City of Cocoa

65 Stone Street
Cocoa, FL 32922

Meeting Agenda - Final

Wednesday, August 28, 2019

6:00 PM

Cocoa City Council Chambers

City Council

I. OPENING MATTERS:

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

ROLL CALL

II. APPROVAL OF AGENDA AND MINUTES:

AGENDA:

II.1 19-409 Approve the Agenda for the Regular meeting of August 28, 2019, as presented or with amendments.

Attachments: 08-28-2019 Short Agenda.pdf

MINUTES:

III. AWARDS AND PRESENTATIONS:

III.1 19-410 Presentation by the Space Coast Transportation Planning Organization. (Georganna Gillette, Executive Director)

IV. DELEGATIONS:

In accordance with the City Council's rules and procedures, residents or tax-payers of the City (upon any subject of general or public interest), City employees (regarding his/her employment), and water and sewer customers (on matters related to the City's water and/or sewer system), may address the City Council under Delegations on items not on the printed agenda by filling out a speaker card.

Speaker cards are located outside the Council meeting room and should be provided to the City Clerk. Please observe the time limit of five (5) minutes while speaking under Delegations. Delegations shall be limited to thirty (30) minutes unless extended by Council.

V. REPORTS:

VI. CONSENT AGENDA:

VI.1 19-394 Approve a one-year policy renewal for the General Insurance Program with Florida League of Cities, Inc., for the period October 1, 2019 through September 30, 2020 with an estimated premium of $951,746 pending approval of the FY2020 budget. (Administrative Services Director)

Attachments: 0105 City of Cocoa19.20 Renewal.pdf

VI.2 19-411 Approve a two-year policy for Workers' Compensation Specific Excess Insurance with Safety National Casualty Corporation for the period of October 1, 2019 through September 30, 2021, with an estimated annual premium of $150,387, pending approval of the FY2020 budget. (Administrative Services Director)

Indexes: workers compensation

Attachments: City of Cocoa WC Excess Quote 2019.pdf

VII. PUBLIC HEARINGS:

VIII. COUNCIL BUSINESS:

VIII.1 19-408 Consider the Appointment of one of the following applicants as a member of the Cocoa Community Redevelopment Agency, through April, 2020: Nancy Elliott, Janne Etz, James McCarthy, Denise Porter, or Candace Rogers. (Administrative Services Director)

Attachments: Elliott, Nancy application.pdf
Elliott Consideration letter.pdf
Etz, Janne application.pdf
Etz Consideration letter.pdf
McCarthy, James application.pdf
McCarthy Consideration letter.pdf
Porter, Denise application.pdf
Porter Consideration letter.pdf
Rogers, Candace application.pdf
Rogers Consideration letter.pdf
Cocoa CRA Roster.pdf

VIII.2 19-417 Approve Resolution No 2019-074 endorsing the East Central Florida Regional Resilience Collaborative providing for the City of Cocoa's support and participation in the initiative. (City Manager)

Attachments: Resolution 2019-074 (ECFRPC Regional Resilience Colloborativ).docx
ECFRPC Presentation.pdf

IX. CITY BUSINESS:

IX.1 19-391 Approve a letter of support committing to a Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools, subject to, and for the purposes of obtaining a grant from the Florida Department of Economic Opportunity (DEO) Florida Job Growth Grant Fund for the Brevard Adult Education Career and Technical Education Center. Should the Grant be Awarded, Staff will return to City Council to Accept the Revenue and prepare the appropriate FY2020 Budget Adjustments. (Community Services Director)

Attachments:
- Career and Technical Center Support Letter 2019.pdf
- JOB Growth Grant proposal Brevard Adult Ed 2019.docx
- florida-job-growth-grant-fund-workforce-training-form.pdf
- 042318 Minutes.pdf

IX.2 19-395 Approve the Preliminary Assessment Resolution 2019-068 for Fire Protection, for Fiscal Year 2020. (Finance Director)

Attachments:
- Preliminary Fire Assessment Resolution 2019 8.2.19.docx
- Stantecs Fire Assessment Techical Memorandum FY2020.pdf

IX.3 19-396 Approve an Initial Assessment Resolution 2019-069, for Stormwater, Fiscal Year 2020. (Finance Director)

Attachments:
- 2019 Initial Stormwater Assessment Resolution 8.26.19
- 10-2019 (Stormwater Services Facilities and Programs).pdf
- 2019-008 (Electing a Uniform Method of Collecting Non-Ad Valorem Special As
- First Class Mailing Sample-Final.docx
- Proof of Ad in Florida today.pdf

IX.4 19-406 Approve a Budget Resolution amending the Fiscal Year 2019 Budget to transfer funds for purchase of two 20 ton Trane Condensing Units at City Hall as unbudgeted capital equipment. (Public Works Director)

Attachments:
- Budget Resolution FY 2019.docx
- 081519 - Precision Air Conditioning - 2 each 20 ton Trane - $34,695.00.pdf
- 081319 - Trane U.S. Inc. - 2 each 20 ton Trane - $64,622.00.pdf
- 081419 - Dial Plumbing and Air Conditioning - 2 each 20 ton Trane - No Quote.
- BAF 19-115 -PW- 2 City Hall Condensing Units (8-28-19 Agenda 19-406.pdf

IX.5 19-413 Adopt the Mead and Hunt Ten (10) year Stormwater Work Plan utilizing the City's Capital Improvement Program including improvement cost estimates as well as ranking and prioritization of water quality and flood mitigation projects. (Public Works Director)

Attachments:
- 10 Year Work Plan.pdf

IX.6 19-412 Accept Stantec Consulting Services Inc., Stormwater Rate Study - Final Report. (Finance Director)

Attachments: Final Stormwater Report 082619.pdf

MULTI-YEAR CONTRACTS:

IX.7 19-393 Approve a Resolution Amending the FY19 Budget to Reallocate Funds from the "Surface Water Plant Clearwell Addition and Reject Pond Improvements", Project No. WS1402 in the amount of $49,396.62, and from the "Dyal TTHM Prevention and/or Reduction", Project No. WS18DT in the amount of $45,393.01 into the Groundwater Cal-Flo pH Adjustment Project, Project No. WS19CF; To Approve a Resolution Waiving the Competitive Bidding Process to Purchase a 48-inch PCCP Tap Services from Thompson Pipe Group; To Approve the Cal Flo Project as a Multi-Year Project; To Approve a Resolution Authorizing the City Manager to Approve Change Orders in an amount Not To Exceed $8,617.24 (10% of the contract amount); To Authorize the City Manager to Execute the Contract. (Utilities Director)

Attachments: Budget Resolution FY 2019 (rev 11-13-18).docx
Cocoa Task Order 2019-101 Cal-Flo Groundwater Chemical Feed Automation.
Cocoa Task Order 2019-101 Cal-Flo Groundwater Chemical Feed Automation - 2019 07 18 Proposal for Additional Pump.pdf
Tap Quote-02.pdf
(08 14 2019) Resolution - Sole Source - Thompson.doc
BAF 19-113-UT-SCADA, New Pump and Tap (08-28-19) Agenda 19-393.pdf
Cal Flo Contingency Resolution.doc
TO (2019-101)-UT-CH2M(8-12-19) $32339.39.pdf

X. INFORMATIONAL AGENDA:

X.1 19-377 Council request to review the cumulative purchase approvals over $35,000 and under $50,000 for period 10/01/2018 to 07/31/2019.

Attachments: PO Monthy Report to City Council 10.01.18 thru 07.31.19.pdf

X.2 19-404 In accordance with the Financial Operations Manual (FOM) the City Manager shall submit to City Council in the form of an agenda item any approved change orders to construction contracts that the City Council has authorized the City Manager, by resolution, to approve in excess of the City Manager's spending authority. (Finance Director)

Attachments: July 2019 Contingency-Change Orders.pdf

X.3 19-405 FY 2019 Budget Adjustment Report. (Finance Director)

Attachments: July FY 2019 EXPENSE Budget Tracking Worksheet.pdf
July FY 2019 REVENUE Budget Tracking Worksheet.pdf

XI. ADJOURNMENT

NOTICE TO THE PUBLIC:

Pursuant to Section 286.0105, Florida Statutes, the City hereby advises the public that: if a person decides to appeal any decision made by the City Council with respect to any matter considered at its meeting or hearing, that person will need a record of the proceedings and for such purpose, affected persons may need to assure that a verbatim record of the proceedings is made, and such record shall include the testimony and evidence upon which the appeal is to be based. This notice does not constitute consent by the City for the introduction or admission into evidence of otherwise inadmissible or irrelevant evidence, nor does it authorize challenges or appeals otherwise not allowed by law.

City Code Section 2-54 requires that an affirmative vote of a majority of a quorum present shall be necessary to enact an ordinance or adopt any resolution; except that two-thirds of the membership of the Council is required to enact an emergency ordinance. All ordinances require two readings, entitled first reading and second reading and public hearing, prior to adoption.

Members of the public speaking on public hearing items, though entitled to be heard by the City Council, are not entitled to an immediate response by either administrative staff members or Council once the public hearing is closed; however, Council discussion may or may not include a response. No question by the public should be addressed directly by the Administrative staff.

Public debate by individual speakers from the audience on public hearing items shall be limited to three (3) minutes. Representatives of recognized groups shall be limited to ten (10) minutes; and total debate on a single issue shall be limited to thirty (30) minutes. Only one presentation per person per issue shall be allowed.

A Council member may add an item to the agenda during the meeting only at the time the agenda is approved. If the item requires action by the Council, then it may be added to the agenda by an affirmative vote of the Council, and written documentation must be submitted at the time the item is added to the agenda.

This agenda is posted on the Municipal Bulletin Board and at the Central Brevard Library and Reference Center in Cocoa for public review.

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This agenda is posted on the Municipal Bulletin Board and at the Central Brevard Library and Reference Center in Cocoa for public review. This is a public meeting. All interested parties may attend. The facility wherein this public meeting will be held is accessible to the physically handicapped. In accordance with the Americans With Disabilities Act, persons needing assistance to participate in any of these proceedings should contact the City Clerk of the City of Cocoa, listed below, at least 48 hours prior to the meeting: Carie Shealy, City Clerk, 65 Stone Street, Cocoa, by telephone at (321) 433-8484 or via email at cshealy@cocoafl.org.

Legislation Details (With Text)

File #:	19-409	**Version:**	1	**Name:**	
Type:	Agenda			**Status:**	Agenda Ready
File created:	8/16/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve the Agenda for the Regular meeting of August 28, 2019, as presented or with amendments.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	08-28-2019 Short Agenda.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 16, 2019
Agenda Date: August 28, 2019
Prepared By: Carie Shealy, City Clerk
Through:
Requested Action:
Approve the Agenda for the Regular meeting of August 28, 2019, as presented or with amendments.

BACKGROUND:

The City Council approves the agenda for all of its regular meetings at the beginning of such meetings.

STRATEGIC PLAN CONNECTION:

NA

BUDGETARY IMPACT:

NA

PREVIOUS ACTION:

The City Council has approved its agenda for all regular meetings at the beginning of such meetings.

RECOMMENDED MOTION:

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Approve the Agenda for the Regular meeting of August 28, 2019, as presented or with amendments

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AGENDA

CITY OF COCOA
REGULAR MEETING OF THE CITY COUNCIL

August 28, 2019

DATE: August 28, 2019	**LOCATION:** City Council Chambers
TIME: 6:00 p.m.	65 Stone Street, Cocoa

I. OPENING MATTERS:

Call to Order
Invocation
Pledge of Allegiance
Roll Call

II. APPROVAL OF AGENDA AND MINUTES:

1. Agenda: Regular Meeting of August 28, 2019 (19-409)
2. Minutes: NA

III. AWARDS AND PRESENTATIONS:

1. Presentation by the Space Coast Transportation Planning Organization. (19-410). (Georganna Gillette, Executive Director)

IV. DELEGATIONS:

In accordance with the City Council's rules and procedures, residents or tax-payers of the City (upon any subject of general or public interest), City employees (regarding his/her employment), water and sewer customers (on matters related to the City's water and/or sewer system), and any person on any item on the agenda (except *Emergency items, Ministerial items, Quasi-judicial items, and Public Hearing items),* may address the City Council under Delegations by filling out a speaker card.

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V. REPORTS:

Advisory Boards and Committees
City Administration
City Attorney
City Manager
City Council

VI. CONSENT AGENDA:

1. Approve a one-year policy renewal for the General Insurance Program with Florida League of Cities, Inc., for the period October 1, 2019 through September 30, 2020 with an estimated premium of $951,746 pending approval of the FY2020 budget. (19-394). (Administrative Services Director)

2. Approve a two-year policy for Workers' Compensation Specific Excess Insurance with Safety National Casualty Corporation for the period of October 1, 2019 through September 30, 2021, with an estimated annual premium of $150,387, pending approval of the FY2020 budget. (19-411). (Administrative Services Director)

VII. PUBLIC HEARINGS:

None.

VIII. COUNCIL BUSINESS:

1. Consider the Appointment of one of the following applicants as a member of the Cocoa Community Redevelopment Agency, through April, 2020: Nancy Elliott, Janne Etz, James McCarthy, Denise Porter, or Candace Rogers. (19-408). (Administrative Services Director)

2. Approve Resolution No 2019-074 endorsing the East Central Florida Regional Resilience Collaborative providing for the City of Cocoa's support and participation in the initiative. (19-417). (City Manager)

IX. CITY BUSINESS:

1. Approve a letter of support committing to a Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools, subject to, and

for the purposes of obtaining a grant from the Florida Department of Economic Opportunity (DEO) Florida Job Growth Grant Fund for the Brevard Adult Education Career and Technical Education Center. (19-391). (Community Services Director)

2. Approve the Preliminary Assessment Resolution 2019-068 for Fire Protection, for Fiscal Year 2020. (19-395). (Finance Director)

3. Approve an Initial Assessment Resolution 2019-069, for Stormwater, Fiscal Year 2020. (19-396). (Finance Director)

4. Approve a Budget Resolution amending the FY 2019 Budget to transfer funds for purchase of two each 20-ton Trane Condensing Units at City Hall as unbudgeted capital equipment. (19-406). (Public Works Director)

5. Adopt the Mead and Hunt Ten (10) year Stormwater Work Plan utilizing the City's Capital Improvement Program including improvement cost estimates as well as ranking and prioritization of water quality and flood mitigation projects. (19-413). (Finance Director)

6. Accept Stantec Consulting Services Inc., Stormwater Assessment Study - Final Report. (19-412). (Finance Director)

MULTI-YEAR CONTRACTS:

7. Approve a Resolution Amending the FY19 Budget to Reallocate Funds from the "Surface Water Plant Clearwell Addition and Reject Pond Improvements", Project No. WS1402 in the amount of $49,396.62, and from the "Dyal TTHM Prevention and/or Reduction", Project No. WS18DT in the amount of $45,393.01 into the Groundwater Cal-Flo pH Adjustment Project, Project No. WS19CF; To Approve a Resolution Waiving the Competitive Bidding Process to Purchase a 48-inch PCCP Tap Services from Thompson Pipe Group; To Approve the Cal Flo Project as a Multi-Year Project; To Approve a Resolution Authorizing the City Manager to Approve Change Orders in an amount Not To Exceed $8,617.24 (10% of the contract amount); To Authorize the City Manager to Execute the Contract. (19-393). (Utilities Director)

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2. Approved change orders to construction contracts that the City Council has authorized the City Manager, by resolution, to approve in excess of the City Manager's spending authority. (19-404). (Finance Director)

3. FY 2019 Budget Adjustment Report. (19-405). (Finance Director)

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proceedings should contact the City Clerk of the City of Cocoa, listed below, at least 48 hours prior to the meeting: Carie Shealy, City Clerk, 65 Stone Street, Cocoa, by telephone at (321) 433-8484 or via email at cshealy@cocoafl.org.

Legislation Details (With Text)

File #:	19-410	**Version:**	1	**Name:**	
Type:	Awards/Presentations			**Status:**	Agenda Ready
File created:	8/16/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Presentation by the Space Coast Transportation Planning Organization. (Georganna Gillette, Executive Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:					

Date	Ver.	Action By	Action	Result

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Legislation Details (With Text)

File #:	19-394	**Version:**	1	**Name:**	
Type:	Contract			**Status:**	Consent Agenda
File created:	8/12/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve a one-year policy renewal for the General Insurance Program with Florida League of Cities, Inc., for the period October 1, 2019 through September 30, 2020 with an estimated premium of $951,746 pending approval of the FY2020 budget. (Administrative Services Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	0105 City of Cocoa19.20 Renewal.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 15, 2019
Agenda Date: August 28, 2019
Prepared By: Tammy B. Gemmati, PHR, Administrative Services Director
Through: John A. Titkanich, Jr., AICP, ICMA-CM
Requested Action:
Approve a one-year policy renewal for the General Insurance Program with Florida League of Cities, Inc., for the period October 1, 2019 through September 30, 2020 with an estimated premium of $951,746 pending approval of the FY2020 budget.

BACKGROUND:

The City has been insured with Florida League of Cities' Florida Municipal Insurance Trust since October 1, 2001. The current policy covering general liability, automobile, and property coverage expires September 30, 2019. The Florida League of Cities has submitted a one-year renewal proposal for the same level of coverage, making the total renewal premium $951,746. This proposal represents an increase of $126,039 (15.3%) based on the FY2019 premium of $825,707.

Under the Finance Operations Manual, Section 12.2 Purchasing Procedures, the City Council may determine exceptions to competitive sealed bidding, under particular circumstances, if such exception is deemed in the best interests of the City and authorized by law. City Staff recommends to waive competitive bidding for this purchase so the City can remain a member of the FMIT for an additional year. The additional services and offers of coverage and services received from FMIT are not offered by other carriers as more fully explained below, the FMIT has superior financial stability (approx. $500 million in assets, $194 million in surplus, and $10 billion in total insured value according to FMIT report), premiums are competitive, and past claims service with the FMIT over the past 18 years has been excellent. In sum, City staff does not believe it is in the City's best interest to

leave FMIT.

At the regular City Council Meeting on September 10, 2014, as part of the General Insurance Program renewal for Fiscal Year 2015, the staff report outlined key differences of the FMIT policy compared to a competitor. Unlike many other insurance coverage, defense/legal costs are not deducted from coverage limits or charged to the member as part of the deductible. As a tool to manage liability and exposure to the City, this is a vital covered item and protected the City from extensive legal expenses over the years. The City has worked with FMIT through our City Attorney's office to defend several important and costly trials where the City has prevailed at trial. In addition, the FMIT policy also provides additional coverage amounts for public officials' liability and property rights claims including extra-contractual coverage for EEOC claims and public official ethics defense. Additionally, FMIT members automatically participate in the *SynergyNDS* Program which is a proprietary program that provides the City with crucial disaster preparedness, response and recovery services for crisis planning, disaster response and loss recovery. For example, in the event of a natural disaster in which the City suffers extensive property damage, this turnkey recovery program will eliminate the City's upfront out-of-pocket expense associated with an insured property loss, expedite the overall claim and recovery process while allowing members the flexibility to have it done in coordination with the City's requirements, and provide real time reporting and experienced project management at no additional cost to the City.

Other items that set FMIT apart from their competition is the additional services received of high value at little or no cost. For example, in FY2016, the City participated in a full property asset survey where all assets were photographed and listed through proprietary software that allows the City to properly list and track all assets efficiently.

A summary of the City's FY20 renewal is:

General Liability 2019 / 2020 Premium - $491,619

The General Liability (GL) premium is based on two factors. (1) The GL experience modification. This modification is calculated just like the City's Workers' Compensation modification by using the 2015/2016, 2016/2017, and 2017/2018 fund year losses. (2) The GL is rated by using projected payrolls from the City for the 2019/2020 year. Using both of these factors, the proposal represents a $54,896 increase based on the FY2019 premium of $415,799.

Auto Liability & Physical Damage 2019 / 2020 Premium - $177,693

This proposal represents a $31,734 increase based on the FY2019 premium of $145,959. There has been a high spike in vehicle liability and physical claims during the current fiscal year that has led to a larger increase than we have had in years past. Additionally, the City has added several large new vehicles and inland marine equipment. All of these factors played a role in our increased renewal. Due to the increase in vehicle accidents, the City's Safety and Risk Program Manager is currently working to create a new driving safety course that will be a requirement for all drivers.

Property Coverage 2019 / 2020 Premium - $282,434

This coverage includes Real & Personal Property, Windstorm/Hail, Equipment and Inland Marine. This proposal represents a $39,409 or 16.2% increase based on the FY2019 premium of $243,025. The City currently has approximately $100,000,000 in assets insured.

For the majority of our years with FMIT, the FMIT Board of Trustees has approved a return of

property premium, which has historically resulted in the City receiving a portion of its property insurance premiums being returned to the City at the end of the fiscal year. The return amount has varied but year-to-year with the annual range between $27,000-70,000 and the average $45,000. Due to recent property devastation related to Hurricanes Irma and Michael, the FMIT Board of Trustees did not approve a return of property premium for their customers for this renewal, which has a direct impact on our property renewal.

Overall, the FMIT policy is increasing by fifteen point three percent (15.3%). The insurance expenses are split between multiple account lines and those are broken down below in the budgetary impact section. The City has budgeted this item in the proposed Fiscal Year 2020 budget.

STRATEGIC PLAN CONNECTION:

Renewal of the General Insurance Program through Florida League of Cities' Florida Municipal Insurance Trust will provide Financial Stability and will allow the City to control expenses of our General Liability, Automobile Liability, and Property Insurance.

BUDGETARY IMPACT:

Budgeted (in Proposed FY20)	Yes
If not budgeted, is amendment/transfer attached?	N/A

All Insurance Account Lines total $981,000 in the proposed FY20 Budget. Some of the City's insurance policies are within the City Manager's spending authority and do not come to City Council for approval but are in the proposed budget. The total budgetary impact for this insurance renewal is $951,746 and is split by Fund/Account below. Since the budgeted amounts are based on an estimate, there may be a need to move monies within the divisions to cover the three types of insurance.

Amount Requested	General Liability	
Account Number	$304,804	001-1600-513.45-00
	$181,899	421-4010-536.45-00
	$4,916	423-3570-538.45-00
Account Name	Insurance	
Amount Requested	Auto Liability/Physical Damage	
Account Number	$80,645	001-1600-513.45-00
	$92,369	421-4010-536.45-00
	$4,911	423-3570-538.45-00
Account Name	Insurance	
Amount Requested	Property	
Account Number	$81,906	001-1600-513.45-00
	$200,528	421-4010-536.45-00

Account Name Insurance

PREVIOUS ACTION:

The City Council at its September 11, 2018 meeting, approved a one-year renewal policy with the Florida League of Cities, Inc., for the period October 1, 2018 through September 30, 2019, pending approval of the FY2019 budget.

RECOMMENDED MOTION:

Approve a one-year policy renewal for the General Insurance Program with Florida League of Cities, Inc., for the period October 1, 2019 through September 30, 2020 with an estimated premium of $951,746 pending approval of the FY2020 budget.

FLORIDA MUNICIPAL INSURANCE TRUST

RENEWAL QUOTE FOR 2019-2020

City of Cocoa

FMIT 0105

Coverage	Deductible	Limit	Premium
General/Professional Liability	$25,000	$2,000,000	$491,619
Automobile Liability	$25,000	$1,000,000	$89,207
Automobile Physical Damage	Per Schedule		$88,486
Property	$25,000	$107,127,641	$282,434

TOTAL FMIT PREMIUM **$951,746**

Note: Coverage summaries provided herein are intended as an outline of coverage only and are necessarily brief. In the event of loss, all terms, conditions, and exclusions of actual Agreement and/or Policies will apply.

Legislation Details (With Text)

File #:	19-411	**Version:**	1	**Name:**	
Type:	Contract			**Status:**	Consent Agenda
File created:	8/16/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve a two-year policy for Workers' Compensation Specific Excess Insurance with Safety National Casualty Corporation for the period of October 1, 2019 through September 30, 2021, with an estimated annual premium of $150,387, pending approval of the FY2020 budget. (Administrative Services Director)				
Sponsors:					
Indexes:	workers compensation				
Code sections:					
Attachments:	City of Cocoa WC Excess Quote 2019.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 16, 2019
Agenda Date: August 28, 2019
Prepared By: Tammy B. Gemmati, PHR, Administrative Services Director
Through: John A. Titkanich, Jr., AICP, ICMA-CM
Requested Action:
Approve a two-year policy for Workers' Compensation Specific Excess Insurance with Safety National Casualty Corporation for the period of October 1, 2019 through September 30, 2021, with an estimated annual premium of $150,387, pending approval of the FY2020 budget.

BACKGROUND:

The City has been insured for our excess workers' compensation coverage with Safety National Casualty Corporation through Re-Ex Insurance Brokers, LLC since October 1, 2012. The current policy expires September 30, 2019. Excess coverage is designed to protect our City from "unexpected" high-cost Workers' Compensation claims. The current policy includes "statutory" limits (unlimited), specific retention of $650,000, and a rate of $0.6240 per $100 of payroll. The City is self-insured up to the specific retention amount on all claims. Once a claim reaches this threshold, the claim is paid by the excess carrier.

The City has been with Safety National since October 2011. Typically, these have been annual policies; however, the City was able to enter into a two-year renewal with Safety National covering October 1, 2017 through September 30, 2019 for the previous term to include the same payroll rate and specific retention limit of $650,000.

Re-Ex solicited quotes with multiple carriers for another two-year policy term with an attempt to

reduce the specific retention amount lower than $650,000. The majority of the solicited carriers have a higher minimum retention, which would be a higher risk to the City. The lowest bidder was again Safety National who presented two retention options, $650,000 or $600,000. By lowering the retention amount to $600,000, it increases the payroll rate to .6567 per $100 of payroll versus the .6240 rate.

Staff recommends taking the lower retention of $600,000 because for the small premium increase, it is worth the benefit of the lower retention and it will be for a two-year premium. The bigger goal for the City is to work further on future renewals to reduce the retention amount back to the $500,000 range as we were in 2010.

The attachment provides details of the Excess Workers' Compensation proposals presented by Re-Ex Insurance Brokers. This is an estimate of premium based on payroll estimates. An audit is done at the end of the fiscal year once payroll numbers are final and then the premium is trued up. In the previous audit done it was determined our estimated payroll for the previous policy period was overestimated, which means the City is expected to receive a return of premium at the end of this year.

STRATEGIC PLAN CONNECTION:

Renewal of the policy through Safety National will provide Financial Stability to our self-insured Workers' Compensation fund, and will allow the City to control expenses.

BUDGETARY IMPACT:

Budgeted	Yes
Amount Requested	$150,387
Account Number	520-1801-513.31-00
Account Name	Professional Services

This is pending approval of the FY2020 budget and will be budgeted in the future renewal year for FY2021.

PREVIOUS ACTION:

The City Council, at its September 26, 2017 meeting, approved a two-year policy with Safety National Casualty Corporation for the period of October 1, 2017 through September 30, 2019.

RECOMMENDED MOTION:

Approve a two-year policy for Workers' Compensation Specific Excess Insurance with Safety National Casualty Corporation for the period of October 1, 2019 through September 30, 2021, with an estimated premium of $150,387, pending approval of the FY2020 budget.

CITY OF COCOA

EXCESS WORKERS' COMPENSATION QUOTES

8/16/2019

	Current Program	Renewal Option
Estimated Annual Total Payroll	**$24,088,759**	**$22,900,415**
Estimated Annual Manual Premium	$926,422	$735,405
Policy Term	2 years	2 years
Specific Retention	**$650,000**	**$600,000**
Specific Limit W.C.	Statutory	Statutory
E.L.	$1,000,000	$1,000,000
Rate (per $100 of Payroll)	**0.6240**	**0.6567**
Annual Policy Premium	**150,314**	**150,387**
Total Policy Premium	$300,628	$300,774
Minimum Policy Premium	$270,565	$270,697
Payment Plan	2 Annual Installments	2 Annual Installments
Carrier	Safety National Casualty Corporation	Safety National Casualty Corporation
Carrier's A.M. Best Rating	**A+, XV**	**A+, XV**

Notes

1. Renewal Option from Safety National includes the same limits as expiring with a $600,000 SIR at a rate increase of 5.24% for 2 years.
2. Safety National's quotes include their MAP Client Services. Resources include Safety Essentials Online, Workers' Comp Kit, Safety Training Source and Ask Best Doctors which provides in-depth case review by world-renowned doctors.

Other Markets:

1. **Safety** also quoted a $650,000 SIR at a premium of $142,899 for 2 years.
2. **Midwest** quoted a $650,000 SIR at a premium of $167,929.
3. **Arch** offered an indication of pricing, but could not offer a competitive quote with a lower SIR.
4. **State National** was not approached due to their inability to write this class of business.
5. **Travelers** was not approached due to the City's TPA not being a nationally approved TPA.
6. **ACE** was not approached due to their minimum SIR for police and fire being $1,000,000.

Legislation Details (With Text)

File #:	19-408	**Version:**	1	**Name:**	
Type:	Appointment			**Status:**	Council Busines
File created:	8/16/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Consider the Appointment of one of the following applicants as a member of the Cocoa Community Redevelopment Agency, through April, 2020: Nancy Elliott, Janne Etz, James McCarthy, Denise Porter, or Candace Rogers. (Administrative Services Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Elliott, Nancy application.pdf Elliott Consideration letter.pdf Etz, Janne application.pdf Etz Consideration letter.pdf McCarthy, James application.pdf McCarthy Consideration letter.pdf Porter, Denise application.pdf Porter Consideration letter.pdf Rogers, Candace application.pdf Rogers Consideration letter.pdf Cocoa CRA Roster.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 16, 2019
Agenda Date: August 28, 2019
Prepared By: Carie Shealy, City Clerk
Through: Tammy Gemmati, Administrative Services Director
Requested Action:
Consider the Appointment of one of the following applicants as a member of the Cocoa Community Redevelopment Agency, through April, 2020: Nancy Elliott, Janne Etz, James McCarthy, Denise Porter, or Candace Rogers.

BACKGROUND:

The Cocoa CRA currently has one (1) member vacancy, which was created in April, 2019 with the resignation of Ms. Jan Stewart, whom it was determined no longer met the qualifications for agency membership. As discussed previously at prior City Council and Cocoa CRA meetings, eligibility of CRA membership falls under Florida Statutes. Specially, Section 163.356(3)(b) of the Florida Statutes states the following:

powered by Legistar™

"Any person may be appointed as a commissioner if he or she resides or engaged in business, which means owning a business, practicing a profession, or performing a service for compensation, or serving as an officer or director of a corporation or other business entity so engaged, within the area of operation of the agency, which shall be coterminous with the area of operation of the county or municipality, and is otherwise eligible for such appointment under this part."

At the Regular City Council meeting held on July 24, 2019, it was determined that staff would advertise the vacancy for the Cocoa CRA and provide an application period through August 14, 2019. While five (5) applications were received, only three (3) meet the criteria for serving on the Agency. They are as follows:

- Nancy Elliott: Cocoa resident
- Janne Etz: Engaged in business within the Cocoa CRA
- James McCarthy: Cocoa resident
- Denise Porter: Cocoa resident
- Candace Rogers: Cocoa resident

All of the applicants applications are attached for your review.

STRATEGIC PLAN CONNECTION:

NA

BUDGETARY IMPACT:

NA

PREVIOUS ACTION:

The City Council appoints and reappoints members to City boards, agencies, and committees as vacancy arise and expirations occur.

RECOMMENDED MOTION:

Consider the Appointment of one of the following applicants as a member of the Cocoa Community Redevelopment Agency, through April, 2020: Nancy Elliott, Janne Etz, James McCarthy, Denise Porter, or Candace Rogers.

powered by Legistar™

RECEIVED
APR 05 2019
OFFICE OF THE CITY CLERK

CITY OF COCOA
APPLICATION FOR BOARD/COMMITTEE MEMBERSHIP

City Code requires prospective and existing board members to fill out an application, consent to a standard criminal background check[1], be duly registered to vote in Brevard County, and be a resident or an owner of real property in the City of Cocoa. City Code also prohibits a person from serving on a City Board or Committee if that person has been convicted of a felony, unless their civil rights have been restored.

(Please Print)

Name: Nancy Elliott Application Date: 4/5/19

Street Address, Including Zip Code: 3406 Indian River Dr 32926

District that you live in ***(this information can be found on your Voter's Registration Card)***:
District 1 ____ District 2 _____ District 3 _____ District 4 X

Telephones: Home: _____ Work: _____ Pager: _____ Cell: (321) 223-8983

Place of Business: _____

Title/Position Held: _____

Date of Birth[2] 5/17/48

Email Address: nancyelliott@cfl.rr.com

VARIOUS CITY BOARDS/COMMITTEES AVAILABLE
(Please Check All Those That Interest You)

	Affordable Housing Advisory Committee		Pension Board - General Employees
	Board of Adjustment		Pension Board – Police
	Brownfields Advisory Board		Planning & Zoning Board
	Code Enforcement/Drug Related Public Nuisance Board	X	Redevelopment Agency (Cocoa)
	Housing Authority		Redevelopment Agency (Diamond Square)
	Pension Board - Fire		Redevelopment Agency (US 1)
	Sustainability Advisory Committee		Utilities Advisory Board

ELIGIBILITY

Have you been a City of Cocoa resident for at least 6 months?	Yes	X	No	____
Do you own property or a business in Cocoa?	Yes	X	No	____
Are you registered to vote in Brevard County, Florida?	Yes	X	No	____
Have you ever been convicted or found guilty, regardless				

[1] An Addendum to the Application is attached and the information being requested is necessary in order to conduct a background check. Information will be used for those purposes only.

of adjudication, of a **felony** in any jurisdiction? Any plea of no contest shall be considered a conviction for purposes of this question. Yes ____ No X

If yes, have your civil rights been restored? Yes ____ No ____
Do you consent to a standard criminal background check? Yes ____ No ____
(PLEASE SEE ATTACHED ADDENDUM)

MISCELLANEOUS INFORMATION

Do you currently serve on any other City of Cocoa board Yes X No ____
Are you related to a City of Cocoa Councilmember by blood, Adoption or marriage? Yes ____ No X
Potential Conflict of Interest: Have you ever been engaged in the management of any business enterprise that has a financial interest with the City of Cocoa? Please provide details, such as the name of the enterprise, the nature of the business, and the positions you hold or have held. Yes ____ No X

INTERESTS AND EXPERIENCE
(Additional Information May be Attached)

Briefly state your interest in serving on a City board or committee. Please include information relating to prior service on any governmental board or committee, and any specialized skills or training you feel will help you to qualify for membership on the desired City board or committee.

RDA US1 - prior; Bd of Adjustment - current; HCVA - president; ArtBeat 3
As a property owner in the Village and an advocate of small business success, I have a dedication to the quality and appropriate development of the downtown.

STATE REPORTING REQUIREMENTS

Section 760.80, Florida Statutes, requires that the City annually submit a report to the Secretary of State disclosing race, gender, and physical disabilities of board and committee members. Please check the appropriate boxes:

RACE

____ African-American
____ Asian-American
____ Hispanic-American
____ Native American
X Caucasian

GENDER

____ Male
X Female

DISABILITY

____ Physically Disabled

APPLICANT CERTIFICATION

By filling this application with the City of Cocoa, I do hereby acknowledge the following:

1. This application, when completed and filed with the Office of the City Clerk, is a public record under Chapter 119, Florida Statutes, and is open to public inspection.

2. I am responsible for keeping the information on this form current and provide any changes or updates to the Office of the City Clerk.

3. I consent to filing a Statement of Financial Interests (Form 1) required if required for the board in which I am appointed to.

4. If appointed to a board/committee, I acknowledge that this is my obligation and duty to comply with the following:

   Code of Ethics for Public Offices (Florida Statutes, Chapter 112, Part III)
   Florida Sunshine Law (Florida Statutes, Chapter 286)
   http://www.flsenate.gov/Statutes

Signature: Nancy Elliott Date: 4/5/19

Social Security No: [redacted]

Drivers License No: [redacted]

Please Return this form to:
Office of the City Clerk, 65 Stone Street, Cocoa, FL 32922

Office of the City Clerk
65 Stone Street I Cocoa, FL 32922
Phone: (321) 433-8480 I Fax: (321) 433-8455

August 19, 2019

Ms. Nancy Elliott
3406 Indian River Drive
Cocoa, FL 32926

Re: Appointment to the Cocoa CRA

Dear Ms. Elliott:

This is to notify you that the Cocoa City Council will consider your application for appointment to the Cocoa CRA at the Regular City Council meeting being held on Wednesday, August 28, 2019.

If you wish to attend, the meeting will commence at 6:00 p.m. in City Council Chambers, in Cocoa City Hall, 65 Stone Street, Cocoa.

If you have any questions or require additional information, please feel free to call our office at (321) 433-8484.

Sincerely,

Carie Shealy, MMC
City Clerk

RECEIVED
APR 11 2019
OFFICE OF THE CITY CLERK

CITY OF COCOA
APPLICATION FOR BOARD/COMMITTEE MEMBERSHIP

City Code requires prospective and existing board members to fill out an application, consent to a standard criminal background check[1], be duly registered to vote in Brevard County, and be a resident or an owner of real property in the City of Cocoa. City Code also prohibits a person from serving on a City Board or Committee if that person has been convicted of a felony, unless their civil rights have been restored.

(Please Print)

Name: Janne Etz Application Date: 4/1/19

Street Address, Including Zip Code: 1203 Creek Side Cir. Rockledge 32955

District that you live in ***(this information can be found on your Voter's Registration Card)***:
District 1 ____ District 2 ____ District 3 ____ District 4 ____

Telephones: Home: _____ Work: 321 632-3505 Pager: _____ Cell: 321 446-0374

Place of Business: Contemporary Concepts (in Cocoa Village)

Title/Position Held: owner

Date of Birth[2] 11/8/59

Email Address: wiregems@bellsouth.net

VARIOUS CITY BOARDS/COMMITTEES AVAILABLE
(Please Check All Those That Interest You)

	Affordable Housing Advisory Committee		Pension Board - General Employees
	Board of Adjustment		Pension Board – Police
	Brownfields Advisory Board		Planning & Zoning Board
	Code Enforcement/Drug Related Public Nuisance Board	X	Redevelopment Agency (Cocoa)
	Housing Authority		Redevelopment Agency (Diamond Square)
	Pension Board - Fire		Redevelopment Agency (US 1)
	Sustainability Advisory Board		Utilities Advisory Board

ELIGIBILITY

Have you been a City of Cocoa resident for at least 6 months?	Yes	____	No	____ I was from 1986 to 2006
Do you own property or a business in Cocoa?	Yes	X	No	____ for 26 years
Are you registered to vote in Brevard County, Florida?	Yes	X	No	____
Have you ever been convicted or found guilty, regardless				

[1] An Addendum to the Application is attached and the information being requested is necessary in order to conduct a background check. Information will be used for those purposes only.

of adjudication, of a **felony** in any jurisdiction? Any plea of no contest shall be considered a conviction for purposes of this question. Yes ____ No X

If yes, have your civil rights been restored? Yes ____ No ____
Do you consent to a standard criminal background check? Yes X No ____
(PLEASE SEE ATTACHED ADDENDUM)

MISCELLANEOUS INFORMATION

Do you currently serve on any other City of Cocoa board Yes ____ No X
Are you related to a City of Cocoa Councilmember by blood, Adoption or marriage? Yes ____ No X
Potential Conflict of Interest: Have you ever been engaged in the management of any business enterprise that has a financial interest with the City of Cocoa? Please provide details, such as the name of the enterprise, the nature of the business, and the positions you hold or have held. Yes ____ No X

INTERESTS AND EXPERIENCE
(Additional Information May be Attached)

Briefly state your interest in serving on a City board or committee. Please include information relating to prior service on any governmental board or committee, and any specialized skills or training you feel will help you to qualify for membership on the desired City board or committee.

Chairman City of Cocoa Parks & Rec advisory board from its formation onward to its disolution. Founding Board member Cocoa Main Street, 1995 onward, continuous member up to current. Member City of Cocoa Economic Development Committee circa 1994-1998. Member Historic Cocoa Village ASSN 1993 to present, 3 time President & Chairman of the Board, currently Vice President.

STATE REPORTING REQUIREMENTS

Section 760.80, Florida Statutes, requires that the City annually submit a report to the Secretary of State disclosing race, gender, and physical disabilities of board and committee members. Please check the appropriate boxes:

RACE

____ African-American
____ Asian-American
____ Hispanic-American
____ Native American
X Caucasian

GENDER

____ Male
X Female

DISABILITY

____ Physically Disabled

If you are truly looking for representation from the downtown, and I think you should, consider me. I have a track record in Cocoa. I care about Cocoa. I have been intimately involved in the downtown for 26 years and counting. I understand what a Redevelopment Agency is, what it does, how it's funded. I understand the importance of a healthy downtown in general, and the importance of the Village to the City of Cocoa as a whole. I believe cities should be self-governing and not be dictated to by beaurocrats or state politicians. I'm smart and dedicated and I listen to all sides of an issue. I am absolutely passionate about civic service. I will make a good agency member! Thanks for your consideration!

APPLICANT CERTIFICATION

By filling this application with the City of Cocoa, I do hereby acknowledge the following:

1. This application, when completed and filed with the Office of the City Clerk, is a public record under Chapter 119, Florida Statutes, and is open to public inspection.

2. I am responsible for keeping the information on this form current and provide any changes or updates to the Office of the City Clerk.

3. I consent to filing a Statement of Financial Interests (Form 1) required if required for the board in which I am appointed to.

4. If appointed to a board/committee, I acknowledge that this is my obligation and duty to comply with the following:

   Code of Ethics for Public Offices (Florida Statutes, Chapter 112, Part III)
   Florida Sunshine Law (Florida Statutes, Chapter 286)
   http://www.flsenate.gov/Statutes

Signature: Joanne C. Etz Date: 4/1/19

Social Security No: [redacted]

Drivers License No: [redacted]

Please Return this form to:
Office of the City Clerk, 65 Stone Street, Cocoa, FL 32922

Office of the City Clerk
65 Stone Street I Cocoa, FL 32922
Phone: (321) 433-8480 I Fax: (321) 433-8455

August 16, 2019

Ms. Janne Etz
1203 Creek Side Circle
Rockledge, FL 32955

Re: Appointment to the Cocoa CRA

Dear Ms. Etz:

This is to notify you that the Cocoa City Council will consider your application for appointment to the Cocoa CRA at the Regular City Council meeting being held on Wednesday, August 28, 2019.

If you wish to attend, the meeting will commence at 6:00 p.m. in City Council Chambers, in Cocoa City Hall, 65 Stone Street, Cocoa.

If you have any questions or require additional information, please feel free to call our office at (321) 433-8484.

Sincerely,

Carie Shealy

Carie Shealy, MMC
City Clerk

RECEIVED
JUL 31 2019
OFFICE OF THE CITY CLERK

CITY OF COCOA
APPLICATION FOR BOARD/COMMITTEE MEMBERSHIP

City Code requires prospective and existing board members to fill out an application, consent to a standard criminal background check[1], be duly registered to vote in Brevard County, and be a resident or an owner of real property in the City of Cocoa. City Code also prohibits a person from serving on a City Board or Committee if that person has been convicted of a felony, unless their civil rights have been restored.

(Please Print)

Name: James M McCarthy Application Date: 7/31/19

Street Address, Including Zip Code: 1116 Lemon St Cocoa FL 32922

District that you live in ***(this information can be found on your Voter's Registration Card)***:
District 1 ✓ District 2 _____ District 3 _____ District 4 _____

Telephones: Home: _____ Work: _____ Pager: _____ Cell: 321 917 7910

Place of Business: Sundancer Gallery

Title/Position Held: Owner

Date of Birth[2] 1/14/60

Email Address: James1.JM26@gmail.com

VARIOUS CITY BOARDS/COMMITTEES AVAILABLE
(Please Check All Those That Interest You)

	Affordable Housing Advisory Committee		Planning & Zoning Board
	Board of Adjustment		Police Community Relations Advisory Committee
	Brownfields Advisory Board	✓	Redevelopment Agency (Cocoa)
	Code Enforcement/Drug Related Public Nuisance Board		Redevelopment Agency (Diamond Square)
	Housing Authority		Redevelopment Agency (US 1)
	Pension Board - Fire		Sustainability Advisory Committee
	Pension Board - General Employees		Utilities Advisory Board
	Pension Board – Police		

ELIGIBILITY

Have you been a City of Cocoa resident for at least 6 months?	Yes	✓	No	_____
Do you own property or a business in Cocoa?	Yes	✓	No	_____
Are you registered to vote in Brevard County, Florida?	Yes	✓	No	_____

[1] An Addendum to the Application is attached and the information being requested is necessary in order to conduct a background check. Information will be used for those purposes only.

Have you ever been convicted or found guilty, regardless of adjudication, of a **felony** in any jurisdiction? Any plea of no contest shall be considered a conviction for purposes of this question. Yes ____ No ✓

If yes, have your civil rights been restored? Yes ____ No ____
Do you consent to a standard criminal background check? Yes ✓ No ____
(PLEASE SEE ATTACHED ADDENDUM)

MISCELLANEOUS INFORMATION

Do you currently serve on any other City of Cocoa board Yes ✓ No ____
Are you related to a City of Cocoa Councilmember by blood, Adoption or marriage? Yes ____ No ✓
Potential Conflict of Interest: Have you ever been engaged in the management of any business enterprise that has a financial interest with the City of Cocoa? Please provide details, such as the name of the enterprise, the nature of the business, and the positions you hold or have held. Yes ____ No ✓

INTERESTS AND EXPERIENCE
(Additional Information May be Attached)

Briefly state your interest in serving on a City board or committee. Please include information relating to prior service on any governmental board or committee, and any specialized skills or training you feel will help you to qualify for membership on the desired City board or committee.

Former City Council Member
Deputy Mayor
Planning and Zoning Board
BOA.
USI RDA

STATE REPORTING REQUIREMENTS

Section 760.80, Florida Statutes, requires that the City annually submit a report to the Secretary of State disclosing race, gender, and physical disabilities of board and committee members. Please check the appropriate boxes:

RACE

____ African-American
____ Asian-American
____ Hispanic-American
✓ Native American
____ Caucasian

GENDER

_____ Male
_____ Female

DISABILITY

_____ Physically Disabled

APPLICANT CERTIFICATION

By filling this application with the City of Cocoa, I do hereby acknowledge the following:

1. This application, when completed and filed with the Office of the City Clerk, is a public record under Chapter 119, Florida Statutes, and is open to public inspection.

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3. I consent to filing a Statement of Financial Interests (Form 1) required if required for the board in which I am appointed to.

4. If appointed to a board/committee, I acknowledge that this is my obligation and duty to comply with the following:

   Code of Ethics for Public Offices (Florida Statutes, Chapter 112, Part III)
   Florida Sunshine Law (Florida Statutes, Chapter 286)
   http://www.flsenate.gov/Statutes

Signature: _____ Date: 7/31/19

Social Security No: [redacted]

Drivers License No: [redacted]

Please Return this form to:

Office of the City Clerk, 65 Stone Street, Cocoa, FL 32922

Office of the City Clerk
65 Stone Street I Cocoa, FL 32922
Phone: (321) 433-8480 I Fax: (321) 433-8455

August 16, 2019

Mr. James McCarthy
116 Lemon Street
Cocoa, FL 32922

Re: Appointment to the Cocoa CRA

Dear Mr. McCarthy:

This is to notify you that the Cocoa City Council will consider your application for appointment to the Cocoa CRA at the Regular City Council meeting being held on Wednesday, August 28, 2019.

If you wish to attend, the meeting will commence at 6:00 p.m. in City Council Chambers, in Cocoa City Hall, 65 Stone Street, Cocoa.

If you have any questions or require additional information, please feel free to call our office at (321) 433-8484.

Sincerely,

Carie Shealy, MMC
City Clerk

Carie Shealy

From: noreply@civicplus.com
Sent: Tuesday, August 13, 2019 1:20 PM
To: Carie Shealy
Subject: Online Form Submittal: Application for Board/Committee Membership

CAUTION! This email originated from an outside source. **DO NOT CLICK** links or attachments unless you recognize the sender and know the content is safe. If you suspect this is a phishing or malicious message, please report it by clicking the "Phish Alert" button above.

Application for Board/Committee Membership

City of Cocoa Application for Board/Committee Membership
City Code requires prospective and existing board members to fill out an application, consent to a standard criminal background check, be duly registered to vote in Brevard County, and be a resident or an owner of real property in the City of Cocoa. City Code also prohibits a person from serving on a City Board or Committee if that person has been convicted of a felony, unless their civil rights have been restored.*

(Please Print)

First Name	Denise
Last Name	Porter
Application Date	8/13/2019
Address1	1306 Stetson Dr South
City	Cocoa
State	FL
Zip	32922
District	District 4
Home Phone Number	321-960-2036
Work Phone Number	321-639-5839
Cell Phone Number	*Field not completed.*
Other Phone Number	*Field not completed.*
Place of Business	FL Department of Health

Title/Position Held	Social Services Worker
Date of Birth*	4/10/1960
E-mail Address	deniseporter003@gmail.com

**The information being requested is necessary in order to conduct a background check. Information will be used for those purposes only.*

(Section Break)

Various City Boards/Committees Available	Redevelopment Agency (Cocoa)

(Section Break)

Eligibility

Have you been a City of Cocoa resident for at least 6 months?	Yes
Do you own property or a business in Cocoa?	Yes
Are you registered to vote in Brevard County, Florida?	Yes
Have you ever been convicted or found guilty, regardless of adjudication, of a felony in any jurisdiction? Any plea of no contest shall be considered a conviction for purposes of this question.	No
If yes, have your civil rights been restored?	*Field not completed.*
Do you consent to a standard criminal background check?	Yes

(Section Break)

Miscellaneous Information

Do you currently serve on any other City of Cocoa board?	No
Are you related to a City of Cocoa Councilmember by blood, adoption, or marriage?	No
Potential Conflict of Interest: Have you ever been engaged in the management of any business enterprise that has a financial interest with the City of Cocoa? Please provide details, such as the name of the enterprise, the nature of the business, and the positions you hold or have held.	No
If yes, please provide details.	*Field not completed.*

(Section Break)

Interests and Experience

Additional Information May be Attached	*Field not completed.*
Briefly state your interest in serving on a City board or committee. Please include information relating to prior service on any governmental board or committee, and any specialized skills or training you feel will help you to qualify for membership on the desired City board or committee.	I have been a Brevard County resident for over 25 years, and a Cocoa resident for 2 years. I, like so many within the county, viewed Cocoa as an undesirable location to live or work. Now as a resident, I want to help improve its image. I am a medical foster care social worker and very much aware of the problems county residents face, most notably in Cocoa.

(Section Break)

State Reporting Requirements

Section 760.80, Florida Statutes, requires that the City annually submit a report to the Secretary of State disclosing race, gender, and physical disabilities of board and committee members. Please check the appropriate boxes:

Race	Caucasian
Gender	Female
Disability	*Field not completed.*
	Field not completed.

(Section Break)

Applicant Certification

By filling this application with the City of Cocoa, I do hereby acknowledge the following: 1. This application, when completed and filed with the Office of the City Clerk, is a public record under Chapter 119, Florida Statutes, and is open to public inspection. 2. I am responsible for keeping the information on this form current and provide any changes or updates to the Office of the City Clerk. 3. I consent to filing a Statement of Financial Interests (Form 1) required if required for the board in which I am appointed to. 4. If appointed to a board/committee, I acknowledge that this is my obligation and duty to comply with the following: Code of Ethics for Public Offices (Florida Statutes, Chapter 112, Part III) Florida Sunshine Law (Florida Statutes, Chapter 286) http://www.flsenate.gov/Statutes.

Signature	Denise Jeannine Porter
Date:	8/13/2019
Social Security Number	[redacted]
Drivers License Number	
City Board and Committee Information as well as Meeting Information	Boards and Committees

All meetings are subject to change in dates and/or may be canceled with the approval of the City Manager (with the exception of the regular Council meetings), dependent upon whether there are items or cases to be considered. Other meetings of boards not listed above are held on an infrequent basis to which there is no standard or specified monthly date. (Please refer to the preceding "Description of Boards and Committees".) The three pension boards generally meet quarterly, and meetings may be held more often, depending on necessity. The Drug Related Public Nuisance Board holds meetings coinciding with the Code Enforcement Board; however, it meets infrequently on an as needed basis. THIS INFORMATION IS PUBLISHED BY THE CITY CLERK'S OFFICE IN AN EFFORT TO BETTER INFORM CITIZENS ABOUT THEIR CITY GOVERNMENT.

Email not displaying correctly? View it in your browser.

Office of the City Clerk
65 Stone Street I Cocoa, FL 32922
Phone: (321) 433-8480 I Fax: (321) 433-8455

August 19, 2019

Ms. Denise Porter
1306 Stetson Drive South
Cocoa, FL 32922

Re: Appointment to the Cocoa CRA

Dear Ms. Porter:

This is to notify you that the Cocoa City Council will consider your application for appointment to the Cocoa CRA at the Regular City Council meeting being held on Wednesday, August 28, 2019.

If you wish to attend, the meeting will commence at 6:00 p.m. in City Council Chambers, in Cocoa City Hall, 65 Stone Street, Cocoa.

If you have any questions or require additional information, please feel free to call our office at (321) 433-8484.

Sincerely,

Carie Shealy

Carie Shealy, MMC
City Clerk

RECEIVED
MAR 14 2019
OFFICE OF THE CITY CLERK

CITY OF COCOA
APPLICATION FOR BOARD/COMMITTEE MEMBERSHIP

City Code requires prospective and existing board members to fill out an application, consent to a standard criminal background check[1], be duly registered to vote in Brevard County, and be a resident or an owner of real property in the City of Cocoa. City Code also prohibits a person from serving on a City Board or Committee if that person has been convicted of a felony, unless their civil rights have been restored.

(Please Print)

Name: CADDACE ROGERS Application Date: _____

Street Address, Including Zip Code: 93 DELANNOY AVE #706 32922

Telephones: Home: 321-305-5028 Work: _____ Pager: _____ Cell: 321-298-2953

Place of Business: _____

Title/Position Held: _____

Date of Birth[2] 8-31-52

Email Address: FLROGERS@GMAIL.COM

VARIOUS CITY BOARDS/COMMITTEES AVAILABLE
(Please Check All Those That Interest You)

	Affordable Housing Advisory Committee		Pension Board - General Employees
	Board of Adjustment		Pension Board – Police
	Brownfields Advisory Board		Planning & Zoning Board
	Code Enforcement/Drug Related Public Nuisance Board	✓	Redevelopment Agency (Cocoa)
	Housing Authority		Redevelopment Agency (Diamond Square)
	Pension Board - Fire		Redevelopment Agency (US 1)
			Utilities Advisory Board

ELIGIBILITY

Have you been a City of Cocoa resident for at least 6 months?	Yes	✓	No	____
Do you own property or a business in Cocoa?	Yes	✓	No	____
Are you registered to vote in Brevard County, Florida?	Yes	✓	No	____
Have you ever been convicted or found guilty, regardless of adjudication, of a **felony** in any jurisdiction? Any plea of no contest shall be considered a conviction for purposes of this question.	Yes	____	No	✓

[1] An Addendum to the Application is attached and the information being requested is necessary in order to conduct a background check. Information will be used for those purposes only.

If yes, have your civil rights been restored? Yes ____ No ____
Do you consent to a standard criminal background check? Yes ____ No ____
(PLEASE SEE ATTACHED ADDENDUM)

MISCELLANEOUS INFORMATION

Do you currently serve on any other City of Cocoa board Yes ____ No ✓
Are you related to a City of Cocoa Councilmember by blood, Adoption or marriage? Yes ____ No ✓
Potential Conflict of Interest: Have you ever been engaged in the management of any business enterprise that has a financial interest with the City of Cocoa? Please provide details, such as the name of the enterprise, the nature of the business, and the positions you hold or have held. Yes ____ No ____

INTERESTS AND EXPERIENCE
(Additional Information May be Attached)

Briefly state your interest in serving on a City board or committee. Please include information relating to prior service on any governmental board or committee, and any specialized skills or training you feel will help you to qualify for membership on the desired City board or committee.

See attached

STATE REPORTING REQUIREMENTS

Section 760.80, Florida Statutes, requires that the City annually submit a report to the Secretary of State disclosing race, gender, and physical disabilities of board and committee members. Please check the appropriate boxes:

RACE

____ African-American
____ Asian-American
____ Hispanic-American
____ Native American
✓ Caucasian

GENDER

____ Male
✓ Female

DISABILITY

____ Physically Disabled

APPLICANT CERTIFICATION

By filling this application with the City of Cocoa, I do hereby acknowledge the following:

1. This application, when completed and filed with the Office of the City Clerk, is a public record under Chapter 119, Florida Statutes, and is open to public inspection.

2. I am responsible for keeping the information on this form current and provide any changes or updates to the Office of the City Clerk.

3. I consent to filing a Statement of Financial Interests (Form 1) required if required for the board in which I am appointed to.

4. If appointed to a board/committee, I acknowledge that this is my obligation and duty to comply with the following:

   Code of Ethics for Public Offices (Florida Statutes, Chapter 112, Part III)
   Florida Sunshine Law (Florida Statutes, Chapter 286)
   http://www.flsenate.gov/Statutes

Signature: Candace Rogers Date: 3-13-'19

Social Security No: [redacted]

Drivers License No:

Please Return this form to:
Office of the City Clerk, 65 Stone Street, Cocoa, FL 32922

Carie Shealy

From: Candace Rogers <flrogers@gmail.com>
Sent: Thursday, May 02, 2019 2:35 PM
Subject: CRA Open Seat

Dear Agency Members,

Since I will be out of the country when you take your vote for the open seat on the Cocoa Redevelopment Agency Board, I would like this letter to speak in my stead.

It is my opinion that the submitted applicants for this position are credible and worthy of your consideration. Should you elect one of the other candidates, I would support that choice and would look forward to working with them for the betterment of the Village as covered by the CRA.

However, I wish to make the case that I too would be a good candidate for the position. By nature, any project I wish to engage always demands indepth research. This was most important in my professional life as clients relied upon my knowledge when making decisions involving product creation, direction, regulation and oversight. This same trait has been applied when following the major CRA projects that are currently under consideration or in process. My background supports my desire to serve on this board so I ask that you kindly give my application due consideration.

Kindest regards,

Candace Rogers
321.305.5029

Office of the City Clerk
65 Stone Street I Cocoa, FL 32922
Phone: (321) 433-8480 I Fax: (321) 433-8455

August 16, 2019

Ms. Candace Rogers
93 Delannoy Avenue #706
Cocoa, FL 32922

Re: Appointment to the Cocoa CRA

Dear Ms. Rogers:

This is to notify you that the Cocoa City Council will consider your application for appointment to the Cocoa CRA at the Regular City Council meeting being held on Wednesday, August 28, 2019.

If you wish to attend, the meeting will commence at 6:00 p.m. in City Council Chambers, in Cocoa City Hall, 65 Stone Street, Cocoa.

If you have any questions or require additional information, please feel free to call our office at (321) 433-8484.

Sincerely,

Carie Shealy, MMC
City Clerk

Cocoa Redevelopment Agency **Meets First Wednesday Every Month @ 5pm** **Expirations in April and November**				
MEMBER	**ADDRESS**	**PHONE**	**APPOINTED**	**EXPIRES**
Mayor Jake Williams, Jr.	1054 Cypress Ln. Cocoa, FL 32922	474-6789	11/18	11/2020
District 1- Councilmember Alex Goins	707A Johnson St. Cocoa, FL 32922	474-4923	11/18 appointed	11/2022
District 3- Councilmember Don Boisvert	285 Outer Drive Cocoa, FL 32922	633-0162 hm 403-9173 cell	06/10 appointed	11/2020
District 4- Councilmember Lorraine Koss	2115 N. Indian River Dr. Cocoa, FL 32922	604-1879 cell	11/18 appointed	11/2022
District 2- Deputy Mayor Brenda Warner	143 Circle Drive Cocoa, FL 32922	543-8018	11/12 appointed	11/2020
Edward A. Lanni	939 N. Indian River Dr., 32922-7531 lanniedward@gmail.com	639-8915	04/2018 Reappointed 04/14-Reappointed 12/11/12 appointed Resigned to run for District 2 3/10 Reappointed 2/06 Reappointed 3/02 Reappointed 11/98 Appointed	04/2022
Vacancy ~~Janet C. Stewart~~	~~1010 Barton Blvd., Rockledge 32955-3032 (owner of Bath Cottage)~~ ~~JStewart07@AOL.com~~	~~639-9004 (H)~~ ~~690-2284 (W)~~ ~~537-9348 (C)~~	~~06/16 Reappointed~~ ~~2/28/12 Reappt.~~ ~~4/8/08 reappt.~~ ~~5/23/06 Appt.~~	~~04/2020~~
Counsel: Anthony Garganese	PO Box 2873, Orlando, FL 32802-2873	866-425-9566		
RECORDING SECRETARY	Courtney Jackson	433-8490		

Legislation Details (With Text)

File #:	19-417	**Version:**	1	**Name:**	
Type:	Report			**Status:**	Council Busines
File created:	8/23/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve Resolution No 2019-074 endorsing the East Central Florida Regional Resilience Collaborative providing for the City of Cocoa's support and participation in the initiative. (City Manager)				
Sponsors:	Office of the City Manager				
Indexes:					
Code sections:					
Attachments:	Resolution 2019-074 (ECFRPC Regional Resilience Colloborativ).pdf ECFRPC Presentation.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 22, 2019
Agenda Date: August 28, 2019
Prepared By: John A. Titkanich, Jr., AICP, ICMA-CM
Through: N/A
Requested Action:
Approve Resolution No 2019-074 endorsing the East Central Florida Regional Resilience Collaborative providing for the City of Cocoa's support and participation in the initiative.

BACKGROUND:

The East Central Florida Regional Planning Council (ECFRPC), through funding by the Economic Development Administration, developed a program to focus on regional disaster resilience in March 2018. The Regional Planning Council held various meetings/workshops related to topics such as affordable housing, aging and failing infrastructure, food access and health outcomes, climate change, and coastal/tidal flooding and sea level rise. Central to this effort was the recognition of the relationships between emergency management, planning, health & safety and economic development. Additionally, they sought to identify gaps within the planning region to pursue initiatives that will achieve measurable improvements in risk reduction and the building of resilience in the planning region.

On September 19, 2018, ECFPC adopted Resolution No. 03-2018 reaffirming their commitment to regionalism and calling for convening stakeholders across the region to develop a structure and framework for a regional resilience collaborative. In December 2018, ECFRPC issued the East Central Florida Regional Resiliency Action Plan. On February 27, 2019, the City of Cocoa approved Resolution 2019-011 adopting the East Central Florida Regional Resiliency Action Plan and

committing to support and work towards the implementation of relevant actions and objectives over the next five years.

This resolution, in furtherance of the above efforts and actions, provides for the City of Cocoa's endorsement of the established collaborative framework for action and to implement resilience measures. Toward that end, and more specifically, as a member of the East Central Florida Regional Resilience Collaborative, the City of Cocoa supports and will participate working toward achieving the following:

- **Regional Cooperation - Create Productive Connectivity -** Each member shall commit appropriate staff resources and expertise, within budget constraints, to participate with other members in facilitating and advancing the work of the Regional Resilience Collaborative. A steering committee appointed by the ECFRPC will identify and report on opportunities for providing sustainable solutions for the current and future resilience of our built and natural environment, economy, and health and equity. The steering committee will draw on strategies and processes that address resilience, organize and direct integrated scientific and other technical research and analysis, and organize and structure its work and procedures toward these ends.

- **Regional Resiliency Action Plan -** Each member shall work collaboratively to develop a Regional Resilience Action Plan that will identify specific initiatives with supportive and actionable data.

- **Legislative Strategy -** Each member shall work to align individual decisions and policies in service of a shared legislative regional resilience strategy developed by the Regional Resilience Collaborative.

- **Community Involvement -** Each member shall work collaboratively to recognize and engage the regional community, involving a diverse stakeholder representation in developing policies and recommendations for implementation of the Regional Resilience Action Plan.

- **Annual Summit -** Each member shall participate in an annual regional summit to share knowledge, resources, and progress on the collaboration. In addition, the East Central Florida Regional Resilience Collaborative will coordinate with other coalitions in the State of Florida to identify opportunities and fulfill the specific initiatives of the Regional Resilience Action Plan and collaborative.

Finally, attached to this agenda item is a presentation by ECFRPC providing an overview of the Collaborative and the structure and framework.

STRATEGIC PLAN CONNECTION:

Given the intersection of resiliency and providing municipal services, developing a Resiliency Plan and participating as a member of the Collaborative touches many areas of our currently adopted Strategic Plan as well as issues identified to be included in the revised and updated Strategic Plan, specifically Resiliency and Sustainability and Infrastructure.

BUDGETARY IMPACT:

Budgeted N/A

PREVIOUS ACTION:

City Council approved Resolution 2019-011 on February 27, 2019, adopting the East Central Florida Regional Action Plan.

Additionally, the City of Cocoa, through a grant from the Florida Department of Environmental Protection's Florida Coastal Management Program and the National Oceanic and Atmospheric Administration (NOAA), contracted with the East Central Florida Regional Planning Council to engage the community and develop a community resilience plan. The plan is in a final draft form and will be finalized before or concurrently with the City's EAR Based Comprehensive Plan Amendments, which include and incorporate, among other revisions, legislatively mandated policies to address peril of flood requirements within the Coastal Element of our Comprehensive Plan.

RECOMMENDED MOTION:

Approve Resolution No 2019-074 endorsing the East Central Florida Regional Resilience Collaborative providing for the City of Cocoa's support and participation in the initiative.

RESOLUTION NO. 2019-074

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, EXPRESSING PROFOUND GRATITUDE TO THE EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL, COUNCIL SUB-COMMITTEE AND STEERING COMMITTEE, WHO HAVE ARTICULATED THE IMPORTANCE OF ESTABLISHING A COLLABORATIVE FRAMEWORK FOR ACTION AND ARE COMMITTED TO IMPLEMENTING RESILIENCE MEASURES AS A GUIDING PRINCIPLE TO ENHANCE THE EFFORTS OF OUR LOCAL JURISDICTIONS, INDIVIDUALLY AND COLLECTIVELY, FOR THE FUTURE; AND ENDORSES THE EAST CENTRAL FLORIDA REGIONAL RESILIENCE COLLABORATIVE.

WHEREAS, the East Central Florida Region is home to more than 4.1 million residents as of 2018, approximately 20% of the population of the State of Florida, includes two of the four majority-minority counties in the State, hosts over 60 million visitors annually, and comprises one of the fastest growing metropolitan areas in the United States; and

WHEREAS, while the East Central Florida Region remains a service-driven economy where 45% of households qualify as asset- limited, income- constrained, employed according to the United Way's 2018 ALICE report, it is also considered a globally competitive marketplace ranking 38th in the nation according to the Stats America Innovation Index, and is a top ten metropolitan region for various patenting technologies thus indicating a high level of innovation, driving wealth creation in the region; and

WHEREAS, according to the East Central Florida Comprehensive Economic Development Strategy, the region has seven innovation clusters including tourism; aviation and aerospace; boats and other marine vessels; photonics; turbines; modeling, simulation and training; and telecommunications; which positions the region for a diversified and transformative future workforce and economy; and

WHEREAS, water and natural resources are the foundation of communities and eco-tourism in the East Central Florida region and the protection of this biodiversity, its ecosystem services and the economic interdependencies are a critical issue facing the region; and

WHEREAS, recent weather, natural and manmade events have resulted in increasing shocks and stressors to our economy, human security, health and equity, natural environment and built infrastructure; and

WHEREAS, vulnerable and underserved people in our region are disproportionately impacted from the aforementioned events and from on-going stressors to their human security; and

WHEREAS, additional and enhanced regional approaches are needed to build on current efforts and increase adaptive capacities to improve resilience in confronting shocks and stressors; and

WHEREAS, this adaptation toward resilience must provide for the region's people, places, and prosperity in ways that promote mutual progress addressing risk exposure and vulnerability in conjunction with sustainability goals; and

WHEREAS, to support further all efforts that continue to mitigate the increasing impacts of hazards and their complexity in the region, we must elevate ways to work cooperatively across disciplines to identify issues, using existing mitigation strategy research with additional technical expertise to identify ways to improve resiliency, while supporting the local mitigation strategy and post disaster recovery planning to include input to measure continual improvement in the process; and

WHEREAS, the East Central Florida 2060 Strategic Regional Policy Plan identifies effects from climate change to our water availability, agriculture and food security, public health, infrastructure, natural resources, ecosystems services, and economy, and all are therefore appropriate subjects for this regional resilience effort; and

WHEREAS, the resilience of East Central Florida Region's people, places and prosperity rely on interconnected and multi-modal transportation infrastructure, including the spaceport, space center, seaport, trails, rail and other transit systems, roadways and airports; and

WHEREAS, promoting safe, affordable transportation, attainable housing choices, opportunities for safe physical activity, green and open spaces, local food systems, and clean energy use improves health outcomes and contributes to a region that is equitable and prosperous; and

WHEREAS, promoting high-performing, energy-efficient and resilience targets and policies for our built infrastructure reduces the region's risks and vulnerabilities; and

WHEREAS, promoting sustainable development that includes compact urban centers, preservation of agricultural landscapes, interconnected, multi-modal corridors, conservation areas, decreases the carbon footprint, increases our Members' fiscal sustainability and minimalizes conflicts in 'wildland and urban interface' areas, further supporting emergency management efforts; and

WHEREAS, the East Central Florida Region provides shelter during the evacuation of surrounding areas in times of disaster, and must plan effectively to accommodate future migration from high hazard areas; and

WHEREAS, good health is essential and instrumental to human survival, livelihood and dignity, and addressing health disparities and externalities will foster advances in our health systems, increase access to services, and build a more resilient region; and

WHEREAS, collaborating with public and private partners across jurisdictional boundaries will improve human and energy security and increase access to clean and affordable resources and sources of electricity and water; and

WHEREAS, several of our jurisdictions and agencies have taken steps to become more sustainable and resilient while continuing to advance economically and socially, all parties recognize that a coordinated and collaborative approach building on current efforts will best serve the region; and

WHEREAS, the development and success of a regional resilience collaborative depends on participation and commitment from cooperative networks and partnerships with local governments, federal, state and regional agencies, educational institutions, non-government organizations, philanthropic organizations, businesses, civil society, and other stakeholders to raise the level of our resilience; and

WHEREAS, this collaborative approach will position the region, jurisdictions and agencies to plan better for resilience, meet state and federal regulations and guidelines, and enable greater access to long-term financing sources;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA SUPPORTS THE EAST CENTRAL FLORIDA REGIONAL RESILIENCE COLLOBARATIVE AND ENDEAVOURS TO PARTICIPATE AND WORK TOWARD ACHIEVING ITS GOALS AND PRINCIPLES, as follows:

Section 1. The City of Cocoa supports East Central Florida Regional Planning Council's call for stakeholder action, being aware that the realization of the new resiliency framework depends especially on our unceasing and tireless collective efforts to make the region and state more resilient in the decades to come for the benefit of our own and future generations.

Section 2. As a member, the City of Cocoa supports and will participate working toward achieving the following:

- **Regional Cooperation – Create Productive Connectivity -** Each member shall commit appropriate staff resources and expertise, within budget constraints,

to participate with other members in facilitating and advancing the work of the Regional Resilience Collaborative. A steering committee appointed by the ECFRPC will identify and report on opportunities for providing sustainable solutions for the current and future resilience of our built and natural environment, economy, and health and equity. The steering committee will draw on strategies and processes that address resilience, organize and direct integrated scientific and other technical research and analysis, and organize and structure its work and procedures toward these ends.

- **Regional Resiliency Action Plan -** Each member shall work collaboratively to develop a Regional Resilience Action Plan that will identify specific initiatives with supportive and actionable data.

- **Legislative Strategy -**Each member shall work to align individual decisions and policies in service of a shared legislative regional resilience strategy developed by the Regional Resilience Collaborative.

- **Community Involvement -**Each member shall work collaboratively to recognize and engage the regional community, involving a diverse stakeholder representation in developing policies and recommendations for implementation of the Regional Resilience Action Plan.

- **Annual Summit -**Each member shall participate in an annual regional summit to share knowledge, resources, and progress on the collaboration. In addition, the East Central Florida Regional Resilience Collaborative will coordinate with other coalitions in the State of Florida to identify opportunities and fulfill the specific initiatives of the Regional Resilience Action Plan and collaborative.

Section 3. The City of Cocoa City Council reserves the right to withdraw or modify its commitment and or participation as may be deemed appropriate by the City Council in furtherance of the interests of the City of Cocoa.

ADOPTED by the City Council of the City of Cocoa, Florida, in a Regular meeting assembled on the 28th day of August, 2019.

_____
Jake Williams, Jr., Mayor

ATTEST:

_____
Carie Shealy, MMC, City Clerk

East Central Florida Regional Resilience Collaborative

Resilience

- EDA funded opportunity to develop and implement a program focusing on regional disaster resilience. March, 2018
- Cultivating resilience (**collaborative ecosystem**) needs to be understood as a long-term team effort, embedded and providing guidance to undertake empirical analysis of regional systems.
- The general thrust of investing in place, identifying points of global economic relevance, and creating higher levels of social cohesion are an essential piece of a regional action agenda.

Regional Planning Council meetings

- Orange County- Hurricane Maria
  - Affordable housing
  - Migration
- Osceola County
  - Infrastructure Failure
  - Aging Infrastructure
- Regional Food Systems
  - Food Access
  - Health Outcomes
  - Shifting Economic Trends
- City of Orlando
  - Climate Change
- Brevard and Volusia Counties Regional Resilience Action Plan
  - Coastal/ tidal flooding
  - Sea Level Rise

Creating Resilience

- Each project was a demonstration of how ***organized local leadership*** can elevate the distinctive assets of a place in ways that transcend the confines of the past, building linkages throughout the region, state and global economy.



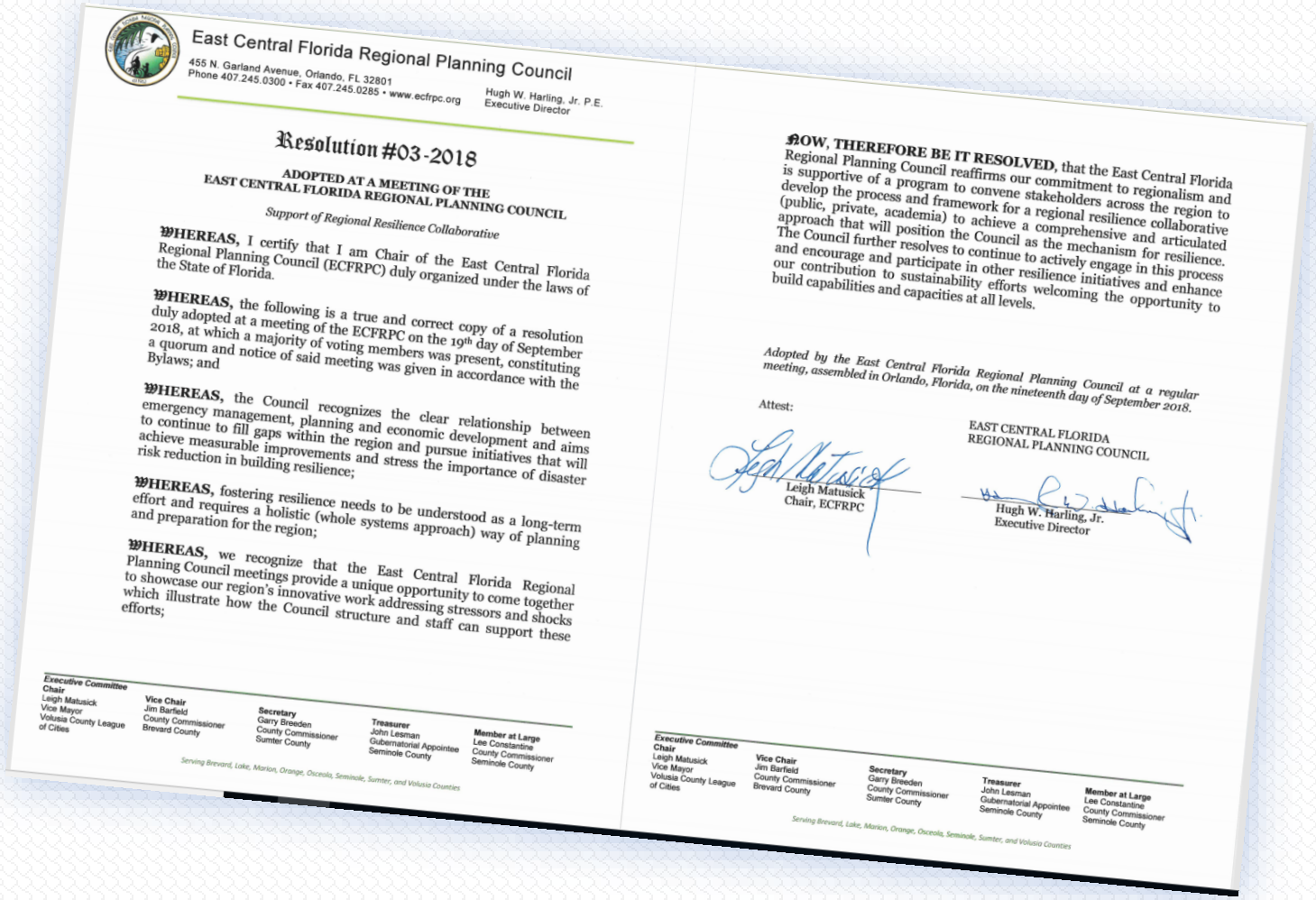




Resolution Adopted

- September, 2018

Council adopted a Resilience Resolution reaffirming their commitment to regionalism; understanding the relationship between planning, economic development and emergency management; and to convene stakeholders across the region to develop the structure and framework for a regional resilience collaborative.



East Central Florida Regional Planning Council

455 N. Garland Avenue, Orlando, FL 32801
Phone 407.245.0300 • Fax 407.245.0285 • www.ecfrpc.org

Hugh W. Harling, Jr. P.E.
Executive Director

Resolution #03-2018

ADOPTED AT A MEETING OF THE EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL

Support of Regional Resilience Collaborative

WHEREAS, I certify that I am Chair of the East Central Florida Regional Planning Council (ECFRPC) duly organized under the laws of the State of Florida.

WHEREAS, the following is a true and correct copy of a resolution duly adopted at a meeting of the ECFRPC on the 19th day of September 2018, at which a majority of voting members was present, constituting a quorum and notice of said meeting was given in accordance with the Bylaws; and

WHEREAS, the Council recognizes the clear relationship between emergency management, planning and economic development and aims to continue to fill gaps within the region and pursue initiatives that will achieve measurable improvements and stress the importance of disaster risk reduction in building resilience;

WHEREAS, fostering resilience needs to be understood as a long-term effort and requires a holistic (whole systems approach) way of planning and preparation for the region;

WHEREAS, we recognize that the East Central Florida Regional Planning Council meetings provide a unique opportunity to come together to showcase our region's innovative work addressing stressors and shocks which illustrate how the Council structure and staff can support these efforts;

NOW, THEREFORE BE IT RESOLVED, that the East Central Florida Regional Planning Council reaffirms our commitment to regionalism and is supportive of a program to convene stakeholders across the region to develop the process and framework for a regional resilience collaborative (public, private, academia) to achieve a comprehensive and articulated approach that will position the Council as the mechanism for resilience. The Council further resolves to continue to actively engage in this process and encourage and participate in other resilience initiatives and enhance our contribution to sustainability efforts welcoming the opportunity to build capabilities and capacities at all levels.

Adopted by the East Central Florida Regional Planning Council at a regular meeting, assembled in Orlando, Florida, on the nineteenth day of September 2018.

Attest:

Leigh Matusick
Chair, ECFRPC

EAST CENTRAL FLORIDA
REGIONAL PLANNING COUNCIL

Hugh W. Harling, Jr.
Executive Director

Executive Committee				
Chair	Vice Chair	Secretary	Treasurer	Member at Large
Leigh Matusick Vice Mayor Volusia County League of Cities	Jim Barfield County Commissioner Brevard County	Garry Breeden County Commissioner Sumter County	John Lesman Gubernatorial Appointee Seminole County	Lee Constantine County Commissioner Seminole County

Serving Brevard, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia Counties

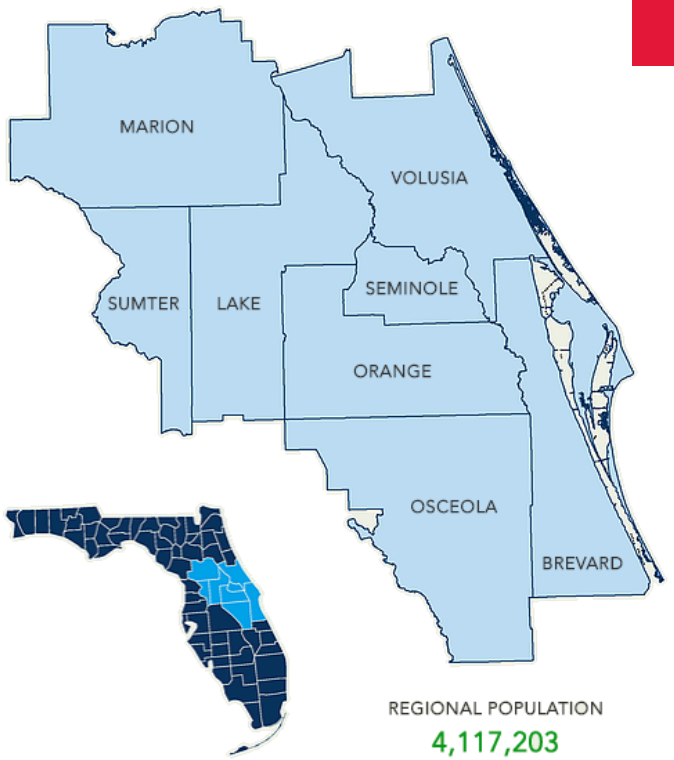
Regional Resilience Collaborative Structure

PROCESS PERSPECTIVE

East Central Florida Regional Planning Council

Council Sub Committee

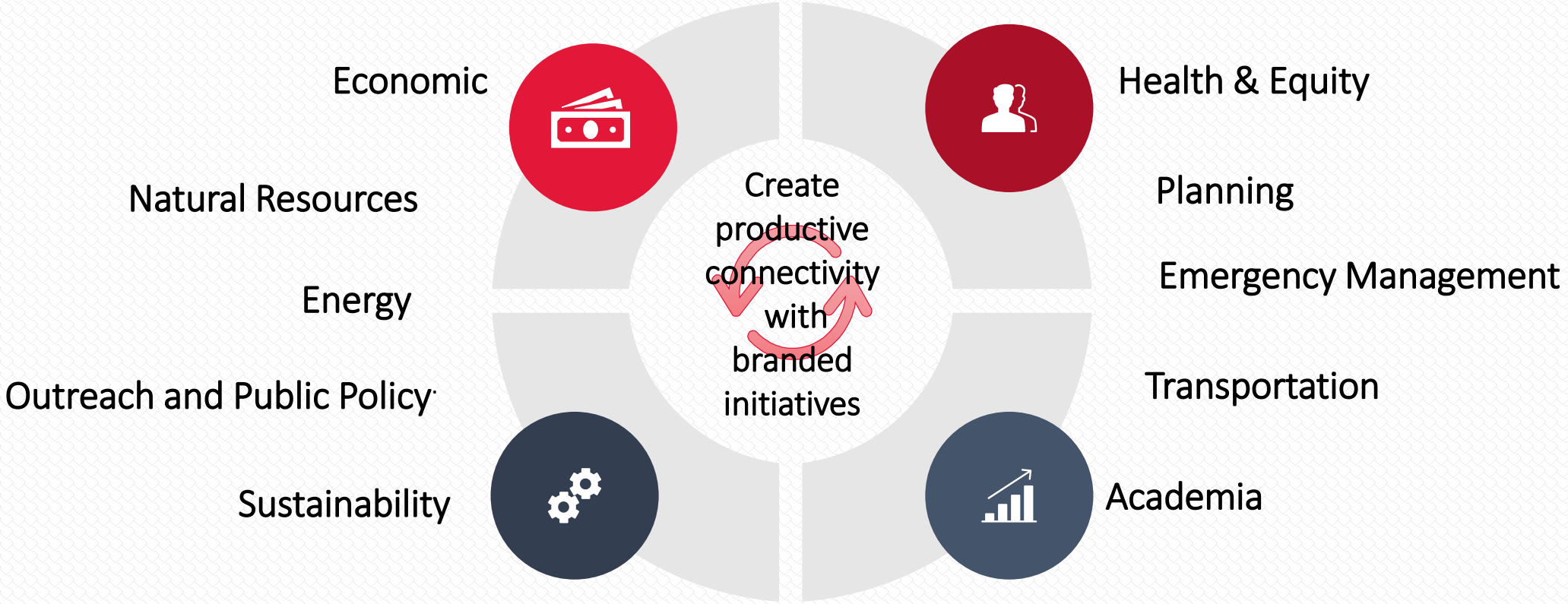
Steering Committee



Collective Impact

Steering Committee

Made up of Disciplines




greenways land resources
food security
infrastructure
water and sanitation
peace and justice
health wellbeing
work and economic growth
sustainable communities
implementing partnerships
energy
climate action
gender equality
poverty
education
blue resources
reduce inequality
consumtion and production

Timeline Development

Council Sub Committee

Capacity Building Resolution Adopted
2 Committees Formed

- Update on Progress
- Review Outline for Draft MOU
- Direction
- Mission Statement
- Requested Bio info for Steering Committee

16

Brevard Manager Meeting
Other Coalition coordination

- Draft MOU to RPC legal for comment
- Draft to CSC/ legal for comment

Feb 25-March 1

- Meetings with Commissioners
- Capacity Building
- Volusia County/City Manager Meeting
- Develop Partnerships

December | January ★ | February

- Develop Structure
- Timeline
- Pillar development
- MOU Language

17

MOU comments due Jan 7th

- Draft MOU Language Discussion,
- Refine Structure, timeline, Pillars

14

- Discuss Refined MOU
- Name Initiative, Logo, Mission Statement

8

Steering Committee

Timeline Development

Council Sub Committee

- Capacity Building
- Plan Jurisdiction Staff Work sessions digging into focus areas June 3-4

- Finalize Mission Statement
- Finalize MOU

March

- Bio + Photo Requests
- Final Language
- Attorney Reviews
- Further define pillars- Focus Areas
- Assessment/ Poll
- **UPDATES from Local Gov, agencies, other**

8

- Council Meeting
- Council Sub Committee Meeting

April

- Capacity Building
- Volusia County/ City Manager Meeting
- National Adaptation Forum

- Logo
- Assessment /Poll
- MOU Roll Out
- Jurisdictional June Workshops
- Pillar Development

12

May

- Signing Ceremony details
- Speakers
- Move MOU to Commission Agendas

- Presentation of MOU

- Council Meeting

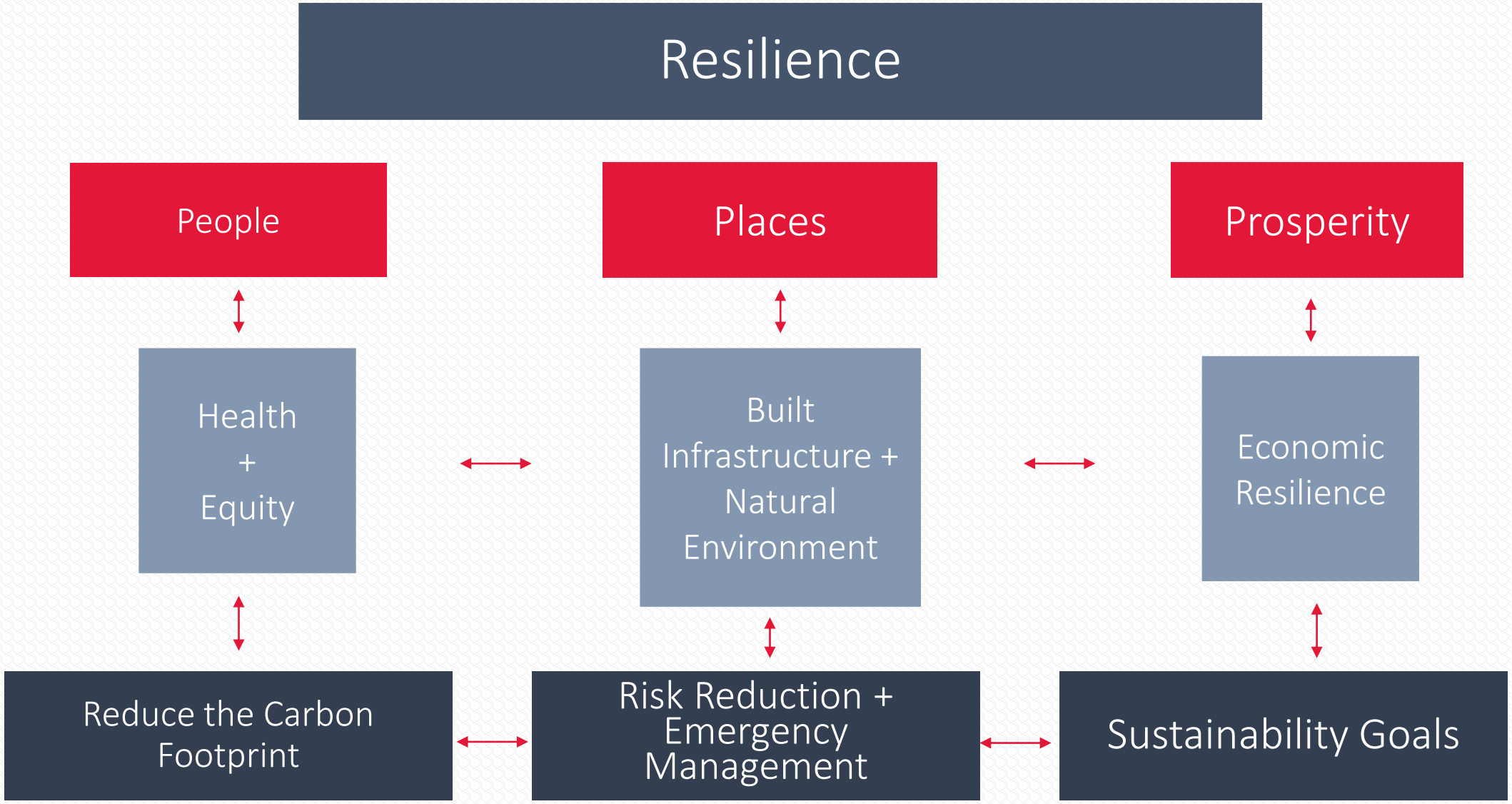
Place MOU on Board Agendas for formalization

Steering Committee

Regional Planning Council meetings

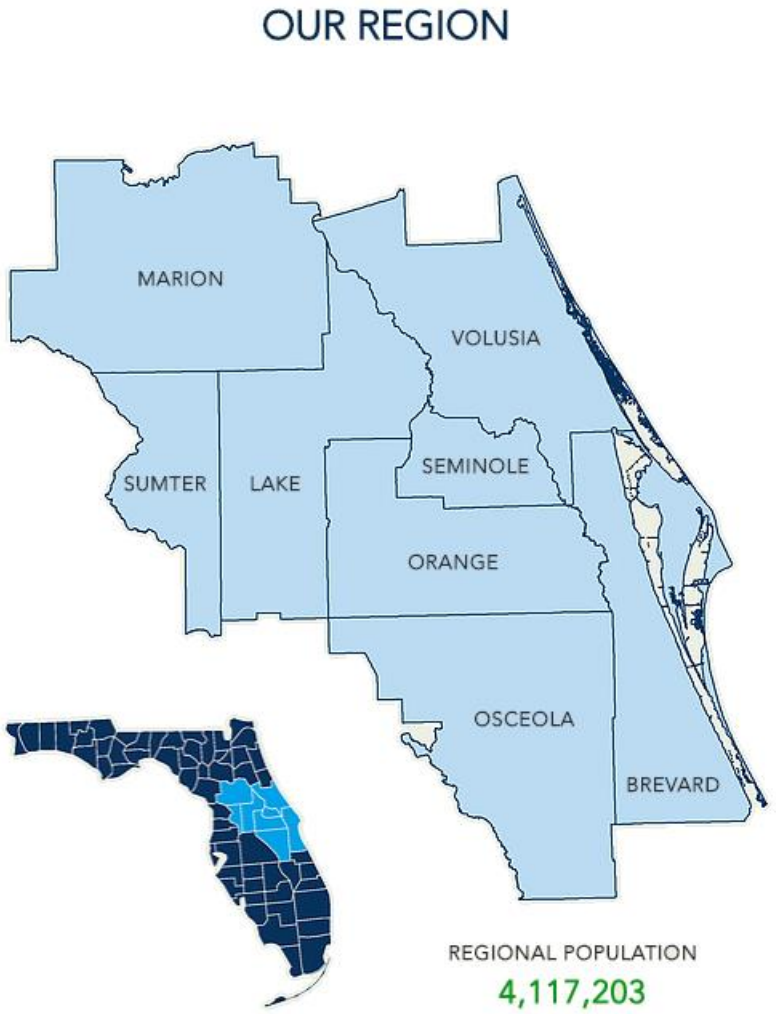
- Lake County
  - Built infrastructure
- City of Titusville
  - Economic Placemaking
- Central Florida; LTRG + EM
  - Resilience on the front lines
  - Risk Reduction
- Volusia County
  - Leveraging grants & partnerships
- Marion County
  - Managing growth and honoring their Agricultural heritage

Council Sub Committee Direction



MOU

- History
- Provide Perspective
- Who constitutes the region
- Why the region is important
  - Prosperity- Economic interdependencies
  - Places – built infrastructure + natural environment
  - People- health + equity
- What are we going to do



What are we going to do?

- **MOU requests**:
  - *Create Productive Connectivity*- commitment and appropriate staff
  - *Regional Resilience Action Plan*- identify regional initiatives with supportive and actionable data
  - *Regional Legislative Strategy*- align individual decisions and policies in service of shared strategy
  - *Community Involvement*
  - *Annual Summit*

Think Globally
Plan Regionally
Act Locally

Next Steps pending vote

EAST CENTRAL FLORIDA REGIONAL RESILIENCE COLLABORATIVE

Collective impact potential begins with ***sharing a vision*** for resilience which is what the MOU and subsequently the collaborative offers.

- **Pillar Refinement**
  - Survey – through May 31 to County/City Managers
  - Staff Engagement Workshops- June 18-19
    - ❖Yield strategic plan for collaborative
- **Roll Out**
  - the stated goal is 8 counties and 78 cities formalizing
  - level of engagement may differ: the annual summit engagement for branded initiatives
- **Governance**
  - Council Sub-Committee dissolves after signing ceremony in fall
  - Steering Committee present outcomes & recommendations to the Council for consideration

June Workshop draft

- Workshops- June 18- 19
- Presentation on collaborative development
  - Background on other national initiatives- Steve Adams
  - Benefits of collaboratives -outcomes- Steve Adams
  - ECFR2C- Jenifer Rupert
- Prioritize Topic Areas
- How does your jurisdiction approach resilience in the prioritized areas?
- Do you have the capacity to track/benchmark topic area progress?
- What initiatives do you want to move forward? What are the barriers/obstacles?
- What regional opportunities does a collaborative present?

Timeline Development

EAST CENTRAL FLORIDA REGIONAL RESILIENCE COLLABORATIVE

Council Sub Committee

Place MOU on Board Agenda for approval

- Capacity Building
- Secure dates for: League of Cities & Association of Counties

- Signing Ceremony details
- Speakers
- Update- MOU to Commission Agendas

- Capacity Building
- League of Cities- potential for Elected Official Primer w/ ACCO

Steering Committee

Place MOU on Board Agenda for approval

June

- June 18-19 Staff Workshops/ ACCO Activator

July ★

- Results from Workshop- form beginnings of strategic plan
- Identify potential Regional Initiatives under each pillar w/mutually reinforcing activities

- Climate Fundamentals Academy- CC-P certification (part 1)

August

- Identify potential Regional Initiatives under each pillar w/mutually reinforcing activities
- Consider TAC
  - Define
  - Populate
- Resources to convene + coordinate participating orgs.

- Climate Fundamentals Academy- CC-P certification (part 2)

September ★

- Signing Ceremony – details tbd by CSC


THANK YOU

Built Infrastructure + Natural Environment

- Green Infrastructure
- Wetlands
- Building Codes
- Drainage/Stormwater
- Energy Efficiency
- Tree Protections
- Relocation
- Public parks
- Coastal Protection
- Growth Planning
- Waste Management
- Water Body Quality/Quantity (spring protection included)
- Green Space
- Flooding
- Storm Surge
- SLR
- Wildlife and Biodiversity Protection
- Transportation
- Gentrification
- Communications (radio, technology)
- Renewables/Storage
- Infrastructure Redundancy
- Extreme Weather

Topic Area Brainstorming

Topic Area MOU

- Accommodate Future Migration
- Water + Sanitation
- Energy
- Reduce Inequalities
- Reduce the carbon footprint
- Sustainable Communities
- Blue Resources
- Green Resources
- Increase fiscal sustainability
- Planning
- Conservation lands
- Interconnected transportation systems
- Biodiversity protection
- Energy Security
- Increase adaptive capacities
- Risk reduction (minimalize conflicts in wild & urban interfaces)
- Water availability
- Ecosystem services
- High performing, energy efficient, resilience targets

Health + Equity

- Contamination Sites
- Farmworkers
- Women/child health
- Economic inequality
- Agriculture
- Water Quality Supply
- Homelessness
- Gender equality
- Affordable housing (safe/sanitary)/Attainable
- Mosquito-born & New disease (vector)
- Access equitable preventative healthcare and services
- Safety / walkability / equitable / accessibility / transportation
- Flooding Impact
- Health impacts
- Poverty
- Representation in decisions /inclusiveness
- Inequitable adaptation/impacts
- Health, food access /deserts
- Environmental justice
- Access to All services
- Sustainable water supply / quality and quantity
- Special needs / ADA
- Heat stress
- Air Quality

Topic Area Brainstorming

Topic Area MOU

- Poverty
- Hunger and Food Security
- Education
- Water + Sanitation
- Sustainability
- Reduce inequalities
- Safe, Clean, affordable transportation
- Peace and justice
- Vulnerable + underserved
- Human security
- Risk exposure + vulnerabilities
- Health disparities + externalities
- Increase adaptive capacities
- Increase access to services
- Risk reduction
- Clean water and energy/ access
- Agriculture
- Safe physical activity
- Local food systems
- Reduce carbon footprint

Economic Resilience

- **Reduce carbon foot print (3)**
- **Eco-Tourism (2)**
- **Transportation (2)**
- **Green/Sustainable Jobs (4)**
- **Poverty /wages (2)**
- **Workforce development / Diversification**
- **Poverty**
- Vulnerable populations
- Living Wage
- Broadband Access
- Economic Diversification (3)
- Circular Economies
- Educational/vocational training
- Water supply /quality
- Philanthropic development/finance
- Business continuity
- Tax Base
- Labor Force Participation
- Long Range Planning
- Redundant infrastructure
- **Insurance/risk reduction (2)**
- Interconnected grids
- Food sector
- Affordable/ attainable housing
- Lack of access to emergency savings
- Barriers to workforce participation

Topic Area Brainstorming

Topic Area MOU

- Poverty
- Hunger + Food security
- Education
- Energy
- Workforce
- Reduce inequalities
- Reduce Carbon Footprint
- Diversify economy
- Diversify + transformative workforce
- Economic interdependencies
- Increase adaptive capacities
- 2 majority, minority counties
- Risk reduction
- Water availability/ clean
- Agriculture
- Local food systems
- Increase fiscal sustainability
- Tourism
- Eco-Tourism

Legislation Details (With Text)

File #:	19-391	**Version:**	1	**Name:**	Brevard Adult Education Career and Technical Educational Center
Type:	Report			**Status:**	City Business
File created:	8/9/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve a letter of support committing to a Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools, subject to, and for the purposes of obtaining a grant from the Florida Department of Economic Opportunity (DEO) Florida Job Growth Grant Fund for the Brevard Adult Education Career and Technical Education Center. Should the Grant be Awarded, Staff will return to City Council to Accept the Revenue and prepare the appropriate FY2020 Budget Adjustments. (Community Services Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Career and Technical Center Support Letter 2019.pdf JOB Growth Grant proposal Brevard Adult Ed 2019.pdf florida-job-growth-grant-fund-workforce-training-form.pdf 042318 Minutes.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 9, 2019
Agenda Date: August 28, 2019
Prepared By: Samia Singleton, Economic Development Specialist
Through: Nancy A. Bunt, Community Services Director
Requested Action:
Approve a letter of support committing to a Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools, subject to, and for the purposes of obtaining a grant from the Florida Department of Economic Opportunity (DEO) Florida Job Growth Grant Fund for the Brevard Adult Education Career and Technical Education Center. Should the Grant be Awarded, Staff will return to City Council to Accept the Revenue and prepare the appropriate FY2020 Budget Adjustments.

BACKGROUND:

In 2017, Governor Rick Scott established the Florida Job Growth Grant Fund to fund public infrastructure and workforce training that would provide Floridians with transferable, sustainable workforce skills. In 2019-20, the Florida Department of Economic Opportunity (DEO) will be able to provide $40 million for projects that focus on rapidly developing a highly skilled workforce and on infrastructure initiatives that attract businesses, create jobs and promote economic growth. The DEO is now accepting proposals aimed at growing infrastructure and aimed at developing a highly-skilled

workforce.

In June 2019, the unemployment rate for Brevard County was 3.5%. However, a substantial portion of the workforce in Cocoa remains unemployed. According to an ESRI report, in 2017 the Cocoa estimated unemployment rate was 8.9%. According to the U.S. Census Bureau, in 2016 the Cocoa Unemployment rate was 14.4% with a 4.1% margin of error. Barriers to employment are high school education attainment and lack of supplemental entry level certified training programs. The larger unemployment rate in Cocoa correlates with the lower education attainment rates, leading to a need for workforce preparedness training. A prepared workforce is an essential element necessary to attract economic development projects, which in turn builds our tax base and reduces the burden of government.

In addition, an alarming trend developing in our region is a mismatch between the level of skills that workers possess and the skills that businesses need. The long-term negative impacts of this “skills gap” on workers, families, businesses, governments and the economy are potentially profound and far-reaching.

The 2015 City of Cocoa Economic Base Analysis, completed by the Balmoral Group, ascertained Cocoa is in a prime position, with its proximity to major interstates, ports and metropolitan areas, to attract new employers and expand its economic base. In addition, the Economic Base Analysis determined that the City should focus recruitment and expansion efforts on the targeted sectors of trade, transportation and warehousing/logistics/distribution, specifically those that serve the existing manufacturing base (both traditional and evolving), and refrigerated storage.

Brevard Adult Education Career and Technical Education Center

The Brevard Adult Education Career and Technical Education Center is a planned career and technical education training center in Brevard County. The center will be constructed on a 13-acre parcel of the 41.17-acre campus of the Clearlake Education Center located at 1225 Clearlake Road in Cocoa, Florida. Establishment of the Brevard Career and Technical Training Center will facilitate delivery of a comprehensive workforce-training program for adult learners in a state of the art facility. Career and technical training will focus on specific job skills, careers and/or trades, such as logistics, pre-apprenticeships and Information Technologies (IT). Additionally, the vocational training will focus on practical applications of skills learned through hands-on training thus providing a link between education and the world of work. Specific and targeted adult career and technical training will assist in building a pipeline of qualified candidates who are prepared to take a high-paying, skilled job immediately. Graduates of the career and technical education center will have an advantage over informally trained job seekers as they will have the opportunity, through their training, to earn industry certifications demonstrating the skills needed to successfully perform a specific, skilled occupation.

On April 23, 2018, at the Budget Workshop a consensus was made among Council to agree to the recommendation made by the City Manager to support the Training Center through the Assigned Economic Development Catalyst Funds. The City provided a letter of support, committing to a Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools, which provided for:

- A one-time City of Cocoa construction capital grant and permitting fee assistance of up to $100,000 as a total contribution.
- An annual operating subsidy of $10,000 from the City of Cocoa.

- In kind marketing services from the City of Cocoa and Brevard Public Schools to co-market and promote the Training Center.
- Up to 25% of the students would be Cocoa residents, having a residency of at least 12 months. If this goal cannot be met, the operating subsidy commitment, would still remain in force.
- Cocoa students would have a first right to participate in both the full time and or part time programs at the Training Center.
- Cocoa residents will receive a full or partial scholarship from the School to cover tuition, on a formula and scoring criteria basis (to be structured).

Subsequently, the Brevard Adult Education Department of Brevard Public Schools prepared and submitted a detailed 2018-19 Florida Job Growth Grant Fund application to the DEO for the Center for $1.4 million for the construction and equipping of the Training Center. Approximate total project costs are $2 million. Unfortunately, DEO did not award Brevard Adult Education's application for the Training Center.

Brevard Adult Education intends to resubmit its application to DEO for the 2019-20 Florida Job Growth Grant Fund and requests the City provide another letter of support, committing to a Municipal Services Capital Contribution Agreement, which provides for:

- A one-time City of Cocoa construction capital grant and permitting fee assistance of up to $100,000 as a total contribution.
- An annual operating subsidy of $10,000 from the City of Cocoa with an initial commitment of two 5-year terms, subject to annual performance reviews.
- In kind marketing services from the City of Cocoa and Brevard Public Schools to co-market and promote the Training Center.
- Up to 25% of the students would be Cocoa residents, having a residency of at least 12 months. If this goal cannot be met, the operating subsidy commitment, would still remain in force.
- Cocoa students would have a first right to participate in both the full time and or part time programs at the Training Center.
- Cocoa residents will receive a full or partial scholarship from the School to cover tuition, on a formula and scoring criteria basis (to be structured).

STRATEGIC PLAN CONNECTION:

The purpose of this project is to provide jobs and build Cocoa's economic competiveness by preparing Adult Education students with training and certifications necessary to qualify for living wage jobs that meet the needs of our target industries. The City of Cocoa 2016 Strategic Plan specifically addressed this need, in addition to identifying the following issues, goals and objectives:

Economic Development

- To recruit a highly qualified workforce that is reflective of the community they represent.
- Foster a skilled workforce to serve Cocoa Business, Industry and Institutions.

Fiscal Sustainability

- The City's need to develop a financially sustainable revenue base through business retention

and expansion.

Community Development

- The City's need to raise the quality of life for all its residents, especially those most vulnerable and disadvantaged.

BUDGETARY IMPACT:

The Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools would provide for:

- A one-time City of Cocoa construction capital grant and permitting fee assistance of up to $100,000 as a total contribution.

- An annual operating subsidy of $10,000 from the City of Cocoa with an initial commitment of two 5-year terms, subject to annual performance reviews.

The 5-Year Capital Improvement Plan includes the one-time City of Cocoa construction capital grant and permitting fee assistance for $100,000, in the FY 2021 Infrastructure Account 001-3205-559.63-00.

(Should the Grant be awarded in FY 2020, City staff will return to City Council to accept the grant funding and budget the revenue and expenditures to the appropriate general ledger accounts).

PREVIOUS ACTION:

On April 23, 2018, at the Budget Workshop a consensus was made among Council to agree to the recommendation made by the City Manager to support the Training Center through the Assigned Economic Development Catalyst Funds.

RECOMMENDED MOTION:

Approve a letter of support committing to a Municipal Services Capital Contribution Agreement between the City of Cocoa and Brevard Public Schools, subject to, and for the purposes of obtaining a grant from the Florida Department of Economic Opportunity (DEO) Florida Job Growth Grant Fund for the Brevard Adult Education Career and Technical Education Center. Should the Grant be Awarded, Staff will return to City Council to Accept the Revenue and prepare the appropriate FY2020 Budget Adjustments.

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City Manager's Office
65 Stone St. I Cocoa, FL 32922
Phone: (321) 433-8686 I Fax: (321) 433-8690

August 14, 2019

The Honorable Ron DeSantis
Governor of Florida
The Capitol
400 South Monroe Street
Tallahassee, Florida 32399-0001

RE: Brevard Adult Education Career and Technical Education Center - Florida Job Growth Grant Fund-Workforce Development Grant

Dear Governor DeSantis,

The City of Cocoa enthusiastically supports the establishment of the Brevard Adult Education Career and Technical Education Center, through a grant from the Florida Job Growth Grant Fund. A dedicated career and technical training facility that educates, certifies, and secures employment for adult students will be an empowering element enabling our residents and our businesses to thrive.

The establishment of a Career and Technical Education Center is consistent with and meets all of the City's Strategic Planning Objectives to "Foster a Skilled Work Force". In the 2015 City of Cocoa Economic Base Analysis completed by the Balmoral Group, it was noted that Cocoa's location, with its proximity to major interstates, ports and metropolitan areas, is in prime position to attract new employers and expand its economic base. Surveys of investment, supply chain and site selection experts recommended that a key sector focus for the City of Cocoa would be trade, transportation and the warehousing/logistics/distribution sectors. Specifically those that serve our existing manufacturing base.

A substantial portion of Cocoa's workforce remains unemployed despite increasing business interest and investment in the area. Low high school education attainment, and lack of supplemental entry level certified training programs continue to be barriers to employment. There is a persistent and growing mismatch between the level of skills that workers possess and the skills businesses require. The long-term negative impacts of this "skills gap" on workers, families, and businesses in Cocoa and Brevard County are potentially profound and far reaching. The creation of a Career and Technical Education Center in Cocoa is a critical component of economic competitiveness, growth, and vitality for the City of Cocoa and the Space Coast region.

The City is seeking a financial commitment from its City Council. If approved the City would enter into a Memorandum of Understanding (MOU) with Brevard Public Schools (BPS) to fund a

significant portion of this project. The MOU would outline the following terms and conditions to be included in a capital contribution agreement with the City of Cocoa:

- A one-time City of Cocoa construction capital grant and permitting fee assistance of up to $100,000 as a total contribution.

- An annual operating subsidy of $10,000 from the City of Cocoa with an initial commitment of two 5-year terms, subject to annual performance reviews.

- In kind marketing services from the City of Cocoa to co-market and promote the Logistics Training Center.

- Up to 25% of the students would be Cocoa residents, having a residency of at least 12 months. If this goal cannot be met, the operating subsidy commitment, would still remain in force.

- Cocoa students would have a first right to participate in both the full time and or part time programs at the Training Center.

- Cocoa residents will receive a full or partial scholarship from the School to cover tuition, on a formula and scoring criteria basis (to be structured).

The City seeks to enrich the quality of life for its unique and diverse community through various economic and community development strategies. This grant is an important opportunity for the Florida Department of Economic Opportunity Job Growth Fund, Brevard Public Schools and the City of Cocoa to make a significant human capital investment and foster greater economic resiliency.

Please contact me if you need additional information about the City of Cocoa or have questions regarding support of the School Board's application.

Sincerely,

John A. Titkanich, Jr., AICP, ICMA-CM
City Manager

Florida Job Growth Grant Fund
Workforce Training Grant Proposal

Entity Information:

Name of Entity: Brevard Public Schools Department of Adult & Community Education
Federal Employer Identification Number: 59-6000522003

Contact Information:

Primary Contact Name: Jeffery Arnott
Title: Director of Adult and Community Education, Brevard Public Schools
Mailing Address: 1225 Clearlake Road, Cocoa, Florida 32922
Phone Number: (321) 633-3660 ext. 198
Email: Arnott.jeffery@brevardschools.org

1. **Program Requirements:**

A. Provide the title and a detailed description of the proposed workforce training:
Title: **Brevard Adult Education Career and Technical Training Program**
Description: Construction of the **Brevard Adult Education Career and Technical Education Center,** by Brevard Public Schools, will enable the public school district to establish a career and technical education training center in Brevard County. The center will be constructed on a 13-acre parcel of the 41.17-acre campus of the Clearlake Education Center located at 1225 Clearlake Road in Cocoa, Florida. The school campus, owned by the Brevard Public School district, is geographically located in the central region of the 73-mile long county. It is less than one mile from the Eastern Florida State College Cocoa Campus, facilitating ease of collaboration and articulation between entities. Establishment of the Brevard Career and Technical Training Center will facilitate delivery of a comprehensive workforce-training program for adult learners in a state of the art facility. Career and technical training will focus on specific job skills, careers and/or trades, such as logistics, pre-apprenticeships and Information Technologies (IT) to benefit industries in the Workforce Region 13. Additionally, the vocational training will focus on practical applications of skills learned through hands-on training thus providing a link between education and the world of work. Specific and targeted adult career and technical training will assist in building a pipeline of qualified candidates who are prepared to take a high-paying, skilled job immediately. Graduates of the career and technical education center will have an advantage over informally trained job seekers as they will have the opportunity, through their training, to earn industry certifications demonstrating the skills needed to successfully perform a specific, skilled occupation.

B. Describe how this proposal supports programs at state colleges or state technical centers:

Brevard Public Schools (BPS) and Eastern Florida State College (EFSC) have a long and successful relationship. This program will directly support EFSC's established Career and Technical student learning outcomes. Each of the EFSC Career and Technical programs have student learning outcomes that are assessed, and associated data are reported during the Fall, Spring, and Summer terms. Articulation between BPS and EFSC will enable mutual support, as adult students complete workforce training through the Brevard Career and Technical Training program. Students will be prepared for the rigor of EFSC programs such as Associate of Science (AS) degree, Post-Secondary Adult Vocational (PSAV) training, College Credit Certificate (CCC), and pre-apprenticeships/full-apprenticeships in areas that lead to industry certifications. Adult learners completing the specialized vocational programs through the Brevard Career and Technical Center will be equipped to not only continue with programs at EFSC, but any other state college or state technical center programs offered throughout the state.

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C. Describe how this proposal provides participants transferable, sustainable workforce skills applicable to more than a single employer:

Major employers in this area include the Canaveral Port Authority (all cruise and cargo operations), Kennedy Space Center, Orlando and Melbourne airports, multiple building contractors, Brightline/Florida East Coast Industries, Walmart logistics warehouses, Health First, Steward Health Care, and many other retailers, hoteliers, builders, and manufacturers. Having a viable adult education career and technical program that provides learners with first-hand industry equipment experiences, pre- and full- apprenticeship opportunities and industry certification will develop a highly qualified workforce with improved literacy skills and credentials such as logistics, manufacturing, welding, and IT services. These students will have enhanced communication and literacy skills that will successfully transfer in the workplace. In addition, they will have worked toward a job-related certification or credential. For example, students can earn a General Educational Development (GED) while gaining industry credentials in logistics. By working collaboratively with area businesses, these skills will match the positions that are available at warehouses, industries, wholesalers/retailers, shipping ports, train depots and airports in and around Brevard County. According to Career Source Brevard's *4 Year Comprehensive Plan (2016-2020)*, the skills needed to meet employment needs in the logistics industry include "training and education in information technology, logistics software, and knowledge of distribution and transportation." This program will address those needs.

D. Does this proposal support a program(s) that is offered to the public? **Yes**

E. Describe how this proposal is based on criteria established by the state colleges and state technical centers:

The Brevard Career and Technical Program is based on criteria that is established by Florida's state colleges and vocational/technical centers for confirming of degrees, certificates, and industry credentials. Because Brevard Public Schools Adult & Community Education department is part of the district public school system it is accredited and follows Florida's state curriculum frameworks for all courses and credits offered to students. As such, this career and technical program will continue to follow state criteria for all diplomas, degrees, and certifications offered to students. In addition, this center will collaborate with Career Source Brevard and the local Economic Development Commission. The vocational training program will emphasize the Workforce Innovation Opportunity Act (WIOA) requirements, such as providing post-secondary options for students, progress monitoring, and integrated educational programs with both literacy and employability skills thus, enhancing and expanding career pathways and Florida's PSAV Career and Professional Education (CAPE) certification credentials.

F. Does this proposal support a program(s) that will not exclude unemployed or underemployed individuals? **Yes**

G. Describe how this proposal will promote economic opportunity by enhancing workforce training. Please include the number of jobs anticipated to be created from the proposed training. Further, please include the economic impact on the community, region, or state and the associated metrics used to measure the success of the proposed training:

The economic impact of this proposal will result in positive growth both directly and indirectly. For example, according to Florida Today newspaper, Port Canaveral is poised to spend $18 million on the first phase of a cargo berth project that will help provide facilities for the commercial space industry. This project is part of a $78.96 million master plan that will unfold over the next 30 years. The overall estimate for the 30-year growth plan of Port Canaveral is $1.15 billion with over 1100 new jobs created. Hundreds of jobs will need filling as the master plan unfolds, which includes new cruise and container terminals, a new liquidized natural gas facility, and an upgraded cargo facility. The impact on the local community and the residents of Brevard County will demonstrate the need to prepare its citizens for the jobs skills necessary to succeed in these growing industries. **The Return on Investment** in a career and technical

education training center will occur through the **Multiplier Effect**. The multipliers in the region of the eastern portion of Central Florida will cause increases in jobs, sales, output, income, and/or value added (VAM). Many industries are already poised to multiply, or increase, the economy of the region. The **total effect** of an adult career and technical education facility in a growing region where none currently exists will have many outcomes. By tailoring training programs with the demands of growing local industries, Brevard's career and technical education program will cause an increase in a highly-skilled and credentialed workforce, aligning student training to industry employability skills. In terms of Multipliers, **total effect** has three main parts: **direct, indirect**, and **induced effects**. The **direct effects** will be the immediate employment impacts associated with the training of hundreds of workers in targeted local industries. Logisticians, cargo and freight agents, and workers engaged in the production and movement of materiel will be in high demand as the Space Coast advances in manufacturing, logistics, and technology. Businesses will see increased productivity and efficiency because marginal costs will be lower and output will be greater with highly-skilled employees. The benefits of enhanced productivity have the potential to be captured by employers in the form of higher profits and increased competitiveness. The **indirect effects** are the increased employment linkages created by or resulting from the initial industry. For example, as a cargo center or warehouse operation grows, an increased demand for truck drivers, trucks, mechanics, clerks and fuel will result. Therefore, other industries that supply goods and services to the expanding industries grow. Brevard Adult Education and Career Source Brevard will continually monitor the potential workforce needs of these growing industries. In addition, the **induced effects,** also known as the "*ripple effect,*" throughout the area will give rise to higher wages commensurate with employee skill levels and result in greater consumer discretionary incomes. With increased availability of discretionary income, sectors of the local economy, such as restaurants, real estate, construction, retailers, and even recreational outlets benefit. Training adults to succeed in the workplace is a multiplier for both the workers and for all sectors of the economy. The **metrics** used to measure the success of the training will be technical skills achievement rate of 97 percent (obtaining a certificate or industry recognized credential) and a placement rate of 95 percent. Economic measures such as the number of applications for government assistance and the overall unemployment rate will decrease as a result of providing workforce training.

2. Additional Information:

A. Is this an expansion of an existing program? **No**

B. Does the program align with Florida's Targeted Industries?
Yes, this program proposal aligns with Florida's Targeted Industries, especially in the areas of **Global Logistics/Transportation/Distribution** and **IT/InfoTech.** This is a key industry that will support the region's **Manufacturing**, **Aviation, Aerospace and IT** sectors**.**

C. Does the proposal align with an occupation(s) on the Statewide Demand Occupation List and/or the Regional Demand Occupation List? **Yes.** This program aligns with occupations identified on the Statewide and Regional Demand occupation lists such as:

i. **Logistician (High Skill/High Wages Occupations)**
ii. **Transportation, Storage, and Distribution Managers**
iii. **First Line Supervisor of Material-Moving Vehicle Operators**
iv. **Cargo and Freight Agent**
v. **Helpers-Production Workers (Forklift and Dock Workers)**

D. Indicate how the training will be delivered (e.g., classroom-based, computer-based, other):
Training will be delivered in a blended program environment where some students may attend ABE or GED classes, if needed, in addition to their career and technical education program courses. Each student's program will be designed to meet the needs of the individual student, ensuring a path to success. In this way, this facility and program will connect Adult General Education students to a post-secondary technical training program/career pathways. The facility will have training equipment and technology labs to complete the necessary hands-on portion of their industry certification. Labs will be designed to mimic environments found in industry. The program will make use of business partnerships to obtain industry credentials for students in a short period of time, thus saving employers' training costs.

E. Indicate the number of anticipated students and completers:
The number of anticipated enrolled students and completers will be in cohorts of 35, advancing through the program in a quarterly system. Once the building is complete and the program is fully established, it is to serve an estimated 140 students at a time, annually producing approximately 65-70 completers, year after year. The completion rate target is 95 percent.

F. Indicate the length of the program (e.g. quarters, semesters, weeks, etc.), included anticipated beginning and ending dates:

The length of the programs will be in quarters roughly aligned to traditional school semesters. Upon completion of the construction of the training center, the anticipated start date for students will begin in the Fall of 2019 and the end date for the first cohort will be May of 2020, depending on the hours required for each specific program.

G. Describe the plan to support the sustainability of the proposal:

Support provided through Florida's Job Growth grant will cover the startup funding needed to begin the career and technical education program. The City of Cocoa, a major partner, has committed their on-going support by offering a subsequent annual operating costs contribution of $10,000, plus in-kind marketing where the City and Brevard Public Schools will work to promote the program by way of websites, social media and other publications and promotions. Beyond the initial startup, the training program will be a sustainable part of the Brevard Public Schools Department of Adult & Community Education operational budget. The career and technical education training facility will be utilized by the adult education program to provide industry certifications and create highly skilled workers. Currently, the adult education program in Brevard serves approximately 2500 students annually, who are obtaining adult high school diplomas, GED's, industry certifications and PSAV certificates. An adult education career and technical training center, which Brevard Public Schools does **not** currently have, will integrate education programs to serve the needs of both local students and employers. The school district will maintain the facility and the program will be staffed by well-qualified instructors who are background checked, screened and vetted through established BPS Human Resource hiring policies. The instructors will integrate curriculum with career and technical **bridge programs**, bridging their courses to collaborative career pathways with other technical and college programs. Students will pay modest fees, and the program will be maintained by the experience and quality control of Brevard Public Schools as part of their Adult Education Program.

H. Identify any certifications, degrees, etc. that will result from the completion of the program. Please include the Classification of Instructional Programs (CIP) code if applicable.

Brevard Adult Education program will work with adult learners enrolled in the career and technical program to provide concurrent opportunities for

individuals who need adult high school diplomas or GED's. Completion of the vocational training program will enable adult learners to earn PSAV industry certifications such as **Global Logistics Associate** (Florida CAPE Industry Certification Code AMSTL003), **Professional Designation in Supply Chain Management** (Florida CAPE Industry Code AMSTL004), **MSSC Certified Logistics Technician** (Florida CAPE Industry Code MSSCN002), and **Pre-Apprenticeship Certificate Training** (CAPE Code HBINS002). The CIP code is 165202301 (Transportation and Logistics). We will also train students in forklift and OSHA credentials.

I. Does this project have a local match amount?

Yes. This project has a $100,000 local match amount from the council members of the **City of Cocoa** that represents a 5.8 percent investment in the total construction cost of the facility. The City of Cocoa is a major partner with the Brevard Adult & Community Education department and together share a vested interest in the economic development of its businesses and citizens. The vocational training center will be located within the city limits of Cocoa and as such will become a vital part of its infrastructure. The City of Cocoa will be committed to this project and its goals through a Municipal Services Agreement for a construction capital contribution and permitting fee assistance ($100,000 total contribution) and subsequent annual operating costs contribution ($10,000), plus in-kind marketing where the City and Brevard Public Schools will work to promote the center. Another partner is **Career Source Brevard**. Career Source Brevard is an in-kind partner pledged to assist with job placement and alignment of employability skills with job openings in the area. These entities have a collective commitment to supporting people in need of education, training and job-skills enhancement, such as those displaced by Hurricanes Irma and Maria. The **School Board of Brevard County** is contributing the land valued at $39,500 for the construction of the new, first of its kind, adult career and technical training facility and will make additional in-kind contributions such as providing maintenance, coverage of utilities, and employment of qualified staff to provide instruction in career and technical training.

J. Provide any additional information or attachments to be considered for the proposal: Attached to this proposal are letters of interest demonstrating support of this project from:

- Career Source Brevard
- Space Coast Economic Development Commission
- The City of Cocoa, Florida
- Knight's Armament
- Representative Tyler Sirois

- Senator Dorthey Hukill

3. Program Budget:

Estimated Costs and Sources of Funding: Include all applicable workforce training costs and other sources available to support the proposal.

A. **Workforce Training Projects Costs:**

1)	Equipment	$ 186,450
2)	Personnel	$ 60,000
3)	Facilities	$ 1,500,000
4)	Tuition	$ 0
5)	Training Materials	$ 70,184
6)	Other (specify):	
	i. Land value BPS	$ 39,500
	ii. Logistics Cert. testing fees	$ 5250
Total Project Costs:		$ 1,871,384

B. **Other Workforce Training Project Funding Sources:**

1)	City/County	$ 100,000
2)	Private Sources	$ 0
3)	Other (specify): in-kind land donation	$ 39,500
Total Other Funding:		$ 139,500

Total Amount Requested: $ 1,731,884

C. **Budget Narrative:** Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding, how equipment purchases will be associated with the training program, if applicable, and any other pertinent budget-related information.

1) Equipment ($186,450)- all equipment will be used by students and instructors in training facility and programs. **See below:**

- Logistics training equipment/supplies to include but not limited to tools, cartons, bubble wrap/foam, labels, tape, tape dispensers, gloves, fasteners, shrink wrap, banding equipment, printers, ink, paper, etc.- $500
- Organizational/storage systems for supplies- $500
- Shelving units- $6000
- Flammable Storage Cabinet- $500

- Locking security cabinet- $1500
- Cart- $200
- Roller conveyors- $1400
- Straddle crane- $5000
- Expand-a-gate- $250
- Hand trucks- $300
- Hydraulic work benches- $5000
- Forklift truck- $40,000
- Electric Hoist- $3000
- Self-dumping hopper- $3000
- Rolling Ladder- $2000
- Slings- $100
- Pallet truck- $600
- Compact electric pallet truck- $5000
- Entrance mats- $150
- Blower- $200
- Fan- $150
- Industrial floor scrubber- $4000
- Wire cage-$1500
- Scales- $500
- Emergency shower and eye wash- $1200
- Bookcases- $1000
- Lateral file cabinets- $2700
- File cabinet desks- $2000
- Aluminum pallets- $1200
- Nesting pallets- $100
- Rack system- $3000
- Transport drone system- $10,000
- Rolling laptop/technology cart- $400
- Inventory management software system with scanners- $30,000
- Platform truck- $300
- Computer lab- $30,000
- Presentation equipment- $3500
- Classroom set-up- $10000
- Security system for the new facility- $ 10000

Total for equipment cost: $186,450

2) Personnel ($60,000): This includes the salary of the career and technical instructors and all fringe benefits, such as social security payments.

3) Facilities ($ 1,500,000): Expenditures to construct a 7,500 square foot logistics training building to be located on the property of Brevard County School Board at 1225 Clearlake Road in Cocoa, Florida. This estimated cost of building this new facility includes all construction costs for a building that will house:
    - **i.** a classroom to seat 35 students
    - **ii.** a computer lab for 35 students
    - **iii.** a climate controlled storage room
    - **iv.** a simulated warehouse for hands-on training.

   It will take approximately one to two years to have the facility built and equipped with the training equipment needed to conduct the programs.

4) Tuition ($0): We do not anticipate that there will be a tuition cost associated with the establishment of the facility; however, modest fees at the state-approved rates for continuing education will be charged to students in the programs once construction of the facility is completed.
5) Training Materials ($70,184): Staff members training in curriculum and instruction to ensure the most up-to-date, research-based best practices in adult career and technical education. Additionally, this will cover the purchase of all materials to be used by staff and students in the logistics training program. **See appendix for detailed list.**
6) Other ($5250): Brevard Adult Education is requesting start-up funds to cover the cost of certification examinations for the first-year student cohort as the program becomes established. The cost of the logistics industry examination is approximately $75 per student. The targeted enrollment for the first year cohort is 70 students (70 X 75 = $5250).
7) Other Funding Sources ($100,000): The City of Cocoa, Florida has pledged a match of $100,000 to assist in the construction of the facility. This includes, but is not limited to, infrastructure such as installation of utilities, zoning/permitting, and construction related costs.
8) Private Sources/Other Sources ($0): No additional sources of finances are budgeted for this job growth training facility project.

Timing and steps necessary to obtain funding: By having the School Board of Brevard County Florida and the City of Cocoa approve in advance to expend the Workforce Training Grant Fund, Brevard Adult and Community Education will be able to expend funds upon receipt of award notification. As soon as award notification has been received, purchase order requests will be made to order the building materials and equipment needed to build the facility. The facility should be completed and ready for student enrollment by either August 2020 or January 2021.

4. Approval and Authority:

A. Approval of the **Brevard County School Board** must be obtained, as well as the approval of the **City of Cocoa, Florida.**

B. Schedules:

i. The schedule of upcoming meetings for the year 2018 for the Brevard County School Board is:

1. August 13 5:30 p.m.
2. August 27 5:30 p.m.
3. Sept. 10 5:30 p.m.
4. Sept 24 5:30 p.m.
5. Oct. 10 5:30 p.m.
6. Oct. 29 5:30 p.m.
7. Nov. 19 5:30 p.m.
8. Dec. 17 5:30 p.m.

ii. The School Board of Brevard County can hold a special meeting with 2 days' notice.

C. Attached please find evidence of delegation of authority for Brevard County Schools to execute this proposal.

FLORIDA DEPARTMENT of ECONOMIC OPPORTUNITY

ENTERPRISE FLORIDA®

I, the undersigned, do hereby certify that I have express authority to sign this proposal on behalf of the above-described entity.

Name of Entity: Brevard Public Schools

Name and Title of Authorized Representative: Desmond Blackburn, Ph.D. Superintendent

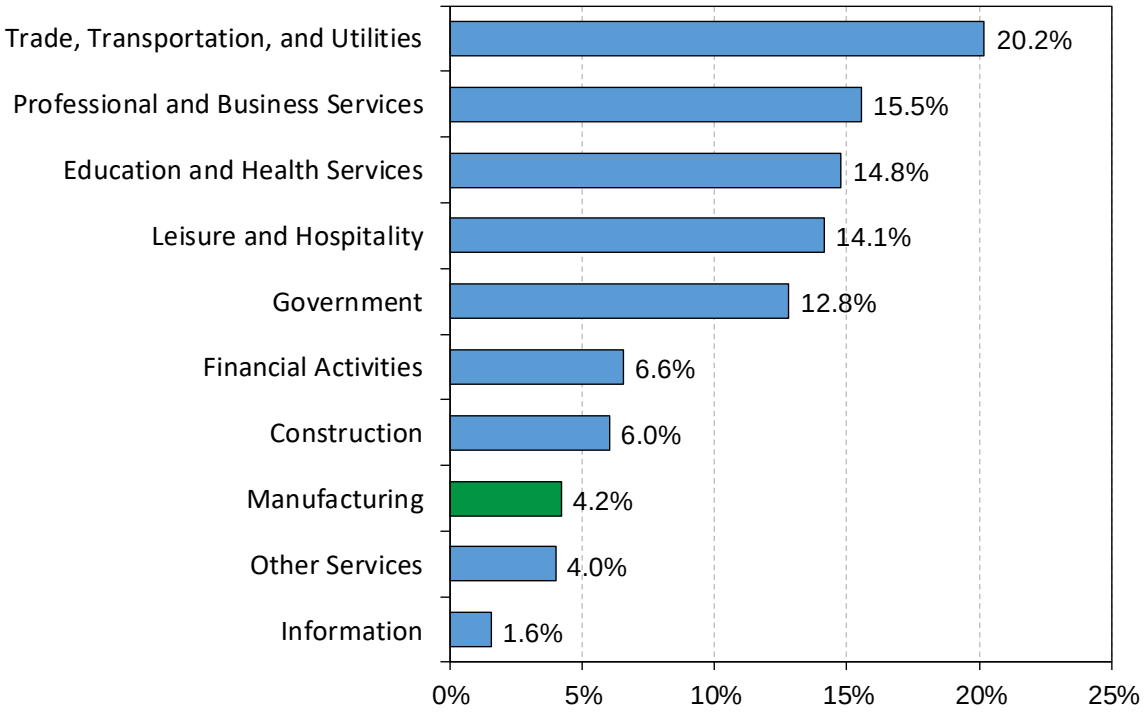
Representative Signature: _____

Signature Date: May 16, 2018

#1 Non-Agricultural Employment Industry in Florida –

Trade, Transportation and Utilities

Total Nonagricultural Employment Share by Industry
January 2018, Seasonally Adjusted



Note: Employment share percentages may not add to 100 due to rounding.
Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, released March 12, 2018.
Prepared by: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics.

FLORIDA DEPARTMENT of ECONOMIC OPPORTUNITY

#8 and 9 Top Existing Demand Occupation in Florida:

Laborers and Freight, Stock and Material; Stock Clerks and Order Fillers

State of Florida
Workforce Innovation and Opportunity Act- Unified Plan
Two-Year Modification
July 1, 2018 – June 30, 2020

The following table displays the top 15 existing demand occupations (based on 2017-2025 total job openings) for Florida statewide.

Figure 2.02
Top 15 Existing Demand Occupations

	Code	Occupation	2017 Employment	2025 Employment	2017-25 Level Change	2017-25 Percent Change	2017-25 Total Job openings	2017 Median Hourly Wage	2017 Entry Wage	2017 Experienced Wage
1	412031	Retail Salespersons	351,545	397,545	46,000	13.09	482,959	10.36	8.9	14.21
2	353021	Combined Food Prep. and Serving Workers, Inc. Fast Food	238,814	277,504	38,690	16.20	417,337	9.47	9.14	10.44
3	412011	Cashiers	248,045	261,482	13,437	5.42	391,038	9.31	8.88	10.48
4	353031	Waiters and Waitresses	226,204	247,019	20,815	9.20	374,691	10.03	9.13	15.49
5	434051	Customer Service Representatives	244,276	278,142	33,866	13.86	289,913	14.43	10.65	17.78
6	436014	Secretaries, Except Legal, Medical and Executive	194,145	211,512	17367	8.95	182,226	15.78	11.44	19.05
7	439061	Office Clerks, General	173,867	188,359	14,492	8.34	177,435	13.4	9.78	17.06
8	537062	Laborers and Freight, Stock and Material	132,364	146,186	13,822	10.44	163,604	11.92	9.58	15.32
9	435081	Stock Clerks and Order Fillers	140,166	152,582	12,416	8.86	161,332	11.59	9.58	14.08
10	372011	Janitors and Cleaners, Except Maids and Housekeeping	131,143	147,628	16,485	12.57	160,755	10.60	9.15	12.70
11	352014	Cooks, Restaurant	105,686	125,554	19,868	18.8	151,110	12.55	10.20	14.42
12	373011	Landscaping and Grounds keeping	115,326	130,911	15,585	13.51	131,690	11.74	9.94	13.84
13	372012	Maids and Housekeeping	95,320	107,252	11,932	12.52	121,572	10.34	9.15	11.73
14	311014	Nursing Assistants	96,804	114,430	17,626	18.21	115,808	12.15	10.59	13.50
15	291141	Registered Nurses	188,202	218,508	30,306	16.1	113,795	30.79	24.84	35.18

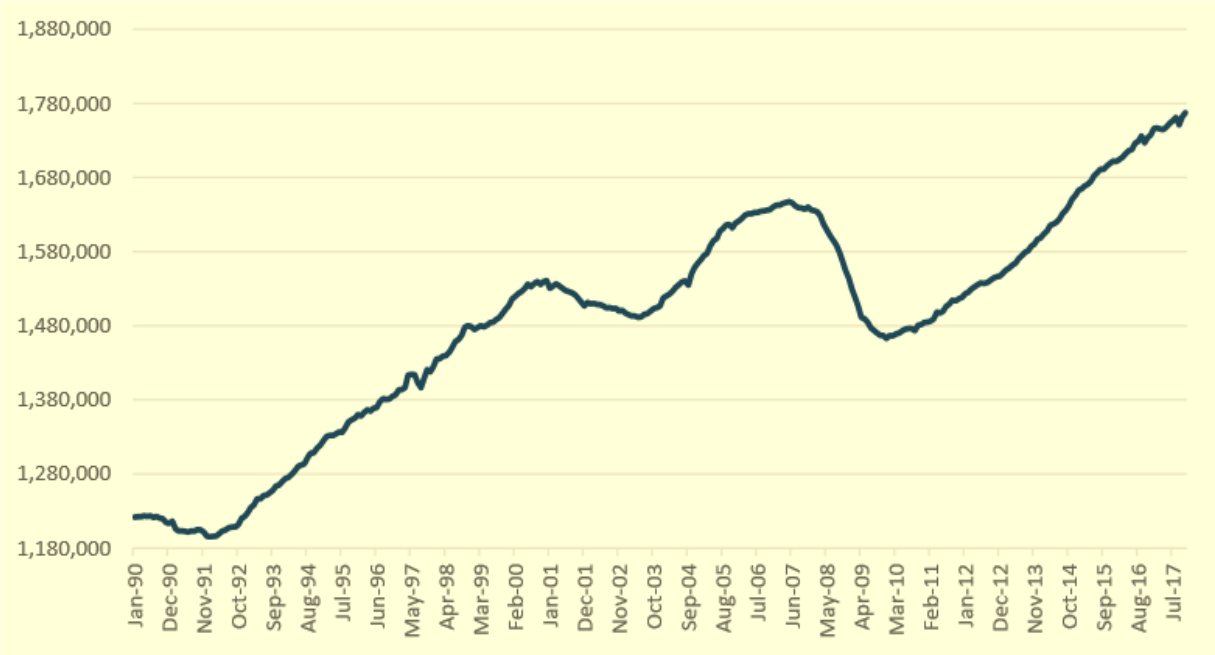
Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, December 2017

Trade, Transportation and Utilities:

"This industry is heavily dependent on tourism and the general economic vitality of the state's economy. The industry peaked in May 2007 at 1,647,600 jobs and began a rapid decline until 2010. Currently, industry employment is 120,000 jobs above its 2007 peak.

In November 2017, employment was 1,767,600. The over-the-year change in November 2017 (+33,500 jobs, +1.9 percent) was 1,400 less when compared to November 2016 (+34,900, +2.1 percent). The number of jobs in this sector has been trending upward over the past seven years."

Figure 2.25 Florida Trade, Transportation and Utilities Employment, Seasonally Adjusted



Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, December 2017.

Skill Boss
Required for MSSC's CPT+ Logistics Certification and used to assess skills in the fields of Safety, Quality, Production Processes, and Maintenance Awareness. Requires 120V/60Hz/1ph electrical, 33934 Hand Tool Package, Customer-Supplied Grease and Oil for Maintenance, and Compressed Air. Recommended 82-610 Mobile Technology Workstation or equivalent. Includes: (1) Operator Station, (1) Parts Feeder, (1) Aluminum Work Surface with Handles, (1) Pick and Place Robot, (1) Maintenance and Installation Guide, (1) Assessment Guide.

Cost: $15,841.00

Hand Tool Package 1 – Mechanical
For Skill Boss Learning System
Includes: (1) Socket Set; (1) Torque Wrench; (2) Combination Wrench; (1) Screwdriver Set; (1) 6" Rule; (1) Allen Wrench Set; (10) Corrosion Inhibiting Wrap; (1) 6" Dial Calipers; (1) Feeler Gauge; (1) Dead Blow Hammer; (1) Leather Gloves; (1) Wax Crayon and Holder; (1) Magnifier; (1) Nylon String; (1) Oil; (1) Keyway Punch; (1) Rubber Gloves; (1) Spring Scale; (1) Tape Measure; (1) Thread locker; (1) 3-Drawer Tool Box; (1) Utility Knife; (2) Wire Brush Sets; (1) Masking Tape; (1) Scissors. **Cost: $1214.00**

Mobile Technology Workstation, Type 1, Gray Surface Plus Cabinet, 6 Foot
Includes: (1) Welded Steel Frame; (1) Gray Laminated Work Surface; (1) Locked Storage Cabinet; (4) Casters. Dimensions: 30"H x 30"W x 72"L. For Skill Boss Learning System.

Cost: $1555.00

eLearning Individual Library Subscription - 12 Months
Subscription access to all courses for 12 months from individual start date. Available to all organizations in any quantity. Requires each individual subscription to start on order date or alternate date specified that is within one year of purchase: subscription start date can vary. Also requires high speed web access and a PC. Includes: Individual subscription access to eLearning library content for a period of 12 months, with the option to use courses with equipment-based content, courses without associated hardware, or both.

Cost: $300.00 per person x 70 students = $2100.00

Rigging 1 Learning System
Includes: (1) Gantry Crane with Rigging Storage System; (1) Electric Wire Rope Hoist and Trolley; (1) Hand Chain Hoist; (1) Load Package including various types of loads, fixtures; (1) Wire Rope Sling Package; (1) Chain Sling Package; (1) M18689 Student Curriculum - Interactive PC-Based Multimedia; (1) C18689 Instructor's Guide; (1) D18689 Installation Guide; (1) H18689 Student Reference Guide.

Cost: $15,626.00

Hand Tool Package – Rigging For Rigging 1 Learning System
Includes: (1) Socket Set; (1) Torque Wrench; (1) Combination Wrench; (1) Wire Cutter; (1) Dial Calipers; (1) Dead Blow Hammer; (2) Hard Hat; (2) Leather Gloves; (1) Nylon String; (1) Oil; (1) Tape Measure; (3) 3-Drawer Tool Box; (1) Utility Pliers; (1) Chalk; (1) Scissors

Cost: $ 1270.00

Rigging Ladder
For Rigging 1 Learning System **Cost: $464.00**

Floor-Standing Belt Conveyor Learning System
Goes with the Mechanical Drives 1 Learning System - Full Bench. Includes: (1) Industrial Belt Conveyor with 70-inch length, 12-inch width; (1) Freestanding legs, 27-39 inches adjustable belt elevation; (1) Safety guards; (1) Start/stop control; (1) 1/3 hp electric drive 115 VAC, 1ph, 50/60 Hz with chain drive; (1) Crown Pulley design, adjustable tension control, adjustable tracking control; (1) 18424 Student Learning Activity Packet; (1) H19712 Student Reference Guide.
Cost: $5921.00

Mechanical Drives 1 Learning System - Full Bench (Goes with conveyor belt system)
Requires 41210 Hand Tool Package and 120V/60Hz/1ph electrical. Includes: (1) Mobile Workstation; (1) Motor Control Unit; (1) Constant Speed Drive Motor; (1) Variable Speed Motor; (1) Lockout/Tagout Package; (1) Shaft Panel 1; (1) Shaft Panel 2; (1) Belt Drive Panel 1; (1) Gear Drive Panel 1; (1) Chain Drive Panel 1; (1) Prony Brake; (1) Digital Tachometer; (1) Alignment/Measurement Package; (1) Indicator Package Level 1; (2) Guard Assemblies; (1) Multi-Drawer Storage Unit; (1) BB502 Student Learning Activity Packet; (1) CB502 Instructor's Guide; (1) DB502 Installation Guide; (1) HB502 Student Reference Guide **Cost: $16,193.00**

SubTotal for all training equipment: $60,184.00

Instructor Training Sessions
$1000 per day, 2-3 days per learning system (Rigging System, Mechanical Drives System, Conveyor Belt System, Skill Boss System). Also, a summer institute (approx. $1000.00)
Instructor Training Cost: $10,000.00

Total Cost of all training materials, learning systems and instructor training: $70,184.00
(Budget item A.5)

Brevard Adult Education Career and Technical Center Concept Drawing



ECONOMIC DEVELOPMENT COMMISSION
FLORIDA'S SPACE COAST

March 21, 2018

The Honorable Rick Scott
Executive Office of the Governor
400 South Monroe Street
Tallahassee, FL 32399

Dear Governor Scott:

The Economic Development Commission of Florida's Space Coast (EDC) strongly supports Brevard Public Schools Department of Adult and Community Education effort to obtain a Florida Job Growth grant. The project goal is to build a technical vocational training center equipped with the technology and capacity necessary to train and develop a pipeline of adult workers with the talent to meet the needs of regional logistics and manufacturing industries.

The planned technical vocational training center will be centrally located in Cocoa, Florida. The center will economically support the area's workforce training needs and produce highly-skilled workers. The center will house industry equipment, and students will use the equipment and specialized training to gain first-hand experience needed to compete in the growing local industries. The experience gained will enable them to obtain nationally recognized industry credentials. Local employers such as Port Canaveral, Kennedy Space Center, Melbourne Airport and Brightline/Florida East Coast industries will have a pool of qualified workers matched to the demands of growing local industries resulting in an estimated need for more than 1,200 new employees. Employers will benefit greatly by hiring certified adult workers who do not require additional training that results in more cost and time.

A technical vocational training center with a focus on manufacturing and logistics will enable Brevard Adult and Community Education to develop a highly skilled workforce with industry certification and better employability skills. Additionally, such a center in Brevard County will strengthen the Space Coast's position as a technology leader, adding to Florida's attraction as a top business destination.

The EDC encourages consideration of this worthy cause, fully supports this application and respectfully requests the funding of this important project for our region.

Please do not hesitate to contact me if I can be of additional assistance.

Sincerely,

Lynda Weatherman
President & CEO

CareerSource BREVARD

careersourcebrevard.com

March 5, 2018

The Honorable Rick Scott
Executive Office of the Governor
400 S. Monroe Street
Tallahassee, FL 32399

Dear Governor Scott:

We strongly support Brevard Public Schools Department of Adult and Community Education effort to obtain a Florida Job Growth grant. The project goal is to build a technical vocational training center equipped with the technology and capacity necessary to train and develop a pipeline of adult workers with the talent to meet the needs of regional logistics and manufacturing industries.

The planned technical vocational training center will be centrally located in Cocoa, Florida. The center will economically support the area's workforce training needs and produce highly-skilled workers. The center will house industry equipment, and students will use the equipment and specialized training to gain first-hand experience needed to compete in the growing local industries. The experience they gain will enable them to obtain nationally recognized industry credentials. Local employers such as Port Canaveral, Kennedy Space Center, Melbourne Airport, and Brightline/Florida East Coast Industries will have a pool of qualified workers matched to the demands of growing employment requirements of these industries. Local industries are growing and this demand will result in an estimated need for more than 1,200 new jobs. By training and certifying adult workers, employers will benefit greatly from hiring personnel who do not require additional cost or time needed for additional training.

A technical vocational training center with a focus on manufacturing and logistics will enable Brevard Adult and Community Education to develop a highly skilled workforce with industry certifications and better employability skills. Additionally, a technical vocational training center in Brevard County will also strengthen the Space Coast's position as a technology leader, while adding to Florida's attraction as a top business destination.

I encourage consideration of this worthy cause. We fully support this application and respectfully request the funding of this important project for our region.

If I can be of assistance, please do not hesitate to contact me at the address below.

Sincerely,

Marci Murphy

Marci Murphy
President
CareerSource Brevard

City Manager's Office
65 Stone St. I Cocoa, FL 32922
Phone: (321) 433-8686 I Fax: (321) 433-8690

April 17, 2018

Cissy Proctor
Executive Director
Florida Department of Economic Opportunity
Florida Job Growth Fund
107 East Madison Street
Caldwell Building
Tallahassee, Florida 32399-4120

RE: Logistics Training Center - Florida Job Growth Fund-Workforce Development Grant
Brevard Public Schools Adult and Community Education

Dear Ms. Proctor,

The City of Cocoa enthusiastically supports the establishment of the Brevard Public Schools Logistics Training Center, through a grant from the Florida Job Growth Fund. A dedicated career and technical training facility that educates, certifies, and secures employment for adult students will be an empowering element enabling our residents and our businesses to thrive.

The establishment of a Logistics Training Center is consistent with and meets all of the City's Strategic Planning Objectives to "Foster a Skilled Work Force". In the 2015 City of Cocoa Economic Base Analysis completed by the Balmoral Group, it was noted that Cocoa's location, with its proximity to major interstates, ports and metropolitan areas, is in prime position to attract new employers and expand its economic base. Surveys of investment, supply chain and site selection experts recommended that a key sector focus for the City of Cocoa would be trade, transportation and the warehousing/logistics/distribution sectors. Specifically those that serve our existing manufacturing base.

A substantial portion of Cocoa's workforce remains unemployed despite increasing business interest and investment in the area. Low high school education attainment, and lack of supplemental entry level certified training programs continue to be barriers to employment. There is a persistent and growing mismatch between the level of skills that workers possess and the skills businesses require. The long-term negative impacts of this "skills gap" on workers, families, and businesses in Cocoa and Brevard County are potentially profound and far reaching. The creation of a Logistics Training Center in Cocoa is a critical component of economic competitiveness, growth, and vitality for the City of Cocoa and the Space Coast region.

The City staff is seeking a financial commitment from its City Council. If approved the City would enter into a Memorandum of Understanding (MOU) with Brevard Public Schools (BPS) to fund a significant portion of this project. The MOU would outline the following terms and conditions to be included in a capital contribution agreement with the City of Cocoa:

- A one-time City of Cocoa construction capital grant and permitting fee assistance of up to $100,000 as a total contribution.
- An annual operating subsidy of $10,000 from the City of Cocoa with an initial commitment of 5-10 years, subject to annual performance reviews.
- In kind marketing services from the City of Cocoa to co-market and promote the Logistics Training Center.
- Up to 25% of the students would be Cocoa residents, having a residency of at least 12 months. If this goal cannot be met, the operating subsidy commitment, would still remain in force.
- Cocoa students would have a first right to participate in both the full time and or part time programs at the Training Center.
- Cocoa residents will receive a full or partial scholarship from the School to cover tuition, on a formula and scoring criteria basis (to be structured).

The City seeks to enrich the quality of life for its unique and diverse community through various economic and community development strategies. This grant is an important opportunity for the Florida Department of Economic Opportunity Job Growth Fund, Brevard Public Schools and the City of Cocoa to make a significant human capital investment and foster greater economic resiliency.

Please contact me if you need additional information about the City of Cocoa or have questions regarding support of the School Board's application.

Sincerely,

Matthew Fuhrer
Assistant City Manager

2019-2020 Florida Job Growth Grant Fund
Workforce Training Grant Proposal

Proposal Instructions: The Florida Job Growth Grant Fund Proposal (this document) must be completed and signed by an authorized representative of the entity applying for the grant. Please read the proposal carefully as some questions may require a separate narrative to be completed. If additional space is needed, attach a word document with your entire answer.

Entity Information

Name of Entity: _____

Federal Employer Identification Number (if applicable): _____

Primary Contact Name: _____

Title: _____

Mailing Address: _____

_____

Phone Number: _____

Email: _____

Secondary Contact Name: _____

Title: _____

Phone Number: _____

Workforce Training Grant Eligibility

Pursuant to 288.101, F.S., the Florida Job Growth Grant Fund was created to promote economic opportunity by improving public infrastructure and enhancing workforce training. This includes workforce training grants to support programs offered at state colleges and state technical centers.

Eligible entities must submit proposals that:

- Support programs and associated equipment at state colleges and state technical centers.
- Provide participants with transferable and sustainable workforce skills applicable to more than a single employer.
- Are offered to the public.
- Are based on criteria established by the state colleges and state technical centers.
- Prohibit the exclusion of applicants who are unemployed or underemployed.

1. Program Requirements:

(If additional space is needed, attach a word document with your entire answer.)

Each proposal must include the following information describing how the program satisfies the eligibility requirements listed on page 1.

A. Provide the title and a detailed description of the proposed workforce training.

B. Describe how this proposal supports programs at state colleges or state technical centers.

C. Describe how this proposal provides participants transferable, sustainable workforce skills applicable to more than a single employer.

D. Describe how this proposal supports a program(s) that is offered to the public?

E. Describe how this proposal is based on criteria established by the state colleges and state technical centers.

F. Does this proposal support a program(s) that will not exclude unemployed or underemployed individuals?

☐ Yes ☐ No

G. Describe how this proposal will promote economic opportunity by enhancing workforce training. Please include the number of program completers anticipated to be created from the proposed training. Further, please include the economic impact on the community, region, or state and the associated metrics used to measure the success of the proposed training.

---

2. Additional Information:

(If additional space is needed, attach a word document with your entire answer.)

A. Is this an expansion of an existing training program? ☐ Yes ☐ No

If yes, please provide an explanation for how the funds from this grant will be used to enhance the existing program.

B. Does the proposal align with Florida's Targeted Industries?
(View Florida's Targeted Industries here.) ☐ Yes ☐ No

If yes, please indicate the specific targeted industries with which the proposal aligns.
If no, with which industries does the proposal align?

C. Does the proposal align with an occupation(s) on the Statewide Demand Occupations List and/or the Regional Demand Occupations List?
(View Florida's Demand Occupations Lists here.) ☐ Yes ☐ No

If yes, please indicate the specific occupation(s) with which the proposal aligns.
If no, with which occupation does the proposal align?

D. Indicate how the training will be delivered (e.g., classroom-based, computer-based, other).

If in-person, identify the location(s) (e.g., city, campus, etc.) where the training will be available.

If computer-based, identify the targeted location(s) (e.g. city, county, statewide, etc.) where the training will be available.

E. Indicate the number of anticipated annual enrolled students and completers in the proposed program.

F. Indicate the length of program (e.g., quarters, semesters, weeks, etc.), including anticipated beginning and ending dates.

Begin Date:_____ End Date:_____

G. Describe the plan to support the sustainability of the program after grant completion.

H. Identify any certifications, degrees, etc. that will result from the completion of the program. Please include the Classification of Instructional Programs (CIP) code and the percent of completers in each code, corresponding with Section E.

I. Does this project have a local match amount?

◉ Yes ○ No

If yes, please describe the entity providing the match and the amount. (Do not include in-kind.)

J. Provide any additional information or attachments to be considered for the proposal.

3. Program Budget

(If additional space is needed, attach a word document with your entire answer.)

Estimated Costs and Sources of Funding: Include all applicable workforce training costs and other funding sources available to support the proposal.

1.) Total Amount Requested **$** _____
Florida Job Growth Grant Fund

A. Other Workforce Training Project Funding: Sources:

City/County $ _____

Private Sources $ _____

Other (grants, etc.) $ _____ Please Specify: _____

Total Other Funding **$** _____

B. Workforce Training Project Costs:

Equipment $ _____

Personnel $ _____

Facilities $ _____

Tuition $ _____

Training Materials $ _____

Other $ _____ Please Specify: _____

Total Project Costs **$** _____

Note: The total amount requested must be calculated by subtracting the total Other Workforce Training Project Funding Sources in A. from the total Workforce Training Project Costs in B.

C. Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding, how equipment purchases will be associated with the training program, if applicable, and any other pertinent budget-related information.

---

4. Approvals and Authority

(If additional space is needed, attach a word document with your entire answer.)

A. If entity is awarded grant funds based on this proposal, what approvals must be obtained before it can execute a grant agreement with the Florida Department of Economic Opportunity (e.g., approval of a board, commission or council)?

B. If approval of a board, commission, council or other group is needed prior to execution of an agreement between the entity and the Florida Department of Economic Opportunity:

i. Provide the schedule of upcoming meetings for the group for a period of at least six months.
ii. State whether entity is willing and able to hold special meetings, and if so, upon how many days' notice.

C. Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the entity. This evidence may take a variety of forms, including but not limited to: a delegation of authority, citation to relevant laws or codes, policy documents, etc.

I, the undersigned, do hereby certify that I have express authority to sign this proposal on behalf of the above-described entity and to the best of my knowledge, that all data and information submitted in proposal is truthful and accurate and no material fact has been omitted.

Name of Entity: _____

Name and Title of Authorized Representative: _____

Representative Signature: _____

Signature Date: _____

MINUTES

CITY OF COCOA
SPECIAL MEETING OF THE CITY COUNCIL
BUDGET WORKSHOP

April 23, 2018

A Budget Workshop was held on Monday, April 23, 2018, in City Council Chambers at Cocoa City Hall, 65 Stone Street, Cocoa, Florida as publicly noticed.

I. OPENING MATTERS:

Deputy Mayor Blanco called the workshop to order at 5:35 p.m.

Councilman Whipple provided the invocation. Councilman Boisvert led the assembly in the Pledge of Allegiance.

Present:	Jeri Blanco	Deputy Mayor
	Brenda Warner	Councilwoman
	Clarence Whipple	Councilman
	Don Boisvert	Councilman
	John Titkanich, Jr.	City Manager
	Matt Fuhrer	Assistant City Manager
	Monica Arsenault	Assistant City Clerk
Absent:	Henry U. Parrish III	Mayor
	Anthony Garganese	City Attorney

Other Staff Members Present:

Tammy Gemmati, Administrative Services Director; Jack Walsh, Utilities Director; Nancy Bunt, Deputy Community Services Director; Gene Prince, Fire Chief; Jonathan Lamm, Deputy Fire Chief; Michael Cantaloupe, Chief of Police; Lora Howell, Interim Finance Director; and Lea Taylor, Budget Analyst.

II. WORKSHOP TOPICS:

1. Budget Presentation

City Manager Titkanich explained that the purpose of the workshop is to lay the foundation for the FY19 budget. He explained that projections, priorities, and influencing factors that will affect the budget need to be discussed as well as to obtain direction from Council. Lastly, there will be discussion held on the FY19 Budget Calendar.

He noted that information regarding upcoming budget meetings has been posted on social media to encourage the attendance and input of the community.

City Manager Titkanich mentioned that the City received a Certificate of Achievement for Excellence in Financial Reporting in 2017 from the Government Finance Officers Association. The City was also assigned the Aa2 rating from Moody's Investors Service. He noted that the City of Orlando only received a rating of Aa1. He stated that he feels the City is off to a good start and is on the right track towards fiscal sustainability.

Councilman Whipple inquired about the ranking of the ratings. In response, City Manager Titkanich explained that Aa2 is the third highest ranking and Aa3 is the highest ranking that can be achieved.

City Manager Titkanich shared a snapshot of the current budget. He stated that revenues are at forty-seven percent and the expenses are at forty-five percent in the General Fund. He explained that revenues are at thirty-six percent and expenses are at forty-one percent in the Water/Sewer Fund, however there is a one week lapse that has not been accounted for as the numbers were not completed in time. Additionally, revenues are at thirty-eight percent and expenses are at forty-one percent in the Stormwater Fund.

City Manager Titkanich explained external factors and challenges. This includes the Consumer Price Index, Municipal Cost Index, Construction Cost Index, along with wages, salaries and compensation for state and local government workers. Additionally, the passage of Amendment 1, which is the Expanded Homestead Exemption, catastrophic claims, an increase in health insurance, and natural disasters pose as challenges. He stated that the City still has not received full reimbursement for Hurricane Matthew and the City has not received any money for Hurricane Irma. Furthermore, he explained that there are still expenses that have not hit the books yet that will effect both the Utilities Fund and the General Fund reserves. He stated that there is no definite date as of yet as to when the City will receive reimbursement.

Councilman Whipple asked for additional information regarding the status of the reimbursement from the hurricanes. In response, Ms. Lora Howell provided an update. She stated that the City has received a large portion of funds from Hurricane Matthew; however, there is still approximately one hundred and forty thousand dollars left to be received. This is reimbursement for two outstanding categories, one of them being debris. She stated the City is still working through the process of receiving funds for Hurricane Irma and staff works with FEMA every week to keep the process moving. She noted that even though it is a cumbersome process it seems to be moving along smoothly so far.

City Manager Titkanich provided a brief history leading up to the current budget. In FY15 Stantec worked collaboratively with City staff to develop a Fiscal Sustainability Model. The City was able to use the modeling process to assess options for the fund's sustainability over a ten year projection period. He explained that the City worked with Stantec to update the model for the upcoming FY19 Budget Process. This process involved updating and validating projections, looking at capital funding availability, and evaluating FY19 Utility rates and Millage and Fire assessment rates.

He explained the basis for FY19 General Fund analysis. He explained that in order to determine the preliminary FY19 budget staff utilized the amended FY18 budget, the FY17 CAFR, and extrapolated existing revenues for FY19 projections. Staff took into account departmental requests and projected expenses for future fiscal years through FY2027. He explained that the idea is to maintain the Fund Balance, or Reserves, equal to four months of O&M expenses. City Manager Titkanich mentioned the Capital Improvements Program (CIP) which is a five year program. Each department has submitted their requests. He stated that the CIP review is underway.

City Manager Titkanich noted the budget expenses and revenue drivers. He mentioned that there is an ARC increase in Public Safety Pensions, however, it is important to note that the City is still below thresholds enacted through Pension Reform.

City Manager Titkanich explained the uses of the General Fund balance. He stated that per the Fund Balance Policy, reserves are used for capital expenses only, they cannot sustain recurring expenses. The fund balance must be preserved at the minimum reserve requirement. Furthermore, the City can continue use for catalytic Capital/Economic projects to enhance overall City growth and quality of life.

He shared personnel requests subject to funding availability. The requests are as follows:

- Community Services:
  - Convert Contract Services to FTE or Building and Permitting
- Finance:
  - Customer Service Representative in FY19
  - Staff Accountant (mid-year FY19, TCR/SJR Regional Project)
- Fire:
  - Training Officer (Part-Time GE-12)
- Police:
  - 1 Detective (CPSM Study)
  - 1 Administrative Specialist for Support Services/CID (CPSM Study)
  - 1 Code Enforcement Officer
  - 2 School Resource Officers
- Public Works:
  - 2 Maintenance Workers
  - 1 Fleet Technician
  - Assistant Manager Streets/Stormwater

City Manager gave his recommendations on which items should be prioritized. They are as follows:

- Community Services:
  - Convert Contract Services to FTE or Building and Permitting
- Police:
  - 1 Administrative Specialist for Support Services/CID (CPSM Study)
  - 1 Code Enforcement Officer
- Public Works:

- 2 Maintenance Workers
- Assistant Manager Streets/Stormwater

Councilman Whipple asked how many employees are currently working in the Building Department. In response, City Manager Titkanich explained that there is only one Building Official, one Building Inspector, one Permitting Technician and one Plans Examiner. He explained that if this item is approved in the budget than the City would contract with a third party to assist with inspections and plan reviews and it would also allow for an upgrade for the Permitting Technician so that instant issue permits can be done.

Councilman Whipple inquired about the Public Works positions. Additionally, he inquired whether a second Code officer could be hired. In response, Assistant City Manager Fuhrer and City Manager Titkanich explained that these would be new positions, meaning the head count at Public Works would increase or if there are any positions that are currently "frozen" they would become "unfrozen". In regards to a second Code officer, City Manager Titkanich stated that there are already three officers, one of which is the Code Enforcement Manager. If the budget is approved, this would allow for one additional Code Officer.

City Manager Titkanich reviewed community based requests. These include:

- Cocoa Logistics Training Center – Clearlake Education Center
  - Partnership with BPS subject to FL DEO Job Growth Grant
  - Consistent with 2015 City Economic Base Analysis and Strategic Plan Economic Development Goal 2, Objective 2.1
  - $100,000 capital construction grant
  - Annual operating contribution of $10,000
  - Certified Logistics, Welder, Heavy Equipment Operators, Warehouse Management, Inventory Management, Port and Railroad Worker Training
    - Up to 25% of students would be Cocoa residents, first right to participate

City Manager Titkanich recommended support through Assigned Economic Development Catalyst Funds.

City Manager Titkanich noted that Principal Rachad Wilson from Cocoa High School had met with members of Council to discuss the potential assistance the City could offer in funding several school initiated projects. They are as follows:

- Rubberized track - $145,000 ($120,000)
  - BPS provides $25,000 for School Initiated Projects
- Turf Field - $185,000 ($160,000)
  - BPS provides $25,000 for School Initiated Projects
- Gym Bleachers - $85,000 ($60,000)
  - BPS provides $25,000 for School Initiated Projects

City Manager Titkanich stated that the total request is for $400,000, which would be $80,000 per year for five years. He recommended that Council delay commitment until the outcome of Amendment 1 and that the maximum commitment match BPS contributions.

Discussion was held among Council regarding the request from Cocoa High School. Deputy Mayor Blanco stated that Cocoa High is already known for their strong athletic programs and if the City assists with paying some of the costs of these projects it will help raise the quality of these programs even more.

Councilwoman Warner stated that at the very least, she would like to see the City assist Cocoa High School with some of their fund raising for these projects.

For the purpose of planning the upcoming budget, City Manager Titkanich asked if there was a consensus among Council to commit funds to match BPS contributions for the upcoming budget year and then coming back next fiscal year to consider additional commitments thereafter.

A consensus was made among Council to agree to the recommendation made by the City Manager.

City Manager Titkanich explained that staff will be reviewing Capital Improvement Plan projects for Public Works. He reviewed the budget prioritization in terms of imperative priorities, essential priorities, important priorities, and desired priorities.

He discussed the Financial Analysis Management System (FAMS) model for the General Fund. He noted that this is a preliminary analysis. He provided a brief background and stated that this is a mid-year update to provide preliminary rate plan adjustments utilizing current available data. He explained that this will be updated again with the FY19 budget once it is available. He stated that the prior year analysis showed that the General Fund will be sustainable over the next ten years and it is able to fund the capital projects that were discussed last year, that were included in the model, but were not included in the budget.

City Manager Titkanich reviewed the Budget Development Philosophy for FY19. He noted that in FY15 and FY16 the focus was on public safety and in FY17 and FY18 the focus was on community improvements and infrastructure. In FY19 the focus will be on community improvements and employee investments. This includes:

- Maintain/enhance current LOS
- In addition to providing negotiation raises, provide for level of market equity adjustments for those employees who were hired before implementation of Pay Plan adopted in 2015, and who haven't already received market rate adjustments
- Maintain employee benefits at reasonable levels
- Strategic use of Fund Balance Reserves
- Work in collaboration with CRAs to implement certain redevelopment projects

- Diamond Square CRA – Dr. Joe Lee Smith Center
- Cocoa CRA – updated Waterfront Master Plan

Council expressed their pleasure in providing raises to long standing employees and having competitive rates to encourage people to come and work for the City.

A consensus was made by Council to agree to the proposed Budget Development Philosophy for FY19.

Councilman Whipple inquired about establishing a Key to the City program. In response, City Manager Titkanich explained that this would need to be included in the City Clerk's budget. Councilman Whipple stated that the program would need a policy established and certain requirements would need to be met.

City Manager Titkanich explained the FY19 General Fund revenue assumptions. They are as follows:

- Millage Rate – maintain at 5.9790 mills
- Fire assessment – return to 3% increase from last year's 5% increase
  - FY18 additional increase related to unanticipated higher than projected Debt Service for Fire Protection Assessment Revenue Bonds
- Strategic use of unassigned fund balance for one-time capital and non-recurring expenditure

City Manager Titkanich shared a General Fund trend over the next ten years. He explained that the current analysis shows continued sustainability of the fund.

He asked Council if there is a preliminary consensus for the following:

- Maintain the current Millage Rate at 5.9790
- Preliminary Tax Roll will not be received from BCPA until June 2018
- FY19 projected 3% Fire Assessment Rate increase
  - Reduction from FY18 5% increase to account for higher than projected debt service

A consensus was made by Council to agree to the proposed preliminary recommendations made by the City Manager.

City Manager Titkanich pointed out key observations in regards to the General Fund. The observations include:

- Current analysis shows continued sustainability of the Fund
- New Homestead Exemption included in analysis
- Approximately $110,000 dollars in Ad Valorem revenues lost in FY2021
- Unanticipated costs associated with Hurricane Irma utilized available reserves
- Slightly less available funds for Catalytic projects
  - Total 10-year CIP: $32.5 million

- Prior plan: $34 million

City Manager Titkanich asked Council for a preliminary consensus to approve the following:

- Millage Rate
  - Maintain current millage rate – 5.9790
  - Preliminary tax roll will not be received from BCPA until June 2018
- Fire Assessment Rate
  - FY19 projected 3% increase
    - Reduction from FY18 5% increase to account for higher than projected debt service

A consensus was made by Council to agree to the proposed preliminary recommendations made by the City Manager.

City Manager Titkanich discussed key observations in regards to the Water and Sewer Fund. The observations include:

- Preliminary 5% annual rate adjustments
- Additional revenues to offset reduced water sales
- Funds higher level of near-term debt for capital needs
- Provides strong debt service coverage
- Maintains reserve balances above minimum target (5 months O&M costs)

Key issues are as follows:

- Minimum Rate Plan: 3.5% annual rate adjustments
- Would require significantly higher levels of borrowing for future capital needs
- Shows weakened debt service coverage to minimum levels
  - 1.5 coverage ratio as minimum
  - 2.0 recommended
- Lesser available emergency reserves than recommended adjustments
  - Reserves used for capital and debt service

City Manager Titkanich spoke about the Water and Sewer Fund trend over the next ten years.

He asked if there is a consensus among Council to accept the preliminary utility rate. Council agreed.

In closing, City Manager Titkanich shared the following announcements:

- June 28, 2018 at 5:30pm - Fiscal Sustainability Update/Budget Priority Workshop
- July 10, 2018 - at 6:00pm - TRIM Hearing to set the tentative ad valorem millage rate
- July 16, 2018 - City Council provided the FY 2019 Budget/CIP Workbooks NLT

- August 8, 2018 at 5:30pm - FY 2018 Budget/CIP Workshop
- August 28, 2018 @ 6:00 p.m.
  - Resolution – Stantec Utility Rate Study/Rate Increase
  - Resolution – Fire Protection Assessment
- September 5, 2018 at 5:30pm – 1st Public Hearing
  - Vote for a Proposed Millage Rate
  - Vote on the Proposed FY2019 Budget
- September 13, 2018 at 5:30pm - 2nd Final Public Hearing
  - Adopt Millage Rate
  - Adopt the FY2019 Budget

City Manager Titkanich asked if there were any additional questions or comments. There being no response, the meeting was adjourned.

III. ADJOURNMENT:

* **MOTION by Councilman Boisvert; Seconded by Deputy Mayor Blanco, to adjourn the Special Meeting of the City Council of April 23, 2018.**

AYES: Boisvert, Warner, Blanco, Whipple

THE MOTION CARRIED UNANIMOUSLY (4-0)

The Budget Workshop adjourned at 7:09 p.m.

Henry U. Parrish III, Mayor

ATTEST:

Carie Shealy, City Clerk
(Transcribed by M. Arsenault, Assistant City Clerk)

Legislation Details (With Text)

File #:	19-395	**Version:**	1	**Name:**	
Type:	Resolution			**Status:**	City Business
File created:	8/12/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve the Preliminary Assessment Resolution 2019-068 for Fire Protection, for Fiscal Year 2020. (Finance Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Preliminary Fire Assessment Resolution 2019 8.2.19.pdf Stantecs Fire Assessment Techical Memorandum FY2020.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 18, 2019
Agenda Date: August 28, 2019
Prepared By: Lora Howell, Deputy Finance Director
Through: Rebeca Bowman, MBA, CGFO, CGFM, Finance Director
Requested Action:
Approve the Preliminary Assessment Resolution 2019-068 for Fire Protection, for Fiscal Year 2020.

BACKGROUND:

On May 9, 2006, City Council approved Ordinance 20-2006 (“Ordinance”) that adopted a fire protection assessment to partially fund the provision of fire protection and first response medical services (“rescue”) (collectively “fire protection services”) to properties within the City. Each year as part of the budgeting process, City Council must adopt the fire assessment rate schedule for the upcoming budget year.

In May 2013, the City entered into a contract with Stantec (Burton & Associates, Inc.), to conduct a study for purposes of updating the City’s fire protection assessment using a revised methodology that is based upon the availability of fire protection services to all parcels within City limits and the protection from loss of structures on improved parcels within City limits. In addition, the new methodology was used to develop a rate structure that will partially fund the City’s cost to provide fire protection services consistent with the authority set forth in the Ordinance. The results of the Study and recommendations are reported in the “FY 2014 Non-Ad Valorem Fire Protection Assessment Study Final Report” dated August 7, 2013, which was presented to City Council on August 13, 2013.

The Study was updated in July 2015 with the objective to develop an updated methodology that will result in assessment rates that will recover a portion of the full cost of providing fire protection service

to properties within the City limits in proportion to the benefit received and to more equitably apportion the cost to vacant properties. Calculations to determine the rate structure include all appropriate costs to operate the City's Fire Department except for distinct costs attributable to emergency medical services, as required by law. Revenue from the fire protection assessment will be utilized to sustain the current level of service and to partially fund construction of new fire stations in future fiscal years.

The Final Assessment Resolution for FY2017 was approved by City Council on September 6, 2016 with the recommendation of a 3% increase to the Fire Assessment rate, which was incorporated into the General Fund Sustainability Analysis. Based on this analysis, it was determined that the rate increase would provide sufficient revenues for projected operations, maintenance costs, and the Fire Department's capital improvement plan.

During the FY2018 Budget Workshop on June 29th, 2017, City Staff presented to City Council, Stantec' s (Burton and Associates) recommendation of a proposed 5% increase to the Fire Assessment rate, which was incorporated into the General Fund Sustainability Analysis. Based on this analysis, it was determined that the rate increase would provide sufficient revenues operations, maintenance costs, and the Fire Department's capital improvement plan. The additional 2% over the projected 3%, which equals the proposed 5%, provided for the full amount of debt service incurred for the construction of the City's three (3) fire stations. The original debt service was projected at $425,000 per year; however, after securing the debt the annual debt service amounted to approximately $465,000 per year. On September 5, 2017, City Council approved Final Fire Assessment Resolution 2017-78, with the recommended 5% increase.

At the September 5, 2018 City Council meeting, Staff recommended that the City Council approve the Final Fire Assessment Resolution inclusive of a 3% increase. For the purposes of this non-ad valorem assessment, benefited parcels are all parcels within the jurisdictional limits of the City of Cocoa except for Brevard County public schools, governmental parcels, rivers, lakes, rights-of-way/buffers and other properties exempted by law, agreement, or other lawful action of the City Council. Additionally, parcels, or portions thereof, that are jurisdictional wetlands are exempt from the assessment.

In order to approve the new rates recommended by Stantec and City Staff, the Ordinance requires that the City Council first approve a Preliminary Assessment Resolution. After approval of the Preliminary Assessment Resolution, the City Council is required to hold a Public Hearing, in accordance with the Ordinance and Florida Statutes, for purposes of adopting a Final Assessment Resolution formally approving the fire assessment rates. The Final Assessment Hearing will be held on September 11, 2019 at 6:00P.M., in City Council Chambers. The final approved rates are then submitted to the Brevard County Tax Collector for purposes of collecting the fire assessment on the annual non-ad valorem assessment portion of the annual property tax bill, no later than September 15, 2019.

For the purposes of this assessment, the assessment for benefited parcels shall be determined based upon the availability of fire/rescue services to all parcels and the protection from loss of structures on improved parcels.

The current fire protection assessment rates adopted by City Council last year are as follows:

Fiscal Year 2019:

Benefit Tier	Equivalent Benefit Unit (EBU)	Applicable to	Rate per EBU	Maximum Rate per EBU
Residential total assessment	Per Dwelling Unit	Improved non-exempt residential parcels	$209.35	$306.12
Non-residential: Response Readiness Availability	• Improved Property - Per parcel • Un-improved Property - Per parcel or parcel equivalent (Parcel EBU)	All improved and un-improved non-exempt parcels	$148.02	$216.45
Protection from Loss of Structures	Per $5,000 of structure value, rounded down to nearest $5,000. (Structure EBU)	Improved non-exempt parcels	$9.27	$13.55

Proposed Fiscal Year 2020 is set forth below:

Benefit Tier	Equivalent Benefit Unit (EBU)	Applicable to	Rate per EBU	Maximum Rate per EBU
Residential total assessment	Per Dwelling Unit	Improved non-exempt residential parcels	$215.63	$306.12
Non-residential: Response Readiness Availability	• Improved Property - Per parcel • Un-improved Property - Per parcel or parcel equivalent (Parcel EBU)	All improved and un-improved non-exempt parcels	$152.46	$216.45
Protection from Loss of Structures	Per $5,000 of structure value, rounded down to nearest $5,000. (Structure EBU)	Improved non-exempt parcels	$9.55	$13.55

Annual adjustments to this assessment, including increases, may be implemented and the maximum assessment rates presented above are authorized to provide sufficient future revenues (in addition to other legally available funds) to fund fire/rescue services at appropriate levels of service including, but not limited to, providing continued availability of fire insurance at favorable rates, protection from loss of property due to fire, and preservation of property values by virtue of the availability of fire/rescue services provided by the City of Cocoa.

STRATEGIC PLAN CONNECTION:

Fiscal Sustainability is part of the City's strategic plan. The recommended rate structure will recover a portion of the cost of providing fire protection service to properties within the city limits for FY2020 and subsequent years in proportion to the benefit received from the fire protection service provided by the City. Costs not covered by the fire protection assessment must be met by other revenue sources within the General Fund

BUDGETARY IMPACT:

The total amount of revenue to be collected in FY2020 from this proposed fire protection assessment is estimated to be $2.77 million dollars, **which is ~43%** of FY2020 proposed budgeted fire protection

services

PREVIOUS ACTION:

On May 9, 2006, City Council approved Ordinance 20-2006 that adopted a fire protection assessment to partially fund the provision of fire protection and first response medical services to properties within the City.

In reliance upon the Ordinance, the City Council has approved an annual fire assessment to fund a portion of the annual Fire Department budget since 2006

RECOMMENDED MOTION:

Approve the Preliminary Assessment Resolution 2019-068 for Fire Protection, for Fiscal Year 2020

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CITY OF COCOA, FLORIDA

FIRE PROTECTON ASSESSMENT
PRELIMINARY ASSESSMENT RESOLUTION

Resolution No. 2019-068

ADOPTED AUGUST 28, 2019

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RESOLUTION NO. 2019-068

A RESOLUTION OF THE CITY COUNCIL OF COCOA, FLORIDA, RELATING TO THE DELIVERY AND FUNDING OF FIRE PROTECTION SERVICES AND FACILITIES WITHIN THE CITY; PROVIDING FOR THE IMPOSITION OF NON-AD VALOREM SPECIAL ASSESSMENTS PURSUANT TO ORDINANCE 20-2006 WITHIN THE ENTIRE AREA OF THE CITY TO FUND FIRE PROTECTION SERVICES AND FACILITIES; ESTABLISHING FIRE ASSESSMENT RATES FOR CITY FISCAL YEAR 2019/2020; DIRECTING THE CITY MANAGER TO PREPARE A PRELIMINARY ASSESSMENT ROLL; ESTABLISHING A PUBLIC HEARING TO CONSIDER IMPOSITION OF THE PROPOSED SPECIAL ASSESSMENTS; DIRECTING THE PROVISION OF NOTICE IN CONNECTION THEREWITH; AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, AS FOLLOWS:

ARTICLE I

INTRODUCTION

SECTION 1.01. AUTHORITY. This Resolution of the City of Cocoa, Florida is adopted pursuant to City Ordinance No. 20-2006, Sections 166.021, 166.041 and 197.3632, Florida Statutes, and other applicable provisions of law.

SECTION 1.02. DEFINITIONS. This Resolution constitutes the Preliminary Rate Resolution as defined in the Assessment Ordinance. All capitalized words and terms not otherwise defined herein shall have the meaning set forth in the Assessment Ordinance. As used in this Resolution, the following terms shall have the following meanings, unless the context hereof otherwise requires.

"Assessed Property" means all Parcels of land included on the Assessment Roll that receive a special benefit from the delivery of the fire protection services, programs or facilities identified or contemplated in this Resolution and included in the Assessment Roll.

"Assessment Study" means the City of Cocoa FY 2016 Fire Protection Assessment Study, dated August 5, 2015, as updated by the FY 2017 Fire Protection Assessment Study, dated July 25, 2016, prepared by Burton & Associates, as updated by the Technical Memorandums prepared by Stantec, dated August 4, 2017, August 9, 2018, and August _____, 2019, as may be further amended in writing.

"Assessment Ordinance" means City Ordinance No. 20-2006, as may be amended from time to time, or its successor in function.

"City" means the City of Cocoa, Florida.

"City Clerk" means the clerk of the City Council.

"City Manager" means the chief administrative officer of the City, designated by the City Council to be responsible for coordinating Fire Protection Assessments or such person's designee.

"City Council" means the governing body of the City of Cocoa, Florida.

"Fiscal Year" means the period commencing on October 1 of each year and continuing through the next succeeding September 30, or such other period as may be prescribed by law as the fiscal year for the City.

"Tax Parcel" or "Parcel" means a parcel of property to which the Brevard County Property Appraiser has assigned a distinct ad valorem property tax identification number.

"Tax Roll" means the real property ad valorem tax roll maintained by the Property Appraiser for the purpose of the levy and collection of ad valorem taxes.

"Uniform Assessment Collection Act" means Sections 197.3632 and 197.3635, Florida Statutes, or any successor statutes authorizing the collection of non-ad valorem assessments on the same bill as ad valorem taxes, and any applicable regulations promulgated thereunder.

SECTION 1.03. INTERPRETATION. Unless the context indicates otherwise, words importing the singular number include the plural number, and vice versa; the terms "hereof," "hereby," "herein," "hereto," "hereunder" and similar terms refer to this Resolution; and the term "hereafter" means after, and the term "heretofore" means before, the effective date of this Resolution. Words of any gender include the correlative words of the other gender, unless the sense indicates otherwise.

SECTION 1.04. FINDINGS. In addition and supplemental to the findings adopted by the City Council in Ordinance No. 20-2006, it is hereby ascertained, determined and declared as follows:

(A) The constant preparedness to provide fire protection services, facilities and programs possesses a logical relationship to the use and enjoyment of real property by:

(1) preserving and/or enhancing property values, marketability and ability to develop for all parcels; (2) protecting the value of the improvements and structures through the continual availability of fire control and provision of fire protection and associated rescue services; (3) protecting the life and safety of intended occupants in the use and enjoyment of real property; (4) lowering the cost of fire insurance by the presence of a professional and comprehensive fire protection and associated rescue program within the City; (5) providing protection for uninsured or underinsured property and property owners; and (6) containing the spread of fire incidents, sometimes occurring on unimproved property, with the potential to spread and endanger the value, structures and occupants of nearby property, thereby limiting liability.

(B) The City Council has carefully considered the Assessment Study which describes an apportionment methodology based upon the benefit conveyed by readiness-to-serve availability of fire protection service provided by the City to all parcels (improved and unimproved), and an additional benefit that this availability of service provides to improved property by the protection from the loss of the structures on improved parcels through the ability to obtain insurance at attractive rates and the ability of the City to respond to and suppress a fire, and has considered the recent decision of the Florida Supreme Court, Morris v. City of Cape Coral, 163 So. 3d 1174 (Fla. 2015), which upheld a similar methodological approach recommended by Burton & Associates that apportioned costs based on the general availability of fire protection services to all

property owners in tier 1, and in tier 2, provided the additional benefit to improved property owners of protecting structures from damage.

(C) Readiness to serve apportionment is based upon the premise that real property receives a substantial benefit from the mere presence and availability of on-call fire protection services and facilities. Such benefit is independent of, and enjoyed even in the absence of, a call or need for actual service. A given Tax Parcel is benefited over time by that availability alone, even when that Tax Parcel does not generate a call for service, through increased value and marketability, development potential, heightened use and enjoyment of the property, and reduced insurance premiums.

(D) The City expends substantial and measurable resources each year in maintaining a constant state of availability, readiness and preparedness which is the primary function of the Fire Department. Preparedness costs are generally those incurred in providing the personnel, operations and facilities necessary for continual, around-the-clock readiness to serve fire protection. Aside from annual inflationary adjustments and atypical expenditures necessitated in a given budget cycle, such costs remain relatively static and unchanged from year to year and are therefore predictable with accuracy across consecutive budget cycles. Preparedness costs are not determined by the nature of an actual fire event or the whether a Tax Parcel is improved or un-improved and are incurred even when the department remains on standby.

(E) Preparedness costs associated with readiness to serve will be incurred without regard to the nature, extent or duration of actual deployments, or the improved or un-improved status of an individual Tax Parcel, and logically apply to every Tax Parcel (or parcel equivalent for un-improved parcels) of real property in the City. However, in the City's current fire assessment rate structure, residential properties are assessed an equal amount per dwelling unit and it was determined to maintain that same feature in the proposed assessment rate structure. Therefore, it was determined that residential dwelling units share in the preparedness costs equally per dwelling unit. Un-improved parcels are converted to parcel equivalents, or parcel equivalent benefit units (parcel EBUs) by dividing the subject parcel's acreage by the average size of improved parcels of the same property class. Preparedness costs are logically related to the number of Tax Parcels/Dwelling Units/parcel EBUs) which, in the aggregate, define the geography of the City and establish the basic service area within which the City must ensure preparedness and readiness to serve. Such preparedness costs are equitably and reasonably shared by all Tax Parcels/Dwelling Units /parcel EBUs on an equal basis since each Tax Parcel/Dwelling Unit /parcel EBU benefits in a substantially similar degree from the readiness to serve aspect of such costs.

(F) All Tax Parcels/Dwelling Units/parcel EBUs within the City receive a substantially similar special benefit from the availability of fire protection services and facilities provided by the City, because the fire protection resources are maintained

throughout the City at the same state of response readiness and availability to all Tax Parcels/Dwelling Units/parcel EBUs.

(G) The City maintains its fire protection resources at a level that provides a response readiness condition to respond to calls for service throughout the City at relatively equal levels of service. When needed, responses are made to calls for service without discrimination as to the property type, location within the City, or any other factors specific to the property requiring the service.

(H) Therefore, all properties, improved and unimproved, receive a special benefit from the very availability of the City's fire protection services and facilities, and improved Tax Parcels also receive an additional special benefit in the protection from the loss of structures on the property afforded by 1) the ability to obtain fire insurance at attractive rates, and 2) the availability of the fire protection services provided by the City to actually suppress a fire and protect the structure(s) on the property from damage and/or loss. The special benefits provided to all Tax Parcels/Dwelling Units/parcel EBUs, improved and unimproved, by the availability of fire protection services and facilities provided by the City include but are not limited to:

(1) Availability of immediate response to fire,

(2) First responder medical aid to protect the life and safety of occupants,

(3) Containment of liability for emergency incidents on the subject Tax Parcels and the spread of fires to other property,

(4) Enhanced property value, and

(5) Enhanced marketability of and/or ability to develop property.

(I) In addition to the above special benefits that are conferred upon all Tax Parcels/Dwelling Units/parcel EBUs in the City, additional benefits are conferred upon improved Tax Parcels including protection from the loss of structures on the property due to fire by virtue of:

(1) The ability to obtain fire insurance and to obtain that insurance at attractive rates because of the availability of fire protection service, and

(2) Protection of loss of structures provided by the availability of fire suppression service provided by the City.

(J) Accordingly, the apportionment methodology described in the Assessment Study recognizes two tiers of benefit: Tier 1, the simple availability of fire protection service which is available equally without discrimination to all Tax Parcels/Dwelling Units/parcel EBUs of all types within the City by virtue of the continued state of readiness to provide fire protection service that is maintained by the City, and Tier 2, the protection from the loss of structures on the property provided by the availability of fire protection service by the ability to obtain fire insurance, and the continued state of readiness maintained by the City so that when actual calls for service are received the City can

provide fire suppression service to protect property owners from the loss of structures on their property. As with the Tier 1 readiness costs, the Tier 2 costs for the structure value on all improved residential parcels is allocated equally per dwelling unit to all dwelling units on those parcels; thus the combined Tier 1 costs per dwelling unit plus the Tier 2 costs per dwelling unit result in a uniform, equal assessment rate per dwelling unit for all dwelling units on improved residential parcels.

(K) The fixed, non-discretionary costs of the Fire Department comprising Tier 1 are generally the personnel costs that must be incurred independent of the number of calls for service (which are total personnel costs less the portion of personnel costs involved in actually responding to calls for service) plus lease payments and capital expenses. The Assessment Study has determined that such Tier 1 costs represent approximately 60% of total fire protection costs.

(L) Tier 2 costs associated with protection from loss of structures on property include all other costs that are not included in Tier 1. Such Tier 2 costs include the portion of personnel costs involved in actually responding to calls for service, plus other costs that are incurred relative to variable drivers such as fuel, equipment maintenance, and other operating costs. The Assessment Study has determined that such Tier 2 costs represent approximately 40% of total fire protection costs.

(M) Improved properties benefit from the protection from loss of the structures on the Tax Parcels. The protection from the loss of the structures due to fire is best

represented by the protection from the loss of the investment in the structure(s) or the avoidance of the cost of replacing the structure(s) on the property. This protection from loss is conferred on such Tax Parcels by the availability of the fire protection services provided by the City either through the ability to obtain fire insurance or by the ability of the City to provide actual fire suppression services, whether or not a request for service is ever received.

(N) The actual investment or replacement cost of the structure(s) on the Tax Parcels in the City is not readily available and would require inordinate resources to determine and maintain over time. However, the structure values on tax parcels analyzed annually pursuant to state law and kept in the County Property Appraiser's database are readily available and are the best data reasonably available as a surrogate representation of the relative investment or replacement cost of structures on each Tax Parcel in the City as compared to the investment or replacement cost of structures on all Tax Parcels in the City. Therefore, it is appropriate to apportion the costs associated with Tier 2 based upon the relative value of structures on improved Tax Parcels as contained in the Property Appraiser's database.

(O) Apportionment associated with Tier 2 based upon structure value inherently addresses the higher and proportionate benefit accruing to properties facing potentially greater financial loss in the event of fire incident and is a direct and logical

means to allocate the costs and benefits of fire protection services and facilities associated with Tier 2.

(P) Besides cost and efficiency advantages associated with relying upon a publicly maintained database for apportionment metrics, a methodology utilizing structure value is advantageous because it is uniform across all Tax Parcels in its application of value as a proxy for measuring and allocating the relative benefit conveyed to each improved Tax Parcel. Tax Parcels with similar structure value are assessed with proportionate fairness, and the methodology provides an internal system of controls which is self-correcting in that valuation may change over time according to improvements, redevelopment and other factors and such changes in value will be addressed automatically each subsequent year in accordance with the latest structure value determined by the Property Appraiser. In Morris v. City of Cape Coral, 163 So. 3d 1174, 1179 (Fla. 2015), the Florida Supreme Court found that the "use of property appraiser's structure value is reasonable because the property appraiser is statutorily required to use replacement cost to determine this value."

(Q) Utilizing improvement value as one factor among several considered in a given methodology is fair, reasonable and equitable since the resulting assessments form a logical valuation base against which the special benefits and costs may be multiplied or determined.

(R) In the City's current fire assessment rate structure, residential properties are assessed an equal amount per dwelling unit. It was determined to maintain that same feature in the proposed assessment rate structure. Therefore, the assessment rate per residential dwelling unit was calculated as the sum of the Tier 1 costs for all improved residential parcels plus the Tier 2 costs for all residential parcels divided by the total number of dwelling units on all improved residential parcels to derive the average assessment per dwelling unit.

(S) The two-tiered apportionment methodology relies upon the property database maintained by the Property Appraiser in the normal course of performing his or her constitutional responsibilities. The database indicates the number of Tax Parcels within the City, each Tax Parcel's status as improved or unimproved, and the structure or improvement value associated with each. The number of Tax Parcels and structure value are updated by the Property Appraiser as properties within the City develop or combine, split or subdivide. Therefore, the fire assessments will be essentially self-correcting as the assessment roll is updated each year and unimproved Tax Parcels upon which structures have been constructed are reclassified as improved Tax Parcels and their assessments are adjusted accordingly. Furthermore, this database can be accessed from year to year without extraordinary effort or cost to the City and provides a stable, reliable, reasonably accurate and cost effective basis for annual administration and updating of the assessment program.

(T) Use of such publicly maintained data avoids duplication of efforts and the ongoing expenses associated with the City developing and maintaining apportionment metrics on its own, thereby resulting in cost-efficient administration and use of public resources. The City avoids expending substantial resources in determining the factors upon which the methodology is based and administered over time because it relies upon the database developed, compiled and maintained by the Property Appraiser each year during the course of performing his or her constitutional responsibilities, at no additional cost to the Property Appraiser or the taxpayers of the City.

(U) Furthermore, if the owner of Assessed Property owner felt in any given year that the benefit to their Tax Parcel was inequitable, there is an appeal process already in place and administered by the countywide value adjustment board by which to seek remedy. If the value adjustment board or Property Appraiser, through existing statutory procedures, reduces the structure valuation associated with a given Tax Parcel, the fire assessment would likewise be reduced, automatically, as the annual assessment roll is updated with no further effort required by the property owner - an additional example of the self-correcting, equitable and cost-efficient nature of the methodology. Additionally, the City has also established an administrative appeal process to hear inequitable claims made by an owner of vacant Assessed Property pursuant to Resolution No. 2013-143.

(V) The City is not required to fully fund any given essential service or improvement cost through a special assessment. So long as the application of funds is for a public purpose and funds are legally available, the City may determine to fund all or a portion of an essential service or improvement, such as fire protection services and facilities, with general fund or other legally available revenues. The determination as to whether to contribute such other legally available revenues, and how much to contribute, lies solely in the discretion of the City Council.

(W) Stated in the alternative, there is no requirement that the City impose an assessment for the maximum amount of the budget which can be funded by special assessments. The City Council may annually determine as a matter of public policy and tax equity to impose Fire Protection Assessments at a rate less than necessary to fund all or any specific portion of the Fire Protection Assessed Costs. Costs incurred in providing fire protection services and facilities not otherwise funded through Fire Service Assessments may be paid with general fund or other legally available revenues. Such legally available revenues as a matter of policy may be applied exclusively to any tier or class of budget allocation or expense otherwise funded by a special assessment, in part to one tier or class of any budget allocation or expense, or in any combination thereof, and maintain the validity of the apportionment. The flexibility is implemented through a policy and legislative determination employed through careful adherence to case law, statutory law, and the State Constitution, as well as the exercise of annual budget responsibility, discretion

and equity vested in the City Council. However, in no event shall any annual rate of Fire Protection Assessment exceed the maximum assessment rate previously noticed to the affected land owners without further notice and public hearing pursuant to the Assessment Ordinance.

(X) The findings and legislative determinations contained herein are premised upon information, input, analysis and review from City staff, officials and experts, and public comment, as well as careful consideration by the City Council. A combination of the foregoing yields a reasoned apportionment methodology premised upon the two distinct tiers or classes of apportionment allocation described herein. The two tiers, when used together, provide a legal, flexible and equitable means for the City to fairly and reasonably allocate assessable benefits and costs among Assessed Property in the City.

(Y) The apportionment among Tax Parcels of a portion of the City's annual budget for fire protection services, facilities and programs necessary for providing the continual readiness to provide fire protection is hereby determined to be a fair and reasonable means to annually allocate and share the benefits and costs associated therewith.

(Z) The benefits derived from the continual readiness to provide fire protection services, facilities and programs as to each Tax Parcel subject to the Fire Service Assessments equal or exceed the amount of the special assessments levied and imposed hereunder. The Assessment for any Tax Parcel within the City in employing such an approach also does not

exceed the proportional benefits that such Tax Parcel will receive compared to any other Tax Parcel so assessed within the City.

(AA) The City Council hereby finds and determines that the Fire Protection Assessments to be imposed in accordance with this Resolution provide a proper and equitable method of funding fire protection services and facilities by fairly and reasonably allocating a portion of the costs associated therewith among specially benefited property.

(BB) The City Council also recognizes and finds that the City of Cocoa's fire assessment was recently validated on August 18, 2016 by the Circuit Court of the Eighteenth Judicial Circuit in and for Brevard County, Florida in case No. 05-2016-CA-025719 for purposes of securing funding for the construction of three new fire stations, and the City Council continues to rely on said validation for purposes of levying the Fire Protection Assessments to be imposed in accordance with this Resolution.

ARTICLE II

NOTICE AND PUBLIC HEARING

SECTION 2.01. ESTIMATED FIRE PROTECTION ASSESSED COST.

(A) The estimated Fire Protection Assessed Cost to be recovered through Fire Protection Assessments for the Fiscal Year commencing October 1, 2019, is approximately $2.6 million. The Fire Protection Assessed Cost will be funded through the imposition of Fire Protection Assessments, as provided herein.

(B) The City Manager shall utilize the assessment rates associated with Tier 1 and Tier 2 of the Fire Protection Assessments as described in this Preliminary Assessment Resolution in the preparation of the preliminary Assessment Roll as provided in Section 2.02 of this Preliminary Assessment Resolution.

SECTION 2.02. ASSESSMENT ROLL. The City Manager is hereby directed to prepare, or cause to be prepared, a preliminary Assessment Roll for Fire Protection Assessments for the Fiscal Year commencing October 1, 2019, in the manner provided in Section 2.03 of the Assessment Ordinance. The Assessment Roll shall include all Tax Parcels within the City which are not otherwise exempted from payment of the Fire Protection Assessments hereunder. The City Manager shall apportion the estimated Fire Protection Assessed Cost to be recovered through Fire Protection Assessments in the manner set forth in this Preliminary Assessment Resolution. A copy of this Preliminary Assessment Resolution, the Assessment Study which summarizes information and analysis related to the estimated amount of the Fire Protection Assessed Cost to be recovered through the imposition of Fire Protection Assessments, and the preliminary Assessment Roll shall be maintained on file in the office of the City Clerk and open to public inspection. The foregoing shall not be construed to require that the preliminary Assessment Roll be in printed form if the amount of the Fire Protection Assessment for each parcel of property can be determined by the use of a computer terminal or internet access available to the public.

SECTION 2.03. PUBLIC HEARING. There is hereby established a public hearing to be held at 6:00 p.m. or soon thereafter on September 11, 2019, in City Council Chambers of City Hall, 65 Stone Street, Cocoa, FL 32922, at which time the City Council will receive and consider any comments on the Fire Protection Assessments from the public and affected property owners and consider imposing Fire Protection Assessments and authorizing an alternative manner of collection.

SECTION 2.04. NOTICE BY PUBLICATION. The City Manager shall direct the publication of notice of the public hearing authorized by Section 2.03 hereof in the manner and time provided by the Assessment Ordinance. The notice shall be published no later than twenty days before the hearing which is on or about August 23, 2019, in substantially the form attached hereto as Appendix A. The City Council acknowledges that this notice was published by the City Manager prior to the adoption of this Resolution.

SECTION 2.05. NOTICE BY MAIL, IF NECESSARY. To the extent that the City Manager determines that the mailing of notice of the public hearing authorized by Section 2.03 is required for certain Assessed Property, in the manner and time provided by the Assessment Ordinance, the notice shall be mailed no later than twenty days (August 23, 2019) before the hearing, in substantially the form previously approved by the City Council as Appendix B to the 2015 Preliminary Resolution.

ARTICLE III

ASSESSMENTS

SECTION 3.01. FIRE PROTECTION ASSESSMENTS TO BE IMPOSED THROUGHOUT CITY. Fire Protection Assessments are to be imposed throughout the entire area contained within the boundaries of the City in accordance with the Assessment Ordinance and the Final Assessment Resolution.

SECTION 3.02. IMPOSITION OF ASSESSMENTS. Fire Protection Assessments shall be imposed against property located within the City, the annual amount of which shall be computed for each Tax Parcel in accordance with this Article III. When imposed, the Fire Service Assessment for each Fiscal Year shall constitute a lien upon Assessed Property equal in rank and dignity with the liens of all state, county, district or municipal taxes and other non-ad valorem assessments until paid, as provided in the Assessment Ordinance and in accordance with Florida law.

SECTION 3.03. APPORTIONMENT.

(A) The Assessment Study is hereby ratified and incorporated herein in its entirety. The apportionment method set forth therein is hereby ratified as the apportionment method for the Fire Protection Assessments authorized by this Resolution. The City Manager is hereby authorized and directed to prepare a preliminary Assessment Roll for Fiscal Year 2019-2020 based on the following rate schedule:

Benefit Tier	Equivalent Benefit Unit (EBU)	Applicable to	Rate per EBU	Maximum Rate per EBU
Residential total assessment	Per Dwelling Unit	Improved non-exempt residential parcels	$215.63	$306.12
Non-residential: Response Readiness Availability	• Improved Property - Per parcel • Un-improved Property - Per parcel or parcel equivalent (Parcel EBU)*	All improved and un-improved non-exempt parcels	$152.46	$216.45
Protection from Loss of Structures	Per $5,000 of structure value (Structure EBU) rounded down to the nearest $5,000.	Improved non-exempt parcels	$9.55	$13.55

* The minimum size per parcel equivalent was determined to be 5 acres based upon an evaluation of the range of size of developed parcels. Thus, it was determined that un-improved properties will be converted to EBU by rounding down the acreage of the parcel to the nearest 5 acres and dividing by 5 acres/EBU to determine the number of EBUs for the parcel.

(B) The Maximum Assessment Rate for the residential and non-residential assessment set forth in the rate schedule were previously approved by the City Council by Resolution No. 2015-057 and are hereby being restated and shall continue to be the maximum rate for this next and all subsequent City fiscal years until otherwise modified by the City Council.

(C) Based upon the projections concerning net revenue requirements set forth in the Assessment Study, the Assessment Roll for subsequent Fiscal Years may reflect increases in the assessment rates up to and including the maximum rates presented in the rate schedule in Section 3.03.(A).

(D) The amount of the annual Fire Protection Assessment imposed against Assessed Property may include a pro rata share of the costs and expenses associated with collection and administration of the Fire Protection Assessments each year.

(E) It is hereby ascertained, determined, and declared that the method of determining the Fire Protection Assessments as set forth in this Preliminary Assessment Resolution is a fair and reasonable method of apportioning the Fire Protection Assessed Cost among Assessed Property.

SECTION 3.04. APPLICATION OF ASSESSMENT PROCEEDS. Proceeds derived by the City from the Fire Protection Assessments shall be utilized for the provision of fire protection services and facilities. In the event there is any fund balance remaining at the end of the 2019-20 Fiscal Year, such balance shall be carried forward and thereafter used only to fund fire protection related services, facilities, improvements and programs.

SECTION 3.05. COLLECTION OF ASSESSMENTS. Fire Protection Assessments for the 2019-20 Fiscal Year shall be collected pursuant to the direct billing method provided for in the Assessment Ordinance, and each year thereafter pursuant to the Uniform Assessment Collection Act as provided for in the Assessment Ordinance, unless otherwise determined by the City Council.

SECTION 3.06. EXEMPTION.

(A) Tax Parcels assigned the following Florida Department of Revenue property use codes (DOR codes) by the Property Appraiser are not subject to the Fire Protection Assessment contemplated hereunder; provided, however, that the costs associated with the exemption of such Tax Parcels shall be funded through other legally

available revenues of the City and not through Fire Protection Assessments imposed hereunder.

DOR Code	DOR Description	Parcel Count
465	CONDOMINIUM - MISCELLANEOUS (NOT COVERED	59
499	NON-TAXABLE CONDOMINIUM COMMON AREA	60
8010	SCHOOL (PUBLICLY OWNED) - VACANT	1
8020	COUNTY OWNED LAND - VACANT (THAT DOES	5
8040	HOUSING AUTHORITY - VACANT	13
8060	STATE OWNED LAND - VACANT (THAT DOES NOT	15
8080	MUNICIPALLY OWNED LAND - VACANT (THAT	78
8300	SCHOOL (PUBLICLY OWNED) - IMPROVED	7
8400	COLLEGE	1
8610	COUNTY OWNED LAND - IMPROVED (THAT DOES	6
8640	BREVARD COUNTY-OWNED (AGENCY OTHER THAN	1
8660	HOUSING AUTHORITY - IMPROVED	37
8710	STATE OWNED LAND - IMPROVED (THAT DOES	4
8810	FEDERALLY OWNED LAND - IMPROVED (THAT	1
8910	MUNICIPALLY OWNED LAND - IMPROVED (THAT	33
9105	LOCALLY-ASSESSED RAILROAD PROPERTY	14
9170	WATER & SEWER SERVICE	3
9400	RIGHT OF WAY STREET, ROAD, ETC - PUBLIC	-
9410	RIGHT OF WAY STREET, ROAD, ETC - PRIVATE	1
9499	ASSESSMENT ARREARS	-
9500	RIVERS AND LAKES	1
9510	SUBMERGED LANDS	2

In addition, vacant (un-improved) parcels that contain jurisdictional wetlands are not assessed for the portion of the parcels that are wetlands as those portions do not receive material benefit from fire protection service and those portions are considered to be exempt from the fire protection assessments.

(B) Tax Parcel classifications indicative of special designations used by the Property Appraiser for recordkeeping purposes which do not represent actual or

assessable Tax Parcels are not subject to the Fire Protection Assessments contemplated hereunder (e.g. header records).

(C) Notwithstanding anything herein to the contrary, the City Council reserves the right and ability in the future to impose Fire Protection Assessments against Tax Parcels determined to be exempt hereunder to the extent permitted by law or otherwise in the event required or directed to do so by a court of competent jurisdiction.

ARTICLE IV

GENERAL PROVISIONS

SECTION 4.01. CONFLICTS. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict. However, nothing herein is intended to repeal or modify the administrative appeal process for vacant (unimproved) land which is set forth in Resolution No. 2013-143. Upon adoption of the 2019/2020 Final Assessment Resolution, Resolution No. 2013-143 shall be deemed supplemental to the 2019/2020 Final Assessment Resolution subject to severability as set forth in Section 3(b) of Resolution No. 2013-143.

SECTION 4.02. SEVERABILITY. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Resolution that can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are declared to be severable.

SECTION 4.03. EFFECTIVE DATE. This Resolution shall take effect immediately upon its passage and adoption.

PASSED, ADOPTED AND APPROVED this 28th day of August, 2019.

CITY COUNCIL OF
COCOA, FLORIDA

By: _____
Jake Williams, Jr., Mayor

Attest:

By: _____
Carie Shealy, MMC, City Clerk

To Be Published on or before August 23, 2019

NOTICE OF HEARING TO ADOPT NON-AD VALOREM FIRE PROTECTION ASSESSMENT RATES

Notice is hereby given that the City Council of the City of Cocoa, Florida, will conduct a public hearing to consider adopting updated Fire Protection Assessment non-ad valorem assessment rates to continue funding the provision of Fire Protection Services to properties within the City pursuant to Ordinance 20-2006 previously adopted by the City Council in 2006. The proposed updated rates will not exceed the maximum rate per EBU previously adopted by the City Council. The City Council may continue hearings on the matter and the date and time for continuance shall be announced at the public hearing without further written notice of the continued hearing to the public. The decision on whether to impose the assessment will be made either at this public hearing at the time and date listed below or at a continuance of the public hearing to be held, if necessary. Note: The proposed assessment, if adopted, will replace the current Fire Protection Assessment and will not be in addition to the current Fire Protection Assessment. Additionally, the City's Fire Protection Assessment was previously validated and held to be lawful by the Circuit Court of the Eighteenth Judicial Circuit, Florida, in Case No. 05-2016-CA-025719.

The public hearing will be held on September 11, 2019, at 6:00 PM or soon thereafter, at the Council Chambers, 65 Stone St., Cocoa, FL 32922, for the purpose of considering approval of the Final Assessment Resolution and receiving public comment on the proposed assessment. All affected property owners have a right to attend and speak at the hearing and to file written objections and/or comments with the City Council within 20 days of this notice. If a person decides

to appeal any decision made by the City Council with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings and, for such purpose, 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 to be based. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk's Office at (321) 433-8488 at least two days prior to the date of the hearing.

The non-ad valorem assessment will fund a portion of the cost of the provision of essential services relating to fire protection service within the City. A more specific description of the services is set forth in the Preliminary and Final Assessment Resolutions being considered for adoption by the City Council pursuant to Ordinance 20-2006. Copies of the above-referenced Ordinance, Resolutions, and the non-ad valorem assessment roll are on file with and may be viewed during normal business hours at the Office of the City Manager or at the Office of the City Clerk, both located at 65 Stone Street, Cocoa, FL 32922.

Upon authorization of the non-ad valorem Fire Protection Assessment for fiscal year 2019/2020 and thereafter, the fire protection non-ad valorem assessment will be billed by and collected by the Brevard County Tax Collector on the ad valorem tax bill to be mailed in November. In accordance with the tax bill collection method authorized by Section 197.3632, Florida Statutes, failure to pay this or any non-ad valorem assessment will cause a tax certificate to be issued against the property which may result in a loss of title to real property that is subject to the non-ad valorem assessment.

For the purpose of this non-ad valorem assessment, benefited parcels are all parcels within the City limits of the City of Cocoa except for Brevard County public schools, governmental

parcels, rivers, lakes, rights-of-way/buffers and other properties exempted by law, agreement, or other lawful action of the City Council. In addition, parcels, or portions thereof, that are jurisdictional wetlands are exempt from the assessment. For the purposes of this assessment, the assessment for benefited parcels shall be determined based upon the availability of fire/rescue service to all parcels and the protection from loss of structures on improved parcels and the rate schedule is as follows:

Benefit Tier	Equivalent Benefit Unit (EBU)	Applicable to	Rate per EBU (1)	Maximum Rate per EBU
Residential total assessment	Per Dwelling Unit	Improved non-exempt residential parcels	$215.63	$306.12
Non-residential: Response Readiness Availability	• Improved Property - Per parcel • Un-improved Property - Per parcel or parcel equivalent (Parcel EBU)	All improved and un-improved non-exempt parcels	$152.46	$216.45
Protection from Loss of Structures	Per $5,000 of structure value, rounded down to nearest $5,000. (Structure EBU)	Improved non-exempt parcels	$9.55	$13.55

(1) Parcel EBU is the Tier 1 equivalent benefit unit representing a parcel for improved parcels and a parcel equivalent (EBU) for un-improved parcels. Un-improved parcel EBUs are determined by rounding down the acreage of the parcel to the nearest 5 acres and dividing by 5 acres to determine the number of EBUs for the parcel.

In addition, annual adjustments to this assessment, including increases, may be implemented and the maximum assessment rates presented above are authorized to provide sufficient future revenues (in addition to other legally available funds) to provide fire/rescue services at appropriate levels of service including, but not limited to, providing continued availability of fire insurance at favorable rates, protection from loss of property due to fire, and

preservation of property values by virtue of the availability of fire/rescue services provided by the City of Cocoa. The total amount of revenue to be collected by the City of Cocoa in FY 2019/2020 under the non-ad valorem assessment program is estimated to be approximately $2.6 million.

If you have any questions, please contact Lora Howell, Deputy Finance Director, at (321) 433-8611, Monday through Friday between 8:00 a.m. and 5:00 p.m.

[INSERT MAP OF THE CITY OF COCOA]

CITY COUNCIL
CITY OF COCOA, FLORIDA

APPENDIX B

FORM OF NOTICE TO BE MAILED

(date) (City

(property owner's name/address – Col B)
(property owner's name/address – Col C)
(property owner's name/address – Col D)
(property owner's name/address – Col E)
(property owner's name/address – Col F)
(property owner's name/address – Col G)

Fire Protection Assessment Hearing Notice

PLEASE NOTE: THIS IS NOT A BILL

RE: PARCEL NO.: (parcel number - Col A) (parcel address – Col H)

Dear Property Owner:

This is a notice to inform you that the Cocoa City Council will conduct a public hearing to consider adopting updated Fire Protection Assessment rates to continue funding the provision of Fire Protection Services to properties within the City pursuant to Ordinance 20-2006 previously adopted by the City Council in 2006.

BACKGROUND: The City of Cocoa has funded fire protection and first response medical services ("rescue") for its citizens through a non-ad valorem assessment since 2006. The City updated its assessment methodology and altered the non-ad valorem assessment rates based on a study prepared by the City's consultant, Burton & Associates ("Study"), which methodology and rates were adopted by Resolution 2015-057 on September 8, 2015. Updated annual studies have also been prepared by the consultant and approved by the City Council ("Updated Studies"). The Updated Studies do not modify the assessment methodology or maximum assessment rate previously approved by the City Council pursuant to Resolution 2015-057. Additionally, the City Fire Protection Assessment was previously validated and held to be lawful by the Circuit Court of the Eighteenth Judicial Circuit, Florida in Case No. 5-2016-CA-025719.

HEARING: You are hereby notified that the City Council of the City of Cocoa, Florida will conduct a public hearing to adopt an updated non-ad valorem assessment. The City Council may continue hearings on the matter and the date and time for continuance shall be announced at the public hearing without further written notice of the continued hearing to the public. The decision on whether to impose the assessment will be made either at this public hearing at the time and date listed below or at a continuance of the public hearing to be held, if necessary.

Note: The proposed assessment, if adopted, will replace the current Fire Protection Assessment and will not be in addition to the current Fire Protection Assessment.

The public hearing will be held on September 11, 2019 at 6:00 PM or soon thereafter at the Council Chambers, 65 Stone Street, Cocoa, FL 32922. All affected property owners have a right to attend and speak at the hearing. You may also file written objections and/or comments with the City Council within twenty (20) days of the date of this notice. If a person decides to appeal any decision made by the City Council with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, 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 to be based.

PURPOSE: The non-ad valorem assessment will continue to fund a portion of the cost of the provision of essential services relating to fire protection service within the City. A more specific description of the services is set forth in the Preliminary and Final Assessment Resolutions being considered for adoption by the City Council pursuant to Ordinance 20-2006 and the aforementioned Study. Copies of the above-referenced Ordinance, Resolutions, Study,

Updated Studies, the Circuit Court Validation, and the non-ad valorem assessment roll are on file with and may be viewed during normal business hours at the Office of the City Clerk, 65 Stone Street, Cocoa, FL 32922.

Upon authorization of the non-ad valorem Fire Protection Assessment for fiscal year 2019/2020 and thereafter, in accordance with the tax bill collection method authorized by Section 197.3632, Florida Statutes, failure to pay this or any non-ad valorem assessment will cause a tax certificate to be issued against the property which may result in a loss of title to your real property that is subject to the non-ad valorem assessment.

APPORTIONMENT METHOD AND RATES: For the purpose of this non-ad valorem assessment, benefited parcels are all parcels within the City limits of the City of Cocoa except for Brevard County public schools, governmental parcels, rivers, lakes, right-of-way/buffers and other properties exempted by law, agreement or other lawful action of the City Council. In addition, parcels, or portions thereof, that are jurisdictional wetlands are exempt from the assessment. For the purposes of this assessment, the assessment for benefited parcels shall be determined based upon the availability of fire/rescue service to all parcels and the protection from loss of structures on improved parcels and the rate schedule is as follows:

Benefit Tier	Equivalent Benefit Unit (EBU)	Applicable to	Rate per EBU (1)	Maximum Rate per EBU
Residential total assessment	Per Dwelling Unit	Improved non-exempt residential parcels	$215.63	$306.12
Non-residential: Response Readiness Availability	• Improved Property - Per parcel • Un-improved Property - Per parcel or parcel equivalent (Parcel EBU)*	All improved and un-improved non-exempt parcels	$152.46	$216.45
Protection from Loss of Structures	Per $5,000 of structure value (Structure EBU) rounded down to the nearest $5,000.	Improved non-exempt parcels	$9.55	$13.55

(1) Parcel EBU is the Tier 1 equivalent benefit unit representing a parcel for improved parcels and a parcel equivalent (EBU) for un-improved parcels. Un-improved parcel EBUs are determined by rounding down the acreage of the parcel to the nearest 5 acres and dividing by 5 acres to determine the number of EBUs for the parcel.

The total non-ad valorem assessment proposed to be levied against your benefited parcel for FY 2019/2020 will be $(amount – Col I) for (number - Col J) Dwelling Units, or for (number – Col K) Parcel EBUs and (number – Col L) Structure EBUs. In addition, annual adjustments to this assessment, including increases, may be implemented and the maximum assessment rates presented above are authorized to provide sufficient future revenues (in addition to other legally available funds) to provide fire/rescue services at appropriate levels of service including, but not limited to, providing continued availability of fire insurance at favorable rates, protection from loss of property due to fire, and preservation of property values by virtue of the availability of fire/rescue services provided by the City of Cocoa. No further first class mail notice is required unless the assessment rates are adjusted to levels higher than the maximum rates above or as otherwise provided by law. The total amount of revenue to be collected by the City of Cocoa in FY 2019/2020 under the non-ad valorem assessment program is estimated to be approximately $2.77 million.

If you have any questions, please contact Lora Howell, Deputy Finance Director, (321) 433-8611.

TECHNICAL MEMORANDUM

Stantec Consulting Services Inc.
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DATE: August 6, 2019
TO: Lora Howell, Deputy Finance Director – City of Cocoa, Florida
FROM: Erick van Malssen - Principal, Financial Services
RE: **FY 2020 Fire Assessment Roll Update**

Background: Burton & Associates (now Stantec Consulting Services, Inc.) completed a Fire Assessment Study for the City that was implemented in FY 2014. We have completed annual updates to the Fire Assessment program and Non-Ad Valorem roll since 2015. This Technical Memorandum presents the results of our analysis for the Fire Assessment to be implemented for FY 2020.

Scope

The scope of this FY 2020 Fire Assessment Update included 1) an evaluation of the need for increased Fire Assessment revenue in the context of the General Fund Financial Sustainability Analysis, the results of which are being delivered in a separate Report, and 2) an update of the Fire Assessment Roll to include the below referenced revenue increase in the assessment to all assessed parcels. The data utilized to prepare the Non-Ad Valorem assessment roll is obtained directly from the Brevard County Property Appraiser. There is no change to the Fire Assessment methodology for FY 2020.

Results

Based upon the analysis conducted in this year's update, it was determined that the Fire Assessment rates would increase by 3% as shown in the table below.

	FY 2019	FY 2020	% Increase
Residential Rate per Dwelling Unit	$209.35	$215.63	3.0%
Tier 1 Rate per Parcel EBU	$148.02	$152.46	3.0%
Tier 2 Rate per Structure EBU	$9.27	$9.55	3.0%

The FY 2019 rates generated approximately $2.47 million of billed assessment revenues including corrections. The updated Non-Ad Valorem assessment roll submitted to City Staff for review shows a billed assessment revenue of $2.77 million. These revenues, in combination with a subsidy from the General Fund for the remaining costs of providing Fire Protection services will sufficiently fund the Fire Department's projected operations and maintenance costs as well as the Fire Department's capital improvement program. The General Fund Sustainability Analysis performed separately from this task provides for the projected financial

dynamics of the General Fund and shows the sustainable 10-year projection with these Fire Assessment rate adjustments.

A Fire Assessment Roll is being delivered separately to reflect all current assessable parcels, along with a full list of exempted parcels for staff use. A separate roll is delivered for use by the Brevard County Property Appraiser and Tax Collector for TRIM purposes. Upon review and any revisions, the final roll will be delivered for the FY 2020 tax bills.

If you have any questions or would like to discuss this Technical Memorandum, please do not hesitate to call me at (904) 907-5256.

Very truly yours,



Erick van Malssen
Principal, Financial Services

Legislation Details (With Text)

File #:	19-396	**Version:**	1	**Name:**	
Type:	Resolution			**Status:**	City Business
File created:	8/12/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve an Initial Assessment Resolution 2019-069, for Stormwater, Fiscal Year 2020. (Finance Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	2019 Initial Stormwater Assessment Resolution 8.26.19 10-2019 (Stormwater Services Facilities and Programs).pdf 2019-008 (Electing a Uniform Method of Collecting Non-Ad Valorem Special Assessments).pdf First Class Mailing Sample-Final.docx Proof of Ad in Florida today.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 12, 2019
Agenda Date: August 28, 2019
Prepared By: Lora Howell, Deputy Finance Director
Through: Rebecca Bowman, MBA, CGFO, CGFM, Finance Director
Requested Action:
Approve an Initial Assessment Resolution 2019-069, for Stormwater, Fiscal Year 2020.

BACKGROUND:

In 1992, the City of Cocoa established a Stormwater Utility Fee (City Ordinance, Sec. 22-85), to fund operating and capital projects and to maintain the City's drainage, ditches, swales, piping, inlets, manholes, and retention/detention ponds. At that time, a complete evaluation of all pervious and impervious surfaces, on non-residential and undisturbed parcels within the City limits, resulted in the development of a calculation inclusive of both surfaces. Residential properties assigned a Single Family Unit (SFU) rate, for parcels, under 5 acres and residential properties over 5 acres were inclusive of a pervious surface component and multi-family residential units assigned the (SFU) rate per unit.

December of 2018, the City contracted with Stantec Consulting, to develop a 10-year financial plan for the Stormwater Fund. City Staff provided our consultant with audited FY 2018 financial information and the amended FY 2019 budget, to assist with the 10-year financial plan modeling. Mead and Hunt, one of the City's engineering firms, was simultaneously evaluating capital and water quality needs and developing a 10-year work plan for the stormwater utility, including new regulatory

requirements for the Indian River Lagoon.

At the May 14, 2019 Stormwater Utility Workshop, Stantec presented to City Council a change in methodology on the calculation and collection of fees for the Stormwater Utility. Industry supports basing Stormwater rates on impervious surface only, and not including pervious surface in the calculation, which is a complete departure from the current methodology in our Utility database. A comprehensive evaluation of the impervious surface, utilizing the Brevard County Property Appraisers Data, on all non-residential parcels inside the City limits of Cocoa, presented to City Council at this workshop. Also presented to City Council was the average impervious surface for residential properties. At the Workshop, the direction from City Council was to also validate all residential properties impervious square surface, and develop a more equitable tiered rate structure.

During the workshop, a discussion on the current method of collection ensued as there are two primary issues using the Utility Fee method of collection. A shortfall in revenue, due to vacancies/turn -over of commercial and residential properties, creating inactive utility accounts not billing for stormwater service, and the mapping of a parcel with a utility account. Example: A larger commercial parcel (strip-mall) may have ten (10) utility accounts associated with it. It is challenging and not always equitable, to assign a utility fee to each unit. In addition, if the units are vacant, the parcel is not paying for its share of the stormwater benefit they are receiving. Direction from City Council was to continue to move forward with the Uniform Method of Collection as an Assessment, verses staying with the Utility Fee method.

On June 26, 2019, the first reading of Ordinance No. 10-2019, Home Rule Stormwater Special Assessment was presented to City Council, to utilize special assessment procedures. The Ordinance approved by City Council and the second and final reading held on and approved, July 10, 2019.

In order to approve the new rates recommended by Stantec and City Staff, the Ordinance requires that the City Council first approve an Initial Assessment Resolution. After approval of the Initial Assessment Resolution, the City Council is required to hold a Public Hearing, in accordance with the Ordinance and Florida Statues, for the purposes of adopting a Final Assessment Resolution, formally approving the stormwater assessment rates. The Final Assessment Hearing will be held on September 11, 2019 at 6:00P.M., in the City Council Chambers. The final approved rates are then submitted to the Brevard County Tax Collectors for the purpose of collecting the stormwater assessment on the annual non-ad valorem assessment portion of the 2019 annual property tax bill, no later than September 15, 2019. Once approved, the fees on the Utility Bill will be inactivated, on all utility accounts, by September 30, 2019.

The Proposed Fiscal Year 2020 Rates are as follows:

FY 2020 Assessment Rates for Single Family Parcels (up to three units)		
Tier 1: 400 - 2,300 sq. ft. of impervious area	Tier 2: 2,400 - 4,400 sq. ft. of impervious area	Tier 3: Greater than 4,400 sq. ft. of impervious area
$71.96	$110.71	$192.64

For non-single family parcels, each parcel was assigned a number of Equivalent Residential Units (ERUs) that was calculated based on the measured amount of impervious area on the parcel rounded down to the nearest hundred sq. ft. divided by the ERU definition of 3,100 sq. ft. (which is

the average impervious area of a Single Family parcel). The annual assessment to each parcel was then determined by multiplying $110.71 (as presented in the table below), which represents the stormwater assessment per ERU, by the number of ERUs for each non single-family parcel.

FY 2020 Assessment Rate for Non-Single Family Parcels
$110.71 Per ERU

Annual adjustments to this assessment, including increases of 9% in Fiscal Years 2021 and 2022, and a 3% each year thereafter. The maximum residential assessment for Tier 1, $102.09, Tier 2, $157.06 and Tier 3, $273.29, with the maximum assessment rate of $157.06 per ERU for non-single family parcels that are not subject to the tiered assessment.

STRATEGIC PLAN CONNECTION:

Fiscal sustainability is part of the City's strategic plan. By creating the 10-year Financial Model, the City provides an equitable rate and method of collection.

Additionally, during the City Council - Leadership Retreat and planned for the upcoming revisions to the Strategic Plan is City Council consensus to address the issue of Infrastructure (and specifically proactively managing and maintaining it) in the revised Strategic Plan.

BUDGETARY IMPACT:

The total annual Stormwater Assessment Revenue to be collected for Fiscal Year 2020 is $1,744,000. This amount is included in the proposed FY 2020 budget.

PREVIOUS ACTION:

January 18th and 25th and February 1st and 8th 2019 - Advertised in the Florida Today Newspaper a Resolution of Intent, to change the method of collection to one of an Uniform Method of Collection, in pursuant to section 197.3632(3)(a) of Florida Statues and the Municipal Home Rule Powers Act.

February 13, 2019, 6:00 - Held a Public Hearing on the Resolution of Intent, to allow the use of the Uniform Method of Collection, pursuant of section 197.3632 of Florida Statues. Allow the City Manager, to enter into negotiations with the Brevard County Property Appraiser and Brevard County Tax Collectors Office to bill the assessment, should the 10-year financial model deem it prudent.

May 14, 2019 6:00 - Stormwater Utility Workshop, with Mead and Hunt, Stantec Consulting, City

Staff, City Council, and the Public.

May 24, 2019 - The City of Cocoa entered into agreement with the Brevard County Tax Collector and Brevard County Property Appraiser, to bill the Non-Ad Valorem Assessment, previously approve by City Council on February 13, 2019.

June 26, 2019 - First Reading of Ordinance 10-2019: Home Rule Stormwater Special Assessment, advertised in Florida Today June 6, 2019.

July 10, 2019 - Final Reading of Ordinance 10-2019: Home Rule Stormwater Special Assessment, advertised in the Florida Today newspaper June 20, 2019.

August 23, 2019 - First Class mailing to all affected parcels, with the date, time and place of the reading of the Initial Assessment Resolution as well as the stormwater assessment rate/charge.

August 23, 2019 - Advertise in the Florida Today Newspaper, the date, time and place of the reading of the Initial Assessment Resolution as well as the stormwater assessment rate.

RECOMMENDED MOTION:

Approve an Initial Assessment Resolution 2019-069, for Stormwater, Fiscal Year 2020.

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CITY OF COCOA, FLORIDA

STORMWATER ASSESSMENT
INITIAL ASSESSMENT RESOLUTION

Resolution No. 2019-069

ADOPTED AUGUST 28, 2019

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RESOLUTION No. 2019-069

A RESOLUTION OF THE CITY COUNCIL OF COCOA, FLORIDA, RELATING TO STORMWATER SERVICES, FACILITIES AND PROGRAMS; PROVIDING FOR THE IMPOSITION OF NON-AD VALOREM SPECIAL ASSESSMENTS PURSUANT TO ORDINANCE 10-2019 WITHIN THE ENTIRE AREA OF THE CITY TO FUND STORMWATER SERVICES, FACILITIES AND PROGRAMS; ESTABLISHING STORMWATER ASSESSMENT RATES FOR CITY FISCAL YEAR 2019/2020; DIRECTING THE CITY MANAGER TO PREPARE A PRELIMINARY ASSESSMENT ROLL; ESTABLISHING A PUBLIC HEARING TO CONSIDER IMPOSITION OF THE PROPOSED SPECIAL ASSESSMENTS; DIRECTING THE PROVISION OF NOTICE IN CONNECTION THEREWITH; AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, AS FOLLOWS:

ARTICLE I

INTRODUCTION

SECTION 1.01. AUTHORITY. This Resolution of the City of Cocoa, Florida is adopted pursuant to City Ordinance No. 10-2019, Sections 166.021, 166.041, 197.3632, and 403.0893, Florida Statutes, and other applicable provisions of law.

SECTION 1.02. DEFINITIONS. This Resolution constitutes the Initial Assessment Resolution as defined in the Assessment Ordinance. All capitalized words and terms not otherwise defined herein shall have the meaning set forth in the Assessment Ordinance. As used in this Resolution, the following terms shall have the following meanings, unless the context hereof otherwise requires.

"Assessed Property" means all Parcels of land included on the Assessment Roll that receive a special benefit from the delivery of the stormwater services, programs or facilities identified or contemplated in this Resolution and included in the Assessment Roll.

"Assessment Study" means the City of Cocoa Stormwater Rate Study – Final Report prepared by Stantec Consulting Services, Inc., dated August 26, 2019.

"Assessment Ordinance" means City Ordinance No. 10-2019, as may be amended from time to time, or its successor in function.

"City" means the City of Cocoa, Florida.

"City Clerk" means the clerk of the City Council.

"City Manager" means the chief administrative officer of the City, designated by the City Council to be responsible for coordinating Stormwater Assessments or such person's designee.

"City Council" means the governing body of the City of Cocoa, Florida.

"Fiscal Year" means the period commencing on October 1 of each year and continuing through the next succeeding September 30, or such other period as may be prescribed by law as the fiscal year for the City.

"Tax Parcel" or "Parcel" means a parcel of property to which the Brevard County Property Appraiser has assigned a distinct ad valorem property tax identification number.

"Tax Roll" means the real property ad valorem tax roll maintained by the Property Appraiser for the purpose of the levy and collection of ad valorem taxes.

"Uniform Assessment Collection Act" means Sections 197.3632 and 197.3635, Florida Statutes, or any successor statutes authorizing the collection of non-ad valorem assessments on the same bill as ad valorem taxes, and any applicable regulations promulgated thereunder.

SECTION 1.03. INTERPRETATION. Unless the context indicates otherwise, words importing the singular number include the plural number, and vice versa; the terms "hereof," "hereby," "herein," "hereto," "hereunder" and similar terms refer to this Resolution; and the term "hereafter" means after, and the term "heretofore" means before, the effective date of this Resolution. Words of any gender include the correlative words of the other gender, unless the sense indicates otherwise.

SECTION 1.04. FINDINGS. In addition and supplemental to the findings adopted by the City Council in Ordinance No. 10-2019, it is hereby ascertained, determined and declared as follows:

(A) Inadequate management of runoff from development in a watershed increases stormwater peak flows, volumes, and velocities, erodes and/or silts stream channels, pollutes water, overloads existing drainage facilities, undermines floodplain management in downstream communities, reduces groundwater recharge, and threatens public health and safety. More specifically, stormwater runoff can convey pollutants into

and cause higher velocities in receiving waters such as the Indian River Lagoon. The potential impacts of these pollutants and higher velocities include: (1) Changing natural ecosystems through sediment and pollutant deposits which affect the quantity and quality of flowing water, destruction of habitats, and loss of plant and animal life; (2) Posing significant health risks through increased bacteria; (3) Accelerating eutrophication of receiving waters by introducing excessive nutrient loads; (4) Increasing metal deposits creating toxicity for aquatic life; (5) Reducing oxygen levels because of oil, grease and organic matter; and (6) Affecting animal and plant life, adversely, due to changing temperatures of receiving waters.

(B) Uncontrolled stormwater runoff can increase the incidence of flooding and of floods that occur, endangering roads, aboveground and underground utility infrastructure, and other public and private property and human life.

(C) Altered land surfaces can change the rate and volume of runoff. These changes may result in the following: (1) increased urban runoff and pollutants to the natural environment; (2) increased flooding of private property; (3) degradation of safety and welfare of the residents and visitors of the City, including negatively impacting emergency response capabilities as a result of stormwater flooding; (4) decreased use and enjoyment of property; and (5) decreased property and rental value, marketability, and integrity of property.

(D) Every parcel of real property, both public and private, either uses or benefits from the maintenance of the City's stormwater system; and receives a special benefit from the City's stormwater system including the following: (1) reduced urban runoff and pollutants to the natural environment; (2) reduced flooding of private property; (3) improved safety and welfare of the residents and visitors of the City, including negatively impacting emergency response capabilities as a result of stormwater flooding; (4) enhanced use and enjoyment of property; and (5) enhanced property and rental value, marketability, and integrity of property.

(E) The City Council has carefully considered the Assessment Study which describes an apportionment methodology based upon the benefit received from the City's stormwater services, facilities and programs by all developed parcels with impervious surface, and has considered the applicable court decisions including Sarasota County v. Sarasota Church of Christ, Inc., 667 So. 2d 180 (Fla. 1995) (upholding stormwater special assessment on developed real property with impervious surfaces to fund stormwater utility services); State v. Sarasota County, 693 So. 2d 546 (Fla. 1997)(upholding stormwater special assessment on all developed property, with or without impervious surface); and Boca Raton v. State, 595 So. 2d 25 (Fla. 1992)(local governments are afforded deference in fairly apportioning costs under a special assessment as long as the amount of the assessment for each tract is not in excess of the proportional benefits as compared to other assessments on other tracts).

(F) The conversion of natural land to developed land with impervious area results in increased stormwater runoff and numerous engineering and hydrologic studies have demonstrated that impervious area is the single most important factor contributing to the quantity and quality of stormwater runoff from a property. Thus, the use of impervious area has been demonstrated to be a simple, easy to understand approach that is a highly defensible basis to fairly and equitably apportion the costs of a municipal stormwater system to benefitting parcels for the stormwater assessment.

(G) The City expends substantial and measurable resources each year in providing stormwater services, facilities and programs to the public within the jurisdictional limits of the City.

(H) The City must generate and receive sufficient stormwater revenues to meet projected operating and capital expenditures of the City's stormwater utility, and the City Council has determined based on the recommendations contained in the Assessment Study, that the City should use a non- ad valorem assessment process as the primary method of funding the City's stormwater utility system.

(I) The City is not required to fully fund any given essential service or improvement cost through a special assessment. So long as the application of funds is for a public purpose and funds are legally available, the City may determine to fund all or a portion of an essential service or improvement, such as stormwater services, facilities or programs, with general fund or other legally available revenues. The determination as to

whether to contribute such other legally available revenues, and how much to contribute, lies solely in the discretion of the City Council.

(J) Stated in the alternative, there is no requirement that the City impose an assessment for the maximum amount of the budget which can be funded by special assessments. The City Council may annually determine as a matter of public policy and tax equity to impose Stormwater Assessments at a rate less than necessary to fund all or any specific portion of the Stormwater Assessed Costs. Costs incurred in providing stormwater services, facilities and programs not otherwise funded through Stormwater Service Assessments may be paid with general fund or other legally available revenues. Such legally available revenues as a matter of policy may be applied exclusively to any tier or class of properties, and the City may adjust and appropriate any budget allocation or expense otherwise funded by a special assessment, or in any combination thereof, and maintain the validity of the apportionment. The flexibility described above is implemented through a policy and legislative determination employed through careful adherence to case law, statutory law, and the State Constitution, as well as the exercise of annual budget responsibility, discretion and equity vested in the City Council. However, in no event shall any annual rate of Stormwater Assessment exceed the maximum assessment rate previously noticed to the affected land owners without further notice and public hearing pursuant to the Assessment Ordinance.

(K) The findings and legislative determinations contained herein are premised upon information, input, analysis and review from City staff, officials and experts, and public comment, as well as careful consideration by the City Council. A combination of the foregoing yields a reasoned apportionment methodology premised upon the distinct tiers or classes of apportionment allocation described herein. The tiers and classes, when used together, provide a legal, flexible and equitable means for the City to fairly and reasonably allocate assessable benefits and costs among Assessed Property in the City.

(L) The apportionment among Tax Parcels of a portion of the City's annual budget for stormwater services, facilities and programs necessary for providing the stormwater protection is hereby determined to be a fair and reasonable means to annually allocate and share the benefits and costs associated therewith.

(M) The benefits derived from the stormwater services, facilities and programs as to each Tax Parcel subject to the Stormwater Assessments equal or exceed the amount of the special assessments levied and imposed hereunder. The Assessment for any Tax Parcel within the City in employing such an approach also does not exceed the proportional benefits that such Tax Parcel will receive compared to any other Tax Parcel so assessed within the City.

(N) The City Council hereby finds and determines that the Stormwater Assessments to be imposed in accordance with this Resolution provide a proper and equitable method of funding stormwater services, facilities and programs by fairly and

reasonably allocating a portion of the costs associated therewith among specially benefited property.

ARTICLE II

NOTICE AND PUBLIC HEARING

SECTION 2.01. ESTIMATED STORMWATER ASSESSED COST.

(A) The estimated Stormwater Assessed Cost to be recovered through Stormwater Assessments for the Fiscal Year commencing October 1, 2019, is approximately $1.74 million. The Stormwater Assessed Cost will be funded through the imposition of Stormwater Assessments, as provided herein.

(B) The City Manager shall utilize the assessment rates associated with the single family residential Tier 1, Tier 2 and Tier 3, and non-single family residential Stormwater Assessments as described in this Initial Assessment Resolution in the preparation of the Initial Assessment Roll as provided in Section 2.02 of this Initial Assessment Resolution.

SECTION 2.02. ASSESSMENT ROLL. The City Manager is hereby directed to prepare, or cause to be prepared, a Initial Assessment Roll for Stormwater Assessments for the Fiscal Year commencing October 1, 2019, in the manner provided in Section 2.03 of the Assessment Ordinance. The Assessment Roll shall include all Tax Parcels within the City which are not otherwise exempted from payment of the Stormwater Assessments hereunder. The City Manager shall apportion the estimated Stormwater

Assessed Cost to be recovered through Stormwater Assessments in the manner set forth in this Initial Assessment Resolution. A copy of this Initial Assessment Resolution, the Assessment Study which summarizes information and analysis related to the estimated amount of the Stormwater Assessed Cost to be recovered through the imposition of Stormwater Assessments, and the Initial Assessment Roll shall be maintained on file in the office of the City Clerk and open to public inspection. The foregoing shall not be construed to require that the Initial Assessment Roll be in printed form if the amount of the Stormwater Assessment for each parcel of property can be determined by the use of a computer terminal or internet access available to the public.

SECTION 2.03. PUBLIC HEARING. There is hereby established a public hearing to be held at 6:00 p.m. or soon thereafter on September 11, 2019, in City Council Chambers of City Hall, 65 Stone Street, Cocoa, FL 32922, at which time the City Council will receive and consider any comments on the Stormwater Assessments from the public and affected property owners and consider imposing Stormwater Assessments and authorizing an alternative manner of collection.

SECTION 2.04. NOTICE BY PUBLICATION. The City Manager shall direct the publication of notice of the public hearing authorized by Section 2.03 hereof in the manner and time provided by the Assessment Ordinance. The notice shall be published no later than twenty days before the hearing which is on or about August 23, 2019, in substantially the form attached hereto as Appendix A. The City Council acknowledges

that this notice was published by the City Manager prior to the adoption of this Resolution.

SECTION 2.05. NOTICE BY MAIL, IF NECESSARY. To the extent that the City Manager determines that the mailing of notice of the public hearing authorized by Section 2.03 is required for certain Assessed Property, in the manner and time provided by the Assessment Ordinance, the notice shall be mailed no later than twenty days (August 23, 2019) before the hearing, in substantially the form provided in Appendix B of this Resolution. The City Council acknowledges that this notice was published by the City Manager prior to the adoption of this Resolution.

ARTICLE III

ASSESSMENTS

SECTION 3.01. STORMWATER ASSESSMENTS TO BE IMPOSED THROUGHOUT CITY. Stormwater Assessments are to be imposed throughout the entire area contained within the boundaries of the City in accordance with the Assessment Ordinance and the Final Assessment Resolution to be adopted by the City Council at the public hearing to be held pursuant to this Article III.

SECTION 3.02. IMPOSITION OF ASSESSMENTS. Stormwater Assessments shall be imposed against property located within the City, the annual amount of which shall be computed for each Tax Parcel in accordance with this Article III. When imposed, the Stormwater Assessment for each Fiscal Year shall constitute a

lien upon Assessed Property equal in rank and dignity with the liens of all state, county, district or municipal taxes and other non-ad valorem assessments until paid, as provided in the Assessment Ordinance and in accordance with Florida law.

SECTION 3.03. APPORTIONMENT.

(A) The Assessment Study is hereby ratified and incorporated herein in its entirety. The apportionment method set forth therein is hereby ratified as the apportionment method for the Stormwater Assessments authorized by this Resolution. The City Manager is hereby authorized and directed to prepare a Initial Assessment Roll for Fiscal Year 2019-2020 based on the following rate schedule:

FY 2020 Assessment Rates for Single Family Parcels (up to three units)			FY 2020 Assessment Rate for Non-Single Family Parcels
Tier 1: 400 – 2,300 sq. ft. of impervious area	Tier 2: 2,400 – 4,400 sq. ft. of impervious area	Tier 3: Greater than 4,400 sq. ft. of impervious area	
$71.96	$110.71	$192.64	$110.71 Per ERU

Note that parcels with less than 400 sq. ft. will not be assessed as the impact upon the City's stormwater system is di minimus. The amount of the annual stormwater assessment imposed against each property is based on an impervious area apportionment method whereby a portion of the City's annual stormwater budget is allocated to properties based upon the total impervious area of each individual parcel. For single family residential parcels (including up to three dwelling units), parcels will be placed into one of three tiers mentioned herein based on the amount of impervious

area measured on the individual parcel rounded down to the nearest hundred sq. ft. Tier 1 ranges from 400 - 2,300 sq. ft., Tier 2 ranges from 2,400 - 4,400 sq. ft., and Tier 3 is greater than 4,400 sq. ft. The assessment for each tier is presented in the table above. For non-single-family parcels, each parcel is assigned a number of Equivalent Residential Units (ERUs) that is calculated based on the measured amount of impervious area on the parcel rounded down to the nearest hundred sq. ft. divided by the ERU definition of 3,100 sq. ft. (which is the average impervious area of a single-family parcel). The annual fee assessed to each parcel is then determined by multiplying $110.71 (as presented in the table above), which represents the stormwater assessment per ERU, by the number of ERUs for each non single-family parcel.

(B) Based upon the projections concerning net revenue requirements set forth in the Assessment Study, the Assessment Roll for subsequent Fiscal Years may reflect increases in the assessment rates up to and including the maximum rates presented in the rate schedule in Section 3.03.(A). More specifically, the annual assessment will be increased by 9.0% in Fiscal Year 2021, 9.0% in Fiscal Year 2022 and 3.0% each year thereafter that the assessment is levied up to a maximum assessment rate of $102.09 for Tier 1, $157.06 for Tier 2, $273.29 for Tier 3 and $157.06 per ERU, and a maximum assessment rate of $157.06 per ERU for non-single family parcels that are not subject to the tiered assessment.

(C) The amount of the annual Stormwater Assessment imposed against Assessed Property may include a pro rata share of the costs and expenses associated with the collection and administration of the Stormwater Assessments each year.

(D) It is hereby ascertained, determined, and declared that the method of determining the Stormwater Assessments as set forth in this Initial Assessment Resolution is a fair and reasonable method of apportioning the Stormwater Assessed Cost among Assessed Property.

SECTION 3.04. APPLICATION OF ASSESSMENT PROCEEDS. Proceeds derived by the City from the Stormwater Assessments shall be utilized for the provision of stormwater services, facilities and programs. In the event there is any fund balance remaining at the end of the 2019-20 Fiscal Year, such balance shall be carried forward and thereafter used only to fund stormwater related services, facilities, and programs.

SECTION 3.05. COLLECTION OF ASSESSMENTS. Stormwater Assessments for the 2019-20 Fiscal Year shall be collected pursuant to the direct billing method provided for in the Assessment Ordinance, and each year thereafter pursuant to the Uniform Assessment Collection Act as provided for in the Assessment Ordinance, unless otherwise determined by the City Council.

SECTION 3.06. EXEMPTION.

(A) Tax Parcels assigned the following Florida Department of Revenue property use codes (DOR codes) by the Property Appraiser are not subject to the

Stormwater Assessment contemplated hereunder; provided, however, that the costs associated with the exemption of such Tax Parcels shall be funded through other legally available revenues of the City and not through Stormwater Assessments imposed hereunder.

DOR Code	DOR Description	Parcel Count
465	CONDOMINIUM - MISCELLANEOUS (NOT COVERED	59
499	NON-TAXABLE CONDOMINIUM COMMON AREA	60
8010	SCHOOL (PUBLICLY OWNED) - VACANT	1
8020	COUNTY OWNED LAND - VACANT (THAT DOES	5
8040	HOUSING AUTHORITY - VACANT	13
8060	STATE OWNED LAND - VACANT (THAT DOES NOT	15
8080	MUNICIPALLY OWNED LAND - VACANT (THAT	78
8300	SCHOOL (PUBLICLY OWNED) - IMPROVED	7
8400	COLLEGE	1
8610	COUNTY OWNED LAND - IMPROVED (THAT DOES	6
8640	BREVARD COUNTY-OWNED (AGENCY OTHER THAN	1
8660	HOUSING AUTHORITY - IMPROVED	37
8710	STATE OWNED LAND - IMPROVED (THAT DOES	4
8810	FEDERALLY OWNED LAND - IMPROVED (THAT	1
8910	MUNICIPALLY OWNED LAND - IMPROVED (THAT	33
9105	LOCALLY-ASSESSED RAILROAD PROPERTY	14
9170	WATER & SEWER SERVICE	3
9400	RIGHT OF WAY STREET, ROAD, ETC - PUBLIC	-
9410	RIGHT OF WAY STREET, ROAD, ETC - PRIVATE	1
9499	ASSESSMENT ARREARS	-
9500	RIVERS AND LAKES	1
9510	SUBMERGED LANDS	2

In addition, parcels that are undeveloped land with no impervious surface are not assessed for the portion of the parcels that are undeveloped as those portions do not receive material benefit from City stormwater services, facilities and programs and those portions are considered to be exempt from the Stormwater Assessments. However, one

parcel with a 9105 land use code will be assessed because of impervious surface related to a building on the parcel.

(B) Tax Parcel classifications indicative of special designations used by the Property Appraiser for recordkeeping purposes which do not represent actual or assessable Tax Parcels are not subject to the Stormwater Assessments contemplated hereunder (e.g. header records).

(C) Notwithstanding anything herein to the contrary, the City Council reserves the right and ability in the future to impose Stormwater Assessments against Tax Parcels determined to be exempt hereunder to the extent permitted by law or otherwise in the event required or directed to do so by a court of competent jurisdiction.

SECTION 3.07 CREDITS.

(A) Parcels that engage in onsite stormwater management may receive a credit on their Stormwater Assessment in order to recognize the benefit of the activity to reduce the volume of stormwater leaving the properties, or enhance the quality of the runoff, thereby, reducing the burden on the City's stormwater system. The intent and purpose of the credit is to maintain equity for property owners with onsite stormwater management because such property owners have invested in measures to reduce stormwater runoff from their property and therefore reducing the effort required by the City to manage their stormwater runoff.

(B) In order for a property owner to obtain a credit, the property owner must demonstrate a specified reduction of stormwater to the City's stormwater system from the property by providing onsite attenuation for a minimum storm event required by the St. Johns River Water Management District, pursuant to applicable law.

(C) Application and eligibility requirements to obtain a credit shall be determined by written administrative policy approved by the City Manager, provided such policy shall be consistent and not in conflict with this Resolution, and supported by a written technical memorandum prepared by the City's stormwater assessment consultant evidencing a fair and equitable method of determining the applicable credit.

ARTICLE IV

GENERAL PROVISIONS

SECTION 4.01. CONFLICTS. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 4.02. SEVERABILITY. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Resolution that can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are declared to be severable.

SECTION 4.03. EFFECTIVE DATE. This Resolution shall take effect immediately upon its passage and adoption.

PASSED, ADOPTED AND APPROVED this 28th day of August, 2019.

CITY COUNCIL OF
COCOA, FLORIDA

By: _____
Jake Williams, Mayor

Attest:

By: _____
Carie Shealy, MMC, City Clerk

Appendix A

To Be Published on or before August 23, 2019

NOTICE OF HEARING TO ADOPT NON-AD VALOREM STORMWATER ASSESSMENT RATES

Notice is hereby given that the City Council of the City of Cocoa, Florida, will conduct a public hearings to consider adopting an annual non-ad valorem Stormwater assessment to pay a portion of annual stormwater costs related to the provision of Stormwater services, facilities and programs to properties within the City pursuant to Ordinance 10-2019 previously adopted by the City Council in 2019. Note: Upon adoption of the non-ad valorem assessment, the current stormwater fee currently on the City's water and sewer utility bill will be rescinded effective as of October 1, 2019 ("Fiscal Year 2020"), and will be replaced by the non-ad valorem assessment which will be included on the Brevard County property tax bill to be issued in November 2019.

The public hearings will be held on August 28, 2019 at 6:00 P.M. and September 11, 2019, at 6:00 PM or soon thereafter, at the Council Chambers, 65 Stone St., Cocoa, FL 32922, for the purpose of considering approval of the Initial and Final Assessment Resolutions and receiving public comment on the proposed assessment. The final decision on the assessment will be made by the City Council during the public hearings. If necessary, the City Council may continue the public hearings and the date and time for continuance shall be announced at the public hearing without further written notice of the continued hearing to the public. All affected property owners have a right to attend and speak at the hearing and to file written objections and/or comments with the City Council.

Copies of the above-referenced Ordinance, Resolutions, and the non-ad valorem assessment roll are on file with and may be viewed during normal business hours at the Office of

the City Manager or at the Office of the City Clerk, both located at 65 Stone Street, Cocoa, FL 32922.

The total annual stormwater assessment revenue to be collected within the City for Fiscal Year 2020 is estimated to be $1,744,000. For the purpose of this non-ad valorem assessment, benefited parcels are all parcels within the City limits of the City of Cocoa except for properties with government ownership, public roads and rights-of-way, vacant parcels, railroad tracks, certain educational establishments, bona-fide agricultural operations, parcels with less than 400 square feet of impervious surface, and such other exempt properties determined by lawful action of the City Council. The amount of the annual stormwater assessment imposed against each property is based on an impervious area apportionment method whereby a portion of the City's annual stormwater budget is allocated to properties based upon the total impervious area of each individual parcel. For single family residential parcels (including up to three dwelling units), parcels will be placed in to one of three tiers based on the amount of impervious area measured on the individual parcel rounded down to the nearest hundred sq. ft. Tier 1 ranges from 400 - 2,300 sq. ft., Tier 2 ranges from 2,400 - 4,400 sq. ft., and Tier 3 is greater than 4,400 sq. ft. The assessment for each tier is presented in the table below. For non-single-family parcels, each parcel is assigned a number of Equivalent Residential Units (ERUs) that is calculated based on the measured amount of impervious area on the parcel rounded down to the nearest hundred sq. ft. divided by the ERU definition of 3,100 sq. ft. (which is the average impervious area of a single-family parcel. The annual fee assessed to each parcel is then determined by multiplying $110.71 (as presented in the table below), which represents the stormwater assessment per ERU, by the number of ERUs for each non single-family parcel.

FY 2020 Assessment Rates for Single Family Parcels (up to three units)			FY 2020 Assessment Rate for Non-Single Family Parcels
Tier 1: 400 – 2,300 sq. ft. of impervious area	Tier 2: 2,400 – 4,400 sq. ft. of impervious area	Tier 3: Greater than 4,400 sq. ft. of impervious area	
$71.96	$110.71	$192.64	$110.71 Per ERU

Note that parcels with less than 400 sq. ft. will not be assessed as the impact upon the stormwater system is di minimus.

For parcels that have constructed permitted, on-site facilities that meet the criteria outlined in Final Rate Resolution that mitigate the stormwater runoff from the parcel, a property owner may apply for a mitigation credit against the parcel's stormwater assessment. For those parcels that currently have a mitigation credit in the current stormwater user fee, those credits have been recognized in the assessment amount above.

The annual assessment will be increased by 9.0% in Fiscal Year 2021, 9.0% in Fiscal Year 2022 and 3.0% each year thereafter that the assessment is levied up to a maximum assessment of $102.09 for Tier 1, $157.06 for Tier 2, $273.29 for Tier 3 and $157.06 per ERU, and a maximum assessment rate of $157.06 per ERU for non-single family parcels that are not subject to the tiered assessment.

The non-ad valorem assessment is an annual assessment which will continue from year to year. For Fiscal Year 2020 and each year thereafter, the assessment will be collected by the Brevard County Tax Collector pursuant to the tax bill collection method authorized by Section 197.3632, Florida Statutes, commencing in November 2019. The annual assessment amount will include expenses incurred by the City in administering and collecting the assessment including fees imposed by the County property appraiser and tax collector and will be adjusted as necessary to account for any statutory discounts which are necessitated when employing the efficiencies of

collecting the assessments annually on the same bill as property taxes. Florida law provides that failure to pay the assessment will cause a tax certificate to be issued against the assessed property which may result in a loss of title. Annual adjustments to this assessment, including increases, may be implemented and the maximum assessment rates presented above are authorized to provide sufficient future revenues (in addition to other legally available funds) for the City to provide stormwater services, facilities and programs at appropriate levels of service.

Unless proper steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the hearing on September 11, 2019 (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented. If a person decides to appeal any decision made by the City Council with respect to any matter considered at the hearing, he or she will need a record of the proceedings and, for such purpose, 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 to be based. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk's Office at (321) 433-8488 at least two days prior to the date of the hearing. If you have any questions, please contact, Stormwater Division at (321-433-8770) or stormwater@cocoafl.org, Monday through Friday between 8:00 a.m. and 4:00 p.m.

[INSERT MAP OF THE CITY OF COCOA]

CITY COUNCIL
CITY OF COCOA, FLORIDA

Appendix B

NOTICE OF PUBLIC HEARING TO ADOPT THE FINAL ASSESSMENT RESOLUTION FOR THE COLLECTION OF STORMWATER NON-AD VALOREM ASSESSMENTS
******THIS IS NOT A BILL******

[Insert Mailing Date]

[Owner1 - Col AB]
[Owner2 - Col AC]
[MailAddressLine1 - Col AE]
[MailCity - Col AG], [MailState - Col AH] [MailZip5 - Col AK]

CITY OF COCOA Tax ID : [TaxAcct - Col A]
[LocAddressFormatted - Col Y]

Dear Property Owner:

The City of Cocoa is moving the existing monthly utility fee for stormwater services incurred in operating, maintaining and capital investment of the City's stormwater drainage system to an annual non-ad valorem assessment on your property tax bill. The City of Cocoa (the "City") is hereby providing notice that an annual non-ad valorem assessment to pay a portion of the annual stormwater costs may be levied against your property for the fiscal year commencing October 1, 2019 ("Fiscal Year 2020"), and each fiscal year thereafter, as required by Section 197.3632, Florida Statutes. Note: upon adoption of the non-ad valorem assessment, the current stormwater fee on the water and sewer utility bill will be rescinded effective as of October 1, 2019, and will be replaced by the non-ad valorem assessment which will be included on the Brevard County property tax bill to be issued in November 2019.

Public hearings are scheduled for August 28, 2019 at 6:00 P.M. and September 11, 2019 at 6:00 P.M. at 65 Stone Street, Cocoa, Florida, in the City Council Chambers to receive public comment on the proposed non-ad valorem assessments. The final decision on the assessment will be made by the City Council during the public hearings. If necessary, the City Council may continue the public hearings and the date and time for continuance shall be announced at the public hearing without further written notice of the continued hearing to the public. All affected property owners have a right to appear at either hearing and to file written objections with the City within twenty days of this notice. If a person decides to appeal any decision made by the City Council with respect to any matter considered at the hearing, such person will need a record of the proceedings and may need to ensure that a verbatim record is made, including the testimony and evidence upon which the appeal is to be made. Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk, at least 48 hours in advance of the meeting at 321-433-8484.

The total annual stormwater assessment revenue to be collected within the City for Fiscal Year 2020 is estimated to be $1,744,000. The amount of the annual stormwater assessment imposed against each property is based on an impervious area apportionment method whereby the City's annual stormwater budget is allocated to properties based upon the total impervious area of each individual parcel. For single family residential parcels (including up to three dwelling units), parcels were placed in to one of three tiers based on the amount of impervious area measured on the individual parcel rounded down to the nearest hundred sq. ft. Tier 1 ranges from 400 - 2,300 sq. ft., Tier 2 ranges from 2,400 - 4,400 sq. ft., and Tier 3 is greater than 4,400 sq. ft. The assessment for each tier is presented in the table below.

FY 2020 Assessment Rates for Single Family Parcels (up to three units)		
Tier 1: 400 – 2,300 sq. ft. of impervious area	Tier 2: 2,400 – 4,400 sq. ft. of impervious area	Tier 3: Greater than 4,400 sq. ft. of impervious area
$71.96	$110.71	$192.64

For non-single family parcels, each parcel was assigned a number of Equivalent Residential Units (ERUs) that was calculated based on the measured amount of impervious area on the parcel rounded down to the nearest hundred sq. ft. divided by the ERU definition of 3,100 sq. ft. (which is the average impervious area of a Single Family parcel). The annual assessment to each parcel was then determined by multiplying $110.71 (as presented in the table below), which represents the stormwater assessment per ERU, by the number of ERUs for each non single-family parcel.

FY 2020 Assessment Rate for Non-Single Family Parcels
$110.71 Per ERU

Note that parcels with less than 400 sq. ft. will not be assessed as the impact upon the stormwater system is de minimis.

The FY 2020 Assessment for this parcel will be as follows:

Tier if single-family: [Tier Structure - Col L]
Billed ERUs if non-single family: [ERUs - Col M]
Annual Assessment Amount: $[Net Fee - Col P] (Includes mitigation credit of [Credit – Col O]

For parcels that have constructed permitted, on-site facilities that meet the criteria outlined in the Final Rate Resolution that mitigate the stormwater runoff from the parcel, a property owner may apply for a mitigation credit against the parcel's stormwater assessment. For those parcels that currently have a mitigation credit in the current stormwater fee, those credits have been recognized in the assessment amount above.

The annual assessment will be increased by 9.0% in Fiscal Year 2021, 9.0% in Fiscal Year 2022 and 3.0% each year thereafter that the assessment is levied up to a maximum assessment for single family parcels (including up to three dwelling units) of $102.09 for Tier 1, $157.06 for Tier 2, $273.29 for Tier 3, and a maximum assessment rate of $157.06 per ERU for non-single family parcels that are not subject to the tiered assessment.

The non-ad valorem assessment is an annual assessment which will continue from year to year. For Fiscal Year 2020 and each year thereafter, the assessment will be collected by the Brevard County Tax Collector pursuant to the tax bill collection method authorized by Section 197.3632, Florida Statutes, commencing in November 2019. The annual assessment amount includes expenses incurred by the City in administering and collecting the assessment including fees imposed by the County property appraiser and tax collector and was be adjusted to account for any statutory discounts which are necessitated when employing the efficiencies of collecting the assessments annually on the same bill as property taxes. Florida law provides that failure to pay the assessment will cause a tax certificate to be issued against the assessed property which may result in a loss of title. Unless proper steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the hearing on September 11, 2019 (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented.

If you have any questions regarding your stormwater assessment, please contact the Stormwater Division at (321-433-8770) or stormwater@cocoafl.org, Monday through Friday between 8:00 a.m. and 4:00 p.m.

*******DO NOT SEND PAYMENT - THIS IS NOT A BILL*******

ORDINANCE NO. 10-2019

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA; RELATING TO THE PROVISION OF STORMWATER SERVICES, FACILITIES, AND PROGRAMS THROUGHOUT THE INCORPORATED AREAS OF COCOA, FLORIDA; AUTHORIZING THE IMPOSITION AND COLLECTION OF STORMWATER ASSESSMENTS AGAINST PROPERTY; PROVIDING CERTAIN DEFINITIONS INCLUDING A DEFINITION FOR THE TERM "STORMWATER ASSESSMENT"; ESTABLISHING A PROCEDURE FOR IMPOSING STORMWATER ASSESSMENTS; PROVIDING THAT STORMWATER ASSESSMENT CONSTITUTE A LIEN ON ASSESSED PROPERTY UPON ADOPTION OF ASSESSMENT ROLL; PROVIDING THAT THE LIEN FOR A STORMWATER ASSESSMENT COLLECTED PURSUANT TO SECTIONS 197.3632 AND 197.3635, FLORIDA STATUTES, UPON PERFECTION SHALL ATTACH TO THE PROPERTY ON THE PRIOR JANUARY 1, THE LIEN DATE FOR AD VALOREM TAXES; PROVIDING THAT A PERFECTED LIEN SHALL BE EQUAL IN RANK AND DIGNITY WITH THE LIENS OF ALL STATE, COUNTY, DISTRICT, OR MUNICIPAL TAXES AND ASSESSMENTS AND SUPERIOR IN DIGNITY TO ALL OTHER PRIOR LIENS, MORTGAGES, TITLES, AND CLAIMS; AUTHORIZING THE IMPOSITION OF INTERIM ASSESSMENTS; PROVIDING FOR HARDSHIP ASSISTANCE; PROVIDING A PROCEDURE FOR THE COLLECTION OF STORMWATER ASSESSMENTS; PROVIDING A MECHANISM FOR THE IMPOSITION OF ASSESSMENTS ON GOVERNMENT PROPERTY; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA:

ARTICLE I

INTRODUCTION

SECTION 1.01. DEFINITIONS. As used in this Ordinance, the following words and terms shall have the following meanings, unless the context clearly otherwise requires:

"Annual Rate Resolution" means the resolution described in Section 2.08 hereof, establishing the rate at which a Stormwater Assessment for a specific Fiscal Year will be computed. The Final Assessment Resolution shall constitute the Annual

Rate Resolution for the initial Fiscal Year in which a Stormwater Assessment is imposed or reimposed.

"Assessed Property" means all parcels of land included on the Assessment Roll that receive a special benefit from the delivery of stormwater management services, programs or facilities identified in the Initial Assessment Resolution or a subsequent Preliminary Rate Resolution.

"Assessment Roll" means the special assessment roll relating a stormwater Assessment approved by a Final Assessment Resolution pursuant to Section 2.06 hereof or an Annual Rate Resolution pursuant to Section 2.08 hereof.

"Building" means any structure, whether temporary or permanent, built for support, shelter or enclosure of persons, chattel, or property of any kind, including mobile homes. This term shall include the use of land in which lot or spaces are offered for use, rent or lease for the placement of mobile homes, travel trailers, or the like for residential purposes.

"Certificate of Occupancy" means the written certification issued by the City that a Building is ready for occupancy for its intended use. For the purposes of this Ordinance, a set up or tie down permit or its equivalent issued for a mobile home shall be considered a Certificate of Occupancy.

"City" means the City of Cocoa, Florida.

"City Clerk" means the Clerk of the City Council.

"City Code" shall mean the city code of the City, as may be amended from time to time.

"City Council" means the City Council of the City of Cocoa, Florida.

"City Manager" means the chief administrative officer of the City, designated by the City Council to be responsible for coordinating Stormwater Assessments or such person's designee.

"County" means Brevard County, Florida.

"Final Assessment Resolution" means the resolution described in Section 2.06 hereof which shall confirm, modify, or repeal the Initial Assessment Resolution and which shall be the final proceeding for the initial imposition of Stormwater Assessments.

"Stormwater Assessment" means a special assessment lawfully imposed by the City Council against Assessed Property to fund all or any portion of the cost of the provision of stormwater management services, facilities, or programs providing a special benefit to property as a consequence of possessing a logical relationship to the value, use, or characteristics of the Assessed Property.

"Stormwater Assessed Cost" means the amount determined by the City Council to be assessed in any Fiscal Year to fund all or any portion of the cost of the provision of stormwater management services, facilities, or programs of the Stormwater Drainage Utility which provide a special benefit to Assessed Property, and shall include, but not be limited to, the following components: (A) the cost of physical construction, reconstruction or completion of any required facility or improvement; (B) the costs incurred in any required acquisition or purchase; (C) the cost of all labor, materials, machinery, and equipment; (D) the cost of fuel, parts, supplies, maintenance, repairs, and utilities; (E) the cost of computer services, data

processing, and communications; (F) the cost of all lands and interest therein, leases, property rights, easements, and franchises of any nature whatsoever; (G) the cost of any indemnity or surety bonds and premiums for insurance; (H) the cost of salaries, volunteer pay, workers' compensation insurance, or other employment benefits; (I) the cost of uniforms, training, travel, and per diem; (J) the cost of construction plans and specifications, surveys and estimates of costs; (K) the cost of engineering, financial, legal, and other professional services; (L) the costs of compliance with any contracts or agreements entered into by the City to provide stormwater management services; (M) all costs associated with the structure, implementation, collection, and enforcement of the Stormwater Assessments, including any service charges of the Tax Collector, or Property Appraiser and amounts necessary to off-set discounts received for early payment of Stormwater Assessments pursuant to the Uniform Assessment Collection Act or for early payment of Stormwater Assessments collected pursuant to Section 3.02 herein; (N) all other costs and expenses necessary or incidental to the acquisition, provision, or construction of stormwater management services, facilities, or programs, and such other expenses as may be necessary or incidental to any related financing authorized by the City Council by subsequent resolution; (O) a reasonable amount for contingency and anticipated delinquencies and uncollectible Stormwater Assessments; (P) all costs, fees and expenses incurred in connection with the issuance and sale of any series of obligations including, but not limited to, rating agency and other financing fees, fees and disbursement of the City's bond counsel, underwriter's discount, fees and disbursement of the City's financial advisor and

legal counsel, costs of printing the obligations and the documentation supporting issuance of the obligations, fees payable in respect of any municipal bond insurance policy, administrative, development, credit review or other fee associated with any pooled commercial paper or similar interim financing program and any costs of a similar nature incurred in connection with issuance of such obligations; and (Q) reimbursement to the City or any other Person for any moneys advanced for any costs incurred by the City or such Person in connection with any of the foregoing components of Stormwater Assessed Cost. In the event the City also imposes an impact fee upon new growth or development for stormwater related capital improvements, the Stormwater Assessed Cost shall not include costs attributable to capital improvements necessitated by new growth or development that will be paid by such impact fees.

"Fiscal Year" means that period commencing October 1st of each year and continuing through the next succeeding September 30th, or such other period as may be prescribed by law as the fiscal year for the City.

"Government Property" means property owned by the United States of America or any agency thereof, a sovereign state or nation, the State of Florida or any agency thereof, a county, a special district or a municipal corporation.

"Initial Assessment Resolution" means the resolution described in Section 2.02 hereof which shall be the initial proceeding for the identification of the Stormwater Assessed Cost for which an assessment is to be made and for the imposition of a Stormwater Assessment.

"Maximum Assessment Rate" means the highest rate of a Stormwater

Assessment established by the City Council in an Initial Assessment Resolution or Preliminary Rate Resolution and confirmed by the City Council in the Final Assessment Resolution or Annual Rate Resolution.

"Ordinance" means this Stormwater Assessment Ordinance.

"Owner" shall mean the Person reflected as the owner of Assessed Property on the Tax Roll.

"Person" means any individual, partnership, firm, organization, corporation, association, or any other legal entity, whether singular or plural, masculine or feminine, as the context may require.

"Preliminary Rate Resolution" means the resolution described in Section 2.08 hereof initiating the annual process for updating the Assessment Roll and directing the reimposition of Stormwater Assessments pursuant to an Annual Rate Resolution.

"Property Appraiser" means the Brevard County Property Appraiser.

"Stormwater Drainage Utility" means the stormwater drainage utility established and operated by the City pursuant to Chapter 22, Division 2. – Stormwater Utility System of the City Code. Such Utility includes the City operating and maintaining a system of storm and surface water management facilities including, but not limited to, conduits, pipes, manholes, channels, ditches, drainage easements, retention and detention basins, infiltration facilities, natural waterways and bodies, and other infrastructure and components.

"Tax Collector" means the Brevard County Tax Collector.

"Tax Roll" means the real property ad valorem tax assessment roll maintained by the Property Appraiser for the purpose of the levy and collection of ad valorem taxes.

"Uniform Assessment Collection Act" means sections 197.3632 and 197.3635, Florida Statutes, or any successor statutes authorizing the collection of non-ad valorem assessments on the same bill as ad valorem taxes, and any applicable regulations promulgated thereunder.

SECTION 1.02. INTERPRETATION. Unless the context indicates otherwise, words importing the singular number include the plural number, and vice versa; the terms "hereof," "hereby," "herein," "hereto," "hereunder" and similar terms refer to this Ordinance; and the term "hereafter" means after, and the term "heretofore" means before, the effective date of this Ordinance. Words of any gender include the correlative words of the other genders, unless the sense indicates otherwise.

SECTION 1.03. GENERAL FINDINGS. It is hereby ascertained, determined, and declared that:

(A) Pursuant to Article VIII, section 2(b), Florida Constitution, and sections 166.021 and 166.041, Florida Statutes, the City Council has all powers of local self government to perform municipal functions and to render municipal services in a manner not inconsistent with law, and such power may be exercised by the enactment of City ordinances.

(B) The City Council may exercise any governmental, corporate, or proprietary power for a municipal purpose except when expressly prohibited by law, and the City Council may legislate on any subject matter on which the Florida Legislature may act, except those subjects described in (a), (b), (c), and (d) of section 166.021(3), Florida Statutes. The subject matter of paragraphs (a), (b), (c), and (d) of section 166.021(3), Florida Statutes, are not relevant to the imposition of assessments related to

stormwater management services, facilities or programs of the City.

(C) The Stormwater Assessments authorized by this Ordinance are consistent with the authority granted in Section 403.0893, Florida Statutes, which is additional authority and supplements the constitutional and statutory power of local government granted to a municipality.

(D) The purpose of this Ordinance is to (1) provide procedures and standards for the imposition of citywide Stormwater Assessments under the general home rule powers of a municipality to impose special assessments; (2) authorize a procedure for the funding of stormwater management services, facilities, or programs providing special benefits to property within the City; and (3) legislatively determine the special benefit provided to Assessed Property from the provision of the City's stormwater management services.

(E) The City has previously established a Stormwater Drainage Utility which has been and continues to be responsible for the operation, construction, maintenance and repair of stormwater facilities; for stormwater system planning; and for lake and river water quality management.

(F) All real property located within the City either uses or benefits from the operation, construction, maintenance and repair of the City's stormwater system by the Stormwater Drainage Utility and such benefits include, by way of example and not limitation, (1) the provision of stormwater management services and the availability and use of facilities or improvements by owners and occupants of such property to properly and safely detain, retain, convey or treat stormwater discharge from such property and reduce flooding and soil erosion, (2) stabilization of or the increase or property values,

(3) increased safety and better access to property, (4) improved appearance, (5) rendering property more adaptable to a current or reasonably foreseeable new or higher use, (6) alleviation of the burdens caused by stormwater runoff and accumulation attendant with the present or projected use of property, (7) fostering the enhancement of environmentally responsible use and enjoyment of the natural resources within the City, (8) reducing stormwater runoff capable of carrying pollutants into receiving water bodies (e.g., Indian River Lagoon), thereby degrading water quality and adversely affecting flora and fauna and wildlife, and (9) implementation of the City's City Code and Comprehensive Plan.

(G) The annual Stormwater Assessments, to be imposed using the procedures provided in this Ordinance, shall constitute non-ad valorem assessments within the meaning and intent of the Uniform Assessment Collection Act.

(H) The Stormwater Assessments to be imposed using the procedures provided in this Ordinance are imposed by the City Council, not the Brevard County Board of County Commissioners, Property Appraiser or Tax Collector. The duties of the Property Appraiser and Tax Collector under the provisions of this Ordinance and the Uniform Assessment Collection Act are ministerial.

SECTION 1.04. LEGISLATIVE DETERMINATIONS OF SPECIAL BENEFIT. It is hereby ascertained and declared that the stormwater management services, facilities, and programs provide a special benefit to property because stormwater services bear a logical relationship to the value, use and characteristics of the property located within the City. The Stormwater Assessments authorized by this Ordinance provide an equitable method of funding the Stormwater Assessed Costs, by fairly and reasonably allocating

such costs to specially benefitted property classified on the basis of the stormwater burden expected to be generated by the physical characteristics and use of such property.

ARTICLE II

ANNUAL STORMWATER ASSESSMENTS

SECTION 2.01. GENERAL AUTHORITY.

(A) The City Council is hereby authorized to impose an annual Stormwater Assessment to fund all or any portion of the Stormwater Assessed Cost upon benefitted property at a rate of assessment based on the special benefit accruing to such property from the City's provision of stormwater management services, facilities, or programs. All Stormwater Assessments shall be imposed in conformity with the procedures set forth in this Article II.

(B) The amount of the Stormwater Assessment imposed in a Fiscal Year against a parcel of Assessed Property shall be determined pursuant to an apportionment methodology based upon a classification of property designed to provide a fair and reasonable apportionment of the Stormwater Assessed Cost among properties on a basis reasonably related to the special benefit provided by stormwater management services, facilities, or programs funded with assessment proceeds. Notwithstanding the foregoing, if it is specifically determined by the City Council that any area or property within the City receives a distinct special benefit that is different in kind or degree from the special benefit received by other areas or property of the City, the Special Assessment Costs related to such component shall be assigned against the portion of

the area or property receiving the distinct benefit. Further, if any area or property within the City receives a higher level of maintenance service, the incremental maintenance cost associated with the higher level of service shall be assessed only against that portion of area or property that received the higher level of service.

(C) Stormwater Assessments shall be payable annually and shall be computed as the parcel's share of the Special Assessment Costs, less the amount equal to the maximum discount allowed for early payment thereof under the Uniform Assessment Collection Act. Nothing contained in this Ordinance shall be construed to require the imposition of Stormwater Assessments against Government Property.

SECTION 2.02. INITIAL PROCEEDINGS. The initial proceeding for the imposition of a Stormwater Assessment shall be the adoption of an Initial Assessment Resolution by the City Council, (1) identifying the area within the City to be assessed, and if applicable, that portion of the City or property receiving a distinct special benefit or a higher level of service (2) containing a brief and general description of the stormwater management services, facilities, or programs to be provided, (3) determining the Stormwater Assessed Cost to be assessed, and if applicable, such portion of related costs of providing a distinct special benefit and higher level of service, (4) describing the method of apportioning the Stormwater Assessed Cost and the computation of the Stormwater Assessment for specific properties, and describing the procedure for adjusting the apportionment attributable to a parcel of property (including any mitigation credit factors), (5) establishing an estimated assessment rate for the applicable Fiscal Year, (6) establishing a Maximum Assessment Rate, if desired by the City Council, and (7) directing the City Manager to (a) prepare the initial Assessment Roll, as required by Section 2.03 hereof, (b) publish the

notice required by Section 2.04 hereof, and (c) mail the notice required by Section 2.05 hereof using information then available from the Tax Roll.

SECTION 2.03. INITIAL ASSESSMENT ROLL.

(A) The City Manager shall prepare, or direct the preparation of, the initial Assessment Roll, which shall contain the following:

(1) A summary description of all Assessed Property conforming to the description contained on the Tax Roll.

(2) The name of the Owner of the Assessed Property.

(3) The amount of the Stormwater Assessment to be imposed against each such parcel of Assessed Property including the unit of apportionment attributable to such parcel.

(4) The maximum annual Stormwater Assessment to become due in any Fiscal Year.

(B) The initial Assessment Roll shall be retained by the City Manager and shall be open to public inspection. The foregoing shall not be construed to require that the Assessment Roll be in printed form if the amount of the Stormwater Assessment for each parcel of property can be determined by use of a computer terminal available to the public.

SECTION 2.04. NOTICE BY PUBLICATION.

(A) Upon completion of the Initial Assessment Roll, the City Manager shall publish, or direct the publication of, once in a newspaper of general circulation within the City a notice stating that at a meeting of the City Council on a certain day and hour, not earlier than 20 calendar days from such publication, which meeting shall be a regular,

adjourned, or special meeting, the City Council will receive written comment and hear testimony and objections of all interested persons to the Final Assessment Resolution which shall establish the rate of assessment and approve the aforementioned initial Assessment Roll.

(B) The published notice shall conform to the requirements set forth in the Uniform Assessment Collection Act. Such notice shall include (1) a geographic depiction of the property subject to the Stormwater Assessment; (2) a brief and general description of the stormwater management services, facilities, or programs to be provided; (3) the rate of assessment including a Maximum Assessment Rate in the event one was adopted; (4) the procedure for objecting provided in Section 2.06 hereof; (5) the method by which the Stormwater Assessment will be collected; and (6) a statement that the Initial Assessment Roll is available for inspection at the office of the City Manager and all interested persons may ascertain the amount to be assessed against a parcel of Assessed Property at the office of the City Manager.

SECTION 2.05. NOTICE BY MAIL.

(A) In addition to the published notice required by Section 2.04, the City Manager shall provide notice, or direct the provision of notice, of the proposed Stormwater Assessment by first class mail to the Owner of each parcel of property subject to the Stormwater Assessment.

(B) Such notice shall include (1) the purpose of the Stormwater Assessment; (2) the rate of assessment to be levied against each parcel of property, including a Maximum Assessment Rate in the event one was adopted; (3) the unit of measurement applied to determine the Stormwater Assessment; (4) the number of

such units contained in each parcel of property; (5) the total revenue to be collected by the City from the Stormwater Assessment; (6) a statement that failure to pay the Stormwater Assessment will cause a tax certificate to be issued against the property or foreclosure proceedings to be instituted, either of which may result in a loss of title to the property; (7) a statement that all affected Owners have a right to appear at the hearing and to file written objections with the City Council within 20 days of the notice; and (8) the date, time, and place of the hearing. The mailed notice shall conform to the requirements set forth in the Uniform Assessment Collection Act. Notice shall be mailed at least 20 calendar days prior to the hearing to each Owner at such address as is shown on the Tax Roll. Notice shall be deemed mailed upon delivery thereof to the possession of the United States Postal Service. The City Manager may provide proof of such notice by affidavit. Failure of the Owner to receive such notice due to mistake or inadvertence shall not affect the validity of the Assessment Roll nor release or discharge any obligation for payment of a Stormwater Assessment imposed by the City Council pursuant to this Ordinance.

SECTION 2.06. ADOPTION OF FINAL ASSESSMENT RESOLUTION.

(A) At the public hearing as noticed pursuant to Sections 2.04 and 2.05 hereof, or to which an adjournment or continuance may be taken by the City Council, the City Council shall receive any oral or written objections of interested persons and may then, or at any subsequent meeting of the City Council adopt the Final Assessment Resolution which shall (1) confirm, modify, or repeal the Initial Assessment Resolution with such amendments, if any, as may be deemed appropriate by the City Council; (2) establish the rate of assessment to be imposed in the upcoming Fiscal Year; (3) establish a Maximum

Assessment Rate that may be imposed in the event such rate was adopted; (4) approve the initial Assessment Roll, with such amendments as it deems just and right; and (5) determine the method of collection.

(B) The adoption of the Final Assessment Resolution by the City Council shall constitute a legislative determination that all parcels assessed derive a special benefit from the stormwater management services, facilities, or programs to be provided or constructed and a legislative determination that the Stormwater Assessments are fairly and reasonably apportioned among the properties that receive the special benefit.

(C) All written objections to the Final Assessment Resolution shall be filed with the City Manager at or before the time or adjourned time of such hearing. The Final Assessment Resolution shall constitute the Annual Rate Resolution for the Initial Fiscal Year in which Stormwater Assessments are imposed or reimposed hereunder.

SECTION 2.07. EFFECT OF FINAL ASSESSMENT RESOLUTION. The Stormwater Assessments for the initial Fiscal Year shall be established upon adoption of the Final Assessment Resolution. The adoption of the Final Assessment Resolution shall be the final adjudication of the issues presented (including, but not limited to, the determination of special benefit and fair apportionment to the Assessed Property; the method of apportionment and assessment; the initial rate of assessment; the Maximum Assessment Rate, if any; the initial Assessment Roll; and the levy and lien of the Stormwater Assessments), unless proper step shall be initiated in a court of competent jurisdiction to secure relief within 20 days from the date of the City Council action on the Final Assessment Resolution. The initial Assessment Roll, as approved by the Final Assessment Resolution, shall be delivered to the Tax Collector, as required by the Uniform

Assessment Collection Act, or if the alternative method described in Section 3.02 hereof is used to collect the Stormwater Assessments, such other official as the City Council by resolution shall designate.

SECTION 2.08. ADOPTION OF ANNUAL RATE RESOLUTION.

(A) The City Council shall adopt an Annual Rate Resolution during its budget adoption process for each Fiscal Year following the initial Fiscal Year for which a Stormwater Assessment is imposed hereunder.

(B) The proceedings for the adoption of an Annual Rate Resolution shall begin with the adoption of a Preliminary Rate Resolution by the City Council (1) containing a brief and general description of the stormwater management services, facilities, or programs to be provided; (2) determining the Stormwater Assessed Cost to be assessed for the upcoming Fiscal Year; (3) establishing the estimated assessment rate for the upcoming Fiscal Year; (4) establishing or increasing a Maximum Assessment Rate, if desired by the City Council; (5) authorizing the date, time, and place of a public hearing to receive and consider comments from the public and consider the adoption of the Annual Rate Resolution for the upcoming Fiscal Year; and (6) directing the City Manager to (a) update the Assessment Roll, (b) provide notice by publication and first class mail to affected Owners in the event circumstances described in subsection (F) of this Section so require, and (c) directing and authorizing any supplemental or additional notice deemed proper, necessary or convenient by the City.

(C) The Annual Rate Resolution shall (1) establish the rate of assessment to be imposed in the upcoming Fiscal Year and (2) approve the Assessment Roll for

the upcoming Fiscal Year with such adjustments as the City Council deems just and right. The Assessment Roll shall be prepared in accordance with the method of apportionment set forth in the Initial Assessment Resolution, or any subsequent Preliminary Rate Resolution, together with modifications, if any, that are provided and confirmed in the Final Assessment Resolution or any subsequent Annual Rate Resolution.

(D) Nothing herein shall preclude the City Council from providing annual notification to all Owners of Assessed Property in the manner provided in Sections 2.04 and 2.05 hereof or any other method as provided by law.

(E) The City Council may establish or increase a Maximum Assessment Rate in an Initial Assessment Resolution or Preliminary Rate Resolution and confirm such Maximum Assessment Rate in the event notice of such Maximum Rate Assessment has been included in the notices required by Section 2.04 and 2.05 hereof.

(F) In the event (1) the proposed Stormwater Assessment for any Fiscal Year exceeds the rates of assessment adopted by the City Council including a Maximum Assessment Rate, if any, that were listed in the notices previously provided to the Owners of Assessed Property pursuant to Sections 2.04 and 2.05 hereof, (2) the purpose for which the Stormwater Assessment is imposed or the use of the revenue from the Stormwater Assessment is substantially changed from that represented by notice previously provided to the Owners of Assessed Property pursuant to Sections 2.04 and 2.05 hereof, (3) Assessed Property is reclassified or the method of apportionment is revised or altered resulting in an increased Stormwater Assessment from that represented by notice previously provided to the Owners of Assessed Property pursuant to Sections 2.04 and

2.05 hereof, or (4) an Assessment Roll contains Assessed Property that was not included on the Assessment Roll approved for the prior Fiscal Year, notice shall be provided by publication and first class mail to the Owners of such Assessed Property as provided by law. Such notice shall substantially conform with the notice requirements set forth in Sections 2.04 and 2.05 hereof and inform the Owner of the date, time, and place for the adoption of the Annual Rate Resolution. The failure of the Owner to receive such notice due to mistake or inadvertence, shall not affect the validity of the Assessment Roll nor release or discharge any obligation for payment of a Stormwater Assessment imposed by the City Council pursuant to this Ordinance.

(G) As to any Assessed Property not included on an Assessment Roll approved by the adoption of the Final Assessment Resolution or a prior year's Annual Rate Resolution, the adoption of the succeeding Annual Rate Resolution shall be the final adjudication of the issues presented as to such Assessed Property (including, but not limited to, the determination of special benefit and fair apportionment to the Assessed Property, the method of apportionment and assessment, the rate of assessment, the establishment or increase of a Maximum Assessment Rate, the Assessment Roll, and the levy and lien of the Stormwater Assessments), unless proper steps shall be initiated in a court of competent jurisdiction to secure relief within 20 days from the date of the City Council action on the Annual Rate Resolution. Nothing contained herein shall be construed or interpreted to affect the finality of any Stormwater Assessment not challenged within the required 20-day period for those Stormwater Assessments previously imposed against Assessed Property by the inclusion of the Assessed Property on an Assessment Roll approved in the Final Assessment Resolution or any subsequent Annual Rate

Resolution.

(H) The Assessment Roll, as approved by the Annual Rate Resolution, shall be delivered to the Tax Collector as required by the Uniform Assessment Collection Act, or if the alternative method described in Section 3.02 hereof is used to collect the Stormwater Assessments, such other official as the City Council by resolution shall designate. If the Stormwater Assessment against any property shall be sustained, reduced, or abated by the court, an adjustment shall be made on the Assessment Roll.

SECTION 2.09. LIEN OF STORMWATER ASSESSMENTS. Upon the adoption of the Assessment Roll and the Final Assessment Resolution or Annual Rate Resolution, whichever is applicable, all Stormwater Assessments shall constitute a lien against Assessed Property equal in rank and dignity with the liens of all state, county, district, or municipal taxes and special assessments. Except as otherwise provided by law, such lien shall be superior in dignity to all other prior liens, mortgages, titles, and claims, until paid. The lien for a Stormwater Assessment shall be deemed perfected upon the City Council's adoption of the Final Assessment Resolution or the Annual Rate Resolution, whichever is applicable. The lien for a Stormwater Assessment collected under the Uniform Assessment Collection Act shall attach to the property included on the Assessment Roll as of the prior January 1, the lien date for ad valorem taxes imposed under the Tax Roll. The lien for a Stormwater Assessment collected under the alternative method of collection provided in Section 3.02 shall be deemed perfected upon the City Council's adoption of the Final Assessment Resolution or the Annual Rate Resolution, whichever is applicable, and shall attach to the property on such date of adoption.

SECTION 2.10. REVISIONS TO STORMWATER ASSESSMENTS. If any

Stormwater Assessment made under the provisions of this Ordinance is either in whole or in part annulled, vacated, or set aside by the judgment of any court, or if the City Council is satisfied that any such Stormwater Assessment is so irregular or defective that the same cannot be enforced or collected, or if the City Council has failed to include or omitted any property on the Assessment Roll, which property should have been so included, the City Council may take all necessary steps to impose a new Stormwater Assessment against any property benefited by Stormwater Assessed Costs, following as nearly as may be practicable, the provisions of this Ordinance and in case such second Stormwater Assessment is annulled, vacated, or set aside, the City Council may obtain and impose other Stormwater Assessments until a valid Stormwater Assessment is imposed.

SECTION 2.11. PROCEDURAL IRREGULARITIES. Any informality or irregularity in the proceedings in connection with the levy of any Stormwater Assessment under the provisions of this Ordinance shall not affect the validity of the same after the approval thereof, and any Stormwater Assessment as finally approved shall be competent and sufficient evidence that such Stormwater Assessment was duly levied, that the Stormwater Assessment was duly made and adopted, and that all other proceedings adequate to such Stormwater Assessment were duly had, taken, and performed as required by this Ordinance; and no variance from the directions hereunder shall be held material unless it be clearly shown that the party objecting was materially injured thereby.

SECTION 2.12. CORRECTION OF ERRORS AND OMISSIONS.

(A) No act of error or omission on the part of the Property Appraiser, Tax

Collector, City Manager, City Council, or their deputies or employees, shall operate to release or discharge any obligation for payment of a Stormwater Assessment imposed by the City Council under the provision of this Ordinance.

(B) When it shall appear that any Stormwater Assessment should have been imposed under this Ordinance against a parcel of property specially benefited by the provision of stormwater management services, facilities, or programs, but that such property was omitted from the Assessment Roll; or such property was erroneously assessed; or was not listed on the Tax Roll as an individual parcel of property as of the effective date of the Assessment Roll approved by the Final Assessment Resolution or any subsequent Annual Rate Resolution for any upcoming Fiscal Year, the City Council may, upon provision of a notice by mail provided to the Owner of the omitted or erroneously assessed parcel in the manner and form provided in Section 2.05, impose the applicable Stormwater Assessment for the Fiscal Year in which such error or omission is discovered, in addition to the applicable Stormwater Assessment due for the prior two Fiscal Years. Such Stormwater Assessment shall constitute a lien against Assessed Property equal in rank and dignity with the liens of all state, county, district, or municipal taxes and special assessments, and superior in rank and dignity to all other prior liens, mortgages, titles, and claims in and to or against the real property involved, shall be collected as provided in Article III hereof, and shall be deemed perfected on the date of adoption of the resolution imposing the omitted or delinquent assessments.

(C) Prior to the delivery of the Assessment Roll to the Tax Collector in accordance with the Uniform Assessment Collection Act, the City Manager shall have

the authority at any time, upon his or her own initiative or in response to a timely filed petition from the Owner of any property subject to a Stormwater Assessment, to reclassify property based upon presentation of competent and substantial evidence, and correct any error in applying the Stormwater Assessment apportionment method to any particular parcel of property not otherwise requiring the provision of notice pursuant to the Uniform Assessment Collection Act. Any such correction shall be considered valid ab initio and shall in no way affect the enforcement of the Stormwater Assessment imposed under the provisions of this Ordinance. All requests from affected property owners for any such changes, modifications or corrections shall be referred to, and processed by, the City Manager and not the Property Appraiser or Tax Collector.

(D) After the Assessment Roll has been delivered to the Tax Collector in accordance with the Uniform Assessment Collection Act, any changes, modifications, or corrections thereto shall be made in accordance with the procedures applicable to correcting errors and insolvencies on the Tax Roll upon timely written request and direction of the City Manager.

SECTION 2.13. INTERIM ASSESSMENTS.

(A) An interim Stormwater Assessment may be imposed against all property for which a Certificate of Occupancy is issued after the adoption of the Final Rate Resolution or any subsequent Annual Rate Resolution. The amount of the interim Stormwater Assessment shall be calculated upon a monthly rate, which shall be one-twelfth of the annual rate for such property computed in accordance with the Final Rate Resolution or any subsequent Annual Rate Resolution for the Fiscal Year for

which the interim Stormwater Assessment is being imposed. Such monthly rate shall be imposed for each full calendar month remaining in the Fiscal Year. In addition to the monthly rate, the interim Stormwater Assessment may also include an estimate of the subsequent Fiscal Year's Stormwater Assessment.

(B) Issuance of the Certificate of Occupancy without the payment in full of the interim Stormwater Assessment shall not relieve the Owner of such property of the obligation of full payment. Any interim Stormwater Assessment not collected prior to the issuance of the Certificate of Occupancy may be collected pursuant to the Uniform Assessment Collection Act as provided in Section 3.01 of this Ordinance, under the alternative collection method provided in Section 3.02 or by any other method authorized bylaw.

(C) Any interim Stormwater Assessment shall be deemed due and payable on the date the Certificate of Occupancy was issued and shall constitute a lien against such property as of that date. Said lien shall be equal in rank and dignity with the liens of all state, county, district or municipal taxes and special assessments, and superior in rank and dignity to all other liens, encumbrances, titles and claims in and to or against the real property involved and shall be deemed perfected upon the issuance of the Certificate of Occupancy.

ARTICLE III

COLLECTION AND USE OF STORMWATER ASSESSMENTS

SECTION 3.01. METHOD OF COLLECTION.

(A) Unless otherwise directed by the City Council, the Stormwater

Assessments shall be collected pursuant to the uniform method provided in the Uniform Assessment Collection Act, and the City shall comply with all applicable provisions of the Uniform Assessment Collection Act. Any hearing or notice required by this Ordinance may be combined with any other hearing or notice required by the Uniform Assessment Collection Act or other provision of law.

(B) The amount of a Stormwater Assessment to be collected using the uniform method pursuant to the Uniform Assessment Collection Act for any specific parcel of benefitted property may include an amount equivalent to the payment delinquency, delinquency fees and recording costs for a prior year's assessment for a comparable service, facility, or program provided, (1) the collection method used in connection with the prior year's assessment did not employ the use of the uniform method of collection authorized by the Uniform Assessment Collection Act, (2) notice is provided to the Owner as required under the Uniform Assessment Collection Act, and(3) any lien on the affected parcel for the prior year's assessment is supplanted and transferred to such Stormwater Assessment upon certification of a non-ad valorem roll to the Tax Collector by the City.

SECTION 3.02. ALTERNATIVE METHOD OF COLLECTION. In lieu of using the Uniform Assessment Collection Act, the City Council may elect to collect the Stormwater Assessments by any other method which is authorized by law or under the alternative collection method provided by this Section:

(A) The City Council shall provide Stormwater Assessment bills by first class mail to the Owner of each affected parcel of property that is subject to the Stormwater Assessment. The bill or accompanying explanatory material shall include (1) a brief explanation of the Stormwater Assessment, (2) a description of the unit of measurement

used to determine the amount of the Stormwater Assessment, (3) the number of units contained within the parcel, (4) the total amount of the Stormwater Assessment imposed against the parcel for the appropriate period, (5) the location at which payment will be accepted, (6) the date on which the Stormwater Assessment is due, and (7) a statement that the Stormwater Assessment constitutes a lien against Assessed Property equal in rank and dignity with the liens of all state, county, district or municipal taxes and other non-ad valorem assessments.

(B) A general notice of the lien resulting from imposition of the Stormwater Assessments shall be recorded in the Official Records of the City. Nothing herein shall be construed to require that individual liens or releases be filed in the Official Records.

(C) The City Council shall have the right to foreclose and collect all delinquent Stormwater Assessments in the manner provided by law for the foreclosure of mortgages on real property or appoint or retain an agent to institute such foreclosure and collection proceedings. A Stormwater Assessment shall become delinquent if it is not paid within 30 days from the date payment was due, as identified in accordance with paragraph (A)(6) of this Section. The City Council or its agent shall notify any property owner who is delinquent in payment of his or her Stormwater Assessment within 60 days from the date such assessment was due. Such notice shall state in effect that the City Council or its agent will either (1) initiate a foreclosure action or suit in equity and cause the foreclosure of such property subject to a delinquent Stormwater Assessment in a method now or hereafter provided by law for foreclosure of mortgages on real property, or (2) cause an amount equivalent to the delinquent Stormwater Assessment, not previously subject to collection using the uniform method under the Uniform

Assessment Collection Act, to be collected on the tax bill for a subsequent year.

(D) All costs, fees and expenses, including reasonable attorney fees and title search expenses, related to any foreclosure action as described herein shall be included in any judgment or decree rendered therein. At the sale pursuant to decree in any such action, the City may be the purchaser to the same extent as any Person. The City Council or its agent may join in one foreclosure action the collection of Stormwater Assessments against any or all property assessed in accordance with the provisions hereof. All delinquent Owners whose property is foreclosed shall be liable for an apportioned amount of reasonable costs and expenses incurred by the City Council and its agents, including reasonable attorney fees, in collection of such delinquent Stormwater Assessments and any other costs incurred by the City Council as a result of such delinquent Stormwater Assessments and the same shall be collectible as a part of or in addition to, the costs of the action.

(E) In lieu of foreclosure, any delinquent Stormwater Assessment and the costs, fees and expenses attributable thereto, may be collected pursuant to the Uniform Assessment Collection Act; provided however, that (1) notice is provided to the Owner in the manner required by the Uniform Assessment Collection Act and this Ordinance, and (2) any existing lien of record on the affected parcel for the delinquent Stormwater Assessment is supplanted by the lien resulting from certification of the Assessment Roll, as applicable, to the Tax Collector.

(F) Notwithstanding the City Council's use of an alternative method of collection, the City Manager shall have the same power and authority to correct errors and omissions as provided to him or other City officials in Section 2.12 hereof.

(G) Any City Council action required in the collection of Stormwater Assessments may be by resolution.

SECTION 3.03. GOVERNMENT PROPERTY.

(A) In the event Stormwater Assessments are imposed against Government Property, the City Council shall provide Stormwater Assessment bills by first class mail to the Owner of each affected parcel of Government Property. The bill or accompanying explanatory material shall include (1) a brief explanation of the Stormwater Assessment, (2) a description of the unit of measurement used to determine the amount of the Stormwater Assessment, (3) the number of units contained within the parcel, (4) the total amount of the parcel's Stormwater Assessment for the appropriate period, (5) the location at which payment will be accepted, and (6) the date on which the Stormwater Assessment is due.

(B) Stormwater Assessments imposed against Government Property shall be due on the same date as all other Stormwater Assessments and, if applicable, shall be subject to the same discounts for early payment.

(C) A Stormwater Assessment shall become delinquent if it is not paid within 30 days from the date payment was due, as identified in paragraph (A)(6) of this Section. The City Council shall notify the Owner of any Government Property that is delinquent in payment of its Stormwater Assessment within 60 days from the date such assessment was due. Such notice shall state that the City Council will initiate a mandamus or other appropriate judicial action to compel payment.

(D) All costs, fees and expenses, including reasonable attorney fees and title search expenses, related to any mandamus or other action as described herein

shall be included in any judgment or decree rendered therein. All delinquent Owners of Government Property against which a mandamus or other appropriate action is filed shall be liable for an apportioned amount of reasonable costs and expenses incurred by the City, including reasonable attorney fees, in collection of such delinquent Stormwater Assessments and any other costs incurred by the City Council as a result of such delinquent Stormwater Assessments and the same shall be collectible as a part of or in addition to, the costs of the action.

(E) As an alternative to the foregoing, a Stormater Assessment imposed against Government Property may be collected as a surcharge on a utility bill provided to such Government Property in periodic installments with a remedy of a mandamus action in the event of non-payment. The City Council may contract for such billing services with any utility, whether or not such utility is owned by the City.

ARTICLE IV

GENERAL PROVISIONS

SECTION 4.01. APPLICABILITY. This Ordinance and the City Council's authority to impose assessments pursuant hereto shall be applicable throughout the City.

SECTION 4.02. ALTERNATIVE METHOD.

(A) This Ordinance shall be deemed to provide an additional and alternative method for the doing of the things authorized hereby and shall be regarded as supplemental and additional to powers conferred by other laws, and shall not be regarded as in derogation of any powers now existing or which may

hereafter come into existence. This Ordinance, being necessary for the welfare of the inhabitants of the City, shall be liberally construed to effect the purposes hereof.

(B) Nothing herein shall preclude the City Council from directing and authorizing, by resolution, the combination with each other of (1) any supplemental or additional notice deemed proper, necessary, or convenient by the City, (2) any notice required by this Ordinance, or (3) any notice required by law, including the Uniform Assessment Collection Act.

SECTION 4.03. SEVERABILITY. The provisions of this Ordinance are severable; and if any section, subsection, sentence, clause or provision is held invalid by any court of competent jurisdiction, the remaining provisions of this Ordinance shall not be affected thereby.

SECTION 4.04. EFFECTIVE DATE. This Ordinance shall take effect immediately upon its passage and adoption on the second and final reading.

PASSED on First Reading on the 26th day of June, 2019.

PASSED AND ADOPTED on Second Reading and Final Reading on the 10th day of July, 2019.

(SEAL)

ATTEST:

Carie Shealy, MMC, City Clerk

CITY OF COCOA, FLORIDA

Jake Williams, Jr., Mayor

APPROVED AS TO FORM AND CONTENT:

City Attorney

RESOLUTION NO. 2019-008

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA; ELECTING TO USE THE UNIFORM METHOD OF COLLECTING NON-AD VALOREM SPECIAL ASSESSMENTS WITHIN THE INCORPORATED AREA OF THE CITY OF COCOA RELATED TO STORMWATER; STATING THE NEED FOR SUCH LEVY; PROVIDING A LEGAL DESCRIPTION OF THE INCORPORATED AREA OF THE CITY OF COCOA; PROVIDING FOR THE MAILING OF THIS RESOLUTION; PROVIDING FOR THE REPEAL OF PRIOR INCONSISTENT RESOLUTIONS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Cocoa, Florida (the "City") is contemplating the imposition of special assessments for the provision of stormwater services; and

WHEREAS, the City intends to use the uniform method for collecting non-ad valorem special assessments for the cost of continuing to provide stormwater services within the incorporated area of the City as authorized by Section 197.3632, Florida Statutes, as amended, because this method will allow such special assessments to be collected annually commencing in November 2019, in the same manner as provided for ad valorem taxes; and

WHEREAS, the City held a duly advertised public hearing prior to the adoption of this Resolution, proof of publication of such hearing being attached hereto as **EXHIBIT "A,"** which is deemed incorporated herein by this reference; and

WHEREAS, the City Council deems it to be in the best interest of the City of Cocoa to approve this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, as follows:

SECTION 1. Commencing with the Fiscal Year beginning on October 1, 2019, and with the tax statement mailed for such Fiscal Year, the City intends to use the uniform method of collecting non-ad valorem assessments authorized in Section 197.3632, Florida Statutes, as amended, for collecting non-ad valorem assessments for the cost of continuing to provide stormwater services within the incorporated area of the City of Cocoa, Florida, as said area may be amended in the future by law. A legal description of the current incorporated area subject to the assessment is attached hereto as **EXHIBIT "B,"** which is incorporated herein by this reference.

SECTION 2. The City hereby determines that the levy of the assessments is needed to continue to fund the provision of stormwater services within the incorporated area of the City of Cocoa, Florida.

SECTION 3. Upon adoption and execution of this Resolution, the City Clerk is hereby directed to send a copy of this Resolution by United States mail to the Florida Department of Revenue, the Brevard County Tax Collector, and the Brevard County Property Appraiser within three (3) business days, but in no case later than March 10, 2019.

SECTION 4. All prior resolutions or prior resolutions inconsistent with this Resolution are hereby repealed to the extent of the conflict.

SECTION 5. This Resolution shall become effective immediately upon its adoption by the City Council of the City of Cocoa, Florida.

ADOPTED by the City Council of the City of Cocoa, Florida, in a regular meeting assembled on February 13, 2019.

Jake Williams, Jr., Mayor

ATTEST:

Carie Shealy, MMC, City Clerk

SEAL

EXHIBIT A
(HEARING NOTICE)

NOTICE OF INTENT TO USE UNIFORM METHOD OF COLLECTING NON-AD VALOREM ASSESSMENTS

The City of Cocoa, Florida (the "City") hereby provides notice, pursuant to section 197.3632(3)(a). Florida Statutes, and the Florida Municipal Home Rule Powers Act, of its intent to use the uniform method of collecting non-ad valorem special assessment to be levied within the incorporated area of the City, for the cost of continuing to provide stormwater services within the incorporated area of the City, commencing for the Fiscal Year beginning on October 1, 2019. The City will consider the adoption of a resolution electing to use the uniform method of collecting such assessments authorized by section 197.3632, Florida Statutes, at a public hearing to be held at 6:00 p.m. on February 13, 2019 at City Hall, City Council Chambers, located at 65 Stone Street, Cocoa, Florida 32922. Such resolution will state the need for the levy and will contain a legal description of the boundaries of the real property subject to the levy. Copies of the proposed form of resolution, which contains the legal description of the real property subject to the levy, are on file at the Office of the City Clerk, 65 Stone Street, Cocoa, Florida. All interested persons are invited to attend the public meeting.

In the event any person decides to appeal any decision by the City with respect to any matter relating to the consideration of the resolution at the above-referenced public hearing, a record of the proceeding may be needed, and in such an event, such person may need to ensure that a verbatim record of the public hearing is made, which record includes the testimony and evidence on which the appeal is to be based. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk at 321-433-8484 7 days prior to the date of the hearing.

By Order of: Carrie Shealy, MMC, City Clerk
CITY OF COCOA, FLORIDA
Dated this 15th day of January 2019

NOTE to City Clerk: To be published in the Florida Today (Newspaper) for four consecutive weeks preceding the aforementioned hearing on the following dates: 01/18/2019, 01/25/2019, 02/01/2019, 02/08/2019

EXHIBIT "B"

Legal Description of Incorporated City of Cocoa

Cocoa City Charter, Section 1. - City established; boundaries described.

A municipal corporation under and by the name of the City of Cocoa, hereinafter called the city, is hereby created, organized, and constituted in Brevard County, which said city shall embrace, include, and have jurisdiction over all that territory in said county as described in the Attachment hereto, such Attachment being incorporated into this Charter.

Cocoa Corporate Limits Defined:

The City of Cocoa shall embrace and include the following territory in Brevard County, Florida:

Beginning in the waters of the Indian River at the Southeast corner of Government Lot Three (3), Section Thirty-Three (33), Township Twenty-Four (24) South, Range Thirty-Six (36) East, Brevard County, Florida; thence West along the South line of said Government Lot Three (3) to the Southwest corner thereof; thence continue West along the South line of the Northwest quarter (NW¼) of the Southeast quarter (SE¼) of said Section 33 to the West right-of-way line of Old U.S. Highway Number One; thence South along said West right-of-way line of U.S. Highway No. One to a point eighty and no hundredths (80.00) feet South and perpendicular to the South line of said Northwest quarter (NW¼) of the Southeast quarter of said Section Thirty-Three (33); thence West and parallel to said South line of the Northwest quarter (NW¼) of the Southeast quarter (SE¼) of said Section Thirty-Three (33) to the West right-of-way line of Hughlett Avenue; thence North along said West right of way line of Hughlett Avenue to the South line of the Northwest quarter (NW¼) of the Southeast quarter (SE¼) of said Section Thirty-Three (33); thence West along said South line of the Northwest quarter (NW¼) of the Southeast quarter (SE¼), and along the South line of the North half (N½) of the Southwest quarter (SW¼) of said Section Thirty-Three (33) to the West line thereof; thence continue West along the South line of the North half (N½) of the Southeast quarter (SE¼) of Section Thirty-Two (32), Township Twenty-Four (24) South, Range Thirty-Six (36) East to the West line of said Southeast quarter (SE¼) of said Section Thirty-Two (32); thence continue West six hundred ninety-one and ninety-five hundredths (691.95) feet along the North line of the South half (S½) of the Southwest quarter (SW¼) of said Section Thirty-Two (32) to a point on the West right of way line of Aurora Street; thence North along the West right of way line of Aurora Street to the Southeast corner of Lot 11, Block "D" of PINEGROVE PARK, UNIT NO. 2, THIRD ADDITION, according to the plat thereof recorded in Plat Book 19, Page 46 of the Public Records of Brevard County, Florida; thence West along the South line of aforesaid Lot 11, a distance of ninety seven and no hundredths (97.00) feet to the Southwest corner thereof; thence North along the West line of aforesaid Lot 11, a distance of one hundred and ten and no hundredths (110.00) feet to the Southeast corner of Lot 23, Block "D" of aforesaid PINEGROVE PARK, UNIT NO. 2, THIRD ADDITION; thence West along the South line of Lot 23, Block "D" and along the South lines of Lots 9 and 12, a distance of four hundred and no hundredths (400.00) feet to the West right-of-way of Gardenia Avenue; thence South along the West right-of-way of Gardenia Avenue, a distance of five and no hundredths (5.00) feet to the Southeast corner of Lot 16, Block "F" of PINEGROVE PARK, UNIT NO. 2, THIRD ADDITION; thence West along the South line of aforesaid Lot 16, a distance of one hundred twenty-eight and eighty-six hundredths (128.86) feet to a point on the West line of Block "F" of PINEGROVE PARK, UNIT NO. 2, THIRD ADDITION, according to the plat thereof recorded in Plat Book 19, Page 46 of the Public Records of Brevard County, Florida; thence North along the West line of said Block "F" and the West line of COCOA VILLAGE SUBDIVISION, according to the plat thereof recorded in Plat Book 18, Page 19 of the Public Records of Brevard County, Florida, a distance of eleven hundred eighty-three and seventy-five hundredths (1,183.75) feet to the South right of way line of Jackson Street; thence East along the South right of way line of Jackson Street, a distance of six hundred eighty-six and nineteen hundredths (686.19) feet to the East right-of-way line of Aurora Street; thence South along the East right of way line of Aurora Street, a distance of five hundred and no hundredths (500.00) feet to a point which is on the North line of

Block "A," PINEGROVE PARK, UNIT NO. 2, FIRST ADDITION, as recorded in Plat Book 17, Page 88, Public Records of Brevard County, Florida; thence East along the North line of said Block "A," a distance of six hundred thirty-one and twenty-nine hundredths (631.29) feet to the East line of the Northeast quarter (NE¼) of the Southwest quarter (SW¼) of said section Thirty-Two (32); thence North along the East line of the aforesaid quarter section and the East line of the Southeast quarter (SE¼) of the Northwest quarter (NW¼) of said Section thirty-two (32), a distance of eleven hundred eighty and ninety-hundredths (1,180.90) feet to a point which is the Easterly projection of the South line of tract of land described in Deed Book 344, Page 182 of the Public Records of Brevard County, Florida; thence West along the aforementioned line, a distance of two hundred thirty and no hundredths (230.00) feet to a point which is the Southwest corner of the tract of land described in Deed Book 344, Page 182; thence North along the West line of said described tract of land, as described in Deed Book 344, Page 182, Public Records of Brevard County, Florida, a distance of two hundred and no hundredths (200.00) feet to the South right of way line of State Road 520; thence East along the South right-of-way line of State Road 520, a distance of two hundred thirty and no hundredths (230.00) feet to the East line of the Southeast quarter (SE¼) of the Northwest quarter (NW¼) of said Section Thirty-Two (32); thence North along the East line of the Southeast quarter (SE¼) of the Northwest quarter (NW¼) of said Section Thirty-Two (32) to the South line of Lots Nineteen (19), Twenty (20) and Twenty-One (21) of BARLOW'S SUBDIVISION, according to the plat thereof recorded in Plat Book 3, Page 5 of the Public Records of Brevard County, Florida; thence West along aforesaid South line of Lots Nineteen (19), Twenty (20) and Twenty-One (21) to West property line of aforesaid Lot Twenty-One (21); thence North along the West property line of aforesaid Lot Twenty-One (21) to the South right of way of Lake Drive; thence Southeasterly along the South right of way line of Lake Drive to the East line of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of said Section Thirty-Two (32); thence North along the East line of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of said Section Thirty-Two (32) and the East line of the Southwest quarter (SW¼) of Section Twenty-Nine (29), Township Twenty-Four (24) South, Range Thirty-Six (36) East to a point which is the Southeast corner of the North half (N½) of the Northeast quarter (NE¼) of the Southwest quarter (SW¼) of said Section Twenty-Nine (29); thence West along the South line of the North half (N½) of the Northeast quarter (NE¼) of the Southwest quarter (SW¼) to the Southwest corner thereof; thence North along the West line of the North half (N½) of the Northeast quarter (NE¼) of the Southwest quarter (SW¼) and the East line of the Southeast quarter (SE¼) of the Northwest quarter (NW¼) of said Section 29 to a point which is the Southeast corner of the Northwest quarter (NW¼) of the Northwest quarter (NW¼) of said Section Twenty-Nine (29); thence West along the South line of the Northwest quarter (NW¼) of the Northwest quarter (NW¼) of said Section Twenty-Nine (29) to the East right of way line of Clearlake Road; thence South along the East right of way line of Clearlake Road to the South line of the Northwest quarter (NW¼) of the Southwest quarter (SW¼) of said Section Twenty-Nine (29); thence West along aforesaid line in said Section Twenty-Nine (29) to the Southeast corner of the Northeast quarter (NE¼) of the Southeast quarter (SE¼) of Section Thirty (30), Township Twenty-Four (24) South, Range Thirty-Six (36) East; thence West along the South line of the Northeast quarter (NE¼) of the Southeast quarter (SE¼) of said Section Thirty (30) to the Northwest corner of lands described in Official Records Book 521, Page 736 of the Public Records of Brevard County, Florida; thence South along the West line of said lands described in Official Records Book 521, Page 736 to the North right of way line of Terrace Street (formerly Cocoa Street, a 25.00 foot right of way); thence West along said North right-of-way line of Terrace Street to Northwest corner of the right of way of Terrace Street; thence South twenty-five and no hundredths (25.00) feet to a point which is the Southwest corner of the right of way of Terrace Street; thence West along the Westerly extension of the South right of way of Terrace Street to the Southerly extension of the West line of lot 2 of SPEED AND SCOTT SUBDIVISION, as recorded in Plat Book 1, Page 31 of the Public Records of Brevard County, Florida; thence North along the Southerly extension of said West line and the West line of said Lot 2, SPEED AND SCOTT SUBDIVISION to a point which is the Northwest corner of Lot 2 of SPEED AND SCOTT SUBDIVISION, as recorded in Plat Book 1, Page 31 of the Public Records of Brevard County, Florida, said Northwest corner also being on the South line of the North three hundred thirty and no hundredths (330.00) feet of the Northwest quarter (NW¼) of the Southeast quarter (SE¼) of said Section Thirty (30); thence West along said South line of the North three hundred thirty and no hundredths (330.00) feet of the Northwest quarter (NW¼) of the Southeast quarter (SE¼) of said Section Thirty (30) to the West line of the Southeast quarter (SE¼) of said Section Thirty (30); thence North along the West line of the Southeast quarter (SE¼) of said Section Thirty (30) to the Northwest corner of the Southeast quarter (SE¼) of said

Section Thirty; thence East along the North line of the Southeast quarter (SE¼) of said Section Thirty (30) to the West right-of-way line of Clearlake Road; thence North along the West right-of-way line of Clearlake Road to the South line of the North half (N½) of the Northeast quarter (NE¼) of said Section Thirty (30); thence West along the South line of the North half (N½) of the Northeast quarter (NE¼) of said Section Thirty (30) and the South line of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of said Section Thirty (30) to the Southwest corner thereof; thence North along the West line of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of said Section Thirty (30) to the Northeast corner of the Northwest quarter (NW¼) of the Northwest quarter (NW¼) of Section Thirty (30); thence West along the North line of the Northwest quarter (NW¼) of the Northwest quarter (NW¼) of Section Thirty (30) to the center line of a Florida Gas Transmission Easement; thence South fourteen (14) degrees forty-five (45) minutes fifty (50) seconds East along the center line of said easement to the Northeast corner of SABAL LAKE ESTATES, UNIT ONE, as recorded in Plat Book 30, Page 12 of the Public Records of Brevard County, Florida; thence West along the North line of said SABAL LAKE ESTATES, UNIT ONE, to the West line of the Northwest quarter (NW¼) of the Northwest quarter (NW¼) of Section Thirty (30), Township Twenty-Four (24) South, Range Thirty-Six (36) East, said line also being the East line of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of Section Twenty-Five (25), Township Twenty-Four (24) South, Range Thirty-Five (35) East; thence South along said East line of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of Section Twenty-Five (25) to the South line of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Five (25); thence West along said South line of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Five (25) to the West line of the Northeast quarter (NE¼) of the Northeast (NE¼) of said Section Twenty-Five (25); thence North along the West line of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Five (25) to the North line of said Section Twenty-Five (25), said North line also being the South line of Section Twenty-Four (24), Township Twenty-Four (24) South, Range Thirty-Six (36) East; thence West along the South line of said Section Twenty-Four (24) to the Southwest corner thereof, said corner also being the Southeast corner of Section Twenty-Three (23), Township Twenty-Four (24) South, Range Thirty-Five (35) East; thence North along the East line of said Section Twenty-Three (23) to a point four hundred and sixty-six and one hundredths (466.01) feet North of the South line of said Section Twenty-Three (23); thence Westerly and parallel with the South line of said Section Twenty-Three (23) to a point four hundred and eighty-six and no hundredths (486.00) feet, as measured, perpendicular to the East line of the Southeast quarter (SE¼) of said Section Twenty-Three (23); thence North and parallel with said East line of the Southeast quarter (SE¼) of said Section Twenty-Three (23) to the South line of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence North, parallel with and four hundred and eighty-six and no hundredths (486.00) feet, as measured, perpendicular to the East line of said Northeast quarter (NE¼) of said Section Twenty-Three (23) to the South right-of-way line of State Road 524; thence Northeasterly along the said South right-of-way line to the East line of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence North along the East line of the Northeast quarter (NE¼) of said Section Twenty-Three (23) to the North right-of-way line of State Road 524; thence Southwesterly along said North right-of-way line to the South line of the Southwest quarter (SW¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence West along said South line of the Southwest quarter (SW¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23) to the Southwest corner thereof; thence North along the West line of the Southwest quarter (SW¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23) to the Northwest corner of said Southwest quarter (SW¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence East along the North line of the Southwest quarter (SW¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23) to the Southwest corner of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence North along the West line of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23) to the Northwest corner of the South half (S½) of the South half (S½) of the South half (S½) of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence East along the North line of the South half (S½) of the South half (S½) of the South half (S½) of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of said Section Twenty-Three (23); thence North along the East line of the Northeast quarter (NE¼) of said Section Twenty-Three (23) and the West line of Section Thirteen (13), Township Twenty-Four (24) South, Range Thirty-Five (35) East to the Northwest corner of the Southwest quarter (SW¼) of said Section Thirteen (13); thence East along the North line of the South half (S½) of said Section Thirteen (13) to the Southwest corner of the Northeast quarter (NE¼) of said

Section Thirteen (13) and said corner also being the Southwest corner of COCOA NORTH, UNIT 3, according to the plat thereof, as recorded in Plat Book 25, Pages 90 and 91 of the Public Records of Brevard County, Florida; thence Northerly along the West line of the Northeast quarter (NE¼) to the Northwest corner of the Southwest quarter (SW¼) of the Northeast quarter (NE¼) of said Section Thirteen (13); thence East along the North line of the Southwest quarter (SW¼) of the Northeast quarter (NE¼) of Section Thirteen (13), a distance of one thousand three hundred fourteen and twenty-two hundredths (1,314.22) feet to the Northwest corner of Lot 21 of COCOA NORTH, UNIT NO. 2, according to the plat thereof, as recorded in Plat Book 21, Page 101 of the Public Records of Brevard County, Florida; thence along the West, South and East boundaries of said COCOA NORTH, UNIT NO. 2, the following courses; thence South eleven (11) degrees fifty-seven (57) minutes forty-eight (48) seconds West, a distance of one hundred ninety-six and eighty-four hundredths (196.84) feet; thence South sixteen (16) degrees twenty-eight (28) minutes forty-eight (48) seconds East forty six and forty hundredths (46.40) feet to the P.C. of a curve concave Westerly; thence Southerly along said curve, having for its elements a radius of four hundred and fifty and no hundredths (450.00) feet and a central angle of eleven (11) degrees thirty-one (31) minutes forty-nine (49) seconds for an arc distance of ninety and fifty-six hundredths (90.56) feet to the Southwest corner of Lot 19 of said plat of COCOA NORTH, UNIT NO. 2, according to the plat thereof, as recorded in Plat Book 21, Page 101 of the Public Records of Brevard County, Florida; thence South eighty-nine (89) degrees fifty-one (51) minutes zero (00) seconds East, a distance of one hundred ninety-eight and seventy-eight hundredths (198.78) feet to the Southeast corner of Lot 17, Block 3 of said COCOA NORTH, UNIT NO. 2; thence South sixty-six (66) degrees six (06) minutes twenty-four (24) seconds East, a distance of seventy-five and thirty-three hundredths (75.33) feet to the Southeast corner of Lot 16, Block 3 of said COCOA NORTH, UNIT NO. 2; thence South sixty (60) degrees forty-three (43) minutes seventeen (17) seconds East, a distance of seventy-five and no hundredths (75.00) feet to the South corner of Lot 15, Block 3 of said COCOA NORTH, UNIT NO. 2; thence South twenty-nine (29) degrees sixteen (16) minutes forty-three (43) seconds West, a distance of one hundred two and fifty hundredths (102.50) feet to a point on the West line of Lot 12, Block 3 of said COCOA NORTH, UNIT NO. 2; thence South nine (09) degrees fifty-six (56) minutes four (04) seconds West, a distance of ninety-seven and fifty-four hundredths (97.54) feet to a point on the West line of Lot 11, Block 3 of said COCOA NORTH, UNIT NO. 2; thence South zero (00) degrees nine (09) minutes zero (00) seconds West, a distance of one hundred and no hundredths (100.00) feet to the Southwest corner of Lot 11 of said COCOA NORTH, UNIT NO. 2, said Southwest corner also being on the North right of way line of London Boulevard; thence South eighty-nine (89) degrees fifty-one (51) minutes zero (00) seconds East along the North right-of-way line of said London Boulevard, to a point on the West line of Block Two (2) of aforesaid COCOA NORTH, UNIT NO. 1; thence Northerly along the West line of said Block Two (2) to the North right-of-way line of North Road of said COCOA NORTH, UNIT NO. 1; thence Southeasterly along said North right-of-way line of North Road to a point on the West section line of Section Eighteen (18), Township Twenty-Four (24) South, Range Thirty-Six (36) East; thence North along said West section line to the South right-of-way of State Road 528; thence southeasterly along the South right-of-way of said State Road 528 to the North right-of-way of Old State Road 528; thence Easterly along the North right-of-way of said Old State Road 528 to the West right of way of U.S. Highway Number One; thence Northwesterly along the West right-of-way of said U.S. Highway Number One to the North line of Section Seventeen (17), Township Twenty-Four (24) South, Range Thirty-Six (36) East; thence Easterly along the North line of said Section Seventeen (17) to the East right-of-way of said U.S. Highway Number One; thence Southeasterly along the said East right of way of said U.S. Highway Number One and the North right of way of said State Road 528 to the Southwest corner of Lot 3, Block "D" of HIGH POINT, SECTION TWO, as recorded in Plat Book 19, Page 9 of the Public Records of Brevard County, Florida; thence Northerly along the West line of said Lot 3, Block "D" of the aforesaid HIGH POINT, SECTION TWO and the Northerly extension of said West line of Lot 3, Block "D" to the Southwest corner of Lot 2, Block "C" of HIGH POINT, SECTION ONE, as recorded in Plat Book 19, Page 8 of the Public Records of Brevard County, Florida; thence Southeasterly, Northeasterly, and Northwesterly along the perimeter of said Lot 2, Block "C" of said plat of HIGH POINT, SECTION ONE to the Northwest corner thereof; thence Northerly along the Southerly extension of the West line of Block "A" of said HIGH POINT SUBDIVISION, SECTION TWO, and the West line of Lots 7, 8, 9 and 10 of Block "A" of said HIGH POINT, SECTION TWO to the Northwest corner of Lot 10 of Block "A", HIGH POINT, SECTION TWO, and said Northwest corner of Lot 10, also being on the North line of aforesaid Section Seventeen (17); thence Easterly along the said North line of Section Seventeen (17), and the North line of Section Sixteen

(16), Township Twenty-Four (24) South, Range Thirty-Six (36) East to the center line of the channel of Indian River; thence Southerly along the center line of the channel of Indian River to the South right of way of State Road 528; thence Westerly along the South right of way of State Road 528 to the East right of way of U.S. Highway Number One; thence Southeasterly along the East right of way of U.S. Highway Number One to the Northwest corner of lands described in Deed Book 440, Page 457 of the Public Records of Brevard County, Florida; thence East along the North line of lands described in said Deed Book 440, Page 457, to the Northeast corner thereof; thence South along the East line of said lands described in said Deed Book 440, Page 457 of the Public Records of Brevard County, Florida, to the Southeast corner thereof and continue along the Southerly extension of said East line to the North line of lands described in Deed Book 442, Page 555 of the Public Records of Brevard County, Florida; thence East along said North line of lands described in said Deed Book 442, Page 555, to the Northeast corner thereof; thence South along the East line of the lands described in said Deed Book 442, Page 555, to the Southeast corner thereof and said point also being on the North line of Block Twenty-Two (22) of CARLTON TERRACE, as recorded in Plat Book 3, Page 99 of the Public Records of Brevard County, Florida; thence East along the aforementioned North line of Block Twenty-Two (22) of CARLTON TERRACE, to a point on the West line of Lot Ten (10) in GRANDVIEW HEIGHTS, as recorded in Plat Book 11, Page 32 of the Public Records of Brevard County, Florida; thence Southeasterly along the West line of said Lot Ten (10), GRANDVIEW HEIGHTS, to a point which is the Southwest corner of said Lot Ten (10) also being the Northwest corner of Lot One (1), Block Sixteen (16) of the AMENDED PLAT OF CARLTON TERRACE, as recorded in Plat Book 3, Page 61 of the Public Records of Brevard County, Florida; thence Northeasterly along the North line of Blocks Sixteen (16) and Seven (7) of said AMENDED PLAT OF CARLTON TERRACE and the Northeasterly extension of said North line thereof to the center line of the channel of Indian River; thence Southeasterly along the center line of the channel of Indian River to a point which is on the Easterly extension of the South line of the aforementioned Government Lot Three (3), Section Thirty-Three (33), Township Twenty-Four (24) South, Range Thirty-Six (36) East; thence West to the POINT OF BEGINNING. Except the North half (N½) of the Southeast quarter (SE¼) of Section Nineteen (19), Township Twenty-Four (24) South, Range Thirty-Six (36) East; except the North half (N½) of the Southeast quarter (SE¼) of the Southeast quarter (SE¼) of Section Nineteen (19), Township Twenty-Four (24) South, Range Thirty-Six (36) East; except the West half (W½) of the Southwest quarter (SW¼) of Section Twenty (20), Township Twenty-Four (24) South, Range Thirty-Six (36) East; except CLEARLAKE TERRACE SUBDIVISION, as recorded in Plat Book 11, Page 103, Public Records of Brevard County, Florida, lying in Section Eighteen (18) and Section Nineteen (19), Township Twenty-Four (24) South, Range Thirty-Six (36) East, in Brevard County, Florida.

Amendments to City Boundaries by Annexation:

(1) *Ordinance No. 8-89 (as amended by Ordinance No. 14-89):*

The East ½ of the West ½ of the NW ¼ of the SE ¼, Section 23, Township 24 South, Range 35 East, Brevard County, Florida, LESS AND EXCEPT right-of-way for State Road 528 (now known as S.R. 524) and that portion lying north of S.R. 524.

AND

East ¼ of Northwest ¼ of Southeast ¼ of Section 23, Township 24 south, Range 35 east, except highway right-of-way, Brevard County, Florida.

AND

The East one-half (½) of the Southeast Quarter (SE ¼); the Southwest Quarter (SW ¼) of the Southeast Quarter (SE ¼), and that part of the South one-half of the Northeast Quarter (NE ¼) lying South of State Road No. 524, and that part of the Northeast Quarter (NE ¼) of the Southwest Quarter (SW ¼) lying South of State Road No. 524 in Section 23, Township 24 South, Range 35 East, in Brevard County, Florida.

Subject to road right-of-ways and easements of record.

AND

That part of the East Half of the South Half of the Southwest Quarter of Section 23, Township 24 S., Range 35 E., lying South of State Road 524 right-of-way, less the West 25 feet thereof, more particularly described as follows: From the SW corner of Section 23, Township 24 S., Range 35 E. run South 89°57'15" East along the South line of said section 1347.30 feet to a point 25 feet East of the SW corner of the East Half of the said South Half for a point of beginning; thence continue South 89°57'15" East 1297.30 feet to the SE corner of the South Half of the SW ¼ of said section; thence run North 0°1'54" East 1337.93 feet to a point; thence run North 89°57'36" West along the North line of said South Half 576.72 feet to a point on the SE right-of-way line of State Road; thence run along said right-of-way line South 53°6'3" West 901.22 feet to a point 25 feet East of the West line of the East Half of said South Half; thence run South 0°2'41" West 796.19 feet of the point of beginning, containing 35.36 acres, more or less.

LESS AND EXCEPT THE FOLLOWING:

A parcel of land being the East 486 feet of Section 23, Township 24 South, Range 35 East, Brevard County, Florida, lying South of State Road No. 524 and being more particularly described as follows:

Commence at the Southeast corner of said Section 23, and run S.89°32'27"W., along the South line of said Section 23, a distance of 50.0 feet to a point on the West right-of-way line of Cox Road, the Point of Beginning; thence continue S.89°32'27"W., along said South line, a distance of 436.01 feet; thence N.00°05'55"W., parallel to and 486.0 feet distant from the East line of the Southeast ¼, a distance of 3375.64 feet to a point on the Southerly right-of-way line of State Road No. 524; thence N.53°05'55"E., along said Southerly right-of-way line, a distance of 544.81 feet to an intersection with the said West right-of-way line of Cox Road; thence S.00°05'55"E., along said West right-of-way line, a distance of 1046.03 feet to a point of right-of-way transition; thence S.89°57'42"E., along the North line of the Southeast ¼, a distance of 5.00 feet; thence S.00°05'55"E., along said West right-of-way line, a distance of 663.30 feet to a point of right-of-way transition; thence S.89°54'49"W., along the South line of the North ½ of the Northeast ¼ of the Southeast ¼, a distance of 5.00 feet; thence S.00°05'55"E., along said West right-of-way line, a distance of 1989.93 feet to the Point of Beginning.

(2) *Ordinance No. 12-94 (which also repealed Ordinance No. 6-94):*

Commence at the NW corner of the SE ¼ of Section 19, Township 24 South, Range 36 East, Brevard County, Florida; thence S.00°21'18"E. along the West line of the said SE ¼, 154.50 feet to the Point of Beginning, said P.O.B. being on the South R/W of Rosetine Street, thence N.89°17'23"E. along said R/W, 240.00 feet; thence S.00°21'18"E., 127.50 feet, thence N.89°17'23"E., 400.72 feet to the NE corner of Lot 26, Block 20; thence run S.00°30'42"E., 279.50 feet to the NW corner of said Lot 27, Block 21, thence run N.89°17'23"E. along the North line of said Lot 27, Block 21, a distance of 25.00 feet, thence run S.00°30'42"E., 102.00 feet to a point on the South line of said Lot 27, Block 21, said point being a point on the North R/W line of Fay Street as per ORB 144, PG 81, of the Public Records of Brevard County, Florida; thence run S.89°17'23"W. along the said South line of said Lot 27, Block 21, and along the said North R/W line of Fay Street, a distance of 25.00 feet, to the SE corner of said Lot 26, Block 21; thence run S.00°30'42"E., 406.00 feet to the NW corner of said Lot 27, Block 23, thence run N.89°17'23"E. along the North line of said Lot 27, Block 23, a distance of 25.00 feet; thence run S.00°30'42"E., 102.00 feet to a point on the South line of said Lot 27, Block 23, said point being a point on the North R/W line of Rosa Street as per ORB 144, PG 81, Public Records of Brevard County, Florida; thence run S.89°17'23"W. along the said North R/W line, a distance of 25.00 feet to the SW corner of said Lot 27, Block 23, thence run S.00°30'42"E., 50.00 feet to a point on the South R/W line of Rosa Street, said point being the NE corner of Lot 3, Block 24; thence run N.89°17'23"E. along said South R/W line, a distance of 100.00 feet to the NE corner of Lot 1, Block 24, said corner being the point of intersection of the said south R/W line of Rosa Street and the West R/W line of Walter Street as per ORB 144, PG 81, Public Records of

Brevard County, Florida; thence run S.00°30'42"E. along the East line of said Lot 1, Block 24; and along the said West R/W line of Walter Street, a distance of 105.25 feet to the SE corner of said Lot 1, Block 24, said corner being a point on the south line of "Shepard's Clear Lake Village;" thence runs S.89°17'23"W. along said South line, a distance of 743.57 feet to a point on the aforementioned West line of the SE ¼ of Section 19; thence run N.00°21'18"W. along said West line; a distance of 1.162.26 feet to the Point of the Beginning.

(3) *Ordinance No. 12-97:*

AND

A parcel of land lying in the Northwest ¼ of Section 32, Township 24 South, Range 36 East, Brevard County, Florida, being more particularly described as follows:

Begin at the intersection of the East line of said Northwest ¼ with the North right-of-way line of State Road No. 520, and run North 89°31'55" West, along said North right-of-way line, a distance of 295.16 feet to a point of right-of-way transition; thence North 00°28'05" East, along said transition, a distance of 27.50 feet to the Southwest corner of Lot 32 of the plat of subdivision of Block No. 1 of Pine Grove Park, recorded in Plat Book 9, Page 34 of the public records of Brevard County, Florida; thence North 00°07'56" West, along the East line of said lot, a distance of 132.80 feet to a point on the South line of the North 118.66 feet of said Lot 30; thence North 89°59'23" West, along said South line and its Westerly extension, a distance of 184.60 feet to a point on the West line of Lot 30 of said subdivision; thence North 00°23'56" West, along said West line, a distance of 118.66 feet to the Northwest corner of said Lot 32; thence South 89°59'23" East, along the North line of Lots 30, 31 and 32 of said subdivision, a distance of 185.15 feet to the Northeast corner of said Lot 32; thence N. 00.07'55" West, a distance of 0.48 feet to a point on the North line of the South ½ of the Northwest ¼ of said Section 32; thence South 89°50'42" East, along said North line, a distance of 294.86 feet to a point on the aforesaid East line of the Northwest ¼; thence South 00°07'55" East, along said East line, a distance of 281.06 feet to the Point of Beginning, containing 2.401 acres.

(4) *Ordinance No. 18-97:*

A parcel of land lying in Section 32, Township 24 South, Range 36 East, being a portion of Lots 30, 31 and 32 of the plat of subdivision of Block No. 1 of Pine Grove Park, recorded in Plat Book 9, Page 34 of the public records of Brevard County, Florida, being more particularly described as follows:

Begin at the Southwest corner of aforesaid Lot 30, and run N.00°23'56"W., along the West line of said lot, a distance of 131.34 feet to a point which is 118.66 feet distant South, from the North line of said subdivision; thence S.89°59'23"E., parallel with and 118.66 feet distant from the said North line, a distance of 184.80 feet to a point on the East line of aforesaid Lot 32, thence S.00°07'55"E., along said East line, a distance of 7.80 feet to a point which is 125.00 feet distant North from the North right-of-way line of State Road No. 520; thence N.89°31'55'W., parallel with and 125.00 feet distant from the said North right-of-way line, a distance of 170.58 feet to a point which is 14.00 feet distant East, from the aforesaid West line of Lot 30, thence S.00°23'56"E., parallel with and 14.00 feet distant from said West line, a distance of 125.01 feet to a point on said North right-of-way line of State Road No. 520; thence N.89°31'55"W., along said right-of way line, a distance of 14.00 feet to the point of beginning; containing 3053 square feet (0.070 acres).

(5) *Ordinance No. 16-98:*

Generally described as: a tract of land lying in Section 20, Township 24 South, Range 36 East known as Lot 1 of ATKINSON SUBDIVISION, according to the plat thereof, as recorded in Plat Book 9, Page 35, of the public records of Brevard County, Florida, less and except right-of-way for Clearlake Road, containing 2.97 acres, more or less.

(6) *Ordinance No. 1-2000:*

A parcel of land lying in Northeast ¼ and the Northwest ¼ of Section 26, Township 24 South, Range 35 East, being all those lands as described in O.R. Book 1849, Page 0491, O.R. Book 2890, Page 0258, O.R. Book 3455, Page 4431, O.R. Book 3633, Page 4027, O.R. Book 3945, Page 0045 and a portion of those lands as described in O.R. Book 3034, Page 4427, all being recorded in the Brevard County Public Records; said overall parcel being more fully described as follows:

Commence at the northeast corner of said Northeast ¼; thence Westerly, along the north line of said Northeast ¼, a distance of 45.00 feet to a point on the west right-of-way line of Cox Road as described in O.R. Book 587, Page 959 of said Public Records; thence continue Westerly, along said north line, a distance of 840.00 feet to the northeast corner of said lands per O.R. Book 3945, Page 0045, said point being the Point-of-Beginning of the lands herein described; thence continue Westerly, along said north fine of the Northeast ¼, the same being the north lines of said lands per O.R. Book 3945, Page 0045 and O.R. Book 3455, Page 4431, a distance of 1767 feet, more or less, to the northeast corner of said Northwest ¼, the same being the northeast corner of said lands per O.R. Book 3633, Page 4027; thence Westerly, along the north lines of said Northwest ¼ and said lands per O.R. Book 3633, Page 4027, a distance of 1290 feet, more or less, to the east right-of-way line of a 60.00 foot wide right-of-way as recorded in O.R. Book 1531, Page 0691 and O.R. Book 1531, Page 0693 of said Public Records; thence Southerly, along the westerly line of said lands per O.R. Book 3633, Page 4027 and said easterly right-of-way line, a distance of 1955 feet, more or less, to the centerline of a 110.00 foot wide easement in favor of Florida Power and Light Company as recorded in O.R. Book 0059, Page 0122 of said Public Records; thence Easterly, along said centerline, a distance of 1260 feet more or less, to a point of the east line of said Northwest ¼; thence Northerly, along the east lines of said lands per O.R. Book 3633, Page 4027 and the Northwest ¼, a distance of 610 feet, more or less, to the southwest corner of the Northwest ¼ of said Northeast ¼, said point also being the southwest corner of said lands per O.R. Book 2890, Page 0258; thence Easterly, along the south line of said Northwest ¼ of the Northeast ¼, also being the south lines of said lands per O.R. Book 2890, Page 0258 and O.R. Book 1849, Page 0491, a distance of 1326 feet, more or less to the southeast corner of said Northwest ¼ of the Northeast ¼ and O.R. Book 1849, Page 0491; thence Northerly, along the east lines of said Northwest ¼ of the Northeast ¼ and O.R. Book 1849, Page 0491, a distance of 663 feet, more or less, to the southwest corner of the Northwest ¼ of said Northeast ¼, also being southwest corner of said lands recorded in O.R. Book 3945, Page 0045; thence Easterly along the south lines of said Northwest ¼ of the Northeast ¼ of the Northeast ¼ and of O.R. Book 3945, Page 0045, a distance of 663 feet, more or less, to the southeast corner of said Northwest ¼ of the Northeast ¼ of the Northeast ¼ and of O.R. Book 3945, Page 0045; thence Northerly, along the west lines of said Northwest ¼ of the Northeast ¼ of the Northeast ¼ and O.R. Book 3945, Page 0045, a distance of 397 feet, more or less, to a point which lies 66.00 feet north, by right angle measure, of the fifth (5th) course of said lands described in said O.R. Book 3945, Page 0045; thence Westerly parallel with said north line of the Northeast ¼ of Section 26 and 66.00 feet north, by right angle measure, of said fifth (5th) course of said lands per O.R. Book 3945, Page 0045, a distance of 222 feet, more or less, to a point of intersection with a line that is parallel with the east line of said Northeast ¼ and that passes through the Point-of-Beginning; thence Northerly, parallel with said east line of the Northeast ¼ and along the east line of said O.R. Book 3945, Page 0045, a distance of 266 feet more or less, to the Point-of-Beginning.

Containing 102.2 acres (4,451,832 square feet), more or less, and being subject to any easements and/or rights-of-way of record.

(7) *Ordinance No. 2-2000:*

A parcel of land lying in Section 23, Township 24 South, Range 35 East more particularly described as follows:

Begin at the SE corner of the NE ¼ of the NE ¼ of Section 23, Township 24 South, Range 35 East, run south along the western line of said Section 24, a distance of 260 feet more or less to the southern right of way of State Road 524, thence southwest along said southern right-of-way of State Road 524 a distance of 2090 feet more or less to the eastern line of the W ½ of E ½ of NW ¼ of SE ¼ of Section 23 thence north along said line a distance of 260 feet more or less to the northern right of way line of State Road 524, thence north east 2100 feet more or less to the point of beginning (12.5 acres, more or less).

AND

A tract of land lying in Section 23, Township 24 South, Range 35 East known as parcel 753 (legally described as part of W ½ of E ½ of NW ¼ of SE ¼ excluding the real property north of the south right of way of State Road 524) as recorded in O.R. Book 2844, Page 1729, of the Public Records of Brevard County Florida (8.24 acres, more or less).

(8) *Ordinance No. 19-2000:*

Number One (1) Cadillac Gage Property:

A parcel of land lying in Section 7, Township 24 South, Range 36 East, Brevard County, Florida. More particularly described as follows:

Commence at the Northwest corner of said Section 7 and run S 00°05'36" W., along the West line of said Section 7, a distance of 1320.70 feet to the Northwest corner of the South ½ of the Northwest ¼ of said Section 7 and the Point Of Beginning: thence continue S. 00°05'36" W., along the West line of Section 7, a distance of 660.35 feet to the Southwest corner of the North ½ of the South ½ of the Northwest ¼ of said Section 7: thence run N. 87°44'57" E. along the South line of the North ½ of the South ½ of the Northwest ¼ of said Section 7, a distance of 2616.32 feet to point on the East line of the Northwest ¼ of Section 7; thence run S. 00°00'44" W. along the East line of the NW ¼ of said Section 7, a distance of 335.76 feet to a point on the line of the South ½ of the South ½ of the South ½ of the Northwest ¼; thence run South 87°52'18" W., along said North line of the South ½ of the South ½ of the South ½ of the Northwest ¼ a distance of 431.00 feet; thence run S. 00°00'44" W., along a line parallel to the East line of the Northwest ¼ of Section 7, a distance of 548.18 feet; thence run N. 87°59'40" E., a distance of 2.69 feet; thence run S. 01°53'05" E. a distance of 391.83 feet to a point on the North line of the 50.0 foot wide Drainage Easement shown on the plot of Cidco Park as recorded in Plat Book 22, Page 51 of the Public Records of Brevard County, Florida; thence run N. 88°10'45" E., along said North line of said 50.00 foot wide Drainage Easement, a distance of 156.53 feet to a point on the North right-of-way of Cidco Road as shown on said plat of Cidco Park; thence run N. 89°47'20" E., along said North right-of-way line of Cidco Road, a distance of 265.37 feet; thence, continuing along said North right-of-way line of Cidco Road, run N. 88°06'55" E., a distance of 304.99 feet; thence, departing said North right-of-way line, run N. 01°53'05" W., along a line perpendicular to said North right-of-way line of Cidco Road, a distance of 115.00; thence run N. 88°06'55" E., parallel to said North right-of-way line of Cidco Road, a distance of 125.00 feet; thence run S. 01°53'05" E., along a line perpendicular to said North right-of-way line of Cidco Road, a distance of 115.00 feet to a point on said North right-of-way line of Cidco Road; thence N. 88°06'55" E. along said North right-of-way of Cidco Road, a distance of 369.18 feet to a Point of Curvature of a circular curve, concave Northerly, having a radius of 261.48 feet; thence, continuing along said North right-of-way line of Cidco Road, run Easterly, along the arc of said curve an arc distance of 58.41 feet through a central angle of 12°47'56" to a point on curve; thence, departing said North right-of-way line, run N. 00°16'20" W., along a nonradial line, a distance of 393.65 feet; thence run S. 88°06'55" W. a distance of 200.00 feet; thence run N. 00°11'55" W. a distance of 215.39 feet; thence run 00°00'43" W. a distance of 130.00 feet to a point on the meander line described in Deed Book 403, Page 469 of Public Records of Brevard County, Florida; thence run along said described meander line for the next three courses; 1) thence N. 39°39'27" W. a distance of 155.41 feet; 2) thence run N.

83°59'35" W. a distance of 214.10 feet; 3) thence run N. 38°03'35" W. a distance of 29.44 feet to a point; thence run N. 00°00'01" E., along said East line of the West ¼ of the Southwest ¼ of the Northeast ¼ of section 7, a distance of 1033.50 feet to a point on the North line of the South ½ of the Northeast ¼; thence run S. 88°28'10" W., along said North line of the South ½ of the Northeast ¼, a distance of 330.12 feet to a point on the East line of the Northwest ¼ of said Section 7; thence run S. 87°30'14" W., along the North line of the South ½ of the Northwest ¼ of said Section 7, a distance of 2615.85 feet to the Point Of Beginning. Containing 72.08 acres, more or less. Subject to easements and restrictions of record.

Number Two (2) City of Cocoa Water Tower Legal Description:

A parcel of land lying in Section 7, Township 24 South, Range 36 East, Brevard County, Florida. More particularly described as follows:

Commence at the Southwest corner of the North ½ of the South ½ of the Northwest ¼ of said Section 7: thence run N. 87°44'57" E. along the South line of the North ½ of the South ½ of the Northwest ¼ of said Section 7, a distance of 2616.32 feet to point on the East line of the Northwest ¼ of Section 7; thence run S. 00°00'44" W. along the East line of the NW ¼ of said Section 7, a distance of 335.76 feet to a point on the North line of the distance of the South ½ of the South ½ of the South ½ of the Northwest ¼; thence run S. 87°52'18" W., along said North line of the South ½ of the South ½ of the South ½ of the Northwest ¼, a distance of 431.00 feet; thence run S. 00°00'44" W., along a line parallel to the East line of the Northwest ¼ of Section 7, a distance of 548.18 feet; thence run N. 87°59'40" E. a distance of 2.69 feet; thence run S. 01°53'05" E. a distance of 391.83 feet to a point on the North line of the 50.00 foot wide Drainage Easement shown on the plat of Cidco Park as recorded in Plat Book 22, Page 51 of the Public Records of Brevard County, Florida; thence run N. 88°10'45" E., along said North line of said 50.0 foot wide Drainage Easement, a distance of 156.53 feet to a point on the North right-of-way of Cidco Road as shown on said plat of Cidco Park; thence run N. 89°47'20" E., along said North right-of-way line of Cidco Road, a distance of 265.37 feet; thence, continuing along said North right-of-way line of Cidco Road, run N. 88°06'55" E. a distance of 304.99 feet to the Point of Beginning; thence, departing said North right-of-way line, run N. 01°53'05" W., along a line perpendicular to said North right-of-way line of Cidco Road, a distance of 115.00; thence run N. 88°06'55" E., parallel to said North right-of-way line of Cidco Road, a distance of 125.00 feet; thence run S 01°53'05" E., along a line perpendicular to said North right-of-way line of Cidco Road, a distance of 115.00 feet to a point on said North right-of-way line of Cidco Road; thence run S. 88°06'55" W. a distance of 125.00 feet to the Point Of Beginning. Containing 0.33 acres more or less.

Number Three and Five (3 & 5) Legal Description For Parcel #1:

Parcel of land lying in the SEI/4 of Section 7 Township 24 South, Range 36 East, Brevard County, Florida, as follows:

The SE ¼ of the SE ¼ lying west of the FEC Railway, including the unwarranted triangle shaped parcel as described in OR Book 554, Page 806; the east ½ of the SW ¼ of the SE ¼. The South ½ of the NW ¼ of the SE ¼; and being subject to easements granted to Florida Power and Light Company as recorded in OR Book 279, Page 599; OR Book 1623, Page 854; all recorded in the Public Records of Brevard County, Florida, and also being subject to any other easements or rights-of-way of record, containing 69.68 acres more or less.

Number Four (4) Legal Description for 24-36-07-00-00765.0-0000.00 (Rinker):

The West ½ of the Southwest ¼ of the Southeast ¼ of Section 7:

The West ½ of the Southwest ¼ of the Southeast ¼ of Section 7, Township 24 South, Range 36 East, and a 70 foot wide strip of land being the North 70.0 feet of the East 250.0 feet of the South ½ of the S.W. ¼ of Section 7, Township 24 South, Range 36 East, Brevard County, Florida, and more fully described as follows: Begin at the N.E. corner of the said S. ½ of the

S.W. ¼ Section 7 and run S. 88°10'45" W., along the South line of Cidco Park, 250.00 feet to a point on the West right-of-way line of East Industrial Road of Cidco Park; thence run S. 1°49°15" E. 70.00 feet; thence run N. 88°10'45" E. 248.50 feet to a point on the East line of the aforesaid S. ½ of the S.W. ¼; thence run N. 00°35'35" W. 70.02 feet to the point of beginning.

Number Six (6) Legal Description For Parcel #758:

A parcel of land lying in the Southeast ¼ of Section 7, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

Begin at the Northwest corner of the South ½ of the Northeast ¼ of said Southeast of Section 7, and run S. 87°57'50" W., along the South line of the Northeast ¼ of the Northwest ¼ of said Southeast ¼, a distance of 394.00 feet to a point on a southerly right-of-way line of Cidco Road. (A 50 foot right-of-way); thence N. 49°23'25" E., along said southerly right-of-way line, a distance of 394.24 feet to the point of curvature of a 261.48 foot radius curve to the right; thence Northeasterly, along the arc of said curve and said right-of-way line, through a central angle of 24°04'48" a distance of 109.89 feet to a point on the East line of the said Northeast ¼ of the Northwest ¼ of said Southeast ¼; thence S. 00°15'43" W, along said West line, a distance of 294.79 feet to the Point of Beginning; containing 1.447 acres.

Subject to a 20 foot wide private railroad spur recorded in O.R. 633, Page 676 of the Public Records of Brevard County, Florida and subject to all other easements, restrictions, limitations and/or rights-of-way of record.

Number Seven (7) Legal Description For Parcel #756:

A parcel of land lying in the Southeast ¼ of Section 7, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

Commence at the Northwest corner of the South ½ of the Northwest ¼ of said Southeast ¼ of Section 7, and run N. 00°15'43" E., along the West line of the Northeast ¼ of said Southeast ¼, a distance of 165.93 feet to the point of beginning; thence continue N. 00°15'43" E., along said West line, a distance of 128.85 feet to a point on the South right-of-way line of Cidco Road (a 50 foot wide right-of-way), said point being on a 261.48 foot radius to the right having a radial bearing of S. 16°31'47" E.; thence Northeasterly, along the arc of said curve and said right-of-way line, through a central angle of 14°35'12" a distance of 66.57 feet to a point of tangency; thence N. 88°03'25" E., along said South right-of-way line, a distance of 325.13 feet to a point on the Westerly right-of-way line of the Florida East Coast Railway (A 100 foot wide right-of-way); thence S. 19°40'19" E., along said Westerly right-of-way line, a distance of 143.18 feet to a point on the South line of the North ½ of the South ½ of the North ½ of the Northeast ¼ of the Southeast ¼; thence S. 87°57'05" W., along said South line, a distance of 439.54 feet to the point of beginning; containing 1.299 acres.

Subject to all easements, restrictions, limitations and/or rights-of-way of record.

Number Eight (8) Legal Description For Parcel #757:

A parcel of land lying in the Southeast ¼ of Section 7, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

Commence at the Northwest corner of the South ½ of the Northeast ¼ of said Southeast ¼ of Section 7, and run S. 00°15'43" W., along the West line of the Northeast ¼ of said Southeast ¼, a distance of 331.87 feet to the Point of Beginning; thence continue S. 00°15'43" W., along said West line, a distance of 331.87 feet to a point on the South line of said Northeast ¼ of the Southeast ¼; thence N. 88°00'48" E., along said South line, a distance of 736.59 feet to a point on the Westerly right-of-way line of the Florida East Coast Railway (a 100 foot wide right-of-way); thence N. 19°40'19" W., along said Westerly right-of-way line, a distance of 348.34 feet to a point on the North line of the South ½ of the South ½ of said Northeast ¼ of the Southeast ¼;

thence S. 87°59'19" W., along said North line, a distance of 617.74 feet to the Point Of Beginning; containing 5.157 acres.

Subject to all easements, restrictions, limitations and/or rights-of-way of record.

Number Eleven and Twelve (11 & 12) Legal Description For Parcel #3:

The North ½ of the Northeast of the ¼ of Section 18, Township 24 South, Range 36 East, Brevard County, Florida lying northeasterly right-of-way line of State Road No. 528, less and except the following lands described in OR Book 13, Page 571, O.R. Book 281, Page 514, OR Book 126, Page 244; Deed Book 408, Page 217; OR Book 146, Page 524, OR Book 615, Page 385; OR Book 255, Page 72; OR Book 262, Page 385; all recorded in the Public Records of Brevard County, Florida; and being subject to an easement granted to Florida Power & Light Company, as recorded in Deed Book 156, Page 563, of the said Public Records and subject to the FEC Railway right-of-way and subject to any other easements and/or right-of-way of record. Containing 50.87 acres, more or less.

Number Thirteen (13) Legal Description for 24-36-18-00-00005.0-0000.00 (FPL):

Begin at the Northwest corner of the South ½ of the Northeast ¼ of said Southeast ¼ of Section 7, and run N 00°15'43" E., along the West line of the Northeast ¼ of said Southeast ¼, a distance of 165.93 feet; thence N 87°57'05" E., along the North line of the South ½ of the South ½ of the North ½ of the Northeast ¼ of said, Southeast ¼, a distance of 439.54 feet to a point on the Westerly right-of-way line of the Florida East Coast Railway (a 100 foot wide right-of-way); thence S. 19°40'19" E., along said westerly right-of-way line, a distance of 174.08 feet to a point on the South line of the North ½ of the Northeast ¼ of said Southeast ¼; thence S. 87°57'50" W., along said South line, a distance of 498.93 feet to the point of beginning; containing 1.786 acres.

Subject to all easements, restrictions, limitations and/or rights-of-way of record.

Number Nine (9) Legal Description For Parcel #770:

A parcel of land lying in the Southeast ¼ of Section 7, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

Begin at the Northwest corner of the South ½ of the Northeast ¼ of said Southeast ¼ of Section 7, and run N 87°57'50" E., along the North line of the South ½ of said Northeast ¼ of the Southeast ¼, a distance of 498.93 feet to a point on the Westerly right-of-way line of the Florida East Coast Railway (a 100 foot wide right-of-way); thence S. 19°40'19" E., along said Westerly right-of-way line, a distance of 348.24 feet to a point on the South line of the North ½ of the South ½ of said Northeast ¼ of the Southeast ¼; thence S. 87°59'10" W., along said South line, a distance of 617.74 feet to a point on the West line of said Northeast ¼ of the Southeast ¼; thence N. 00°15'43" E., along said West line, a distance of 331.87 feet to the point of beginning; containing 4.252 acres.

Subject to all easements, restrictions, limitations and/or rights-of-way of record.

Number Ten (10) Legal Description For Parcel #767:

Commence at the Northeast corner of Section 18 Township 24 South Range 36 East; thence run South along the East line of said Section 18 a distance of 730.0 feet; thence run West a distance of 522.31 feet to the point of beginning; said point of beginning lying on the Westerly right-of-way of an easement granted to Florida Power & Light Company as recorded in Deed Book 156 page 563 of the Public Records of Brevard County, Florida; thence West a distance of 250.0 feet; thence North a distance of 400.0 feet; thence East a distance of 329.20 feet to an intersection with the Westerly right-of-way of aforementioned easement, recorded in Deed Book 156 page 563; thence S. 11°11'59" W. a distance of 407.76 feet to the point of beginning;

containing 2.66 acres more or less and lying and being in Brevard County, Florida. The said North and South lines of the property hereby conveyed are perpendicular to the East line of Section 18 and the West line of said property is parallel to the East line of Section 18, all as located in Township 24 South Range 36 East.

Number Fourteen (14):

For a course start at the Northeast corner of Section 18, Township 24 South, Range 36 East and proceed West on the North line of said Section 18, a distance of 302.52 feet to a point: thence for a second course, go S. 23°24'30" E. to a point 50 feet South (by right angle measurement) from the North line of said Section 18; thence for a third course, go East and parallel to and 50 feet distant front (by right angle measurement) the North line of said Section 18 to a point on the east line of said Section 18, a distance of 50 feet South of point of beginning; thence for a fourth course go North and along the East line of said Section 18, a distance of 50 feet to point of beginning of the property to be conveyed by this deed; the land hereby conveyed being a strip of land 50 feet wide, running East and West, the North boundary of which is the North boundary of Section 18, Township 24 South, Range 36 East, and the east boundary of which is the East line of said section. Less F.E.C. R.R. right-of-way.

Number Fifteen (15):

Start at the NE corner of Section 18, Township 24 South, Range 36 East and proceed West on the North line of said Section 18, a distance of 302.52 feet to a point; thence S. 23°24'30" E. to a point which is 50 feet South (by right angle measurement) from the North line of said Section 18, which is the point of beginning; thence for a first course run S. 23°24'30" E. to a point 100 feet South (by right angle measurement) from said Section 18; thence for a third course run North on said section line, a distance of 50 feet; thence for a fourth course, run West to the point of beginning, being a strip of land 50 feet wide running East and West, the North boundary of which is parallel to and 50 feet distant from (by right angle measurement) the North line of Section 18, Township 24 South, Range 36 East.

Number Sixteen (16) North Half of Lot:

Start at the NE corner of Section 18, Township 24 South, Range 36 East, and proceed West on the North line of said Section 18, a distance of 302.52 feet to a point; thence S. 23°24'30" E. to a point which is South 100 feet (by right angle measurement) from the North line of said Section 18, which is the point of beginning of the property to be conveyed by this deed; thence for a first course go East and parallel to and 100 feet distant from (by right angle measurement) the North line of said Section 18 to a point on the East line of said Section 18, which is 100 feet South from the NE corner of said Section 18; thence for a second course of the property to be conveyed by this deed, go South and along the East line of said Section 18, a distance of 50 feet to a point; thence for a third course go West and parallel to and 150 Southerly from (by right angle measurement) the North line of said Section 18 to a point which is S. 23°24'30" E. from the point of beginning of the property; thence for a fourth course go N. 23°24'30" W. to the point of beginning, being a strip of land 50 feet wide running East and West, the North boundary of which is parallel to and 100 feet distant from (by right angle measurement) the North line of Section 18, Township 24 South, Range 36 East. Less F.E.C. R.R. right-of-way.

Number Sixteen (16) South Half of Lot:

Start at the NE corner of Section 18, Township 24 South, Range 36 East, and proceed West on the North line of said Section 18, a distance of 302.52 feet to a point; thence S. 23°24'30" E. to a point which is South 150 feet (by right angle measurement) from the North line of said Section 18, which is the point of beginning; thence for a first course go East and parallel to and 150 feet distant from (by right angle measurement) the North line of said Section 18 to a point on the East line of said Section 18, which is 150 feet South from the NE corner of said Section 18; thence for a second course go South and along the East line of said Section 18, a distance of

50 feet to a point; thence for a third course go West and parallel to and 200 feet Southerly from (by right angle measurement) the North line of said Section 18 to a point which is S. 23°24'30" E. from the point of beginning; thence for a fourth course go N. 23°24'30" W. to the point of beginning, being a strip of land 50 feet wide running East and West, the North boundary of which is parallel to and 150 feet distant from (by right angle measurement) the North line of Section 18, Township 24 South, Range 36 East. Less F.E.C. R.R. right-of-way.

Number Seventeen (17):

Start at the NE corner of Section 18, Township 24 South, Range 36 East, and proceed West on the North line of said Section 18, a distance of 302.52 feet to a point; thence S. 23°24'30" E. to a point which is South 200 feet (by right angle measurement) from the North line of said Section 18, which is the point of beginning; thence for a first course go East and parallel to and 200 feet distant from (by right angle measurement) the North line of said Section 18 to a point on the East line of said Section 18, which is 200 feet South from the NE corner of said Section 18; thence for a second course go South and along the East line of said Section 18, a distance of 50 feet to a point; thence for a third course go West and parallel to and 250 feet Southerly from (by right angle measurement) the North line of said Section 18 to a point which is S. 23°24'30" E. from the point of beginning; thence for a fourth course go N. 23°24'30" W. to the point of beginning, being a strip of land 50 feet wide running East and West, the North boundary of which is parallel to and 200 feet distant from (by right angle measurement) the North line of Section 18, Township 24 South, Range 36 East. Less F.E.C. R.R. right-of-way.

Number Eighteen (18) Legal Description For Parcel #2:

As recorded in O.R. Book 554, Page 805, of the Public Records of Brevard County, Florida:

Parcel #2: Begin at the Northwest corner of Section 17, Township 24 South, Range 36 East, City of Cocoa, Brevard County, Florida; thence S. 00°15'40" E., a distance of 396.00 feet along the West line of Section 17, to the Point Of Beginning; thence continue S. 00°15'40" E., along the West line of Section 17, a distance of 956.66 feet, more or less, to a point, which is on the North right-of-way of State Road No. 528 as now surveyed and laid out; thence N. 80°57'40" E. along the North right-of-way line of State Road No. 528, a distance of 105.46 feet to a point; thence N. 62°53'50" E., a distance of 372.50 feet to a point in the Westerly right-of-way line of the FEC R.R.; thence N. 27°06'10" W., along the Westerly right-of-way line of the FEC R.R., a distance of 551.16 feet to the P.C. of a curve to the right; thence continue along the Westerly right-of-way line of the FEC R.R. along the aforementioned curve to the right, with a central angle of 3°06'32" and a radius of 5779.58 feet, a distance of 313.59 feet to a point; thence S. 89°53'14" W., a distance of 53.78 to the Point Of Beginning, containing 5.36 acres, more or less.

Corrective Legal Description For Parcel #2

Legal Description is Based on Attached Survey as Requested by Florida East Coast Railway Co.

Begin at the Northwest corner of Section 17, Township 24S, Range 36E, City of Cocoa, Brevard County, Florida; thence 00°16'23" E., a distance of 396.00 feet along the West line of said Section 17, to the Point Of Beginning; thence continue S. 00°16'23" E. along the West line of said Section 17, a distance of 963.95 feet to a point, which is on the north right-of-way of State Road No. 528 as now surveyed and laid out; thence N. 80°56'57" E. along the said north right-of-way line of State Road No. 528, a distance of 105.45 feet to a point; thence N. 62°53'07" E., a distance of 372.83 feet to a point on the westerly right-of-way line of the FEC R.R.; thence N. 27°06'51" W., along the said westerly right-of-way line of the FEC R.R.; a distance of 499.54 feet to the P.C. of a curve to the right; thence continue along the said westerly right-of-way line of the FEC R.R. along the aforementioned curve to the right, with a central angle of 03°39'01" and a radius of 5779.83 feet a distance of 368.23 feet to a point; thence S. 89°52'58" W. a distance of 55.64 feet to the Point Of Beginning, containing 5.38 acres, more or less.

Number Nineteen (19) Richard Tenzel Sliver:

Begin at the Northeast corner of the Southeast ¼ of the Northeast ¼ of Section 18, Township 24 South, Range 36 East, City of Cocoa, Brevard County, Florida; thence N. 88°14'12" W. a distance of 594.29 feet to a point which is on the North right-of-way of State Road No. 528; thence continue East along a curve to the left, with a central angle of 07°18'01" and a radius of 3719.71 feet a distance of 473.94 feet to the Point of Beginning, containing 0.22 acres more or less.

Number Twenty (20) Additional Triangular Tract (south of Number Eighteen (18)), Part of Parcel 253, Section 17, Township 24 South Range 36 East:

Begin at this Northwest corner of Section 17, Township 24 South, Range 36 East, thence S. 00°16'23" E. a distance of 1359.95 feet to a point, which is on the North right-of-way of State Road No. 528 as now surveyed and laid out; thence N. 80°56'57" E. along the said North right-of-way line of State Road No. 528, a distance of 105.46 feet to a point on the Westerly right-of-way line of State Road No. 528, which is also the Point of Beginning; thence S. 80°56'57" W. along the said North right-of-way line of State Road No. 528, a distance of 105.45 feet to a point; thence N. 62°53'07" E., a distance of 372.83 feet to a point on the Westerly right-of-way line of FEC R.R.; thence S. 27°06'05" E., along the said right-of-way line of the FEC R.R. to the Point of Beginning, containing 0.41 acres more or less.

Number Twenty-One (21) Cidco Road:

A tract of land lying in Section 7, Township 24 South, Range 36 East, Brevard County, Florida. More particularly described as follows:

Commence at the Northwest corner of the Southwest ¼ of the Northwest ¼ of the Southeast ¼ of said Section 7, also the south right-of-way of Cidco Road, and run N. 88°06'55" E., along said right-of-way, a distance of 1122.95 feet; thence N. 00°13'32" E., a distance of 50 feet to a point on the north right-of-way of Cidco Road; thence S. 88°06'55" W., along said right-of-way, a distance of 1122.95 feet to a point on the west line of the Southeast ¼ of said Section 7, thence S. 00°13'32" W. a distance of 50 feet to a point on the South right-of-way of Cidco Road and the Point of Beginning.

(9) *Ordinance No. 14-01:*

Oleander Power Project:

Description (North):

A parcel of land lying in Section 26, Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Begin at the Northwest corner of the Southeast ¼ of said Section 26, and run S. 00°01'47" W., along the west line of said Southeast ¼, a distance of 1095.33 feet to a point on the north right-of-way line of Townsend Road as described in Official Records Book 4218, at Pages 856 through 859, Public Records of Brevard County, Florida; thence N. 89°30'45" E., along said north right-of-way line, a distance of 720.55 feet to the point of curvature of a 433.00-foot radius curve to the right; thence southeasterly, along the arc of said curve and along said right-of-way line, through a central angle of 62°29'26" a distance of 472.26 feet to a point on the south line of the Northwest ¼ of said Southeast ¼; thence N. 89°30'45" E., along said south line, a distance of 222.81 feet to the southeast corner of said Northwest ¼ of the Southeast ¼; thence N. 00°00'30" E., along the east line of said Northwest ¼ of the Southeast ¼, a distance of 1327.20 feet to the Northeast corner of said Northwest ¼ of the Southeast ¼; thence S. 89°33'41" W., along the north line of said Northwest ¼ of the Southeast ¼, a distance of 1329.00 feet to the Point of Beginning.

Description (South)

A parcel of land lying in Section 26, Township 24 South, Range 35 East, Brevard County, Florida, being more particularly described as follows:

Commence at the northwest corner of the Southeast ¼ of said Section 26, and run S. 00°01'47" W., along the west line of said Southeast ¼, a distance of 1161.33 feet to a point on the south right-of-way line of Townsend Road as described in Official Records Book 4218, at Pages 856 through 859, Public Records of Brevard County, Florida, the Point of Beginning; thence continue S. 00°01'47" W., along said west line a distance of 167.01 feet to the southwest corner of said Northwest ¼ of the Southeast ¼; thence N. 89°30'45" E., along the south line of said Northwest ¼ of the Southeast ¼, a distance of 664.76 feet to a point on the east line of the West ½ of said Northwest ¼ of the Southwest ¼; thence N. 00°01'09" E., along said east line, a distance of 167.01 feet to a point on the aforesaid south right-of-way line of Townsend Road; thence S. 89°30'45" W., along said south right-of-way line, a distance of 664.73 feet to the Point of Beginning.

(10) *Ordinance No. 02-02:*

Legal Description Part 1: A Parcel of land lying in Section 7, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

From the West ¼ Corner of said Section 7 Run N00°03'41"E along the West line of the Northwest ¼ of said Section 7 a distance of 330.19 feet to a point on the North line of the South ¼ of the South ½ of said Northwest ¼; thence run N87°44'17"e along said North line 1327.89 feet to an intersection with the East line of a 43.21 foot wide drainage easement as shown on the plat of Cidco Park as recorded in Plat Book 22, Page 51 of the Public Records of Brevard County, Florida being the point of beginning of the herein described parcel; thence continue N87°44'17"E along said line North line 492.71 feet to the Northwest corner of that parcel of land described in Official Records Book 3411, Page 4305 of the Public Records of Brevard County, Florida; thence run along the West line of said parcel S02°00'01"E 587.36 feet; thence departing from said North line N36°13'32"W 2.63 feet; thence N36°09'47"W 21.39 feet; thence N29°47'40"W 57.52 feet; thence N27°39'40"W 37.05 feet; thence N 33°55'39"W 14.12 feet; thence S 87°54'04"W 429.40 feet to the intersection with the aforesaid East line of a 43.21 drainage easement, thence run N01°56'11"W along said East line 469.71 feet to the point of beginning. Containing 5.412 acres more or less.

Legal Description Part 2: (Per Orb 2100 PG 2757) A parcel of land lying in Section 7, Township 24 South, Range 36 East, Tallahassee Meridian, Brevard County, Florida, being more specifically described as follows:

From the intersection thereof with the East line of the Northeast ¼ of the Southwest ¼ of said Section 7 and the Northerly right-of-line of Cidco Road, as shown on the Plat of Cidco Park, as recorded in Plat Book 22, Page 51, of the Public Records of Brevard County, Florida, bear S89°47'20"w along the Northerly right-of-way line of said Cidco Road, a distance of 265.37 feet to the Westerly right-of-way line of East Industry Road; thence S88°10'45"W, along the Northerly right-of-way line of a 50 foot drainage easement according to said plat of Cidco Park, a distance 156.25 feet to the point of beginning; thence continue S88°10'45"W, along said Northerly right-of-way line, a distance of 150.00 feet; thence N01°53'05"W, a distance of 400.92 feet; thence N88°31'50"E, a distance of 150.00 feet; thence S01°53'05"E a distance of 400.00 feet to the point of beginning of this description.

(11) *Ordinance No. 03-02:*

Legal Description: Lot 12, Block 3, Clearlake Terrace Subdivision:

Commence at the Northeast ¼ of Section 19, Township 24 South, Range 36 East, Brevard County, Florida, being more particularly described as beginning at the Northeast ¼ of said Section 19; thence West N 89°34'00" W along the northerly line of said Section 19 a distance of 33 feet to the West right-of-way line of Clearlake Road; thence S00°09'48"E along said right-of-way line a distance of 49.73 feet to the Northeast corner of Lot 12 and also Southeast corner of Lot 11, Block 3 of Clearlake Terrace Subdivision as recorded in Plat Book 11, Page 103 of the public records of Brevard County and also the Point of Beginning; thence S00°09'48"E along said right-of-way line a distance of 80.00 feet; thence S89°50'12"W a distance of 116.63 feet; thence N00°09'48"W a distance of 80.00 feet; thence N89°50'12"E a distance of 116.86 feet to the Point of Beginning.

Lot 13, Block 3, Clearlake Terrace Subdivision:

Commence at the Northeast ¼ of Section 19, Township 24 South, Range 36 East, Brevard County, Florida, being more particularly described as beginning at the Northeast ¼ of said Section 19; thence West N 89°34'00" W along the northerly line of said Section 19 a distance of 33 feet to the West right-of-way line of Clearlake Road; thence S00°09'48"E along said right-of-way line a distance of 129.73 feet to the Northeast corner of Lot 13 and also Southeast corner of Lot 12, Block 3 of Clearlake Terrace Subdivision as recorded in Plat Book 11, Page 103 of the public records of Brevard County and also the Point of Beginning; thence S00°09'48"E along said right-of-way line a distance of 110.00 feet; thence N89°34'00"W a distance of 116.32 feet; thence N00°09'48"W a distance of 108.79 feet; thence N89°50'12"E a distance of 116.63 feet to the Point of Beginning.

(12) *Ordinance 18-02.*

AN-01-01—LEGAL DESCRIPTION BY METES AND BOUNDS

A parcel of land lying in the Southwest ¼ of Section 7, Township 24 South, Range 36 East, Brevard County, Florida, being more particularly described as follows:

Commence at a concrete monument marking the Southwest corner of said Section 7, and run N. 88° 09'29"E., along the South line of said section, a distance of 1058.50 feet to an iron rod, the POINT OF BEGINNING; thence continue N.88° 09'29"E., along said South line, a distance of 1339.49 feet to a point on the West right of way line of East Industry Drive (a 230 foot wide right of way), said point being on an 80.00 foot radius curve to the left, having a radial bearing of N.60° 01'20"W.; thence Northerly, along the arc of said curve and along said right of way line, thru a central angle of 30° 08'38" a distance of 42.09 feet to a point of tangency; thence N.00° 09'58"W., along said West right of way line, a distance of 685.69 feet to a point on the South right of way line of Greensboro Road (a 100 foot wide right of way); thence S.87° 49'50"W., along said South right of way line, a distance of 20.93 feet to the point of curvature of a 350:00 foot radius curve to the left; thence Southwesterly, along the arc of said curve and along said South right of way line, thru a central angle of 12° 16'02" a distance of 74.94 feet to a point on the Southerly right of way line of Grissom Parkway (a 200 foot wide right of way) as defined by right of way maps for Grissom Parkway prepared by Dyer, Riddle, Mills and Precourt, Inc. dated April 3, 1987, said point being on a 572.96 foot radius curve to the left having a radial bearing of S.44° 17'58"W.; thence Northwesterly, along the arc of said curve and along said Southerly right of way line of Grissom Parkway, thru a central angle of 11° 53'40", a distance of 118.94 feet to a point on the Southerly line of a right of way taking recorded in O.R. 2929, Page 1501, said point being on a 1695.00 foot radius curve to the left having a radial bearing of S.09° 11'35"W.; thence Northwesterly, along the arc of said curve and long said Southerly right of way line of Grissom Parkway, thru a central angle of 11° 02'06" a distance of 326.45 feet to a point of tangency; thence S.88° 09'29"W., along said Southerly right of way line of Grissom Parkway, a distance of 540.62 feet to a point on the West line of a Drainage Easement recorded in O.R. 2690, Page 1195; the S.10° 21'39"E., along said West line, a distance of 391.17 feet to a point on the North right of way line of Greensboro

Road; thence N.79° 41'19"E., along said North right of way line, a distance of 138.83 feet to the Northeast corner of said right of way; thence S.10° 18'41"E., along the Easterly end of said right of way, a distance of 100.00 feet to a point on the South right of way line of said Greensboro Road; thence S.79° 41'19"W., along said South right of way line, a distance of 517.18 feet to a point on the West line of a 30 foot wide Gas Transmission Easement recorded in O.R. 498, Page 427; thence S.08° 58'17"E., along said West line, a distance of 277.80 feet to the POINT OF BEGINNING; containing 20.908 acres.

Subject to a Drainage Easement recorded in O.R. 2690, Page 1195; subject to a 30 foot wide Gas Transmission Easement recorded in O.R. 498, Page 427; Subject to a 10 foot wide Florida Power & Light Co. Easement recorded in O.R. 1700, Page 950; subject to a 5 foot wide Florida Power & Light Co. Easement recorded in O.R. 2544, Page 1902; and subject to all other easements, restrictions and rights of way of record.

(13) *Ordinance 6-03.*

Legal Description for Alan Cowart and Michael Quinn Properties:

A parcel of land lying in Section 26, Township 24 South, Range 35 East, Brevard County, Florida, being more particularly described as follows:

Commence at the East ¼ corner of said Section 26, and run S89°32'34"W, along the north line of the southeast ¼ of said section, a distance of 45.00 feet to a point on the west right of way line of Cox Road; thence S00°01'54"E, along said west right of way line, a distance of 100.00 feet to the Point of Beginning; thence continue S00°01'54"E, along said west right of way line, a distance of 255.09 feet to a point of curvature of a 30.00 foot radius right of way transition curve to the right; thence southwesterly along the arc of said curve, thru a central angle of 90°00'00", a distance of 47.12 feet to a point of tangency on the north right of way line of Wright Court (an 80 foot wide right of way); thence S89°58'06"W, along said north right of way line, a distance of 790.05 feet to the point of curvature of a 130.00 foot radius curve to the left; thence southwesterly, along the arc of said curve and along said right of way line, thru a central angel of 37°27'46" a distance of 85.00 feet; thence N37°29'40"W, on a line radial to the aforesaid right of way curve, a distance of 125.25 feet; thence S89°29'45"W, parallel with the north line of lands described in O.R. 3641, Page 1284 of the public records of Brevard County, Florida, a distance of 308.79 feet to a point on the west line of the northeast ¼ of the southeast ¼; thence N00°00'37"W, along said west line, a distance of 205.50 feet to a point 100.00 feet south of the northwest corner of said northeast corner of the southeast ¼; thence N89°32'34"E, parallel with the aforesaid north line of the southeast ¼, a distance of 1284.04 feet to the Point of Beginning.

(14) *Ordinance 7-03.*

DESCRIPTION AS FURNISHED: EAST SAWYER-MCQUAIG ACCESS PARCEL:

An Easement on, over and upon the following described property, to wit: A parcel of land lying in the Northeast ¼ of Section 26, Township 24 South, Range 35 East, Brevard County, Florida, the some being particularly described as follows:

Commence at the Northeast corner of the Northeast ¼ of said Section 26 and run South 89°31'34" West along the North line of said Section 26 for 45.00 feet to a point on the West right of way line of Cox Road, as said right of way is described in Official Record Book 587, Page 959, public records of Brevard County, Florida, thence run South 00°06'04" East along said West right of way line for 265.59 feet to the Point of Beginning of this Easement; thence continue South 00°06'04" East along said West right of way line for 66.00 feet; thence run South 89°31'44" West for 684.30 feet; thence run North 00°06'04" (W.) for 66.00 feet; thence run North 89°31'44" East for 684.30 feet to the Point of Beginning; LESS AND EXCEPT the West 66 feet thereof.

(15) *Ordinance 8-03.*

DESCRIPTION AS FURNISHED: MERRITT-MAURER PARCELS (MAURER PARCEL):

A part of land being part of the West ¼ of the Northwest ¼ of the Southeast ¼ of Section 23, Township 24 South, Range 35 East, lying South of the Southerly right of way line of State Road No. 524 (a 200 foot right of way), being more particularly described as follows: Begin at the intersection of said Southerly right of way line with the West line of the said Southeast ¼ and run S.00°03'44"W., along said West line a distance of 433.18 feet; thence run (N.) 89°49'21"E., along the South line of the said Northwest ¼ of the Southeast ¼ a distance of 331.19 feet; thence run N.00°02'45"E., along the East line of the said West ¼ of the Northwest ¼ of the Southeast ¼, a distance of 223.53 feet; thence run S.89°49'21"W., parallel to the said South line of the Northwest ¼ of the Southeast ¼, a distance of 306.12 feet; thence run N.00°03'44"E., parallel to and 25 feet distance from said West line of the Southeast ¼, a distance of 228.35 feet, to a point on the said Southerly right of way line; thence run S.53°07'46"W., along said Southerly right of way line, a distance of 31.28 feet, to the Point of Beginning.

Together with: (MERRITT PARCEL)

A parcel of land being part of the West ½ of the West ½ of the Northwest ¼ of the Southeast ¼ of Section 23, Township 24 South, Range 35 East, lying South of the Southerly right of way line of State Road No. 524, (a 200 foot right of way), being more particularly described as follows:

Commence at the intersection of the said Southerly right of way line with the West line of said Southeast ¼ and run North 53°07'46" East, along said Southerly right of way line a distance of 31.28 to the Point of Beginning; thence continue North 53°07'46" East, along said right of way line a distance of 382.80 feet; thence run South 00°02'45" West, along the East line of the said West ½ of the West ½ of the Northwest ¼ of the Southeast ¼, a distance of 457.08 feet; thence run South 89°49'21" West, parallel to the South line of the said Northwest ¼ of the Southeast ¼, a distance of 306.12 feet; thence run North 00°03'44" East, parallel to and 25 feet distant from said West line of the Southeast ¼, a distance of 228.35 feet to the Point of Beginning.

(16) *Ordinance 9-03.*

Legal Description for property owned by Cocoa Freewill Baptist Church, Inc.:

A parcel of land lying in the South ½ of the Northeast ¼ of the Southwest ¼ of Section 29, Township 24 South, Range 36 East, Brevard County, Florida, the same being particularly described as follows:

Commence at the Northeast corner of the plat of Hendry Gardens, recorded in Plat Book 0009, Page 0031, of the public records of Brevard County, Florida, said point being the Northeast corner of Lot 18 of said plat and the Point of Beginning; thence go West along the North line of said plat a distance of 662 feet to the Northwest corner of Lot 15 of said plat; thence go South along the West line of said Lot 15 a distance of 300 feet to the Southwest corner of said Lot 15; thence go East along the South line of said Lot 15 a distance of 512 feet to a point 246 feet East of the Southwest corner of Lot 17 of said plat; thence go North and parallel to the West line of said Lot 17 a distance of 150 feet to a point on the South line of Lot 18 of said plat and a point 246 feet East of the Southwest corner of said Lot 18; thence East along the South line of said Lot 18 a distance of 140 feet to the Southeast corner of said Lot 18; thence North along the East line of said Lot 18 a distance of 150 feet to the Northeast corner of said Lot 18 and the Point of Beginning.

(17) *Ordinance 10-03* as amended by *Ordinance 14-03.*

Legal Description:

The subject property is generally described as an area located in Sections 22, 23, 26, and 27, Township 24 South, Range 35 East, Brevard County, Florida, being more particularly described as follows:

Commence at the South ¼ of Section 26, Township 24 South, Range 35 East; thence run N00°24'29"E along the East line of the West ½ of said section, 60.20 feet to the North right of way line of State Road No. 520; thence run S89°59'08"W, along said North right of way line a distance of 1320.04 feet to the West line of the East 1320.00 feet of said West ½, thence run N00°24'29"E, along said West line and parallel to and 1320.00 feet at right angle measurement from said East line of the West ½, a distance of 2706.25 feet to the West right of way line of Interstate Route No. 95; thence run N30°19'38"W, along said West right of way line a distance of 74.10 feet to the Point of Beginning; thence run S89°59'08"W, parallel to and 2769.93 feet of right angle measurements from said North right of way line of State Road No. 520, a distance of 1078.94 feet to a point 150 feet East of the right of way line of Friday Road; thence run N00°26'28"E, parallel to and 150 feet East from said right of way line of said Friday Road, a distance of 358.59 feet; thence run N89°50'31"W, parallel to the South line of the Northwest ¼ of said Section, a distance of 150 feet to a point on the East right of way line of said Friday Road; thence run N00°21'37"W along said East right of way line, a distance of 196.95 feet to the point of curvature of a 1096.28 foot radius curve to the left; thence Northwesterly along the arc of said curve and said right-of-way line, through a central angle of 36°57'57" a distance of 707.29 feet; thence run N36°36'18"W, along the northeast right of way line of Friday Road a distance of 532.51 feet to the South right of way line of State Road No. 524, a 200 foot right of way, and the Northwest corner of a parcel of land described in ORB 691, Page 561 of said Public Records; thence run S53°23'42"W, along the South right of way line of said State Road No. 524, a distance of 100 feet to the west right of way line of said Friday Road; thence S53°23'42"W, along the South right of way line of said State Road No. 524, a distance of 923.60 feet to a point on the West line of the East ½ of Northeast ¼ of said Section 27; thence S00°29'09"W, along the East ½ of Northeast ¼ of said Section 27, a distance of 2803.14 feet to the Southeast corner of said Northwest ¼ of the Southeast ¼ of said Section 27; thence S89°26'01"W, along the South line of said Northwest ¼ of the Southeast ¼, a distance of 1321.44 feet to the Southwest corner thereof; thence run N00°22'55"E, along the East line of the West ½ of said Section 27 a distance of 85.64 feet; thence run S89°17'00"W, parallel with the North right of way line of State Road No. 520, a distance of 679.11 feet; thence run N00°42'50"E, parallel to the East line of the West ½ of said Section 27 a distance of 225.00 feet; thence run S89°17'03"W, parallel with the North right of way line of State Road No. 520, a distance of 655.56 feet; thence run N00°42'50"E, parallel to the East line of the West ½ of said Section 27 a distance of 525.87 feet to a point on the South right of way line of State Road No. 524; thence run N00°42'50"E, parallel to the East line of the West ½ of said Section 27 a distance of 254.12 feet to a point on the North right of way line of State Road No. 524; thence run S53°23'42"W, along the North right of way line of said State Road No. 524 a distance of 1557.77 feet to the East right of way line of Adamson Road, a 150 foot right of way; thence run N00°42'51"W, along said East right of way line of Adamson Road, a distance of 742.88 feet; thence run N89°34'38"E, parallel with the South line of the Northwest ¼, a distance of 656.89 feet; thence run N00°42'51"E, parallel with said West line of the Southwest ¼ of said Section 27, a distance of 331.62 feet; thence run S89°34'38"W, parallel with said South line of the Northwest ¼, a distance of 656.89 feet to a point on said East right of way line of Adamson Road; thence run N00°42'51"E, along said East right of way line of Adamson Road and parallel with the West line of the Southwest ¼ of said Section 27, a distance of 25 feet; thence run N89°34'38"E, parallel with said South line of the Northwest ¼, a distance of 662.19 feet; thence run N00°46'59"E, parallel with said West line of the Northwest ¼, a distance of 330.00 feet; thence run S89°34'38"W, parallel with the South line of the Northwest ¼ of said Section 27, a distance of 659.99 feet to a point on said East right of

way line of Adamson Road; thence run N00°46'59"E, along said East right of way line of Adamson Road, a distance of 25.00 feet; thence run N89°34'38"E, parallel with the South line of the Northwest ¼ of said Section 27, a distance of 659.99 feet; thence run N00°46'59"E, parallel with the West line of the Northwest ¼ of said Section 27, a distance of 560.00 feet to a point on the North line of a 60 foot wide Florida Power and Light Company Easement recorded in ORB 539, Page 184 of said Public Records; thence run N89°34'38"E, along said North line and parallel with the South line of the Northwest ¼ of said Section 27, a distance of 1227.1 feet; thence N00°46'59"W, parallel with the aforesaid East right of way line, a distance of 427.65 feet; thence S89°44'30"W, parallel with the aforesaid North line of said section, a distance of 1887.09 feet to a point on said East right of way line of Adamson Road; thence run N00°46'59"E, along said East right of way line of Adamson Road, a distance of 1095.41 feet to a point on the South line of lands described in O.R.B. 2221, Page 1348; thence run N89°44'50"E, parallel with said North line of Section 27, a distance of 660.00 feet; thence run N00°46'29"E, parallel with said East right of way line of Adamson Road, a distance of 330.00 feet to a point on said North line of Section 27 and the South line of Section 22; thence run S89°44'30"W, along said North line of Section 27 and the South line of Section 22, a distance of 660.00 feet to a point on said East right of way line of Adamson Road; thence run N00°46'59"E, along said East right of way line of Adamson Road, a distance of 1320.00 feet to a point on the North line of the South ½ of the Southwest ¼ of said Section 22; thence run N89°39'08"E, along said North line of the South ½ of the Southwest ¼ of Section 22, a distance of 2565.00 feet to the East line of said Southwest ¼ of Section 22; thence run S00°46'59"W, along said East line of the Southwest ¼ of Section 22, a distance of 1320.00 feet to a point on the South line of said Section 22 and the North line of said Section 27; thence run N89°39'08"E, along said South line of Section 22 and the North line of Section 27, a distance of 2326.51 feet to a point the West right of way line of Interstate Route No. 95; thence run N02°37'46"W, along said West right of way line, a distance of 52.78 feet; thence run N59°40'22"E a distance of 500.00 feet to a point on the East right of way line of Interstate Route No. 95; thence run N30°19'38"W, along said East right of way line of Interstate Route No. 95, a distance of 350.00 feet; thence run N36°40'01"W, along said East right of way line of Interstate Route No. 95, a distance of 86.24 feet to a point on the North line of the South ½ of the Southeast ¼ of the Southeast ¼ of said Section 22; thence run N89°56'08"E, along said North line of the South ½ of the Southeast ¼ of the Southeast ¼ of said Section 22, a distance of 129.11 feet to the Northeast corner of the South ½ of the Southeast ¼ of the Southeast ¼ of said Section 22 and a point on the West line of Section 23; thence run N00°54'36"E, along said West line of Section 23, a distance of 798.92 feet to the west right of way line of Friday Road and a point of curvature; thence Southeasterly along the arc of the point of curvature of a 1096.28 foot radius curve to the left and said right-of-way line, through a central angle of 36°57'57" a distance of 68.82 feet; thence run S00°54'36"W, a distance of 72.51 feet to a point on the North line of the Southwest ¼ of the Southwest ¼ of the said Section 23; thence run S89°57'53"E, along said North line of the Southwest ¼ of the Southwest ¼ of Section 23, a distance of 625.34 feet; thence run S36°53'57"E, a distance of 647.97 feet to the north right of way line of State Road No. 524; thence run S36°53'57"E, a distance of 200.00 feet to the south right of way line of State Road No. 524; thence run N53°28'30"E, along said south right of way line of State Road No. 524, a distance of 241.62 feet to the East right of way line of a fifty foot service road as recorded in ORB 674, Page 313 of said Public Records; thence run S00°24'30"W along said East right of way line and parallel to the East line of the Southwest ¼ of the Southwest ¼ of said Section 23, a distance of 795.86 feet to a point on the South line of said Section 23, the North line of Section 26; thence run S89°33'59"E, along said North line of Section 26, a distance of 5.00 feet to a point on the East right of way line of a sixty foot right of way as recorded in ORB1531, Page 693 and ORB 1531, Page 691; thence run S00°26'11"W along said East right of way line and parallel to the East line of the Northwest ¼ of the Northwest ¼ of said Section 26, a distance of 1858.02 feet to the point of curvature of a 120.00 foot radius curve to the left; thence Southeasterly along the arc of said curve and said right-of-way line, through a central angle of 30°40'13" a distance of 64.24 feet; thence run S30°14'02"E,

along said East right of way line, a distance of 34.29 feet; thence run S89°56'25"W, a distance of 81.32 feet to a point on the East right of way line of Interstate Route No. 95; thence run S30°19'38"E, along said East right of way line, a distance of 611.63 feet; thence run S89°59'08"W a distance of 346.06 feet to the West right of way line of said Interstate Route No. 95 and the Point of Beginning.

(18) *Ordinance 13-03.*

Legal Description:

The subject property is generally described as an area located in Sections 7 and 18, Township 24 South, Range 36 East, Brevard County, Florida; and located in Sections 12 and 13, Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Beginning at a point at the Northwest corner of Section 12, Township 24 South, Range 35 East, said point being the POINT OF BEGINNING; thence South 00 degrees 06 minutes 51 seconds East along the West line of said Section, a distance of 4,186.45 feet to a point on the North right of way line of State Road No. 528 (Beeline Expressway); thence South 74 degrees 54 minutes 58 seconds East, along said North right of way line, a distance of 4,931.47 feet to a point on the South line of said Section 12 and the North line of Section 13; thence continue easterly along said North right of way line, a distance of 441.08 feet to a point on the East line and a distance of 113.19 feet South of the Northeast corner of said Section 13, and on the West line of Section 18, Township 24 South, Range 36 East; thence South 00 degrees 11 minutes 51 seconds East along the West line of said Section 18, a distance of 383.16 feet to a point on the South right of way line of the State Road No. 528 (Beeline Expressway) interchange, said point being on the curve of a non tangent curve to the right, of which the radius point lies South 22 degrees 11 minutes 49 seconds West, a radial distance of 5,629.58 feet; thence southeasterly along the arc of said southerly right of way line, through a central angle of 08 degrees 22 minutes 45 seconds, a distance of 823.29 feet to a point of tangency; thence South 59 degrees 25 minutes 26 seconds East along said south right of way line, a distance of 1,478.25 feet; thence South 30 degrees 34 minutes 34 seconds West along said south right of way line, a distance of 50.00 feet; thence South 59 degrees 25 minutes 26 seconds East along said south right of way line, a distance of 137.14 feet; thence North 73 degrees 58 minutes 56 seconds East, a distance of 4,030.30 feet to a point on the East line of said Section 18 and the North right of way line of said State Road No. 528 (Beeline Expressway) Interchange, said point being on the curve of a non tangent curve to the right, of which the radius point lies North 04 degrees 54 minutes 52 seconds West, a radial distance of 3,719.71 feet; thence westerly along the arc along said North right of way line, through a central angle of 07 degrees 18 minutes 01 seconds, a distance of 473.94 feet to a point of compound curve to the right having a radius of 1,809.86 feet and a central angle of 34 degrees 48 minutes 46 seconds; thence westerly along the arc, a distance of 1,099.67 feet; thence North 52 degrees 48 minutes 05 seconds West, along said North right of way line, a distance of 1,376.16 feet; thence North 00 degrees 54 minutes 16 seconds East, a distance of 83.24 feet to a point on the North line of said Section 18, the South line of Section 07; thence South 88 degrees 14 minutes 12 seconds West along said South line of Section 07, a distance of 33.91 feet to the Southeast corner of the Southwest ¼ of said Section 07 and the East right of way line of East Industry Road; thence South 88 degrees 09 minutes 29 seconds West, along the South line of said section 07, a distance of 247.21 feet to a point on the West right of way line of East Industry Road; thence continue westerly along the South line of said Section 07, a distance of 1,339.50 feet; thence North 08 degrees 58 minutes 17 seconds West, a distance of 277.80 feet to a point on the South right of way line of Greensboro Road; thence North 79 degrees 41 minutes 19 seconds East along said South right of way line, a distance of 517.18 feet to the east terminus of said right of way; thence North 10 degrees 18 minutes 41 seconds West, a distance of 100.00 feet to a point on the North right of way line of Greensboro Road; thence South 79 degrees 41 minutes 19 seconds

West along said North right of way line, a distance of 138.83 feet; thence North 10 degrees 21 minutes 39 seconds West, a distance of 391.17 feet to the South right of way line of Grissom Parkway; thence North 88 degrees 09 minutes 29 seconds East along said South right of way line, a distance of 540.63 feet to a point of curvature on the curve of a non tangent curve to the right, of which the radius point lies South 09 degrees 11 minutes 35 seconds West, a radial distance of 1,695.00 feet; thence easterly along the arc of said curve and along said South right of way line, through a central angle of 11 degrees 02 minutes 06 seconds, a distance of 326.45 feet to a point on said South right of way line, said point being on the curve of a non tangent curve to the right, of which the radius point lies South 44 degrees 17 minutes 58 seconds West, a radial distance of 572.96 feet; thence southeasterly along said arc and along said South right of way line, through a central angle of 11 degrees 53 minutes 40 seconds, a distance of 118.94 feet to a point on said South right of way line, said point being located on a compound curve to the right having a radius of 350.00 feet and a central angle of 12 degrees 16 minutes 02 seconds; thence southeasterly along said arc and along said South right of way line, a distance of 74.94 feet to a point of tangency; thence North 87 degrees 49 minutes 50 seconds East along said right of way line, a distance of 20.93 feet to a point on the West right of way line of East Industry Road; thence North 89 degrees 50 minutes 02 seconds East, a distance of 253.14 feet to point on the East right of way line of East Industry Road; thence North 14 degrees 04 minutes 43 seconds East along said East right of way line, a distance of 43.15 feet; thence South 89 degrees 55 minutes 17 seconds East, a distance of 64.00 feet; thence North 15 degrees 04 minutes 43 seconds East, a distance of 98.00 feet; thence North 55 degrees 00 minutes 34 seconds West, a distance of 68.72 feet to a point of curve to the left having a radius of 1,585.89 feet and a central angle of 01 degrees 15 minutes 52 seconds; thence northwesterly along the arc of said curve and along the said East right of way line, a distance of 35.00 feet; thence North 00 degrees 13 minutes 32 seconds East along said East right of way line, a distance of 72.38 feet to point on the North line of the South ½ of the Northwest ¼ of the Southeast ¼ of said Section 07; thence North 88 degrees 04 minutes 09 seconds East along said North line, a distance of 9.98 feet; thence North 00 degrees 13 minutes 32 seconds East, a distance of 663.05 feet to a point on the South right of way line of Cidco Road; thence continue northerly along said line, a distance of 50.00 feet to a point on the North right of way line of Cidco Road; thence South 88 degrees 06 minutes 55 seconds West along said North right of way line, a distance of 123.45 feet to a point on the East line of the Northwest ¼ of said section 07; thence South 89 degrees 47 minutes 20 seconds West along said North right of way line, a distance of 265.37 feet; thence South 88 degrees 10 minutes 45 seconds West along said North right of way line, a distance of 156.25 feet to a point on the East line of a 50-foot wide drainage easement as recorded in ORB 844, Page 719 in the public records of Brevard County; thence continue westerly along said line, a distance of 150.00 feet; thence South 88 degrees 08 minutes 15 seconds West along said North right of way line, a distance of 200.00 feet; thence South 88 degrees 03 minutes 49 seconds West along said North right of way line, a distance of 493.75 feet to the East line of a 43.21 foot wide drainage easement; thence North 01 degrees 56 minutes 11 seconds West along the East line of said drainage easement, a distance of 939.42 feet to a point on the North line of the South ¼ of the South ½ of the Northwest ¼ of said Section 07; thence North 87 degrees 44 minutes 17 seconds East along said North line, a distance of 492.71 feet; thence North 87 degrees 52 minutes 58 seconds East along said North line, a distance of 350.00 feet to a point on the East line of the West ½ of said Section 07; thence North 00 degrees 00 minutes 44 seconds East along said East line, a distance of 335.76 feet to a point on the South line of the North ½ of the South ½ of the Northwest ¼ of said Section 07; thence South 87 degrees 44 minutes 57 seconds West along said South line, a distance of 2,616.32 feet to a point on the West line of said Section 07; thence North 00 degrees 05 minutes 36 seconds East along said West line, a distance of 1,981.05 feet to the Northwest corner of said Section 07 and the Northeast corner of Section 12, Township 24 South, Range 35 East; thence North 88 degrees 32 minutes 54 seconds West along the North line

of said Section 12, a distance of 5,287.82 feet to the Northwest corner of said Section 12 to the POINT OF BEGINNING.

Containing 40,113,016.94 square feet or 920.8682 acres, more or less.

(19) *Ordinance 15-03.*

Legal Description:

The subject property is generally described as an area located in Sections 31 and 32, Township 24 South, Range 36 East, Brevard County, Florida; being more particularly described as follows:

Beginning at a point at the Southeast corner of Section 31, Township 24 South, Range 36 East, thence North 00 degrees 01 minutes 51 seconds East along the East line of said Section, a distance of 1,320.00 feet to the Northeast corner of the South ½ of the South ½ of said Section 31 and said point being the POINT OF BEGINNING; thence South 89 degrees 00 minutes 10 seconds West along the North line of said South ½ of the South ½ of said Section 31, a distance of 40.01 feet to the West right of way line of Clearlake Road; thence South 89 degrees 00 minutes 10 seconds West along the North line of said South ½ of the South ½ of said Section 31, a distance of 4,580.00 feet to the Southwest corner of the East ½ of the Northwest ¼ of the Southwest ¼ of said Section 31; thence North 00 degrees 01 minutes 51 seconds East along the West line of said East ½ of the Northwest ¼ of the Southwest ¼ of Section 31, a distance of 1,320.00 feet to the Northwest corner of said East ½ of the Northwest ¼ of the Southwest ¼ of Section 31; thence South 89 degrees 00 minutes 10 seconds West along the North line of the West ½ of said Northwest ¼ of the Southwest ¼ of Section 31, a distance of 440.08 feet; thence North 00 degrees 01 minutes 51 seconds East and parallel to the West line of Said Section 31, a distance of 580.65 feet to a point 400.00 feet south of the South right of way line of State Road No. 520; thence South 89 degrees 51 minutes 00 seconds East and parallel to said South right of way line of State Road No. 520, a distance of 180.00 feet; thence North 00 degrees 06 minutes 36 seconds East parallel to said West line of Section 31, a distance of 400.00 feet to a point on said South right of way line of State Road No. 520; thence South 89 degrees 51 minutes 00 seconds East along said South right of way line, a distance of 100.00 feet; thence South 00 degrees 06 minutes 36 seconds West parallel to said West line of Section 31, a distance of 400.00 feet; thence South 89 degrees 51 minutes 00 seconds East and parallel to said South right of way line of State Road No. 520, a distance of 160.00 feet to a point on the West line of said East ½ of the Northwest ¼ of the Southwest ¼ of said Section 31; thence North 00 degrees 06 minutes 36 seconds East along said West line and parallel to said West line of Section 31, a distance of 400.00 feet to a point on the said South right of way line of State Road No. 520; thence South 89 degrees 51 minutes 00 seconds East along said South right of way line, a distance of 3,300.77 feet to a point on the East line of the Southwest ¼ of the Northeast ¼ of said Section 31; thence South 00 degrees 06 minutes 36 seconds West along said East line, a distance of 1,328.17 feet; thence North 89 degrees 00 minutes 10 seconds East and parallel to the South line of said Section 31, a distance of 1280.00 feet to a point on the West right of way line of said Clearlake Road; thence North 89 degrees 00 minutes 10 seconds East and parallel to the South line of said Section 31, a distance of 40.01 feet to a point on the East line of said Section 31 and the West line of Section 32; thence North 89 degrees 00 minutes 10 seconds East, a distance of 37.01 feet to the East right of way line of Clearlake Road; thence North 00 degrees 01 minutes 51 seconds East along the said East right of way line of Clearlake Road, a distance of 96.64 feet; thence North 89 degrees 00 minutes 10 seconds East, a distance of 972.32 feet to a point 315.82 feet west of the East line of the Southwest ¼ of said Section 32; thence South 00 degrees 06 minutes 36 seconds West and parallel to said East line, a distance of 411.44 feet; thence North 89 degrees 00 minutes 10 seconds East, a distance of 315.82 feet to a point on the said East line of the Southwest ¼ of Section 32 and the West line of the Pinegrove Park No. 2 Third Addition

Subdivision as recorded in Plat Book 19 and Page 46 of the official records of Brevard County, Florida; thence South 00 degrees 09 minutes 19 seconds West along the west line of said East line and West line of said Subdivision, a distance of 416.62 feet to the Southwest corner of Lot 16, Block F, of said Subdivision; thence North 89 degrees 00 minutes 10 seconds East along the South line of said Lot 16, a distance of 128.86 feet to the Southeast corner of said Lot 16; thence North 00 degrees 09 minutes 19 seconds East along the East line of said Lot 16, a distance of 5.00 feet to the West right of way line of Gardenia Avenue; thence North 89 degrees 00 minutes 10 seconds East, a distance of 400.00 feet to the Southeast corner of Lot 23, Block D of said Subdivision and the West line of Lot 10, Block D, Pinegrove Park No. 2 First Addition Subdivision as recorded in Plat Book 17 and Page 88 of the official records of Brevard County, Florida; thence South 00 degrees 09 minutes 19 seconds West along the West line of said Subdivision, a distance of 110.00 feet to the Southwest corner of Lot 11, Block D of said Subdivision; thence North 89 degrees 00 minutes 10 seconds East along the South line of said Lot 11, a distance of 97.005 feet to the Southeast corner of said Lot 11 and the West right of way line of Aurora Street; thence South 00 degrees 09 minutes 19 seconds West along said West right of way line, a distance of 61.21 feet to the West terminus and centerline of Rosa L Jones Drive (formerly Poinsett Drive) and the North line of the South ½ of the South ½ of said Section 32; thence South 89 degrees 00 minutes 10 seconds West along said North line of the South ½ of the South ½ of said Section 32, a distance of 1,912.17 feet to a point on the East right of way line of Clearlake Road; thence South 89 degrees 00 minutes 10 seconds West, a distance of 37.01 feet to the Northwest corner of the South ½ of the South ½ of Section 32, the Northeast corner of the South ½ of the South ½ of Section 31, and the POINT OF BEGINNING.

Containing 10,100,385 square feet or 231.87 acres, more or less.

(20) *Ordinance 16-03.*

Legal Description:

The subject property is generally described as an area located in the Southwest ¼ of Section 27, Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Beginning at a point at the Southeast corner of the Southwest ¼ of Section 27, run North 00 degrees 22 minutes 55 seconds East along the East line of said Southwest ¼ of Section 27, a distance of 67.30 feet to a point on the North Right of way line of State Road No. 520, said point being the POINT OF BEGINNING; thence continue North 00 degrees 22 minutes 55 seconds East along said East line, a distance 1355.54 feet to a point; thence South 89 degrees 17 minutes 03 seconds West, parallel with said North right of way line of State Road No. 520, a distance of 679.11 feet to a point 1355.72 feet from said North right of way line of State Road No. 520 along a line bearing South 00 degrees 42 minutes 51 seconds West, parallel with the West line of said Section 27; thence run North 00 degrees 42 minutes 51 seconds East parallel with said West line of Section 27, a distance of 225.00 feet to a point; thence run South 89 degrees 17 minutes 03 seconds West parallel with said North right of way line of State Road No. 520, a distance of 655.56 feet to a point 1580.72 feet from the said North right of way line of State Road No. 520 along a line parallel to said West line of Section 27; thence South 00 degrees 42 minutes 51 seconds West parallel with said West line of Section 27, a distance of 241.99 feet to a point; thence run South 89 degrees 17 minutes 03 seconds West parallel with the said north right of way line of State Road No. 520, a distance of 340.28 feet to a point 1338.73 feet from said North right of way line of State Road No. 520 along a line parallel to said West line of Section 27, thence run South 00 degrees 42 minutes 51 seconds West parallel with said West line of Section 27, a distance of 546.48 feet to a point; thence run South 89 degrees 17 minutes 03 seconds West parallel with said North right of way line of State Road No. 520, a distance of 275.00 feet to a point 792.25 feet from said North right of way

line along a line parallel to said West line of Section 27; thence run South 00 degrees 42 minutes 51 seconds West parallel to said West line of Section 27, a distance of 22.76 feet to a point; thence run South 89 degrees 17 minutes 03 seconds West parallel to said North right of way line of State Road No. 520, a distance of 283.13 feet to a point 769.49 feet from said North right of way line of State Road No. 520 along a line a parallel to said West line of Section 27; thence run South 00 degrees 42 minutes 51 seconds West parallel to said West line of Section 27, a distance of 115.55 feet to a point; thence run South 89 degrees 17 minutes 03 seconds West parallel to said North right of way line of State Road No. 520, a distance of 333.16 feet to a point on the East right of way line of Adamson Road; thence run South 00 degrees 42 minutes 51 seconds West parallel to said West line of Section 27, a distance of 653.94 feet to a point on said North right of way line of State Road No. 520; thence run North 89 degrees 17 minutes 03 seconds East along said North right of way line of State Road No. 520, a distance of 2574.11 feet to the POINT OF BEGINNING.

Containing 70.48 acres, more or less.

(21) *Ordinance 57-03.*

The subject property is generally described as an area located in Sections 23, 25, and Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Beginning at a point at the Southeast corner of Section 23, said point being the POINT OF BEGINNING; and run North 00 degrees 05 minutes 55 seconds West along the East line of said Section 23, a distance of 466.00 feet to a point on a line parallel with the South line of said Section 23; thence South 89 degrees 32 minutes 27 seconds West, parallel with said South line, a distance of 50.00 feet to a point on the West right of way line of Cox Road; thence continue South 89 degrees 32 minutes 27 West parallel with said South line, a distance of 436.00 feet to a point on a line parallel with the East line of said Section 23; thence South 00 degrees 05 minutes 55 seconds East along said parallel line, a distance of 466.00 feet to a point on the South line of said Section 23; thence South 89 degrees 32 minutes 27 seconds West along said South line, a distance of 404.00 feet to a point on a line parallel with the East line of Section 26; thence South 00 degrees 17 minutes 58 seconds West along said parallel line, a distance of 265.61 feet; thence North 89 degrees 56 minutes 20 seconds East, a distance of 840.00 feet to a point on the west right of way line of Cox Road; thence South 00 degrees 17 minutes 58 seconds West, along said west right of way line, a distance of 66.00 feet; thence South 89 degrees 56 minutes 20 seconds West, a distance of 618.11 feet to a point on the East line of the Northwest 1 / 4 of the Northeast 1 / 4 of the Northeast 1 / 4 of said Section 26; thence South 00 degrees 19 minutes 45 seconds West along said East line, a distance of 331.62 feet to a point on the South line of said Northwest 1 / 4 of the Northeast 1 / 4 of the Northeast 1 / 4 of Section 26; thence South 89 degrees 56 minutes 21 seconds West along said South line, a distance of 663.28 feet to a point on the East line of the South 1 / 2 of the Northwest 1 / 4 of Northeast 1 / 4 of said Section 26; thence South 00 degrees 21 minutes 33 seconds West, along said East line, a distance of 663.23 feet to a point on the South line of said South 1 / 2 of the Northwest 1 / 4 of Northeast 1 / 4 of Section 26; thence South 89 degrees 56 minutes 22 seconds West along said South line, a distance of 1327.25 feet to a point on the East line of the Northwest 1 / 4 of said Section 26; thence South 00 degrees 25 minutes 07 seconds West along said East line, a distance of 1326.43 feet to a point on the South line of the Southwest 1 / 4 of the Northeast 1 / 4 of said Section 26; thence South 89 degrees 33 minutes 41 seconds East along the South line of the Southwest 1 / 4 of the Northeast 1 / 4 of said Section 26, a distance of 1329.00 feet to a point on the East line of the Northwest 1 / 4 of the Southeast 1 / 4 of said Section 26; thence South 00 degrees 02 minutes 45 seconds East along said East line, a distance of 100.00 feet; thence North 89 degrees 32 minutes 36 seconds East, a distance of 1328.50 feet to a point on the West right of way line of Cox Road; thence North 00 degrees 03 minutes 35 seconds West along said West

right of way line of Cox Road, a distance of 1426.43 feet to a point on the North line of the Southeast 1 / 4 of the Northeast 1 / 4 of said Section 26; thence North 89 degrees 56 minutes 22 seconds East along said North line, a distance of 45.00 feet to a point on the Northeast corner of the Southeast 1 / 4 of the Northeast 1 / 4 of the said Section 26; thence North 89 degrees 11 minutes 08 seconds East along the South line of the Northwest 1 / 4 of the Northwest 1 / 4 of Section 25, a distance of 35.00 feet to a point on the East right of way line of Cox Road; thence North 00 degrees 00 minutes 51 seconds East along said East right of way line, a distance of 880.00 feet; thence North 89 degrees 11 minutes 08 seconds East, a distance of 1020.11 feet; thence South 00 degrees 00 minutes 51 seconds West, a distance of 880.09 feet to a point on the South line of the North 1 / 2 of the Northwest 1 / 4 of said Section 25; thence North 89 degrees 15 minutes 33 seconds East along said South line, a distance of 2961.58 feet to a point on the East right of way line of Gray Road; thence North 00 degrees 09 minutes 03 seconds West along said East right of way line, a distance of 1344.49 feet to a point on the North line of Section 25; thence South 89 degrees 03 minutes 42 seconds West along the North line of said Section 25, a distance of 4000.66 feet to the Northwest corner of said Section 25 to the POINT OF BEGINNING.

Containing 211.99 acres, more or less.

(22) *Ordinance 8-04.*

The subject property is generally described as an area located in Sections 22 and 27, Township 24 South, Range 35 East, Brevard County, Florida, being that portion of the Southeast 1 / 4 of said Section 22 which lies westerly of the right-of-way of Interstate 95; said parcel being more fully described as follows:

Commence at the southeast corner of said Southeast 1 / 4 of Section 22; thence North 89 degrees 39 minutes 26 seconds West, along the south line of said Southeast 1 / 4 , a distance of 331.35 feet to a point on the westerly right-of-way line of Interstate 95, as shown on S.R.D. Right-of-Way Map Section 70220-2402, said point being the POINT OF BEGINNING of the lands herein described; thence continue North 89 degrees 39 minutes 26 seconds West, along said south line, a distance of 2326.51 feet to the southwest corner of said Southeast 1 / 4 ; thence North 00 degrees 37 minutes 41 seconds East, along the west line of said Southeast 1 / 4 , a distance of 2668.05 feet to the northeast corner of said Southeast 1 / 4 ; thence South 89 degrees 49 minutes 29 seconds East, along the north line of said Southeast 1 / 4 , a distance of 891.02 feet to an intersection with the aforesaid westerly right-of-way line of Interstate 95; thence along said westerly right-of-way line the following four (4) courses to wit: South 30 degrees 02 minutes 56 seconds East, a distance of 1776.31 feet; South 23 degrees 20 minutes 20 seconds East, a distance of 855.86 feet; South 30 degrees 02 minutes 56 seconds East, a distance of 350.00 feet; South 02 degrees 37 minutes 46 seconds East, a distance of 52.78 feet to the Point of Beginning.

Containing 101.0185 acres, more or less.

(23) *Ordinance 11-04.*

The subject property is generally described as an area located in Section 32, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

BEGIN at the intersection of the East line of the Northwest 1 / 4 of said Section 32 with the North right of way line of State Road No. 520, said point being the Point of Beginning; thence run N 89°31'55" W, along said North right of way line, a distance of 295.16 feet to a point of right of way transition; thence run N 00°28'05" E, along said transition, a distance of 27.50 feet to the Southeast corner of Lot 32 of the PLAT OF SUBDIVISION OF BLOCK NO. 1 OF PINE GROVE PARK, recorded in Plat Book 9, Page 34 of the public records of Brevard County, Florida; thence run N 00°07'56" W, along the East line of said lot, a distance of 132.80 feet to a point on the South line of the North 118.66 feet of said Lot 32;

thence run N 89°59'23" W, along said South line and its Westerly extension, a distance of 170.60 feet; thence run S 00°23'58" E, a distance of 132.33 feet to a point on the North right of way line of State Road No. 520; thence run N89°28'34"W along said North right of way, a distance of 989.00 feet to a point on the Southwest corner of Lot 17 of said PINE GROVE PARK subdivision; thence run S00°28'13"W, a distance of 200.00 feet to a point on the South right of way line of State Road No. 520; thence run N 89°42'30" W, a distance of 141.55 feet to a point on the Northwest corner of Lot 1 of the PLAT OF PINE ACRES, recorded in Plat Book 9, Page 46 of the public records of Brevard County, Florida; thence run S 00°17'30" W, along the West line of said Lot 1, a distance of 110.00 feet to a point on the Southwest corner of said Lot 1; thence run S 89°42'30"E, a distance of 350.00 feet to a point on the Southeast corner of Lot 11 of said PLAT OF PINE ACRES; thence run S 00°17'30" W, a distance of 774.70 feet to a point on the South right of way line of Jackson Street; thence run S89°37'15"E, along said South right of way line, a distance of 615.00 feet to a point on the East right of way line of Aurora Street; thence run S 00°09'20" W, along the said East right of way line, a distance of 498.80 feet to a point on the North line of Block "A", PINEGROVE PARK, UNIT NO. 2, FIRST ADDITION, as recorded in Plat Book 17, Page 88, public records of Brevard County, Florida; thence run S 89°37'15" E, a distance of 641.52 feet to a point on the East line of the Northeast 1 / 4 of the Southwest 1 / 4 of said Section 32; thence run N 00°07'55" W along the East line of said quarter section and the East line of the Southeast 1 / 4 of the Northwest 1 / 4 of said Section 32, a distance of 1180.90 feet to a point which is the Easterly projection of the South line of a tract of land described in Deed Book 344, Page 182 of the public records of Brevard County, Florida; thence run N89°31'55"W, along said line, a distance of 230.00 feet to a point on the Southwest corner of the tract of land described in Deed Book 344, Page 182 of the public records of Brevard County, Florida; thence run N 00°07'55" W, along said tract of land, a distance of 200.00 feet to a point on the South right of way line of State Road No. 520; thence run S89°31'55"E, a distance of 230.00 feet to a point on the East line of the Southeast 1 / 4 of the Northwest 1 / 4 of said Section 32; thence run N 00°07'55" W, along the East line of said quarter section, a distance of 172.50 feet to a point on the North right of way line of State Road No. 520, said point being the Point of Beginning.

Containing 39.51 acres more or less.

(24) *Ordinance 17-04.*

The subject property is generally described as an area located in Section 32, Township 24 South, Range 36 East, Brevard County, Florida being more particularly described as follows:

BEGIN at the Northwest corner of Lot 28 of BARLOW'S SUBDIVISION, recorded in Plat Book 3, Page 5, of the public records of Brevard County, Florida, said point being on the South right of way line of West Peachtree Street (a right of way formerly known as the "Orlando Highway") and being the Point of Beginning; thence run N 89°42'54" W, along said South right of way line and along the North line of said BARLOW'S SUBDIVISION, a distance of 413.73 feet to a point on the Southerly projection of the West line of Lot 5 of PINE PARK, recorded in Plat Book 9, Page 17, of the public records of Brevard County, Florida; thence run N 00°53'04" W, along said Southerly projection, a distance of 50.00 feet to the Southwest corner of said Lot 5, said point being on the North right of way line of West Peachtree Street; thence continue N 00°53'04" W, along the West line of Lot 5 and Lot 10 of said PINE PARK subdivision, a distance of 293.29 feet to the Northwest corner of said Lot 10, said point being on the South right of way line of Lake Drive; thence run S 63°13'17" E, along said South right of way line, a distance of 468.82 feet; thence run S 00°06'46" E, a distance of 82.25 feet to a point on the North right of way line of West Peachtree Street; thence continue S 00°06'46" W, a distance of 50.00 feet to a point on the Northwest corner of Lot 28 of said BARLOW'S SUBDIVISION, said point being on the South right of way line of West Peachtree Street and being the Point of Beginning.

Containing 2.26 acres more or less.

(25) *Ordinance 31-04.*

The subject property is generally described as an area located in Sections 10, 11, 12, 13 and 15 Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Commence at the Northwest corner of Section 10, Township 24 South, Range 35 East; thence run N89°59'22"E, a distance of 300.00 feet to the easterly right of way line of Interstate 95 and the Point of Beginning; thence run N89°59'22"E, a distance of 5,002.30 feet to the Northeast corner of said Section 10; thence run S00°32'12"E along the East line of said Section and the West line of Section 11, Township 24 South, Range 35 East, a distance of 2,351.36 feet to a point 100 feet west of the Northwest corner of Lot 6, Block 16 of the Canaveral Groves Survey Subdivision as recorded in Plat Book 2, Page 62 of the public records of Brevard County, Florida; thence run N89°59'22"E, a distance of 318.00 feet to the Northeast corner of said Lot 6; thence run S00°01'22"E, a distance of 200.82 feet to the Southeast corner of said Lot 6; thence run N89°59'22"E along the north line of an Existing Canal to a point on the East line of said Section 11 and the West line of Section 12, Township 24 South, Range 35 East, a distance of 4,966.25 feet; thence run S00°06'51"E along said West line, a distance of 1,466.78 feet to a point on the northerly right of way line of State Road 528; thence run S74°54'58"E, a distance of 4,931.47 feet to a point on the South line of said Section 12 and the North line of Section 13, Township 24 South, Range 35 East; thence run S74°54'58"E along the northerly right of way line of State Road 528, a distance of 441.08 feet to a point on the East line of said Section 13; thence run S00°15'40"E along the East line of said Section 13, a distance of 383.16 feet to a point on the southerly right of way line of State Road 528 and to the Point of Curvature of a circular curve concave to the Northwest having a radius of 5,629.58 feet; thence run Northwesterly along the arc of said curve, said arc being the said southerly right of way line through a central angle of 03°07'11", a distance of 306.52 feet; thence run N70°46'26"W, along said southerly right of way line, a distance of 432.95 feet; thence run N74°48'03"W along said southerly right of way line, a distance of 975.11 feet to a point on the North line of said Section 13 and the South line of Section 12, Township 24 South, Range 35 East; thence run N74°54'58"W along said southerly right of way line, a distance of 3,669.00 feet to a point on the West line of said Section 12 and the East line of Section 11, Township 24 South, Range 35 East; thence run N74°54'58"W along said southerly right of way line, a distance of 5,086.65 feet to a point on the North line of Lot 10 of the Pine Lake Ranch Subdivision as recorded in Plat Book 21, Page 96 of the public records of Brevard County, Florida and to the Point of Curvature of a circular curve concave to the Southwest having a radius of 25.00 feet; thence run Southwesterly along the arc of said curve, through a central angle of 70°31'44", a distance of 30.77 feet to the Point of Curvature of a circular curve convex to the Southwest having a radius of 50.00 feet; thence run Southwesterly along the arc of said curve, through a central angle of 70°31'44", a distance of 61.55 feet to a point on the West line of said Lot 10; thence run S00°01'22"E, a distance of 295.00 feet to the Southwest corner of said Lot 10 and the Southeast corner of Lot 9 of said Subdivision; thence run S89°59'22"W, a distance of 299.86 feet to the Southwest corner of said Lot 9 and the East line of a thirty-foot wide drainage right of way; thence run S00°01'22"E, a distance of 661.97 feet to the Southwest corner of Lot 14.1 of said Subdivision; thence run S89°52'22"W, a distance of 667.88 feet; thence run S00°07'14"E, a distance of 1,323.27 feet to a point on the South line of said Section, the Southerly line of James Road, the northerly line of a fifty-foot drainage canal right of way, and the North line of Section 15, Township 24 South, Range 35 East; thence run S00°07'14"E, a distance of 50.00 feet to a point on the southerly line of said drainage canal right of way; thence run S89°52'22"W and parallel to the North line of said Section 15, a distance of 4,027.65 feet to a point on the easterly right of way line of Interstate 95; thence run N18°19'28"W, a distance of 402.57 feet along said easterly right of way line to the Point of Curvature of a circular curve concave to the Northeast having a radius of 3,274.98 feet; thence run Northwesterly along the arc of said curve, said arc being the said easterly right of way line

through a central angle of 18°07'00", a distance of 1,035.24 feet; thence run N00°12'28"W along said easterly right of way line, a distance of 3,983.42 feet to a point on the North line of said Section 10 and the Point of Beginning. Containing 766 acres more of less.

(26) *Ordinance 03-05.*

The subject property is generally located in Section 20, Township 24 South, Range 36 East, Brevard County, Florida, and being more particularly described as follows:

The West 150 feet of Lots 1 and 2, Block 1, CLEAR LAKE PLAZA SUBDIVISION, as recorded in PLAT BOOK 10, PAGE 48, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

Containing 0.52 acres, more or less.

(27) *Ordinance 04-05.*

The subject property is generally located in Section 29, Township 24 South, Range 36 East, Brevard County, Florida, and being more particularly described as follows:

Commence at the Southeast corner of the Southwest ¼ of said Section 29, Township 24 South, Range 36 East; thence run N00°10'00"E along the East line of said Southwest ¼, a distance of 30.00 feet to a point on the easterly extension of the North right of way line of West School Street and the Point of Beginning; thence run S89°56'45"W, along said easterly extension, a distance of 10.00 feet to a point on the West right of way line of Pineda Street; thence continue S89°56'45"W, along the North right of way line of West School Street, a distance of 384.92 feet to a point on the East right of way line of Bay Street; thence run N00°07'00"E, along the said East line of Bay Street, a distance of 232.52 to a point; thence run N89°56'45"E, a distance of 385.13 feet to a point on the West right of way line of Pineda Street; thence continue N89°56'45"E, a distance of 10.00 feet to a point on the East line of the Southwest ¼ of said Section 29; thence run S00°10'00"W, along said East line of the Southwest ¼ of said Section 29, a distance of 232.52 feet to a point on the easterly extension of the North right of way line of West School Street, and the Point of Beginning.

Containing 2.11 acres, more or less.

(28) *Ordinance 05-05.*

The subject property is generally described as the Southeast ¼ of the Southeast ¼ of Section 31, Township 24 South, Range 36 East, Brevard County, Florida, less right of ways for road and canal and being more particularly described as follows:

Commence at the Southeast corner of Section 31, Township 24 South, Range 36 East; thence run N00°45'29"W along the East line of said Section 31, a distance of 25.00 feet to a point on the easterly extension of the North right of way line of Pluckebaum Road and accompanying drainage ditch; thence run S89°04'01"W, along said easterly extension, a distance of 40.00 feet to a point on the West right of way line of Clearlake Road and the Point of Beginning; thence continue S89°04'01"W, along the North right of way line of Pluckebaum Road and accompanying drainage ditch, a distance of 1290.91 feet to a point on the West line of the of the Southeast ¼ of the Southeast ¼ of said Section 31 and the East line of the Southwest ¼ of the Southeast ¼ of said Section 31; thence run N00°45'29"W, along the West line of the Southeast ¼ of the Southeast ¼ of said Section 31, a distance of 1326.47 feet, to a point on the North line of the Southeast ¼ of the Southeast ¼ of said Section 31 and the South line of the of the Northeast ¼ of the Southeast ¼ of said Section 31; thence run N89°04'01"E, along the North line of the Southeast ¼ of the Southeast ¼ of said Section 31, a distance of 1290.91 feet to a point on the West right of way line of Clearlake Road; thence run S00°45'29"E, along said West

right of way line, a distance of 1326.47 feet to a point on the North right of way line of Pluckebaum Road and accompanying drainage ditch, and the Point of Beginning.

Containing 38.08 acres, more or less.

(29) *Ordinance 08-05.*

The subject property is generally described as an area located in Section 22, Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Beginning at a point at the Southeast corner of the Southwest ¼ of Section 22, Township 24 South, Range 35 East; thence North 00 degrees 18 minutes 58 seconds East along the East line of said Southwest ¼ of Section 22, a distance of 1334.27 feet to a point on the South line of the North ½ of said Southwest ¼ of Section 22, said point being the Point of Beginning; thence North 89 degrees 57 minutes 48 seconds West, along said South line of the North ½ of the Southwest ¼ of Section 22, a distance of 2,570.62 feet to a point on the East right of way line Adamson Road; thence North 00 degrees 14 minutes 39 seconds East along said East right of way line of Adamson Road, a distance of 2,652.74 feet to a point on the North line of the Southwest ¼ of the Northeast ¼ of Section 22; thence North 89 degrees 53 minutes 03 seconds East along said North line of the Southwest ¼ of the Northwest ¼ of Section 22, a distance of 918.37 feet to point; thence South 00 degrees 16 minutes 16 seconds West, a distance of 1325.91 feet to a point on the South line of the Northwest ¼ of Section 22; thence North 89 degrees 51 minutes 49 seconds East, a distance of 330.92 feet to a point on the West line of the East ½ of the Northwest ¼ of Section 22; thence North 00 degrees 16 minutes 59 seconds East along said West line of the East ½ of the Northwest ¼ of Section 22, a distance of 2,651.59 feet to a point on the North line of Section 22; thence North 89 degrees 54 minutes 18 seconds East along said North line of Section 22, a distance of 701.30 feet to a point on the West right of way line of Interstate 95; thence southeasterly along said southerly right of way line, along an arc having a radius of 5,879.58 feet and a central angle of 06 degrees 34 minutes 07 seconds, a distance of 674.06 feet to a point marked by a 5/8 " Rod labeled "FDOT REF LB 7121"; thence South 30 degrees 19 minutes 50 seconds East along the West right of way line of Interstate 95, a distance of 616.74 feet to a point on the East line of the West ½ of Section 22; thence South 00 degrees 18 minutes 58 seconds West along said East line of the West ½ of Section 22, a distance of 2,851.53 feet to a point on the South line of the North ½ of the Southwest ¼ of Section 22, said point being the Point of Beginning;

Containing 178.60 acres, more or less.

(30) *Ordinance 16-05.*

The subject property is generally described as the East ¼ of the Northwest ¼ of the Northeast ¼ of Section 23, Township 24 South, Range 35 East, less the North 25 feet thereof for road right of way per O.R.B. 798 Page 1046, of the public records of Brevard County Florida and being more particularly described as follows:

Commence at the Northeast corner of the Northwest ¼ of the Northeast ¼ of Section 23 Township 24 South Range 35 East; thence run S00°01'26"W, along the East line of the Northwest ¼ of the Northeast ¼ of said Section 23, a distance of 25.00 feet to a point on the South right of way line of Rayburn Road, and the Point of Beginning; thence continue S00°01'26"E, along the East line of the Northwest ¼ of the Northeast ¼ of said Section 23, a distance of 1301.00 feet to a point on the South line of the Northwest ¼ of the Northeast ¼ of said Section 23; thence run N89°59'11"W, along the South line of the Northwest ¼ of the Northeast ¼ of said Section 23, a distance of 330.60 feet, to a point on the West line of the East ¼ of the Northwest ¼ of the Northeast ¼ of said Section 23; thence run N00°00'58"W, along the West line of the East ¼ of the Northwest ¼ of the Northeast ¼ of said Section 23, a distance of 1300.87 feet to a point on the South right of way line of

Rayburn Road; thence run N89°59'31"E, along the South right of way line of Rayburn Road, a distance of 330.24 feet to the Point of Beginning.

Containing 9.82 acres, more or less.

(31) *Ordinance 17-05.*

The subject property is generally described as the Southwest ¼ of the Southeast ¼ of Section 31, Township 24 South, Range 36 East, Brevard County, Florida, less right of ways for road and canal and being more particularly described as follows:

Commence at the Southeast corner of Section 31, Township 24 South, Range 36 East; thence run S89°49'05"W along the South line of said Section 31, a distance of 1328.58 feet to a point on the Southeast corner of the Southwest ¼ of the Southeast ¼ of said Section 31, and the Point of Beginning; thence continue S89°49'05"W, along the South line of said Section 31, a distance of 1328.58 feet to a point on the Southwest corner of the of the Southwest ¼ of the Southeast ¼ of said Section 31; thence run N00°26'18"W, along the West line of the Southwest ¼ of the Southeast ¼ of said Section 31, a distance of 1342.73 feet, to a point on the North line of the Southwest ¼ of the Southeast ¼ of said Section 31; thence run N89°29'19"E, along the North line of the Southwest ¼ of the Southeast ¼ of said Section 31, a distance of 1335.17 feet to a point on the East line of the Southwest ¼ of the Southeast ¼ of said Section 31; thence run S00°09'30"E, along said East line of the Southwest ¼ of the Southeast ¼ of said Section 31, a distance of 1350.39 feet to a point on the South line of said Section 31, and the Point of Beginning.

Containing 41.00 acres, more or less.

(32) *Ordinance 18-05.*

That part of Lot 20, Barlow's Subdivision, of part of Section 32, Township 24 South, Range 36 East, according to the Plat thereof, recorded in Plat Book 3, page 5, Public Records of Brevard County, Florida, lying North of Lake Drive, and being more particularly described as follows:

Begin at the Northeast corner of Lot 20, Barlow's Subdivision, of part of Section 32, Township 24, South, Range 36 East, according to the Plat thereof recorded in Plat Book 3, page 5, Public Records of Brevard County, Florida and run West along the North line of said Lot 20 a distance of 75 feet to the Northwest corner thereof; thence run South on the West line of said lot to a distance of 60.1 feet to the intersection of said West line of Lot 20 with the Northerly line of Lake Drive, being sometimes referred to as State Road No. 206; thence run Southeasterly along the Northerly line of said Lake Drive to its point of intersection with the East line of said Lot 20; thence run North along the East line of said Lot 20, a distance of 98.5 feet to the Northeast corner thereof, being the point of beginning of the land conveyed hereby.

(33) *Ordinance 01-06.*

The subject property is generally described as an area located in Sections 26 and 27, Township 24 South, Range 35 East, Brevard County, Florida, being more particularly described as follows:

Commence at the Southwest corner of the Northwest ¼ of Section 26, Township 24 South, Range 35 East; thence run N89°32'57"E, along the South line of said Northwest ¼, a distance of 50.00 feet to a point on the East right of way line of Friday Road; thence run N00°21'39"E, along said East right of way line, a distance of 540.93 feet to the Point of Beginning; thence continue N00°21'39"E, along said East right of way line, a distance of 388.79 feet to the point of curvature of a 1096.28 foot radius curve to the left; thence Northwesterly along the arc of said curve and said right-of-way line, through a central angle of 36°57'57" a distance of 707.29 feet; thence run N36°36'18"W, along the northeast right

of way line of Friday Road a distance of 532.51 feet to the South right of way line of State Road No. 524, a 200 foot right of way, and the Northwest corner of a parcel of land described in ORB 691, Page 561 of said Public Records; thence run S53°23'42"W, along the South right of way line of said State Road No. 524, a distance of 100 feet to the west right of way line of said Friday Road; thence continue S53°23'42"W, along the South right of way line of said State Road No. 524, a distance of 659.08 feet; thence S36°36'18"E, a distance of 396.49 feet; thence N53°23'42"E, a distance of 65.00; thence S36°36'18"E, a distance of 370.10 feet; thence S00°21'39"W, a distance of 290.01 feet; thence N89°38'21"W, a distance of 55.00 feet; thence run S00°21'39"W, a distance of 157.47 feet to a point on the South line of a 60.00 foot wide Florida Power and Light Company transmission easement as described in Official Records Book 539, Page 184 of the Public Records of Brevard County, Florida; thence S89°57'35"E, along said Florida Power and Light Company transmission easement, a distance of 610.00 feet, to a point on the West right of way line of Friday Road; thence continue S89°57'35"E, along an Easterly extension of said Florida Power and Light Company transmission easement, a distance of 100.00 feet to a point on the East right of way line of Friday Road, said point being the Point of Beginning.

Containing 22.49 acres, more or less.

(34) *Ordinance 02-06.*

The subject property is generally described as the East 1020 feet of the West 1053 feet of the South 880 feet of the Northwest ¼ of the Northwest ¼ of Section 25, Township 24 South, Range 35 East, Brevard County, Florida, as described in O.R. Book 1292, Page 702 of the Public Records of Brevard County, Florida, being more particularly described as follows:

Begin at the Northwest corner of Section 25, Township 24 South, Range 35 East; thence run N89°03'42"E, along the North line of said Section 25, a distance of 33.00 feet to a point on the East right of way line of Cox Road; thence run S00°02'23"W, along the East right of way line of Cox Road, a distance of 446.38 feet to the *Point of Beginning;* thence continue S00°02'23"W, along the East right of way line of Cox Road, a distance of 880.11 feet to the Southwest corner of the Northwest ¼ of the Northwest ¼ of said Section 25; thence run N89°22'21"E, along the South line of the Northwest ¼ of the Northwest ¼ of said Section 25, a distance of 1020.07 feet to a point on a line parallel to the East right of way line of Cox Road; thence run N00°02'23"E, along a line parallel to the East right of way line of Cox Road, a distance of 880.09 feet to a point on a line parallel with the South line of the Northwest ¼ of the Northwest ¼ of said Section 25; thence run S89°22'21"W, along a line parallel to the South line of the Northwest ¼ of the Northwest ¼ of said Section 25, a distance of 1020.07 feet to the East right of way line of Cox Road, said point being the Point of Beginning.

Containing 20.608 acres more or less.

(35) *Ordinance 03-06.*

The subject property is generally described as Lot 12 of Pine Acres Subdivision, recorded in Plat Book 9, Page 46 of the Public Records of Brevard County, Florida, located in Section 32, Township 24 South, Range 36 East, Brevard County, Florida, being more particularly described as follows:

Begin at the Northwest corner of Lot 11 of Pine Acres Subdivision, recorded in Plat Book 9, Page 46, of the public records of Brevard County, Florida, said point being at the intersection of the South right of way line of State Road 520 and the East right of way line of Virginia Avenue; thence run S00°32'30"E, along the East right of way line of Virginia Avenue, a distance of 110.04 feet to the Northwest corner of Lot 12 of said Pine Acres Subdivision, said point being the Point of Beginning; thence continue S00°32'30"E, along the East right of way of Virginia Avenue, a distance of 79.96 feet to the Southwest corner

of Lot 12 of said Pine Acres Subdivision; thence run S89°42'30"E, along the South line of Lot 12 of said Pine Acres Subdivision, a distance of 149.96 feet to the Southeast corner of Lot 12 of said Pine Acres Subdivision; thence run N00°32'30"W, along the West line of Lot 12 of said Pine Acres Subdivision, a distance of 80.04 feet to the Northeast corner of Lot 12 of said Pine Acres Subdivision; thence run N89°42'30"W, along the North line of Lot 12 of said Pine Acres Subdivision, a distance of 149.97 feet to the Northwest corner of Lot 12 of said Pine Acres Subdivision, said point being the Point of Beginning.

Containing 0.275 acres more or less.

(35.1) *Ordinance No. 04-2006.*

The subject property is generally described as an area located in Sections 25 and 26, Township 24 South, Range 35 East, Brevard County, Florida, being more particularly described as follows:

Commence at the Southwest corner of Section 25, Township 24 South, Range 35 East; thence run N89°59'08"E, along the South line of said Section 25, a distance of 33.00 feet to a point on the southerly extension of the East right of way line of Cox Road; thence run N00°02'23"E, along the southerly extension of the East right of way line of Cox Road, a distance of 50.00 feet to a point on the Southwest corner of parcel 552 as described in ORB 2277, Page 2039 of said Public Records, said point being the Point of Beginning; thence continue N00°02'23"E, along the East right of way line of Cox Road, a distance of 2602.29 feet to a point on the South right of way line of Fenner Road; thence N89°23'30"E, along the South right of way line of Fenner Road a distance of 17.00 feet to a point on the southerly extension of Cox Road; thence run N00°02'23"E, along the southerly extension of Cox Road a distance of 33.00 feet to the North right of way line of Fenner Road; thence run N00°02'23"E, along the East right of way line of Cox Road a distance of 850.75 feet; thence run S89°22'21"W a distance of 17.00 feet to a point on the East right of way line of Cox Road; thence N00°02'23"E, along the East right of way line of Cox Road, a distance of 445.75 feet to a point on the South line of the North ½ of the Northwest ¼ of Section 25; thence S89°22'21"W, along the South line of the North ½ of the Northwest ¼ of Section 25, a distance of 33.00 feet to a point on the West line of Section 25 and the East line of Section 26; thence S89°56'22"W, along the North line of the Southeast ¼ of the Northeast ¼ of Section 26, a distance of 45.00 feet to a point on the West right of way line of Cox Road; thence S00°01'54"E, along the West right of way line of Cox Road, a distance of 1681.52 feet to a point of curvature of a 30.00 foot radius right of way transition curve to the right; thence southwesterly along the arc of said curve, thru a central angle of 90°00'00", a distance of 47.12 feet to a point of tangency on the on the North right of way line of Right Street; thence run S89°58'06"W, along the North right of way line of Right Street, a distance of 790.05 feet to the point of curvature of a 130.00 foot radius curve to the left; thence southwesterly, along the arc of said curve and along the North right of way line of Right Street, thru a central angle of 37°27'46", a distance of 85.00 feet; thence N37°29'40"W, on a line radial to the aforesaid right of way curve, a distance of 125.25 feet; thence S89°29'45"W, parallel with the North line of lands described in ORB 3641, Page 1284 of said Public Records, a distance of 308.79 feet to a point on the West line of the Northeast ¼ of the Southeast ¼ of Section 26; thence S00°00'30"W, along the West line of the Northeast ¼ of the Southeast ¼ of Section 26, a distance of 1021.70 feet to a point on the South line of the North ½ of the Southeast ¼ of Section 26; thence run S89°30'45"W, along the South line of the North ½ of the Southeast ¼ of Section 26, a distance of 222.82 feet to a point on the East right of way line of Townsend Road, said point being the point of curvature of a 433.00 foot radius curve concave to the Southwest; thence Northwesterly, along the arc of said curve and along said right of way line, through a central angle of 62°29'26", a distance of 472.26 feet to a point on the East line of the West ½ of the Northwest ¼ of the Southeast ¼ of Section 26; thence run S00°01'09"W, along the East line of the West ½ of the Northwest ¼ of the Southeast ¼ of Section 26, a distance of 236.01 feet to a point on the South line of the Northwest ¼ of the Southeast ¼ of Section

26; thence S89°30'45"W, along the South line of the Northwest ¼ of the Southeast ¼ of Section 26, a distance of 664.73 feet to a point on the East line of the Southwest ¼ of Section 26; thence N00°01'47"E, along the East line of the Southwest ¼ of Section 26, a distance of 236.01 feet to a point on the North right of way line of Townsend Road; thence S89°45'38"W, along the North right of way line of Townsend Road, a distance of 121.05 feet to a point of curvature of a curve concave to the Northeast and having a radius of 120.00 feet; thence continue Northwesterly along the North right of way line of Townsend Road and along said curve through a central angle of 59°54'10", a distance of 125.46 feet to a point of tangency; thence run N30°19'38"W, along the East right of way line of a vacated right of way per ORB 3111, Page 2265 of said Public Records, a distance of 1429.74 feet; thence run S89°59'08"W, a distance of 420.81 feet to a point on the West right of way line of Interstate 95, said point also being the Southeast corner of lands described in ORB 4684, Page 2497 of said Public Records; thence run S30°14'41"E, along the West right of way line of Interstate 95, a distance of 1084.06 feet to a point on the Southeast corner of lands described as Parcel A in ORB 3734, Page 1960 of said Public Records; thence run S89°59'08"W, along the South line of said Parcel A, a distance of 506.99 feet to a point on the West line of the East ½ of the Southwest ¼ of Section 26; thence run S00°24'29"W, along the West line of the East ½ of the Southwest ¼ of Section 26, a distance of 1877.05 feet to a point on the North right of way line of State Road 520; thence run N89°59'08"E, along the North right of way line of State Road 520, a distance of 2941.04 feet to the Southeast corner of lands described as the East 100 feet of the West 300 feet of the South ¼ of the Southeast ¼ of the Southeast ¼ of Section 26; thence N00°24'29"E, along the East line of said East 100 feet, a distance of 293.00 feet to a point on the South line of lands described in ORB 4402, Page 3351 of said Public Records; thence run N89°27'49"E, along the South line of said lands and its easterly extension, a distance of 970.06 feet to a point on the Northeast corner of lands described in ORB 4197, Page 0994 of said Public Records, said point also being on the West right of way line of Cox Road; thence run S00°24'29"W, along the West right of way of Cox Road and its southerly extension, a distance of 301.83 feet; thence run N89°59'08"E a distance of 30.00 feet to a point on the East line of Section 26 and the West line of Section 25; thence continue N89°59'08"E, a distance of 33.00 to the Southwest corner of parcel 552 as described in ORB 2277, Page 2039 of said Public Records, said point being on the East right of way line of Cox Road and the Point of Beginning.

Containing 168 acres, more or less.

(36) *Ordinances 21-05, 07-06.*

The subject property is generally described as an area located in Section 22, Township 24 South, Range 35 East, Brevard County, Florida being A portion of lands as described in O.R. Book 4284, Page 2095, of the Public Records of Brevard County, Florida, and being more particularly described as follows:

Commence at the Northwest corner of said Section 22, Township 24 South, Range 35 East, Brevard County, Florida; thence South 00°14'39" West along the West line of said Section 22, a distance of 1,326.27 Feet to the Northwest corner of the South ½ of the Northwest ¼ of said Section 22; thence North 89°53'03" East along the North line of said South ½ of the Northwest ¼ of said Section 22, a distance of 2,648.99 Feet to the Point of Beginning; thence continue North 89°53'03" East along the North line of the South ½ of the Northeast ¼ of said Section 22, a distance of 113.22 Feet to a point on the West Right-of-Way of Interstate 95 (as shown on Florida Department of Transportation Map Section 70220-2402); thence South 30°19'50" East along the said West Right-of-Way line, a distance of 1,081.98 Feet to a point on the East line of the West ½ of the Southwest ¼ of the Northeast ¼ of Section 22; thence South 00°18'58" West along said East line, a distance of 390.07 Feet to the South line of said Northeast ¼ of Section 22; thence South 89°51'49" West along the said South line, a distance of 664.77 Feet to the center of Section 22; thence North 00°18'58" East along the West line of said West ½ of the

Southwest ¼ of the Northeast ¼ of Section 22, a distance of 1,325.32 Feet to the Point of Beginning.

Containing 14.30 Acres of land more or less.

(37) *Ordinance 08-06.*

The subject property is generally described as an area located in Section 22, Township 24 South, Range 35 East, Brevard County, Florida being more particularly described as follows:

Beginning at a point at the Southeast corner of the Southwest ¼ of Section 22, Township 24 South, Range 35 East; thence North 00 degrees 18 minutes 58 seconds East along the East line of said Southwest ¼ of Section 22, a distance of 1334.27 feet to a point on the South line of the North ½ of said Southwest ¼ of Section 22, said point being the *Point of Beginning;* thence North 89 degrees 57 minutes 48 seconds West, along said South line of the North ½ of the Southwest ¼ of Section 22, a distance of 2,570.62 feet to a point on the East right of way line Adamson Road; thence North 00 degrees 14 minutes 39 seconds East along said East right of way line of Adamson Road, a distance of 2,652.74 feet to a point on the North line of the Southwest ¼ of the Northwest ¼ of Section 22; thence North 89 degrees 53 minutes 03 seconds East along said North line of the Southwest ¼ of the Northwest ¼ of Section 22, a distance of 918.37 feet to point; thence South 00 degrees 16 minutes 16 seconds West, a distance of 1325.91 feet to a point on the South line of the Northwest ¼ of Section 22; thence North 89 degrees 51 minutes 49 seconds East, a distance of 330.92 feet to a point on the West line of the East ½ of the Northwest ¼ of Section 22; thence North 00 degrees 16 minutes 59 seconds East along said West line of the East ½ of the Northwest ¼ of Section 22, a distance of 2,651.59 feet to a point on the North line of Section 22; thence North 89 degrees 54 minutes 18 seconds East along said North line of Section 22, a distance of 701.30 feet to a point on the West right of way line of Interstate 95; thence southeasterly along said southerly right of way line, along an arc having a radius of 5,879.58 feet and a central angle of 06 degrees 34 minutes 07 seconds, a distance of 674.06 feet to a point marked by a 5/8 " Rod labeled "FDOT REF LB 7121"; thence South 30 degrees 19 minutes 50 seconds East along the West right of way line of Interstate 95, a distance of 616.74 feet to a point on the East line of the West ½ of Section 22; thence South 00 degrees 18 minutes 58 seconds West along said East line of the West ½ of Section 22, a distance of 2,851.53 feet to a point on the South line of the North ½ of the Southwest ¼ of Section 22, said point being the *Point of Beginning;*

Containing 178.60 acres, more or less.

(38) *Ordinance No. 01-2007.*

A parcel of land lying in Section 32, Township 24 South, Range 36 East, Brevard County, Florida, the same being all of Lots 3, 4, 5, 6 and 7 in PLAT OF HENDRY RESUBDIVISION, according to the plat thereof recorded in Plat Book 9 at Page 2 of the Public Records of Brevard County, Florida, the same more particularly described as follows:

Begin at the Northeast corner of said Lot 7 and run South along the West right of way line of PINEDA STREET for 250.00 feet to the Southeast corner of said Lot 3; thence run West along the South line of said Lot 3 for 225.00 feet to the Southwest corner of said Lot 3; thence run North along the West line of said Lots 3, 4, 5, 6 and 7 for 250.00 feet to a point on the South right of way line of FERN STREET; thence run East along said South right of way line for 225.00 feet to the Point of Beginning. Said Parcel contains 1.2913 acres more or less.

(39) *Ordinance No. 02-2007.*

A parcel of land lying in Section 30, Township 24 South, Range 36 East being more particularly described as follows:

Commence at the Northwest corner of said Section 30: thence S 00° 14' 07" W along the West line of said Section 30 (said west line also being the centerline of Range Road) a distance of 651.14 feet; thence S. 89° 45' 59" e a distance of 33 feet to a point on the Easterly right-of-way line of Range Road and the Northwest corner of the Subdivision Sabal Lake Estates, Unit One, per plat recorded in Plat Book 30, page 12, of the Public Records of Brevard County, Florida; thence N 89° 46' 45" E along the North line of said Sabal Lake Estates 758.16 feet to the intersection with the centerline of a 30 foot wide Florida Gas Transmission Easement as recorded in Official Records Book 506, Page 682 of said Public Records, said point also being the point of beginning of the herein described parcel; thence N 14° 33' 43" W along said centerline of Florida Gas Easement 701.69 feet to the North line of said Section 30; thence N 89° 55' 28" E along said North line of Section 30 a distance of 465.51 feet to the east line of a 50 foot wide drainage easement as recorded in Official Records Book 2823, Page 1966, of said Public Records; thence S 15° 04' 32" E along said East line of drainage easement 702.11 feet; thence S 89° 46' 45" W a distance of 471.70 feet to the Point of Beginning.

Containing 7.30 acres more or less.

(40) *Ordinance No. 14-2007.*

The East 300.00 feet of the West 600.00 feet of the South ½ of the South ½ of the Southeast ¼ of the Southeast ¼, except the right-of-way for State Road 520 in Section 26, Township 24 South, Range 35 East, Brevard County, Florida.

Less and Except the Following:

That certain parcel described in Official Records Book 1352 at Page 382, of the Public Records of Brevard County, Florida, said out parcel being more particularly described as follows:

Begin at the intersection of the West line of the East 300.00 feet of the West 600.00 feet of the South ½ of the South ½ of the Southeast ¼ of the Southeast ¼ of Section 26 with the North right of way line of State Road 520; thence run North along the West line of the East 300.00 feet of the West 600.00 feet for 125.00 feet; Thence run North 89 Degrees 41 minutes 06 seconds East 30.00 feet; thence run South 40 degrees 04 minutes 32 seconds East 6.50 feet; thence run North 89 degrees 41 minutes 06 seconds East 100.00 feet; thence run South 00 degrees 17 minutes 42 seconds West 120.0 feet to the north right of way line of State Road 520; thence run Westerly along said North right of way line for 134.15 feet to the Point of Beginning.

Containing 1.44 acres more or less.

(41) *Ordinance No. 15-2007.*

The Northeast One Quarter of the Northwest One Quarter of the Southeast One Quarter of Section 7, Township 24 South, Range 36 East, Brevard County, Florida, less the North 25.0 feet thereof, also less the Right-of-Way of Cidco Road as shown on the plat of CIDCO PARK recorded in Plat Book 22 at page 51 of the public records of Brevard County, Florida, also less that parcel described in Official Records Book 867, page 933 of the public records of Brevard County, Florida. The property described herein contains 7.018 acres more or less, and is also described as follows:

PARCEL 1

For a Point of Beginning, commence at the intersection of the South right-of-way line of Cidco Road and the East Line of said Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7, Township 24 South, Range 36 East, Brevard County, Florida; thence, for a first course, run South along the East line of said Northeast Quarter

of the Northwest Quarter of the Southeast Quarter of said Section 7 to the Southeast corner of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter; thence for a second course, run West along the South line of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7 to an intersection with the South right-of-way line of Cidco Road; thence, for a third course, run along the Southerly and Easterly right-of-way line of Cidco Road to the Point of Beginning of the property herein described; AND

PARCEL 2

A parcel of land lying 10 feet on either side of the following described centerline: Commence at a point on the West line of said Northeast Quarter of the Northwest Quarter of the Southeast Quarter of Section 7, Township 24 South, Range 36 East, Brevard County, Florida, South 00 degrees 16 minutes 20 seconds East 223.01 feet from the Northwest corner of said Northeast Quarter of the Northwest Quarter of the Southeast Quarter of Section 7, said point being on the center line of a 20 foot wide Railroad Right-of-Way and the Point of Beginning of the property herein conveyed; thence run along said center line, North 88 degrees 06 minutes 05 seconds East 143.00 feet to the Point of a curve to the right; thence run Southeasterly 57.20 feet along the arc of a 358.10 radius curve, thru a central angle of 09 degrees 09 minutes; thence Southeasterly 122.50 feet along the arc of a 358.10 radius curve, thru a central angle of 19 degrees 36 minutes to the Point of Tangency; thence run South 63 degrees 08 minutes East 55.00 feet, more or less, to the point of a curve to the left; thence run Southeasterly and Northeasterly 303.80 feet along the arc of a 358.10 foot radius curve, thru a central angle of 48 degrees 36 minutes 30 seconds East to a point, South 00 degrees 03 minutes 00 seconds West 314.00 feet, more or less, from the Northeast corner of the aforesaid Northeast Quarter of the Northwest Quarter of the Southeast Quarter, said point being on the center line of said 20 foot Right-of-Way and the end of this description, AND

PARCEL 3

Commence at the Southwest corner of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7, Township 24 South, Range 36 East, Brevard County, Florida, and run thence North 00 degrees 16 minutes 20 seconds West a distance of 430.02 feet to a point on the South line of a 20 foot wide Railroad Right-of-Way; thence run North 88 degrees 06 minutes 55 seconds East along the said Railroad Right-of-Way a distance of 143.28 feet to a Point of Curvature of a curve to the right having a radius of 348.10 feet; thence run along the arc of said curve to the right and the South line of said Railroad Right-of-Way thru a central angle of 09 degrees 29 minutes 15 seconds, an arc distance of 57.64 feet to the Point of Beginning; thence run South 00 degrees 16 minutes 20 seconds East a distance of 368.55 feet to a point on the North Right-of Way line of Cideo Road, said point being on the arc of a curve to the left having a radius of 261.48 feet; thence run Northeasterly along the arc of said curve to the left and the North Right-of-Way line of Cidco Road thru a central angle of 25 degrees 42 minutes 21 seconds, an arc distance of 117.31 feet to a Point of Tangency; thence run North 49 degrees 25 minutes 55 seconds East along the North Right-of-Way line of Cidco Road, a distance of 169.09 feet; thence run North 00 degrees 03 minutes 00 seconds East a distance of 117.42 feet to a point on the South line of a 20 foot Railroad Right-of-Way, said point being on a curve to the right having a radius of 368.10 feet; thence run Northwesterly along the arc of said curve to the right and along the aforesaid South line of a Railroad Right-of-Way thru a central angle of 12 degrees 10 minutes 20 seconds, an arc distance of 78.20 feet to a Point of Tangency; thence run North 63 degrees 08 minutes 00 seconds West along the South line of said Railroad Right-of-Way a distance of 55.00 feet to a Point of Curvature of a curve to the left having a radius of 348.10 feet; thence run Northwesterly along the arc of said curve to the left and the South line of said Railroad Right-of-Way thru a central angle

of 19 degrees 15 minutes 45 seconds, an arc distance of 117.02 feet to the Point of Beginning; AND

PARCEL 4

Commence at the Southwest corner of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7, Township 24 South, Range 36 East, Brevard County, Florida, and thence run North 00 degrees 16 minutes 20 seconds West a distance of 450.02 feet to a point on the North Right-of-Way line of a 20 foot Railroad Right-of-Way and the Point of Beginning; thence run North 88 degrees 06 minutes 55 seconds East along the said North Right-of-Way line of the 20 foot Railroad Right-of-Way a distance of 142.72 feet to a Point of Curvature of a curve to the right having a radius of 368.11 feet; thence run still along the North Right-of-Way line of the said 20 foot Railroad Right-of-Way along the arc of said curve to the right thru a central angle of 28 degrees 45 minutes 00 seconds an arc distance of 184.71 feet to a Point of Tangency; thence run still along the North line of the said 20 foot Railroad Right-of-Way South 63 degrees 08 minutes 00 seconds East a distance of 55.00 feet to a Point of Curvature of a curve to the left having a radius of 348.10 feet; thence run still along the North line of the said 20 foot Railroad Right-of-Way along the arc of said curve to the left thru a central angle of 49 degrees 04 minutes 36 seconds, an arc distance of 298.16 feet to a point on the East line of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7; thence run North 00 degrees 03 minutes 00 seconds East along the East line of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7, a distance of 281.54 feet; thence run South 88 degrees 04 minutes 53 seconds West, parallel to and 25 feet South, by right angle measurement, of the North line of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7, a distance of 660.56 feet to a point on the West line of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7; thence run South 00 degrees 16 minutes 20 seconds East along the West line of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7 a distance of 188.00 feet to a point on the North line of the aforesaid 20 foot Railroad Right-of-Way and the Point of Beginning; AND

PARCEL 5

Commence at the Southwest corner of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of said Section 7, Township 24 South, Range 36 East, Brevard County, Florida, and run thence North 00 degrees 16 minutes 20 seconds West a distance of 50.02 feet to a point on the North Right-of-Way line of Cidco Road; thence run North 88 degrees 06 minutes 55 seconds East along the said North Right-of-Way line of Cidco Road a distance of 142.26 feet to a Point of Curvature of a curve to the left having a radius of 261.48 feet; thence run still along the said North Right-of-Way line of Cidco Road along the arc of said curve to the left thru a central angle of 38 degrees 41 minutes 00 seconds, an arc distance of 176.54 feet to a Point of Tangancy; thence run North 49 degrees 25 minutes 55 seconds East, still along the said North Right-of-Way line of Cidco Road, a distance of 169.09 feet to the Point of Beginning; thence run North 49 degrees 25 minutes 55 seconds East along the said North Right-of-Way line of Cidco Road a distance of 120.31 feet to a Point of Curvature of a curve to the right having a radius of 311.48 feet; thence run still along the said North Right-of-Way line of Cidco Road along the arc of said curve to the right thru a central angle of 09 degrees 06 minutes 47 seconds, an arc distance of 49.54 feet to a Point of Intersection of the said North Right-of-Way line of Cidco Road and the South Right-of-Way line of a 20 foot Railroad Right-of-Way, said point being on a curve to the right having a radius of 368.10 feet and a tangent bearing of South 84 degrees 04 minutes 58 seconds West; thence run along the said South Right-of-Way line of the 20 foot Railroad Right-of-Way in a Westerly direction along the arc of said curve to the right thru a central angle of 20 degrees 36 minutes 42 seconds, an arc distance of

132.42 feet; thence run South 00 degrees 03 minutes 00 seconds West a distance of 117.42 feet to a point on the North Right-of-Way line of Cidco Road and the Point of Beginning.

(42) *Ordinance 05-2008.*

The subject property is generally located in Section 30, Township 24 South, Range 36 East, Brevard County, Florida, and being more particularly described as follows:

The Northeast ¼ of the Northwest and part of the Northwest ¼ as described in Deed Book 69, page 62, EXCEPT the North 600 feet of the Northeast ¼ of the Northwest ¼ PAR 251.

Containing 24.31 acres, more or less.

(43) *Ordinance No. 02-2012.*

The West ½ of the Southeast ¼ of the Northwest ¼ and the Northeast ¼ of the Southwest ¼ of Section 23, Township 24 South, Range 35 East, lying North of State Road No. 524, less the following described land: begin at the center of said Section 23 and run thence South 0 degrees 23'21" West, 654.11 feet to a point on the North Right of Way line of said State Road No. 524; thence South 53 degrees 28'51" West along said North Right of Way Line, 562.0 feet; thence North 43 degrees 27'41" West, 305.15 feet; thence North 0 degrees 23'46" West, 772.00 feet to a point on the North line of said Northeast ¼ of Southwest ¼; thence South 89 degrees 34'20" East along said North line, 660.68 feet to the Point of Beginning.

(44) *Ordinance No. 03-2012.*

Legal Description and Location Map A parcel of land lying in the Southeast ¼ of the Northeast ¼ of Section 30, Township 24 South, Range 36 East, and containing the parcels of land described in Official Records Books 1234, page 1044, 2008, page 973 and 2038, page 543 all lying in and being of the Public Records of Brevard County, Florida, said parcel being described as follows: commencing at the Southeast corner of said Southeast ¼ of the Northeast ¼ of said Section 30, thence s.89'12'02"w., along the south line of said Southeast ¼ of the Northeast ¼ of Section 30, a distance of 40.00 feet to a point lying on the West right-of-way line of Clearlake Road (an 80.00 foot wide right-of-way) and said point being the point of beginning of the parcel of land herein described; thence continue s.89'12'02"w., along said South line of the Southeast ¼ of the Northeast ¼ of Section 30, a distance of 959.35 feet to a point lying on the Southerly prolongation of the East line of the plat of Ackley Subdivision No. 3, as recorded in Plat Book 18, page 91 of the Public Records of Brevard County, Florida; thence n.00'27'00"w., along said East line of said plat of Ackley Subdivision No. 3, a distance of 700.01 feet to a point lying on the North line the South 700 feet of the West 350 feet of the East 1000 feet of said Southeast ¼ of the Northeast ¼ of Section 30; thence n.89'12'02"e., along said line, 339.87 feet to a point lying on the Southerly prolongation of the West line of the parcel of land described in Official Records Book 2008, page 973 of the Public Records of Brevard County, Florida; thence along said prolongation and the boundaries of said parcel of land, the following four courses and distances: thence n.00'22'16"w., 132.27 feet; thence n.89'17'44"e., 340 feet; thence s.00'22'16"e., 139.67 feet; thence s.89'34'04"w., 60.30 feet to the Northeast corner of block 1 as shown on the plat of Pinehurst Cemetery as recorded in Plat Book 8, page 23 of the Public Records of Brevard County, Florida; thence along the boundaries of said block 1, the following five courses and distances; thence s.00'25'56"e., 100.00 feet; thence n.89'34'04"e., 15.00 feet; thence s.00'25'56"e., 200.00 feet; thence s.89'34'04"w., 15.00 feet; thence s.00'25'56"e., 102.43 feet to a point lying on the North line of the South 290 feet of the East 650.00 feet of said Southeast ¼ of the Northeast ¼ of Section 30; thence n.89'12'02"e., along said line, 340.01 feet to a point lying on the aforesaid West right-of-way line of Clearlake Road; thence s.00'25'56"e., along said right-of-way line, 290.01 feet to the point of beginning.

Containing 13.33 acres more or less.

(45) *Laws of Fla., Ch. 2014-232*.

PINECREST CEMETERY

Part of the Southeast ¼ of the Northeast ¼ of Section 30, Township 24 South, Range 36 East, City of Cocoa, Brevard County, Florida: Begin on the East line of the Southeast ¼ of the Northeast ¼ of Section 30, Township 24 South, Range 36 East at a point which is 290.00 feet North of the Southeast corner thereof; thence due West 660.00 feet to a point; thence due North 400.00 feet to a point; thence due East 660.00 feet to a point on said East line of said Southeast ¼ of the Northeast ¼ of Section 30; thence due South along said East line of said Southeast ¼ of the Northeast ¼ of Section 30, 400.00 feet to the Point of Beginning. LESS AND EXCEPT land described in Official Records Book 421, Page 589 and Official Records Book 2038, Page 543, of the Public Records of Brevard County, Florida.

EVERGREEN MEMORIAL PARK

The South 15 acres of the South 30 acres of the West one-half of the Northwest quarter of Section 29, Township 24 South, Range 36 East, Brevard County, Florida. Less and except land recorded in Deed Book 265, Page 564 and Deed Book 351, Pages 547 and 549, Public Records of Brevard County, Florida.

(Ord. No. 8-89, § 1, 9-6-89; Ord. No. 14-89, § 1, 11-28-89; Ord. No. 6-94, § 1(Exh. A), 4-26-94; Ord. No. 12-94, §§ 1, 2,(Exh. A), 6-14-94; Ord. No. 12-97, §§ 1(Exh. A), 2, 8-12-97; Ord. No. 18-97, §§ 1(Exh.A), 2, 10-14-97; Ord. No. 16-98, §§ 1(Exh. A), 2, 7-14-98; Ord. No. 1-2000, §§ 1, 2, 1-11-2000; Ord. No. 2-2000, §§ 1, 2, 1-11-2000; Ord. No. 19-2000, § 2, 12-12-00; Ord. No. 14-2001, § 2, 11-13-01; Ord. No. 02-2002, § 2, 3-12-02; Ord. No. 03-2002, § 2, 3-12-02; Ord. No. 18-2002, § 2, 7-23-02; Ord. No. 6-03, § 2, 3-11-03; Ord. No. 7-03, § 2, 3-11-03; Ord. No. 8-03, § 2, 3-11-03; Ord. No. 9-03, § 2, 3-11-03; Ord. No. 10-03, § 2, 4-8-03; Ord. No. 13-03, § 2, 5-13-03; Ord. No. 14-03, § 2, 5-27-03; Ord. No. 15-03, § 2, 6-24-03; Ord. No. 16-03, § 2, 6-24-03; Ord. No. 57-03, § 2, 1-13-04; Ord. No. 8-04, § 2, 3-9-04; Ord. No. 11-04, § 3, 4-13-04; Ord. No. 17-04, § 2, 4-27-04; Ord. No. 31-04, § 2, 8-24-04; Ord. No. 03-05, § 2, 1-25-05; Ord. No. 04-05, § 2, 1-25-05; Ord. No. 05-05, § 2, 1-25-05; Ord. No. 08-05, § 2, 4-12-05; Ord. No. 16-05, § 2, 7-26-05; Ord. No. 17-05, § 2, 7-26-05; Ord. No. 18-05, § 2, 7-26-05; Ord. No. 21-05, § 2, 12-13-05; Ord. No. 01-06, § 2, 1-24-06; Ord. No. 02-06, § 2, 1-24-06; Ord. No. 03-06, § 2, 1-24-06; Ord. No. 04-2006, § 2, 2-28-2006; Ord. No. 07-06, § 4, 2-14-06; Ord. No. 08-06, § 4, 2-14-06; Ord. No. 01-2007, § 2, 1-23-07; Ord. No. 02-2007, § 2, 1-23-07; Ord. No. 14-2007, § 2, 5-22-2007; Ord. No. 15-2007, § 2, 5-22-07; Ord. No. 05-2008, § 2, 4-22-08; Ord. No. 02-2012, § 2(Exh. A), 5-8-2012; Ord. No. 03-2012, § 2(Exh. A), 5-8-2012; Laws of Fla. Ch. 2014-232, § 1.)

NOTICE OF HEARING TO ADOPT NON-AD VALOREM STORMWATER ASSESSMENT RATES

Notice is hereby given that the City Council of the City of Cocoa, Florida, will conduct a public hearings to consider adopting an annual non-ad valorem Stormwater assessment to pay a portion of annual stormwater costs related to the provision of Stormwater services, facilities and programs to properties within the City pursuant to Ordinance 10-2019 previously adopted by the City Council in 2019. Note: Upon adoption of the non-ad valorem assessment, the current stormwater fee currently on the City's water and sewer utility bill will be rescinded effective as of October 1, 2019 ("Fiscal Year 2020"), and will be replaced by the non-ad valorem assessment which will be included on the Brevard County property tax bill to be issued in November 2019.

The public hearings will be held on August 28, 2019 at 6:00 P.M. and September 11, 2019, at 6:00 PM or soon thereafter, at the Council Chambers, 65 Stone St., Cocoa, FL 32922, for the purpose of considering approval of the Preliminary and Final Assessment Resolutions and receiving public comment on the proposed assessment. The final decision on the assessment will be made by the City Council during the public hearings. If necessary, the City Council may continue the public hearings and the date and time for continuance shall be announced at the public hearing without further written notice of the continued hearing to the public. All affected property owners have a right to attend and speak at the hearing and to file written objections and/or comments with the City Council.

Copies of the above-referenced Ordinance, Resolutions, and the non-ad valorem assessment roll are on file with and may be viewed during normal business hours at the Office of the City Manager or at the Office of the City Clerk, both located at 65 Stone Street, Cocoa, FL 32922.

The total annual stormwater assessment revenue to be collected within the City for Fiscal Year 2020 is estimated to be $1,744,000. For the purpose of this non-ad valorem assessment, benefited parcels are all parcels within the City limits of the City of Cocoa except for properties with government ownership, public roads and rights-of-way, vacant parcels, railroad tracks, certain educational establishments, bona-fide agricultural operations, parcels with less than 400 square feet of impervious surface, and such other exempt properties determined by lawful action of the City Council. The amount of the annual stormwater assessment imposed against each property is based on an impervious area apportionment method whereby a portion of the City's annual stormwater budget is allocated to properties based upon the total impervious area of each individual parcel. For single family residential parcels (including up to three dwelling units), parcels will be placed in to one of three tiers based on the amount of impervious area measured on the individual parcel rounded down to the nearest hundred sq. ft. Tier 1 ranges from 400 - 2,300 sq. ft., Tier 2 ranges from 2,400 - 4,400 sq. ft., and Tier 3 is greater than 4,400 sq. ft. The assessment for each tier is presented in the table below. For non-single-family parcels, each parcel is assigned a number of Equivalent Residential Units (ERUs) that is calculated based on the measured amount of impervious area on the parcel rounded down to the nearest hundred sq. ft. divided by the ERU definition of 3,100 sq. ft. (which is the average impervious area of a single-family parcel. The annual fee assessed to each parcel is then determined by multiplying $110.71 (as presented in the table below), which represents the stormwater assessment per ERU, by the number of ERUs for each non single-family parcel.

FY 2020 Assessment Rates for Single Family Parcels (up to three units)			FY 2020 Assessment Rate for Non-Single Family Parcels
Tier 1: 400 – 2,300 sq. ft. of impervious area	Tier 2: 2,400 – 4,400 sq. ft. of impervious area	Tier 3: Greater than 4,400 sq. ft. of impervious area	
$71.96	$110.71	$192.64	$110.71 Per ERU

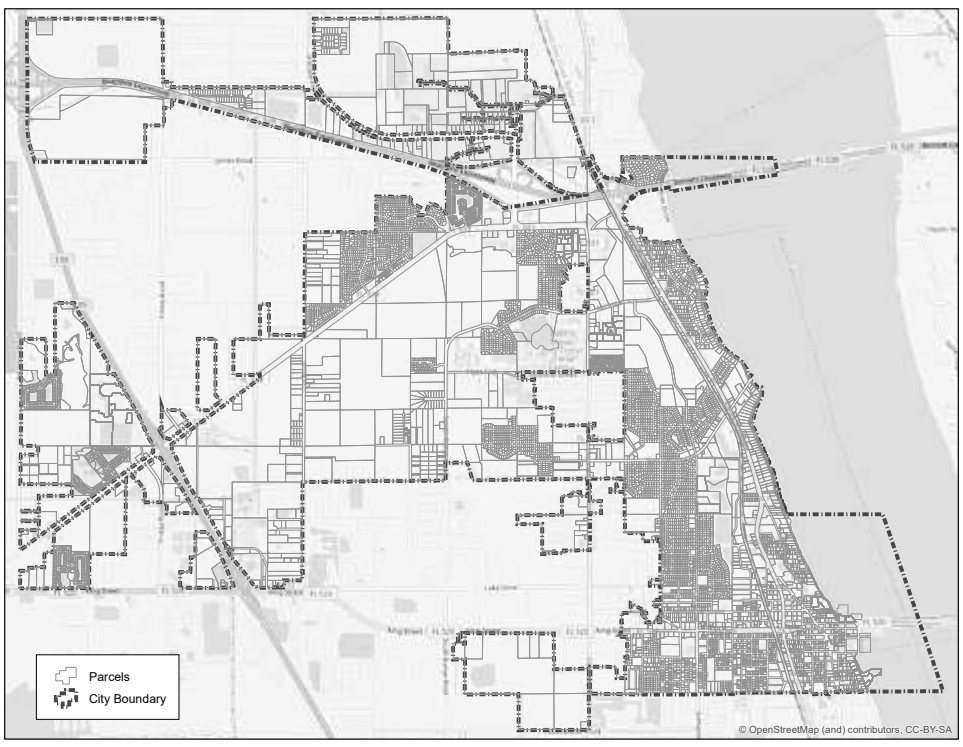
Note that parcels with less than 400 sq. ft. will not be assessed as the impact upon the stormwater system is de minimis.

For parcels that have constructed permitted, on-site facilities that meet the criteria outlined in Final Rate Resolution that mitigate the stormwater runoff from the parcel, a property owner may apply for a mitigation credit against the parcel's stormwater assessment. For those parcels that currently have a mitigation credit in the current stormwater user fee, those credits have been recognized in the assessment amount above.

The annual assessment will be increased by 9.0% in Fiscal Year 2021, 9.0% in Fiscal Year 2022 and 3.0% each year thereafter that the assessment is levied up to a maximum assessment of $102.09 for Tier 1, $157.06 for Tier 2, $273.29 for Tier 3 and $157.06 per ERU, and a maximum assessment rate of $157.06 per ERU for non-single family parcels that are not subject to the tiered assessment.

The non-ad valorem assessment is an annual assessment which will continue from year to year. For Fiscal Year 2020 and each year thereafter, the assessment will be collected by the Brevard County Tax Collector pursuant to the tax bill collection method authorized by Section 197.3632, Florida Statutes, commencing in November 2019. The annual assessment amount will include expenses incurred by the City in administering and collecting the assessment including fees imposed by the County property appraiser and tax collector and will be adjusted as necessary to account for any statutory discounts which are necessitated when employing the efficiencies of collecting the assessments annually on the same bill as property taxes. Florida law provides that failure to pay the assessment will cause a tax certificate to be issued against the assessed property which may result in a loss of title. Annual adjustments to this assessment, including increases, may be implemented and the maximum assessment rates presented above are authorized to provide sufficient future revenues (in addition to other legally available funds) for the City to provide stormwater services, facilities and programs at appropriate levels of service.

Unless proper steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the hearing on September 11, 2019 (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented. If a person decides to appeal any decision made by the City Council with respect to any matter considered at the hearing, he or she will need a record of the proceedings and, for such purpose, 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 to be based. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk's Office at (321) 433-8488 at least two days prior to the date of the hearing. If you have any questions, please contact, out Stormwater Division at (321-433-8770) or stormwater@cocoafl.org, Monday through Friday between 8:00 a.m. and 4:00 p.m.



CITY COUNCIL
CITY OF COCOA, FLORIDA

FT-0000611967

☐ PROOF O.K. BY: _____ ☐ O.K. WITH CORRECTIONS BY:_____

PLEASE READ CAREFULLY • SUBMIT CORRECTIONS ONLINE

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Legislation Details (With Text)

File #:	19-406	**Version:**	1	**Name:**	
Type:	Resolution			**Status:**	City Business
File created:	8/14/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Approve a Budget Resolution amending the Fiscal Year 2019 Budget to transfer funds for purchase of two 20 ton Trane Condensing Units at City Hall as unbudgeted capital equipment. (Public Works Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Budget Resolution FY 2019.pdf 081519 - Precision Air Conditioning - 2 each 20 ton Trane - $34,695.00.pdf 081319 - Trane U.S. Inc. - 2 each 20 ton Trane - $64,622.00.pdf 081419 - Dial Plumbing and Air Conditioning - 2 each 20 ton Trane - No Quote.pdf BAF 19-115 -PW- 2 City Hall Condensing Units (8-28-19 Agenda 19-406.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 14, 2019
Agenda Date: August 28, 2019
Prepared By: Gary Palmer Facilities Manager
Frank Mirabito, Project Manager
Through: Everett J. Wegerif, P.E., Public Works Director, City Engineer
Requested Action:
Approve a Budget Resolution amending the Fiscal Year 2019 Budget to transfer funds for purchase of two 20 ton Trane Condensing Units at City Hall as unbudgeted capital equipment.

BACKGROUND:

Currently, each of the 3 floors of City Hall is serviced by two units. Over the course of this summer, one 20-ton Trane condensing unit has failed (Third Floor) and a second one is expected to fail shortly (Second Floor). These units are ten years old and it is expected that major repairs or replacement will be necessary. The third floor is currently only operating with one unit, if it fails portable cooling may be necessary (impacting access to City Hall) in order to maintain operations. All the current units that service city hall are not under warranty. In this case, it is recommended that two units be replaced this current year and the remaining units are planned for in future budget years. The new units will come with a 10 year warranty. This purchase will insure the continued operations of the second and third floors of City Hall.

City staff will work with the contractor to complete the replacement during non-business hours. Due

to the location a crane will be necessary and the majority of access and parking within City Hall will be unavailable.

STRATEGIC PLAN CONNECTION:

City Hall hosts a wide range of necessary customer services. City Hall must have functioning climate control to provide these services.

BUDGETARY IMPACT:

Budgeted	No
If not budgeted, is amendment/transfer attached?	Yes
Budget Adjustment Form # 19-115	

Amount Requested	$34,695
Account Number	001-3560-519.64-00
Account Name	Machinery and Equipment - Capital

Source of Funds:
____State Revolving Loan
____ Other Loan Source:_
____ Grant Source:_
____ Bond:_
____ Reserves Source:_
__X__ Transfer Acct #:___($20,000 - 001-3560-519.12-00)
($8,000 - 001-3560-519.43-00)
($7,000 - 001-3560-519.46-02)

PREVIOUS ACTION:

N/A

RECOMMENDED MOTION:

Approve a Budget Resolution amending the Fiscal Year 2019 Budget to transfer funds for purchase of two each 20 ton Trane Condensing Units at City Hall as unbudgeted capital equipment.

RESOLUTION NO. 2019-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, AMENDING THE CITY OF COCOA BUDGET FOR FISCAL YEAR 2019; PROVIDING FOR THE REPEAL OF PRIOR INCONSISTENT RESOLUTIONS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Cocoa adopted the final budget for the fiscal year commencing on October 1, 2018, and ending on September 30, 2019, at a Special meeting held on September 13, 2018; and

WHEREAS, in accordance with Article XII, Section 5 of the City of Cocoa Charter, whereby the Council may, at any time by resolution, transfer any unused and unencumbered appropriation or portion thereof from one office or department to another; and

WHEREAS, the City Council deems it to be in the best interest of the City of Cocoa to amend its budget as provided in this resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, as follows:

SECTION 1. The 2018-2019 fiscal year budget shall be amended as detailed in the attached sheets.

SECTION 2. All prior resolutions or prior resolutions inconsistent with this resolution are hereby repealed to the extent of the conflict.

SECTION 3. This resolution shall become effective immediately upon its adoption by the City Council of the City of Cocoa, Florida.

ADOPTED by the City Council of the City of Cocoa, Florida, in a regular meeting assembled on the 28th, day of August 2019.

_____
Jake Williams, Jr., Mayor

ATTEST:

_____
Carie Shealy, MMC, City Clerk

Precision Air Conditioning

Of Brevard, Inc.
505 Canaveral Groves Blvd
Cocoa, Fl. 32926
License #CM-C1249533

8/15/19

Attn: James Wines E-Mail:

Ref: Cocoa City Hall Condenser Replacement

Subj.: Scope of Work

Precision Air Conditioning of Brevard, Inc. will provide all labor, equipment and installation of the Air Conditioning and Mechanical System(s) as noted below:

I. Clarifications:

a. Remove Refrigerant from Existing Trane Condensers. Save for reuse.
b. Remove (2) 20 ton Trane Condensers using 90 ton Crane.
c. Provide and install (2) New Condensers.
d. Trane Condensers to have New Restrained Isolators.
e. All Condensers to have Coastal Coatings.
f. No Temporary Air has been included.
g. No Permit Fees, Badging Fees, Tap Fees and/or Deposits are included in this price
h. Quoted price based on Weekend hours.

The Trane Condensers have a 10 year compressor warranty and a 5 year warranty on remaining parts and labor.

II. Total Price $34,695.00

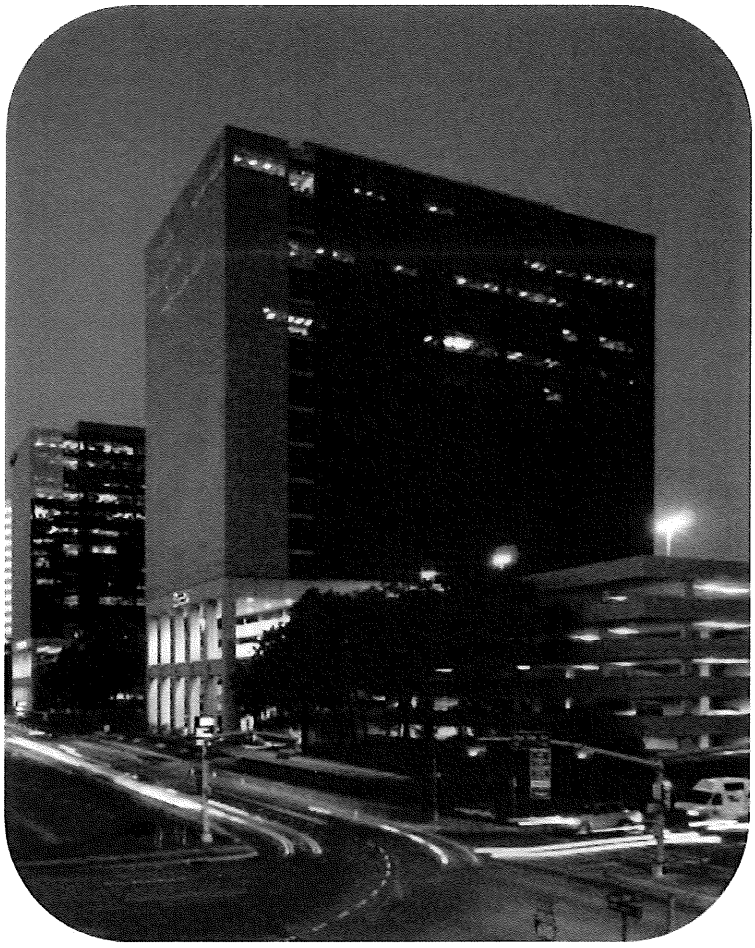
The above 2 condensers are the last 2 remaining of that model number and have a 5 day lead time..

Sincerely,
Precision Air Conditioning of Brevard, Inc.

Bill Fenton
Operations Manager

505 Canaveral Groves Blvd. • Cocoa, FL 32926 • (321) 617-6902 • (321) 617-6904 (fax) • www.acdecision.com

Trane Turnkey Proposal



Turnkey Proposal For:
Gary Palmer
Facility Manager
City of Cocoa

Local Trane Office:
Trane U.S. Inc.
2301 Lucien Way, Suite 430
Maitland, FL 32751

Local Trane Representative:
Jason Aki
Account Manager – Team Leader
Office: (407) 660-1111
Cell: (321) 228-8865

Job Name:
City Hall Condensing Unit Replacement Options

Proposal ID:
2730212

Date:
August 13, 2019

TRANE TURNKEY PROPOSAL

Executive Summary

Trane is pleased to present a solution to help the City of Cocoa reach its performance goals and objectives. This proposed project for City Hall will enhance your operation by helping you to optimize your resources and provide newer, more efficient equipment.

We appreciate the effort from the City of Cocoa team to assist in the HVAC system analysis and business discussions. Because of your efforts, we were able to develop a proposal that offers turnkey retrofit service solutions to your specific concerns, based on Trane system knowledge and application expertise.

As your partner, Trane is committed to providing turnkey retrofit services to help achieve a comfortable environment for those who occupy the facility. For the people who own, manage and maintain the site, Trane is committed to providing reliable HVAC systems and products that improve performance.

Some key features and benefits the City should expect from this project are highlighted below.

- Trane Safety Plans in Place
- Trane Installation Team Oversight
- Turnkey Project
- Newer, More Efficient Equipment with Factory Warranties

Trane appreciates the opportunity to earn your business. We look forward to partnering with you for your turnkey retrofit service needs.

WE VALUE THE CONFIDENCE YOU HAVE PLACED IN TRANE AND LOOK FORWARD TO PARTNERING WITH YOU.

Jason Aki
Account Manager – Team Leader
Trane U.S. Inc.

TRANE
Building Services

Prepared For:
Gary Palmer
Facility Manager
City of Cocoa

Date:
August 13, 2019

Job Name:
City Hall Condensing Unit Replacement Options

Proposal Number:
2730212

Delivery Terms:
Freight Allowed and Prepaid – F.O.B Factory

Payment Terms:
Net 30

Proposal Expiration Date:
30 Days

Scope of Work

"Scope of Work" and notations within are based on the following negotiated scope of work based on the site surveys performed in August 2019.

Turnkey Installation of HVAC Equipment

- One (1) 20-ton Trane Odyssey Condensing Unit
  - DX Cooling
  - R-410A refrigerant
  - 460 Volt-60 Hertz-3 Phase
  - Manifold compressors / single-circuit
  - Complete Coat corrosion protection condenser coil
  - Low ambient modulating
  - Service valve accessory kit
  - New unit includes 5-Year Parts and Labor and 10-year Compressor Parts Warranties

Mechanical Installation

- Reclaim R-410A refrigerant from existing condensing unit using EPA approved techniques.
- Disconnect high voltage electrical service from existing condensing unit.
- Disconnect refrigerant piping and remove existing condensing unit from roof.
- Provide and set new condensing unit on existing roof stand.
- Provide and install new copper refrigerant lines as necessary.
- Provide and install new filter driers and liquid line sight glasses.
- Connect new condensing unit to existing electrical service.
- Pressure test refrigerant piping to ensure leak-free installation.
- Evacuate refrigerant system to proper micron levels.
- Provide all necessary R-410A refrigerant to properly charge new system.
- Re-insulate all locations disturbed during current scope of work. New insulation will match existing thickness and materials.
- Provide crane and rigging as necessary.
- Perform factory startup and checkout to ensure proper system operation.
- Provide mechanical permit.
- Provide all necessary trash and equipment disposal for the project.

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Confidential and Proprietary Information of Trane U.S. Inc.

Proposal Notes/ Clarifications

- Equipment Order Release and Services rendered are dependent on receipt of PO/Subcontract and credit approval.
- Trane will not perform any work if working conditions could endanger or put at risk the safety of our employees or subcontractors.
- Asbestos or hazardous material abatement removal, if necessary, shall be performed by customer.
- All work to be done during normal Trane business hours, 8am to 5pm, Monday thru Friday.
- Engineered drawings are not included.
- No fire alarm or sprinkler work is included.
- Building automation system work is not included.
- Any and all work not specified is not included, and is to be considered extra.
- Liquidated and consequential damages are not included.
- Bonding is not included.

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Confidential and Proprietary Information of Trane U.S. Inc.

Pricing and Acceptance

Investment

Straight-Time Options:

One Condensing Unit	**$33,492**
Two Condensing Units	**$59,615**
Three Condensing Units	**$85,737**

Overtime Options:

One Condensing Unit	**$36,154**
Two Condensing Units	**$64,622**
Three Condensing Units	**$93,090**

** Above pricing is contingent upon one, two or three condensing units be replaced at one time due to the crane being onsite one time during the project.*

Thank you for this opportunity to be of service. If you have any questions or need any additional information, we can be reached by calling the Trane office at (407) 660-1111.

Sincerely,

Jason Aki
Account Manager – Team Leader
Trane U.S. Inc.

Submitted By: **Jason Aki**	Office: (407) 660-1111 Cell: (321) 228-8865 Proposal Date: August 13, 2019
CUSTOMER ACCEPTANCE City of Cocoa	**TRANE ACCEPTANCE** Trane U.S. Inc.
Authorized Representative	Authorized Representative
Printed Name	Printed Name
Title	Title
Purchase Order Acceptance Date:	Signature Date

This proposal is subject to Customer's acceptance of the attached Trane Terms and Conditions (Installation). Proposal is valid 30 days from August 13, 2019.

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Confidential and Proprietary Information of Trane U.S. Inc.

TRANE
Building Services

TERMS AND CONDITIONS – COMMERCIAL INSTALLATION
"Company" shall mean Trane U.S. Inc.

1. Acceptance; Agreement. These terms and conditions are an integral part of Company's offer and form the basis of any agreement (the "Agreement") resulting from Company's proposal (the "Proposal") for the commercial goods and/or services described (the "Work"). COMPANY'S TERMS AND CONDITIONS ARE SUBJECT TO PERIODIC CHANGE OR AMENDMENT. The Proposal is subject to acceptance in writing by the party to whom this offer is made or an authorized agent ("Customer") delivered to Company within 30 days from the date of the Proposal. If Customer accepts the Proposal by placing an order, without the addition of any other terms and conditions of sale or any other modification, Customer's order shall be deemed acceptance of the Proposal subject to Company's terms and conditions. If Customer's order is expressly conditioned upon Company's acceptance or assent to terms and/or conditions other than those expressed herein, return of such order by Company with Company's terms and conditions attached or referenced serves as Company's notice of objection to Customer's terms and as Company's counter-offer to provide Work in accordance with the Proposal and the Company terms and conditions. If Customer does not reject or object in writing to Company within 10 days, Company's counter-offer will be deemed accepted. Customer's acceptance of the Work by Company will in any event constitute an acceptance by Customer of Company's terms and conditions. This Agreement is subject to credit approval by Company. Upon disapproval of credit, Company may delay or suspend performance or, at its option, renegotiate prices and/or terms and conditions with Customer. If Company and Customer are unable to agree on such revisions, this Agreement shall be cancelled without any liability, other than Customer's obligation to pay for Work rendered by Company to the date of cancellation.

2. Pricing and Taxes. Unless otherwise noted, the price in the Proposal includes standard ground transportation and, if required by law, all sales, consumer, use and similar taxes legally enacted as of the date hereof for equipment and material installed by Company. Tax exemption is contingent upon Customer furnishing appropriate certificates evidencing Customer's tax exempt status. Company shall charge Customer additional costs for bonds agreed to be provided. Equipment sold on an uninstalled basis and any taxable labor/labor do not include sales tax and taxes will be added. Following acceptance without addition of any other terms and condition of sale or any other modification by Customer, the prices stated are firm provided that notification of release for immediate production and shipment is received at the factory not later than 3 months from order receipt. If such release is received later than 3 months from order receipt date, prices will be increased a straight 1% (not compounded) for each one-month period (or part thereof) beyond the 3 month firm price period up to the date of receipt of such release. If such release is not received within 6 months after date of order receipt, the prices are subject to renegotiation, or at Company's option, the order will be cancelled. Any delay in shipment caused by Customer's actions will subject prices to increase equal to the percentage increase in list prices during that period of delay and Company may charge Customer with incurred storage fees.

3. Exclusions from Work. Company's obligation is limited to the Work as defined and does not include any modifications to the Work site under the Americans With Disabilities Act or any other law or building code(s). In no event shall Company be required to perform work Company reasonably believes is outside of the defined Work without a written change order signed by Customer and Company.

4. Performance. Company shall perform the Work in accordance with industry standards generally applicable in the area under similar circumstances as of the time Company performs the Work Company may refuse to perform any Work where working conditions could endanger property or put at risk the safety of persons. Unless otherwise agreed to by Customer and Company, at Customer's expense and before the Work begins, Customer will provide any necessary access platforms, catwalks to safely perform the Work in compliance with OSHA or state industrial safety regulations.

5. Payment. Customer shall pay Company's invoices within net 30 days of invoice date. Company may invoice Customer for all equipment or material furnished, whether delivered to the installation site or to an off-site storage facility and for all Work performed on-site or off-site. No retention shall be withheld from any payments except as expressly agreed in writing by Company, in which case retention shall be reduced per the contract documents and released no later than the date of substantial completion. Under no circumstances shall any retention be withheld for the equipment portion of the order. If payment is not received as required, Company may suspend performance and the time for completion shall be extended for a reasonable period of time not less than the period of suspension. Customer shall be liable to Company for all reasonable shutdown, standby and start-up costs as a result of the suspension. Company reserves the right to add to any account outstanding for more than 30 days a service charge equal to 1.5% of the principal amount due at the end of each month. Customer shall pay all costs (including attorneys' fees) incurred by Company in attempting to collect amounts due and otherwise enforcing these terms and conditions. If requested, Company will provide appropriate lien waivers upon receipt of payment. Customer agrees that, unless Customer makes payment in advance, Company will have a purchase money security interest in all equipment from Company to secure payment in full of all amounts due Company and its order for the equipment, together with these terms and conditions, form a security agreement. Customer shall keep the equipment free of all taxes and encumbrances, shall not remove the equipment from its original installation point and shall not assign or transfer any interest in the equipment until all payments due Company have been made.

6. Time for Completion. Except to the extent otherwise expressly agreed in writing signed by an authorized representative of Company, all dates provided by Company or its representatives for commencement, progress or completion are estimates only. While Company shall use commercially reasonable efforts to meet such estimated dates, Company shall not be responsible for any damages for its failure to do so.

7. Access. Company and its subcontractors shall be provided access to the Work site during regular business hours, or such other hours as may be requested by Company and acceptable to the Work site' owner or tenant for the performance of the Work, including sufficient areas for staging, mobilization, and storage. Company's access to correct any emergency condition shall not be restricted. Customer grants to Company the right to remotely connect (via phone modem, internet or other agreed upon means) to Customer's building automation system (BAS) and or HVAC equipment to view, extract, or otherwise collect and retain data from the BAS, HVAC equipment, or other building systems, and to diagnose and remotely make repairs at Customer's request.

8. Completion. Notwithstanding any other term or condition herein, when Company informs Customer that the Work has been completed, Customer shall inspect the Work in the presence of Company's representative, and Customer shall either (a) accept the Work in its entirety in writing, or (b) accept the Work in part and specifically identify, in writing, any exception items. Customer agrees to re-inspect any and all excepted items as soon as Company informs Customer that all such excepted items have been completed. The initial acceptance inspection shall take place within ten (10) days from the date when Company informs Customer that the Work has been completed. Any subsequent re-inspection of excepted items shall take place within five (5) days from the date when Company informs Customer that the excepted items have been completed. Customer's failure to cooperate and complete any of said inspections within the required time limits shall constitute complete acceptance of the Work as of ten (10) days from date when Company informs Customer that the Work, or the excepted items, if applicable, has/have been completed.

9. Permits and Governmental Fees. Company shall secure (with Customer's assistance) and pay for building and other permits and governmental fees, licenses, and inspections necessary for proper performance and completion of the Work which are legally required when bids from Company's subcontractors are received, negotiations thereon concluded, or the effective date of a relevant Change Order, whichever is later. Customer is responsible for necessary approvals, easements, assessments and charges for construction, use or occupancy of permanent structures or for permanent changes to existing facilities. If the cost of such permits, fees, licenses and inspections are not included in the Proposal, Company will invoice Customer for such costs.

10. Utilities During Construction. Customer shall provide without charge to Company all water, heat, and utilities required for performance of the Work.

11. Concealed or Unknown Conditions. In the performance of the Work, if Company encounters conditions at the Work site that are (i) subsurface or otherwise concealed physical conditions that differ materially from those indicated on drawings expressly incorporated herein or (ii) unknown physical conditions of an unusual nature that differ materially from those conditions ordinarily found to exist and generally recognized as inherent in construction activities of the type and character as the Work, Company shall notify Customer of such conditions promptly, prior to significantly disturbing same. If such conditions differ materially and cause an increase in Company's cost of, or time required for, performance of any part of the Work, Company shall be entitled to, and Customer shall consent by Change Order to, an equitable adjustment in the Contract Price, contract time, or both.

12. Pre-Existing Conditions. Company is not liable for any claims, damages, losses, or expenses, arising from or related to conditions that existed in, on, or upon the Work site before the Commencement Date of this Agreement ("Pre-Existing Conditions"), including, without limitation, damages, losses, or expenses involving Pre-Existing Conditions of building envelope issues, mechanical issues, plumbing issues, and/or indoor air quality issues involving mold/mould and/or

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fungi. Company also is not liable for any claims, damages, losses, or expenses, arising from or related to work done by or services provided by individuals or entities that are not employed by or hired by Company.

13. Asbestos and Hazardous Materials. Company's Work and other services in connection with this Agreement expressly excludes any identification, abatement, cleanup, control, disposal, removal or other work connected with asbestos, polychlorinated biphenyl ("PCB"), or other hazardous materials (hereinafter, collectively, "Hazardous Materials"). Customer warrants and represents that, except as set forth in a writing signed by Company, there are no Hazardous Materials on the Work site that will in any way affect Company's Work and Customer has disclosed to Company the existence and location of any Hazardous Materials in all areas within which Company will be performing the Work. Should Company become aware of or suspect the presence of Hazardous Materials, Company may immediately stop work in the affected area and shall notify Customer. Customer will be exclusively responsible for taking any and all action necessary to correct the condition in accordance with all applicable laws and regulations. Customer shall be exclusively responsible for and, to the fullest extent permitted by law, shall indemnify and hold harmless Company (including its employees, agents and subcontractors) from and against any loss, claim, liability, fees, penalties, injury (including death) or liability of any nature, and the payment thereof arising out of or relating to any Hazardous Materials on or about the Work site, not brought onto the Work site by Company. Company shall be required to resume performance of the Work in the affected area only in the absence of Hazardous Materials or when the affected area has been rendered harmless. In no event shall Company be obligated to transport or handle Hazardous Materials, provide any notices to any governmental agency, or examine the Work site for the presence of Hazardous Materials.

14. Force Majeure. Company's duty to perform under this Agreement is contingent upon the non-occurrence of an Event of Force Majeure. If Company shall be unable to carry out any material obligation under this Agreement due to an Event of Force Majeure, this Agreement shall at Company's election (i) remain in effect but Company's obligations shall be suspended until the uncontrollable event terminates or (ii) be terminated upon 10 days notice to Customer, in which event Customer shall pay Company for all parts of the Work furnished to the date of termination. An "Event of Force Majeure" shall mean any cause or event beyond the control of Company. Without limiting the foregoing, "Event of Force Majeure" includes: acts of God; acts of terrorism, war or the public enemy; flood; earthquake; tornado; storm; fire; civil disobedience; pandemic insurrections; riots; labor/labour disputes; labor/labour or material shortages; sabotage; restraint by court order or public authority (whether valid or invalid), and action or non-action by or inability to obtain or keep in force the necessary governmental authorizations, permits, licenses, certificates or approvals if not caused by Company; and the requirements of any applicable government in any manner that diverts either the material or the finished product to the direct or indirect benefit of the government.

15. Customer's Breach. Each of the following events or conditions shall constitute a breach by Customer and shall give Company the right, without an election of remedies, to terminate this Agreement or suspend performance by delivery of written notice: (1) Any failure by Customer to pay amounts when due; or (2) any general assignment by Customer for the benefit of its creditors, or if Customer becomes bankrupt or insolvent or takes the benefit of any statute for bankrupt or insolvent debtors, or makes or proposes to make any proposal or arrangement with creditors, or if any steps are taken for the winding up or other termination of Customer or the liquidation of its assets, or if a trustee, receiver, or similar person is appointed over any of the assets or interests of Customer; (3) Any representation or warranty furnished by Customer in this Agreement is false or misleading in any material respect when made; or (4) Any failure by Customer to perform or comply with any material provision of this Agreement. Customer shall be liable to Company for all Work furnished to date and all damages sustained by Company (including lost profit and overhead).

16. Indemnity. To the fullest extent permitted by law, Company and Customer shall indemnify, defend and hold harmless each other from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or tangible personal property, to the extent caused by the negligence or misconduct of their respective employees or other authorized agents in connection with their activities within the scope of this Agreement. Neither party shall indemnify the other against claims, damages, expenses or liabilities to the extent attributable to the acts or omissions of the other party. If the parties are both at fault, the obligation to indemnify shall be proportional to their relative fault. The duty to indemnify will continue in full force and effect, notwithstanding the expiration or early termination hereof, with respect to any claims based on facts or conditions that occurred prior to expiration or termination.

17. Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT CONSEQUENTIAL, OR PUNITIVE OR EXEMPLARY DAMAGES (INCLUDING WITHOUT LIMITATION BUSINESS INTERRUPTION, LOST DATA, LOST REVENUE, LOST PROFITS, LOST DOLLAR SAVINGS, OR LOST ENERGY USE SAVINGS, EVEN IF A PARTY HAS BEEN ADVISED OF SUCH POSSIBLE DAMAGES OR IF SAME WERE REASONABLY FORESEEABLE AND REGARDLESS OF WHETHER THE CAUSE OF ACTION IS FRAMED IN CONTRACT, NEGLIGENCE, ANY OTHER TORT, WARRANTY, STRICT LIABILITY, OR PRODUCT LIABILITY). In no event will Company's liability in connection with the provision of products or services or otherwise under this Agreement exceed the entire amount paid to Company by Customer under this Agreement.

18. Patent Indemnity. Company shall protect and indemnify Customer from and against all claims, damages, judgments and loss arising from infringement or alleged infringement of any United States patent by any of the goods manufactured by Company and delivered hereunder, provided that in the event of suit or threat of suit for patent infringement, Company shall promptly be notified and given full opportunity to negotiate a settlement. Company does not warrant against infringement by reason of Customer's design of the articles or the use thereof in combination with other materials or in the operation of any process. In the event of litigation, Customer agrees to reasonably cooperate with Company. In connection with any proceeding under the provisions of this Section, all parties concerned shall be entitled to be represented by counsel at their own expense.

19. Limited Warranty. Company warrants for a period of 12 months from the date of substantial completion ("Warranty Period") commercial equipment manufactured and installed by Company against failure due to defects in material and manufacture and that the labor/labour furnished is warranted to have been properly performed (the "Limited Warranty"). Trane equipment sold on an uninstalled basis is warranted in accordance with Company's standard warranty for supplied equipment. **Product manufactured by Company that includes required startup and is sold in North America will not be warranted by Company unless Company performs the product start-up**. Substantial completion shall be the earlier of the date that the Work is sufficiently complete so that the Work can be utilized for its intended use or the date that Customer receives beneficial use of the Work. If such defect is discovered within the Warranty Period, Company will correct the defect or furnish replacement equipment (or, at its option, parts therefor) and, if said equipment was installed pursuant hereto, labor/labour associated with the replacement of parts or equipment not conforming to this Limited Warranty. Defects must be reported to Company within the Warranty Period. Exclusions from this Limited Warranty include damage or failure arising from: wear and tear; corrosion, erosion, deterioration; Customer's failure to follow the Company-provided maintenance plan; refrigerant not supplied by Trane; and modifications made by others to Company's equipment. Company shall not be obligated to pay for the cost of lost refrigerant. Notwithstanding the foregoing, all warranties provided herein terminate upon termination or cancellation of this Agreement. No warranty liability whatsoever shall attach to Company until the Work has been paid for in full and then said liability shall be limited to the lesser of Company's cost to correct the defective Work and/or the purchase price of the equipment shown to be defective. Equipment, material and/or parts that are not manufactured by Company are not warranted by Company and have such warranties as may be extended by the respective manufacturer. **THE WARRANTY AND LIABILITY SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHERS ARISING FROM COURSE OF DEALING OR TRADE. COMPANY MAKES NO REPRESENTATION OR WARRANTY EXPRESS OR IMPLIED REGARDING PREVENTION BY THE WORK, OR ANY COMPONENT THEREOF, OF MOLD/MOULD, FUNGUS, BACTERIA, MICROBIAL GROWTH, OR ANY OTHER CONTAMINATES. COMPANY SPECIFICALLY DISCLAIMS ANY LIABILITY IF THE WORK OR ANY COMPONENT THEREOF IS USED TO PREVENT OR INHIBIT THE GROWTH OF SUCH MATERIALS.**

20. Insurance. Company agrees to maintain the following insurance while the Work is being performed with limits not less than shown below and will, upon request from Customer, provide a Certificate of evidencing the following coverage:

Commercial General Liability	$2,000,000 per occurrence
Automobile Liability	$2,000,000 CSL
Workers Compensation	Statutory Limits

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If Customer has requested to be named as an additional insured under Company's insurance policy, Company will do so but only subject to Company's manuscript additional insured endorsement under its primary Commercial General Liability policies. In no event does Company waive its right of subrogation.

21. Commencement of Statutory Limitation Period. Except as to warranty claims, as may be applicable, any applicable statutes of limitation for acts or failures to act shall commence to run, and any alleged cause of action stemming therefrom shall be deemed to have accrued, in any and all events not later than the last date that Company or its subcontractors physically performed work on the project site.

22. General. Except as provided below, to the maximum extent provided by law, this Agreement is made and shall be interpreted and enforced in accordance with the laws of the state or province in which the Work is performed, without regard to choice of law principles which might otherwise call for the application of a different state's or province's law. Any dispute arising under or relating to this Agreement that is not disposed of by agreement shall be decided by litigation in a court of competent jurisdiction located in the state or province in which the Work is performed. Any action or suit arising out of or related to this Agreement must be commenced within one year after the cause of action has accrued. To the extent the Work site is owned and/or operated by any agency of the Federal Government, determination of any substantive issue of law shall be according to the Federal common law of Government contracts as enunciated and applied by Federal judicial bodies and boards of contract appeals of the Federal Government. This Agreement contains all of the agreements, representations and understandings of the parties and supersedes all previous understandings, commitments or agreements, oral or written, related to the subject matter hereof. This Agreement may not be amended, modified or terminated except by a writing signed by the parties hereto. No documents shall be incorporated herein by reference except to the extent Company is a signatory thereon. If any term or condition of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, all other terms and conditions of this Agreement will nevertheless remain in full force and effect as long as the economic or legal substance of the transaction contemplated hereby is not affected in a manner adverse to any party hereto. Customer may not assign, transfer, or convey this Agreement, or any part hereof, or its right, title or interest herein, without the written consent of the Company. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of Customer's permitted successors and assigns. This Agreement may be executed in several counterparts, each of which when executed shall be deemed to be an original, but all together shall constitute but one and the same Agreement. A fully executed facsimile copy hereof or the several counterparts shall suffice as an original.

23. Equal Employment Opportunity/Affirmative Action Clause. Company is a federal contractor that complies fully with Executive Order 11246, as amended, and the applicable regulations contained in 41 C.F.R. Parts 60-1 through 60-60, 29 U.S.C. Section 793 and the applicable regulations contained in 41 C.F.R. Part 60-741; and 38 U.S.C. Section 4212 and the applicable regulations contained in 41 C.F.R. Part 60-250 Executive Order 13496 and Section 29 CFR 471, appendix A to subpart A, regarding the notice of employee rights in the United States and with Canadian Charter of Rights and Freedoms Schedule B to the Canada Act 1982 (U.K.) 1982, c. 11 and applicable Provincial Human Rights Codes and employment law in Canada.

24. U.S. Government Work.

The following provision applies only to direct sales by Company to the US Government. The Parties acknowledge that all items or services ordered and delivered under this Agreement are Commercial Items as defined under Part 12 of the Federal Acquisition Regulation (FAR). In particular, Company agrees to be bound only by those Federal contracting clauses that apply to "commercial" suppliers and that are contained in FAR 52.212-5(e)(1). Company complies with 52.219-8 or 52.219-9 in its service and installation contracting business.

The following provision applies only to indirect sales by Company to the US Government. As a Commercial Item Subcontractor, Company accepts only the following mandatory flow down provisions: 52.219-8; 52.222-26; 52.222-35; 52.222-36; 52.222-39; 52.247-64. If the Work is in connection with a U.S. Government contract, Customer certifies that it has provided and will provide current, accurate, and complete information, representations and certifications to all government officials, including but not limited to the contracting officer and officials of the Small Business Administration, on all matters related to the prime contract, including but not limited to all aspects of its ownership, eligibility, and performance. Anything herein notwithstanding, Company will have no obligations to Customer unless and until Customer provides Company with a true, correct and complete executed copy of the prime contract. Upon request, Customer will provide copies to Company of all requested written communications with any government official related to the prime contract prior to or concurrent with the execution thereof, including but not limited to any communications related to Customer's ownership, eligibility or performance of the prime contract. Customer will obtain written authorization and approval from Company prior to providing any government official any information about Company's performance of the work that is the subject of the Proposal or this Agreement, other than the Proposal or this Agreement.

25. Limited Waiver of Sovereign Immunity. If Customer is an Indian tribe (in the U.S.) or a First Nation or Band Council (in Canada), Customer, whether acting in its capacity as a government, governmental entity, a duly organized corporate entity or otherwise, for itself and for its agents, successors, and assigns: (1) hereby provides this limited waiver of its sovereign immunity as to any damages, claims, lawsuit, or cause of action (herein "Action") brought against Customer by Company and arising or alleged to arise out of the furnishing by Company of any product or service under this Agreement, whether such Action is based in contract, tort, strict liability, civil liability or any other legal theory; (2) agrees that jurisdiction and venue for any such Action shall be proper and valid (a) if Customer is in the U.S., in any state or United States court located in the state in which Company is performing this Agreement or (b) if Customer is in Canada, in the superior court of the province or territory in which the work was performed; (3) expressly consents to such Action, and waives any objection to jurisdiction or venue; (4) waives any requirement of exhaustion of tribal court or administrative remedies for any Action arising out of or related to this Agreement; and (5) expressly acknowledges and agrees that Company is not subject to the jurisdiction of Customer's tribal court or any similar tribal forum, that Customer will not bring any action against Company in tribal court, and that Customer will not avail itself of any ruling or direction of the tribal court permitting or directing it to suspend its payment or other obligations under this Agreement. The individual signing on behalf of Customer warrants and represents that such individual is duly authorized to provide this waiver and enter into this Agreement and that this Agreement constitutes the valid and legally binding obligation of Customer, enforceable in accordance with its terms.

1-26.251-10(0316)
Supersedes 1-26.251-10(0614)

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PLUMBING AND
DIAL
AIR CONDITIONING

Specializing in Plumbing and Air Conditioning Services
Residential/Commercial
License Numbers: CAC012709/CFC1425973

TRANE
It's Hard To Stop A Trane.

August 14, 2019

TO: jwoolwine@cocoafl.org

ATTN: Joe

Due to our present work load at this time, we decline bidding for the (3) 20 ton rooftop condenser replacements at Cocoa City Hall. Please feel free to reach out to us for any future bidding needs.

Thank you,

Jeannie Williamson – A/C Service Coordinator
Dial Plumbing & Air Conditioning
290 Paint Street
Rockledge, FL 32955
Phone: 321-632-2663
Fax: 321-690-2678
jeannie@dialplumbing.com

City of Cocoa Budget Adjustment Form FY 2019 - 19-115

SELECT ADJUSTMENT TYPE: BUDGET TRANSFER | REQUESTING DEPARTMENT #: 3560 | DATE PREPARED: 08/15/19

'FROM' ACCOUNT(S)

ADJUSTMENT AMOUNT	ACCOUNT NUMBER	PROJECT NUMBER	ACCOUNT NAME	ORIGINAL BUDGET	AMENDED BUDGET	ADJUSTED BUDGET	UNENCUMBERED BALANCE
($ 20,000)	001-3560-519.12-00		Regular Salaries & Wages	$ 394,796	$ 394,356	$ 374,356	$ 89,239
($ 8,000)	001-3560-519.43-00		Electric/Water/Sewer	$ 268,360	$ 268,360	$ 260,360	$ 23,441
($ 7,000)	001-3560-519.46-02		Repair/Maint Building	$ 265,597	$ 353,384	$ 346,384	$ 105,790
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
($ 35,000)	TOTAL						

'TO' ACCOUNT(S)

ADJUSTMENT AMOUNT	ACCOUNT NUMBER	PROJECT NUMBER	ACCOUNT NAME	ORIGINAL BUDGET	AMENDED BUDGET	ADJUSTED BUDGET	UNENCUMBERED BALANCE
$ 35,000	001-3560-519.64-00		Machinery and Equipment	$ 90,500	$ 69,500	$ 104,500	$ 48,773
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 35,000	TOTAL						

REASON/JUSTIFICATION FOR ADJUSTMENT:

City Hall has experienced failure of two (2) condensing units that serve the second and third floors. These units are ten years old and at the end of their useful life expectancy. Replacement is necessary at this point before the remaining units fail, which will result in complete loss of colling capacity for the 2nd and 3rd floors of City Hall. Agenda # 19-406

CITY COUNCIL APPROVAL REQUIRED? *YES* (●) *NO* ( ) *DATE APPROVED:* 08/28/19 *RESOLUTION #:* 2019-075

City Council approval is needed for all transfers greater than $50,000 and transfers between Departments / Funds. Attach copy of agenda item and City Clerk's Journal noting approval.

8/15/19	Cheryl Meisenzahl	8/16/19	Lea Taylor Digitally signed by Lea Taylor Date: 2019.08.16 10:24:16 -04'00'		
Date	Requestor's Signature	Date	Finance Approval Signature	Date	Finance Director's Signature
8/15/19	Everett J. Wegerif	8/16/19	Lora Howell Digitally signed by Lora Howell Date: 2019.08.16 10:58:18 -04'00'		
Date	Department Director's Signature	Date	Deputy Fin. Director's Signature	Date	City Manager's Signature

FINANCE USE ONLY:

Date Entered: _____ Entered By: _____ Group #: _____

Legislation Details (With Text)

File #:	19-413	**Version:**	1	**Name:**	
Type:	Report			**Status:**	City Business
File created:	8/20/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Adopt the Mead and Hunt Ten (10) year Stormwater Work Plan utilizing the City's Capital Improvement Program including improvement cost estimates as well as ranking and prioritization of water quality and flood mitigation projects. (Public Works Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	10 Year Work Plan.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 20, 2019
Agenda Date: August 28, 2019
Prepared By: Abigail Diaz P.E. Assistant City Engineer
Through: Everett Wegerif P.E. Public Works Director/City Engineer
Requested Action:
Adopt the Mead and Hunt Ten (10) year Stormwater Work Plan utilizing the City's Capital Improvement Program including improvement cost estimates as well as ranking and prioritization of water quality and flood mitigation projects.

BACKGROUND:

The City of Cocoa established a Stormwater Utility in 1992 to provide a dedicated funding source for stormwater system construction projects and routine maintenance. The Stormwater Utility was created to address both flood mitigation efforts and water quality improvements. Since the Stormwater Utility has been established, numerous environmental regulatory changes have taken place impacting flood mitigation and water quality requirements throughout the City.

The Stormwater Utility must also fulfill the Water Quality requirements of the National Pollutant Discharge Elimination System (NPDES) and Total Maximum Daily Loads (TMDLs) established as part of the Florida Department of Environmental Protection's (FDEP) Basin Management Action Plan (BMAP). Following a series of algal superblooms between 2010-2012, the North IRL BMAP was created as part of a State-wide program to restore the quality of water bodies in Florida. The BMAP established water quality targets, or TMDLs, for specific pollutants including Total Nitrogen (TN) and Total Phosphorous (TP). The original 2013 document (FDEP 2013) required the City of Cocoa reduce TN and TP loadings by 16,063 lbs/yr and 3,714 lbs/yr respectively.

In the latest available Progress Report for the North IRL BMAP (FDEP 2017), the City of Cocoa was estimated to have met 50% of its required Total Nitrogen (TN) reductions, or 8,063 lbs/yr as well as 104% of its required Total Phosphorous (TP) reductions, 3,868 lbs/year. The City had submitted 20 projects to be considered for their calculation of TMDL reductions, with 14 projects listed as completed, and the other 6 underway. Some of those projects have since been completed, while others are still in their planning stages.
City staff recommended a 10-year Capital Needs study be performed to quantify costs of future improvements needed to meet maintenance needs and water improvement quality requirements. City staff has generated a preliminary list of approximately 40 projects. The construction cost of the needed projects has provided the data necessary to determine future rates needed to sustain the completion of the identified projects.

Through referendum in 2016, Brevard County residents voted in favor of the implementation of a ½ cent discretionary sales tax to fund water quality improvements for the Indian River Lagoon. The resulting plan of improvements includes projects within the corporate limits of Cocoa as well as projects within our basin that will benefit the water quality of the Lagoon in and around Cocoa. As of May 2019, estimated County-provided information indicated that TMDL credit shares via the Save Our Indian River Lagoon (SOIRL) program would cover Cocoa's remaining BMAP reductions if all projects were completed. However, City staff recommended including Water Quality projects within their 10-Year Plan to address nutrient removal issues specific to the City.

STRATEGIC PLAN CONNECTION:

These projects will reduce the potential for flooding as well as enhance the quality of the water in the Indian River Lagoon.

BUDGETARY IMPACT:

No Budgetary Impact at this time

PREVIOUS ACTION:

Council previously approved the task order for Mean and Hunt to conduct the 10 year Capital Needs Study

RECOMMENDED MOTION:

Adopt the Mead and Hunt Ten (10) year Stormwater Work Plan utilizing the City's Capital Improvement Program including improvement cost estimates as well as ranking and prioritization of water quality and flood mitigation projects.

FINAL

AUGUST 2019

Stormwater 10-Year Work Plan

City of Cocoa, FL

Mead & Hunt

4401 Eastport Parkway
Port Orange, FL 32127
386-761-6810
meadhunt.com

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1. Executive Summary

The City of Cocoa (City) is located in Brevard County, Florida between the eastern shore of the Indian River Lagoon (IRL) and the St. Johns River (SJR). The City employs the Stormwater Utility as part of its Public Works Department in order to ensure the capacity and functionality of the overall stormwater management system. It is the task of this division to protect public health and safety by maintaining and upgrading drainage systems such that potential blockages are removed (Flood Mitigation) and nutrient loads to water bodies are reduced (Water Quality) as required by the City's Comprehensive Plan.

In order to properly plan and budget for the City's future Stormwater Utility needs, Mead & Hunt was tasked with developing a 10-Year Stormwater Capital Plan. The work plan needed to address single year capital improvements as well as improvements spread out over the course of the 10-year plan. The types of projects have been categorized under 3 general types: Flood Mitigation (FM), Water Quality (WQ), and Major Equipment (ME).

This effort is being conducted in coordination with a utility rate study being performed by Stantec. The rate study also includes the proposal to shift the funding source for the Stormwater Utility from one based upon utility billing along with the property's water and sewer bill to one that is attached to the Property Appraiser's tax assessment. Stantec's effort also incorporated a shift in the method of measuring a property's impact on the Stormwater Utility and infrastructure. This shift is in the direction of calculating the property's impervious area which more properly predicts stormwater runoff and therefore load to the City's infrastructure.

Over the course of this evaluation, meetings with City Staff and Stantec have resulted in the various conversations pertaining to the impacts to future funding based upon project scheduling and implementation. Various alternatives pertaining to scheduling of the projects, borrowing money and increased utility fees were discussed and presented to the City Manager and the City Council.

Among the various funding sources available for the implementation of the projects discussed below include direct budgeting from the Stormwater Utility funding source directly. Additionally, various grant and loan programs are available to fund portions of projects depending on their particular requirements. These include Save Our Indian River Lagoon (SOIRL) grants for water quality improvements and nutrient reduction. St Johns River Water Management District (SJRWMD) cost share grants. Programs offered by the Florida Department of Environmental Protection include; State Water-quality Assistance Grant (SWAG), Federal Clean Water Act Section 319(h) Grants, and Clean Water State Revolving Fund (SRF) Loan Program. Funds from these programs can often be utilized in intricate schemes that are beyond the scope of this report. Going forward, as the projects are developed and the Stormwater Utility revenue stream are defined and delineated, a careful look will need to be taken with respect to re-prioritizing along this line. Programs gain or lose support from one year to the next, or one administration to the next, and careful and consistent monitoring is required to implement them for best advantage.

Because of the various sources of funding, certain projects may be moved up or down the schedule, or even deferred from the planned list based upon funding availability.

Flood Mitigation

In the case of Flood Mitigation issues, the City maintains a Stormwater Capital Work Plan (SCWP) where it both, identifies the existing conditions of its infrastructure, and project improvements necessary to address any deficiencies in the system. This plan includes projects that aim to identify and prioritize flooding situations witnessed during significant storm events and contains alternatives that make use of non-structural methods wherever possible, as required by the Comprehensive Plan.

Flood mitigation projects address a variety of issues from ageing infrastructure to sea level rise. Included in this report are projects that aim to address recurring flooding issues as well as general improvements to the overall stormwater system. Some topics include:

- Ditch piping projects
- Elevating roadways
- Stormwater retention structures

Water Quality

The Stormwater Utility must also fulfill the Water Quality requirements of the National Pollutant Discharge Elimination System (NPDES) and Total Maximum Daily Loads (TMDLs) established as part of the Florida Department of Environmental Protection's (FDEP) Basin Management Action Plan (BMAP). Following a series of algal superblooms between 2010-2012, the North IRL BMAP was created as part of a State-wide program to restore the quality of water bodies in Florida. The BMAP established water quality targets, or TMDLs, for specific pollutants including Total Nitrogen (TN) and Total Phosphorous (TP). The original 2013 document (FDEP 2013) required the City of Cocoa reduce TN and TP loadings by 16,063 lbs/yr and 3,714 lbs/yr respectively.

In the latest available Progress Report for the North IRL BMAP (FDEP 2017), the City of Cocoa was estimated to have met 50% of its required Total Nitrogen (TN) reductions, or 8,063 lbs/yr as well as 104% of its required Total Phosphorous (TP) reductions, 3,868 lbs/year. The City had submitted 20 projects to be considered for their calculation of TMDL reductions, with 14 projects listed as completed, and the other 6 underway. Some of those projects have since been completed, while others are still in their planning stages.

As of May 2019, recent County-provided information from Brevard County indicated that TMDL credit shares via the Save Our Indian River Lagoon (SOIRL) program would cover Cocoa's remaining BMAP reductions. However, City staff recommended including Water Quality projects to their 10-Year Plan to address nutrient removal issues specific to the City. Included in this report are some alternatives for projects in this category, including:

- Nutrient removal structures
- Pond aeration
- Low Impact Development (LID) systems

Major Equipment

A smaller but important portion of this report is dedicated to maintenance of the fleet of vehicles and machinery used by the Stormwater Utility staff. Major Equipment projects seek to answer the question of whether to make necessary repairs to equipment currently in inventory, or to replace them with new equipment which may also have designs and features which will allow the Utility to more effectively maintain its infrastructure.

Costs

As required by the 10-year SCWP, the City must perform a comprehensive and comparative analysis of all capital, operational, and maintenance costs associated with the identified improvements necessary to reduce flooding and nutrient loading. The estimated costs of each individual alternative, including a proposed prioritized plan of implementation, and a recommended time schedule for performing each chosen project are necessary elements, all of which are discussed in this document.

A. Selected Projects

The following tables contain the projects that were selected by the City and this study to be considered as part of their 10-Year Stormwater Work Plan. The selection process involved a prioritization system developed by City officials and outlined in Section 5 of this document.

B. Selected Flood Mitigation Projects

The following list is the final selection of Flood Mitigation projects as determined by City staff in conjunction with their consultants and the City Council to be considered. The projects are ranked to motivate the completion of some projects ahead of others based on the parameters described later in this document.

Table 1: Selected Flood Mitigation Projects Prioritization and Ranking.

Project #	Project Name	Rank	Total Project Cost
FM-6	Replace or Line Corrugated Metal Pipe (CMP) Piping	1	$968,750
FM-3	Pineda St. Drainage Improvements - Peachtree to Dixon Upgrade Sidewalks & Swales	2	$1,167,075
FM-12	Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision	2	$353,808
FM-15	Annual Curb & Gutter R&M Program	2	$500,000
FM-7	Driveway Culvert Replacements (Cox Road)	5	$509,418
FM-10	Provost Park / Pinegrove Park Ditch Piping	5	$244,125
FM-18	iWorQ Integration Between GIS and Operations & Maintenance	5	$77,777
FM-19	Comprehensive System Model	5	$125,000
FM-17	West Dixon Blvd. Stormwater Facility	9	$291,564
FM-20	Mud Lake Improvements	9	$77,770
FM-1	Range Road Ditch Piping	12	$387,000
FM-13	Cocoa North Rear Yard Ditch Piping (London Blvd. to West Minister)	13	$999,180
FM-2	Junction Structure at Plaza Parkway & Highland Drive Open Pit	14	$165,848
FM-5	Bracco Pond Outfall and Discharge Structure	14	$536,445
TOTAL			$6,403,760

C. Selected Water Quality Projects

The following list contains the selected water quality projects to be completed as determined by City staff in conjunction with their consultants and the City Council. These projects were chosen following several discussions and cost/benefit determinations involving members of the Mead & Hunt team, Stantec staff, and City managers. The prioritization process detailed subsequently was utilized to identify which project should take precedence.

Table 2: Selected Water Quality Projects Prioritization and Ranking.

Project #	Project Name	Rank	Total Project Cost
WQ-12	Verizon Stormwater Pond in Diamond Square	1	$549,643
WQ-16	Riverfront Park In-Lagoon Nutrient Removal	2	$1,500,000
WQ-28*	Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview	3	$4,338,360
WQ-10	72" Outfall Baseflow Capture/Treatment	4	$1,216,663
WQ-29*	Expand Reclaimed Water Usage and Distribution	5	$2,528,011
WQ-15	Add Floating Wetlands to Existing Stormwater Ponds	5	$818,635
WQ-11	Horseshoe Ponds (North & South) Vegetation Removal	6	$236,670
WQ-20	De-muck/Dredge SR520 Relief Channel	6	$282,900
TOTAL			$11,470,882
WQ-18**	SR 520 Runoff Treatment to Downtown	-	$611,270
WQ-17**	Riverfront Park Stormwater Capture Modification	-	$369,369
TOTAL**			$10,951,521

* Projects are anticipated to be funded and conducted by other Departments, i.e. SOIRL/Public Utilities.
** In the event that WQ-16 Riverfront Park In-Lagoon Nutrient Removal cannot be permitted, Projects WQ-17 and WQ-18 would substitute it.

D. Selected Major Equipment

The following is the list of major equipment purchases to be included as determined by City staff. Based upon current maintenance requirements and depreciation value it has been determined that these pieces of equipment will be replaced in the following order on alternating years of the upcoming ten-year cycle. The actual expenditure schedule for Major Equipment purchases is shown in Section 6 of this document.

Table 3: Proposed Major Equipment replacements.

Equipment #	Year	Equipment Name	Description	Replacement Cost
131	2008	Isuzu FVR TYMCO 500X	Street Sweeper	$338,592
137	2009	Ford F150	Pickup Truck	$25,989
146	1999	Ford 350SD	Pickup Truck	$74,991
158	2014	International TYMCO 600X	Street Sweeper	$395,953
167	2006	Sterling Acterra	Truck	$178,459
91	1995	Ford VAC-CON	Vac-Con	$599,999
TOTAL				$1,013,984

E. Overall Projects List

The following tables show the overall projects list for the projects outlined in this document including their costs. As this list was being developed (see Section 2, Part C.) a number of projects were singled out and removed from consideration from the prioritization process and thus, not included in the overall list, or in the project description portion of this report (Sections 3 and 4).

In the tables below, the "Project Cost" column portrays the cost for implementing each individual project as described in Sections 3 and 4 of this document. The "Project Total" column portrays the overall cost of constructing, operating, and maintaining each project over the entire 10-year period being evaluated.

Flood Mitigation

Table 4: Proposed Flood Mitigation projects and cost estimates.

Project #	Project Name	Project Cost	Project Total
FM-1	Range Road Ditch Piping	$387,000	$387,000
FM-2	Junction Structure at Plaza Parkway & Highland Drive	$165,848	$165,848
FM-3	Pineda St. Drainage Improvements - Peachtree to Dixon Upgrade Sidewalks & Swales	$1,167,075	$1,167,075
FM-4	Broadmoor Acres Rear Yard Swales Piping	$1,026,383	$1,026,383
FM-5	Bracco Pond Outfall and Discharge Structure	$536,445	$536,445
FM-6	Replace or Line Corrugated Metal Pipe (CMP) Piping	$193,750	$968,750
FM-7	Driveway Culvert Replacements (Cox Road)	$509,418	$509,418
FM-8	Complete Drainage System on Dixon Blvd.	$1,193,283	$1,193,283
FM-10	Provost Park / Pinegrove Park Ditch Piping	$244,125	$244,125
FM-11	Elevate Indian River Dr.	$967,395	$967,395
FM-12	Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision	$353,808	$353,808
FM-13	Cocoa North Rear Yard Ditch Piping (London Blvd. to West Minister)	$999,180	$999,180
FM-14	Diamond Square Pond & Piping Improvements	$235,872	$235,872
FM-15	Annual Curb & Gutter R&M Program	$50,000	$500,000
FM-16	Bracco Pond 72" Outfall (Rehabilitation/Replacement)	$402,675	$402,675
FM-17	West Dixon Blvd. Stormwater Facility	$291,564	$291,564
FM-18	iWorQ Integration between GIS and Operations & Maintenance	$77,777	$77,777
FM-19	Comprehensive System Model	$125,000	$125,000
FM-20	Mud Lake Investigation & Retrofit	$77,777	$77,777

Water Quality

Table 5: Proposed Water Quality projects and cost estimates.

Project #	Project Name	Project Cost	Project Total
WQ-1	Baffle Boxes on Smaller Basins Outfalls	$227,088	$1,135,440
WQ-2	Baffle Boxes on Larger Basins Outfalls	$282,240	$564,480
WQ-3	BAM Filter Retrofits for Existing Baffle Boxes	$241,605	$241,605
WQ-4	Living Shoreline Along Lagoon	$117,000	$117,000
WQ-5	Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales	$421,667	$421,667
WQ-7	Bracco Pond Aerators	$51,534	$51,534
WQ-8	Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond	$1,960,793	$1,960,793
WQ-10	72" Outfall Baseflow Capture/Treatment	$1,216,663	$1,216,663
WQ-11	Horseshoe Ponds (North & South) Vegetation Removal	$236,670	$236,670
WQ-12	Verizon Stormwater Pond in Diamond Square	$549,643	$549,643
WQ-13	Pond Aeration at North Fiske and other Stormwater Treatment Facilities	$65,482	$65,482
WQ-14	Scarborough Park & Water Tower Pond Expansion	$160,272	$160,272
WQ-15	Add Floating Wetlands to Existing Stormwater Ponds	$206,635	$818,635
WQ-16	Riverfront Park In-Lagoon Nutrient Removal	$1,500,000	$1,500,000
WQ-17	Riverfront Park Stormwater Capture Modifications	$369,369	$369,369
WQ-18	SR 520 Runoff Treatment to Downtown	$611,270	$611,270
WQ-19	Install BAM Treatment for AT&T Dry Retention Pond	$168,714	$168,714
WQ-20	De-muck/Dredge SR520 Relief Channel	$282,900	$282,900
WQ-21	Downtown Area Treatment System - Urban Planters, LID Improvements	$145,080	$725,400
WQ-22	Reduce Impervious Area (PaveDrain, Reduce Roadway) Near IRL	$209,469	$1,047,345
WQ-23	Inspection Program for HOA-Owned Treatment Ponds	$57,492	$57,492
WQ-24	Enhanced Stormwater Quality Education Programs	$10,000	$100,000
WQ-25	Update LDR's to Encourage LID and Provide Incentives for Overtreatment on Redevelopment	$44,000	$44,000
WQ-26	Bracco Pond Irrigation Repair/Replace for increased Reuse & Bank Stabilization	$100,000	$100,000
WQ-27	North Fiske Pond Irrigation Repair/Replacement	$100,000	$100,000
WQ-28	Septic to Sewer	$4,338,360	$4,338,360
WQ-29	Expand Reclaimed Water Usage and Distribution	$1,264,006	$2,528,011

2. Background

The City of Cocoa, located at latitude 28°22'13.43"N and longitude 80°44'47.68"W, covers an area of about 15.4 square miles between the City of Rockledge and Port St. John. The City has a population of about 19,286 according to 2018 estimates by the Bureau of Economic and Business Research (BEBR). Land use throughout the City is a mix of residential and commercial usages, including a downtown area of high intensity commercial usage known as Cocoa Village. Most of the soils in the City are well-drained soils, classified as hydrologic Type-A or A/D soils.

A. Stormwater Utility

Although some elements of the stormwater system date back to the 1920s, the City of Cocoa's current Stormwater Utility System was created in 1992. An implementation plan funding the program was developed following an evaluation of the stormwater utility which found that the level of funding at the time could not address the water quality and quantity issues the City was facing.

Today, the City maintains nearly 3,000 structures throughout its system including manholes, stormwater control structures, end structures, baffle boxes, and more. The system is connected by way of about 65 miles of stormwater piping ranging in size from 12-inches to 72-inches in some of the larger structures. The utility is also in charge of maintaining about 77-acres of stormwater retention and detention ponds, including 5 large ponds in the center of the City known as the Bracco Ponds.

The Stormwater Utility accounted for $1.48M in funding for fiscal year 2019 through their Stormwater Utility Fee. This funding is necessary in order to maintain the numerous stormwater management structures that the City actively maintains. At the current level of funding, less than $400,000 can be dedicated to maintenance functions. The City, therefore, is looking at revising the Stormwater Utility revenue generating structure and associated rates.

B. Scope of Work

This report aims to provide a comprehensive list of projects that may be included in the City's Stormwater Utility 10-year work plan. The types of projects have been categorized under 3 general types: Water Quality (WQ), Flood Mitigation (FM), and Major Equipment (ME).

Flood Mitigation projects are focused on meeting City-wide stormwater level of service goals, and various stormwater infrastructure and maintenance projects needed to be evaluated. Examples of these types of projects include:

- Replacing or stabilizing ageing and deteriorating pipes.
- Reducing maintenance requirements by piping open ditches.
- Installing or completing drainage systems.
- Establishing comprehensive City-wide initiatives.

Water Quality projects are primarily focused on meeting the City's Indian River Lagoon (IRL) Basin Management Action Plan (BMAP) requirements to reduce Total Maximum Daily Loading (TMDL) of nutrients to the lagoon. Capital projects include items like:

- Construction of nutrient removing baffle boxes
- Establishing living shorelines
- Augmentation of existing stormwater treatment facilities such as Bracco Ponds
- Expanding public education programs
- Updating the Land Development Regulations (LDRs) to require and/or incentivize stormwater treatment measures

These projects were presented to City staff with the aim of populating their 10-year work plan in conjunction with a stormwater utility rate study and potential change in utility funding structure being performed by Stantec, and in coordination with City staff.

C. Origin of Projects

The projects outlined in this report were developed as a result of a collective effort from the project team at Mead & Hunt and the City's Stormwater Utility. The origins of these conceptual designs vary from existing projects found within the City's Fiscal Year (FY) 2018 Capital Improvements Projects (CIP) list, an existing Stormwater TMDL Compliance Report (QLH 2016) prepared by Quentin L. Hampton, and a collaboration of ideas between the City engineers and the team of engineers at Mead & Hunt. The scopes of the projects range from straightforward adaptations of BMPs in specified locations, to comprehensive City-wide initiatives.

From CIP:

- **Project FM-1:** Range Road Ditch Piping
- **Project FM-6:** Replace or Line Corrugated Metal Pipe (CMP) Piping
- **Project FM-15:** Annual Curb & Gutter R&M Program
- **Project FM-20:** Mud Lake Investigation & Retrofit
- **Project WQ-1:** Baffle Boxes on Smaller Basins Outfalls
- **Project WQ-10:** 72" Outfall Baseflow Capture/Treatment

From TMDL:

- **Project FM-14:** Diamond Square Pond & Piping Improvements
- **Project WQ-5:** Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales
- **Project WQ-10:** 72" Outfall Baseflow Capture/Treatment
- **Project WQ-14:** Scarborough Park & Water Tower Pond Expansion
- **Project WQ-21:** Downtown Area Treatment System - Urban Planters, LID Improvements
- **Project WQ-28:** Septic to Sewer

D. Sources of Data

City staff provided GIS shape files which included stormwater basins, pipes and structure information. Additionally, staff provided stormwater monitoring data and information on observed flooding and actions taken. This data assisted in the development of conceptual designs as well as with the evaluation of nutrient loading and load reductions.

In order to evaluate nutrient loading and BMP analysis for load reductions, a variety of sources were utilized. BMPTRAINS which was developed by the University of Central Florida Stormwater Academy takes inputs such as basin size and land use categories to predict nutrient runoff and annual average nutrient loads to receiving water bodies (Wanielista et al.2017). The program then allows the user to input various types and sizes of treatment mechanisms in a parallel manner, or in series, in a treatment train approach. Utilizing data from multiple studies by various agencies, it then applies a nutrient reduction factor which was then utilized in our analysis of load reductions (FDEP 2018).

Anticipated project cost and annual maintenance of the projects was largely performed based on recent project costs for similar projects designed and administered by Mead & Hunt, or utilizing quotes provided to the City, along with their recent project costing data.

For the flood mitigation projects, the GIS information provided by the City also included parcel data which was utilized to estimate the number of properties affected by the flooding potential and project benefit. Although the Brevard County Property Appraiser's website was utilized in evaluating the project costing where it may be necessary to purchase property to accomplish a project, this tool was not implemented for evaluating the flood mitigation projects. It was felt that in order to impartially determine a project's benefit, that the relative property value might skew the evaluation in favor of more well to do areas to the detriment of lower income neighborhoods.

3. Recommended Flood Mitigation Projects

The following projects have been identified for the purposes of flood mitigation, reduction in nuisance flooding, and reduction in the required maintenance of stormwater conveyance systems. Projects range from improved stormwater conveyance, upgrading deteriorating piping, roadway elevation and additional basin storage to reduce runoff downstream.

A. Project List

Project FM-1: Range Road Ditch Piping
Project FM-2: Junction Structure at Plaza Parkway & Highland Drive
Project FM-3: Pineda St. Drainage Improvements - Peachtree to Dixon Upgrade Sidewalks & Swales
Project FM-4: Broadmoor Acres Rear Yard Swales Piping
Project FM-5: Bracco Pond Outfall and Discharge Structure
Project FM-6: Replace or Line Corrugated Metal Pipe (CMP) Piping
Project FM-7: Driveway Culvert Replacements (Cox Road)
Project FM-8: Complete Drainage System on Dixon Blvd.
Project FM-10: Provost Park / Pinegrove Park Ditch Piping
Project FM-11: Elevate Indian River Dr.
Project FM-12: Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision
Project FM-13: Cocoa North Rear Yard Ditch Piping (London Blvd. to West Minister)
Project FM-14: Diamond Square Pond & Piping Improvements
Project FM-15: Annual Curb & Gutter R&M Program
Project FM-16: Bracco Pond 72” Outfall (Rehabilitation/Replacement)
Project FM-17: West Dixon Blvd. Stormwater Facility
Project FM-18: iWorQ Integration between GIS and Operations & Maintenance
Project FM-19: Comprehensive System Model
Project FM-20: Mud Lake Investigation & Retrofit

B. Recommended Flood Mitigation Projects.

(1) FM-1: Range Road Ditch Piping

Location

Project FM-1 focuses on the open ditch that runs along the eastern boundary of Range Rd. between SR520 and Cocoa Bay Blvd. N Range Rd. is a well-traveled corridor that extends southward with its open ditch stormwater conveyance system joining a larger open channel near the intersection with Lake Dr.

Proposed Improvements

Public Works proposes the installation of 3000 feet of Surplus 48" Ductile Iron Pipe (DIP) and inlets on Range Road from Hooper Rd. north to Cocoa Bay Blvd. This work to be done in three phases with the first phase being engineering, then two construction phases consisting of 1,500 feet each.

Benefits

Open ditch conveyance systems are often put in place as they are cost effective methods of transporting runoff from rainfall events. They have water quality improvement capabilities and help reduce flow rates as they attenuate flow rates. However, they also present safety hazards as they are usually near roadways, may be unsightly, and usually incur maintenance costs due to sediment accumulation and vegetation growth.

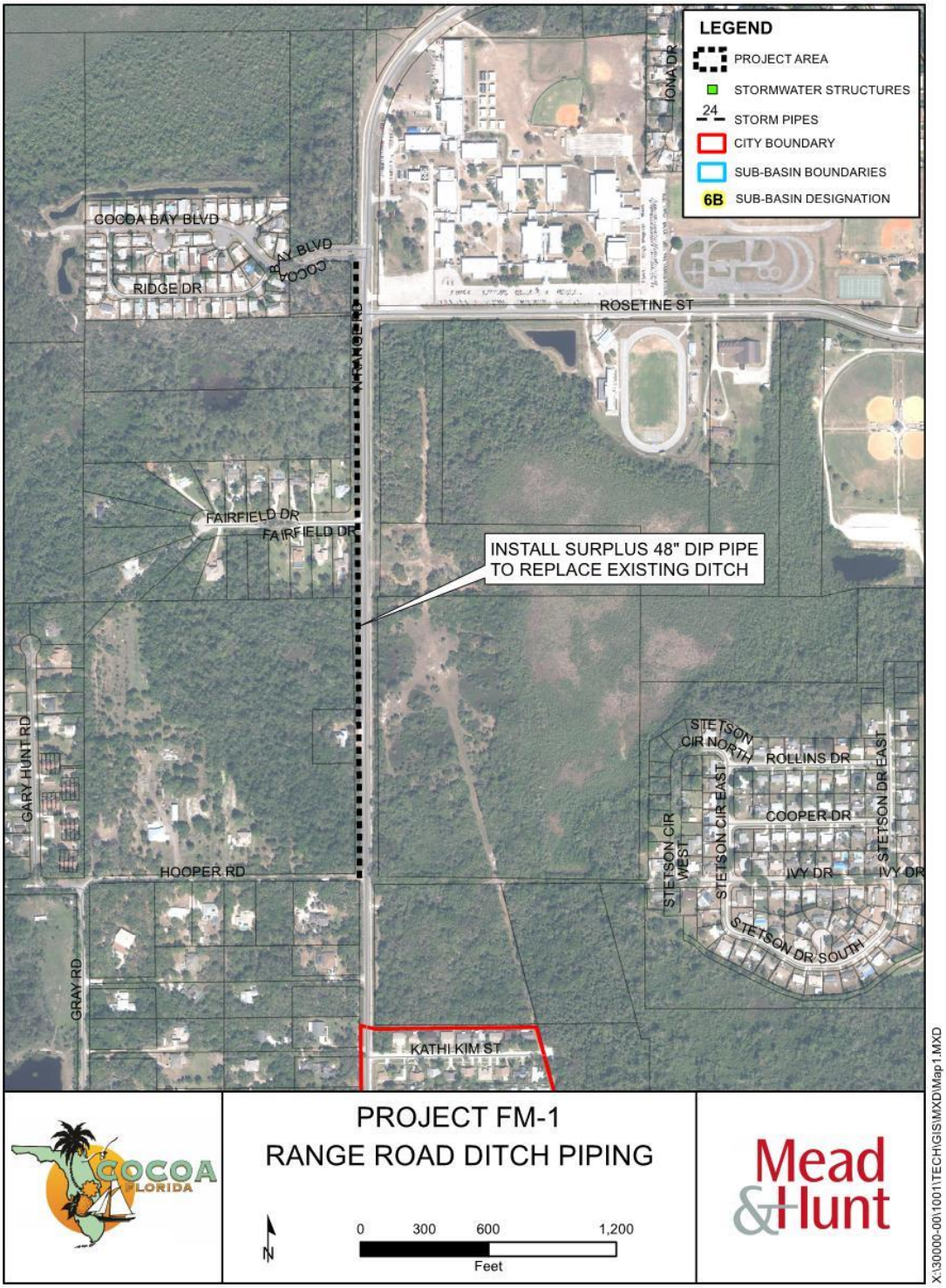
Benefits to changing from open ditch conveyance systems to closed piping systems include a reduction in maintenance costs as well as an increase to public safety as this possible hazard is removed.

Cost Estimate

Total costs for all phases of this project are estimated to be $387,000.

Table 6: Cost Estimate Table – Project FM-1: Range Road Ditch Piping.

Project FM-1: Range Road Ditch Piping						
Item Number	Location	Proposed Retrofit Improvements				
	Range Rd.	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition	1	LS	$20,000.00	$20,000.00
	- Site preparation	Dewatering and flow diversion	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Storm Pipe	Install Owner Furnished 48" DIP Pipe	3,000	LF	$75.00	$225,000.00
	- Roadway/Driveway Restoration	Asphalt, base and subgrade	500	SY	$25.00	$12,500.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$20,000.00	$20,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$322,500.00
1						
			- Mobilization @		10%	$32,250.00
			- Contingencies @		10%	$32,250.00
			SUB-TOTAL OF CONSTRUCTION COST			$387,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$387,000**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
COCOA BAY BLVD
RIDGE DR
ROSETINE ST
IONA DR
FAIRFIELD DR
INSTALL SURPLUS 48" DIP PIPE
TO REPLACE EXISTING DITCH
GARY HUNT RD
HOOPER RD
GRAY RD
KATHI KIM ST
STETSON CIR NORTH
ROLLINS DR
STETSON CIR EAST
STETSON DR EAST
COOPER DR
STETSON CIR WEST
IVY DR
STETSON DR SOUTH
PROJECT FM-1
RANGE ROAD DITCH PIPING
0 300 600 1,200
Feet
N
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(2) FM-2: Junction Structure at Plaza Parkway & Highland Drive

Location

Project FM-2 is focused on the confluence of two existing pipes between the Bracco retention water ponds. Presently, there is an open ditch on the intersection where Plaza Pkwy. /W Highland Dr. turns northward from N Cocoa Blvd. This structure is unsightly and is fenced off to the public as it poses a safety risk. There have been documented episodes of people driving into this pit. Water pooling in the open ditch may be plagued by algal blooms that happen as a result in eutrophication.

Proposed Improvements

This project proposes the installation of a precast junction box along with all necessary piping to make the connections that would replace the current open ditch.

Benefits

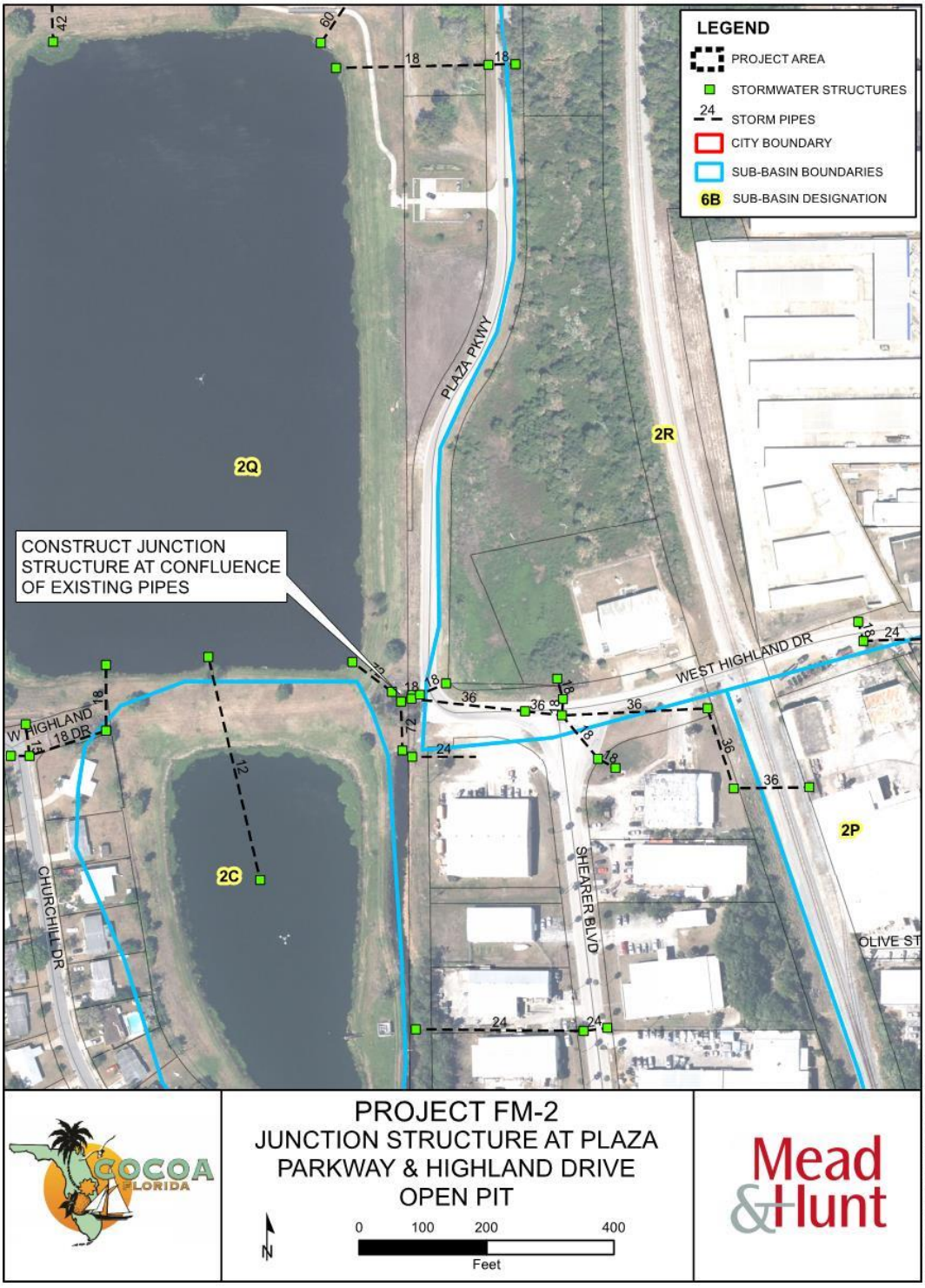
This project removes a potential hazard, improves the general aesthetics of this location, and protects an important stormwater asset. Installation of a junction box would remove the ditch and leave a manhole in its place.

Cost Estimate

The cost to furnish and install the structure and all necessary piping for this project is estimated to be $165,848 including all engineering and construction costs.

Table 7: Cost Estimate Table – Project FM-2: Junction Structure at Plaza Parkway & Highland Drive.

Project FM-2: Junction Structure at Plaza Parkway & Highland Drive						
Item Number	Location	Proposed Retrofit Improvements				
	Plaza Parkway & Highland Dr.	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition	1	LS	$20,000.00	$20,000.00
	- Site preparation	Dewatering and flow diversion	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$5,000.00	$5,000.00
	- Furnish & Install	18" RCP	25	LF	$85.00	$2,125.00
	- Furnish & Install	36" RCP	25	LF	$115.00	$2,875.00
	- Furnish & Install	72" RCP	25	LF	$250.00	$6,250.00
	- Furnish & Install	Precast Junction Box	1	EA	$15,000.00	$15,000.00
	- Restoration	Sodding, landscaping, etc.	1	LS	$20,000.00	$20,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$101,250.00
1						
		- Mobilization @			10%	$10,125.00
		- Contingencies @			20%	$20,250.00
		SUB-TOTAL OF CONSTRUCTION COST				$131,625.00
		- Eng Design & Permitting @			15%	$19,743.75
		- Subconsultants @			5%	$6,581.25
		- Constr Admin and Insp @			6%	$7,897.50
		TOTAL PROJECT COST				**$165,848**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
CONSTRUCT JUNCTION STRUCTURE AT CONFLUENCE OF EXISTING PIPES
PLAZA PKWY
WEST HIGHLAND DR
W HIGHLAND DR
CHURCHILL DR
SHEARER BLVD
OLIVE ST
2Q
2R
2C
2P
PROJECT FM-2
JUNCTION STRUCTURE AT PLAZA PARKWAY & HIGHLAND DRIVE
OPEN PIT
0 100 200 400
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(3) FM-3: Pineda St. Drainage Improvements – Peachtree to Dixon Upgrade Sidewalks & Swales

Location

Project FM-3 focuses on the drainage structures along Pineda St., a heavily traveled corridor used by all types of traffic, including school buses. The roadway has deteriorated to the point that the base is failing, and the sidewalks are currently in poor condition including non-Americans with Disabilities Act (ADA) compliant handicap ramps.

Proposed Improvements

This project proposes an augmentation of existing plans for the reconstruction of Pineda Street. Improvements include the restoration of sidewalks as well as excavation of about 4,000 ft of swales and installation of about 5,000 ft of piping and approximately 30 inlet structures and junction boxes.

Benefits

Improvements to this heavily used corridor will bring increased public safety for the communities immediately adjacent to the roadway, including increased access to Endeavour Elementary School. Restoration of sidewalks along this street will provide a walkway and thus address trip hazards for pedestrians.

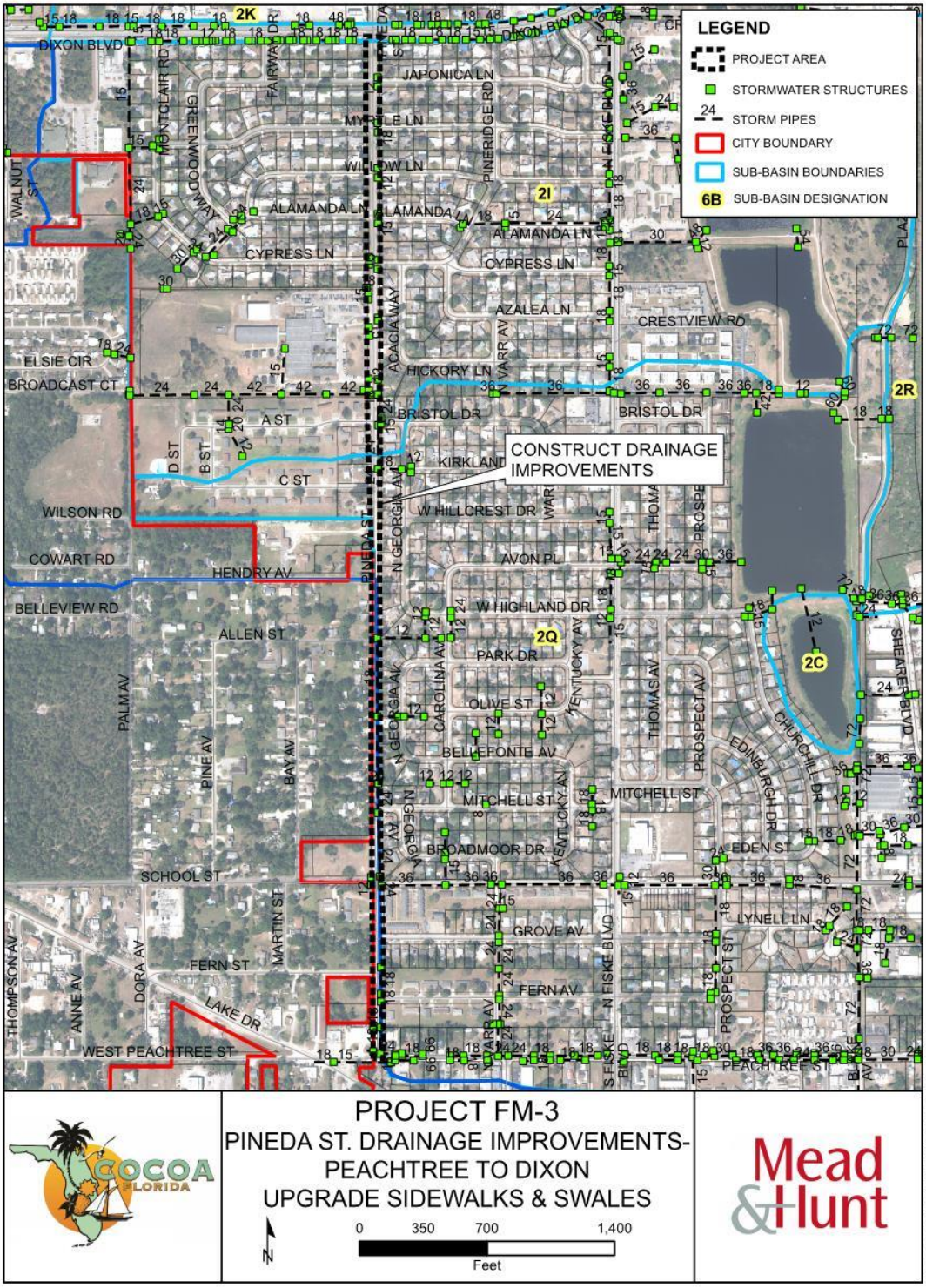
Restoration of swales and new piping will also bring drainage improvements to this corridor, as well as solving issues related to the deterioration of the roadway.

Cost Estimate

Estimated design and construction costs for this project are estimated to be $1,167,075 including all piping, and necessary stormwater structures.

Table 8: Cost Estimate Table – Project FM-3: Pineda St. Drainage Improvements – Peachtree to Dixon Upgrade Sidewalks & Swales.

Project FM-3: Pineda St. Drainage Improvements - Peachtree to Dixon Upgrade Sidewalks & Swales						
Item Number	Location	Proposed Retrofit Improvements				
	Pineda St. - Peachtree to Dixon	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$20,000.00	$20,000.00
	- Site preparation	Demolition	1	LS	$30,000.00	$30,000.00
	- Site preparation	Swale Construction	4,000	LF	$10.00	$40,000.00
	- Furnish & Install	18" - 24" RCP	2,500	LF	$60.00	$150,000.00
	- Furnish & Install	36" - 48" RCP	2,500	LF	$125.00	$312,500.00
	- Furnish & Install	Inlets & Storm Drains	30	EA	$4,500.00	$135,000.00
	- Landscaping	Sodding, landscaping, etc.	1	LS	$25,000.00	$25,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$712,500.00
1						
		- Mobilization @			10%	$71,250.00
		- Contingencies @			20%	$142,500.00
		SUB-TOTAL OF CONSTRUCTION COST				$926,250.00
		- Eng Design & Permitting @			15%	$138,937.50
		- Subconsultants @			5%	$46,312.50
		- Constr Admin and Insp @			6%	$55,575.00
		TOTAL PROJECT COST				**$1,167,075**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
CONSTRUCT DRAINAGE IMPROVEMENTS
PROJECT FM-3
PINEDA ST. DRAINAGE IMPROVEMENTS-
PEACHTREE TO DIXON
UPGRADE SIDEWALKS & SWALES
0 350 700 1,400
Feet
COCOA FLORIDA
Mead &Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(4) FM-4: Broadmoor Acres Rear Yard Swales Piping

Location

Project FM-4 is focused on the Broadmoor Acres subdivision, pictured below. The overall drainage area is approximately 39 acres of ¼ acre lots and impervious road. Past projects in the area have been implemented to improve the drainage abilities of this area, including the excavation of swales in a corridor across the rear yards of homes between W Highland Dr. and Park Dr.

Proposed Improvements

This project aims to replace existing swales that were put in place to divert the flow of water towards the Bracco Ponds and N Fiske Blvd. with stormwater piping. Assuming the reuse of all existing stormwater structures and piping that already exists at some intersections, an additional 7700 ft of storm piping is to be installed.

Benefits

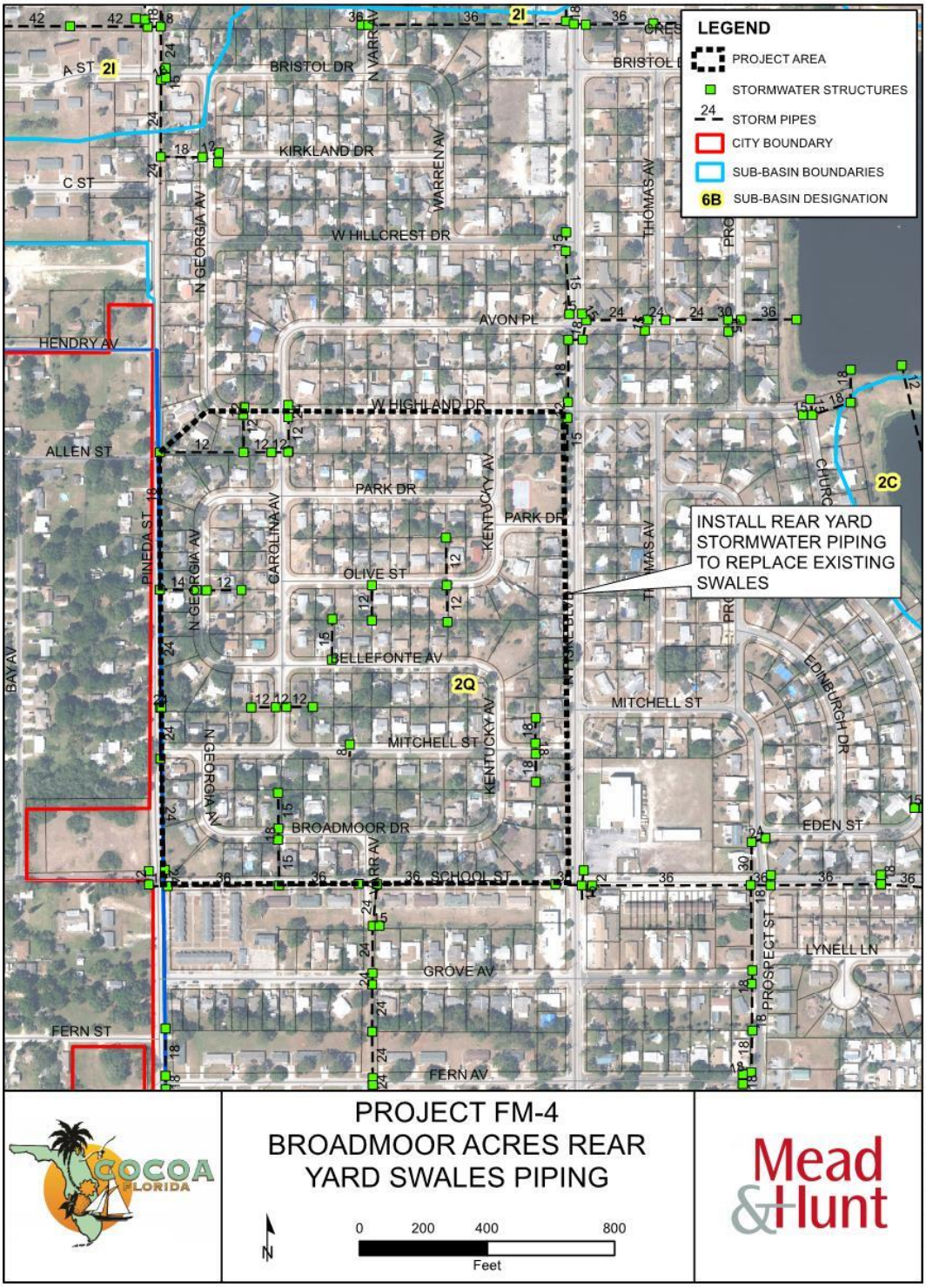
Benefits of this project include overall improvements to the general drainage of Broadmoor Acres, as well as alleviation or prevention of localized flooding issues that may exist. Ultimately, stormwater conveyed via this improved system will end up in the Bracco reservoir.

Cost Estimate

This project is estimated to cost $1,026,383. Costs include about 7,700 feet of piping. However, the City determined that the cost of this project far exceeded the cost of maintaining the existing swales. In addition, there is a N Fiske /Broadmoor Acres Subdivision Drainage Improvement Project that is budgeted and anticipated to be performed in FY 2020. Therefore, this project was removed from consideration.

Table 9: Cost Estimate Table – Project FM-4: Broadmoor Acres Rear Yard Swales Piping.

Project FM-4: Broadmoor Acres Rear Yard Swales Piping						
Item Number	Location	Proposed Retrofit Improvements				
	Broadmoor Acres	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$20,000.00	$20,000.00
	- Site preparation	Demolition	1	LS	$30,000.00	$30,000.00
	- Storm Piping	18" - 24" RCP	7,700	LF	$75.00	$577,500.00
	- Restoration	Sodding, landscaping, etc.	1	LS	$25,000.00	$25,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$652,500.00
1	Assumes the reuse of existing stormwater structures and piping at road crossings.					
			- Mobilization @		10%	$65,250.00
			- Contingencies @		20%	$130,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$848,250.00
			- Eng Design & Permitting @		12%	$101,790.00
			- Subconsultants @		3%	$25,447.50
			- Constr Admin and Insp @		6%	$50,895.00
			TOTAL PROJECT COST			**$1,026,383**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
INSTALL REAR YARD STORMWATER PIPING TO REPLACE EXISTING SWALES
2I
2C
2Q
A ST
C ST
BRISTOL DR
KIRKLAND DR
W HILLCREST DR
AVON PL
HENDRY AV
W HIGHLAND DR
ALLEN ST
PARK DR
OLIVE ST
BELLEFONTE AV
MITCHELL ST
BROADMOOR DR
SCHOOL ST
GROVE AV
FERN ST
FERN AV
EDEN ST
LYNELL LN
EDINBURGH DR
N GEORGIA AV
WARREN AV
KENTUCKY AV
CAROLINA AV
PINEDA ST
BAY AV
PROSPECT ST
PROJECT FM-4
BROADMOOR ACRES REAR YARD SWALES PIPING
0
200
400
800
Feet
N
COCOA FLORIDA
Mead &Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(5) FM-5: Bracco Pond Outfall and Discharge Structure

Location

Project FM-5 deals with the Bracco Ponds outfall structure located between “Pond B” and “Pond C” and extends underneath W Highland Dr. towards the 72” pipe that conveys water beneath U.S. 1 and eastward to the IRL. The Bracco Ponds provide treatment of stormwater runoff to nearly 1,060 acres of land, meaning this outfall is an important component of a major drainage and stormwater treatment system.

Proposed Improvements

This project proposes the replacement of the existing open ditch with all of the piping, junctions, and structures necessary to complete the project.

Benefits

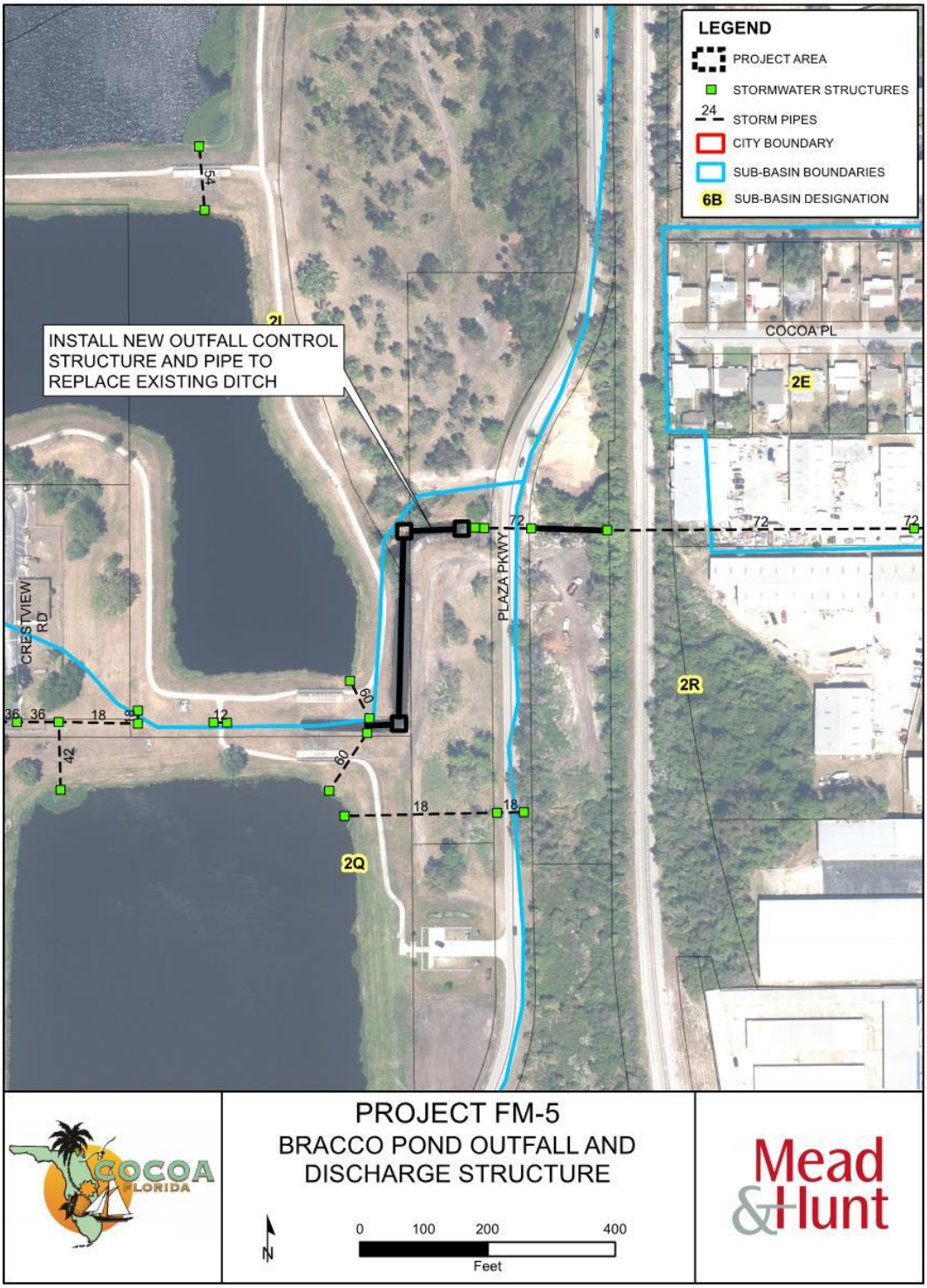
Like other ditch piping projects, this project will improve the efficiency of this outfall as maintenance operations are usually associated with removing vegetation and other solids that may cause blockages at junction structures such as culverts, intakes and outfalls. It is important to ensure the reliability of this outfall structure to prevent any negative consequences to the Bracco system due to a major storm event.

Cost Estimate

It is anticipated that the cost of furnishing about 750 ft of 72” RCP piping as well as junction boxes at each location where connections to the new pipe will be made will be $536,445.

Table 10: Cost Estimate Table – Project FM-5: Bracco Pond Outfall and Discharge Structure.

Project FM-5: Bracco Pond Outfall and Discharge Structure						
Item Number	Location	Proposed Retrofit Improvements				
	Bracco Pond Outfall	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$10,000.00	$10,000.00
	- Construction Activities	Dewatering & Flow Control	1	LS	$25,000.00	$25,000.00
	- Furnish & Install	Junction Boxes	6	EA	$15,000.00	$90,000.00
	- Furnish & Install	72" RCP Storm Piping	750	LF	$250.00	$187,500.00
	- Restoration	Sodding, landscaping, etc.	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$327,500.00
1						
			- Mobilization @		10%	$32,750.00
			- Contingencies @		20%	$65,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$425,750.00
			- Eng Design & Permitting @		15%	$63,862.50
			- Subconsultants @		5%	$21,287.50
			- Constr Admin and Insp @		6%	$25,545.00
			TOTAL PROJECT COST			**$536,445**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
INSTALL NEW OUTFALL CONTROL STRUCTURE AND PIPE TO REPLACE EXISTING DITCH
COCOA PL
2E
2R
2Q
2I
PLAZA PKWY
CRESTVIEW RD
54
72
72
72
36
36
18
48
12
42
60
60
18
18
PROJECT FM-5
BRACCO POND OUTFALL AND DISCHARGE STRUCTURE
0
100
200
400
Feet
N
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(6) FM-6: Replace or Line Corrugated Metal Pipe (CMP) Piping

Location

Project FM-6 is part of a City-wide effort to replace or restore some of the old corrugated metal piping (CMP) around the City. The City stormwater drainage system currently employs the following amounts of different sizes of CMP:

Pipe Size (in)	Length of Pipe (Ft)
12-18	15,242
19-30	4,325
31-42	1,282
43-54	502
55+	365
Total	21,716

Proposed Improvements

This project proposes the replacement or lining of these old metal pipes in order to address current localized flooding issues, and to prevent issues from arising in the future as corroding and decaying metal pipes fail.

It is proposed that an annual program be established to replace or line piping, assuming that about 25% of all piping currently being employed by the City will need attention.

Benefits

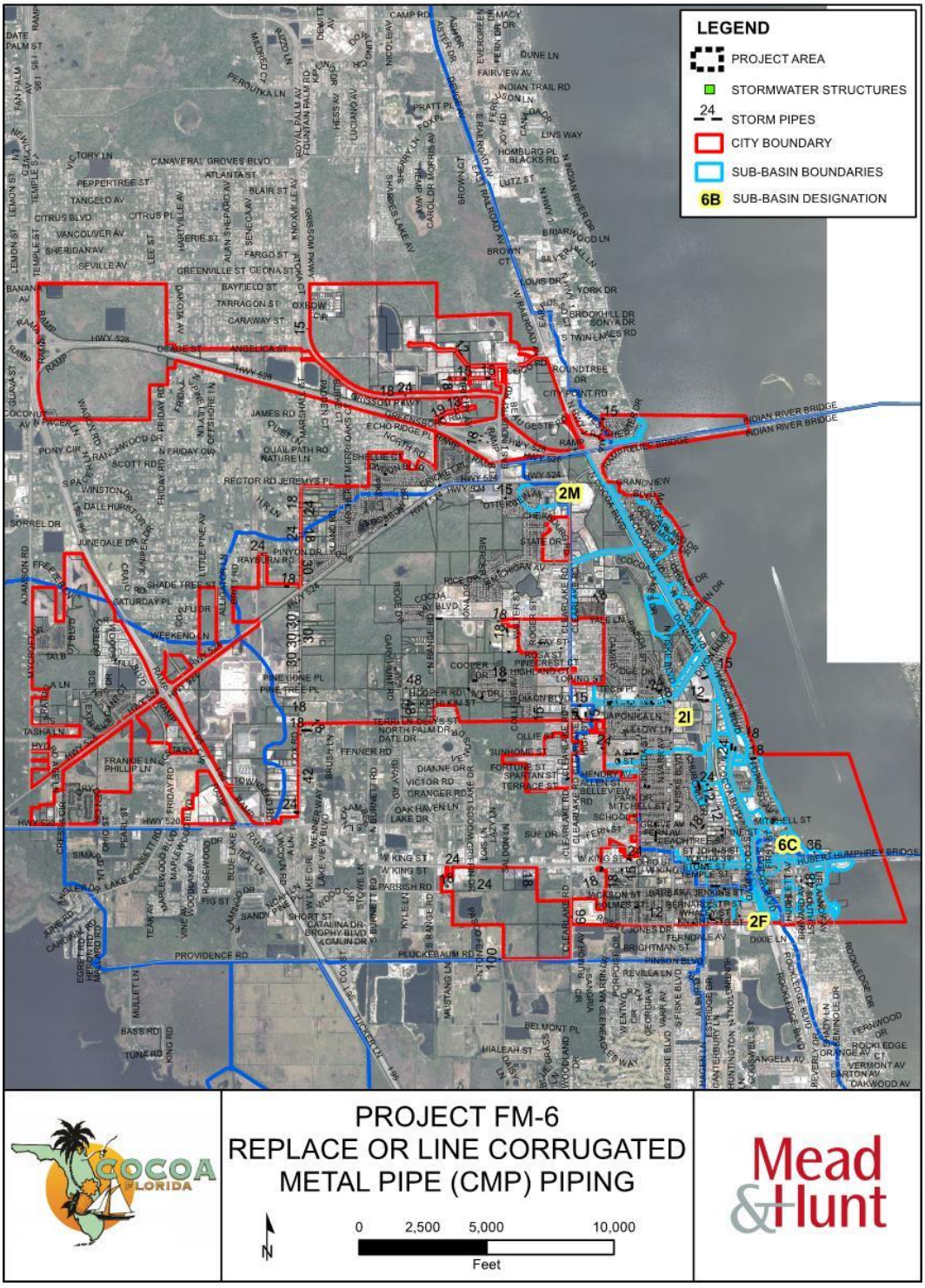
Replacing or lining these pipes reduces the amount of silt entering the pipe which can cause a blockage and potentially flood an area. Furthermore, this would reduce the potential for pipe failures along with the attendant driveway and roadway failures. When these pipes fail, flow is blocked, and flooding results. A failed pipe also allows soil to enter the pipe, causing damage to roads, structures and yards.

Cost Estimate

Cost estimates for this project were made assuming that this project would ultimately be an annual project that would gradually address different sections of the City's CMP. It was assumed that the annual program would look at about 1,000 feet of piping every year. Each pipe is approximately 100 feet in length and the average price per foot ranges from $50 to $150 per foot, depending on pipe size and condition, therefore, annual costs for this project are estimated to be $193,750.

Table 11: Cost Estimate Table – Project FM-6: Replace or Line Corrugated Metal Pipe (CMP) Piping.

Project FM-6: Replace or Line Corrugated Metal Pipe (CMP) Piping						
Item Number	Location	Proposed Retrofit Improvements				
	City of Cocoa	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Construction management	Maintenance of traffic, signage	1	EA	$15,000.00	$15,000.00
	- Line CMP Piping	Average cost per foot	1,000	LF	$140.00	$140,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$155,000.00
1						
			- Mobilization @		10%	$15,500.00
			- Contingencies @		15%	$23,250.00
			SUB-TOTAL OF CONSTRUCTION COST			$193,750.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$193,750**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
2M
2I
6C
2F
INDIAN RIVER BRIDGE
HUBERT HUMPHREY BRIDGE
PROJECT FM-6
REPLACE OR LINE CORRUGATED METAL PIPE (CMP) PIPING
0 2,500 5,000 10,000
Feet
COCOA FLORIDA
Mead &Hunt
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(7) FM-7: Driveway Culvert Replacements (Cox Road)

Location

Project FM-7 aims to replace culverts under the driveways on Cox Rd. in the area south of SR-524. There is an open ditch conveyance system on the western boundary of Cox Road that must intersect several driveways and side streets on its course. Culverts of different sizes are installed at these locations to allow water to pass freely and without obstruction.

Proposed Improvements

It is proposed that these culverts be replaced due, in part, to a need for allowing a greater flow of water through the ditch. It is possible that some culverts may be clogged and in need of replacement. To achieve this, new larger pipes and headwalls will need to be installed depending on the nature of each driveway or intersection.

Benefits

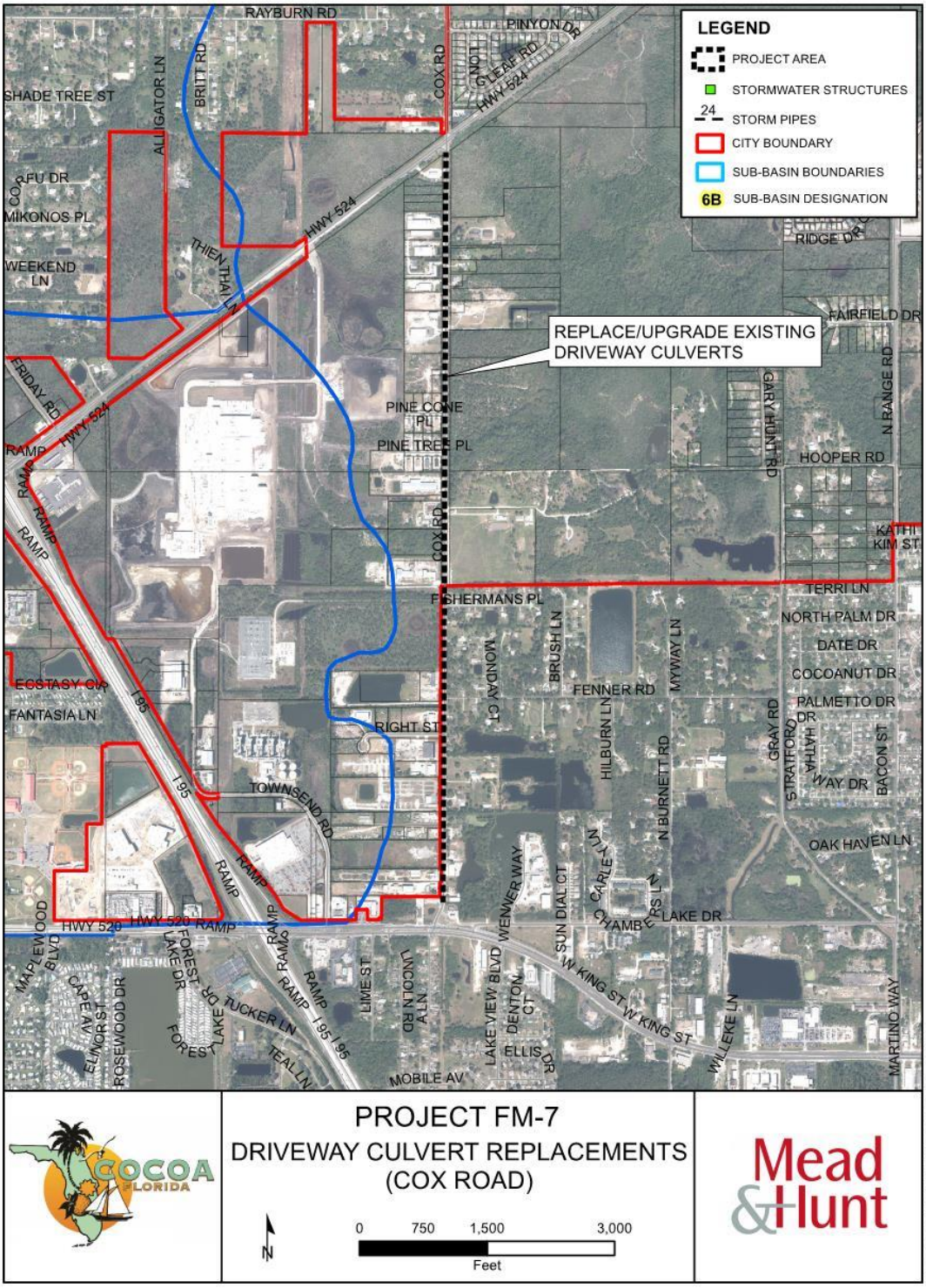
Open ditch systems are important elements of stormwater management. They provide effective conveyance of stormwater through the system and may also provide some storage and attenuation of larger flows. However, there is a constant need for maintenance to the system to ensure that there are no blockages that may cause flooding upstream. Thus, replacing culverts is a necessary task in maintaining the effectiveness of these open ditch systems to allow the free flow of water without having flooding issues.

Cost Estimate

It is anticipated that this project will cost $509,418 including all necessary piping, headwalls, and driveway restorations necessary.

Table 12: Cost Estimate Table – Project FM-7: Driveway Culvert Replacements (Cox Road).

Project FM-7: Driveway Culvert Replacements (Cox Road)						
Item Number	Location	Proposed Retrofit Improvements				
	Cox Rd.	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition	1	EA	$20,000.00	$20,000.00
	- Site preparation	Dewatering and flow diversion	1	EA	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	EA	$10,000.00	$10,000.00
	- Storm Piping	48" x 60" RCP	300	LF	$225.00	$67,500.00
	- Storm Piping	Concrete Headwall	24	EA	$6,500.00	$156,000.00
	- Roadway/Driveway Restoration	Asphalt, base and subgrade	300	SY	$25.00	$7,500.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$20,000.00	$20,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$311,000.00
1						
			- Mobilization @		10%	$31,100.00
			- Contingencies @		20%	$62,200.00
			SUB-TOTAL OF CONSTRUCTION COST			$404,300.00
			- Eng Design & Permitting @		15%	$60,645.00
			- Subconsultants @		5%	$20,215.00
			- Constr Admin and Insp @		6%	$24,258.00
			TOTAL PROJECT COST			**$509,418**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
REPLACE/UPGRADE EXISTING DRIVEWAY CULVERTS
RAYBURN RD
PINYON DR
SHADE TREE ST
ALLIGATOR LN
BRITT RD
COX RD
HWY 524
CORFU DR
MIKONOS PL
WEEKEND LN
THIEN THAI LN
FRIDAY RD
RIDGE DR
FAIRFIELD DR
N RANGE RD
GARY HUNT RD
PINE COVE PL
PINE TREE PL
HOOPER RD
KATHI KIM ST
FISHERMANS PL
TERRI LN
NORTH PALM DR
DATE DR
COCOANUT DR
PALMETTO DR
MONDAY CT
BRUSH LN
MYWAY LN
FENNER RD
HILBURN LN
N BURNETT RD
GRAY RD
STRATFORD DR
HATHA WAY DR
BACON ST
ECSTASY CIR
FANTASIA LN
I95
RIGHT ST
TOWNSEND RD
RAMP
OAK HAVEN LN
HWY 520
MAPLEWOOD BLVD
CAPE AV
ELINOR ST
ROSEWOOD DR
FOREST LAKE DR
TUCKER LN
TEAL LN
LIME ST
LINCOLN RD
LAKEVIEW BLVD
WENNER WAY
SUN DIAL CT
CARLE CT
CYAMBER LN
LAKE DR
S W KING ST
W KING ST
DENTON CT
ELLIS DR
WILLEKE LN
MARTINO WAY
MOBILE AV
PROJECT FM-7
DRIVEWAY CULVERT REPLACEMENTS
(COX ROAD)
0 750 1,500 3,000
Feet
N
COCOA FLORIDA
Mead &Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(8) FM-8: Complete Drainage System on Dixon Blvd.

Location

Project FM-8 is focused on the drainage system along Dixon Blvd. Dixon Blvd is a heavily traveled roadway that extends eastward from Clearlake Middle School to the IRL. Piping has been installed from Pineridge Rd. to N Fiske Blvd. connecting the roadway to outfalls in Bracco Pond. The rest of the corridor, the sections extending eastward and westward, have swales installed that direct water towards the current piping system.

Proposed Improvements

Plans have been drawn up to overhaul the drainage system on this corridor. Work has been completed on that part of the network west from N Fiske Blvd. up to Pineridge Rd. and that there is an unfinished section east from N Fiske Blvd. to the Florida East Coast Railroad, and west of Pineridge Rd.

The plans propose installing about 1,800 ft of piping and all associated inlet structures on the remaining eastern section of the road from N Fiske Blvd. to the FEC Railroad. Additionally, it is proposed that a similar drainage system be constructed west of Pineridge Rd. with about 2,700 ft of piping to be installed along with all necessary stormwater structures. An overlying system of swales would aid in attenuating flows from smaller rain events.

Benefits

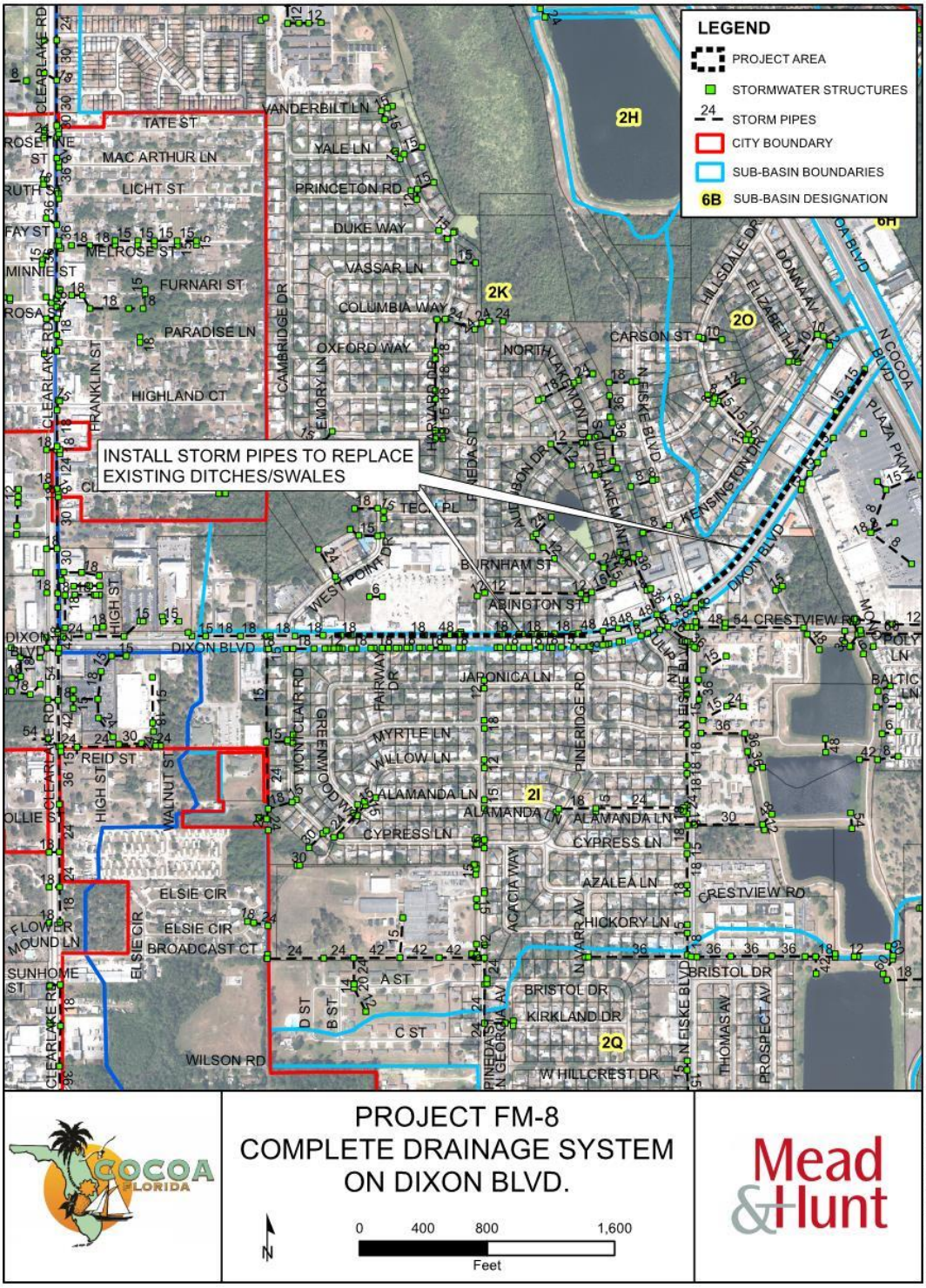
Upgrades to drainage systems are necessary as development of an area intensifies. This section of Dixon Blvd. is within the boundaries of the 836-acre US1 Community Redevelopment Area (CRA).

Cost Estimate

It is anticipated that this project will cost $1,193,283. It is possible to consider this a multi-phase project separating the excavation of swales and the installation of the remaining piping.

Table 13: Cost Estimate Table – Project FM-8: Complete Drainage System on Dixon Blvd.

Project FM-8: Complete Drainage System on Dixon Blvd.						
Item Number	Location	Proposed Retrofit Improvements				
	Dixon Blvd.	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition	1	LS	$15,000.00	$15,000.00
	- Site preparation	Swale Construction	3,500	LF	$10.00	$35,000.00
	- Furnish & Install	18" - 24" RCP	1,800	LF	$80.00	$144,000.00
	- Furnish & Install	30" - 36" RCP	2,700	LF	$125.00	$337,500.00
	- Furnish & Install	Stormwater Structures	24	EA	$3,500.00	$84,000.00
	- Restoration	Driveway Aprons	28	LS	$3,500.00	$98,000.00
	- Landscaping	Sodding, landscaping, etc.	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$728,500.00
1						
			- Mobilization @		10%	$72,850.00
			- Contingencies @		20%	$145,700.00
			SUB-TOTAL OF CONSTRUCTION COST			$947,050.00
			- Eng Design & Permitting @		15%	$142,057.50
			- Subconsultants @		5%	$47,352.50
			- Constr Admin and Insp @		6%	$56,823.00
			TOTAL PROJECT COST			**$1,193,283**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
INSTALL STORM PIPES TO REPLACE EXISTING DITCHES/SWALES
2H
2K
2O
2I
2Q
6H
TATE ST
MAC ARTHUR LN
LICHT ST
MELROSE ST
FURNARI ST
PARADISE LN
HIGHLAND CT
VANDERBILT LN
YALE LN
PRINCETON RD
DUKE WAY
VASSAR LN
COLUMBIA WAY
OXFORD WAY
CARSON ST
NORTH
BURNHAM ST
ARLINGTON ST
DIXON BLVD
CRESTVIEW RD
JAPONICA LN
MYRTLE LN
WILLOW LN
ALAMANDA LN
CYPRESS LN
AZALEA LN
HICKORY LN
BRISTOL DR
KIRKLAND DR
W HILLCREST DR
WILSON RD
ELSIE CIR
BROADCAST CT
A ST
B ST
C ST
D ST
REID ST
OLLIE ST
SUNHOME ST
PROJECT FM-8
COMPLETE DRAINAGE SYSTEM
ON DIXON BLVD.
0 400 800 1,600
Feet
N
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(9) FM-10: Provost Park / Pinegrove Park Ditch Piping

Location

Project FM-10 is located on the west of Provost Park, a 9-acre multi-use park located on S Varr Ave., just south of W King St. There is an open field bounded by a pine grove on the western section of the park, Pinegrove Park, with an open ditch that is used to convey stormwater runoff. This open ditch is a section of a larger conveyance system that is transporting runoff from the drainage basin south to a retention pond on Pluckebaum Rd.

Proposed Improvements

It is proposed that the existing open ditch be replaced by piping in order to complete the section extending from W King St. to the wet pond south.

Benefits

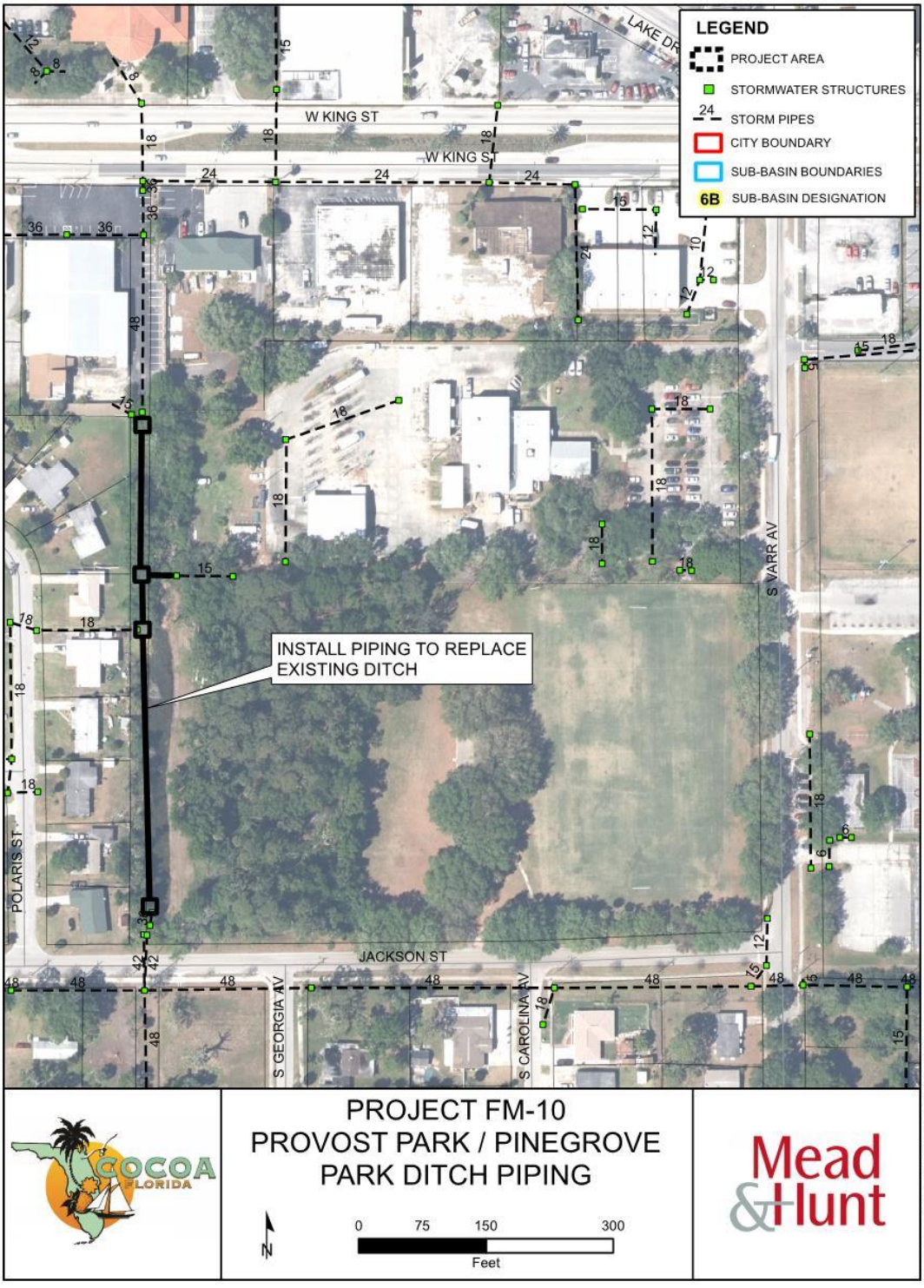
Open ditch systems require constant maintenance in order to sustain their ability to transport stormwater runoff effectively. Therefore, piping of these ditches reduces maintenance costs to the City in the long run. Apart from important benefits provided by covering up of this ditch, this project would complete the final section piping the runoff from W King St. southward.

Cost Estimate

This project is anticipated to cost $244,125 to install about 600 ft of storm piping and the necessary structures to connect this new system to the existing piping.

Table 14: Cost Estimate Table – Project FM-10: Provost Park / Pinegrove Park Ditch Piping.

Project FM-10: Provost Park / Pinegrove Park Ditch Piping						
Item Number	Location	Proposed Retrofit Improvements				
	Provost Park / Pinegrove Park	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site Preparation	Dewatering and Flow Control	1	LS	$15,000.00	$15,000.00
	- Furnish & Install	Stormwater Structures	5	EA	$5,000.00	$25,000.00
	- Storm Piping	48" RCP	600	LF	$175.00	$105,000.00
	- Right of Way Restoration	Sodding, Landscaping, etc.	1	LS	$10,000.00	$10,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$155,000.00
1						
			- Mobilization @		10%	$15,500.00
			- Contingencies @		15%	$23,250.00
			SUB-TOTAL OF CONSTRUCTION COST			$193,750.00
			- Eng Design & Permitting @		15%	$29,062.50
			- Subconsultants @		5%	$9,687.50
			- Constr Admin and Insp @		6%	$11,625.00
			TOTAL PROJECT COST			**$244,125**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
W KING ST
W KING ST
LAKE DR
S VARR AV
INSTALL PIPING TO REPLACE EXISTING DITCH
POLARIS ST
JACKSON ST
S GEORGIA AV
S CAROLINA AV
PROJECT FM-10
PROVOST PARK / PINEGROVE PARK DITCH PIPING
0 75 150 300
Feet
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(10) FM-11: Elevate Indian River Dr.

Location

Project FM-11 focuses on a 2300 ft length of roadway on Indian River Dr., a scenic, residential road extending northward from SR520 past the northern boundary of the City. The roadway essentially delineates the eastern boundary of the City of Cocoa where it meets the IRL. With heavy storm events bringing record rain, such as those witnessed in an October 2017 rain event, water levels in the roadway have risen to dangerous levels forcing partial shutdowns of the area.

Proposed Improvements

The reconstruction of this section of roadway at a higher elevation is proposed. Elevating this roadway entails the total reconstruction of the roadway and its intersections to the new desired elevation without negatively impacting nearby or adjacent properties.

Benefits

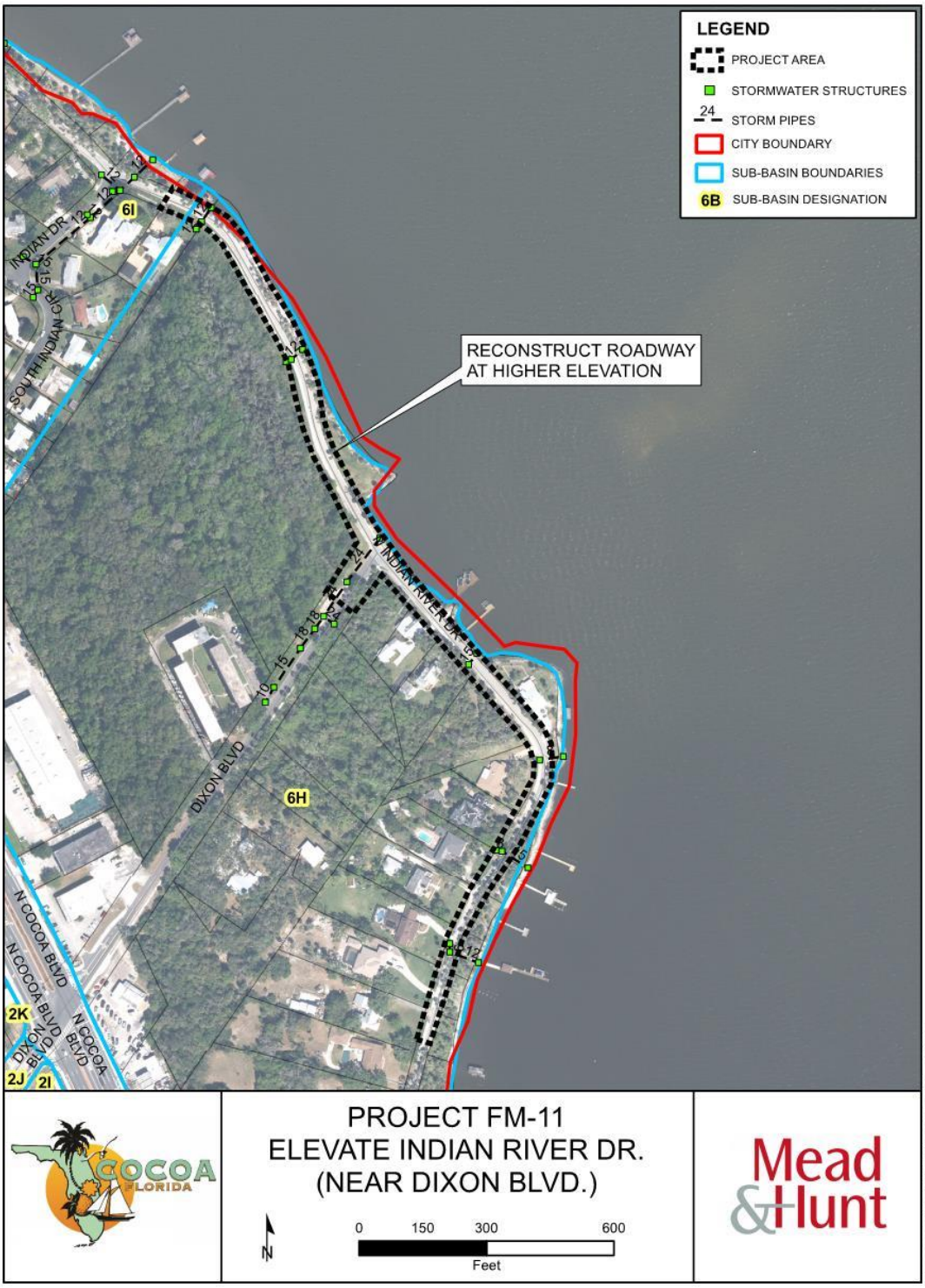
Elevating this vulnerable roadway protects it from the effects of heavy storm events eroding or destroying structure, as well as from the long-term effects of sea level rise. Projects of this nature are intended to reduce the overall flood risk to the area including any properties in the vicinity. Roadway elevation projects may be coupled with drainage improvements, such as those proposed in the Water Quality Projects WQ-1 and WQ-2 which propose the installation of discharge structures on the smaller and larger sub-basins that discharge stormwater to the IRL.

Cost Estimate

This project is anticipated to cost $967,395.

Table 15: Cost Estimate Table – Project FM-11: Elevate Indian River Dr.

Project FM-11: Elevate Indian River Dr.						
Item Number	Location	Proposed Retrofit Improvements				
	Indian River Dr. (near Dixon Blvd.)	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Roadway Construction	R & R Indian River Drive	3,000	LF	$322.47	$967,395.00
Qualifications (if applicable)			**SUB-TOTAL**			$967,395.00
1	Assumes reconstruction of approximately 3,000 LF of two lane roadway, driveways					
	and 1 intersection.		- Mobilization @		0%	$0.00
2	Based on FDOT Long Range Estimates		- Contingencies @		0%	$0.00
3	Accounts for roadway elevation of approximately 3 feet.					
			SUB-TOTAL OF CONSTRUCTION COST			$967,395.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$967,395**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
RECONSTRUCT ROADWAY AT HIGHER ELEVATION
INDIAN DR
SOUTH INDIAN CIR
W INDIAN RIVER DR
DIXON BLVD
N COCOA BLVD
6I
6H
2K
2J
2I
PROJECT FM-11
ELEVATE INDIAN RIVER DR.
(NEAR DIXON BLVD.)
0 150 300 600
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(11) FM-12: Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision

Location

Project FM-12 is located on a small roadway in the Highpoint Subdivision on the northern part of the City of Cocoa. There are reports of localized flooding issues in this subdivision, and it is anticipated that high groundwater conditions contribute to the standing water and flooding. Due to high property costs and little options for installing retention systems to transport and store this floodwater, alternative measures must be employed to address the problem. Fairfax Ln. is within a 30.3-acre drainage basin with outfalls to the IRL.

Proposed Improvements

This project proposes to install an underdrain type of system where appropriate in order to lower the groundwater table and improve the standing water situations. Currently, there is a pipe network connecting the streets on the North and South ends of Fairfax Ln. to an outfall located along River Point Dr. The underdrain system proposed would connect to this pipe network and ultimately enhance the flood mitigation abilities within this 30.3-acre sub-basin.

Benefits

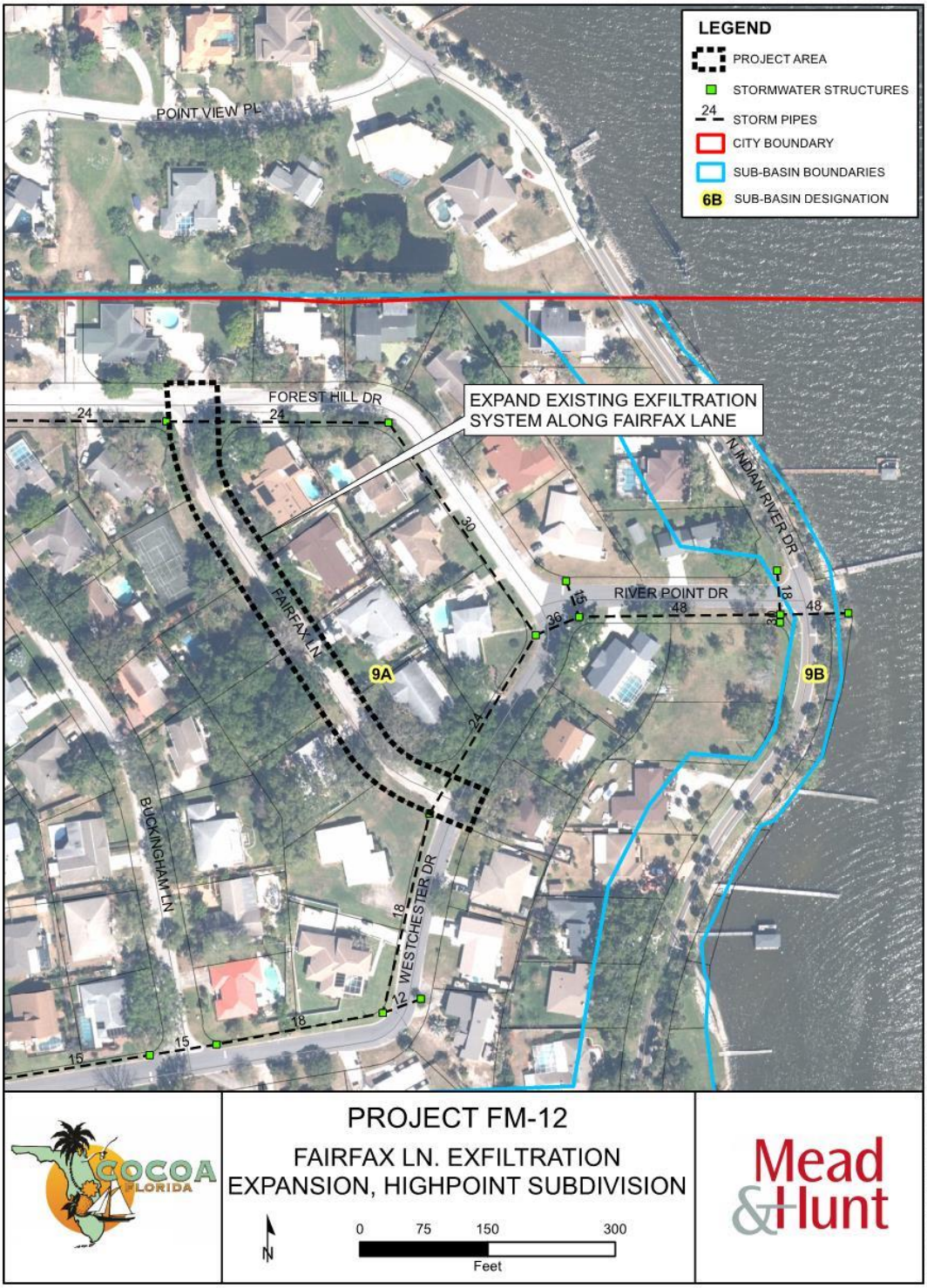
This project proposes a practical method of improving the ability of this locale to mitigate flooding issues. Additionally, seeping groundwater can cause street deterioration so this project will help protect the existing roads.

Cost Estimate

It is anticipated that this project will cost $353,808 including the installation of a 600 ft underdrain system and all necessary structures associated with it.

Table 16: Cost Estimate Table – Project FM-12: Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision.

Project FM-12: Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision						
Item Number	Location	Proposed Retrofit Improvements				
	Fairfax Ln., Highpoint Subdivision	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition	1	LS	$20,000.00	$20,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$5,000.00	$5,000.00
	- Furnish & Install	Exfiltration System	600	LF	$200.00	$120,000.00
	- Roadway/Driveway Restoration	Asphalt, base and subgrade	1,600	SY	$35.00	$56,000.00
	- Landscaping	Sodding, landscaping, etc.	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$216,000.00
1						
			- Mobilization @		10%	$21,600.00
			- Contingencies @		20%	$43,200.00
			SUB-TOTAL OF CONSTRUCTION COST			$280,800.00
			- Eng Design & Permitting @		15%	$42,120.00
			- Subconsultants @		5%	$14,040.00
			- Constr Admin and Insp @		6%	$16,848.00
			TOTAL PROJECT COST			**$353,808**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
POINT VIEW PL
FOREST HILL DR
EXPAND EXISTING EXFILTRATION SYSTEM ALONG FAIRFAX LANE
N INDIAN RIVER DR
RIVER POINT DR
FAIRFAX LN
BUCKINGHAM LN
WESTCHESTER DR
9A
9B
PROJECT FM-12
FAIRFAX LN. EXFILTRATION EXPANSION, HIGHPOINT SUBDIVISION
0 75 150 300
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(12) FM-13: Cocoa North Rear Yard Ditch Piping (London Blvd. to West Minister)

Location

Project FM-13 is yet another project aiming to transform the cities stormwater conveyance systems into an underground piping network. In this case, the location being addressed is the open ditch that extends between Westminster Dr. and SR-524, parallel to London Blvd. This stretch of about 3,000 ft is surrounded primarily by single family residential parcels, and it continues westward of Westminster Dr., outside the City boundaries.

Proposed Improvements

This project proposes the replacement of the existing open ditch with all necessary piping, junctions, and discharge structures. The project may include a possible amenity of a walking path.

Benefits

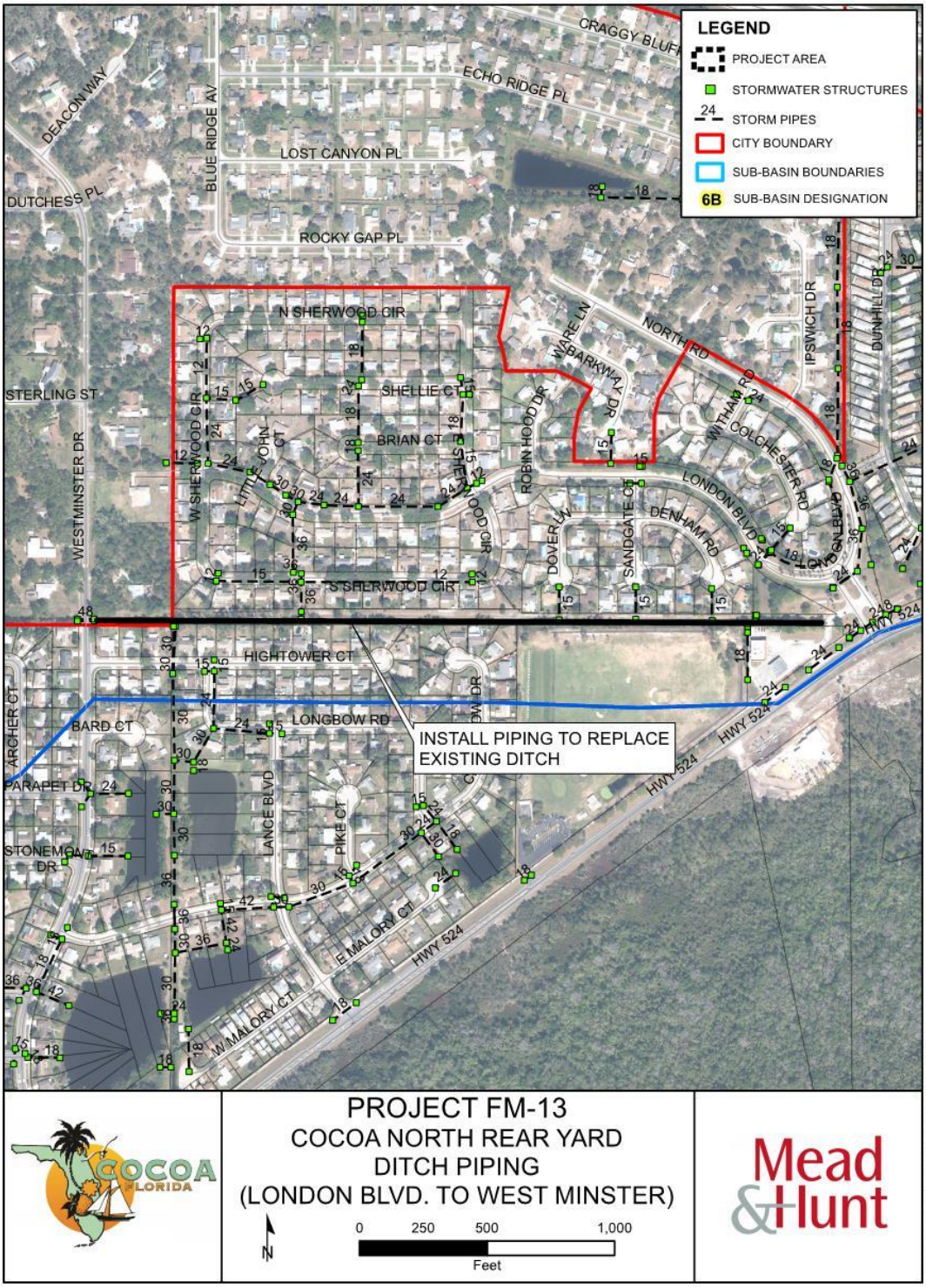
Open ditch systems require constant maintenance in order to sustain their ability to transport stormwater runoff effectively, therefore piping of these ditches reduces maintenance costs to the City in the long run.

Cost Estimate

It is anticipated that this project will cost $999,180. Cost estimates for this 2,800 ft corridor were made assuming about 3,000 ft of piping and 30 stormwater junction boxes are to be necessary.

Table 17: Cost Estimate Table – Project FM-13: Cocoa North Rear Yard Ditch Piping (London Blvd. to West Minister).

Project FM-13: Cocoa North Rear Yard Ditch Piping (London Blvd. to West Minister)						
Item Number	Location	Proposed Retrofit Improvements				
	London Blvd. to West Minister	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Dewatering and flow diversion	1	LS	$30,000.00	$30,000.00
	- Storm Piping	36" RCP	1,500	LF	$115.00	$172,500.00
	- Storm Piping	48" RCP	1,500	LF	$185.00	$277,500.00
	- Storm Piping	Stormwater Junction Boxes	30	EA	$3,500.00	$105,000.00
	- Restoration	Sodding, landscaping, etc.	1	LS	$25,000.00	$25,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$610,000.00
1						
			- Mobilization @		10%	$61,000.00
			- Contingencies @		20%	$122,000.00
			SUB-TOTAL OF CONSTRUCTION COST			$793,000.00
			- Eng Design & Permitting @		15%	$118,950.00
			- Subconsultants @		5%	$39,650.00
			- Constr Admin and Insp @		6%	$47,580.00
			TOTAL PROJECT COST			**$999,180**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
INSTALL PIPING TO REPLACE EXISTING DITCH
PROJECT FM-13
COCOA NORTH REAR YARD
DITCH PIPING
(LONDON BLVD. TO WEST MINSTER)
0 250 500 1,000
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(13) FM-14: Diamond Square Drainage Improvements

Location

Project FM-14 is part of the greater Diamond Square CRA, a 430-acre community redevelopment area. The area of interest is approximately 100 acres between SR-520/King St. and Rosa L. Jones Blvd, and between Blake Ave. and the Florida East Coast (FEC) Railroad. The land use in the surrounding Diamond Square area is made up of mostly residential parcels with some commercial activity near the main roadway north of the project site, SR520.

Proposed Improvements

This project proposes improvements to the drainage of the Diamond Square CRA. Past studies suggested drainage improvements in the following categories:

- Conveyance Improvements
- Storage Improvements
- Mitigation Improvements

Project WQ-12 is an element of this drainage improvement plan, as it intends to excavate a 0.94-acre pond in a vacant property on W Railroad Ave.

Benefits

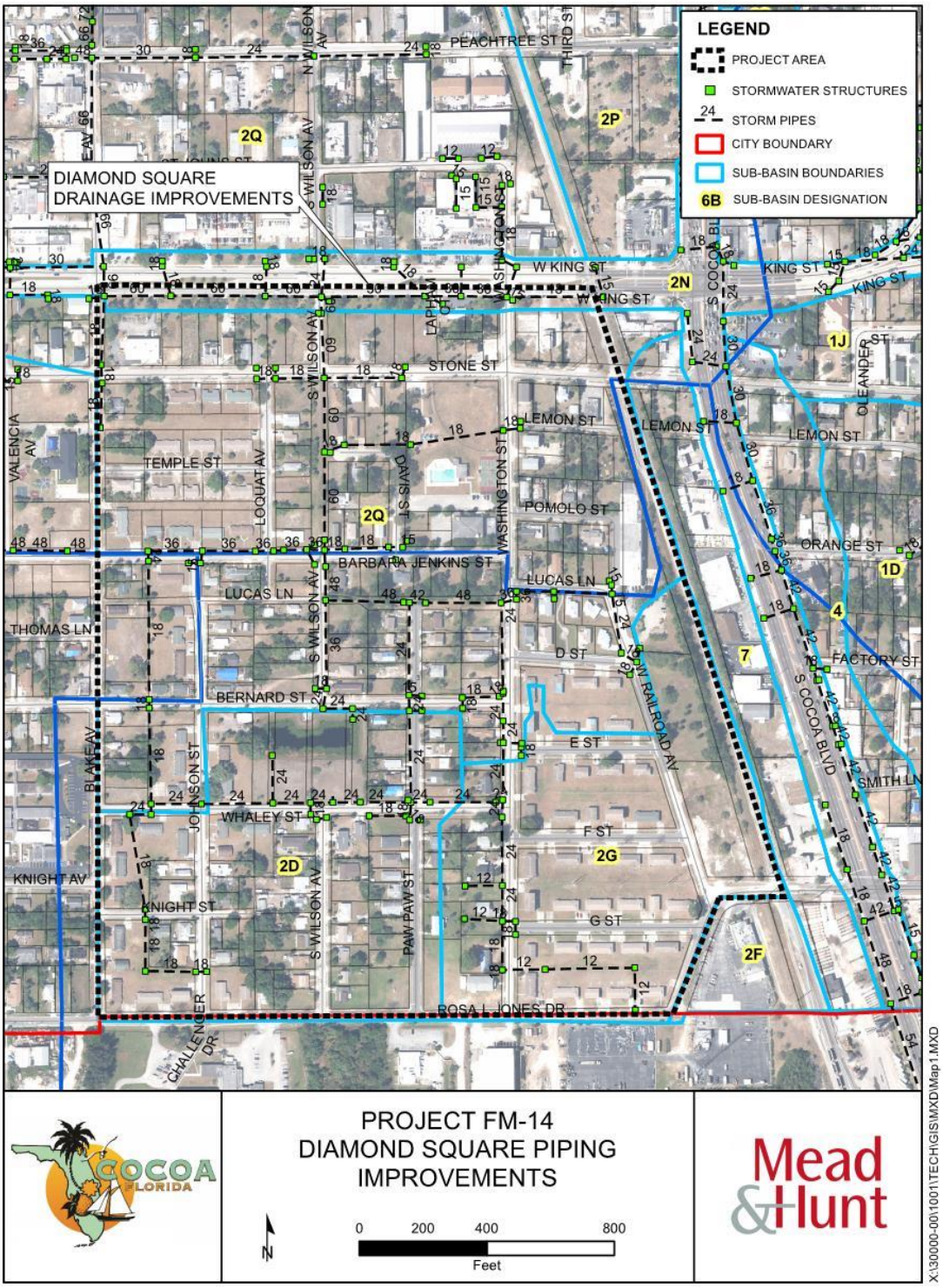
These efforts to improve the drainage of the Diamond Square CRA are an important element in attenuating the flows of stormwater for the changing land use landscape that is Diamond Square. As part of the greater redevelopment plan, this project is an essential component in reducing the physical and environmental impact on water resources.

Cost Estimate

Preliminary cost estimates associated with drainage improvements to the Diamond Square area assume about 800 ft of piping and several stormwater structures are to be put in place to channel stormwater flows to existing outfalls in Bracco Pond or in the future Verizon stormwater pond. It is anticipated that this would cost $235,872. However, further study and understanding of localized flooding in the area may change the scope of this project.

Table 18: Cost Estimate Table – Project FM-14: Diamond Square Drainage Improvements.

Project FM-14: Diamond Square Pond & Piping Improvements						
Item Number	Location	Proposed Retrofit Improvements				
	Diamond Square	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition	1	LS	$30,000.00	$30,000.00
	- Site preparation	Pond Excavation	1	LS	$15,000.00	$15,000.00
	- Storm Piping	15" - 24" RCP	800	LF	$85.00	$68,000.00
	- Furnish & Install	Stormwater Structures	4	EA	$4,000.00	$16,000.00
	- Landscaping	Sodding, landscaping, etc.	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$144,000.00
1						
			- Mobilization @		10%	$14,400.00
			- Contingencies @		20%	$28,800.00
			SUB-TOTAL OF CONSTRUCTION COST			$187,200.00
			- Eng Design & Permitting @		15%	$28,080.00
			- Subconsultants @		5%	$9,360.00
			- Constr Admin and Insp @		6%	$11,232.00
			TOTAL PROJECT COST			**$235,872**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
DIAMOND SQUARE DRAINAGE IMPROVEMENTS
PEACHTREE ST
THIRD ST
N WILSON AV
S WILSON AV
W KING ST
KING ST
S COCOA BL
STONE ST
LEMON ST
TEMPLE ST
VALENCIA AV
LOQUAT AV
S SAVO ST
WASHINGTON ST
POMOLO ST
ORANGE ST
OLEANDER ST
BARBARA JENKINS ST
LUCAS LN
THOMAS LN
D ST
FACTORY ST
BERNARD ST
E ST
SMITH LN
BLANE AV
JOHNSON ST
WHALEY ST
F ST
KNIGHT AV
KNIGHT ST
PAW PAW ST
G ST
ROSA L JONES DR
CHALLENGER DR
FEC RAILROAD AV
S COCOA BLVD
2Q
2P
2N
1J
1D
4
7
2D
2G
2F
PROJECT FM-14
DIAMOND SQUARE PIPING IMPROVEMENTS
0 200 400 800
Feet
X:\30000-0010011\TECH\GIS\MXD\Map1.MXD

(14) FM-15: Annual Curb & Gutter R&M Program

Location

Project FM-15 is part of a City-wide effort to maintain stormwater facilities in working order. This project scrutinizes the network of curbs & gutters and focuses on the annual maintenance and replacement of sub-standard, deteriorated and non-existing curbs around the City.

Proposed Improvements

This project proposes establishing an annual program to analyze, replace, and/or, maintain curbs and gutters around the City. Some survey services from outside contractors may be included with this item for proper installation of new curb to the proper slope.

Benefits

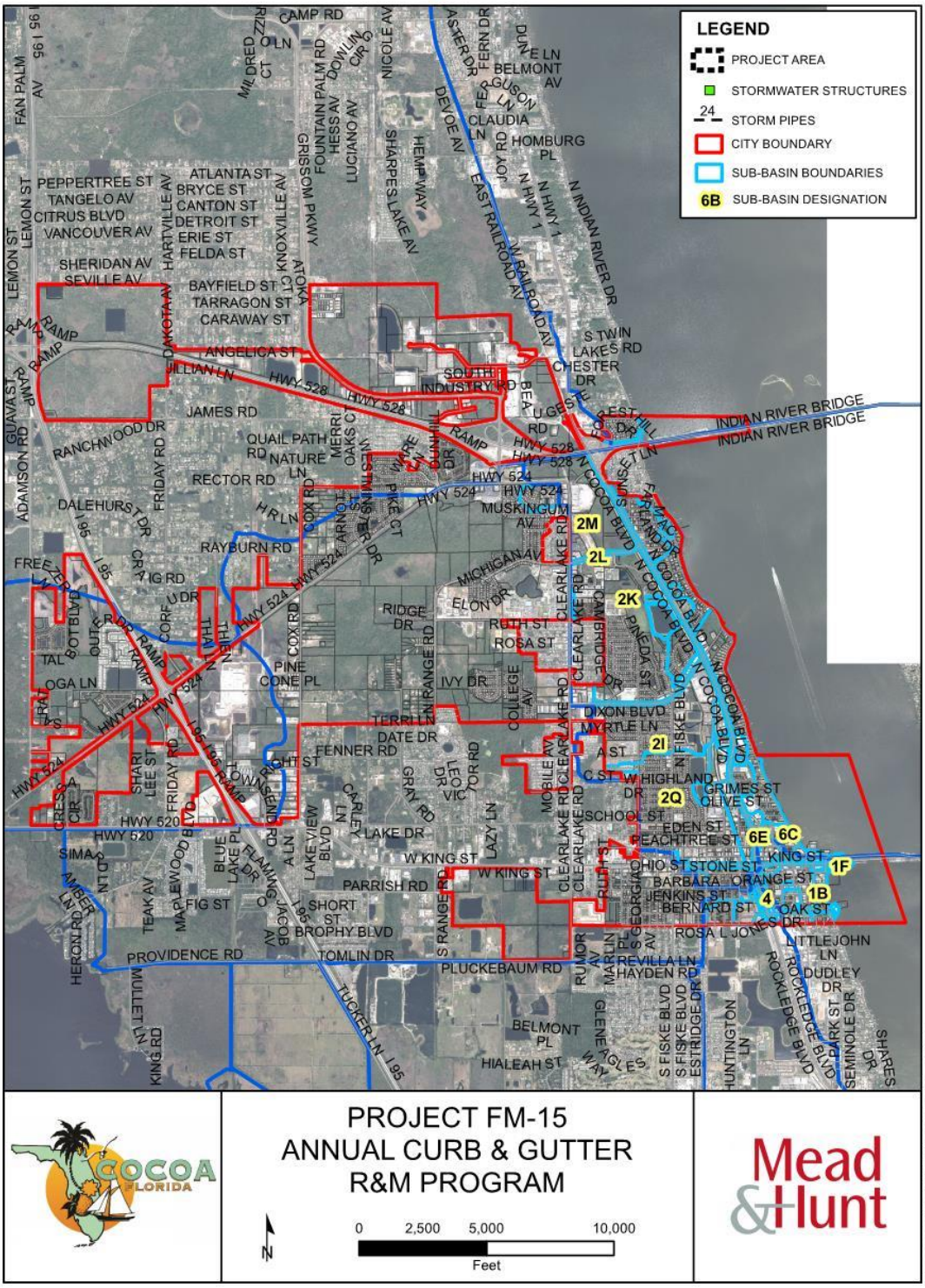
Curbs and gutters are important elements ensuring proper conveyance of runoff to inlets and other stormwater structures. This project will help protect and maintain the stormwater assets of the City. Additionally, this program would ensure all structures are adequate and thus prevent or alleviate localized flooding issues associated with deteriorated structures.

Cost Estimate

The City has previously allocated a yearly amount of $50,000 to this annual program.

Table 19: Cost Estimate Table – Project FM-15: Annual Curb & Gutter R&M Program.

Project FM-15: Annual Curb & Gutter R&M Program						
Item Number	Location	Proposed Retrofit Improvements				
	City of Cocoa	Item Description	Quantity	Unit	Unit Cost	Amount
1	Annual Program					
	- Curb & Gutter Replacement	Concrete Curbing	2,500		$20.00	$50,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$50,000.00
1	Previously allocated amount per year.					
			- Mobilization @		0%	$0.00
			- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$50,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$50,000**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
PROJECT FM-15
ANNUAL CURB & GUTTER
R&M PROGRAM
0 2,500 5,000 10,000
Feet
COCOA FLORIDA
Mead &Hunt
X:\30000-0010011\TECH\GIS\MXD\Map1.MXD

(15) FM-16: Bracco Pond 72" Outfall (Rehabilitation/Replacement)

Location

Project FM-16 is related to the 72" outfall that extends eastward of Bracco Pond to the IRL. There is a large 72" pipe about 1,500 ft long from the Bracco Ponds outfall crossing beneath U.S. 1 and out to the IRL. This outfall is also associated to project FM-5 that intends to replace the open ditch that is the outfall structure of the reservoirs with piping.

Proposed Improvements

The purpose of this project is to rehabilitate or replace the 72" outfall as it is an important element of several other projects related to this structure. As such, it is an important part of the general maintenance projects that the City must execute continuously. Project WQ-10 addresses water quality and improved water storage issues related to this same outfall.

Benefits

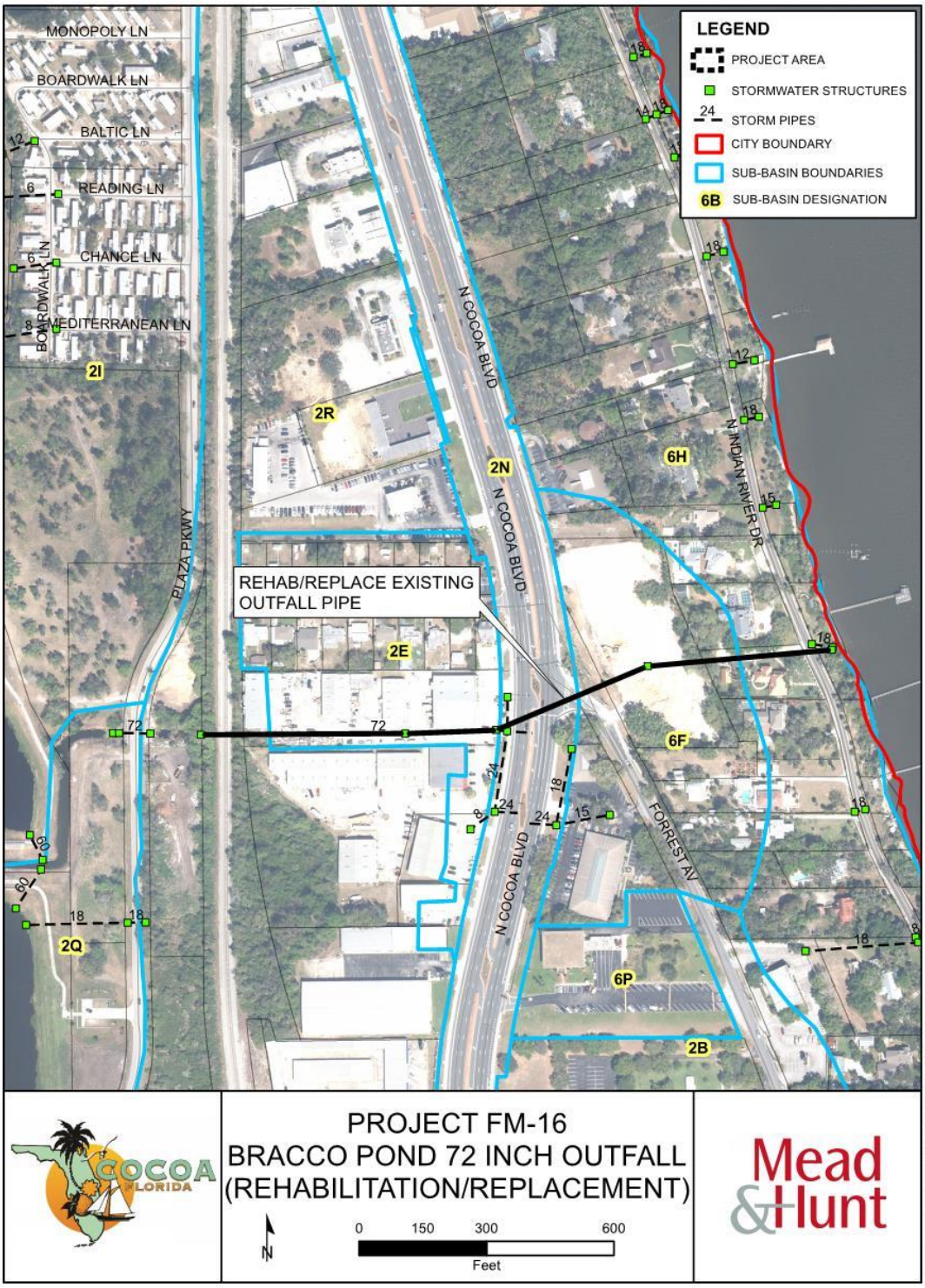
By rehabilitating this pipe, you are ensuring the structural integrity of this outfall to guarantee the longevity and effectiveness of all current and planned structures associated with it.

Cost Estimate

It is anticipated that this project will cost $402,675 assuming all 1,500 ft of 72" piping is to be installed. Further analysis of the condition of this pipe is necessary to establish a more precise estimate.

Table 20: Cost Estimate Table – Project FM-16: Bracco Pond 72" Outfall (Rehabilitation/Replacement).

Project FM-16: Bracco Pond 72" Outfall (Rehabilitation/Replacement)						
Item Number	Location	Proposed Retrofit Improvements				
	Bracco Pond Outfall	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Site Investigation	Pre-Design Inspection	1	LS	$50,000.00	$50,000.00
	- Construction Activities	Dewatering & Flow Control	1	LS	$25,000.00	$25,000.00
	- Furnish & Install	72" RCP Storm Piping	1,500	LF	$125.00	$187,500.00
Qualifications (if applicable)			**SUB-TOTAL**			$262,500.00
1						
			- Mobilization @		10%	$26,250.00
			- Contingencies @		20%	$52,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$341,250.00
			- Eng Design & Permitting @		10%	$34,125.00
			- Subconsultants @		3%	$10,237.50
			- Constr Admin and Insp @		5%	$17,062.50
			TOTAL PROJECT COST			**$402,675**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
MONOPOLY LN
BOARDWALK LN
BALTIC LN
READING LN
CHANCE LN
MEDITERRANEAN LN
BOARDWALK LN
PLAZA PKWY
N COCOA BLVD
N COCOA BLVD
N COCOA BLVD
N INDIAN RIVER DR
FORREST AV
REHAB/REPLACE EXISTING OUTFALL PIPE
2I
2R
2N
2E
2Q
2B
6H
6F
6P
PROJECT FM-16
BRACCO POND 72 INCH OUTFALL
(REHABILITATION/REPLACEMENT)
0 150 300 600
Feet
X:\30000-0010011\TECH\GIS\MXD\Map1.MXD

(16) FM-17: West Dixon Blvd. Stormwater Facility

Location

Project FM-17 is related to a planned, off-line, stormwater facility to be built behind the Dixon Fire Station. The parcel of land is located between Clearlake Middle School and W Dixon Blvd. There are currently some inlets west of the area of interest that convey runoff from the College Manor neighborhood south to some vacant lots.

Proposed Improvements

This project proposes the installation of a stormwater facility in the available open lot as well as inlet structures from the College Manor neighborhood. This project could be developed in phases, that is, separating the excavation of the stormwater pond and the connections to the drainage system from the College Manor neighborhood.

Benefits

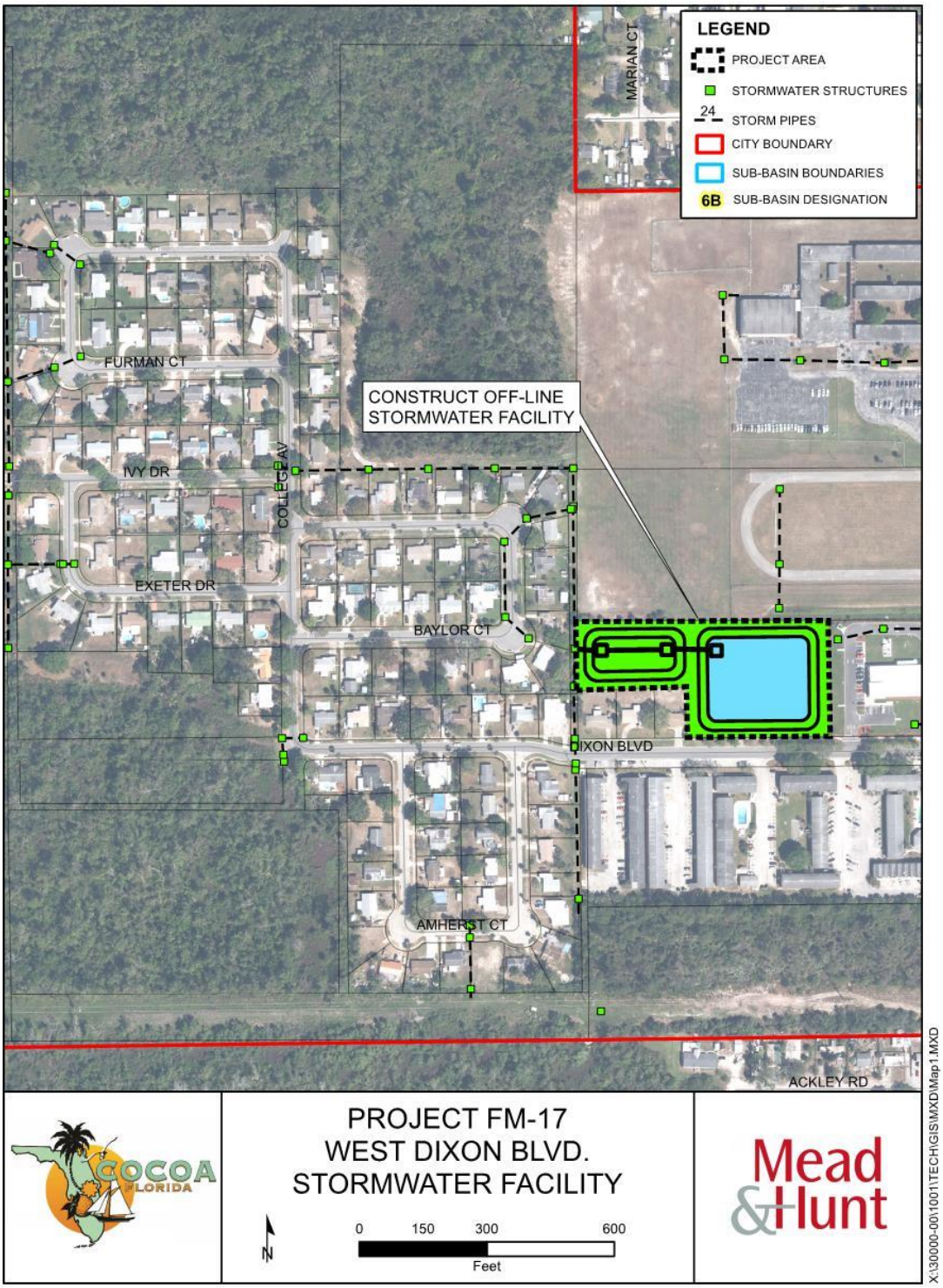
Stormwater structures, such as wet ponds, are elemental in ensuring a City's ability to mitigate floods. Furthermore, depending on the characteristics of the site, it may even provide some type of treatment to the water to prevent it from outflowing without treatment. Additional value could be given to the site by incorporating some community amenities such as benches, a pathway, and educational signage.

Cost Estimate

It is anticipated that this project will cost $291,564 to complete.

Table 21: Cost Estimate Table – Project FM-17: West Dixon Blvd. Stormwater Facility.

Project FM-17: West Dixon Blvd. Stormwater Facility						
Item Number	Location	Proposed Retrofit Improvements				
	W Dixon Blvd.	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Dewatering and flow diversion	1	LS	$15,000.00	$15,000.00
	- Site preparation	Pond Excavation	1	LS	$75,000.00	$75,000.00
	- Stormwater Structures	Junction Boxes & Inlets	3	EA	$3,500.00	$10,500.00
	- Stormwater Structures	Discharge Structure w Skimmer	1	EA	$5,000.00	$5,000.00
	- Stormwater Structures	36" RCP	500	LF	$115.00	$57,500.00
	- Landscaping	Sodding, landscaping, etc.	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$178,000.00
1						
		- Mobilization @			10%	$17,800.00
		- Contingencies @			20%	$35,600.00
		SUB-TOTAL OF CONSTRUCTION COST				$231,400.00
		- Eng Design & Permitting @			15%	$34,710.00
		- Subconsultants @			5%	$11,570.00
		- Constr Admin and Insp @			6%	$13,884.00
		TOTAL PROJECT COST				**$291,564**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
MARIAN CT
FURMAN CT
IVY DR
COLLEGE AV
EXETER DR
BAYLOR CT
CONSTRUCT OFF-LINE
STORMWATER FACILITY
DIXON BLVD
AMHERST CT
ACKLEY RD
PROJECT FM-17
WEST DIXON BLVD.
STORMWATER FACILITY
0 150 300 600
Feet
COCOA FLORIDA
Mead &Hunt
X:\30000-0011001\TECH\GIS\MXD\Map1.MXD

(17) FM-18: iWorQ Integration between GIS and Operations & Maintenance

Location

Project FM-18 has no specified location.

Proposed Improvements

This project proposes the integration of the iWorQ Systems Inc. to the City's operation and maintenance. iWorQ is a web-based public works software that helps cities with anything from tracking and managing fleets and assets, within a user-friendly interface.

Benefits

The iWorQ website lists the following capabilities for the software:

- Work Management
- Fleet Management
- Facilities
- Citizen Engagement
- Stormwater
- Sewer
- Water
- Capital Assets
- Etc.

The software provides for better communication between engineering, operations and maintenance by inputting all GIS information in the hands of everyone. Logging and tracking of flood information, rainfall, pipe condition, age, material, etc. Ultimately, this project will improve the operation and maintenance of the stormwater system.

Cost Estimate

It is anticipated that this project will cost $77,777. However, cost estimates associated with the integration of this software into the City's current action plan are merely order of magnitude estimates as to what integration of this software might entail.

Table 22: Cost Estimate Table – Project FM-18: iWorQ Integration between GIS and Operations & Maintenance.

Project FM-18: iWorQ Integration between GIS and Operations & Maintenance						
Item Number	Location	Proposed Retrofit Improvements				
	City of Cocoa	Item Description	Quantity	Unit	Unit Cost	Amount
1	Consultant Work	Software Integration	1	LS	$77,777.00	$77,777.00
Qualifications (if applicable)			**SUB-TOTAL**			$77,777.00
1	Provides for better communication between engineering, operations and					
	maintenance by inputting all GIS information in the hands of everyone. Logging		- Mobilization @		0%	$0.00
	and tracking of flood information, rainfall, pipe condition, age, material, etc.		- Contingencies @		0%	$0.00
	Enables stormwater model integration into land development efforts.					
			SUB-TOTAL OF CONSTRUCTION COST			$77,777.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$77,777**

(18) FM-19: Comprehensive System Model

Location

Project FM-19 has no specified location.

Proposed Improvements

This project proposes the development of an overall model of the hydraulic and hydrologic features of the City of Cocoa. As of now, several portions of the City have been modeled as required by different projects. This project, therefore, aims to bring together any of these past studies and fill any holes still present in the overall model in order to have a better overview of the effects of different storm events and be able to prepare for them.

To do so, the City must:

- Assess available basin, node, link information and deficiencies.
- Obtain survey quality information on unaccounted for structures, pipes, etc.
- Combine new and old information into a new complete model.
- Verify model results by running known storm events and observe results.
- Adjust model to conform with reality.

Benefits

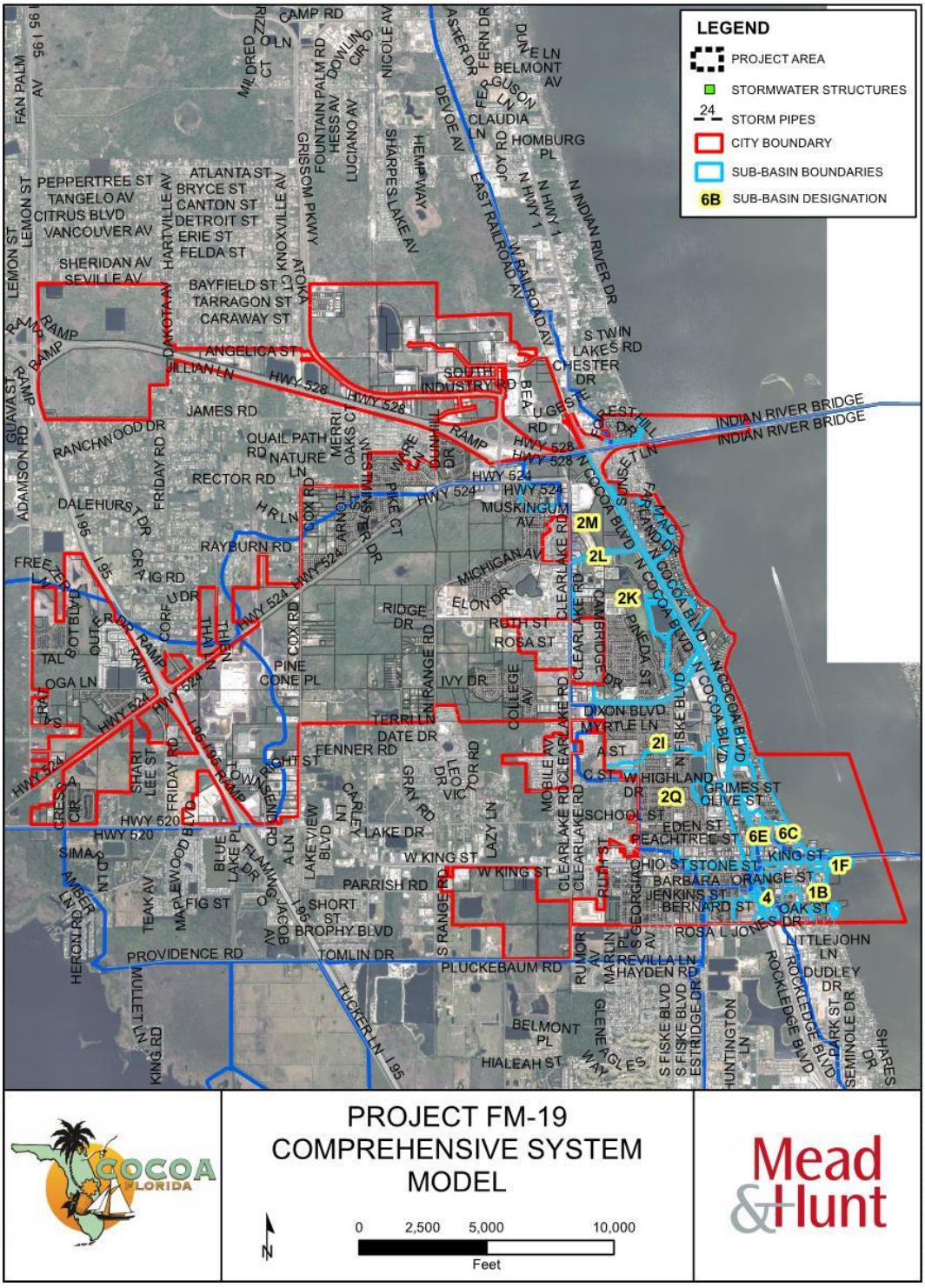
It is important that the City have an accurate and continuously updated model of the overall stormwater system in order develop resiliency strategies for the future. As the nature, intensity, and duration of storms change due to issues such as climate change, cities need to come up with innovative solutions to address the possible negative effects. Similar to project FM-18, this project will improve the operation and maintenance of the stormwater system.

Cost Estimate

It is anticipated that all consultant work associated with the development of this overall model would cost $125,000.

Table 23: Cost Estimate Table – Project FM-19: Comprehensive System Model.

Project FM-19: Comprehensive System Model						
Item Number	Location	Proposed Retrofit Improvements				
	City of Cocoa	Item Description	Quantity	Unit	Unit Cost	Amount
1	Consultant Work	Stormwater Model Update	1	LS	$125,000.00	$125,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$125,000.00
1	Assess available basin, node, link information and deficiencies.					
2	Obtain survey quality information on unaccounted for structures, pipes, etc.		- Mobilization @		0%	$0.00
3	Combine new and old information into a new complete model		- Contingencies @		0%	$0.00
4	Verify model results by running known storm events and observe results.					
5	Adjust model to conform with reality		**SUB-TOTAL OF CONSTRUCTION COST**			$125,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$125,000**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
PROJECT FM-19
COMPREHENSIVE SYSTEM
MODEL
0 2,500 5,000 10,000
Feet
COCOA FLORIDA
Mead &Hunt
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(19) FM-20 Mud Lake Investigation and Retrofit

Location

Project FM-20 focuses on the large vacant parcels of land located south of SR524. This vacant lot, generally referred to as Mud Lake has been the subject of several investigations by different entities such as Brevard County. Different proposals for the usage of this land have been offered including anything from stormwater structures to recreational facilities. The site is currently considered a wetland and contains a small water body called Mud Lake, encouraging the development of ideas that preserve or perhaps enhance the environmental services that wetlands are known to provide.

Proposed Improvements

This project aims to establish a City of Cocoa program to investigate their own future developments of the site. In particular, the City plans to develop the site to improve the overall stormwater management systems of the City to ensure all present and future stormwater flood mitigation needs are met. Coupled with stormwater improvements is the possibility of developing amenities for public use, such as nature trails.

Benefits

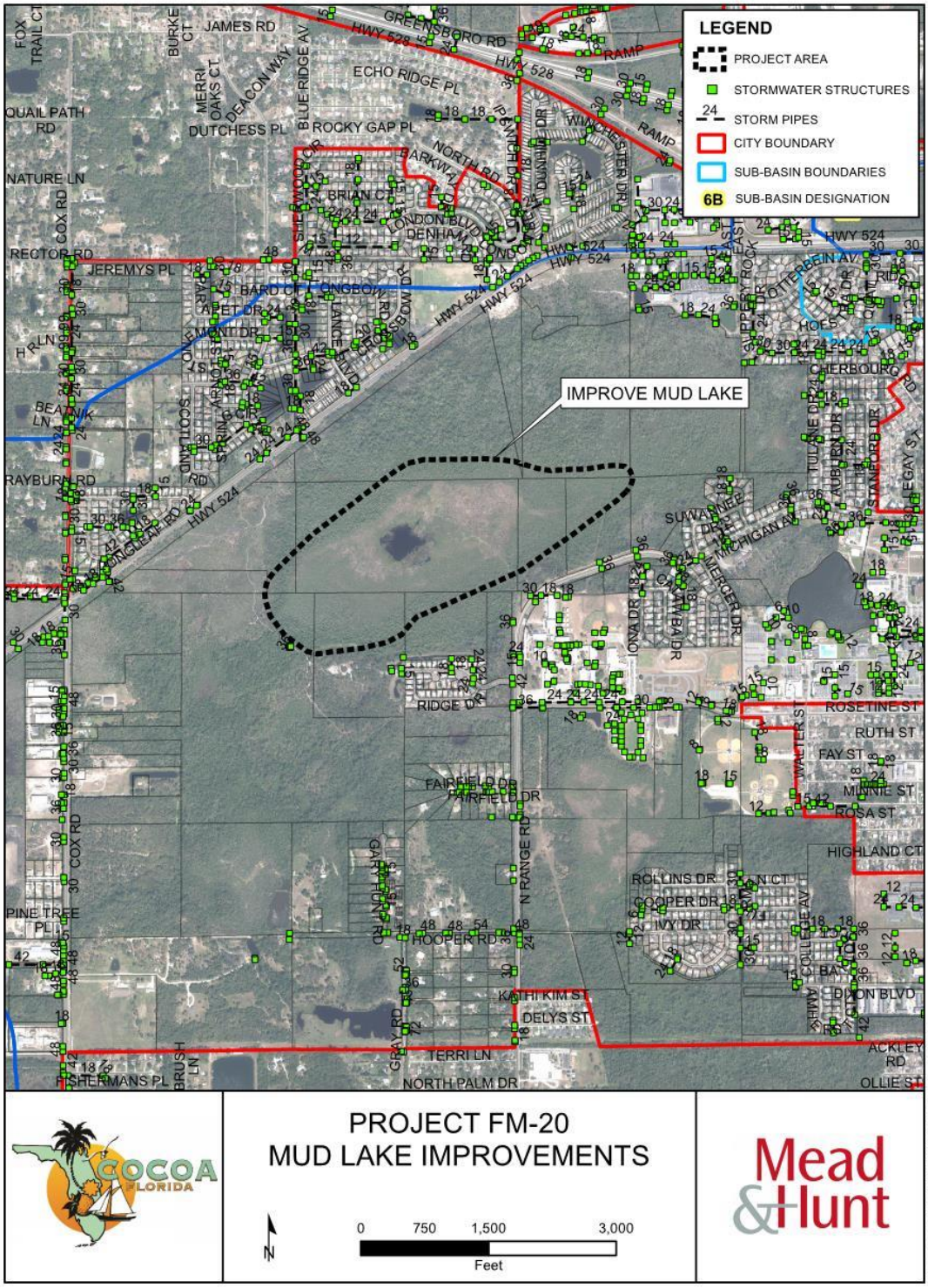
Carrying out this investigation would prepare the City for any future developments at the site. As cities continue to expand and develop, the need for flood attenuation structures such as stormwater ponds increases. It is in the best interest of the City to have studied several options for future flood mitigation projects.

Cost Estimate

It is anticipated that any consulting associated this project will be $77,770. This number is merely an estimate of the order of magnitude of what such a project may cost.

Table 24: Cost Estimate Table – Project FM-20: Mud Lake Investigation and Retrofit.

Project FM-20: Mud Lake Investigation & Retrofit						
Item Number	Location	Proposed Retrofit Improvements				
	Mud Lake Investigation & Retrofit	Item Description	Quantity	Unit	Unit Cost	Amount
1	Consultant Work	Investigation/Feasability Study				$70,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$70,000.00
1						
		- Mobilization @			5%	$3,500.00
		- Contingencies @			5%	$3,500.00
		SUB-TOTAL OF CONSTRUCTION COST				$77,000.00
		- Eng Design & Permitting @			1%	$770.00
		- Subconsultants @			0%	$0.00
		- Constr Admin and Insp @			0%	$0.00
		TOTAL PROJECT COST				**$77,770**


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
IMPROVE MUD LAKE
PROJECT FM-20
MUD LAKE IMPROVEMENTS
COCOA FLORIDA
Mead &Hunt
0 750 1,500 3,000
Feet
N
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

4. Recommended Water Quality Projects

The projects listed below comprise recommended projects to address nutrient loading (primarily nitrogen and phosphorous) to the receiving water body. Many of these projects address the Total Maximum Daily Loading (TMDL's) assigned to the City by the Indian River Lagoon Basin Management Action Plan (BMAP).

A. Project List

Project WQ-1: Baffle Boxes on Smaller Basins Outfalls
Project WQ-2: Baffle Boxes on Larger Basins Outfalls
Project WQ-3: BAM Filter Retrofits for Existing Baffle Boxes
Project WQ-4: Living Shoreline Along Lagoon
Project WQ-5: Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales
Project WQ-7: Bracco Pond Aerators
Project WQ-8: Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond
Project WQ-10: 72" Outfall Baseflow Capture/Treatment
Project WQ-11: Horseshoe Ponds (North & South) Vegetation Removal
Project WQ-12: Verizon Stormwater Pond in Diamond Square
Project WQ-13: Pond Aeration at North Fiske and other Stormwater Treatment Facilities
Project WQ-14: Scarborough Park & Water Tower Pond Expansion
Project WQ-15: Add Floating Wetlands to Existing Stormwater Ponds
Project WQ-16: Riverfront Park In-Lagoon Nutrient Removal
Project WQ-17: Riverfront Park Stormwater Capture Modifications
Project WQ-18: SR 520 Runoff Treatment to Downtown
Project WQ-19: Install BAM Treatment for AT&T Dry Retention Pond
Project WQ-20: De-muck/Dredge SR520 Relief Channel
Project WQ-21: Downtown Area Treatment System - Urban Planters, LID Improvements
Project WQ-22: Reduce Impervious Area (PaveDrain, Reduce Roadway) Near IRL
Project WQ-23: Inspection Program for HOA-Owned Treatment Ponds
Project WQ-24: Enhanced Stormwater Quality Education Programs
Project WQ-25: Update LDR's to Encourage LID and Provide Incentives for Overtreatment on Redevelopment
Project WQ-26: Bracco Pond Irrigation Repair/Replace for increased Reuse & Bank Stabilization
Project WQ-27: North Fiske Pond Irrigation Repair/Replacement
Project WQ-28: Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview
Project WQ-29: Expand Reclaimed Water Usage and Distribution

B. Recommended Water Quality Projects

(1) WQ-1: Baffle Boxes on Smaller Basins Outfalls.

Location

Project WQ-1 is located along the eastern boundary of the City of Cocoa where it meets the Indian River Lagoon (IRL). The project area shown covers an area of roughly 493 acres and is made up of individual drainage basins. Each of these basins contribute to outfalls along the IRL, many of which are currently discharging with little to no treatment. The region is predominantly made up of single-family residential parcels, becoming more and more commercial towards its southern boundary. There are currently between 25-30 outfalls on each smaller sub-basin within this project area.

Proposed Improvements

The proposed project recommends the installation of baffle boxes with filter media along the smaller basin outfalls. These would include discharges from basins with fewer than 10 inlets, and storm pipes 24" and smaller. Adding in the proposed baffle boxes will provide stormwater quality improvements with respect to nitrogen, phosphorus, and total suspended solids removal from the watershed area before entering the IRL. Incorporating filter media into the baffle box will boost the overall nutrient removal rates. Pollutant removal efficiencies for baffle boxes with filter media are currently estimated at 45% for both, total nitrogen and total phosphorus.

Due to limited property, installation of nutrient-removal baffle boxes is the only practical way to improve water quality in this area. Ultimately, the goal is to have all outfalls treated within the 10-year window of this plan, however, due to cost limitations, the proposed program would identify and install a total of 5 projects over the 10-year window.

Benefits

Installing baffle boxes has proven effectiveness in removing sediment and suspended solids from stormwater runoff. These simple structures are ideal solutions to retrofitting the stormwater systems immediately adjacent to the IRL. Implementation of the proposed project will capture approximately 130.5 pounds of nitrogen and 20.6 pounds of phosphorus on an annual basis, or 26.1 lbs/yr and 4.12 lbs/yr of total nitrogen and total phosphorous per project.

Cost Estimate

Cost to install each of the proposed baffle boxes is estimated at $277,088. In order to construct the proposed 5 small baffle box projects in the 10-year CIP window, it is recommended that 1 project be implemented every other year. This would require an allocation of approximately $1,135,440 in order to achieve the intended goal. If all 30 baffle boxes in the basin are installed, the total cost of the project would be $6,812,624. It should be noted that this figure has not been adjusted for inflation.

Although a conceptual design plan has been prepared, the overall locations of the baffle boxes will need to be evaluated during the design phase with respect to existing utilities, maintenance access, and the seasonal ground water or tidal affects. Baffle boxes typically have a higher efficiency when the invert is installed above the seasonal ground water table. The design phase of the project will also need to acquire FDOT permits. Due to the baffle boxes being designed with a high flow bypass, obtaining a permit should not be an issue, but funds for obtaining a permit have been incorporated into the conceptual project cost.

Table 25: Cost Estimate Table – Project WQ-1: Baffle Boxes on Smaller Basins Outfalls.

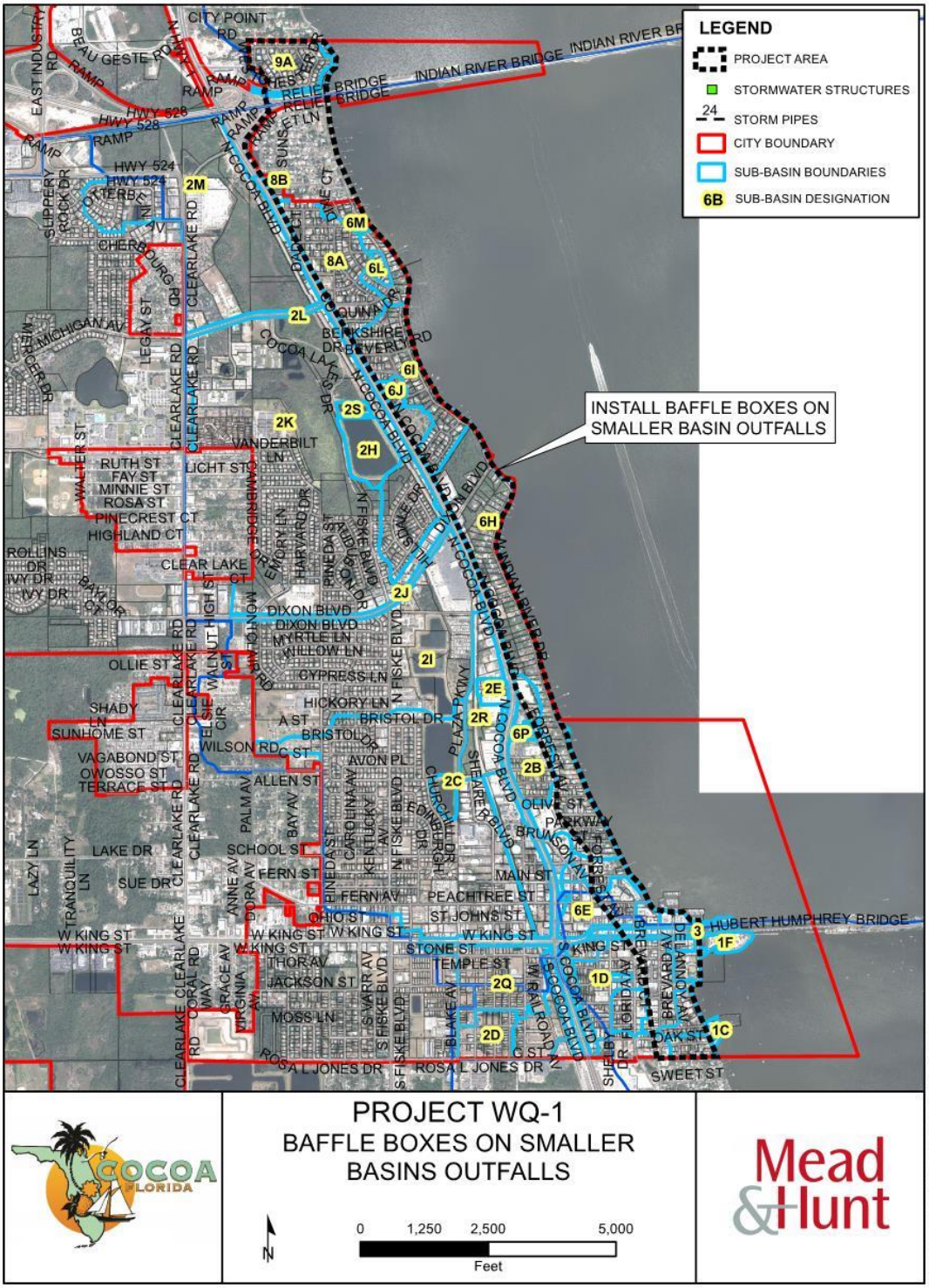
Project WQ-1: Baffle Boxes on Smaller Basins Outfalls						
Item Number	Location	Proposed Retrofit Improvements				
	IRL East of US-1	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition & Flow Diversion	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Pollutant Removal Structure	Baffle Box with Filter Media for 24"	1	LS	$92,000.00	$92,000.00
	- Storm Pipe	24" CMP	20	LF	$135.00	$2,700.00
	- Roadway open cut and restoration	Asphalt, base and subgrade	100	SY	$105.00	$10,500.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$7,500.00	$7,500.00
Qualifications (if applicable)			**SUB-TOTAL**			$157,700.00
1	Estimated 30 Small discharge locations in need of retrofit.					
2	Individual Baffle Box Installation = $230,000		- Mobilization @		10%	$15,770.00
3	City desires to allocate $125,000/year to the program allowing for about 5 projects		- Contingencies @		10%	$15,770.00
	to be completed, or about 1 project/2 years, based on present cost estimate					
4	5 Projects spread over 10 years = 1 project every 2 years.		**SUB-TOTAL OF CONSTRUCTION COST**			$189,240.00
5	Total Program Cost (5 Projects) = $ 1,135,440.00					
			- Eng Design & Permitting @		12%	$22,708.80
*	Total Cost (if 30 Projects) = $6,812,640		- Subconsultants @		2%	$3,784.80
			- Constr Admin and Insp @		6%	$11,354.40
			TOTAL PROJECT COST			**$227,088**

Table 26: Nutrient Removal Cost/Pound Table – Project WQ-1: Baffle Boxes on Smaller Basins Outfalls.

Project WQ-1: Baffle Boxes on Smaller Basins Outfalls					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-1	Baffle Box	26.1	4.12	$8,701	$55,118
TOTAL	10-year totals	130.5	20.6	$8,701	$55,118

Assumptions:

Drainage area: 7 ac, avg basin size for small basins
Land-use: Single-family, TN=2.07 TP=0.327
Soil type A, Non DCIA CN: 61
DCIA (%): 40
Pre-improvement load: TN=58.06 lb/yr, TP=9.17 lb/yr
Assumes 45% TNTP removal using B&G ECT3 media


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
INSTALL BAFFLE BOXES ON SMALLER BASIN OUTFALLS
PROJECT WQ-1
BAFFLE BOXES ON SMALLER BASINS OUTFALLS
0 1,250 2,500 5,000
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(2) WQ-2: Baffle Boxes on Larger Basins Outfalls

Location

Project WQ-2 is located along the eastern boundary of the City of Cocoa where it meets the Indian River Lagoon (IRL). The project area shown covers an area of roughly 493 acres and is made up of individual drainage basins. Each of these basins contribute to outfalls along the IRL, many of which are currently discharging with little to no treatment. The region is predominantly made up of single-family residential parcels, becoming more and more commercial towards its southern boundary. There are 2 identified outfalls on each large sub-basin within this project area.

Proposed Improvements

The proposed project recommends the installation of baffle boxes with filter media along the larger basin outfalls. These would include discharges from basins with more than 10 inlets, and storm pipes 30" and larger. Adding in the proposed baffle boxes will provide stormwater quality improvements with respect to nitrogen, phosphorus, and total suspended solids removal from the watershed area before entering the IRL. Incorporating filter media into the baffle box will boost the overall nutrient removal rates. Pollutant removal efficiencies for baffle boxes with filter media are currently estimated at 45% for both, total nitrogen and total phosphorus.

Due to limited property, installation of nutrient-removal baffle boxes is the only practical way to improve water quality in this area. Ultimately, the goal is to have all outfalls treated within the 10-year window of this plan, however, due to cost limitations, the proposed program would install a maximum of 2 baffle boxes over the 10-year window.

Benefits

Installing baffle boxes has proven effectiveness in removing sediment and suspended solids from stormwater runoff. These simple structures are ideal solutions to retrofitting the stormwater systems immediately adjacent to the IRL. Implementation of the proposed project will capture approximately 261.0 lbs/yr of nitrogen and 41.2 lbs/yr of phosphorus on an annual basis, or 130.5 lbs/yr and 20.6 lbs/yr of total nitrogen and total phosphorus per project.

Cost Estimate

Cost to install each of the proposed baffle boxes is estimated at $282,240. In order to construct the proposed large baffle box projects in the 10-year CIP window, it is recommended that 1 project be implemented every 5 years. This would require an allocation of approximately $564,480 in order to achieve the intended goal. If all 5 baffle boxes in the basin are installed, the total cost of the project would be $1,411,200. It should be noted that this figure has not been adjusted for inflation.

Although a conceptual design plan has been prepared, the overall locations of the baffle boxes will need to be evaluated during the design phase with respect to existing utilities, maintenance access, and the seasonal ground water or tidal affects. Baffle boxes typically have a higher efficiency when the invert is installed above the seasonal ground water table. The design phase of the project will also need to acquire FDOT permits. Due to the baffle boxes being designed with a high flow bypass, obtaining a permit should not be an issue, but funds for obtaining a permit have been incorporated into the project cost.

Table 27: Cost Estimate Table – Project WQ-2: Baffle Boxes on Larger Basins Outfalls.

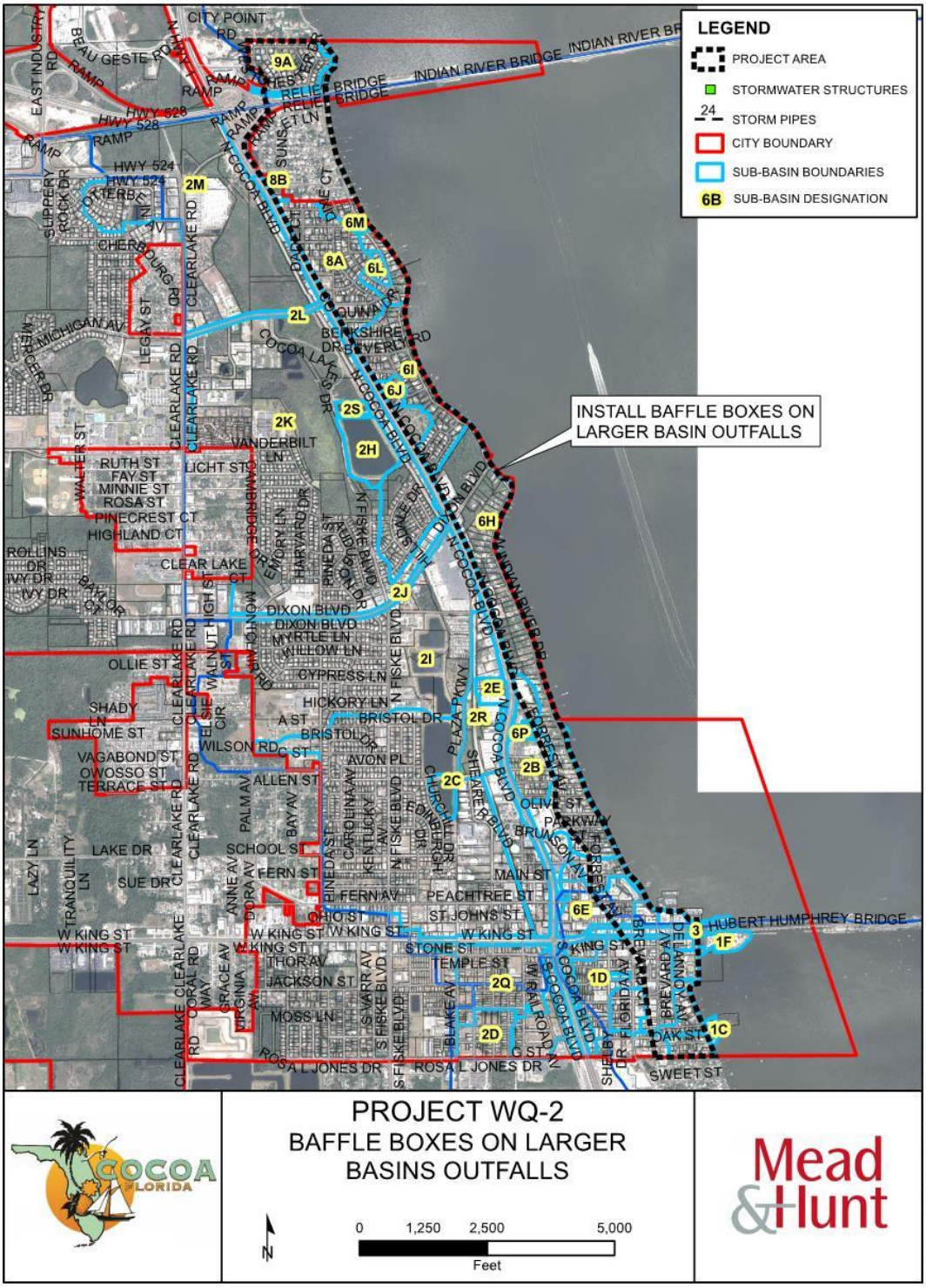
Project WQ-2: Baffle Boxes on Larger Basins Outfalls							
Item Number	Location	Proposed Retrofit Improvements					
	IRL East of US-1	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Demolition & Flow Diversion	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Pollutant Removal Structure	Baffle Box with Filter Media for 36"	1	LS	$130,000.00	$130,000.00
	- Storm Pipe	36" CMP	20	LF	$150.00	$3,000.00
	- Roadway open cut and restoration	Asphalt, base and subgrade	100	SY	$105.00	$10,500.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$7,500.00	$7,500.00
Qualifications (if applicable)			**SUB-TOTAL**			$196,000.00
1	Estimated 2 large discharge locations in need of retrofit.					
2	Individual Baffle Box Installation = $285,000		- Mobilization @		10%	$19,600.00
3	2 Projects spread over 10 years = 1 project every 5 years.		- Contingencies @		10%	$19,600.00
4	Total Program Cost = $ 564,480.00					
			SUB-TOTAL OF CONSTRUCTION COST			$235,200.00
			- Eng Design & Permitting @		12%	$28,224.00
			- Subconsultants @		2%	$4,704.00
			- Constr Admin and Insp @		6%	$14,112.00
			TOTAL PROJECT COST			**$282,240**

Table 28: Nutrient Removal Cost/Pound Table – Project WQ-2: Baffle Boxes on Larger Basins Outfalls.

Project WQ-2: Baffle Boxes on Larger Basins Outfalls					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-2	Baffle Box	130.52	20.62	$2,162	$13,688
TOTAL	10-year totals	261.04	41.24	$2,162	$13,688

Assumptions:

Drainage area: 35 ac, avg basin size for small basins
Land-use: Single-family, TN=2.07 TP=0.327
Soil type A, Non DCIA CN: 61
DCIA (%): 40
Pre-improvement load: TN=290.30 lb/yr, TP=45.86 lb/yr
Assumes 45% TNTP removal using B&G ECT3 media


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
INSTALL BAFFLE BOXES ON LARGER BASIN OUTFALLS
PROJECT WQ-2
BAFFLE BOXES ON LARGER BASINS OUTFALLS
0 1,250 2,500 5,000
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(3) WQ-3: BAM Filter Retrofits for Existing Baffle Boxes

Location

Project WQ-3 focuses on several existing baffle boxes located across different parts of the City:

1. 2 Baffle Boxes N of Riverfront Park
2. Baffle Box on N Indian River Drive near Carlton Terrace area.

The project area and location of these baffle boxes is pictured below.

The baffle boxes on the lower portion of the study area serve a drainage area of about 71.9 acres of mostly commercial land use, and is also supported by a recently installed baffle box along Church St. The northernmost baffle box serves a drainage area of about 20 acres; however, this drainage area is also connected to an outfall that currently empties into the IRL untreated.

Proposed Improvements

The proposed project involves retrofitting the existing baffle boxes mentioned above using Bio-Activated Media (BAM) filters. The existing Type I baffle boxes have proven effectiveness reducing solids from stormwater runoff. However, BAM filter retrofit systems may be put in place to improve the removal of nutrients from runoff as well as further improving the physical filtration of solids. The media used on the filters can be made from recycled materials and is effective in capturing TN, TP, solids, and metals from water.

Benefits

Incorporating filter media into the design improvements will boost the overall nutrient removal rates. Pollutant removal efficiencies for baffle boxes with filter media are currently estimated at 45% for both total nitrogen and total phosphorus removal. Implementation of the proposed project will capture approximately 267.3 pounds of nitrogen and 53.0 pounds of phosphorus on an annual basis.

Cost Estimate

Anticipated cost to install each baffle box BAM retrofit is estimated at about $81,000. The total cost of the project is $241,605 for all 3 retrofit systems.

Table 29: Cost Estimate Table – Project WQ-3: BAM Filter Retrofits for Existing Baffle Boxes.

Project WQ-3: BAM Filter Retrofits for Existing Baffle Boxes						
Item Number	Location	Proposed Retrofit Improvements				
	IRL East of US-1	Item Description	Quantity	Unit	Unit Cost	Amount
1						
	- Site preparation	Dewatering and flow diversion	3	LS	$15,000.00	$45,000.00
	- Construction management	Maintenance of traffic, signage	3	LS	$7,500.00	$22,500.00
	- Pollutant Removal Structure	Baffle Box Retrofit w. BAM Filter	3	LS	$30,000.00	$90,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$157,500.00
1	Cost for one Baffle Box Retrofit = $80,535.00					
			- Mobilization @		10%	$15,750.00
			- Contingencies @		20%	$31,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$204,750.00
			- Eng Design & Permitting @		10%	$20,475.00
			- Subconsultants @		2%	$4,095.00
			- Constr Admin and Insp @		6%	$12,285.00
			TOTAL PROJECT COST			**$241,605**

Table 30: Nutrient Removal Cost/Pound Table – Project WQ-3: BAM Filter Retrofits for Existing Baffle Boxes.

Project WQ-3: BAM Filter Retrofits for Existing Baffle Boxes					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-3	BAM Filter Retrofit	89.09	17.68	$904	$4,555
TOTAL		267.27	53.04	$904	$4,555

Assumptions:

Locations vary, Riverfront Park Baffle box drainage basin used as an EXAMPLE

Drainage area: 8 ac, avg basin size for small basins

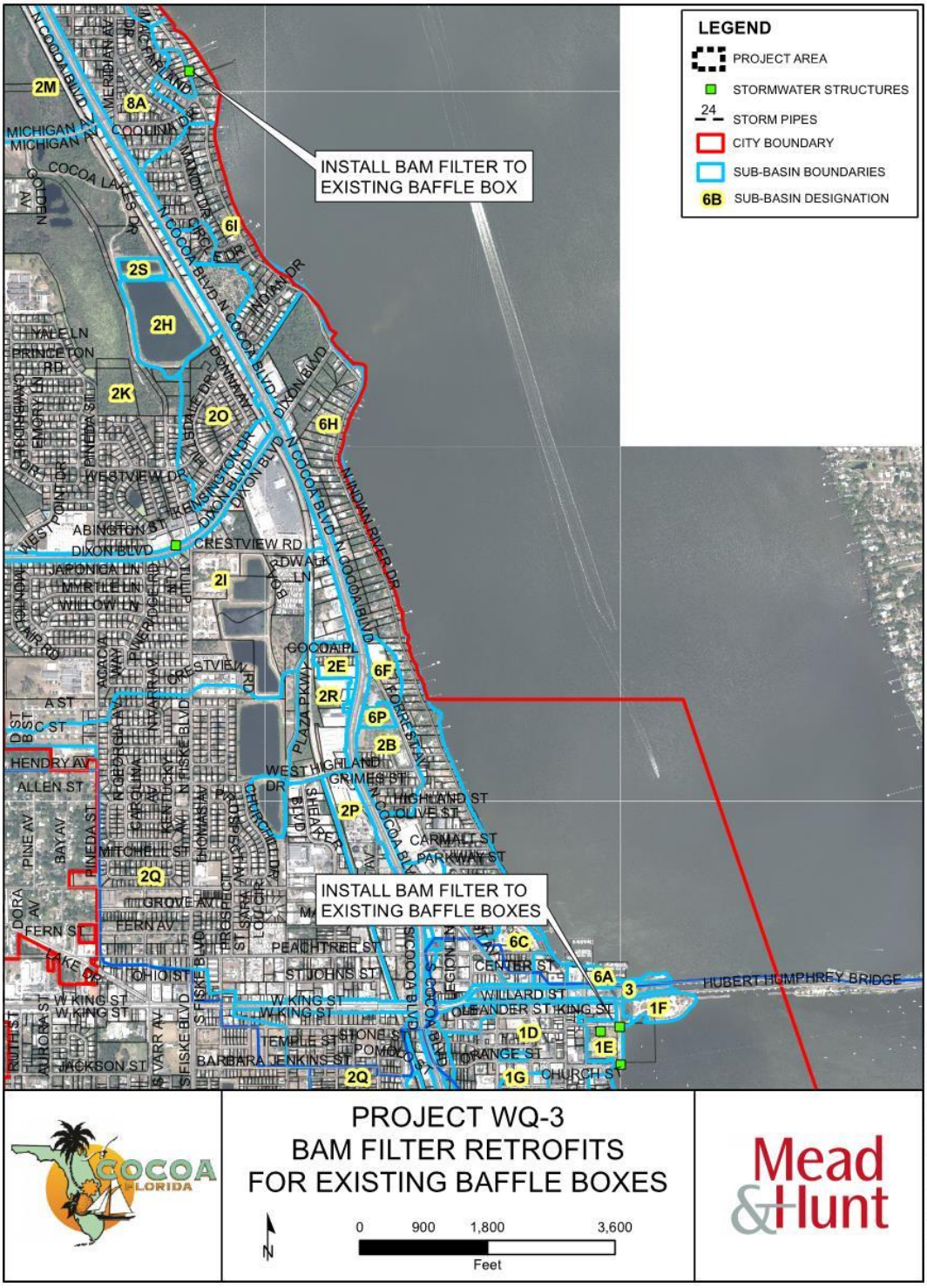
Land-use: High-intensity Commercial, TN=2.4 TP=0.345

Soil type A, Non DCIA CN: 89

DCIA (%): 85

Pre-improvement load: TN=161.66 lb/yr, TP=23.24 lb/yr

Assumes 45% TNTP removal using B&G ECT3 media


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
INSTALL BAM FILTER TO EXISTING BAFFLE BOX
INSTALL BAM FILTER TO EXISTING BAFFLE BOXES
PROJECT WQ-3
BAM FILTER RETROFITS
FOR EXISTING BAFFLE BOXES
0 900 1,800 3,600
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(4) WQ-4: Living Shoreline Along Lagoon

Location

Project WQ-4 is planned for various locations along the shoreline of the IRL (See Figure). Coastal communities are constantly under the threat of losing valuable resources because of erosion, intense storms, or even sea-level rise.

Proposed Improvements

The proposed project aims to install a living shoreline consisting of oyster beds which create a form of natural breakwaters. As an alternative to installing a solid barrier between water and land, the idea of Living Shorelines has gained popularity thanks to their ability to reduce loss of resources while simultaneously providing ecosystem services to society including food production, nutrient and sediment removal, and water quality improvement. Reefs are built by adding material to the water, such as small bags of oyster shells, loose oyster or clam shells, riprap, marl, or other suitable substances. The material attracts oyster larvae, which settles and creates a live reef.

Benefits

The installation of oyster beds along the shoreline of the IRL is another good example of LID applied to multiple issues simultaneously. Oyster beds dissipate wave action and trap sediments and can reduce the effects of erosion to a shoreline. Furthermore, oysters are known to filter runoff and improve water quality which would work symbiotically with the improvements to the discharge structures (see WQ-1 & WQ-2) along that entire corridor.

Cost Estimate

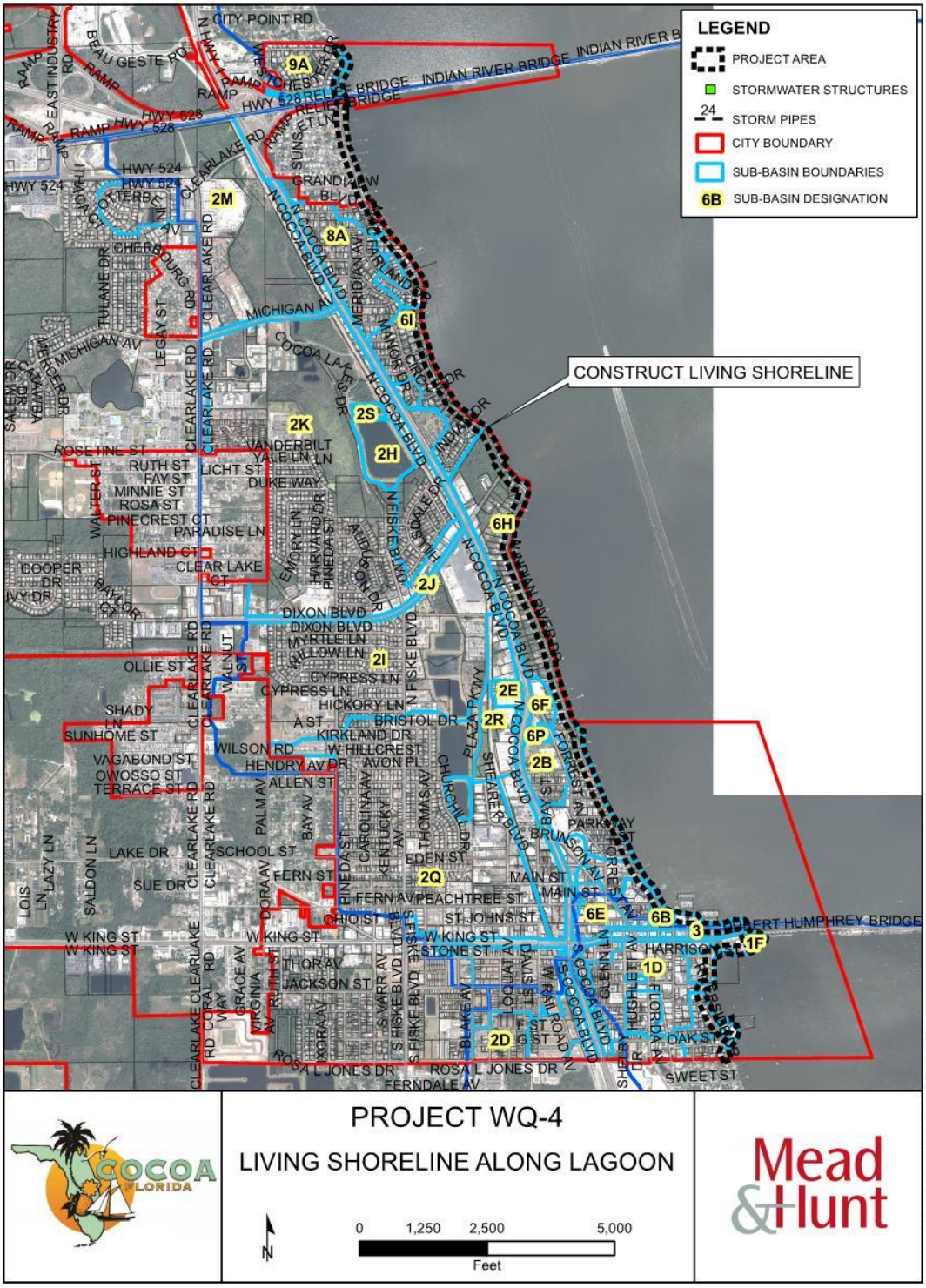
The cost to construct living shorelines varies significantly depending on the amount of site preparation necessary, and the elevation change between the lagoon bottom and the highest anticipated water level. Keeping this in mind, and assuming a single terrace with sea grass plantings, various species of appropriately selected mangrove and oyster shell bags, a 200-foot long section of living shoreline with the attendant design and permitting can be expected to cost approximately $15,000. If significant grading should be required, or additional terracing, the prices could rise significantly. It should be noted that very often these projects are accomplished by volunteers as community projects. Depending on the amount of volunteer labor and donated materials, the costs could be reduced appreciably.

Table 31: Cost Estimate Table – Project WQ-4: Living Shoreline Along Lagoon.

Project WQ-4: Living Shoreline Along Lagoon						
Item Number	Location	Proposed Retrofit Improvements				
	IRL East of US-1	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Grading	1,000	LF	$20.00	$20,000.00
	- Site preparation	Terracing	1,000	LF	$30.00	$30,000.00
	- Site preparation	Oyster Bag Placement	1,000	LF	$10.00	$10,000.00
	- Site preparation	Plantings	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$75,000.00
1						
			- Mobilization @		10%	$7,500.00
			- Contingencies @		10%	$7,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$90,000.00
			- Eng Design & Permitting @		20%	$18,000.00
			- Subconsultants @		5%	$4,500.00
			- Constr Admin and Insp @		5%	$4,500.00
			TOTAL PROJECT COST			**$117,000**

Table 32: Nutrient Removal Cost/Pound Table – Project WQ-4: Living Shoreline Along Lagoon.

Project WQ-4: Living Shoreline Along Lagoon					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-4					
Assumptions:					
No known credits currently being offered for living shorelines.					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
CONSTRUCT LIVING SHORELINE
PROJECT WQ-4
LIVING SHORELINE ALONG LAGOON
0 1,250 2,500 5,000
Feet
N
COCOA FLORIDA
Mead &Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(5) WQ-5: Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales

Location

Circle Drive Dry Retention Pond: Circle Drive is located in Broadview Manor, an older residential area between U.S. 1 and the IRL. Some roads have no curbs, gutters, or storm drain systems. The land elevation is high, approximately 36 feet above sea level, and the soil is Class A sand. There is a green space adjacent to Circle Drive that would be a good location for a dry retention pond.

Carlton Terrace Swales: Located in an older subdivision in the north section of the City, between U.S. 1 and the IRL. The streets are 20' wide, with no curbs, gutters or swales. Runoff flows westward to one small inlet and pipe that crosses U.S. 1 and the railroad. The pipe daylights south of Michigan, allowing water to sheet flows through sloughs before entering Bracco Pond. There are sidewalks 15 feet offset from the pavement, soils are Class A, ground elevations are 30 to 40 feet above sea level, and groundwater is low.

Broadview Manor Swales: Broadview Manor is an older residential area between U.S. 1 and the IRL. Three roads in this area, Manor Drive, Beverly Manor, and Bedford Place, have no curbs, gutters, or storm drain systems. The runoff from these streets flows to the IRL with no treatment. The land elevation is high, approximately 36 feet above sea level, and the soil is Class A sand.

Proposed Improvements

Circle Drive Dry Retention Pond: A shallow (1.25ft) retention pond could be excavated to capture 1.43in of runoff from the basin in order to obtain 100% removal credits for 51.82 lbs/yr of TN and 7.01 lbs/yr of TP

Carlton Terrace Swales: Proposed improvements include installing swales between the sidewalks and each side of the roads. This project consists of cutting 7,143 linear feet of 12" deep swales on each side of the roads, within the right-of-way, to provide 0.5 inches of runoff storage in the 59-acre subdivision. The swales will provide reductions of 203.25 lbs/yr of TN and 25.83 lbs/yr of TP.

Broadview Manor Swales: Construction of 2,050 feet of roadside retention swales along these streets, within existing road right-of-way, to capture 0.15 inches of runoff. The resultant pollutant removals would be 73 lbs/yr of TN and 8.52 lbs/yr of TP.

Benefits

All these improvements would provide increased flood control, and water quality management to the Broadview Manor/Carlton Terrace community. Implementation of the proposed projects will capture approximately 328.1 pounds of nitrogen and 41.36 pounds of phosphorus on an annual basis.

Cost Estimate

Circle Drive Dry Retention Pond: The estimated cost of the project is $60,480.

Carlton Terrace Swales: Construction of the swales is estimated to cost $261,394.

Broadview Manor Swales: Costs for swale construction are estimated to be $99,792.

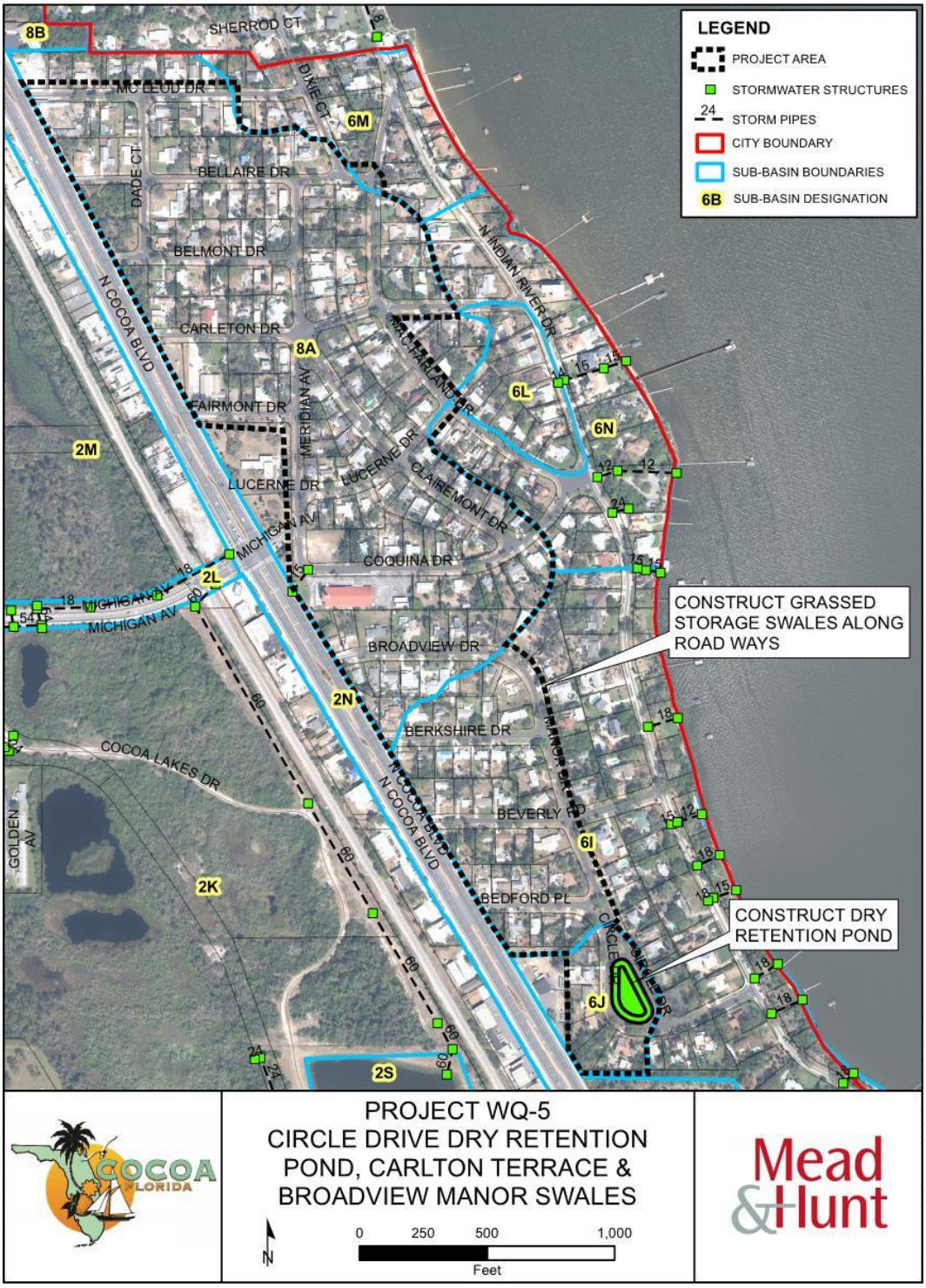
The total for all of these projects, plus the engineering and permitting necessary to implement them is approximately $421,667.

Table 33: Cost Estimate Table – Project WQ-5: Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales.

Project WQ-5: Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales						
Item	Location	Proposed Retrofit Improvements				
Number	IRL East of US-1	Item Description	Quantity	Unit	Unit Cost	Amount
1	Circle Drive Dry Retention Pond Construction Activities					
	- Site Preparation	Clearing and grubbing	1	LS	$5,000.00	$5,000.00
	- Construction Management	Maintenance of traffic, signage	1	LS	$3,000.00	$3,000.00
	- Erosion control and pollution abatement	Silt fences, turbidity barriers, etc.	1	LS	$2,000.00	$2,000.00
	- Pond Construction	Excavation, exc.	1	LS	$25,000.00	$25,000.00
	- Restoration	Sodding, landscaping, etc.	1	LS	$5,000.00	$5,000.00
2	Carlton Terrace Swales Construction Activities					
	- Site Preparation	Clearing and grubbing	1	LS	$5,000.00	$5,000.00
	- Construction Management	Maintenance of traffic, signage	1	LS	$10,000.00	$10,000.00
	- Erosion control and pollution abatement	Silt fences, turbidity barriers, etc.	1	LS	$5,000.00	$5,000.00
	- Swale Construction	Excavation	7,144	LF	$20.00	$142,880.00
	- Storm Pipe	24" RCP	100	LF	$100.00	$10,000.00
3	Broadview Mannor					
	- Site Preparation	Clearing and grubbing	1	LS	$5,000.00	$5,000.00
	- Construction Management	Maintenance of traffic, signage	1	LS	$3,000.00	$3,000.00
	- Erosion control and pollution abatement	Silt fences, turbidity barriers, etc.	1	LS	$2,000.00	$2,000.00
	- Swale Construction	Excavation	2,050	LF	$20.00	$41,000.00
	- Storm Pipe	24" RCP	50	LF	$100.00	$5,000.00
	- Restoration	Sodding, landscpaing, etc.	1	LS	$10,000.00	$10,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$278,880.00
1						
			- Mobilization @		10%	$27,888.00
			- Contingencies @		10%	$27,888.00
			SUB-TOTAL OF CONSTRUCTION COST			$334,656.00
			- Eng Design & Permitting @		15%	$50,198.40
			- Subconsultants @		5%	$16,732.80
			- Constr Admin and Insp @		6%	$20,079.36
			TOTAL PROJECT COST			**$421,667**

Table 34: Nutrient Removal Cost/Pound Table – Project WQ-5: Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales.

Project WQ-5: Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-5	Various	328.07	41.36	$1,285	$10,195
Assumptions:					
From TMDL Report					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
CONSTRUCT GRASSED STORAGE SWALES ALONG ROAD WAYS
CONSTRUCT DRY RETENTION POND
SHERROD CT
MCLEOD DR
DIXIE CT
BELLAIRE DR
DADE CT
BELMONT DR
CARLETON DR
FAIRMONT DR
LUCERNE DR
MERIDIAN AV
MICHIGAN AV
COQUINA DR
BROADVIEW DR
BERKSHIRE DR
BEVERLY RD
BEDFORD PL
COCOA LAKES DR
GOLDEN AV
N COCOA BLVD
N INDIAN RIVER DR
CLAIREMONT DR
MANOR DR
CIRCLE DR
8B
6M
8A
6L
6N
2M
2L
2N
6I
2K
6J
2S
PROJECT WQ-5
CIRCLE DRIVE DRY RETENTION POND, CARLTON TERRACE & BROADVIEW MANOR SWALES
0 250 500 1,000
Feet
N
COCOA FLORIDA
Mead&Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(6) WQ-7: Bracco Pond Aerators

Location

Project WQ-7 focuses on the Bracco Reservoirs Stormwater Ponds, located between W Highland Dr. and N Fiske Blvd. These wet ponds provide treatment of stormwater runoff to nearly 1,060 acres of land. They provide sediment and nutrient removal, and a decrease in runoff rates before being discharged to the Indian River Lagoon.
There are outflow structures to transport runoff to a reclaimed water pond with a usable volume of 7.2 million gallons, if needed. The reuse of this water can decrease the freshwater flows and nutrient loading into the IRL. However, in the moments when supply exceeds demand, further treatment may be needed.

Proposed Improvements

This project proposes the installation of surface aerators in the Bracco Ponds to assist in the control of toxic algae blooms. High nutrient levels from surface runoff can result in the conditions which might foster algal blooms which can cause nutrient levels to exceed requirements due to their toxic effects on biomass. Aerators have been shown to be a beneficial addition to wet detention ponds in order to keep dissolved oxygen levels high enough to improve aquatic life which can help keep the water column cleaner.

Benefits

In general, aerating ponds promotes biological activity which in turn reduces the available nutrients for algae to grow. Biological decomposition of muck de-stratifies thermal layers in water and improves the ecological health of the system. Benefits are also aesthetic because aerators generally resemble fountains. Implementation of the proposed project will capture approximately 173.8 pounds of nitrogen and 14.41 pounds of phosphorus on an annual basis.

Cost Estimate

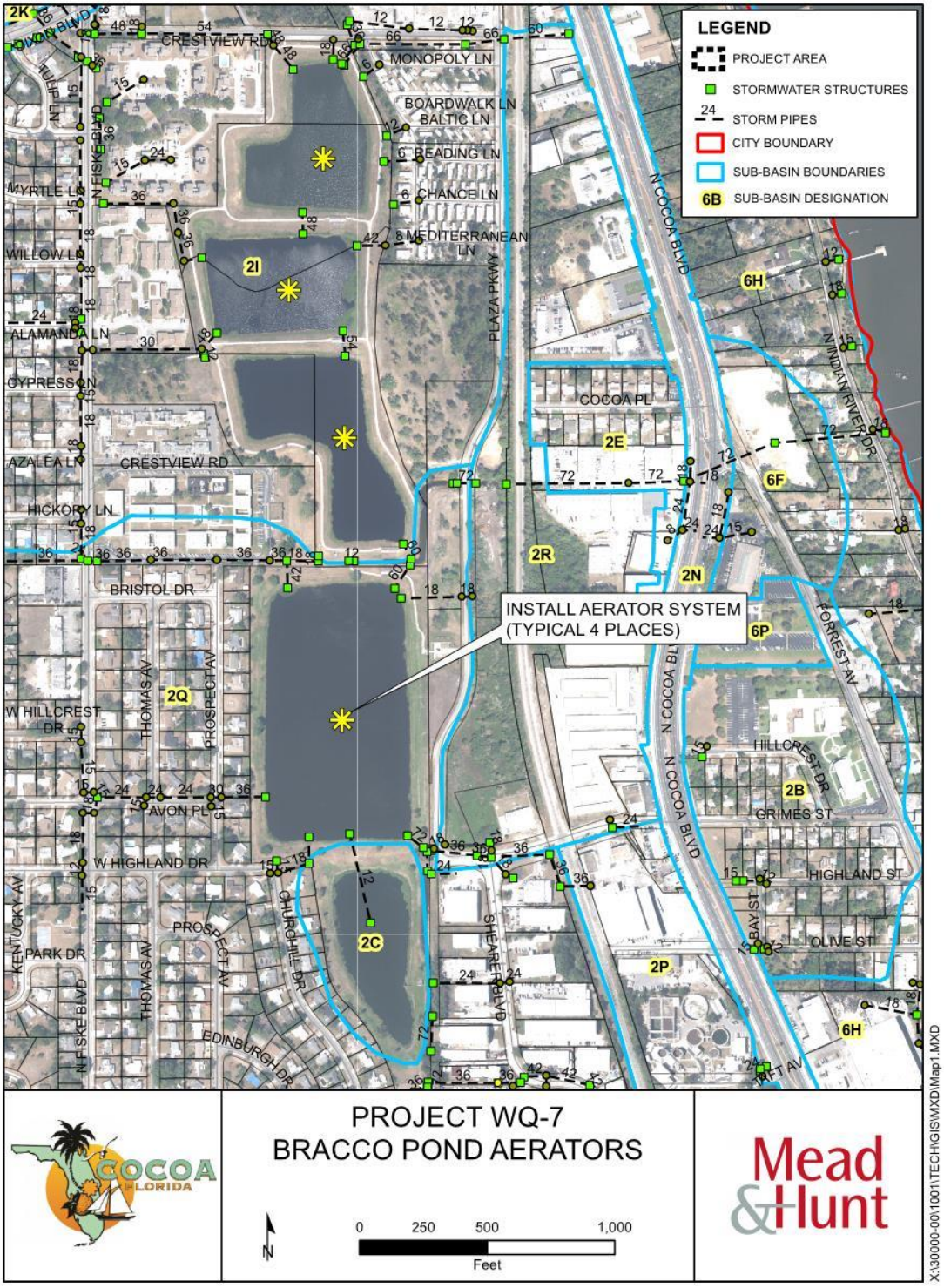
The City received a quote from Vertex Water Features to furnish Ponds B-E for a total cost of $41,534. An estimated annual cost of $1,000 for maintenance was included into the cost estimate below, bringing the cost to $51,534 for the 10-year work plan period.

Table 35: Cost Estimate Table – Project WQ-7: Bracco Pond Aerators.

Project WQ-7: Bracco Pond Aerators						
Item Number	Location	Proposed Retrofit Improvements				
	Bracco Ponds	Item Description	Quantity	Unit	Unit Cost	Amount
1	Vertex Aeration Systems					
	- AIR 4 Aeration System Wired 230 Volt	Bracco Pond "E"	1	LS	$6,966.49	$6,966.49
	- AIR 5 Aeration System Wired 230 Volt	Bracco Pond "D"	1	LS	$7,912.65	$7,912.65
	- HF 7 Aeration System Wired 230 Volt	Bracco Pond "C"	1	LS	$10,919.15	$10,919.15
	- LL22 8XL5 Aeration System Wired 230 Volt	Bracco Pond "B"	1	LS	$15,735.64	$15,735.64
	- Annual Maintenance		10	EA	$1,000.00	$10,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$51,533.93
1	Quote provided by Vertex Water Features at the request of City of Cocoa					
			- Mobilization @		0%	$0.00
			- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$51,533.93
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$51,534**

Table 36: Nutrient Removal Cost/Pound Table – Project WQ-7: Bracco Pond Aerators.

Project WQ-7: Bracco Pond Aerators						
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**	**Cost/TNTP Pound**
WQ-7	Pond Aeration	173.756	14.41	$ 239.04	$ 2,882.30	$221
BMPTRAINS analysis of Bracco Ponds as is						
Pond E	Area = 129 ac, CN = 84, DCIA = 35%, RT = 34.5					
Ponds C&D	Area = 137 ac, CN = 67, DCIA = 35%, RT = 138					
Pond B	Area = 794.6 ac, CN = 70.6, DCIA = 35%, RT = 39.4					
Loading to Ponds						
TN	2712.77	kg/yr	5968.094	lbs/yr		
TP	446.43	kg/yr	982.146	lbs/yr		
Removal Efficiency		TN = 40%	TP = 68%			
Discharge Load						
TN	1638.76	kg/yr	3605.272	lbs/yr		
TP	144.99	kg/yr	318.978	lbs/yr		
Load Removed						
TN	1074.02	kg/yr	2362.844	lbs/yr		
TP	301.45	kg/yr	663.19	lbs/yr		
WITH FLOATING AERATORS						
Assume 2.5% credit						
Removal Efficiency		TN = 43%	TP = 69%			
Discharge Load						
TN	1559	kg/yr	3429.8	lbs/yr		
TP	138	kg/yr	303.6	lbs/yr		
Load Removed						
TN	1153	kg/yr	2536.6	lbs/yr		
TP	308	kg/yr	677.6	lbs/yr		


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
INSTALL AERATOR SYSTEM (TYPICAL 4 PLACES)
PROJECT WQ-7
BRACCO POND AERATORS
0 250 500 1,000
Feet
CRESTVIEW RD
MONOPOLY LN
BOARDWALK LN
BALTIC LN
READING LN
CHANCEL LN
MEDITERRANEAN LN
PLAZA PKWY
N COCOA BLVD
COCOA PL
N INDIAN RIVER DR
BRISTOL DR
HICKORY LN
AZALEA LN
WILLOW LN
ALAMANDA LN
CYPRESS DR
MYRTLE LN
N FISKE BLVD
TULIP LN
W HILLCREST DR
THOMAS AV
PROSPECT AV
AVON PL
W HIGHLAND DR
KENTUCKY AV
PARK DR
CHURCHILL DR
EDINBURGH DR
SHEARER BLVD
HILLCREST DR
GRIMES ST
HIGHLAND ST
BAY ST
OLIVE ST
FORREST AV
2I
2K
2Q
2C
2R
2N
2E
2B
2P
6H
6F
6P
6B
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(7) WQ-8: Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond

Location

Project WQ-8 is focused on the baseflow of the Bracco Pond Reservoirs. This project is one of several alternatives for the management of baseflow in the Bracco Ponds. Alongside project WQ-12, this project aims to alter the discharge location of baseflow from the Bracco Ponds to a drainage basin that drains to the St. Johns River Basin instead of the IRL.

Proposed Improvements

As a way of reducing loading to the IRL, this project proposes diverting flow from the ponds that would normally discharge to the IRL to the St. Johns River Basin, via the proposed Verizon Stormwater Pond in Diamond Square (WQ-12). This would require transport structures routing water south of the Bracco reservoirs, and the completion of project WQ-12.

Proposed improvements include installation of 600 GPM pumps to transport baseflow from Bracco Pond to the Verizon Pond during dry days when the Verizon system is not receiving runoff. Flow projections were performed assuming the pumps would operate for about 18 hours/day for an average of 240 days/year. According to several weather sites, the City of Cocoa experiences about 130 days of rain every year.

Benefits

The immediate benefit is that stormwater discharge to the IRL would be reduced as water would instead be discharging to the St John's River. Storage of this diverted water in large wet ponds would mean much lower peak flow rates to the discharge structures in the IRL, as well as benefits from increased storage times of water, namely, nutrient treatment.

Implementation of the proposed project will capture approximately 954.3 pounds of nitrogen and 117.2 pounds of phosphorus on an annual basis. Before discharging to the SJR, the diverted baseflow proposed in this project would be routed through a series of retention ponds where it will undergo further treatment before its ultimate discharge.

Cost Estimate

Cost estimates were developed by choosing a reasonable amount of water that could be transported (pumped) from the Bracco reservoir to the Diamond Square Pond. Assuming a continuous flow of 600gpm, 18 hours a day, for 240 days of the year. The total cost of this project would be $1,960,793, not accounting for any operating costs.

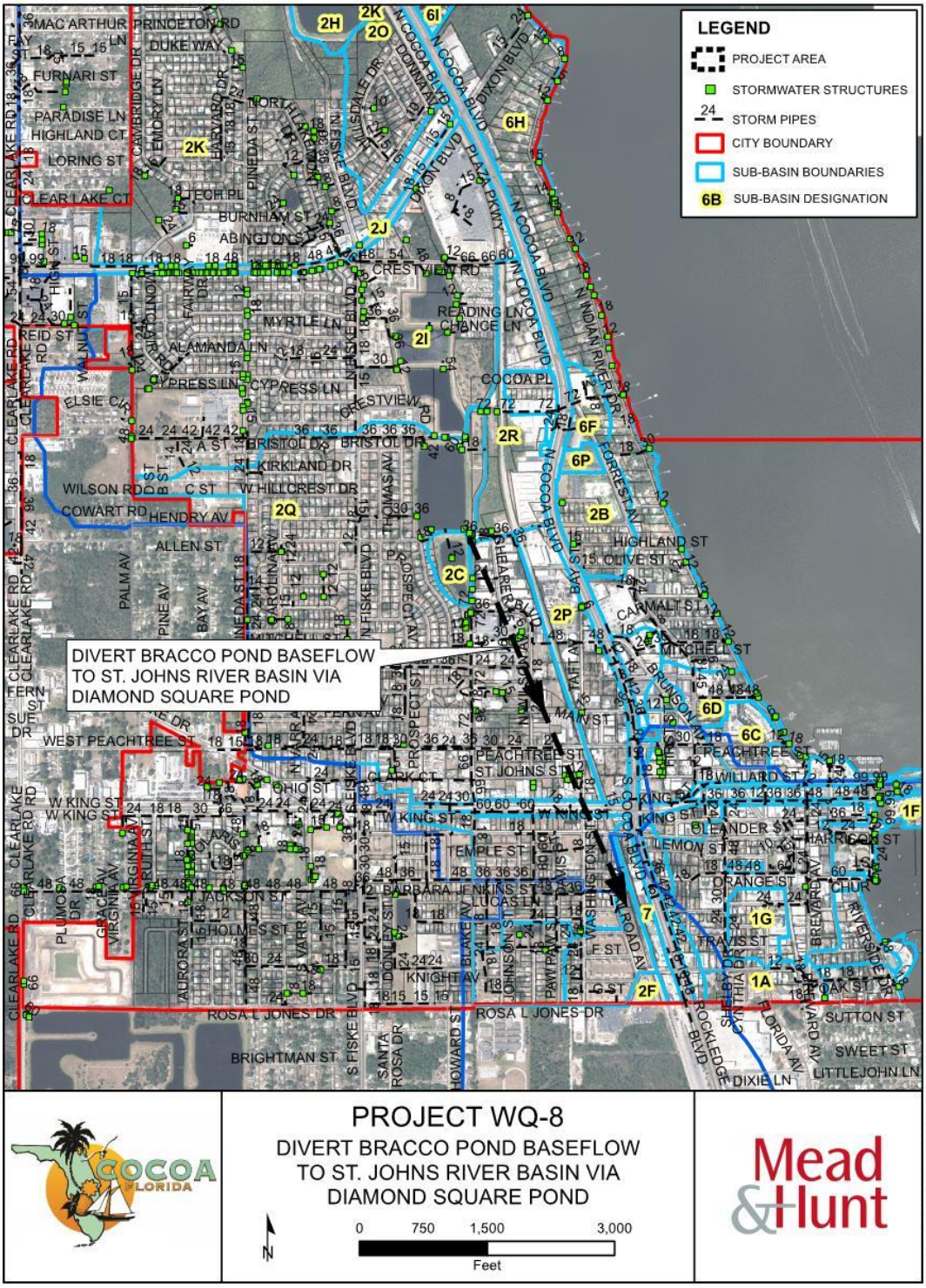
Table 37: Cost Estimate Table – Project WQ-8: Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond.

Project WQ-8: Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond						
Item Number	Location	Proposed Retrofit Improvements				
	Bracco Ponds	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Construction management	Maintenance of traffic, signage	1	LS	$30,000.00	$30,000.00
	- Furnish & Install	12" PVC	5,500	LF	$185.00	$1,017,500.00
	- Furnish & Install	Pumps & Controls	1	LS	$75,000.00	$75,000.00
	- Furnish & Install	Wet Well	1	LS	$35,000.00	$35,000.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$50,000.00	$50,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$1,207,500.00
1	Note: Cost of pipe includes valves and appurtenences					
			- Mobilization @		10%	$120,750.00
	Need to add operating costs		- Contingencies @		20%	$241,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$1,569,750.00
			- Eng Design & Permitting @		12%	$188,370.00
			- Subconsultants @		5%	$78,487.50
			- Constr Admin and Insp @		6%	$94,185.00
			- Annual Operating Cost for 10 yrs			$30,000.00
			TOTAL PROJECT COST			**$1,960,793**

Table 38: Nutrient Removal Cost/Pound Table – Project WQ-8: Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond.

Project WQ-8: Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-8	Flow Diversion	954.33	117.20	$ 2,055	$ 16,731

Assumptions:						
1.71	mg/L TN	=	1.43E-05	lbs/gal	Based on Grab Samples	
0.21	mg/L TP	=	1.75E-06	lbs/gal	provided by City	
Assume pumping a continuous flow of 300 gpm @ 6 hrs / day for 180 days/year.						
Flow	600	gpm	1.3368	cfm		
Time Lengt	18	hrs/day				
Days / Yea	240	days/year				
Annual Flo	20,791,443.85	cf/yr				
	155,520,000.00	gal/yr				
Annual Load						
TN	2,219.4	lbs/yr				
TP	272.5	lbs/yr				
BAM Treatı	43%					
Load Removed						
TN	954.3	lbs/yr				
TP	117.2	lbs/yr				


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
DIVERT BRACCO POND BASEFLOW TO ST. JOHNS RIVER BASIN VIA DIAMOND SQUARE POND
PROJECT WQ-8
DIVERT BRACCO POND BASEFLOW TO ST. JOHNS RIVER BASIN VIA DIAMOND SQUARE POND
0 750 1,500 3,000
Feet
N
COCOA FLORIDA
Mead &Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(8) WQ-10: 72" Outfall Baseflow Capture/Treatment

Location

Project WQ-10 is related to the City's plans to build a dry pond in a vacant lot on the intersection of Forrest Ave. and U.S. 1. There is currently a 72" outfall pipe that conveys untreated water from west of U.S. 1, under the highway, and eastward to the IRL. The drainage basin for this site is 16.39 acres of mixed-use land that is modeled to generate 219 lbs/yr of TN and 43 lbs/yr of TP, as modeled in the aforementioned TMDL Report (QLH, 2016).

The City has also expressed concern with infiltrating waters near the site causing damage to roadways.

Proposed Improvements

This is a multiphase project that aims to improve the quality of runoff from its adjacent drainage basin, as well as treat baseflow coming through the 72" outfall from the Bracco Reservoir.

- Phase 1: Excavate the pond and install a Bioactivated Media (BAM) underdrain filtration system to prevent infiltration of water in the area despite an increase in the volume of water being stored for treatment.
- Phase 2: Complete the project by installing the pumps and distribution manifold to control the flow and storage of water effectively. The plan is to install solar powered pumps which will operate in such a manner to capture the flows that seep into the pipe during non-rain events.

Benefits

This project would simultaneously treat baseflow from Bracco Pond as well as effluent from the adjacent drainage basin and reduce infiltration in the immediate area. Nutrient loads will be addressed by cycling them through a BAM system to reduce nitrogen and phosphorous. Implementation of the proposed project will capture approximately 94.3 pounds of nitrogen and 12.4 pounds of phosphorus from the drainage basin that discharges to the pond as well as an additional 122.1 pounds of nitrogen and 15.0 pounds of phosphorous from the baseflow being pumped out of Bracco Pond.

Cost Estimate

It is estimated that the total cost of the facilities to capture, pump and distribute the baseflow water into the pond will cost approximately $1,216,663 including both phases of the project. The breakdown of each phase can be seen in the Cost Estimate Table below.

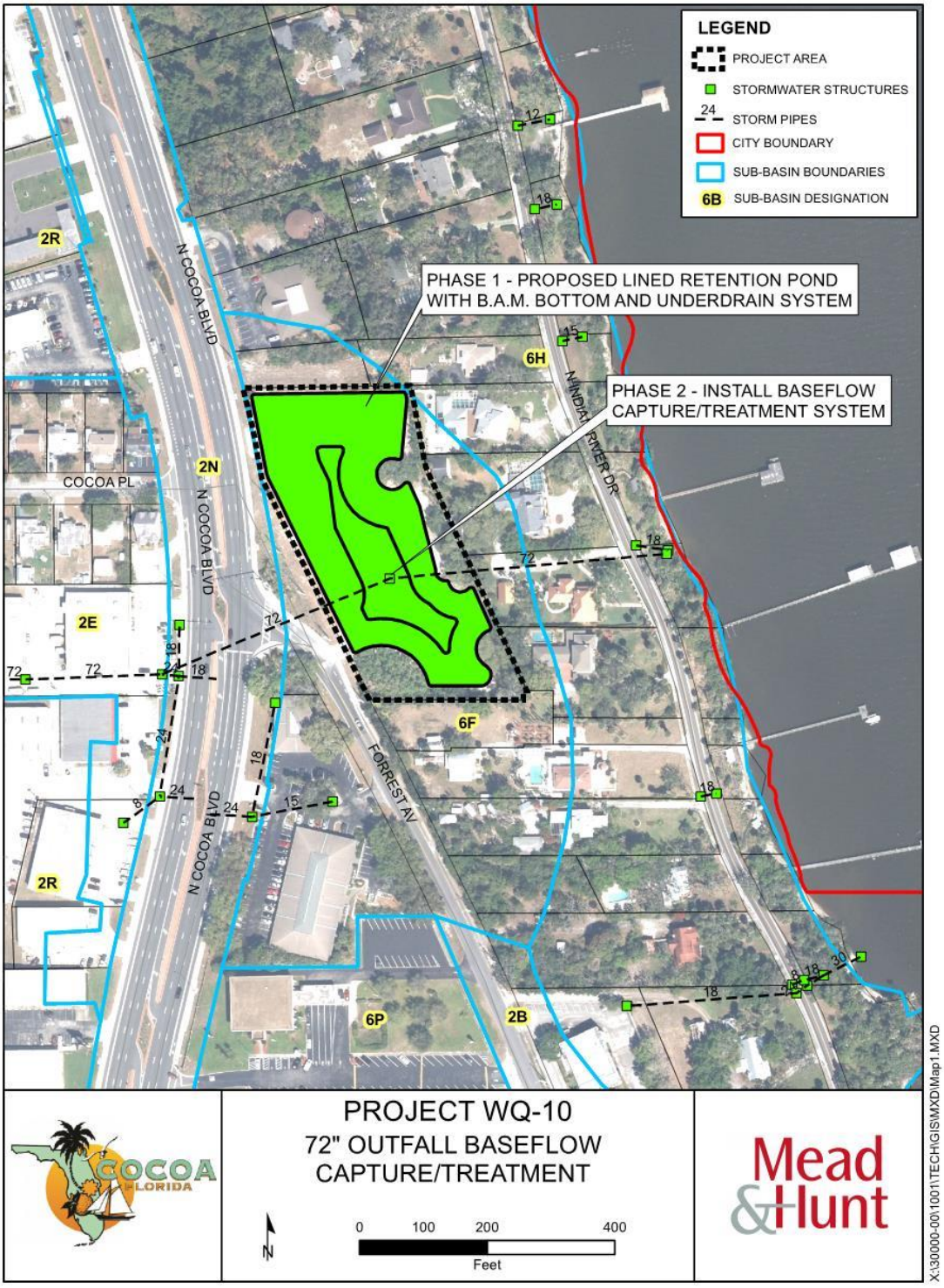
Table 39: Cost Estimate Table – Project WQ-10: 72" Outfall Baseflow Capture/Treatment.

Project WQ-10: 72" Outfall Baseflow Capture/Treatment							
Item Number	Location		Proposed Retrofit Improvements				
	72" Outfall		Item Description	Quantity	Unit	Unit Cost	Amount
1	Phase 1 Construction Activities						
	-	Site preparation	Clearing and grubbing	1	LS	$15,000.00	$15,000.00
	-	Site preparation	Pond Excavation	1	LS	$75,000.00	$75,000.00
	-	Discharge Structure	Discharge Structurea w Skimmer	1	EA	$15,000.00	$15,000.00
	-	Pollutant Removal	BAM Underdrain Filtration System	2,100	CY	$200.00	$420,000.00
		Furnish & Install	Pond Liner	8,000	SY	$11.00	$88,000.00
	-	Landscaping	Sodding, plants and trees	1	LS	$25,000.00	$25,000.00
2	Phase 2 Construction Activities						
	-	Construction management	Maintenance of traffic, signage	1	LS	$7,500.00	$7,500.00
	-	Furnish & Install	Wet Well	1	LS	$20,000.00	$20,000.00
	-	Furnish & Install	Pumps, controls, etc	1	LS	$35,000.00	$35,000.00
	-	Furnish & Install	Distribution Manifold	1,400	LF	$25.00	$35,000.00
	-	Restoration	Sod, landscape replacement, etc.	1	LS	$7,500.00	$7,500.00

	SUB-TOTAL (Phase 1)		$638,000.00
Qualifications (if applicable)	**SUB-TOTAL (Phase 2)**		$105,000.00
1. Phase 1: Outfall Baseflow Capture/Treatment	**SUB-TOTAL**		$743,000.00
2. Phase 2: Finish Forrest Ave Dry Retention Pond With BAM			
	- Mobilization @	10%	$74,300.00
	- Contingencies @	15%	$111,450.00
	SUB-TOTAL OF CONSTRUCTION COST		$928,750.00
	- Eng Design & Permitting @	20%	$185,750.00
	- Subconsultants @	5%	$46,437.50
	- Constr Admin and Insp @	6%	$55,725.00
	TOTAL PROJECT COST		**$1,216,663**

Table 40: Nutrient Removal Cost/Pound Table – Project WQ-10: 72" Outfall Baseflow Capture/Treatment.

Project WQ-10: 72" Outfall Baseflow Capture/Treatment						
Project #	**Improvement**		**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-10	Dry Pond		216.40	27.40	$ 5,622.25	$ 44,406.68
Assumptions:						
8000 SY	296	CY				
1.71	mg/L TN	=	1.43E-05	lbs/gal	Based on Grab Samples provided	
0.21	mg/L TP	=	1.75E-06	lbs/gal	Based on Grab Samples provided	
Assume pumping a continuous flow of 300 gpm @ 6 hrs / day for 180 days/year.						
Flow	300	gpm		0.6684	cfm	
Time Length	6	hrs/day				
Days / Year	180	days/year				
Annual Flow	2,598,930.48	cf/yr				
	19,440,000.00	gal/yr				
Annual Load						
TN	277.4	lbs/yr				
TP	34.1	lbs/yr				
BAM Treatment	44%					
Load Removed						
TN	122.1	lbs/yr				
TP	15.0	lbs/yr				
Phase 1 Pond						
US-1 Drainage Basin Area			5	ac		
CN			93			
DCIA			85	%		
Treatment Depth			3	inches		
Loading to Pond						
TN	97.5	kg/yr		214.5	lbs/yr	
TP	12.83	kg/yr		28.226	lbs/yr	
Removal Efficiency			TN =	44	%	
			TP =	44	%	
Discharge Load						
TN	54.62	kg/yr		120.164	lbs/yr	
TP	7.19	kg/yr		15.818	lbs/yr	
Load Removed						
TN	42.88	kg/yr		94.336	lbs/yr	
TP	5.64	kg/yr		12.408	lbs/yr	


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
PHASE 1 - PROPOSED LINED RETENTION POND WITH B.A.M. BOTTOM AND UNDERDRAIN SYSTEM
PHASE 2 - INSTALL BASEFLOW CAPTURE/TREATMENT SYSTEM
N COCOA BLVD
COCOA PL
INDIAN RIVER DR
FORREST AV
2R
2N
2E
6H
6F
6P
2B
PROJECT WQ-10
72" OUTFALL BASEFLOW
CAPTURE/TREATMENT
0 100 200 400
Feet
N
COCOA FLORIDA
Mead & Hunt
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(9) WQ-11: Horseshoe Ponds (North & South) Vegetation Removal

Location

Project WQ-11 is located in the Horseshoe Ponds, three small ponds (total area of 3.4 acres) located north of Dixon Blvd just west of N Fiske Blvd. They are surrounded by single family residential units, in a drainage basin of about 55-acres, and serve as stormwater retention facilities for the drainage basin.

Proposed Improvements

This project proposes the removal of vegetation in the Horseshoe Ponds to prevent the decay and ultimate deposition of nutrients to these systems. Nutrient rich sediments and clay accumulate over time as a result of algae and plants that inevitably grow along the banks of aquatic systems.

Access to the two southern ponds may be achieved via the two vacant lots located at the south end of South Lakemont Drive, however the northern pond will likely require property acquisition in order to access the pond and perform the work.

Benefits

This project aims to restore these water bodies which may be plagued by algal blooms by reducing vegetation which may become a source of nutrients. Overgrown vegetation contributes nutrient loading to the ponds which over time may decay and result in algal blooms which are unsightly and adversely impact the neighborhood as well as the plant and animal communities in or near the water bodies.

Although data is lacking in order to claim nutrient removal credits according to FDEP, an estimate was performed under the assumption that completion of this project would effectively restore the ability of these ponds to remove nutrients from the effluent. If removal of this excess vegetation restores 50% of the ability of these ponds to treat nutrients, then the ponds would be able to treat an additional 66.9 and 18.0 pounds of nitrogen and phosphorous respectively.

Cost Estimate

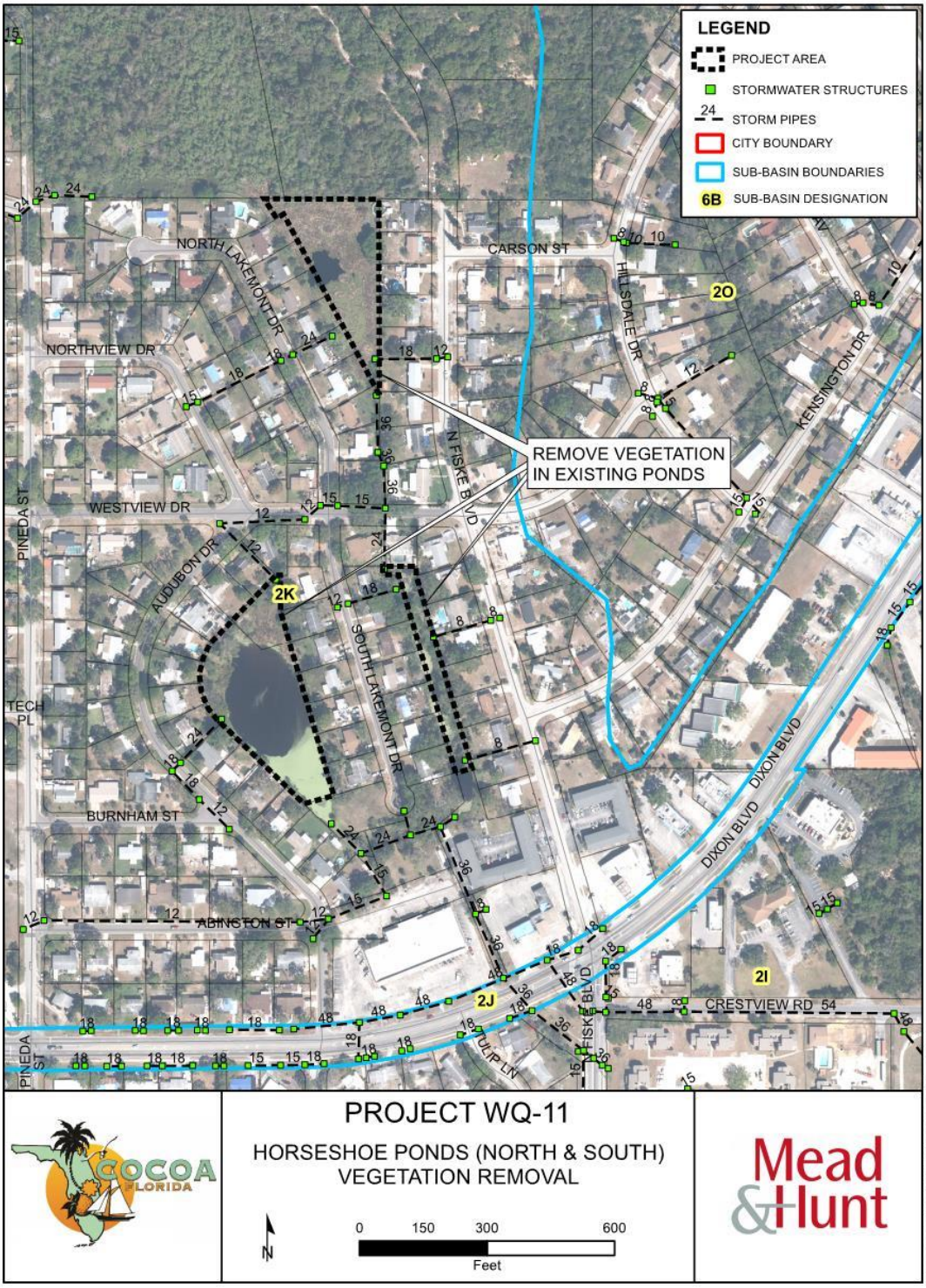
For the purpose of this cost estimate it is presumed that property acquisition will occur, and the County can negotiate a price 2 times higher than the BCPAO's Market Value of $38,000 for the least expensive property with direct access to the pond. The total estimate for design, permitting and construction of this project is $236,670.

Table 41: Cost Estimate Table – Project WQ-11: Horseshoe Ponds (North & South) Vegetation Removal.

Project WQ-11: Horseshoe Ponds (North & South) Vegetation Removal						
Item Number	Location	Proposed Retrofit Improvements				
	Horseshoe Ponds	Item Description	Quantity	Unit	Unit Cost	Amount
1	Property Acquisition	Parcel	1	LS	$76,000.00	$76,000.00
2	Construction activities					
	- Site preparation	Demolition	1	LS	$10,000.00	$10,000.00
	- Pond Cleaning	Floating Vegetation Removal	1	LS	$53,000.00	$53,000.00
	- Right-of-way Restoration	Sodding, landscaping, etc.	1	LS	$10,000.00	$10,000.00
	Add Control Structures	Discharge Control Structures	3	EA	$7,500.00	$22,500.00
Qualifications (if applicable)			**SUB-TOTAL**			$171,500.00
1	- Property Acquisition is based on 2 times the BCPAO Market Estimate					
	- Vegetation Removal per quote from Solitude		- Mobilization @		10%	$17,150.00
			- Contingencies @		10%	$17,150.00
			SUB-TOTAL OF CONSTRUCTION COST			$205,800.00
			- Eng Design & Permitting @		10%	$20,580.00
			- Subconsultants @		5%	$10,290.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$236,670**

Table 42: Nutrient Removal Cost/Pound Table – Project WQ-11: Horseshoe Ponds (North & South) Vegetation Removal.

Project WQ-11: Horseshoe Ponds (North & South) Vegetation Removal											
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**						
WQ-11	Vegetation Removal	66.86	18.00	$ 3,540	$ 13,151						
Assumptions:											
Data lacking to assign credit according to FDEP											
Use $60/CY for Excavation & Hauling											
Basin Area	55	ac									
Pond Areas	1.75	ac									
	1.85	ac									
	0.65	ac									
	4.25	ac									
Residence T	20	days									
Loading to Pond											
TN	183.55	kg/yr	403.81	lbs/yr							
TP	28.99	kg/yr	63.778	lbs/yr							
Removal Efficiency		TN =	36	%							
		TP =	61	%							
Discharge Load											
TN	108.58	kg/yr	238.876	lbs/yr							
TP	10.4	kg/yr	22.88	lbs/yr							
Load Removed											
TN	60.78	kg/yr	133.716	lbs/yr							
TP	16.36	kg/yr	35.992	lbs/yr							
Anticipate 50% Credit											
Load Reduction Crediit											
TN	30.39	kg/yr	66.858	lbs/yr							
TP	8.18	kg/yr	17.996	lbs/yr							


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
REMOVE VEGETATION IN EXISTING PONDS
NORTH LAKEMONT DR
CARSON ST
HILLSDALE DR
KENSINGTON DR
NORTHVIEW DR
N FISKE BLVD
WESTVIEW DR
PINEDA ST
AUDUBON DR
SOUTH LAKEMONT DR
TECH PL
BURNHAM ST
ABINGTON ST
DIXON BLVD
CRESTVIEW RD
TULIP LN
2O
2K
2J
2I
PROJECT WQ-11
HORSESHOE PONDS (NORTH & SOUTH)
VEGETATION REMOVAL
0 150 300 600
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(10) WQ-12: Verizon Stormwater Pond in Diamond Square

Location

Project WQ-12 is a proposed wet pond from the May 2016 TMDL Report to be excavated East of the Diamond Square CRA. Specifically, the plot of land for this project is located between W Railroad Ave. and the railroad. A 2004 Preliminary Site Investigation Report by Ecology and Environment, Inc. (EE) confirmed the results of previous phase 1 and phase 2 analyses of the site which uncovered arsenic contamination at the site. The study found arsenic concentrations which exceeded the Residential Direct Exposure (RDE) Soil Cleanup Target Level (SCTL) of 2.1 mg/kg at soil boring locations 0-6 ft below the surface. Additionally, groundwater samples exceeding Groundwater Cleanup Target Levels (GCTL) were also collected.

Proposed Improvements

The project intends to construct an off-line 0.94-acre wet pond to retrofit an additional 20.66 acres of single and multifamily properties, as part of the larger Diamond Square redevelopment plan. However, the potential to disturb and mobilize the arsenic-impacted soils and groundwater to uncontaminated levels warrants consultation with FDEP and further assessment of the site in order to establish remediation options. Lining the pond has also been discussed.

Following the completion of this pond excavation, the City has suggested that further analysis be done to the drainage of the Diamond Square area. If this analysis shows that flooding issues are still present, an alternative phase could be added to the project scope. There is an 18” pipe going east along Orange Dr. on the other side of US-1. This pipe connects to a 48” pipe past Hughlett Ave. to Brevard Ave. where it travels south down an 48x 72 oval pipe and into the baffle box on Church Street before discharging to the IRL. To do this a pump station and piping would be needed to project the excess water that would have been treated on the Verizon pond, across to connect with the 18” pipe in Orange St.

Benefits

The primary aims of this wet pond construction is to attenuate the flows of stormwater for the changing land use landscape that is Diamond Square. As part of the greater redevelopment plan mentioned in project FM-14, this project is an essential component for improving the drainage abilities of Diamond Square and thus addressing flooding issues that have been experienced in the past.

Furthermore, this wet pond will have a significant environmental impact on water resources. Because of the reduction of nutrient loading from attenuating flows, the project would provide 125.7 lbs/yr of TN credits and 45.6 lbs/yr of TP credits, as was calculated in the 2016 TMDL Report.

Cost Estimate

The estimated cost of the project is $549,643 including construction and engineering costs. The current cost estimates reflect the most up to date cost calculations for the excavation of this wet detention pond.

Table 43: Cost Estimate Table – Project WQ-12: Verizon Stormwater Pond in Diamond Square.

Project WQ-12: Verizon Stormwater Pond in Diamond Square						
Item Number	Location	Proposed Retrofit Improvements				
	Verizon Pond	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$5,000.00	$5,000.00
	- Site preparation	Pond Excavation	1	LS	$90,000.00	$90,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$3,000.00	$3,000.00
	- Drainage Structure	Stormwater Inlets	2	LS	$5,000.00	$10,000.00
	- Storm Pipe	24" RCP	1,112	LF	$125.00	$139,000.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$10,000.00	$10,000.00
	- Hazardous Waste	Hazardous Materials Cleanup	1	LS	$100,000.00	$100,000.00
2	Property Acquisition					
	- Property Acquisition	Property Acquisition	1	LS	$38,000.00	$38,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$395,000.00
1						
		- Mobilization @			5%	$19,750.00
		- Contingencies @			10%	$39,500.00
		SUB-TOTAL OF CONSTRUCTION COST				$454,250.00
		- Eng Design & Permitting @			10%	$45,425.00
		- Subconsultants @			5%	$22,712.50
		- Constr Admin and Insp @			6%	$27,255.00
		TOTAL PROJECT COST				**$549,643**

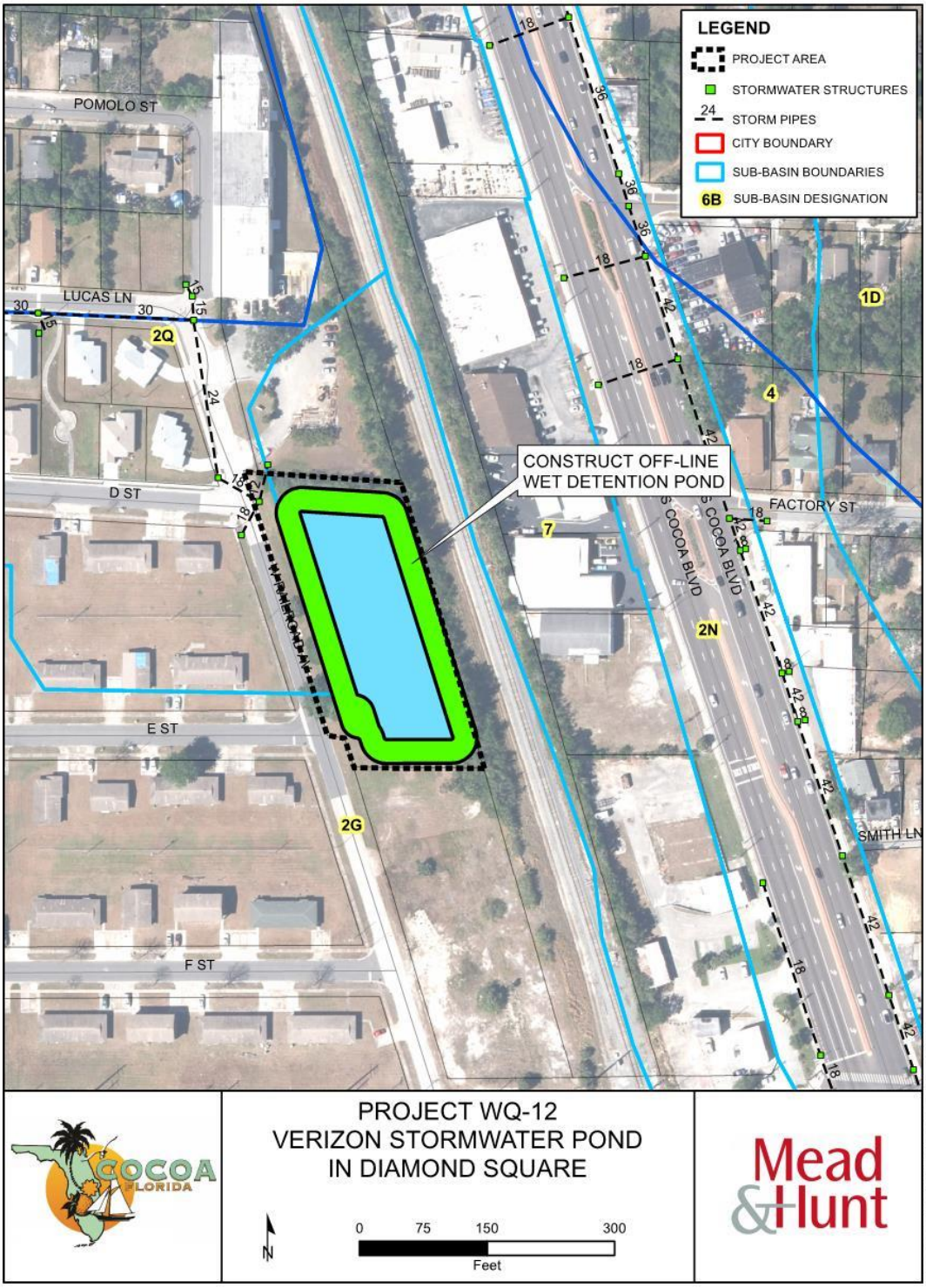
Table 44: Nutrient Removal Cost/Pound Table – Project WQ-12: Verizon Stormwater Pond in Diamond Square.

Project WQ-12: Verizon Stormwater Pond in Diamond Square					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-12	Dry Pond	125.7	45.6	$ 4,372.65	$ 12,053.56

Assumptions:

These #s from TMDL report CC-12

Estimated TN Removal	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
125.7	45.6	$ 2,572.59	$ 7,091.56


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
CONSTRUCT OFF-LINE
WET DETENTION POND
POMOLO ST
LUCAS LN
D ST
E ST
F ST
FACTORY ST
SMITH LN
S COCOA BLVD
2Q
2G
2N
7
4
1D
PROJECT WQ-12
VERIZON STORMWATER POND
IN DIAMOND SQUARE
0
75
150
300
Feet
N
COCOA
FLORIDA
Mead &Hunt
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(11) WQ-13: Pond Aeration at North Fiske and Other Stormwater Treatment Facilities

Location

Project WQ-13 focuses on the North Fiske Pond, an 18.8-acre freshwater pond located between Cocoa Blvd. and some vacant commercial land. The pond provides storage and treatment to stormwater flows from runoff in areas to the north. Additionally, the City operates an additional 8 ponds throughout the City with a total area of 11.8 acres.

Proposed Improvements

This project, like WQ-7, proposes the installation of an aeration system at the North Fiske pond and other stormwater facilities in order to prevent toxic algae blooms and to improve the general health and treatment capabilities of the pond systems.

Benefits

In general, aerating ponds promotes biological activity which in turn reduces the available nutrients for algae to grow. High nutrient levels from surface runoff can result in the conditions which might foster algal blooms which can cause nutrient levels to exceed requirements due to their toxic effects on biomass. Aerators have been shown to be a beneficial addition to wet detention ponds in order to keep dissolved oxygen levels high enough to improve aquatic life which can help keep the water column cleaner. Biological decomposition of muck de-stratifies thermal layers in water and improves the ecological health of the system.

Nutrient removal calculations were performed by specifying the parameters of an idealized “Standard Pond” with an area of 10-acres and the basin parameters listed below. This standard pond with the addition of aerators was able to remove 5.94 pounds of nitrogen and 0.66 pounds of phosphorous. Expanding this estimate to address all 30-acres of ponds around the City of Cocoa would estimate a nutrient capture capacity of approximately 17.80 pounds of nitrogen and 1.98 pounds of phosphorus on an annual basis.

Cost Estimate

The City received a quote from Vertex Water Features to furnish the North Fiske Pond with aerators for $26,639. The additional 11.8-acres of ponds that the City operates would therefore cost an estimated $20,000 to have aerators installed based on this Vertex quote. The total cost to install aeration systems in all stormwater treatment facilities would be $65,482.

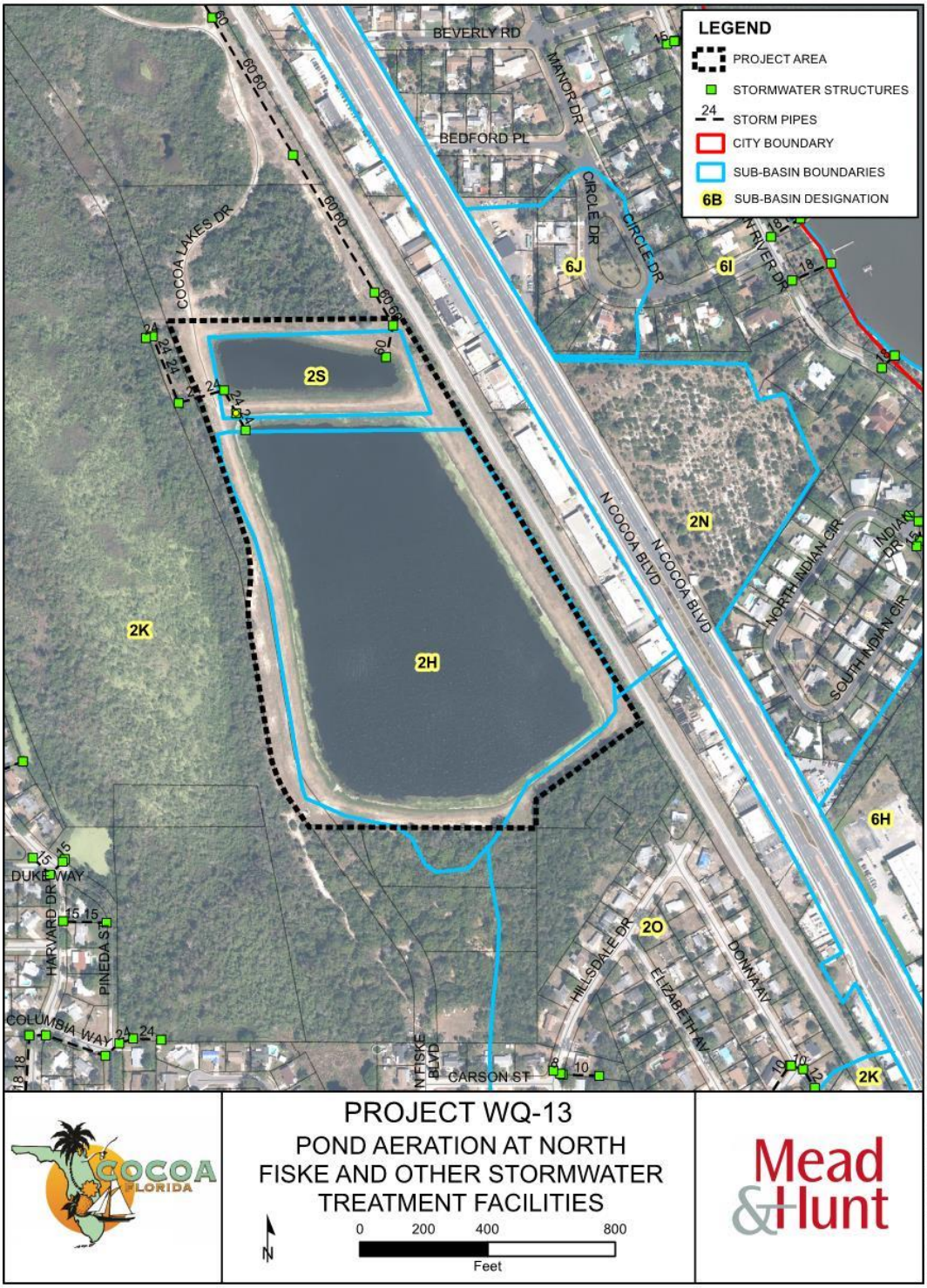
Table 45: Cost Estimate Table – Project WQ-13: Pond Aeration at North Fiske and Other Stormwater Treatment Facilities.

Project WQ-13: Pond Aeration at North Fiske and other Stormwater Treatment Facilities						
Item Number	Location	Proposed Retrofit Improvements				
	Various Ponds	Item Description	Quantity	Unit	Unit Cost	Amount
1	Vertex Aeration Systems Quote					
	- LLHE33 Aeration System Wired 230 Volt	Vertex Water Features Quote	1	LS	$26,639.32	$26,639.32
2	Construction activities; Additional ponds					
	- Furnish & Install	City-operated ponds	1	LS	$20,000.00	$20,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$46,639.32
1	- Quote provided by Vertex Water Features at the request of City of Cocoa					
	- North Fiske pond = 18.8 acres		- Mobilization @		10%	$4,663.93
	- **City operates additional 8 ponds throughout city = 11.8 acres**		- Contingencies @		10%	$4,663.93
	- Cost estimate for additional ponds based on Vertex quote					
			SUB-TOTAL OF CONSTRUCTION COST			$55,967.18
			- Eng Design & Permitting @		10%	$5,596.72
			- Subconsultants @		2%	$1,119.34
			- Constr Admin and Insp @		5%	$2,798.36
			TOTAL PROJECT COST			**$65,482**

Table 46: Nutrient Removal Cost/Pound Table – Project WQ-13: Pond Aeration at North Fiske and Other Stormwater Treatment Facilities.

Project WQ-13: Pond Aeration at North Fiske and other Stormwater Treatment Facilities					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-13	Pond Aeration	17.82	1.98	$3,675	$33,072

Assumptions:					
BMPTRAINS analysis of "Standard Pond"					
Standard Pond		Basin Area =	65	ac	
		CN =	84		
		DCIA	65	%	
		Pond Area =	10	ac	
		Residence Time =	30	days	
Loading to Ponds					
TN	113.8	kg/yr	250.36	lbs/yr	
TP	18.9	kg/yr	41.58	lbs/yr	
Removal Efficiency		TN =	38	%	
		TP =	64	%	
Discharge Load					
TN	56.3	kg/yr	123.86	lbs/yr	
TP	5.41	kg/yr	11.902	lbs/yr	
Load Removed					
TN	34.8	kg/yr	76.56	lbs/yr	
TP	9.7	kg/yr	21.34	lbs/yr	
WITH FLOATING AERATORS					
Assume 2.5% credit					
Removal Efficiency		TN =	41	%	
		TP =	66	%	
Discharge Load					
TN	56.5	kg/yr	124.3	lbs/yr	
TP	5.15	kg/yr	11.33	lbs/yr	
Load Removed					
TN	37.5	kg/yr	82.5	lbs/yr	
TP	10	kg/yr	22	lbs/yr	
Removal Difference					
TN	2.7	kg/yr	5.94	lbs/yr	
TP	0.3	kg/yr	0.66	lbs/yr	
Total Project w		3	Aerators		
TN	8.1	kg/yr	17.82	lbs/yr	
TP	0.9	kg/yr	1.98	lbs/yr	


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
6B
BEVERLY RD
MANOR DR
BEDFORD PL
CIRCLE DR
COCOA LAKES DR
6J
6I
2S
2H
2K
2N
2O
6H
N COCOA BLVD
NORTH INDIAN CIR
SOUTH INDIAN CIR
DUKE WAY
HARVARD DR
PINEDA ST
COLUMBIA WAY
N FISKE BLVD
CARSON ST
HILLSDALE DR
ELIZABETH AV
DONNA AV
PROJECT WQ-13
POND AERATION AT NORTH FISKE AND OTHER STORMWATER TREATMENT FACILITIES
0 200 400 800
Feet
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(12) WQ-14: Scarborough Park & Water Tower Pond Expansion

Location

Project WQ-14 is located on Scarborough Park, a City-owned property on Brunson Blvd., north of Main Street, and on the property to the East of the Cocoa Water Tower, on N Cocoa Blvd. and Peachtree St. The basin areas for the Scarborough Park pond and the Water Tower pond are 3-acres and 7-acres, respectively.

Water from Main Street, 1st Street, and Brunson Blvd. is diverted by street flow and pipes into a shallow dry pond in Scarborough Park, motivating its expansion. While localized flooding in the intersection of Peachtree St. and 1st St. has called on the expansion and modification of the inlets at the water tower pond.

Proposed Improvements

The proposed projects plan to expand the ponds such that the increased capacity can reduce localized flooding and treat a greater volume of runoff from the 10-acre combined basins.

Benefits

Expansion of the ponds will provide increased flood control capabilities for the basins as well as increased TN and TP removal. The result will be the removal of 58.1 lbs/yr TN and 8.3 lbs/yr TP.

Cost Estimate

Project costs are estimated to be $160,272.

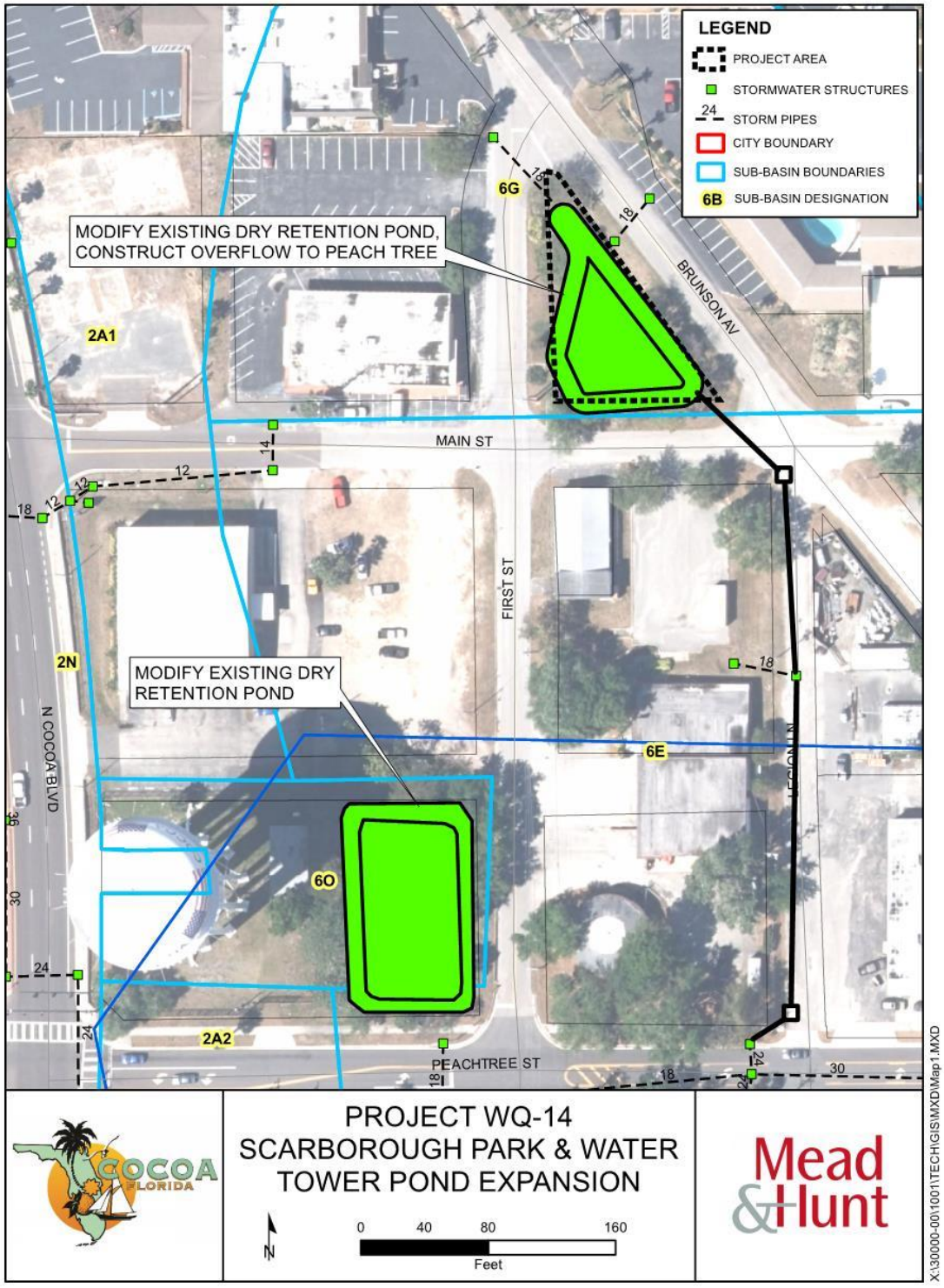
Table 47: Cost Estimate Table – Project WQ-14: Scarborough Park & Water Tower Pond Expansion.

Project WQ-14: Scarborough Park & Water Tower Pond Expansion						
Item	Location	Proposed Retrofit Improvements				
Number	Scarborough Park & Water Tower Ponds	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$10,000.00	$10,000.00
	- Site preparation	Pond Excavation	1	LS	$50,000.00	$50,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Flow Control Structure	Discharge Control Structure	2	LS	$5,500.00	$11,000.00
	- Furnish & Install	R&R Concrete Curb & Sidewalk	1	LS	$5,000.00	$5,000.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$106,000.00
1						
			- Mobilization @		10%	$10,600.00
			- Contingencies @		10%	$10,600.00
			SUB-TOTAL OF CONSTRUCTION COST			$127,200.00
			- Eng Design & Permitting @		15%	$19,080.00
			- Subconsultants @		5%	$6,360.00
			- Constr Admin and Insp @		6%	$7,632.00
			TOTAL PROJECT COST			**$160,272**

Table 48: Nutrient Removal Cost/Pound Table – Project WQ-14: Scarborough Park & Water Tower Pond Expansion.

Project WQ-14: Scarborough Park & Water Tower Pond Expansion					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-14	Dry Ponds	58.08	8.338	$2,759.50	$19,221.88

Assumptions					
Scarborough Park Basin size = 3 ac					
Water tower (approximate) Basin Size = 7 ac					
City expanded scope to address localized flooding on Peachtree St.					
Drainage area: 10 ac sum of both basins					
Land-use: High-intensity Commercial, TN=2.4 TP=0.345					
Soil type A, Non DCIA CN: 89					
DCIA (%): 85					
Assumes 1/4" of runoff retention					
Loading to Ponds					
TN	94.66	kg/yr	208.252	lbs/yr	
TP	13.18	kg/yr	28.996	lbs/yr	
Removal Efficiency		TN =	29	%	
		TP =	29	%	
Discharge Load					
TN	66.26	kg/yr	145.772	lbs/yr	
TP	9.38	kg/yr	20.636	lbs/yr	
Load Removed					
TN	26.4	kg/yr	58.08	lbs/yr	
TP	3.79	kg/yr	8.338	lbs/yr	


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
MODIFY EXISTING DRY RETENTION POND, CONSTRUCT OVERFLOW TO PEACH TREE
MODIFY EXISTING DRY RETENTION POND
6G
6B
2A1
2N
6E
6O
2A2
MAIN ST
FIRST ST
BRUNSON AV
N COCOA BLVD
PEACHTREE ST
PROJECT WQ-14
SCARBOROUGH PARK & WATER TOWER POND EXPANSION
0 40 80 160
Feet
X:\30000-001\1001\TECH\GIS\MXD\Map1.MXD

(13) WQ-15: Add Floating Wetlands to Existing Stormwater Ponds

Location

Project WQ-15 is located in various locations to be determined around the City of Cocoa on different stormwater ponds. There are several stormwater ponds located throughout the City that provide pollution reduction services thanks to their control structures, attenuation characteristics, and in some cases, innovative technologies. The most notable stormwater facility is the Bracco stormwater treatment ponds.

Proposed Improvements

As an element in LID stormwater nutrient reduction, the installation of an innovative technology known as a floating wetland is proposed. Commercially known as Bee-mats, these floating mats serve as a type of wetland, except the plants are suspended on artificial mats that create a sort of hydroponic environment that may be adapted to the needs of each specific project.

Benefits

The benefits of installing Bee-Mats on various existing stormwater ponds range from the reduction of nutrients from the effluent to the various aesthetic possibilities as a result of the great adaptability of the technology, lending itself to the posting of educational signage.

Nutrient removal calculations were performed by specifying the parameters of an idealized “Standard Pond” with an area of 10-acres and the basin parameters listed in the table below. Implementation of the proposed project will capture approximately 21.78 pounds of nitrogen and 2.42 pounds of phosphorus on an annual basis.

A total nutrient removal estimate could be calculated by extrapolating the estimates obtained using the 10-acre model described, to the total 77-acres of ponds being managed by the City’s Stormwater Utility. Implementation of this project throughout the City of Cocoa’s stormwater ponds would remove 167.7 lbs/year of nitrogen and 18.64 lbs/year of phosphorous.

It should be noted that nutrient calculations were performed assuming FDEP’s 10% nutrient removal credit for 5% coverage reflects the actual nutrient removal capabilities of this technology. Past studies, however, have shown otherwise, with nutrient removal being as high as 40-48% (Lynch et al. 2014).

Cost Estimate

Anticipated cost to install floating wetlands in an idealized 10-acre wet pond in the City of Cocoa would be about $818,635 over the course of 10 years. This can be broken down into first year installation costs of about $206,635, followed by yearly maintenance costs of $68,000.

Table 49: Cost Estimate Table – Project WQ-15: Add Floating Wetlands to Existing Stormwater Ponds.

Project WQ-15: Add Floating Wetlands to Existing Stormwater Ponds							
Item Number	Location		Proposed Retrofit Improvements				
	Various Ponds		Item Description	Quantity	Unit	Unit Cost	Amount
1	Bee-Mats						
	- Installation		Floating Wetland Installation	170	EA	$450.00	$76,500.00
	- Annual Maintenance		Harvesting & Replanting	170	LS	$400.00	$68,000.00
Qualifications (if applicable)				**SUB-TOTAL**			$144,500.00
1	Cost of Year 1 =	$206,635					
	Costs calculated assuming 5% coverage of 10-acres=0.5-acres			- Mobilization @		10%	$14,450.00
	0.5-acres=21,780ft^2 and @ 128ft^2/mat = 170 mats			- Contingencies @		20%	$28,900.00
	Cost estimated to $38/m^2 and each mat or 11.89m^2/mat						
	Cost/mat = $450			**SUB-TOTAL OF CONSTRUCTION COST**			$187,850.00
2	Annual Maintenance Costs =	$68,000					
3	Annual Costs for 10-year period =	$680,000		- Eng Design & Permitting @		10%	$18,785.00
4	Cost of 10-acres for 10-years =	$818,635		- Subconsultants @		0%	$0.00
				- Constr Admin and Insp @		0%	$0.00
				TOTAL PROJECT COST			**$206,635**

Table 50: Nutrient Removal Cost/Pound Table – Project WQ-15: Add Floating Wetlands to Existing Stormwater Ponds.

Project WQ-15: Add Floating Wetlands to Existing Stormwater Ponds					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-15	Floating Wetlands	21.78	2.42	$9,487.37	$85,386.36

Assumptions					
BMPTRAINS analysis of "Standard Pond"					
Standard Pond		Basin Area =	65	ac	
		CN =	84		
		DCIA	65	%	
		Pond Area =	10	ac	
		Residence Time =	30	days	
Loading to Ponds					
TN	113.8	kg/yr	250.36	lbs/yr	
TP	18.9	kg/yr	41.58	lbs/yr	
Removal Efficiency		TN =	38	%	
		TP =	64	%	
Discharge Load					
TN	56.3	kg/yr	123.86	lbs/yr	
TP	5.4	kg/yr	11.88	lbs/yr	
Load Removed					
TN	34.8	kg/yr	76.56	lbs/yr	
TP	9.7	kg/yr	21.34	lbs/yr	
WITH FLOATING WETLANDS					
Assume 10% credit					
Removal Efficiency		TN =	49	%	
		TP =	71	%	
Discharge Load					
TN	46.4	kg/yr	102.08	lbs/yr	
TP	4.4	kg/yr	9.68	lbs/yr	
Load Removed					
TN	44.7	kg/yr	98.34	lbs/yr	
TP	10.8	kg/yr	23.76	lbs/yr	
Removal Difference					
TN	9.9	kg/yr	21.78	lbs/yr	
TP	1.1	kg/yr	2.42	lbs/yr	
Total Project w		7.7	X 10acres = 77 Acres		
TN	76.23	kg/yr	167.706	lbs/yr	
TP	8.47	kg/yr	18.634	lbs/yr	


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
CONCEPTUAL FLOATING WETLAND DESIGN
8A
2S
2H
2N
2K
2O
6I
6J
6H
2I
2J
COCOA LAKES DR
BERKSHIRE DR
BEVERLY RD
BEDFORD PL
MANOR DR
CIRCLE DR
RIVER DR
N COCOA BLVD
INDIAN DR
NORTH INDIAN CIR
SOUTH INDIAN CIR
VANDERBILT LN
TATE ST
PRINCETON RD
DUKE WAY
VASSAR LN
COLUMBIA WAY
OXFORD WAY
PURDUE WAY
WESTVIEW DR
TECH PL
CAMBRIDGE DR
EMORY LN
HARVARD DR
PINEDA ST
NORTHVIEW DR
NORTH LAKEMONT DR
SOUTH LAKEMONT DR
WEST POINT DR
AUDUBON DR
CARSON ST
HILLSDALE DR
DONNA AV
ELIZABETH AV
N FISKE BLVD
KENSINGTON DR
DIXON BLVD
PLAZA PKWY
PROJECT WQ-15
ADD FLOATING WETLANDS TO EXISTING STORMWATER PONDS
N
0 300 600 1,200
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(14) WQ-16: Riverfront Park In-Lagoon Nutrient Removal

Location

Project WQ-16 focuses on the eastern boundary of Riverfront Park. Located in the historic Cocoa Village area, between Harrison St. and Church St., Riverfront Park is part of a 5-acre recreational area which includes the Civic Center and Taylor Park. This multi-use park is a hub for many of the stormwater treatment projects involving the commercial downtown district of Cocoa, and as such is an ideal location for innovative treatment solutions.

Proposed Improvements

This project aims to improve the treatment of stormwater runoff that flows through the Riverfront Park area. Installation of an in-lagoon nutrient removal system at the site will increase the ability to retain and treat stormwater runoff before it is ultimately discharged to the IRL. The project design has been provided by ISS and is pictured below.

In the event that this project cannot be executed, implementation of projects WQ-17 and WQ-18 would serve as a replacement.

Benefits

An in-lagoon nutrient removal system at this site would have a direct effect on the water quality immediately adjacent to Riverfront Park. This innovative project would showcase and educate the public on the City's initiative to provide effective water treatment technologies in its bid to improve water quality in the IRL. Nutrient load reductions, assuming a total basin of 109.9-acres, are 735.8 lbs/yr TN removal and 188.6 lbs/yr TP removal.

Cost Estimate

Cost calculations were carried out by ISS and estimated that the total cost of the project would be around $1,500,000.

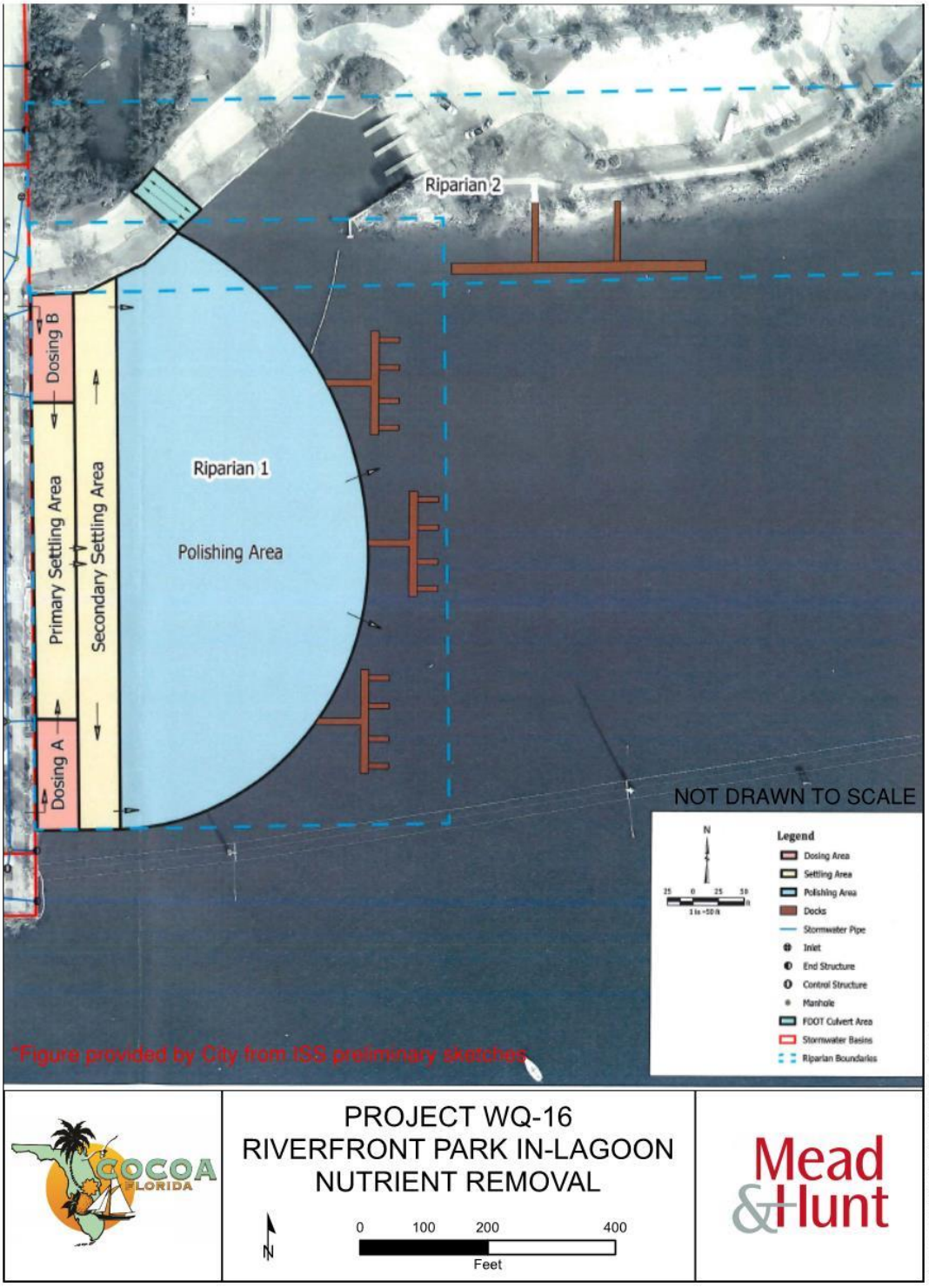
Table 51: Cost Estimate Table – Project WQ-16: Riverfront Park In-Lagoon Nutrient Removal.

Project WQ-16: Riverfront Park In-Lagoon Nutrient Removal						
Item Number	Location	Proposed Retrofit Improvements				
	Riverfront Park	Item Description	Quantity	Unit	Unit Cost	Amount
1	In-Lagoon Treatment System		1	LS	$1,500,000.00	$1,500,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$1,500,000.00
1	Estimate provided by ISS					
		- Mobilization @			0%	$0.00
		- Contingencies @			0%	$0.00
		SUB-TOTAL OF CONSTRUCTION COST				$1,500,000.00
		- Eng Design & Permitting @			0%	$0.00
		- Subconsultants @			0%	$0.00
		- Constr Admin and Insp @			0%	$0.00
		TOTAL PROJECT COST				**$1,500,000**

Table 52: Nutrient Removal Cost/Pound Table – Project WQ-16: Riverfront Park In-Lagoon Nutrient Removal.

Project WQ-16: Riverfront Park In-Lagoon Nutrient Removal					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-16	In-Lagoon Treatment	735.8	188.6	$ 2,039	$ 7,955

Assumptions							
Church St Basin =		63.9	ac				
SR 520 Basin =		38	ac				
Riverfront Park =		8	ac				
		109.9					
Loading to Lagoon							
TN	668.87	kg/yr		1471.514	lbs/yr		
TP	95.23	kg/yr		209.506	lbs/yr		
Removal Efficiency		TN =		50%			
		TP =		90%			
Load Removed							
TN	334.435	kg/yr		735.757	lbs/yr		
TP	85.707	kg/yr		188.5554	lbs/yr		


Riparian 2
Dosing B
Primary Settling Area
Secondary Settling Area
Riparian 1
Polishing Area
Dosing A
NOT DRAWN TO SCALE
Legend
Dosing Area
Settling Area
Polishing Area
Docks
Stormwater Pipe
Inlet
End Structure
Control Structure
Manhole
FDOT Culvert Area
Stormwater Basins
Riparian Boundaries
*Figure provided by City from ISS preliminary sketches
PROJECT WQ-16
RIVERFRONT PARK IN-LAGOON
NUTRIENT REMOVAL
0 100 200 400
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(15) WQ-17: Riverfront Park Stormwater Capture Modifications

Location

Project WQ-17 focuses on another aspect of Riverfront Park's ability to capture stormwater. Located in the historic Cocoa Village area, between Harrison St. and Church St., Riverfront Park is part of a 5-acre recreational area which includes the Civic Center and Taylor Park. Stormwater captured at the Riverfront site is generally discharged to the IRL after some minor treatment in first-generation Baffle Boxes or stored in an underground pipe gallery that spans the center of the park.

Southwest of Riverfront Park, in the intersection of Factory St. and Florida Ave. there is a recently expanded dry retention pond, the AT&T dry pond. The dry pond was expanded and modeled using its 12.7-acre drainage basin.

Proposed Improvements

In order to reduce the amount of effluent discharging from Riverfront Park, this project proposes the rerouting of some of that captured stormwater during low flow events to the recently expanded AT&T pond. To achieve this, water will have to be pumped approximately 1,550 feet from the park back to the pond.

This project, along with WQ-18 could serve as a replacement for WQ-16 in the event that WQ-16 cannot be implemented.

Benefits

Redirecting the outflow to the dry retention pond will have benefits including the reduction of flow volumes from the Riverfront Park area, as well as pollutant loading reductions. It is anticipated that the additional elevation of this pond will allow for more and quicker percolation into the ground which will reduce the nutrient loading into the IRL. Nutrient load reductions were calculated by assuming that flow from storms with less than 1" of rain would be rerouted to the AT&T pond, whereas anything larger would bypass this system and be discharged. This would mean that at maximum capacity, 119.7 lbs/yr TN and 17.2 lbs/yr TP would be treated.

Cost Estimate

To avoid undue impacts to this commercial area, it is anticipated that horizontal directional drilling methods will be employed for the construction of the stormwater force main. It is estimated that this project would cost about $369,369.

Table 53: Cost Estimate Table – Project WQ-17: Riverfront Park Stormwater Capture Modifications.

Project WQ-17: Riverfront Park Stormwater Capture Modifications						
Item Number	Location	Proposed Retrofit Improvements				
	Riverfront Park	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$10,000.00	$10,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Pump Modifications	Pump Modifications	1	LS	$20,000.00	$20,000.00
	- Storm Pipe	6" HDPE installed by HDD	1,550	LF	$90.00	$139,500.00
	- Roadway open cut and restoration	Asphalt, base and subgrade	200	SY	$105.00	$21,000.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$20,000.00	$20,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$225,500.00
1						
		- Mobilization @			10%	$22,550.00
		- Contingencies @			20%	$45,100.00
		SUB-TOTAL OF CONSTRUCTION COST				$293,150.00
		- Eng Design & Permitting @			15%	$43,972.50
		- Subconsultants @			5%	$14,657.50
		- Constr Admin and Insp @			6%	$17,589.00
		TOTAL PROJECT COST				**$369,369**

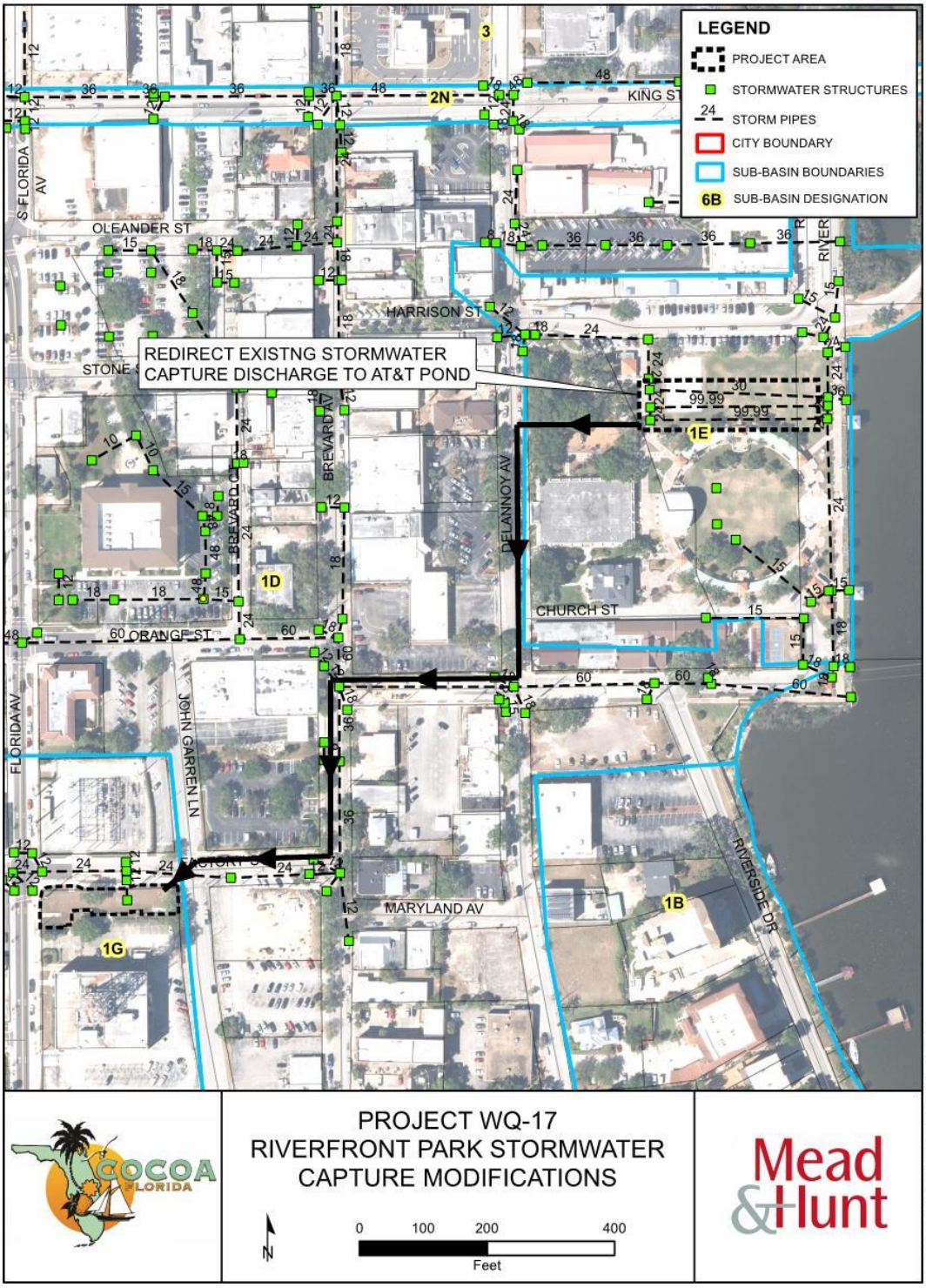
Table 54: Nutrient Removal Cost/Pound Table – Project WQ-17: Riverfront Park Stormwater Capture Modifications.

Project WQ-17: Riverfront Park Stormwater Capture Modifications					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-17	Flow Diversion	119.658	17.204	$ 2,450	$ 17,040

Assumptions

Assumes storms larger than 1" bypass and discharge to Lagoon.

Loading to Lagoon					
TN	101.74	kg/yr	223.828	lbs/yr	
TP	14.63	kg/yr	32.186	lbs/yr	
Removal Efficiency		TN =	53	%	
		TP =	53	%	
Discharge Load					
TN	47.35	kg/yr	104.17	lbs/yr	
TP	6.81	kg/yr	14.982	lbs/yr	
Load Removed					
TN	54.39	kg/yr	119.658	lbs/yr	
TP	7.82	kg/yr	17.204	lbs/yr	
4,606,034	gallons per year				


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
REDIRECT EXISTNG STORMWATER CAPTURE DISCHARGE TO AT&T POND
KING ST
OLEANDER ST
HARRISON ST
STONE ST
ORANGE ST
CHURCH ST
MARYLAND AV
RIVERSIDE DR
S FLORIDA AV
FLORIDA AV
BREVARD AV
DELANNOY AV
JOHN GARREN LN
RIVER
3
2N
1E
1D
1G
1B
PROJECT WQ-17
RIVERFRONT PARK STORMWATER CAPTURE MODIFICATIONS
0 100 200 400
Feet
N
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(16) WQ-18: SR 520 Runoff Treatment to Downtown

Location

Project WQ-18 is to be located somewhere along King St. in downtown Cocoa. There is a 48" outfall located between Brevard Ave. and Delannoy Ave. directly adjacent to the 9.3-acre drainage basin that is between King St. and Willard St. This basin along with the basin that makes up the two roadways (SR-520), have several inlet structures that generally discharge untreated runoff to the relief channel located to the east. The overall basin that drains towards the King St. location described above is approximately 37.8 acres according to an Oct. 2008 feasibility study.

The Florida Department of Transportation (FDOT) is planning on making improvements to SR 520 in this vicinity and the City is in discussions regarding coordination with this project.

Proposed Improvements

This project proposes the installation of a baffle box somewhere along this corridor where there is an existing 48" outfall. Incorporating filter media into the baffle box will boost the overall nutrient removal rates. Pollutant removal efficiencies for baffle boxes with filter media are currently estimated at 45% and 58% for total nitrogen and total phosphorus removal, respectively.

This project, along with WQ-17 could serve as a replacement for WQ-16 in the event that WQ-16 cannot be implemented.

Benefits

Installing baffle boxes has proven effectiveness in removing sediment and suspended solids from stormwater runoff. This simple but effective structure is ideal solutions to retrofitting the stormwater systems immediately adjacent to the IRL. Implementation of the proposed project will capture approximately 338 lbs/yr of nitrogen and 48.6 lbs/yr pounds of phosphorus on an annual basis.

Cost Estimate

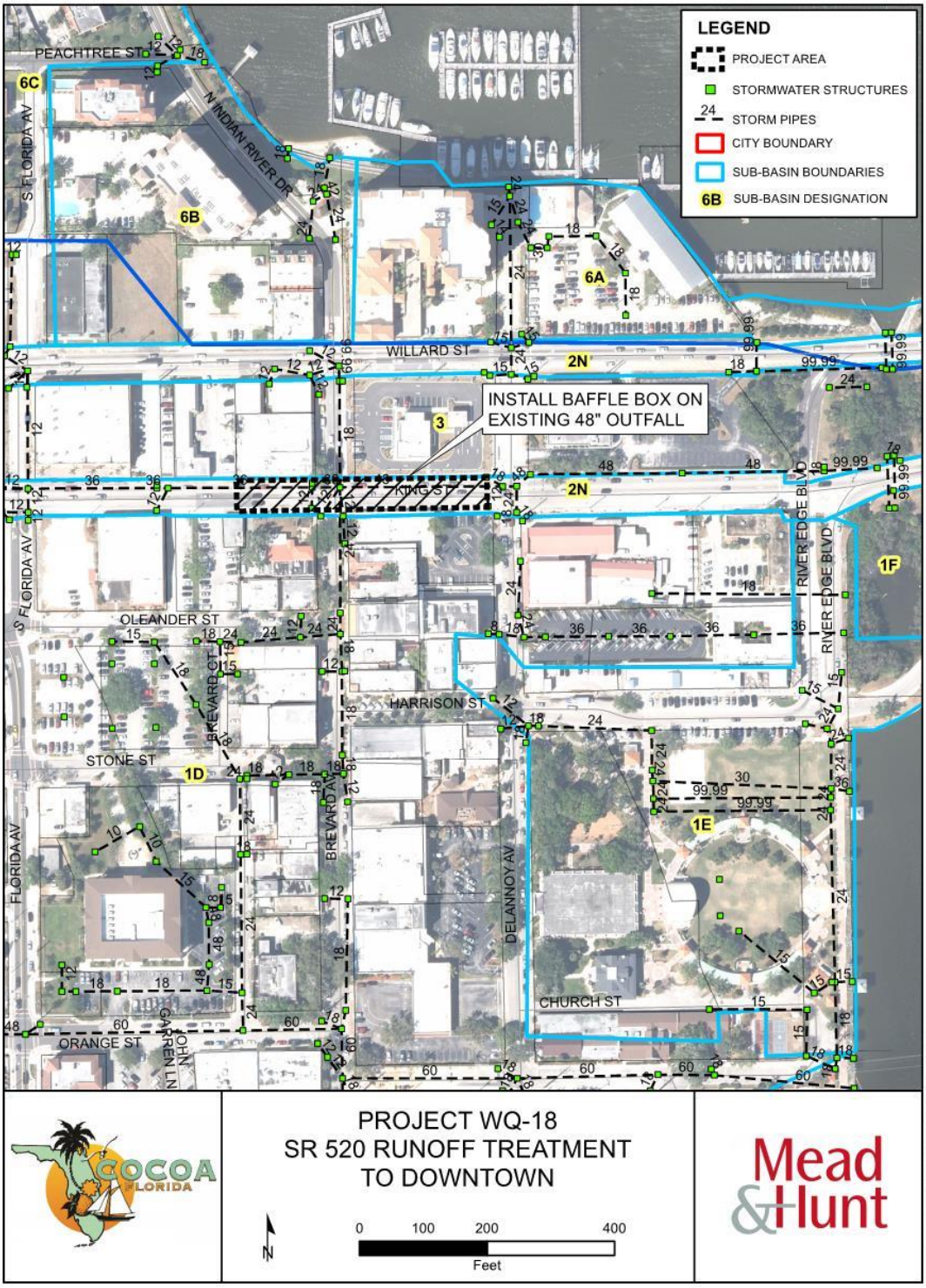
It is anticipated that the costs associated with the construction and installation of a baffle box in this location is approximately $611,270.

Table 55: Cost Estimate Table – Project WQ-18: SR 520 Runoff Treatment to Downtown.

Project WQ-18: SR 520 Runoff Treatment to Downtown						
Item Number	Location	Proposed Retrofit Improvements				
	Riverfront Park	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction activities					
	- Site preparation	Clearing and grubbing	1	LS	$20,000.00	$20,000.00
	- Site preparation	Dewatering and flow diversion	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$45,000.00	$45,000.00
	- Pollutant Removal Structure	Baffle Box with Filter Media for 48"	1	LS	$250,000.00	$250,000.00
	- Storm Pipe	48" RCP	20	LF	$185.00	$3,700.00
	- Roadway open cut and restoration	Asphalt, base and subgrade	100	SY	$105.00	$10,500.00
	- Right-of-way restoration	Sodding, landscaping, etc.	1	LS	$20,000.00	$20,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$379,200.00
1						
		- Mobilization @			10%	$37,920.00
		- Contingencies @			20%	$75,840.00
		SUB-TOTAL OF CONSTRUCTION COST				$492,960.00
		- Eng Design & Permitting @			15%	$73,944.00
		- Subconsultants @			3%	$14,788.80
		- Constr Admin and Insp @			6%	$29,577.60
		TOTAL PROJECT COST				**$611,270**

Table 56: Nutrient Removal Cost/Pound Table – Project WQ-18: SR 520 Runoff Treatment to Downtown.

Project WQ-18: SR 520 Runoff Treatment to Downtown					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-18	Baffle Box	337.97	48.58	$1,809	$12,583
Assumptions:					
Drainage area: 38 ac from Oct. 2018 feasibility study					
Land-use: High-intensity Commercial, TN=2.4 TP=0.345					
Soil type A, Non DCIA CN: 89					
DCIA (%): 85					
Pre-improvement load: TN=751.73 lb/yr, TP=108.07 lb/yr					
Assumes 45% TNTP removal using B&G ECT3 media					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
INSTALL BAFFLE BOX ON EXISTING 48" OUTFALL
PEACHTREE ST
N INDIAN RIVER DR
S FLORIDA AV
WILLARD ST
KING ST
OLEANDER ST
HARRISON ST
STONE ST
ORANGE ST
CHURCH ST
BREVARD AV
DELANNOY AV
RIVER EDGE BLVD
CARRIE JOHN LN
6A
6B
6C
1D
1E
1F
2N
3
PROJECT WQ-18
SR 520 RUNOFF TREATMENT
TO DOWNTOWN
0 100 200 400
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(17) WQ-19: Install BAM Treatment for AT&T Dry Retention Pond

Location

Project WQ-19 focuses on the recently expanded dry retention pond at the intersection of Factory St. and Florida Ave., the AT&T dry pond. The dry pond was expanded and modeled to accommodate runoff from its 12.8-acre drainage basin.

Proposed Improvements

This project proposes to improve the pollutant reduction ability of the dry retention pond. By installing BAM filtration media on the bottom of the retention pond, as well as an underdrain system, nutrient removal and filtration of solids will be improved.

Benefits

BAM filter media may be put in place to improve the removal of nutrients from runoff as well as further improving the physical filtration of solids. The media used on the filters can be made from recycled materials and is effective in capturing TN, TP, solids, and metals from water. No removal credits can be assigned to this project as all credits possible are already applied to this dry retention pond. As a result, this project was not included in the ranking exercise.

Cost Estimate

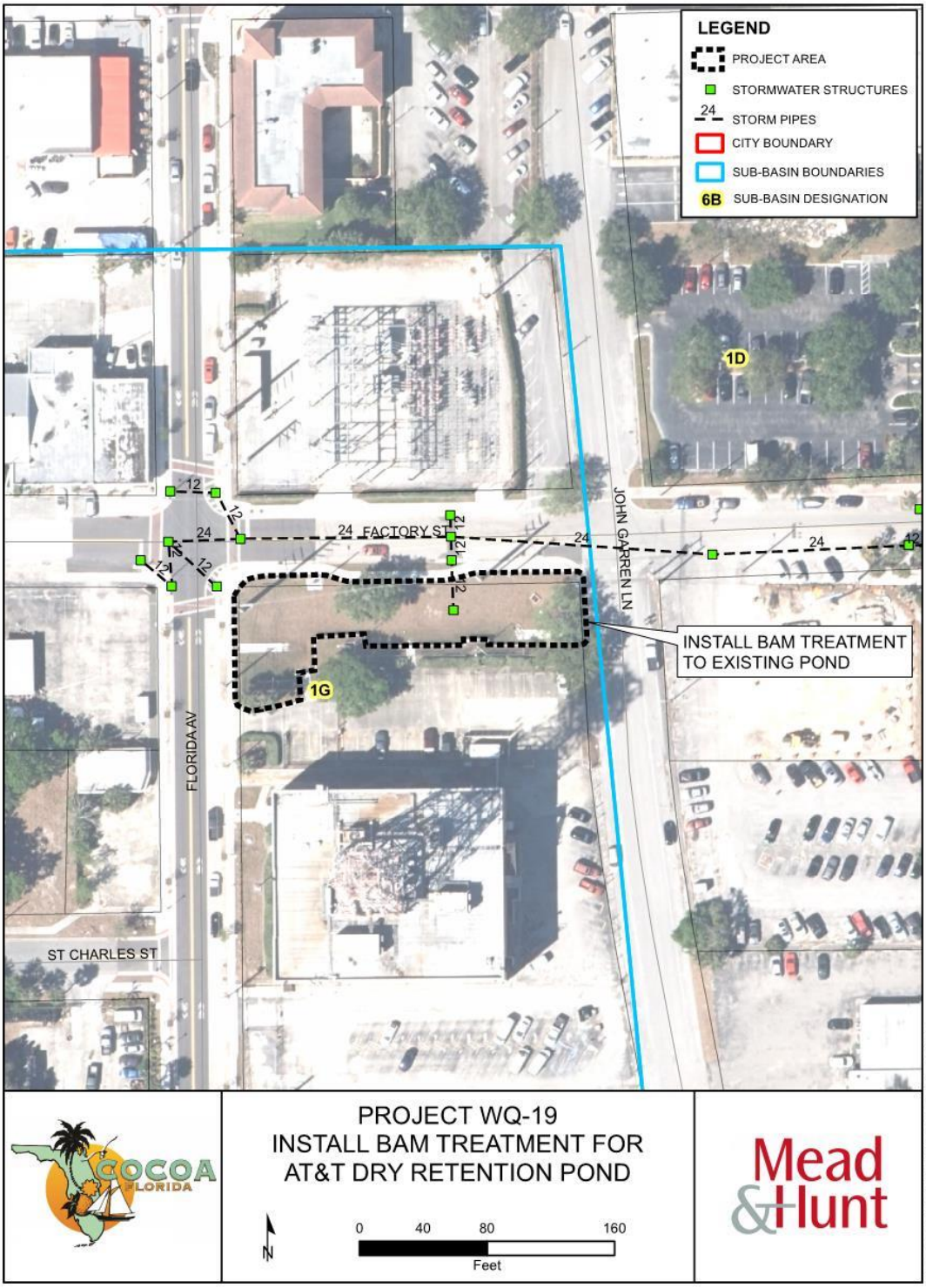
It is estimated that costs associated with further excavation of the pond and installation of the BAM Line Filtration System total $168,714.

Table 57: Cost Estimate Table – Project WQ-19: Install BAM Treatment for AT&T Dry Retention Pond.

Project WQ-19: Install BAM Treatment for AT&T Dry Retention Pond						
Item Number	Location	Proposed Retrofit Improvements				
	Downtown	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Site preparation	Clearing and grubbing	1	LS	$15,000.00	$15,000.00
	- Site preparation	Pond Excavation	1	LS	$15,000.00	$15,000.00
	- Pollutant Removal	BAM Liner Filtration System	315	SY	$200.00	$63,000.00
	- Landscaping	Sodding, plants and trees	1	LS	$10,000.00	$10,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$103,000.00
1	- Project without BAM Filtration System = $75,000					
			- Mobilization @		10%	$10,300.00
			- Contingencies @		20%	$20,600.00
			SUB-TOTAL OF CONSTRUCTION COST			$133,900.00
			- Eng Design & Permitting @		15%	$20,085.00
			- Subconsultants @		5%	$6,695.00
			- Constr Admin and Insp @		6%	$8,034.00
			TOTAL PROJECT COST			**$168,714**

Table 58: Nutrient Removal Cost/Pound Table – Project WQ-19: Install BAM Treatment for AT&T Dry Retention Pond.

Project WQ-19: Install BAM Treatment for AT&T Dry Retention Pond					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-19	BAM Treatment				
Assumptions					
Project treats water from the 12.8 acre basin in which it resides					
BAM media underlaying a dry pond to be constructed at the AT&T property.					
BAM Layer	1	ft thick			
Pond Size =	8500	sf	944	SY	
BAM Layer	8500	cf	315	CY	
Assume treatment of the first 2" of runoff					
FDEP does not provide credits for improvements to a retention pond					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
1D
1G
FACTORY ST
JOHN GARREN LN
FLORIDA AV
ST CHARLES ST
INSTALL BAM TREATMENT TO EXISTING POND
PROJECT WQ-19
INSTALL BAM TREATMENT FOR
AT&T DRY RETENTION POND
0 40 80 160
Feet
COCOA FLORIDA
Mead & Hunt
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(18) WQ-20: De-Muck/Dredge SR520 Relief Channel

Location

Project WQ-20 focuses on the relief channel found along SR-520, in the area adjacent to Lee Werner Park. This channel receives some of the stormwater runoff from several drainage basins, including the well-traveled SR-520. Over time, the channel has accumulated muck in the fine-grained sediments and organic material settled at the bottom.

Proposed Improvements

It is proposed that the relief channel be dredged and de-mucked in order to remove accumulated muck in the fine-grained sediments and organic material that has settled at the bottom.

Benefits

Nutrient rich sediments and clay accumulate over time as a result of heavy nutrient loading from the surrounding basin which inevitably contributes to the uncontrolled growth of vegetation, including algae. The process of dredging/de-mucking a basin is an effective way to restore a water body's ability to treat surface water runoff. FDEP awards credits to dredging projects like this one on a case-by-case basis depending on the nutrient flux of muck.

Restoring this channel will also provide additional benefits related to flood mitigation as it is expected that this project will help alleviate flooding around the Cocoa Village area.

Cost Estimate

It is anticipated that the costs associated with the de-mucking and disposal of the dredged material is approximately $282,900.

Table 59: Cost Estimate Table – Project WQ-20: De-Muck/Dredge SR520 Relief Channel.

Project WQ-20: De-muck/Dredge SR520 Relief Channel						
Item Number	Location	Proposed Retrofit Improvements				
	Downtown	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Site preparation	Clearing and grubbing	1	LS	$15,000.00	$15,000.00
	- Flow Diversion	Sheetpile Wall Construction	2	EA	$33,500.00	$67,000.00
	- Construction	Muck Removal	2,000	CY	$54.00	$108,000.00
	- Restoration	Site Cleanup & Restoration	1	LS	$15,000.00	$15,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$205,000.00
1						
			- Mobilization @		10%	$20,500.00
			- Contingencies @		10%	$20,500.00
			SUB-TOTAL OF CONSTRUCTION COST			$246,000.00
			- Eng Design & Permitting @		7%	$17,220.00
			- Subconsultants @		3%	$7,380.00
			- Constr Admin and Insp @		5%	$12,300.00
			TOTAL PROJECT COST			**$282,900**

Table 60: Nutrient Removal Cost/Pound Table – Project WQ-20: De-Muck/Dredge SR520 Relief Channel.

Project WQ-20: De-muck/Dredge SR520 Relief Channel					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-20	Dredging				
Assumptions:					
Data lacking to assign credit according to FDEP					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
6A
WILLARD ST
2N
DELANNOY AV
3
HUBERT HUMPHREY BRIDGE
KING ST
2N
DE-MUCK/DREDGE SR 520
RELIEF CHANNEL
RIVER EDGE BLVD
RIVER EDGE BLVD
1F
1D
HARRISON ST
1E
1D
CHURCH ST
COCOA
FLORIDA
PROJECT WQ-20
DE-MUCK/DREDGE SR520
RELIEF CHANNEL
N
0 50 100 200
Feet
Mead &Hunt
X:\30000-001001\TECH\GIS\MXD\Map1.MXD

(19) WQ-21: Downtown Area Treatment System - Urban Planters, LID Improvements

Location

Project WQ-21 is based on a City-wide effort to implement Low Impact Development (LID) improvements throughout the City. Multiple locations around the area of downtown Cocoa will be selected for the installation of urban planters and bio-swales. (See figure below). Urban planters can be modified to fit almost any physical setting.

Proposed Improvements

This project proposes the installation of various combinations of urban planters, and bio-swales in order to provide an innovative way of treating stormwater as part of a treatment train approach. Because these LID improvements are able to accept runoff from most type of impervious surfaces, potential areas for installation include residential yards, parking lots, and under roof spouts. In order to reduce construction costs, these projects can be incorporated into street beautification projects in association with other public works projects.

Benefits

Urban planters and bio-swales are an excellent example of LID and Green Infrastructure projects. Depending on the type of planter being installed, it is possible to cleanse stormwater runoff and reduce runoff volumes if infiltration to surrounding soils is possible. Urban planters have storage capabilities, meaning that runoff is attenuated, and sediments and other solids in runoff can settle out. The Center for Watershed Protection estimated the event mean concentration phosphorus removal rate to be 25% to 50% and nitrogen removal 40% to 60% (CWP 2008).

Assuming 1-acre basins surrounding 500ft lengths of a “standard block”, 6 urban planters would be able to reduce 1.11 lbs/yr TN and 0.16 lbs/yr TP loading. This number, of course, varies greatly depending on the type of urban planter and system being installed.

Cost Estimate

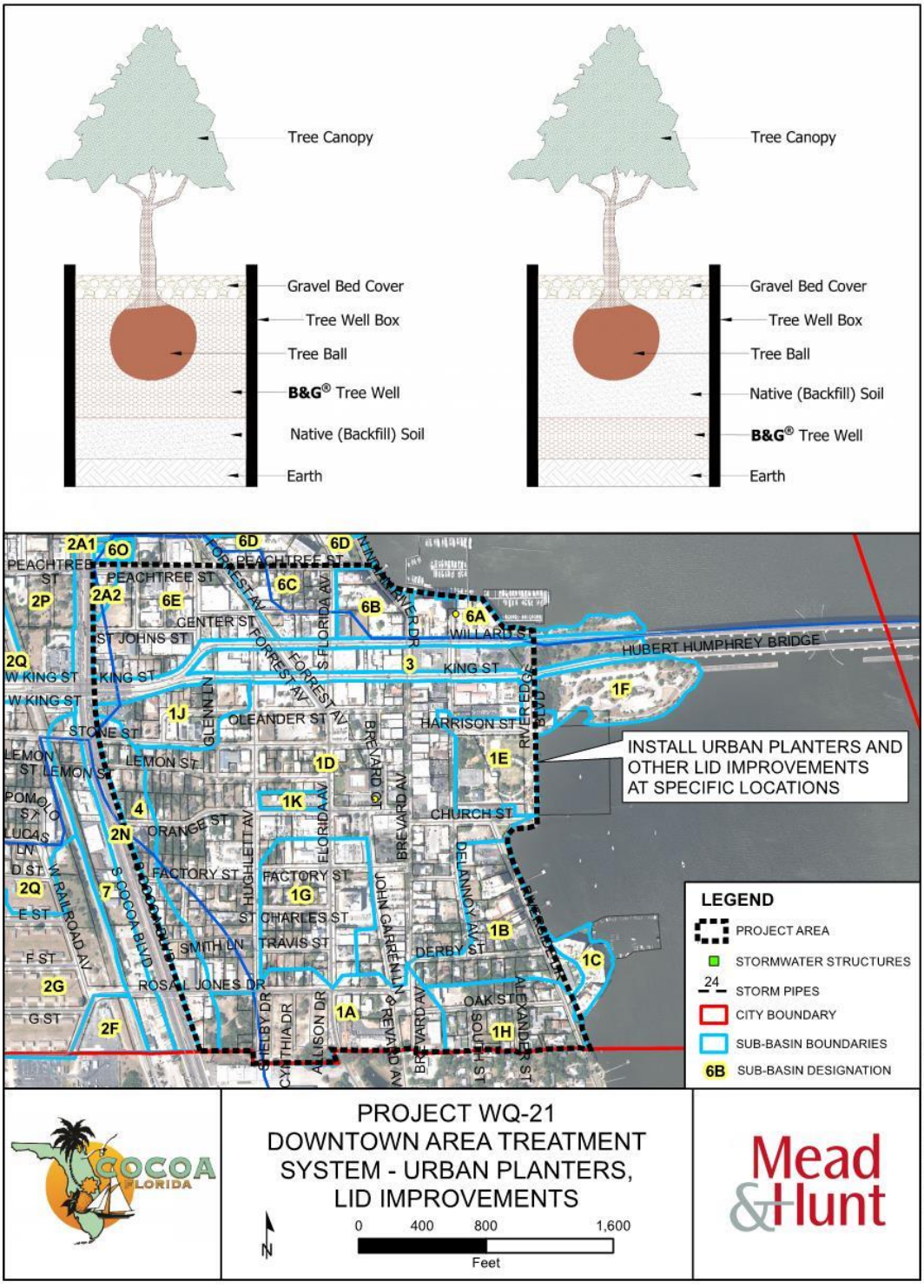
It is anticipated that the costs associated with the construction and installation of a 500-foot long block with the above described elements is approximately $145,080. Various elements may be incorporated as budget and design aesthetics dictate.

Table 61: Cost Estimate Table – Project WQ-21: Downtown Area Treatment System - Urban Planters, LID Improvements.

Project WQ-21: Downtown Area Treatment System - Urban Planters, LID Improvements						
Item Number	Location	Proposed Retrofit Improvements				
	Downtown	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Site preparation	Demolition	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Furnish & Install	Urban Planter	6	EA	$7,500.00	$45,000.00
Qualifications (if applicable)		**SUB-TOTAL**				$90,000.00
1	- Prices listed are for a 500 foot long block.					
		- Mobilization @			10%	$9,000.00
		- Contingencies @			20%	$18,000.00
		SUB-TOTAL OF CONSTRUCTION COST				$117,000.00
		- Eng Design & Permitting @			15%	$17,550.00
		- Subconsultants @			3%	$3,510.00
		- Constr Admin and Insp @			6%	$7,020.00
		TOTAL PROJECT COST				**$145,080**

Table 62: Nutrient Removal Cost/Pound Table – Project WQ-21: Downtown Area Treatment System - Urban Planters, LID Improvements.

Project WQ-21: Downtown Area Treatment System - Urban Planters, LID Improvements					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-21	Urban Planters	1.11	0.16	$ 130,702.70	$ 906,750.00
Assumptions:					
There is a specific drainage area associated with a certain size of planter.					
Assuming 1 ac basins					
Over the 10 year period, plan on retrofitting 5 blocks.					


Tree Canopy
Gravel Bed Cover
Tree Well Box
Tree Ball
B&G® Tree Well
Native (Backfill) Soil
Earth
Tree Canopy
Gravel Bed Cover
Tree Well Box
Tree Ball
Native (Backfill) Soil
B&G® Tree Well
Earth
INSTALL URBAN PLANTERS AND OTHER LID IMPROVEMENTS AT SPECIFIC LOCATIONS
HUBERT HUMPHREY BRIDGE
LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
PROJECT WQ-21
DOWNTOWN AREA TREATMENT SYSTEM - URBAN PLANTERS, LID IMPROVEMENTS
0 400 800 1,600
Feet
X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(20) WQ-22: Reduce Impervious Area (PaveDrain, Reduce roadway) near IRL

Location

Project WQ-22 is based on a City-wide effort to create Low Impact Development (LID) improvements. Multiple locations around the area of downtown Cocoa will be selected (See figure below). This project aims to put emphasis on identifying large roadways that may be reduced and areas where LID technologies such as PaveDrain may be used to increase the impervious area of downtown Cocoa.

Proposed Improvements

In order to reduce the impervious area of a highly developed commercial area such as downtown Cocoa, innovative technologies such as PaveDrain must be implemented. PaveDrain, also known as Permeable Articulating Concrete Block, has proven capabilities in improving the infiltration capabilities of an area as well as helping to reduce the impact of first flush pollutants from affecting groundwater or runoff to nearby water bodies. It is a highly adaptable example of LID. To improve the quantity of storage that this system can provide, other products like R-Tank can be added underneath.

Benefits

Porous pavement is primarily used with the purpose of reducing the volume of stormwater runoff, however, secondary functions include flow attenuation and nutrient reduction. The Center for Watershed Protection estimates the total amount of phosphorus removed for level 1 and 2 designs at 59 to 81 percent, and nitrogen removal at 59 to 81 percent. Runoff reduction was estimated at 45 to 75 percent (CWP&CSN 2008). It is estimated that these improvements would reduce nutrient loading by 9.45 lbs/yr TN and 1.36 lbs/yr TP, assuming a corridor of 500 SY of pervious pavers are installed.

Cost Estimate

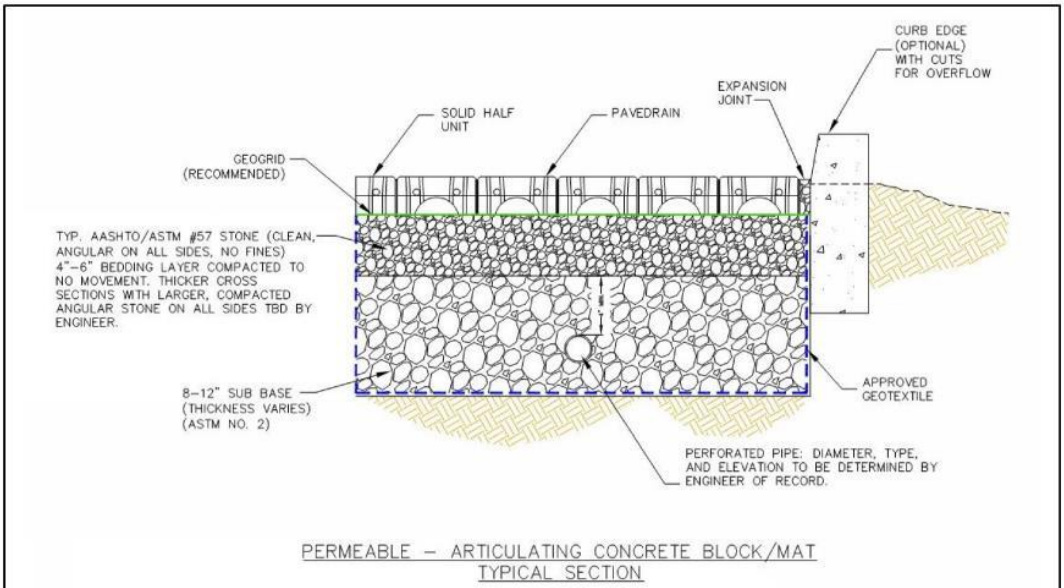
It is anticipated that the costs associated with the construction and installation of a 500-foot long block with the above described elements is approximately $209,469.

Table 63: Cost Estimate Table – Project WQ-22: Reduce Impervious Area (PaveDrain, Reduce roadway) near IRL.

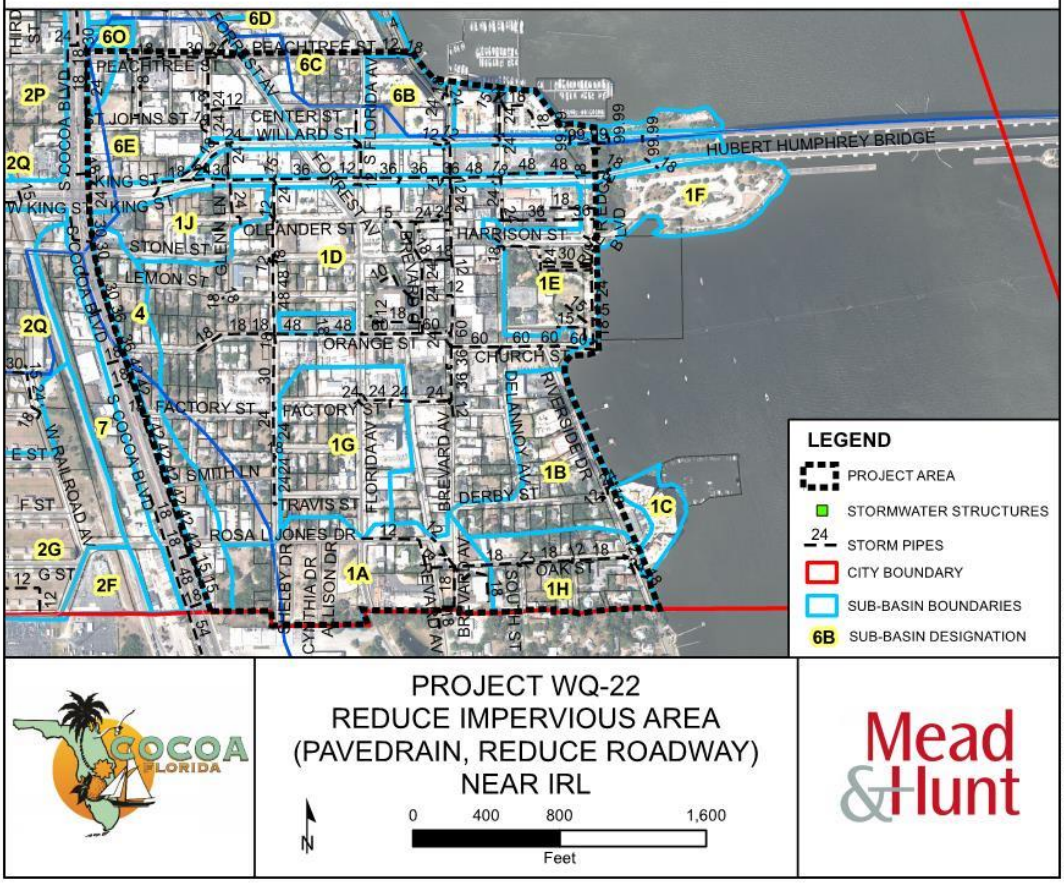
Project WQ-22: Reduce Impervious Area (PaveDrain, Reduce Roadway) Near IRL						
Item Number	Location	Proposed Retrofit Improvements				
	Downtown	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Site preparation	Demolition	1	LS	$30,000.00	$30,000.00
	- Construction management	Maintenance of traffic, signage	1	LS	$15,000.00	$15,000.00
	- Furnish & Install	Pervious Pavers w Addl Storage	500	SY	$150.00	$75,000.00
	- Furnish & Install	Concrete Curb	550	LF	$20.00	$11,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$131,000.00
1 - Prices listed are for a 500 foot long block.						
- Pervious Pavers planned for Parking Spaces			- Mobilization @		10%	$13,100.00
			- Contingencies @		20%	$26,200.00
			SUB-TOTAL OF CONSTRUCTION COST			$170,300.00
			- Eng Design & Permitting @		12%	$20,436.00
			- Subconsultants @		5%	$8,515.00
			- Constr Admin and Insp @		6%	$10,218.00
			TOTAL PROJECT COST			**$209,469**

Table 64: Nutrient Removal Cost/Pound Table – Project WQ-22: Reduce Impervious Area (PaveDrain, Reduce roadway) near IRL.

Project WQ-22: Reduce Impervious Area (PaveDrain, Reduce Roadway) Near IRL					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-22	Pervious Pavement	9.45	1.36	$ 22,166.03	$ 154,021.32
Assumptions:					
Permeable Pavers Thickness (in)	5.5 in		5% porosity		
Pvmnt SubBase Thickness (in)	6 in		25% porosity		
#57 rock	12 in		21% porosity		
BOLD & GOLD Layer	6 in		9% porosity		
Drainage area: 1 ac, avg basin size for 1 500ft block					
Land-use: High-intensity Commercial, TN=2.4 TP=0.345					
Soil type A, Non DCIA CN: 89					
DCIA (%): 85					
Pre-improvement load: TN=20.22 lb/yr, TP=2.91 lb/yr					



PERMEABLE – ARTICULATING CONCRETE BLOCK/MAT
TYPICAL SECTION



PROJECT WQ-22
REDUCE IMPERVIOUS AREA
(PAVEDRAIN, REDUCE ROADWAY)
NEAR IRL

0 400 800 1,600
Feet

X:\30000-00\10011\TECH\GIS\MXD\Map1.MXD

(21) WQ-23: Inspection & Repair Program for HOA-Owned Treatment Ponds

Location

Project WQ-23 focuses on multiple treatment ponds in the City that are owned and managed by Homeowners Associations (HOAs).

Proposed Improvements

The aim of this project is to establish a program for inspecting and repairing treatment ponds owned and operated by HOAs to ensure the efficiency and utility of these. It is anticipated that a member of the City's Stormwater Utility staff would be engaged and trained in the various aspects of water quality treatment, stormwater treatment design and maintenance, along with monitoring erosion and sediment control measures. There would also be equipment and software such as sampling equipment, camera, handheld GPS unit, and laptop utilized to perform these functions and log data into the City's database.

Benefits

Most importantly, this ensures that treatment ponds and their respective structures remain in good working order, even when they are not under the jurisdiction of the City. This ensures the integrity of the overall stormwater management system of the City.

Cost Estimate

It is not anticipated that this work would require a new full-time position but would be a collateral duty which, when taken into consideration with the Stormwater Utilities other functions, could very well require the acquisition and training of a new full-time employee. For the purpose of this evaluation a Utility Field Inspector position with a starting salary of $15.26 per hour, or $31,780 per year is utilized. Considering customary municipal benefits of approximately 50% of base salary, that provides an annual cost to the utility of $44,492 per year.

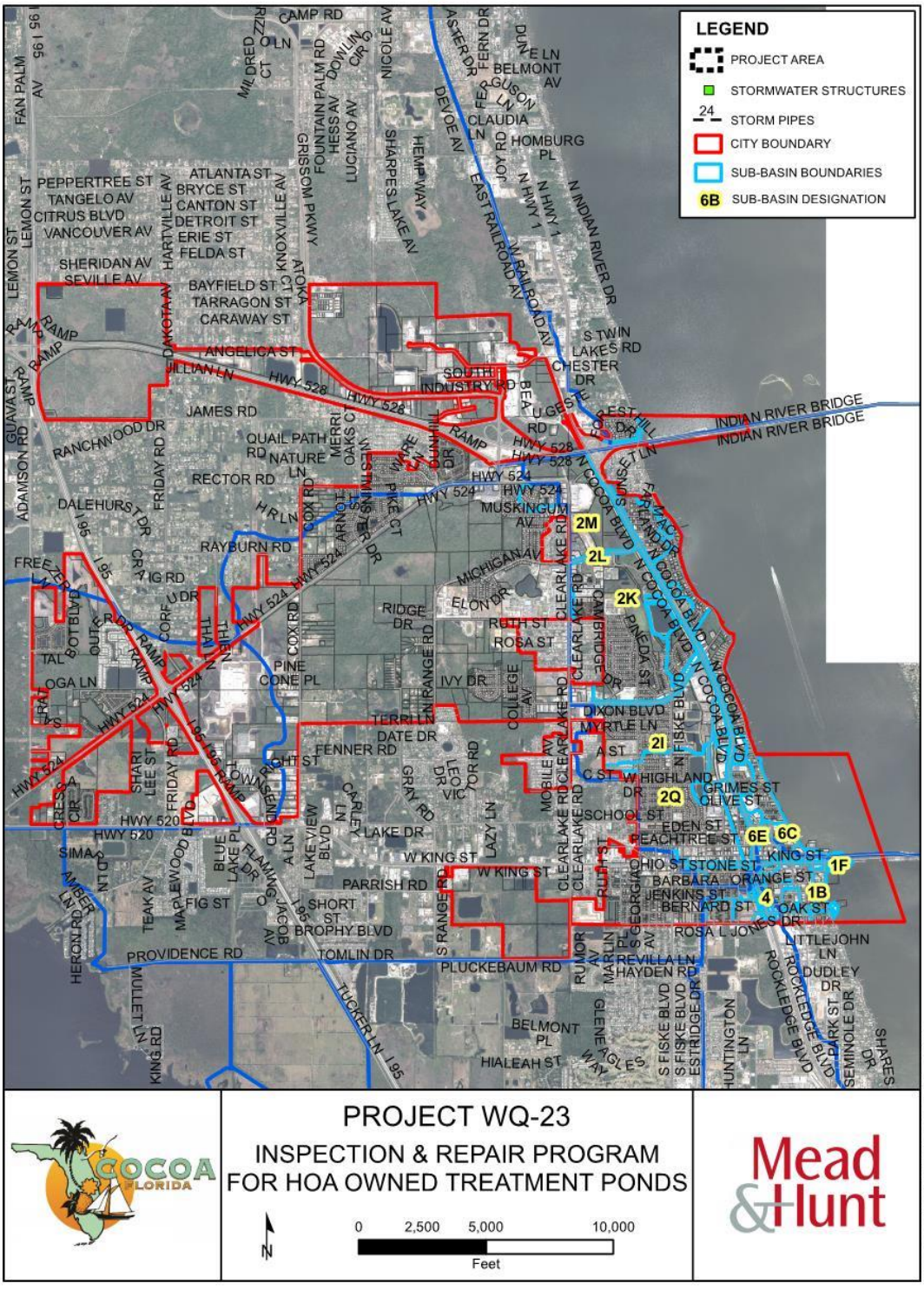
Additional equipment and training that would reasonably be expected to enable personnel to function in this role would likely have an initial investment of $13,000 for a total of approximately $57,492 for the first year. This initial investment would be followed by a recurring investment of $44,492 for the recurring 10 years.

Table 65: Cost Estimate Table – Project WQ-23: Inspection & Repair Program for HOA-Owned Treatment Ponds.

Project WQ-23: Inspection Program for HOA-Owned Treatment Ponds						
Item Number	Location City-Wide	Proposed Retrofit Improvements				
		Item Description	Quantity	Unit	Unit Cost	Amount
1	Personnel Costs	Salary + Benefits	1	EA	$44,492.00	$44,492.00
2	Equipment Costs					
	- Documentation	GPS Data Collector	1	LS	$5,000.00	$5,000.00
	- Computer	Laptop	1	LS	$3,000.00	$3,000.00
	- Equipment	Sampling & Measuring	1	LS	$2,500.00	$2,500.00
	- Training	Courses & Seminars	1	LS	$2,500.00	$2,500.00
Qualifications (if applicable)			**SUB-TOTAL**			$57,492.00
1	Total Program Cost after 10 Years = $457,920					
			- Mobilization @		0%	$0.00
			- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$57,492.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$57,492**

Table 66: Nutrient Removal Cost/Pound Table – Project WQ-23: Inspection & Repair Program for HOA-Owned Treatment Ponds.

Project WQ-23: Inspection Program for HOA-Owned Treatment Ponds					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-23	Consulting				
Assumptions:					
Base Salar	Benefits = 50%	Net Cost			
$ 31,780	12712	44492			


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24 STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B SUB-BASIN DESIGNATION
PROJECT WQ-23
INSPECTION & REPAIR PROGRAM
FOR HOA OWNED TREATMENT PONDS
0 2,500 5,000 10,000
Feet
COCOA FLORIDA
Mead &Hunt
X:\30000-0010011\TECH\GIS\MXD\Map1.MXD

(22) WQ-24: Enhanced Stormwater Quality Education Programs

Location

Project WQ-24 has no specified location.

Proposed Improvements

An important element of improving stormwater management is educating those entities whose activities will directly and indirectly affect the quality of stormwater effluents. The IRL BMAP provides up to a 6% reduction in the baseline anthropogenic load for both TN and TP to the entities signed on to the plan. As of 2014, the City has already had credits applied as far as TMDL BMAP reductions.

Credit was given for the following applicable education activities:

1. Local funding to implement the Florida Yards and Neighborhoods (FYN) program in the City or county.
2. Local land development codes or ordinances that require Florida-friendly landscaping on all new developments.
3. Implementation of public service announcements (PSAs) on local cable or commercial television and radio stations.
4. Informational pamphlets on pollution prevention, fertilizer application, Florida-friendly landscaping, water conservation, septic tank maintenance, etc. Presentations on these topics to civic groups, local businesses, students, and the general public.
5. Websites to provide information on reducing nutrient pollution for homeowners and businesses.
6. Inspection program and public call-in number to address illicit discharges.

Benefits

Pursuing a public education program pertaining to the individual's ability to reduce nutrients from entering the waterways will not only have measurable benefits to the IRL and St Johns River, but it will also contribute to the City meeting their TMDL reductions according to the BMAP.

Cost Estimate

It is anticipated that these activities can be added to the duties of the City's Public Information Officer, who can coordinate the publication and inclusion of educational material at public events and in monthly utility bills. The anticipated costs associated with a public education and outreach program is about $10,000. The research, publication materials, and public outreach are likely already accounted for in the City's fiscal budget.

Table 67: Cost Estimate Table – Project WQ-24: Enhanced Stormwater Quality Education Programs.

Project WQ-24: Enhanced Stormwater Quality Education Programs						
Item Number	Location	Proposed Retrofit Improvements				
	Consulting	Item Description	Quantity	Unit	Unit Cost	Amount
1						
	- Printing, Publishing, Meetings, etc.					$10,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$10,000.00
1						
			- Mobilization @		0%	$0.00
			- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$10,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$10,000**

Table 68: Nutrient Removal Cost/Pound Table – Project WQ-24: Enhanced Stormwater Quality Education Programs.

Project WQ-24: Enhanced Stormwater Quality Education Programs					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-24	Education				
Assumptions:					
City currently has a public education program, so credits have already been applied elsewhere.					

(23) WQ-25: Update LDR's to Encourage LID and Provide Incentive for Overtreatment on Redevelopment

Location

Project WQ-25 has no specified location.

Proposed Improvements

Land Development Regulations (LDR's) provide guidance to the City for growth, development, and redevelopment. They are policy documents that create a framework for how the City should grow. These policies are developed to ensure growth is environmentally conscious, fiscally responsible, and meets the needs of current and future residents.

As such, this project intends to add legislation to the Code of the City of Cocoa that encourages LID projects and provides incentives for overtreatment of stormwater flows as well as redevelopment and retrofitting of older systems.

Benefits

Incentives to furnish any future projects in the City of Cocoa with technologies, such as innovative LIDs, would enhance the City's overall ability to treat stormwater effluents and would encourage future projects centered around sustainable development. Incentives for overtreatment would help the City meet its long-term goals of nutrient load reductions.

Cost Estimate

Cost estimates for this project are simply a lump-sum cost for the consultant work necessary to find a basis and language for new additions to the City of Cocoa LDR, or City Code.

Table 69: Cost Estimate Table – Project WQ-25: Update LDR's to Encourage LID and Provide Incentive for Overtreatment on Redevelopment.

Project WQ-25: Update LDR's to Encourage LID and Provide Incentives for Overtreatment on Redevelopment						
Item Number	Location	Proposed Retrofit Improvements				
	Consulting	Item Description	Quantity	Unit	Unit Cost	Amount
1	Consultant Work	Stormwater Model Update	1	LS	$40,000.00	$40,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$40,000.00
1						
			- Mobilization @		0%	$0.00
			- Contingencies @		10%	$4,000.00
			SUB-TOTAL OF CONSTRUCTION COST			$44,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$44,000**

Table 70: Nutrient Removal Cost/Pound Table – Project WQ-25: Update LDR's to Encourage LID and Provide Incentive for Overtreatment on Redevelopment.

oject WQ-25: Update LDR's to Encourage LID and Provide Incentives for Overtreatment on Redevelopme					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-25	Consulting				

(24) WQ-26: Bracco Pond Irrigation Repair/Replace for Increased Reuse & Bank Stabilization

Location

Project WQ-26 focuses on the Bracco Reservoirs Stormwater Ponds, located between W Highland Dr. and N Fiske Blvd. These wet ponds provide treatment of stormwater runoff to nearly 1,060 acres of land. They provide sediment and nutrient removal, and a decrease in runoff rates before being discharged to the Indian River Lagoon.
There are outflow structures to transport runoff to a reclaimed water pond with a usable volume of 7.2 million gallons, if needed. Improvements/repairs to the irrigation systems in place will increase the City's ability to effectively reuse wastewater and stormwater effluents.

Proposed Improvements

This project aims to preserve the integrity of these water storage facilities by repairing and preserving the banks of the reservoirs to prevent property loss and storage reductions due to erosion and subsidence. Repairing irrigation structures in the ponds is essential to preserving the vegetation that protects the banks of the reservoirs. Pipes and other irrigation systems are vulnerable to damages such as impact by maintenance equipment, clogging, pipe separation, or corrosion. Vegetative stabilization of the banks of the reservoirs is proposed to further guarantee the structural integrity of the embankments and ensure safety of the reservoir will not be compromised.

Benefits

A well-maintained irrigation system in Bracco Pond will increase and preserve the City's supply of freshwater for reuse. This project will indirectly improve the Bracco Pond's ability to store and treat stormwater runoff before it is discharged.

Upon review of the objectives of this project, it was determined that it was to be considered a general maintenance project and was therefore removed from evaluation as a standalone project for the purpose of the ranking exercise in this report.

Cost Estimate

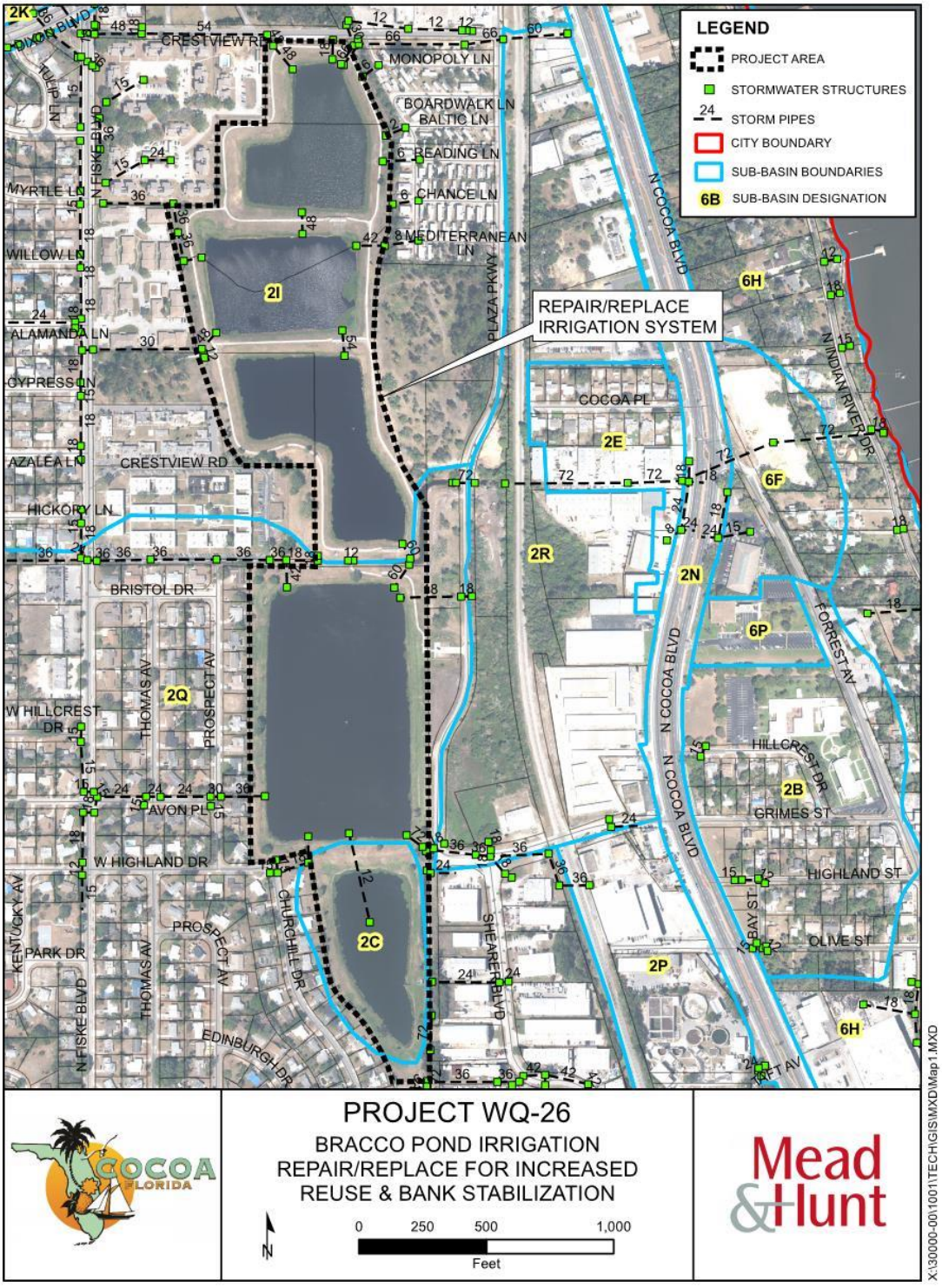
The costs for this project were estimated to be a lump-sum cost of $100,000.

Table 71: Cost Estimate Table – Project WQ-26: Bracco Pond Irrigation Repair/Replace for Increased Reuse & Bank Stabilization.

Project WQ-26: Bracco Pond Irrigation Repair/Replace for increased Reuse & Bank Stabilization						
Item Number	Location	Proposed Retrofit Improvements				
	Bracco Pond	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Furnish & Install	Irrigation System	100,000	LS	$1.00	$100,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$100,000.00
1	Project to be completed by another department					
			- Mobilization @		0%	$0.00
			- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$100,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$100,000**

Table 72: Nutrient Removal Cost/Pound Table – Project WQ-26: Bracco Pond Irrigation Repair/Replace for Increased Reuse & Bank Stabilization.

Project WQ-26: Bracco Pond Irrigation Repair/Replace for increased Reuse & Bank Stabilization					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-26	Irrigation				
Assumptions:					
No additional use of reuse, or stormwater reuse, therefore no additional credits.					
It was determined that this project was a maintenance project and was no longer made part of the evaluation.					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
REPAIR/REPLACE IRRIGATION SYSTEM
PROJECT WQ-26
BRACCO POND IRRIGATION REPAIR/REPLACE FOR INCREASED REUSE & BANK STABILIZATION
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Mead & Hunt
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(25) WQ-27: North Fiske Pond Irrigation Repair/Replacement

Location

Project WQ-27 focuses on the North Fiske Pond, a 13.3-acre freshwater pond located between Cocoa Blvd. and some vacant commercial land. The pond provides storage and treatment to stormwater flows from runoff in areas to the north. There is a culvert that crosses south of Michigan Av. parallel to N Cocoa Blvd. that directs water from a 59-acre sub-basin to the east.

Proposed Improvements

This project aims to preserve the integrity of these water storage facilities by repairing and preserving the banks of the reservoirs to prevent property loss and storage reductions due to erosion and subsidence. Repairing irrigation structures in the ponds is essential to preserving the vegetation that protects the banks of the reservoirs. Pipes and other irrigation systems are vulnerable to damages such as impact by maintenance equipment, clogging, pipe separation, or corrosion. Vegetative stabilization of the banks of the reservoirs is proposed to further guarantee the structural integrity of the embankments and ensure safety that the reservoir will not be compromised.

Benefits

Maintenance of stormwater ponds is necessary to ensure their ability to remove pollutants, control flooding, and reduce flow rates. The efficiency and ability of a wet pond to do this decreases if the structural integrity of the embankment is reduced because vegetation that helps stabilize the embankments is lost. Thus, improvements and repairs to the irrigation systems protecting this vegetation are essentially helping to protect the structure and integrity of the ponds.

Upon review of the objectives of this project, it was determined that it was to be considered a general maintenance project and was therefore removed from evaluation as a standalone project for the purpose of the ranking exercise in this report.

Cost Estimate

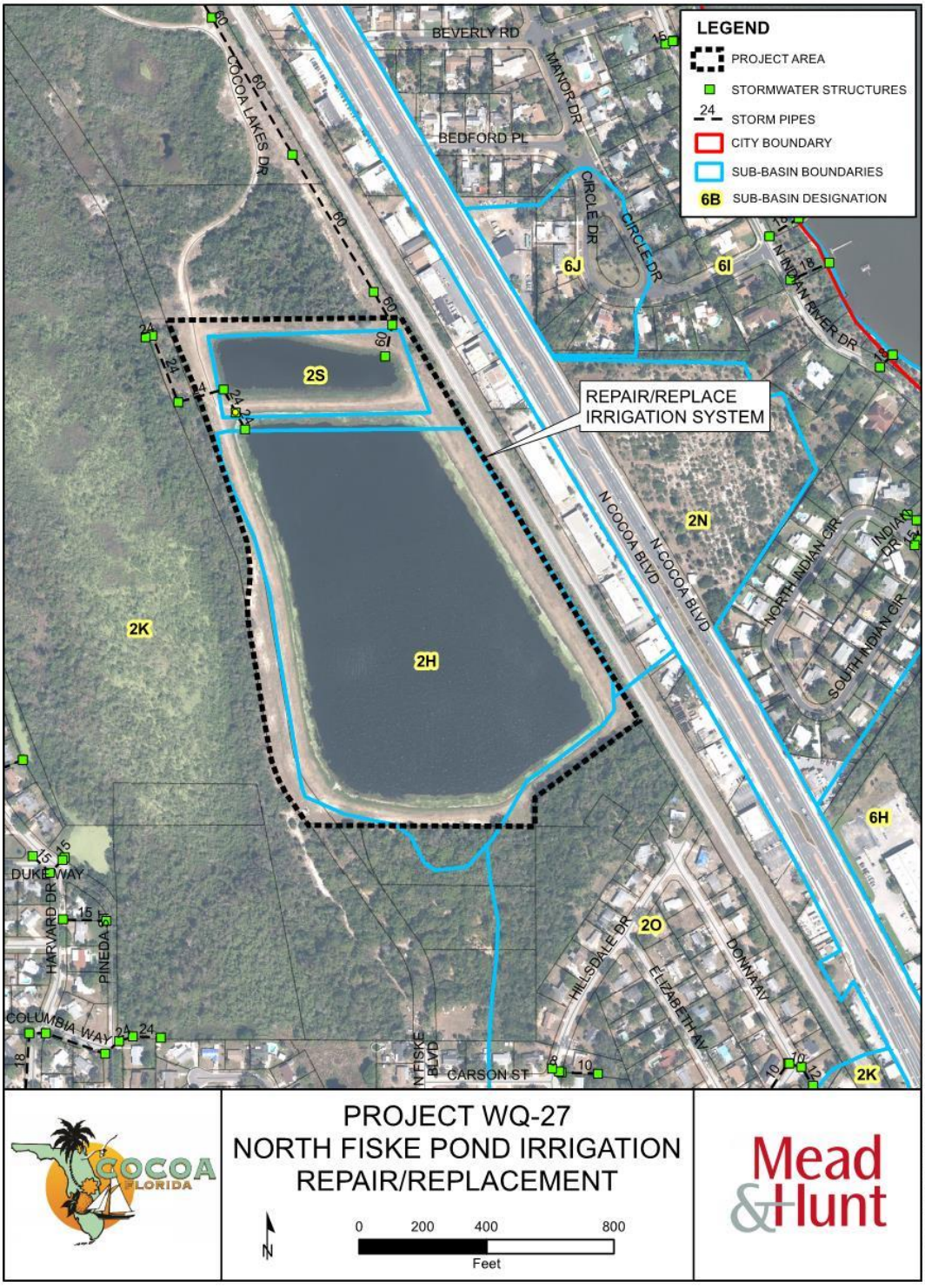
The costs for this project were estimated to be a lump-sum cost of $100,000.

Table 73: Cost Estimate Table – Project WQ-27: North Fiske Pond Irrigation Repair/Replacement.

Project WQ-27: North Fiske Pond Irrigation Repair/Replacement						
Item Number	Location	Proposed Retrofit Improvements				
	North Fiske Pond	Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities					
	- Furnish & Install	Irrigation System	100,000	LS	$1.00	$100,000.00
Qualifications (if applicable)			**SUB-TOTAL**			$100,000.00
1	Project to be completed by another department					
			- Mobilization @		0%	$0.00
			- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$100,000.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$100,000**

Table 74: Nutrient Removal Cost/Pound Table – Project WQ-27: North Fiske Pond Irrigation Repair/Replacement.

Project WQ-27: North Fiske Pond Irrigation Repair/Replacement					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-27	Irrigation				
Assumptions:					
No additional use of reuse, or stormwater reuse, therefore no additional credits.					
It was determined that this project was a maintenance project and was no longer made part of the evaluation.					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
SUB-BASIN DESIGNATION
REPAIR/REPLACE IRRIGATION SYSTEM
BEVERLY RD
MANOR DR
BEDFORD PL
COCOA LAKES DR
CIRCLE DR
N INDIAN RIVER DR
N COCOA BLVD
NORTH INDIAN CIR
SOUTH INDIAN CIR
INDIAN DR
DUKE WAY
HARVARD DR
PINEDA ST
COLUMBIA WAY
N FISKE BLVD
GARSON ST
HILLSDALE DR
ELIZABETH AV
DONNA AV
6B
6J
6I
2S
2N
2K
2H
6H
2O
PROJECT WQ-27
NORTH FISKE POND IRRIGATION
REPAIR/REPLACEMENT
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COCOA FLORIDA
Mead & Hunt
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(26) WQ-28: Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview

Location

A large portion of the City's potable water customers along the Indian River Lagoon are currently operating on septic tanks which have been shown to leach TN and TP throughout their service life. A recent TMDL Report (2016) estimated a 57 mg/L and 10 mg/L for TN and TP leakage, respectively, for each septic tank system. These values are from the final TMDL report for the Blue Springs, written by DEP, and from research conducted by the University of Florida.

Proposed Improvements

The improvements necessary to convert the existing residences to central sewer include the construction of sewer mains and lift stations which would pump to the existing water reclamation facility. Various options to accomplish this exist including vacuum sewer, grinder pump stations, and gravity sewers. The actual method employed depends on many factors including topography, groundwater table, existing municipal infrastructure, and land use density.

Benefits

A reduction of the number of septic tanks in the area would result in significant TMDL reductions. A proposed reduction of 130 septic tanks would result in the reduction of approximately 4,922 lbs/yr TN. Removal of septic tanks would increase the amount of water available to be reclaimed by the City. Reduction in TMDL loading to the IRL provides an environmental benefit, which, given the growing concerns by the County and State for the issue, could result in financial assistance from grants. It should be noted that the community in the area is highly supportive of this project.

Cost Estimate

The cost for each septic tank elimination/conversion varies by site characteristics, but a general estimate is that it will cost the City approximately $33,372 per septic tank eliminated. This results in an anticipated construction cost of $4,338,360 for removing 130 septic tanks.

Sewer projects are normally considered a public utility CIP function. Thus, this project is anticipated to be funded and conducted by another Department, i.e. Public Utilities.

Table 75: Cost Estimate Table – Project WQ-28: Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview.

Project WQ-28: Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview						
Item Number	Location	Proposed Retrofit Improvements				
	City-Wide	Item Description	Quantity	Unit	Unit Cost	Amount
1						
	- Cost per Zone	Zone K	36	EA	$33,372.00	$1,201,392.00
	- Cost per Zone	Zone J	94	EA	$33,372.00	$3,136,968.00
Qualifications (if applicable)			**SUB-TOTAL**			$4,338,360.00
1	Individual Project Cost = $30,000					
	100 Projects spread over 10 years = 10 projects per year.		- Mobilization @		0%	$0.00
	Annual Program Cost = $433,836		- Contingencies @		0%	$0.00
			SUB-TOTAL OF CONSTRUCTION COST			$4,338,360.00
			- Eng Design & Permitting @		0%	$0.00
			- Subconsultants @		0%	$0.00
			- Constr Admin and Insp @		0%	$0.00
			TOTAL PROJECT COST			**$4,338,360**

Table 76: Nutrient Removal Cost/Pound Table – Project WQ-28: Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview.

Project WQ-28: Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview					
Project #	**Improvement**	**Estimated TN Removal (lbs/year)**	**Estimated TP Removal (lbs/year)**	**Cost/TN Pound**	**Cost/TP Pound**
WQ-28	Various	4922		$ 881.42	
Assumptions:					
Septic to Sewer Opportunities per City provided figure 05-01-2019					
		Number of Lots	Cost	TN Red (lbs/yr)	TN Cost per lb
City of Cocoa - Zone K*		36	$ 1,201,392	1663	$ 722
City of Cocoa - Zone J*		94	$ 3,136,968	3259	$ 963
				4922	

(27) WQ-29: Expand Reclaimed Water Usage and Distribution

Location

Project WQ-10 is a City-wide effort to expand the availability of reclaimed water for usage in activities such as irrigation.

Proposed Improvements

It is the intention of this project to provide an annual budgetary allotment for the expansion of the City's reuse distribution system.

Benefits

The benefits of wastewater effluent reuse are well known to the City. Besides being able to eliminate the direct discharge of effluent from the water reclamation facility, the water can be land applied for the irrigation of yards, landscaping and golf courses, just to name a few. Although the wastewater has been treated, it still retains an elevated amount of nitrogen and phosphorous which would otherwise affect the health of the IRL. Utilizing this resource for irrigation, therefore, reduces the need for chemical fertilizer which also has a tendency to run off in stormwater if applied incorrectly. Thirdly, utilizing this quantity of water reduces the demand for raw water and the treatment costs that go along with the production and delivery of potable water.

It is possible to add value to this project by incorporating educational signage at visible locations of reclaimed water expansion stating the benefits of wastewater effluent reuse. Signage could be placed in subdivisions where reclaimed water is being used, as well as other public facilities.

Nutrient load reductions for this project were estimated by assuming that the usage of reclaimed water prevents all the nutrients in the volume of water used from being discharged. In this case, the reclaimed water being used is currently being stored in the Bracco Ponds. Grab samples from Bracco provided by the City allowed for the calculation of the total amount of nutrients removed per mile of reclaimed water currently available. Using this method, it was estimated that for every mile of additional reclaimed system installed, 135 lbs/yr TN and 17 lbs/yr TP would be removed. Or 270.6 lbs/yr TN and 33.2 lbs/yr TP assuming the reclaimed water distribution system is expanded by 2 miles.

Cost Estimate

Based upon recent bid opening information for similar reclaimed water distribution systems, and average of $145/ft can be expected including appurtenances, connections, other construction related expenses, such as pavement repair, horizontal directional drilling of roadway crossings, etc. Therefore, if the City were to allocate the addition of 1 mile (5,280 ft) of new reuse watermain each year it is anticipated to cost approximately $1,264,006 each year.

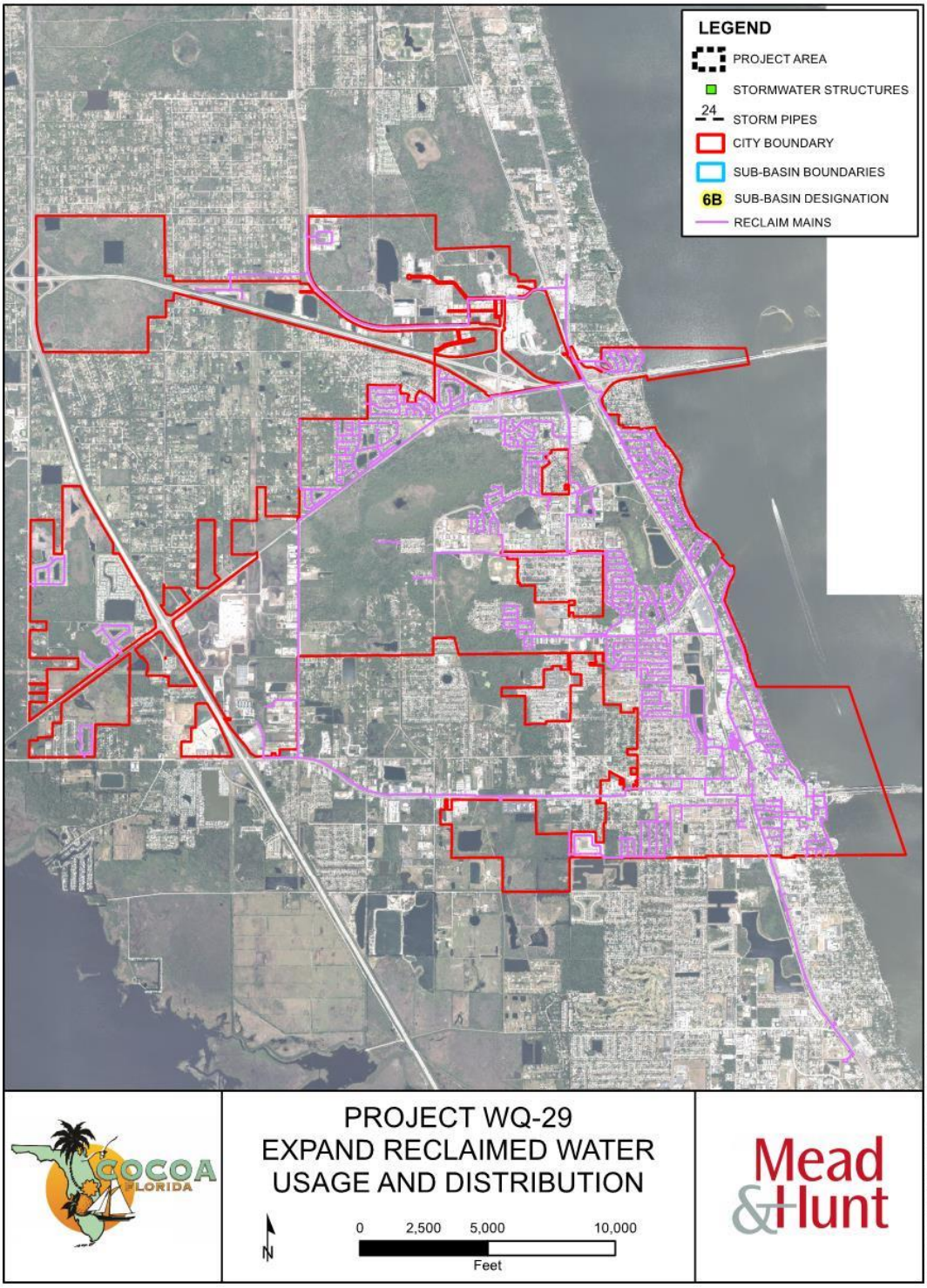
Table 77: Cost Estimate Table – Project WQ-29: Expand Reclaimed Water Usage and Distribution.

Project WQ-29: Expand Reclaimed Water Usage and Distribution							
Item Number	Location City-Wide		Proposed Retrofit Improvements Item Description	Quantity	Unit	Unit Cost	Amount
1	Construction Activities						
	- Furnish & Install		Reuse Watermain Distribution Sys	5,280	LF	$145.00	$765,600.00
Qualifications (if applicable)				**SUB-TOTAL**			$765,600.00
1	Project to be completed by another department						
				- Mobilization @		10%	$76,560.00
	Total Program Cost for 2 miles	$2,528,011		- Contingencies @		20%	$153,120.00
				SUB-TOTAL OF CONSTRUCTION COST			$995,280.00
				- Eng Design & Permitting @		15%	$149,292.00
				- Subconsultants @		6%	$59,716.80
				- Constr Admin and Insp @		6%	$59,716.80
				TOTAL PROJECT COST			**$1,264,006**

Table 78: Nutrient Removal Cost/Pound Table – Project WQ-29: Expand Reclaimed Water Usage and Distribution.

Project WQ-29: Expand Reclaimed Water Usage and Distribution					
Project #	Improvement	Estimated TN Removal (lbs/year)	Estimated TP Removal (lbs/year)	Cost/TN Pound	Cost/TP Pound
WQ-29	Reclaimed	135	17	$ 9,342.72	$ 76,077.96
TOTAL	10-year totals	270.6	33.2	$9,343	$76,078

Assumptions:					
2	MGD	Average Daily Reuse Flow per PW Utilities			
77	miles				
25,974	gal/mi-day	365	days/yr		
1.71	mg/L TN =	1.43E-05	lbs/gal	Based on Grab Samples provided by City	
0.21	mg/L TP =	1.75E-06	lbs/gal	Based on Grab Samples provided by City	
Removal per mile					
0.371	lbs TN/mi-day				
0.046	lbs TP/mi-day				
Removal per year per mile					
135	lbs TN/mi-year				
17	lbs TN/mi-year				
Assume expanding the reclaimed distribution system by 2.5%, or 2 miles over the 10 year period.					


LEGEND
PROJECT AREA
STORMWATER STRUCTURES
24
STORM PIPES
CITY BOUNDARY
SUB-BASIN BOUNDARIES
6B
SUB-BASIN DESIGNATION
RECLAIM MAINS
COCOA
FLORIDA
PROJECT WQ-29
EXPAND RECLAIMED WATER
USAGE AND DISTRIBUTION
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2,500
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&Hunt
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5. Prioritization Evaluation

Projects have been prioritized by the City using a variety of metrics with the purpose of ranking projects by order of relative importance. A system for assigning points based on different criteria specific to the two different types of projects, Flood Mitigation and Water Quality, was developed. This analysis helped forecast the order in which these projects may be performed.

A. Flood Mitigation Ranking Evaluation

For Flood Mitigation projects, points were assigned based on five different categories, or Rank Levels, that assessed various aspects of each individual project. Points were given based on the following criteria:

- Addresses an observed or potential flooding issue – 40 points.
- Provides additional benefits (i.e. water quality improvement, maintenance improvements, public safety, etc.) – 15 points.
- Number of properties impacted – 5 points for 1-100 properties, 10 points for 101-200 properties, or 15 points for >200 properties.
- Addresses protection of private property – 10 points.
- Previously identified in study or CIP – 10 points.

The criteria identified for this ranking helped to develop the final list of selected projects from Section 1 Part B of this document. At the highest-ranking level, projects that addressed areas of chronic or potential flooding were given the most points. Next points were given to projects with multiple benefits, that is, projects that simultaneously fixed multiple issues related to a site. The number of properties impacted by each project was estimated using parcel data provided by the City, and the majority of points in this category were given to projects whose benefits would impact 200 properties or more. Projects that were immediately adjacent to homes and thus safeguarded private property were also given points. Finally, weight was given to those projects that had been previously identified for completion in past projects or in the old City of Cocoa CIP.

The following table provides the overall results of the ranking system for Flood Mitigation projects.

Table 79: Flood Mitigation Prioritization Ranking Results.

Project #	Project Name	Addresses Observed or Potential Flooding	Multiple Benefits	Properties Impacted	Addresses Private Property Erosion/ Health	Project Identified in Previous Study or CIP	Total
FM-6	Replace or Line Corrugated Metal Pipe (CMP) Piping	40	15	0	10	10	75
FM-3	Pineda St. Drainage Improvements - Peachtree to Dixon Upgrade Sidewalks & Swales	20	15	15	0	10	60

Project #	Project Name	Addresses Observed or Potential Flooding	Multiple Benefits	Properties Impacted	Addresses Private Property Erosion/ Health	Project Identified in Previous Study or CIP	Total
FM-12	Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision	20	15	5	10	10	60
FM-15	Annual Curb & Gutter R&M Program	20	15	15	0	10	60
FM-7	Driveway Culvert Replacements (Cox Road)	20	15	5	10	0	50
FM-10	Provost Park / Pinegrove Park Ditch Piping	20	15	5	10	0	50
FM-18	iWorQ Integration Between GIS and Operations & Maintenance	20	15	15	0	0	50
FM-19	Comprehensive System Model	20	15	15	0	0	50
FM-17	West Dixon Blvd. Stormwater Facility	20	15	10	0	0	45
FM-20	Mud Lake Improvements	20	15	10	0	0	45
FM-1	Range Road Ditch Piping	20	0	0	10	10	40
FM-13	Cocoa North Rear Yard Ditch Piping (London Blvd. to Westminster)	0	15	10	10	0	35
FM-2	Junction Structure at Plaza Parkway & Highland Drive Open Pit	0	15	5	0	10	30
FM-5	Bracco Pond Outfall and Discharge Structure	0	15	5	10	0	30
FM-14	Diamond Square Pond & Piping Improvements	20	0	15	10	0	45
FM-4	Broadmoor Acres Rear Yard Swales Piping	0	0	10	10	10	30
FM-11	Elevate Indian River Dr. (near Dixon Blvd.)	20	0	5	0	0	25
FM-8	Complete Drainage System on Dixon Blvd.	0	0	10	0	10	20
FM-16	Bracco Pond 72” Outfall (Rehabilitation/Replacement)	0	0	5	0	0	5

NOTE: The dark lines indicate the cutoff for the projects that were chosen for the final selection of projects.

The final selection of Flood Mitigation projects from table 1 in Section 1 Part B of this report omitted several projects from this overall ranking table. Although Project FM-14 has a high ranking, it is being substituted by WQ-12 which will provide both flood mitigation and water quality benefits. Project FM-4, was excluded because it is part of a separate Fiske Blvd. improvement project that is already funded for

FY 2020. Projects FM-11, FM-8, and FM-16 are being deferred after the priority ranking evaluation singled them out as being lower priority projects than others and therefore not in the best interests of the City Stormwater Utility at this time based on funding availability.

B. Water Quality Ranking Evaluation

For Water Quality Projects, points were assigned based on four different categories that assessed various aspects of each individual project. Points were given based on the following criteria:

- Nutrient removal Cost/lb analysis – 20 points $1,000-$5,000/lb, 15 points $5,001-$10,000/lb, 10 points $10,001-$50,000/lb, 5 points > $50,000/lb.
- Provides additional benefits (i.e. flood mitigation improvements, aesthetic improvements, etc.) – 25 points.
- Public education capabilities – 20 points.
- Community supported – 15 points.

The criteria identified for this ranking helped to develop the final list of selected projects from Section 1 Part C of this document. At the highest-ranking level, the cost of nutrient removal in Dollars spent per pounds of TN and TP removed was given the most weight. It was possible to model the nutrients prevented from discharging to the IRL for many Water Quality projects, and thus the cost/nutrients removed idea was used to consider the general cost effectiveness of each individual project. Similar to Flood Mitigation projects, projects that addressed a multiplicity of issues or that, in other words, provided multiple benefits were given points. Finally, points were given for those projects that had the ability to educate the public, and that were generally high-profile projects that the community would support.

The following table provides the overall results of the ranking system for Water Quality projects.

Table 80: Water Quality Prioritization Ranking Results.

Project #	Project Name	Cost/ TN-TP Pound Rank	Multiple Benefits Rank	Public Education Rank	High Profile Rank	Total
WQ-12	Verizon Stormwater Pond in Diamond Square	40	25	20	15	**100**
WQ-16	Riverfront Park In-Lagoon Nutrient Removal	40	0	20	0	**60**
WQ-28	Septic to Sewer: Broadview Manor, Carleton Terrace, Indian River Drive Frontage, River Heights and Grandview	20	0	20	15	**55**
WQ-10	72" Outfall Baseflow Capture Treatment	30	0	20	0	**50**
WQ-29	Expand Reclaimed Water Usage and Distribution	25	0	20	0	**45**
WQ-15	Add Floating Wetlands to Existing Stormwater Ponds	25	0	20	0	**45**
WQ-11	Horseshoe Ponds (North & South) Vegetation Removal	0	25	0	15	**40**
WQ-20	De-muck/Dredge SR 520 Relief Channel	0	25	0	15	**40**

Project #	Project Name	Cost/ TN-TP Pound Rank	Multiple Benefits Rank	Public Education Rank	High Profile Rank	Total
WQ-18*	SR 520 Runoff Treatment to Downtown	40	0	0	0	**40**
WQ-17*	Riverfront Park Stormwater Capture Modification	35	0	0	0	**35**
WQ-2	Baffle Boxes on Larger Basins Outfalls	40	0	0	0	**40**
WQ-3	BAM Filter Retrofits for Existing Baffle Boxes	40	0	0	0	**40**
WQ-5	Circle Drive Dry Retention Pond, Carlton Terrace & Broadview Manor Swales	40	0	0	0	**40**
WQ-7	Bracco Pond Aerators	40	0	0	0	**40**
WQ-14	Scarborough Park & Water Tower Pond Expansion	35	0	0	0	**35**
WQ-8	Divert Bracco Pond Baseflow to St. Johns River Basin via Diamond Square Pond	35	0	0	0	**35**
WQ-1	Baffle Boxes on Smaller Basins Outfalls	25	0	0	0	**25**
WQ-4	Living Shoreline Along Lagoon	0	25	0	0	**25**
WQ-23	Inspection Program for HOA-Owned Treatment Ponds	0	0	20	0	**20**
WQ-24	Enhanced Stormwater Quality Education Programs	0	20	0	0	**20**
WQ-22	Reduce Impervious Area (PaveDrain, Reduce Roadway) Near IRL	15	0	0	0	**15**
WQ-25	Update LDR's to Encourage LID and Provide Incentives for Overtreatment on Redevelopment	-	-	-	-	**0**
WQ-26	Bracco Pond Irrigation Repair/Replace for Increased Reuse & Bank Stabilization	-	-	-	-	**0**
WQ-27	North Fiske Pond Irrigation Repair/Replacement	-	-	-	-	**0**

* In the event that WQ-16 Riverfront Park In-Lagoon Nutrient Removal cannot be permitted, Projects WQ-17 and WQ-18 would substitute it.
NOTE: The dark lines indicate the cutoff for the projects that were chosen for the final selection of projects.

The final selection of Water Quality projects from table 2 in Section 1 Part C of this report included only a small selection of projects from this overall ranking table. The selected projects were deemed to provide the most benefits per the cost of each project based on the ranking criteria described above. The final selection of projects included only those projects that received points in at least 2 of the ranking criteria. That is, projects were selected because they offered a diverse set of benefits, ultimately making them more desirable.

One may notice that some water quality projects overlap and treat areas covered by another project, i.e. WQ-16, WQ-17, and WQ-18 all treat the same downtown core area. Each project was scored based on

its own individual merit and ranked accordingly. If WQ-16 is not able to be implemented for some reason, WQ-18 may be attempted. If that project falls short, WQ-17 may be initiated.

As may be noted, Projects WQ-25, WQ-26, and WQ-27 do not include metrics for nutrient removal as they cannot be quantified by the available methods. Updating Land Development Regulations to incentivize LID development can provide a net benefit to the lagoon, however the possible scenarios cannot be anticipated. Furthermore, the irrigation repair and replacement projects have been deemed to be maintenance projects and removed from consideration.

C. Major Equipment Evaluation

As described above, the Major Equipment program portion is not only prioritized by the remaining lifespan of the current equipment, but an attempt to quantify the relative increase in efficiency and productivity of new equipment is included. Additionally, the critical nature of the existing equipment needing repairs is considered.

Table 81: Major Equipment Prioritization Ranking.

Equipment #	Year	Equipment Name	Description	Replacement Cost	Purchase Year
131	2008	Isuzu FVR TYMCO 500X	Street Sweeper	$338,592	1
137	2009	Ford F150	Pickup Truck	$25,989	3
146	1999	Ford 350SD	Pickup Truck	$74,991	3
158	2014	International TYMCO 600X	Street Sweeper	$395,953	5
167	2006	Sterling Acterra	Truck	$178,459	7
91	1995	Ford VAC-CON	Vac-Con	$599,999	9
TOTAL				$1,013,984	

6. Schedule of Implementation

A preliminary schedule for the implementation of the projects described in this report over the 10-year period of this SCWP was developed. Section 5 of this document outlined the ranking system that was developed in order to determine which projects offered the most benefits based on several criteria. This ranking, in conjunction with utility rate analyses from Stantec, was then used to populate the following schedule. The cost analyses from Stantec helped establish which projects were assigned to be completed earlier in the 10-year period outlined in this document. It is important to mention that there may be a lag in the initial years of the implementation schedule due to efforts in securing debt and the design and engineering of the projects in Fiscal Years 2020 and 2021.

In the tables below, the "Project Cost" column indicates the individual cost to execute each project, while the "Total Cost" column indicates the total cost of implementing each project over the 10-year period, including all operations and maintenance costs as defined above in Sections 3 and 4. The "Year [1-10]" columns show the timeline for implementation of each project based on the expenditures necessary either for construction, operations, or maintenance.

Flood Mitigation

The table below shows a potential schedule of implementation for projects addressing flood mitigation issues. The top five projects in the ranking table were given priority in the schedule of implementation and were all selected to be constructed or initiated within the first 3 years of this 10-year period.

Distinctively, projects FM-6 and FM-15 are projects that incur ongoing costs for some or all of the duration of this timeline. Project FM-6 is an annual program to replace or repair CMP piping around the City and will be employed for about 5 years after which another analysis may be done to decide whether or not the program needs to be continued. Project FM-15 is an annual program to maintain curbs and gutters around the City, a general maintenance task that ensures the effectiveness of the conveyance system of the City's stormwater system. Project FM-18 and FM-19, although not highly ranked, offer overall improvements to the operation and execution of all future projects, and should therefore be implemented early in this period.

The rest of the projects are single projects whose annual expenditures are minimal, negligible, or already accounted for, and are therefore all projects that could be executed in smaller timeframes.

Table 82: Flood Mitigation Projects 10-Year Schedule of Implementation

Project #	Project Cost	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
FM-1	$387,000	$387,000							$387,000			
FM-2	$165,848	$165,848								$165,848		
FM-3	$1,167,075	$1,167,075				$233,415	$933,660					
FM-5	$536,445	$536,445										$536,445
FM-6	$193,750	$968,750	$193,750	$193,750	$193,750	$193,750	$193,750					

FM-7	$509,418	$509,418		$254,709	$254,709							
FM-10	$244,125	$244,125							$244,125			
FM-12	$353,808	$353,808		$353,808								
FM-13	$999,180	$999,180						$99,918	$399,672	$99,918	$399,672	
FM-15	$50,000	$500,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
FM-17	$291,564	$291,564										$291,564
FM-18	$77,777	$77,777	$77,777									
FM-19	$125,000	$125,000	$125,000									
FM-20	$77,770	$77,770							$77,770			
TOTAL	$5,100,990	$5,789,538	$446,527	$852,267	$498,459	$477,165	$1,177,410	$149,918	$771,567	$315,766	$449,672	$878,009

Water Quality

The table below shows a potential schedule of implementation for projects addressing water quality improvements.

Similar to Flood Mitigation projects, some Water Quality projects are multi-year efforts that will incur annual costs, or additional costs over the 10-year period. Project WQ-15 is a project that involves an initial expenditure where floating wetland will be installed, followed by subsequent annual costs for maintenance of these wetlands. Project WQ-29, which aims to extend the reclaimed water system on a per-mile basis, is a project who's "Total Cost" will ultimately depend on the number of miles of additional piping to be completed.

The rest of the projects are single projects whose annual expenditures are minimal, negligible, or already accounted for, and are therefore all projects that could be executed in smaller timeframes.

Table 83: Water Quality Project 10-year Schedule of Implementation.

Project #	Project Cost	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
WQ-10	$1,216,663	$1,216,663	$1,216,663									
WQ-11	$236,670	$236,670	$236,670									
WQ-12	$549,643	$549,643	$549,643									
WQ-15	$206,635	$818,635	$206,635	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000
WQ-16	$1,500,000	$1,500,000		$1,500,000								
WQ-20	$282,900	$282,900	$282,900									
WQ-28*	$4,338,360	$4,338,360	$500,000	$3,838,360								
WQ-29*	$1,264,006	$2,528,012			$1,264,006		$1,264,006					
TOTAL**	$3,992,511	4,604,511	$2,492,511	$1,568,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000

* Projects are anticipated to be funded and conducted by other Departments, i.e. SOIRL/Public Utilities

** Total cost not including projects to be funded by other Departments.

Major Equipment

The table below shows a potential schedule for when Major Equipment purchases need to be made.

Table 84: Major Equipment Purchases 10-Year Schedule of Implementation.

Equipment #	Year	Equipment Name	Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
131	2008	ISUZU FVR TYMCO 500X	$338,592	$338,592									
137	2009	FORD F150	$25,989			$25,989							
146	1999	FORD 350SD	$74,991			$74,991							
158	2014	International TYMCO 600X	$395,953					$395,953					
167	2006	Sterling Acterra	$178,459							$178,459			
91	1995	FORD VAC-CON	$599,999									$599,999	
TOTAL			$1,613,983	$338,592		$100,980		$395,953		$178,459		$599,999	

Overall

The following Table provides a breakdown of the three project categories spread out over the 10-year program with the total annual project budget as outlined above.

Table 85: Overall annual Costs of 10-year Program.

Category	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
FM Projects	$446,527	$852,267	$498,459	$477,165	$1,177,410	$149,918	$771,567	$315,766	$449,672	$878,009
WQ Projects	$2,492,511	$1,568,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000	$68,000
Major Equip.	$338,592		$100,980		$395,953		$178,459		$599,999	
TOTAL	$3,277,630	$2,420,267	$667,439	$545,165	$1,641,363	$217,918	$1,018,026	$383,766	$1,117,671	$946,009

A. Amendments to Schedule

The schedules for implementation of Flood Mitigation and Water Quality projects described above serve as suggestions for the order in which the City should consider execution of each project. The actual timeline of implementation will vary as the City may need to make amendments to the order based on input from other officials or the City Council.

Each project present in this final selection is self-supporting and will not present any conflicts with any of the other independent projects in this final list, should the implementation order change.

7. Funding

Alongside the development of this 10-year SCWP, City officials worked with Stantec Inc. to establish a different stormwater rate structure in order to ensure the future economic sustainability of the Stormwater Utility. Alongside the required investments to address existing flooding issues, the City faces mandatory expenditures to ensure the TMDL requirements of the IRL BMAP are met, as well as numerous expenses for general maintenance tasks associated with the stormwater system.

A. Sources

Among the various funding sources available for the implementation of the projects discussed below include direct budgeting from the Stormwater Utility funding source directly. Additionally, various grant and loan programs are available to fund portions of projects depending on their particular requirements. These include:

- Save Our Indian River Lagoon (SOIRL) grants for water quality improvements and nutrient reduction.
- St Johns River Water Management District (SJRWMD) cost share grants.
- Programs offered by the Florida Department of Environmental Protection include; State Water-quality Assistance Grant (SWAG),
- Federal Clean Water Act Section 319(h) Grants, and
- Clean Water State Revolving Fund (SRF) Loan Program.

Funds from these programs can often be utilized in intricate schemes that are beyond the scope of this report. Going forward, as the projects are developed and the Stormwater Utility revenue stream are defined and delineated, a careful look will need to be taken with respect to re-prioritizing along this line. Programs gain or lose support from one year to the next, or one administration to the next, and careful and consistent monitoring is required to implement them for best advantage.

B. Possible SOIRL Funding

SOIRL funding may be possibilities for most of the Water Quality projects. Currently, SOIRL funding pays projects a set dollars per pound removal for Nitrogen and Phosphorous. The estimated pounds of nutrient reduction are calculated utilizing established, State recognized removal efficiencies, such as those generated by the BMPTRAINS model, or as listed in the IRL BMAP.

8. References

Florida Department of Environmental Protection (FDEP). (2013). “Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection in the Indian River Lagoon Basin North Indian River Lagoon”. Basin Management Action Plan, Tallahassee, FL.

Florida Department of Environmental Protection (FDEP). (2017). “Final 2017 Progress Report for the North Indian River Lagoon Basin Management Action Plan”. Basin Management Action Plan, Tallahassee, FL.

Florida Department of Environmental Protection (FDEP). (2018). “Statewide Best Management Practice (BMP) Efficiencies for Nonpoint Source Management of Surface Waters”.

Quentin L. Hampton Associates (QLH) and Applied Sciences. (2016). “Stormwater TMDL Compliance Report”. City of Cocoa Public Works Department, Cocoa, FL.

Marty Wanielista, Harvey Harper, Eric Livingston, Mike Hardin, Przemyslaw Kuzlo. and Ikiensinma Gogo-Abite. (2017). “User’s Manual for the BMPTRAINS Model”. University of Central Florida Stormwater Management Academy, FL.

Legislation Details (With Text)

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Type:	Report			**Status:**	City Business
File created:	8/19/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Accept Stantec Consulting Services Inc., Stormwater Rate Study - Final Report. (Finance Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Final Stormwater Report 082619.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 19, 2019
Agenda Date: August 28, 2019
Prepared By: Lora Howell, Deputy Finance Director
Through: Rebecca Bowman, MBA, CGFO, CGFM, Finance Director
Requested Action:
Accept Stantec Consulting Services Inc., Stormwater Rate Study - Final Report.

BACKGROUND:

At the January 23, 2019 regular City Council Meeting, City Council authorized the City Manager to sign and approve a Task Order with Mead and Hunt, to provide engineering services related to the development of a 10-year Capital Improvement Working Plan, outlining and prioritizing future projects, utilizing an existing Continuing Services Agreement (CSA). At the same meeting, City Staff requested approval for the City's financial consultant Stantec, to develop a 10-year financial plan for the Stormwater Utility, similar to the models for Water/Sewer and General Fund. The purpose of this request was to ensure that revenues for the Stormwater Fund were sufficient to maintain the Utility, as well as support the implementation of the 10-year Capital Improvement Plan.

During the course of the financial study, and as part of the scope of work, Stantec validated the impervious surface on a sample of both residential and non-residential parcels within the city limits of Cocoa, using the Brevard County Property Appraiser Database. Through discussions, it became apparent that a citywide validation should occur on all non-residential parcels; due to the fact, the last full-scale validation had occurred in 1992. The Citywide evaluation on all non-residential parcels was to assess and recognize each parcels potential stormwater contribution.

After the evaluation of all non-residential parcels, Stantec Consulting presented to City Council their finding and recommendations, during the Stormwater Workshop held on May 14, 2019. Stantec and staff proposed a change in methodology for calculating Stormwater rates, as well as the method of

collection. Stantec recommended the City consider changing the methodology from the 1992 calculation of billing for both pervious and impervious square footage, to exclude the pervious calculation and focus solely on the impervious square footage. In addition, at the workshop and included in the report, are the pros and cons of switching to a Non-Ad Valorem Assessment method of collection, and the recommendation by Stantec, to consider changing to the assessment method.

At the same workshop, City Council provided direction to staff, that the consultant should also validate all residential properties, possibly incorporating a tiered rate approach and apply it to all residential parcels, rather than assess the average impervious square footage of all residential units. The approach provides for a more equitable solution to the rate structure through assessing the impact each parcel has on the stormwater system, based on the total impervious square surface within each tier. As such, all non-residential parcels, as well as all residential parcels within the city limits of Cocoa, had their impervious square footage evaluated by our consultant Stantec, using aerial photography from the Brevard County Property Appraiser.

The attached final report is the result of an extensive study on the cost of implementing Mead and Hunts Working 10-year Plan, inclusive of maintenance costs, estimated capital projects costs, and the cost to implement mandated water quality projects, in conjunction with the Stormwater Utilities revenue needs, to support such costs. This study incorporates a tiered rate approach for residential properties and a complete evaluation of all impervious square footage for every parcel inside the city limits of Cocoa.

Also as part of the Stantec study, Stantec evaluated the sufficiency of the rates required to provide funding for the operating and capital costs to support the stormwater program. The result was a 9% increase in the stormwater rates for FY 2020, with additional changes in the established rate per for the remainder of the 5-year study period. However, the revenue generated as a result of the change to a tiered structure and the requested rate increase does not fully support the capital activity as included in the Mead & Hunt 10-year plan. Therefore, debt funding is anticipated in this study to achieve the successful completion of the capital projects in a timely manner.

Staff recommends City Council accept the Stormwater Rate Study - Final Report.

STRATEGIC PLAN CONNECTION:

Financial stability is part of the City's strategic plan. The attached report outlines and validates the need for changing the methodology in calculating Stormwater Rates, to allow for a more equitable and fair solution for our citizens and business owners, who benefit from the services the Stormwater Utility provides.

BUDGETARY IMPACT:

Will be addressed with the Stormwater Assessment Resolution

PREVIOUS ACTION:

December 10, 2018 Stantec Consulting Scope of Service, to conduct a Stormwater Rate Study, inclusive of an impervious surface evaluation sampling.

May 2, 2019 Stantec Consulting Scope of Service, to validate all non-residential parcels impervious surface, using the Professional Services Agreement.

May 14, 2019 Stormwater Utility Workshop.

May 22, 2019 City Council Approval, to process a Change Order to validate all residential parcels impervious surface.

RECOMMENDED MOTION:

Accept Stantec Consulting Services Inc., Stormwater Rate Study - Final Report.

Stantec

City of Cocoa, Florida

Stormwater Rate Study – Final Report

August 26, 2019



August 26, 2019

John Titkanich
City Manager
65 Stone St.
Cocoa, FL 32922

Re: Stormwater Assessment Study – Final Report

Dear Mr. Titkanich,

Stantec Consulting Services Inc. (Stantec) is pleased to present this final report of the Stormwater Assessment Study (Study) that Stantec performed for the City of Cocoa, Florida (City).

Stantec appreciate the fine assistance provided by you and all of the members of City staff and who actively participated in and contributed to this Study. Please feel free to distribute this report to the appropriate members of City staff for their review and comments in addition to your own.

If you have any questions or would like to discuss, please do not hesitate to call me at (904) 923-1466 or email me at Michael.Burton@stantec.com. Stantec appreciate the opportunity to be of service to the City and look forward to the possibility of doing so again in the near future.

Sincerely,

Michael Burton
Vice President – Financial Services
Stantec Consulting Services, Inc.
4651 Salisbury Rd., Suite 350
Jacksonville, FL 32256
Office - (904) 247-0787
Direct – (904) 923-1466
Michael.Burton@stantec.com

Enclosure

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1. INTRODUCTION

Stantec Consulting Services Inc. (Stantec) has conducted a Stormwater Assessment Study (Study) for the City of Cocoa's Stormwater Enterprise Fund (Fund). This report presents the objectives, approach, methodologies, source data, and assumptions, as well as the findings and recommendations of the Study.

1.1 BACKGROUND

The City of Cocoa (City) manages an extensive Stormwater Utility System. The Stormwater Management Division of the City is responsible for maintaining the City's drainage ditches, swales, piping, inlets, manholes, and retention and detention ponds. The Stormwater System serves to protect individual and personal property, while reducing the impacts of urban runoff to the natural environment and specifically the ecologically significant Indian River Lagoon.

While the City evaluates the level of its stormwater user fees annually as part of its budget process, this study goes beyond normal budgeting and includes a ten-year revenue sufficiency analysis and a stormwater revenue recovery structure evaluation for the City's Stormwater Enterprise Fund. The Stormwater Utility currently charges monthly stormwater user fees to properties through their water and sewer utility bill. Residential parcels are assessed on a per dwelling unit basis, while commercial and vacant parcels are assessed based upon measured impervious and pervious area. The Stormwater Fee and the Stormwater Utility were established in the early 1990's and have been unaltered in structure since inception.

1.2 SCOPE OF SERVICES

The purpose of this Study was to develop a sustainable financial plan and modern assessment structure for the City's Stormwater Utility that satisfies the projected cost of providing the desired level of service, ensures an equitable allocation of costs to different parcel types, and evaluates and potentially modifies the current stormwater fee structure.

The scope of services for the Study are outlined herein:

- Revenue Requirements – Develop a ten-year financial plan for the Stormwater Utility to ensure that the assessments developed will provide sufficient revenues to cover all of the Stormwater Utility's operations, maintenance, debt service, and capital costs, while maintaining sufficient levels of reserve funds. As part of this Analysis, Stantec worked directly with the City and the City's consulting Engineers (Mead and Hunt) to develop a sustainable 10-year capital improvement plan.
- Billing Method – Determine the appropriate billing method for Stormwater revenue collection: continuing to bill on the water and sewer utility bill or converting to collecting the stormwater fee as a non-ad valorem assessment on the property tax bill.

- Measurement of Impervious Area – Conduct a geospatial measurement of impervious area in the Cocoa Stormwater Service area for each parcel with service. As part of this analysis, Stantec created a stormwater geodatabase that includes polygons which digitally represent the impervious area measured on each parcel.

- Stormwater Assessment Structure Design – Develop specific assessments by property class that advance the inherent equity of the City's stormwater assessments, enhance transparency, and increase administrative efficiency. Additionally, a Master Account File (MAF) with the stormwater assessment for each account to be billed was created.

2. REVENUE REQUIREMENTS

2.1 DESCRIPTION

This section presents the development of annual system revenue requirements and the corresponding plan of annual revenue adjustments for the Stormwater Utility as identified during the Revenue Sufficiency Analysis (RSA) component of the Study. The following sub-sections of the report present a description of the source data, assumptions, and resulting multi-year financial plan, while Appendix A includes detailed supporting schedules for the financial management plan identified herein for the Stormwater Utility.

During the RSA, Stantec reviewed several alternative multi-year financial management plans and corresponding stormwater annual revenue adjustment plans through interactive work sessions with City staff. During these work sessions, we examined the impact of various inputs and assumptions upon key financial indicators summarizing the results of the forecasting model under assumed conditions. In this way, we incorporated local information and management input as we developed the recommended financial management plan for the Stormwater Utility. The result is a financial plan that considers the City's current and best assumptions and data to satisfy the Stormwater Utility's revenue requirements over a multi-year projection period while meeting key financial performance objectives and minimizing annual assessment adjustments to the greatest extent possible.

In order to initialize the RSA, we obtained the City's historical and budgeted financial information regarding the operation of its Stormwater Utility, as well as information pertaining to the enterprise fund's fund balance and future out-year cost requirements. We also worked with the City, City staff engineers, and the engineering team of Mead and Hunt to incorporate the Stormwater Utility's multi-year capital improvement program (CIP). We discussed with City staff other assumptions and policies that would affect the performance of the Stormwater Utility, such as planned developments/property growth, capital funding sources, debt service coverage, reserve fund levels, earnings on invested funds, escalation rates for operating costs, and other considerations.

This information was entered into the financial module of our proprietary Financial Analysis and Management System (FAMS-XL) interactive modeling system. This module of FAMS-XL produced a ten-year projection of the sufficiency of the revenue provided by stormwater assessments to meet current and projected financial requirements. Based upon these projections, Stantec then determined the level of revenue adjustments necessary in each year of the projection period to satisfy the Stormwater Utility's annual financial requirements.

The revenue sufficiency and financial planning module of FAMS-XL utilizes all projected available funds in each year of the projection period (after payment of operations and maintenance expenses, debt service and renewal and replacement) to pay for capital projects. The model incorporates the rules of cash application as defined and applied by City Staff, and it produces a detailed summary of the funding sources to be used for each project in the CIP. To the extent that current revenues and unrestricted reserves are not adequate to fund all capital projects in any year of the projection period, the model identifies a borrowing

requirement to fund those projects or portions thereof that are determined to be eligible for borrowing. In this way, the FAMS-XL model is used to develop a borrowing program that includes the required borrowing amount by year and the resultant annual debt service requirements for each year in the projection period.

2.2 SOURCE DATA

The following sections review the various source data and assumptions supporting the Stormwater System revenue requirements identified during the course of the Study.

2.2.1 Beginning Fund Balance

City Staff provided audited FY 2018 financial information used to establish the beginning FY 2019 balances for the revenue fund (operating fund) of the Stormwater Utility. The detailed end of FY 2018 fund balances (as of September 30, 2018) that serve as the FY 2019 beginning fund balances are presented on Schedule 2 of Appendix A.

2.2.2 Revenues

The revenue projections utilized in the Study reflect an evaluation of multiple years of historical results, FY 2018 audited actual results, and the FY 2019 amended budget. Budgeted revenues for the Stormwater Utility consist of stormwater user fee revenues and other earnings and interest income. FY 2019 projected stormwater user fee revenues are based upon the City's current fee structure, the projected number of equivalent units for both residential and non-residential properties, and the assumed number of acres of undisturbed property. Revenue projections for the remainder of the forecast represent FY 2019 projected revenues adjusted for assumed developer property growth and annual fee increases. Interest income is calculated annually based upon average fund balances and assumed interest rates. A summary of projected cash inflows is presented on Schedule 3 of Appendix A.

2.2.3 Operating Expenditures

The Stormwater Utility's operating expenditures include all operating and maintenance (O&M) expenses, calculated debt service requirements, and minor capital outlay requirements. The RSA based the operating expenditure projections on the individual expense categories and expense amounts contained in the FY 2018 audited actual results and the FY 2019 amended budget. The cost requirements from the FY 2019 proposed budget were adjusted annually thereafter based upon assumed cost escalation factors that were determined in consultation with City staff. In addition to the budgeted expenses, allowances were made for anticipated expenses such as pond maintenance, replacement or lining of corrugated pipes, and curb and gutter maintenance.

Projected operating expenditures and cash outflows (excluding the cash funding of capital) are presented on Schedule 4 of Appendix A.

2.2.4 Capital Improvement Program (CIP)

A 10-year CIP was developed during this Study through interactive work sessions with City staff and the City's consulting engineer (Mead and Hunt). The CIP plan used in the analysis was developed on July 30, 2019. The CIP identified in the Study is presented in project level detail from FY 2019 through FY 2029 and considers both the future needs of the Stormwater System as well as the funding capabilities of the Stormwater Utility. Beginning in FY 2021, budgeted capital improvement requirements are adjusted for anticipated inflation of 3.00% per year (based upon recent increases observed in the Engineering News Record Construction Cost Index) to account for the inflation in the future cost of construction. In total, the CIP in future year dollars from FY 2019 through FY 2029 is approximately $12.7 million. Of the $12.7 million in budgeted capital projects, approximately $10.2 million is to be funded with long-term debt over the course of FY 2020 through FY 2029, with debt issuances assumed in 3-year increments ($5.2 million in FY 2020, $1.7 million in FY 2023, $1.3 million in FY 2026, and $2.0 million in FY 2029). More information related to the debt-funding of capital projects is discussed in Sections 2.3.5 and 2.3.6 of this report. A detailed list of the specific projects and costs by year is included on Schedule 6 of Appendix A.

2.3 ASSUMPTIONS

2.3.1 Cost Escalation

Annual cost escalation factors for the various types of operating and maintenance expenses were developed based upon discussions with City staff, a review of historical trends, and our industry experience, and are applied in each year of the projection period beginning in FY 2020. The specific escalation factors assumed for the various categories of expenses can be found on Schedule 5 of Appendix A.

2.3.2 Interest Earnings

The Study reflects assumed interest earning rates on invested funds of 0.25% starting in FY 2019, projected to increase by 0.25% every year until interest earnings reach 2.00% in FY 2026. Projected interest earnings are presented on Schedule 3 of Appendix A.

2.3.3 Property and Impervious Area Forecast

A forecast of stormwater properties (equivalent units) within the City was developed based on historical trends and staff discussions. The forecast assumes conservative growth of 0.5% annually for residential and non-residential equivalent units and no growth in undisturbed property acres.

2.3.4 Minimum Reserve Policy

Reserve balances for utilities are funds set aside for a specific cash flow requirement, financial need, project, task, or unforeseen system requirements. These balances are maintained in order to meet short-term cash flow requirements and minimize the risk associated with meeting the financial obligations and continued operational and capital needs under adverse conditions. The level of reserves maintained by a

utility is an important component and consideration in developing a utility system multi-year financial management plan.

Many utilities, rating agencies, and the investment community place a significant emphasis on having sufficient reserves available for potentially adverse economic conditions. The rationale related to the maintenance of adequate reserves is twofold. First, it helps to ensure that a utility will have adequate funds available to meet its financial obligations during unusual periods (i.e. when revenues are unusually low and/or expenditures are unusually high). Second, it provides funds that can be used for emergency repairs or replacements to the system that can occur as a result of natural disasters or unanticipated system failures.

The financial management plans presented in this report assume that the City will maintain a minimum unrestricted cash reserve balance equal to 4 months of annual operating and maintenance expenses. This level of reserve is consistent with 1) our industry experience for similar systems, and 2) a healthy level of reserves for a municipal utility system per the evaluation criteria published by the municipal utility rating agencies (Fitch, Moody's, and Standard & Poor's).

2.3.5 Future Borrowing & Capital Funding

As the 10-year CIP for the Stormwater Utility was developed in this Study, sources of funding for individual projects were identified. Approximately $11.1 million in capital funding was determined to be provided through revenue bonds, with the remainder of projects to be paid for out of the Stormwater Utility's revenue fund.

The new long-term debt required during the projection period is assumed to be issued for a 30-year term, starting at an interest rate of 3.50% in FY 2019, and gradually increasing up to 5.00% by FY 2022. The City's actual future financing and funding decisions will reflect then-current market conditions and broader City-wide financing objectives, but the projections in this Study reflect realistic projections of expected overall conditions and are appropriate for planning purposes.

A complete schedule of assumed CIP funding can be found on Schedule 9 of Appendix A and projected future senior lien borrowing can be found on Schedule 11 of Appendix A.

2.3.6 Debt Service Coverage

The City's Stormwater Utility currently has no outstanding debt; however, a minimum senior-lien debt service coverage ratio of 1.25 (with a target of 1.50), was utilized in the current Study for projected future debt issuances. The debt service coverage ratio signifies that net income must be at least 1.25 times annual debt service.

The ratio of net income to annual debt service requirement (referred to as a debt service coverage ratio hereafter) described above was developed through discussions with City Staff and represents the minimum requirements of bondholders. As a policy decision, utilities frequently opt to measure revenue sufficiency

and set fees based upon a higher debt service coverage ratio in order to ensure compliance with the rate covenants in the event future projections of revenue and expenses do not occur as predicted (due to unanticipated capital requirements or substantial operating cost increases, natural disasters, etc.). The financial management plan presented herein results in projected total debt service coverage greater than 1.50 in each year of the forecast, which is indicative of the midrange level of municipal utility system performance per the current evaluation criteria published by the municipal utility rating agencies (Fitch, Moody's, and Standard & Poor's).

2.4 RESULTS

Based upon the source data and assumptions presented herein, the Study resulted in the following findings and recommendations relative to the financial sustainability of the City's Stormwater System:

- The City's current stormwater revenues are insufficient to meet projected operating & capital expenditures of the Stormwater Utility through the projected time period.
- In order to generate sufficient revenues to meet the financial requirements of the Stormwater Utility, Stantec recommends that the City adopt the stormwater assessments recommended in Section 3 of this report, which will generate 9% more revenue in FY 2020 than was generated in FY 2019. Additionally, we recommend that stormwater assessment revenues be increased by 9% each October 1st for the following two years (FY 2021 – FY 2022) and then establish an annual revenue adjustment indexing plan of 3%, beginning in FY 2023, consistent with historical levels of inflation. A 5-year revenue adjustment plan for the Stormwater Utility is shown below in Table 2-1.

Table 2-1 Stormwater Assessment Adjustments

Fiscal Year	FY 2020[1]	FY 2021	FY 2022	FY 2023	FY 2024
Effective Date	10/1/2019	10/1/2020	10/1/2021	10/1/2022	10/1/2023
Stormwater Revenue Adjustment Plan	9.00%	9.00%	9.00%	3.00%	3.00%

It is important to note that the projections of future conditions underlying this analysis are not intended to be predictions. Applicable to many utility systems, there are multiple factors beyond the City's control, such as i) weather, ii) regulatory changes, iii) national, regional, and local economic conditions, iv) the rate of growth in developed properties, v) operating and capital cost inflation, and vi) changes in the timing and composition of the Stormwater Utility's capital improvement program, that may have material impacts on the future financial condition of the City's utility operations. Further, the projections in this Study rely upon data and guidance provided by the City during the development of the Study, and while the information

[1] FY 2020 stormwater assessment revenue requirement will be recovered through the new fee structure as discussed in Section 3 of this report.

utilized in this Study is believed to be reliable, detailed independent reviews or auditing of the data were not conducted.

As a result, there will usually be differences between forecasted and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. While Stantec has no responsibility to update this report for events and circumstances occurring after the date of this report, future management actions should be based upon and adjusted to reflect future results as they occur. These comments are provided to emphasize the importance of active management informed by the actual future results of Stormwater Utility operations by the City. While the planning effort supported by this Study will serve to guide and inform the City in balancing future revenue and spending decisions, it is only through observation of future results, and the update of this analysis, that the City will be able to determine the actions required to ensure its financial and operational objectives are met over time.

Appendix A includes detailed schedules presenting all components of the financial management plan developed for the Stormwater Utility.

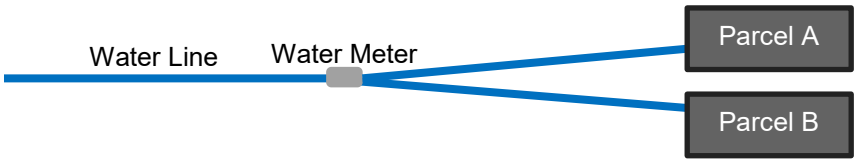
3. STORMWATER ASSESSMENT COLLECTION METHODOLOGY

Stormwater revenues are collected from the users and beneficiaries of a stormwater system through two standard methods; monthly utility bills or annual non-ad valorem property assessments. The City currently uses the utility billing method and has expressed concerns with regards to managing the required data base needed to administer this method. Stantec reviewed the two methods and has the following findings:

Utility Billing Method

This form of billing primarily relies on the existing utility billing infrastructure for water and sewer service in order to bill for stormwater service. For rural and/or communities with a simple flat fee for stormwater, this method can be sufficient. The level of the fee can be adjusted by City action in a relatively short timeframe. Two primary issues arise in the City of Cocoa that make this method less than optimal for the collection of stormwater fee revenue. First, the fee is only paid on active utility accounts and the City has a significant amount of rental, both commercial and residential, that go inactive when vacant, resulting in a revenue shortfall that must be accounted for in the level of the fee. Additionally, utilizing the utility billing method requires that utility billing accounts are mapped to the underlying parcels being served. While simple in the case of one utility account to one parcel, there are often cases in which one utility account services multiple parcels. This dynamic is shown simplistically in Figure 3.1 below in which one utility account and meter is serving two billable stormwater parcels. Without a significant amount of administrative resources, the relationship between utility accounts and parcels is often hard to maintain. As parcels are developed or old ones split, the connection between utility accounts and parcels is altered and must be updated to maintain a current database. For these reasons, it is not recommended that the City continue with the monthly utility billing method of stormwater fee collection.

Figure 3.1 – Current Utility Billing Configuration

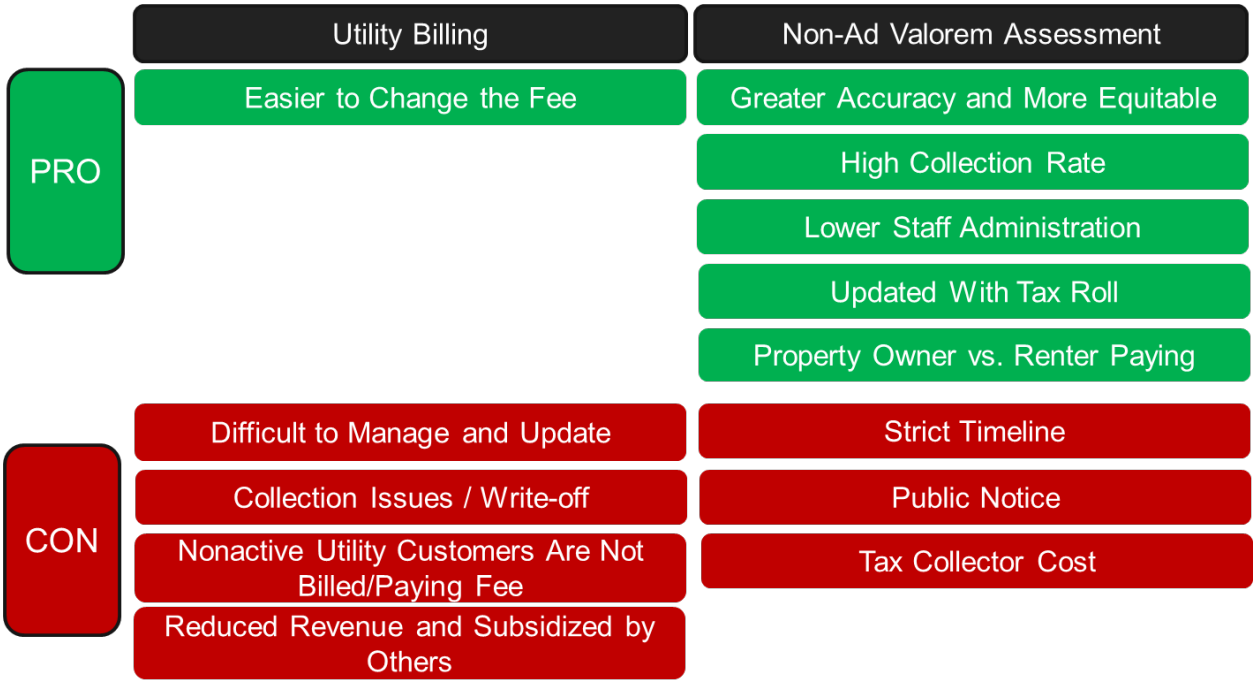


Non-Ad Valorem Assessment Method

Alternatively, the stormwater revenue requirements can be assessed to property owners directly through a non-ad valorem assessment on the annual property tax bill. In doing so, this method eliminates the need to create utility billing account matches and additionally results in high revenue remittance rates, solving the primary deficiencies that arise in the City of Cocoa when using the Utility billing method. For these reasons it is recommended that the City switch billing methods to the non-ad valorem process. The primary drawbacks to this method arise in the form of strict timelines for the submission of the assessment roll to

the tax collector and cost incurred in collection fees from the tax collector. The full list of the pros and cons developed in the study is included below in Figure 3.2

Figure 3.2 - Billing Collection Method Comparison



Based upon discussions with City Staff and interaction with City Council, the City Council has determined to implement a stormwater assessment and has directed that this study develop such an assessment program. As such, the development of stormwater assessment rates and the final assessment roll reflect this assumption. The assessment roll should be updated each year with the most current parcel listing for the service area.

3.1 STORMWATER METHODOLOGY PEER COMPARISON

As part of the analysis, a local benchmarking comparison was developed to compare the stormwater revenue collection methodology employed by other local communities. Table 3.1 provides a summary comparison between local communities that utilize a non-ad valorem assessment collection methodology and those that charge a fee for stormwater services on the utility bill. Through Stantec's state and national experience, a movement from utility billing towards an annual assessment has been observed and is expected to continue as communities realize the benefits of an annual assessment.

Table 3.1 – Stormwater Revenue Collection Methodology Comparison

Stormwater Utility	Non-ad Valorem Assessment	Utility Bill
Brevard County (District 1)	X	
Cape Canaveral		X
Cocoa (FY 2019)		X
Cocoa (FY 2020)	X	
Cocoa Beach		X
Daytona Beach		X
Edgewater		X
Flagler Beach		X
Holly Hill	X	
Indialantic	X	
Indian Harbour Beach	X	
Malabar	X	
Melbourne	X	
New Smyrna Beach	X	
Ormond Beach		X
Oviedo		X
Palm Bay	X	
Palm Coast		X
Port Orange	X	
Rockledge		X
Sanford		X
Satellite Beach	X	
South Daytona		X
Titusville	X	
West Melbourne	X	
Count	**13**	**12**

4. STORMWATER BILLING BASIS

4.1 FINDING OF SPECIAL BENEFIT OF THE CITY'S STORMWATER SERVICE

Non-ad valorem assessments in the State of Florida must meet a two-pronged test. The first prong of the test is that the service being assessed must provide a special benefit to the properties being assessed. The second prong of the test is that the assessments must be fairly and reasonably apportioned to the parcels being assessed and the benefits to the parcels must equal to or exceed the assessment.

4.1.1 Special Benefit – The First Requirement

Properties within the City receive a special benefit from the stormwater services provided through annual operation, maintenance, and repairs of the stormwater system.

Special Benefits include the following:

- Reduced urban runoff and pollutants to the natural environment.
- Reduced flooding of private property.
- Improved safety and welfare of the residents and visitors of the City, including improved emergency response capabilities as a result of stormwater flood mitigation.
- Enhanced use and enjoyment of property.
- Enhanced property and rental value, marketability, and integrity of the property.

Therefore, the first requirement that (the property burdened by the assessment must derive a special benefit from the service provided by the assessment) is met because each property will receive a special benefit from the stormwater service provided by the City.

4.1.2 Fair and Reasonable Apportionment – The Second Requirement

In considering the assessment methodology, the second requirement is that the costs must be fairly and reasonably apportioned among the properties that receive the special benefit so that no property is paying more than the benefit received. The stormwater assessment for a property is based on the estimated stormwater generated on the parcel as result of the specific characteristics of the property (i.e. impervious surface vs. pervious surface), and therefore, the second requirement is met because the assessment is fairly and reasonably apportioned to parcels receiving benefit from the stormwater system. Section 5 of this report summarizes the apportionment methodology used to create the assessment; whereas, Section 4 of the report describes the billing basis of the assessment program.

Stormwater management efforts are fundamentally concerned with the systematic management of stormwater runoff in the community, which are primarily driven through the quantity and quality of stormwater delivered to the municipal system. Properties within the City receive a special benefit from the stormwater services provided through annual operation, maintenance, and repairs of the stormwater

system. The City of Cocoa's stormwater system serves the property base of the community by receiving runoff from developed parcels during storm events and conveying the stormwater to receiving bodies. This critical function provides for the protection of private property during adverse storm events that can cause flooding and maintains clear and passable roads so that parcels are accessible. Additionally, much of the community's stormwater is ultimately deposited in the Indian River Lagoon, an ecologically sensitive water body. As such, environmental regulators have instituted total maximum daily load (TMDL) requirements to ensure that surface water bodies are protected. The City of Cocoa manages its stormwater to improve the quality of runoff entering surface waters.

Managing a stormwater system such as the one in place in the City of Coca requires monetary resources. The City currently collects revenue though a stormwater user fee that is levied in the form of a monthly utility bill for properties with water and sewer utility service or an annual bill for unserved parcels. The current fee is structured to bill utility accounts based on both the amount of impervious area present on the parcel and the amount of pervious area on the parcel. This is a hybrid fee structure between two distinct billing units. Stantec, as part of the fee study, reviewed both the alternatives for stormwater revenue collection and the basis of the revenue collection method considering modifications that would improve transparency, administrative efficiency, property owner understanding and fit the underlying characteristics of the community the best. The following sections detail the thought process and present the recommendations of the study as they relate to the measurement of stormwater service, stormwater revenue recovery structure, and collection method.

4.2 STORMWATER BILLING BASIS

The collection of dedicated stormwater revenues can and is accomplished through the use of different billing bases. The billing basis is essentially the methodology used to measure the stormwater contribution from each parcel and to fairly apportion the Stormwater Utility revenue requirement among benefitting parcels. The stormwater assessment billing basis methodology is driven by two key factors, which include availability of data and the equity associated with the basis. For example, while it would require limited information to bill each property owner in the City the same flat assessment, this approach would certainly not recognize the different stormwater contribution potential of different parcels to the City's system. There are a number of different approaches that have been used around the country to address stormwater cost apportionment and revenue recovery, including property value, metered water use, parcel gross area and zoning, building footprint, and impervious area. Since the conversion of natural land to developed land with impervious area results in increased stormwater runoff, most communities with stormwater utilities use impervious area, or some variation of impervious area, as the basis for the stormwater assessment or utility fee. Impervious area impedes the natural infiltration of stormwater into the ground and results in higher stormwater runoff that must be managed by the City's System.

Numerous engineering and hydrologic studies have demonstrated that impervious area is the single most important factor contributing to the quantity and quality of stormwater runoff from a property. For example,

a one-acre undeveloped parcel will generate approximately 1,600 gallons of stormwater during a one-inch rainfall event, whereas a one-acre parking lot will generate 26,000 gallons of stormwater during the same rainfall event. As a result, the use of impervious area has been demonstrated to be a highly defensible basis and has been validated in numerous legal challenges in Florida, and across the country. The use of impervious area is typically easily understood within the community. The use of impervious area requires information that delineates the impervious area on all parcels within the community, typically contained in a geographic information system (GIS) database.

The City's current Stormwater fee is based on a hybrid of impervious area and pervious area on a parcel. This is a relatively uncommon stormwater fee methodology for stormwater fees. This analysis reviewed the various industry standard bases for recovery of required stormwater revenues and provided a recommendation below that best fits the needs of the community by increasing transparency, administrative efficiency, property owner understanding, and simplicity.

Recommended Stormwater Assessment Cost Apportionment Basis

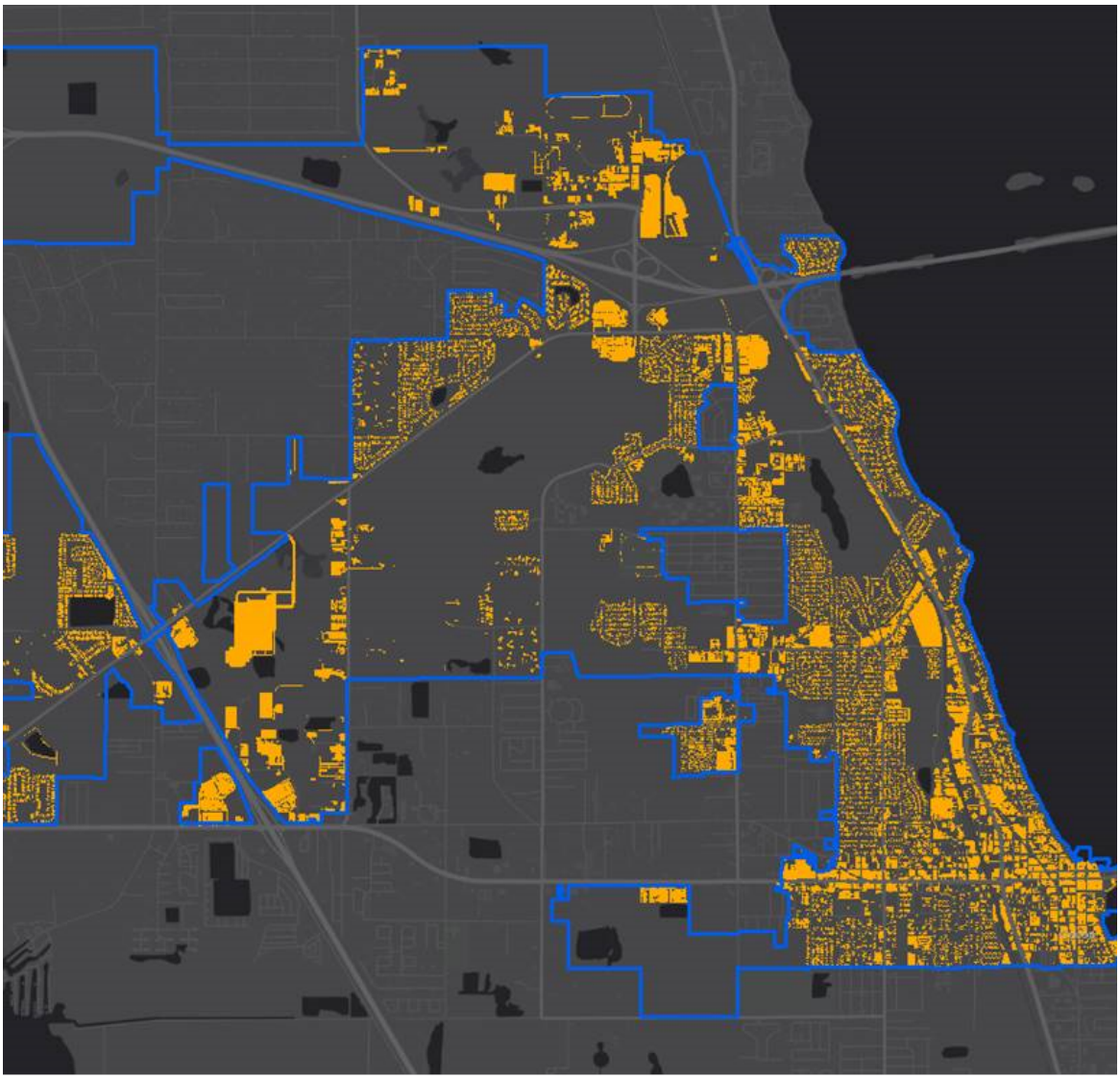
Based on our project team's experience and the key goals and objectives for the Stormwater Utility assessment structure in the City, Stantec recommends that the City use impervious area as the sole basis for apportioning costs to benefitting parcels for the stormwater assessment. This approach meets key goals and objectives and provides a simple, easy to understand approach that is defensible and provides an equitable and reasonable allocation of stormwater costs to benefitting parcels within the City.

4.3 MEASUREMENT OF IMPERVIOUS AREA

The City of Cocoa does not currently maintain an impervious area layer within its GIS database system. As a result, our project team was tasked with developing an impervious area database to facilitate the development of the proposed Stormwater Assessments based on impervious area. The database was constructed using a geographical software environment.

Impervious data area was captured by measuring the impervious area on each parcel within the City's municipal limits. The City currently considers any improvement on a parcel that disturbs the natural percolation of water to be impervious. Accordingly, each parcel's impervious area was measured and a parcel specific impervious area database in GIS was created. Stantec identified approximately 55 million square feet of impervious area within the stormwater system service area as shown in blue on the map in Figure 4.1.

Figure 4.1 – City Wide Impervious Area



This data set became the basis for analysis in order to understand the unique parcel configurations in the City and to determine which assessment structure option best suits the community. Our first step in the impervious area analysis was to group properties with similar development characteristics. This grouping allows for the determination of the typical impervious area patterns within each type of development. To facilitate this analysis, properties were grouped into two primary categories including:

- Single Family Residential - Properties with single owner residential development including homes, duplexes, triplexes, mobile homes and other low-density residential uses.
- Non-Single Family Residential - Properties with institutional or commercial development including apartment complexes with greater than three units, and condos.

The impervious area patterns for each of these categories of properties were reviewed. Figure 4.2 shows a histogram of the distribution of the amount of impervious area on 4,773 single family residential properties identified within the City. The distribution shows that the majority of single-family properties in the City have between 2,000 and 6,000 square feet of impervious. The statistical mean impervious area is **3,514 square feet.**

Figure 4.2 - Single Family Residential Impervious Area Distribution

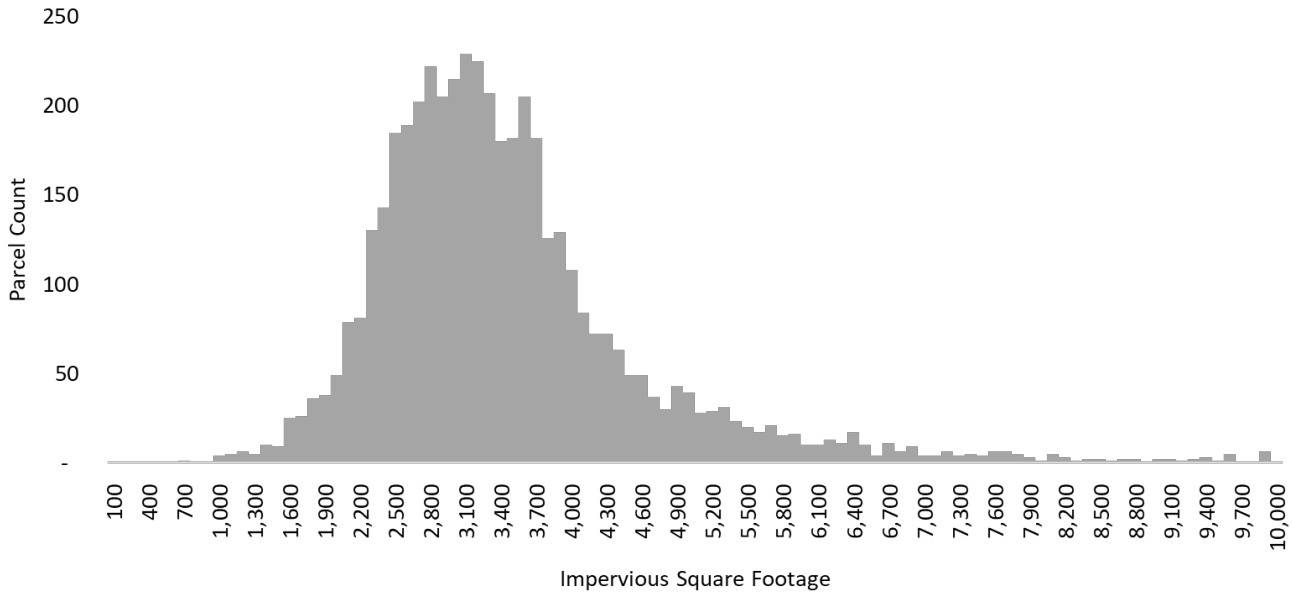
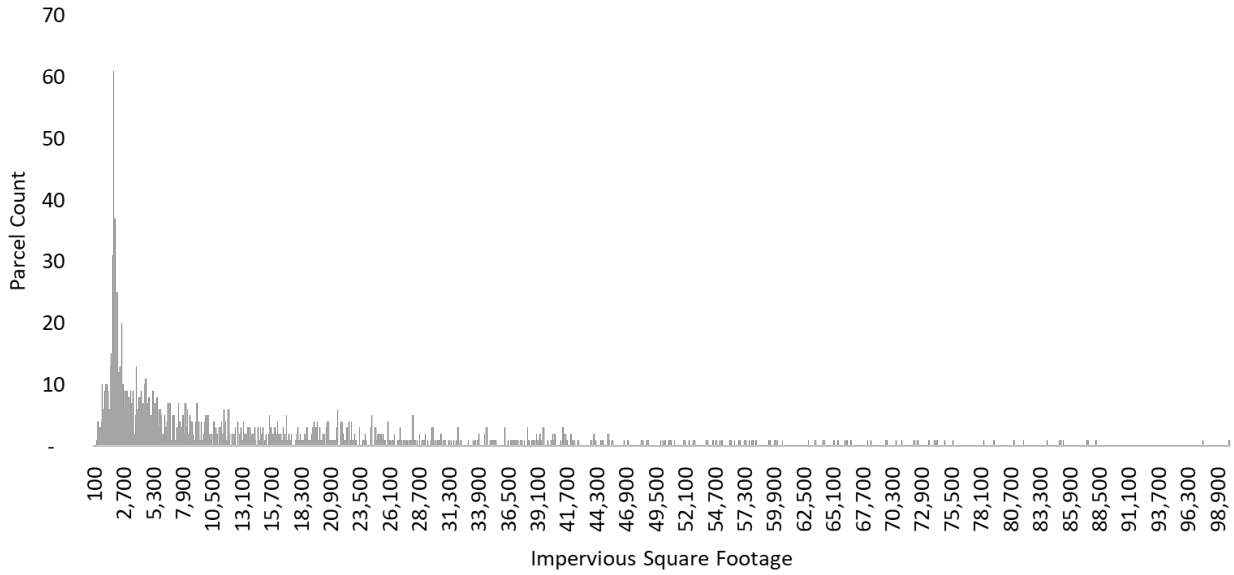


Figure 4.3 presents the distribution of impervious area on non-residential properties within the City. There are 1,486 non-residential properties located within the City. As demonstrated in the figure there is a wide range of impervious area located on these parcels with no apparent pattern. The median impervious area is 28,789 square feet and ranges as high as 3,060,022 square feet.

Figure 4.3 - Non-Residential Impervious Area Distribution



The total impervious area by property type is shown in Table 4.1.

Table 4.1 – Total Impervious Area by Property Type

Land Use	Number of Parcels	Impervious Area	% of Total Impervious
Single Family Residential	4,773	15,949,500	29%
Residential High Density[1]	1,216	1,687,562	3%
Commercial & Industrial[2]	1,609	34,769,684	64%
Governmental	47	2,417,600	4%
Total	**7,645**	**54,824,346**	**100%**

[1]Represents number of condo parcels.
[2]Includes apartments with more than three units.

5. STORMWATER ASSESSMENT STRUCTURE

5.1 STRUCTURE ANALYSIS

Upon selecting impervious area as the basis for the Stormwater Utility assessment and examining the distribution of impervious area on like parcels, it is possible to consider the actual structure of a stormwater assessment. The first step in the assessment structure analysis is to consider how the City might group similar parcel types, effectively creating property classes for stormwater billing. Second, the way in which the stormwater revenue requirement is apportioned to each property class, and to parcels within each property class, must be given significant consideration to ensure the assessment structure is easy to understand, equitable, and administratively efficient.

5.1.1 Property Classes

The City of Cocoa, like most communities, consists of a wide variety of land uses and parcel configurations that make up its property base. Grouping like properties into property classes is appropriate in order to streamline the assessment structure, enhance property owner understanding, and insure administrative efficiency. To develop the stormwater assessment by property classes, our project team examined the property use distribution and parcel configurations in the City, as discussed in the prior section of the report, in order to determine the most appropriate property classifications.

The following four property classes were identified in the Study to provide simplicity and ease of understanding within the stormwater assessment structure. These are common among communities with stormwater utilities as they recognize the common parcel characteristics that exist on each group of parcels.

- **Single Family Residential** – Parcels with single owner residential development including duplexes, triplexes, and other low density residential.
- **Non-Single Family Residential** – Parcels with institutional or commercial development including apartment complexes with more than three units and condominiums.
- **Exempt** – Parcels that receive little or no benefit from the stormwater system, such as public roads and rights-of-way, vacant parcels, railroad tracks, certain educational establishments, Bona-fide agricultural, and parcels with less than 400 square feet of impervious (these parcels were not included in the apportionment of the stormwater revenue requirement and were not included on the assessment roll). The basis for the categories of parcels included in the exempt property class include the following:
    - Public roads and rights-of-way: These properties serve as key components of the stormwater system.
    - Vacant parcels: The impervious area only approach would exclude vacant/undeveloped properties.

- Certain educational establishments have been determined to have sovereign immunity with regards to Stormwater fees.
- Bona-fide agricultural operations: Florida statute exempts these properties.
- Less than 400 square feet of impervious: These properties are exempt to simplify the stormwater assessment structure and to recognize the practical limitations of capturing all impervious area in the City.

The properties included in the exempt property class are customarily considered exempt from a stormwater assessment by most communities with stormwater utilities across the country for similar reasons listed above.

- **Excluded** – Parcels with governmental ownership (these parcels were included in the allocation of the stormwater revenue requirement but were excluded from the assessment roll as they do not receive a tax bill). Parcels with an excluded designation are billable, but due to particular ownership characteristics (i.e. government) cannot be billed as part of non-ad valorem assessment. As such, this study has calculated the amount of impervious area on these parcels and the parcels were included in the measurement of billable units and apportionment of cost. The total assessment amount for these parcels was calculated and is presented in this study. The City should evaluate its options with regards to revenue recovery goals for these parcels and determine a policy for this property class.

5.1.2 Assessment Structure Options

Upon selecting the property classes, our project team next considered the appropriate mechanism for charging parcels within each class to arrive at a recommended stormwater assessment structure. There are three typical approaches used to develop stormwater assessment structures on a property class level. These approaches include the following:

- Flat Assessment - All parcels within a property class are assessed a flat assessment based on the average impervious area for the class. This approach is often used for single family residential parcels within communities that do not have measurements of impervious area for these parcels or when the community contains a very homogenous distribution of impervious area among single family residential properties.

- Tiered - Properties are placed into tiers based on the actual impervious area on the individual parcel and charged a stormwater assessment based on the associated tier. This approach is commonly used for single family residential parcels within communities with a wider distribution of impervious area and enough data to support the structure. Tiered assessments are a way in which an assessment structure can capture these dynamics in an administratively efficient way and ensure cost recovery is equitable within the residential property class.

- Parcel Specific - Parcels are charged a stormwater assessment based on the actual measured impervious area on the individual parcel. While there are communities that have implemented

stormwater assessment structures that are based on actual impervious area for all property classes, this structure is typically applied to non single-family residential parcels. The significant variation in impervious area on these parcels precludes the use of averages or flat assessment structures.

5.1.3 Assessment Structure Recommendation

The selection of the appropriate assessment structure for each class can be viewed in light of the goals and objectives described earlier. As mentioned earlier, one of the primary goals is to have a stormwater assessment structure that provides a fair and reasonable apportionment of the stormwater revenue requirements to parcels benefitting from the stormwater system in order to align the amount charged to each parcel with its stormwater runoff. It is also important that the assessment structure be easy to understand within the community and easy to administer. For these reasons Stantec recommends that the City utilize the following assessment structure for each class:

- Single Family Residential - Given the relative distribution of impervious area located on these parcels, a tiered assessment for single family residential parcels is recommended. This approach will provide simplicity, while recognizing impervious area differentials and ease of understanding. The tiers should be constructed to capture single-family parcels with below average impervious area footprints, average impervious area footprints and larger than average impervious area footprints. Based on the database of impervious area, a three-tier configuration has been created that conforms to the underlying distribution of impervious area, while accomplishing equity objectives.

- Non-Single Family Residential - A parcel specific assessment structure is recommended based on the actual measured impervious area on each non single-family residential parcel expressed in terms of ERUs or equivalent residential units.

In the determination of the amount of impervious area on each parcel, Stantec rounded impervious area down to the nearest 100 square feet and determined that only parcels with more than 400 sq. ft. of impervious area will be assessed.

For single family parcels as identified herein, Stantec recommends a tiered stormwater assessment structure. Tiers allow the City to recognize differentials in single family parcel impervious area that are of statistical importance and administratively efficiently priced across the entire class of over 4,500 parcels. As such, it is recommended that the City create three tiers based on a statistical distribution of impervious area. The first tier is meant to capture properties below approximately one standard deviation of the mean of impervious area for all single-family homes. The middle tier will capture all parcels with average impervious area footprints and contained within approximately one standard deviation of the mean. A third tier will then capture the remaining parcels whose impervious area footprints are greater than approximately one standard deviation from the mean. Configuring the tier breakpoints based on statistical distribution ensures that the tier break points fit the underlying property data and are not arbitrary. The pricing of each tier has been constructed in this analysis to be based on the median parcel for each tier and ensures pricing

parity per sq. ft. of impervious area billed for each tier. Figure 5.1.1 and Table 5.1 present the recommend distribution of the above described tiers.

Figure 5.1 - Single Family Residential Impervious Area Distribution

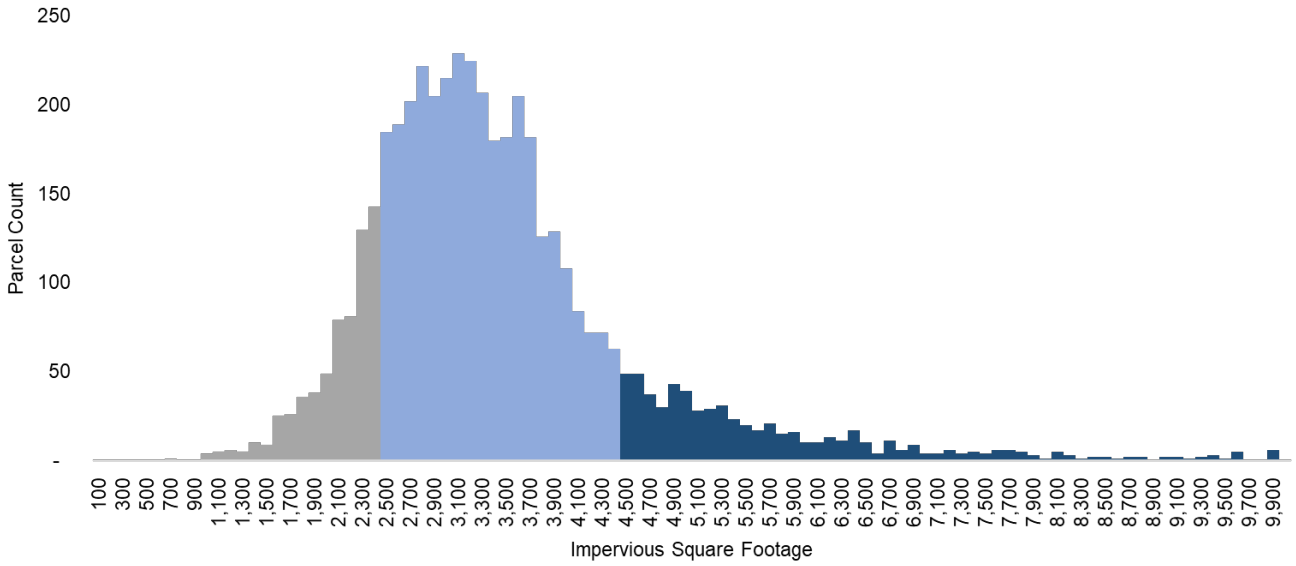


Table 5.1 – Tier Break Points and Parcel Counts

Tier	Tier Size	Number of Parcels	Percentage of Parcels	ERU Basis
Tier 1	400-2,300	674	14%	0.65
Tier 2	2,400-4,400	3,418	72%	1.00
Tier 3	>4,400	681	14%	1.74

Based on the distribution of impervious area for single family parcels, an equivalent residential unit or ERU has been calculated at 3,100 sq. ft. This unit reflects the median impervious area on a tier two single family residential parcel. The ERU is a construct that allows for parcels that are measured on actual area to be billed in terms of ERUs.

Based on the recommended assessment structure for each of the defined property classes it is possible to determine the total number of billable ERUs that were used to determine the stormwater assessment per ERU. Table 5.2 presents the number of ERUs for each defined property class.

Table 5.2 - Number of Billable Units

Property Class	Number of ERUs
Single Family Residential	5,041
Non Single-Family Residential	11,313
Excluded Parcels	724
Total	**17,078**

5.2 CALCULATED STORMWATER ASSESSMENT

This section of the stormwater assessment structure analysis determines the assessments that will be needed to fund the Stormwater Utility based on the revenue requirements of the utility. Table 5.3 presents the calculated annual stormwater assessment per ERU. It should be noted that the assessments shown in the table include an assumption of charges from the Property Appraiser and Tax Collector for billing and collection (discussed in Chapter 5) of 6% of revenues and provide an allowance for mitigation credits equal to 2% of the Stormwater Utility revenue requirement. These adjustments are required to calculate stormwater assessments that will generate the necessary revenues to fund the Stormwater Utility.

Table 5.3 - Annual Stormwater Assessment Calculation

Funding Level	Revenue Required
(A) Stormwater Utility Revenue Requirement	$1,744,683
(B) Tax Collector Fee & Prepayment Discount	$104,680
(C) Allowance for Credits	$41,338
Total Revenue Requirement	**$1,890,701**
Billable ERUs	**17,078**
Annual Assessment Per ERU	**$110.71**

Importantly, the annual stormwater assessment per ERU includes 724 ERUs that are governmental in ownership and as such they cannot receive a tax bill. The City may wish to explore other means of collection for these parcels.

Once the calculated assessment per ERU was calculated as presented in Table 5.3 it was possible to determine the resulting annual stormwater assessments for the single-family tiers described in table 5.4. The assessment levels by tier are based on the statistical distribution of single-family parcels and the midpoint impervious area footprint by tier, shown in the ERU allocation below.

Table 5.4 - Annual Stormwater Assessment Calculation for Tiered Assessments

Funding Level	ERU Allocation	Annual Assessment
Annual Assessment Per ERU	1	$110.71
Tier 1	0.65	$71.96
Tier 2	1.00	$110.71
Tier 3	1.74	$192.64

5.2.1 Single Family Residential Assessment

All single-family residential parcels are placed into one of 3 tiers for billing purposes based on their measured impervious area. Properties are considered to be .65 ERU in the first tier,1.00 ERU in the second, and 1.74 ERUs in the third. The assessment for single family parcels is dependent on the tier in which they reside based on the amount of impervious area measured on the parcel. As impervious area can vary within single family homes, the following figures illustrate varying scenarios. Figure 5.2 represents the experience of a single family parcel in the first tier with smaller than average impervious area, Figure 5.3 indicates a single family parcel with an average amount of impervious area, and Figure 5.4 displays a single family parcel with more impervious area than the average single family home.

Figure 5.2 – Sample Single Family Residential Property (Tier 1)



Parcel Characteristics	
Measured Area	2,012
Billed Area	2,000
Assessment Type	Tier 1
Annual Stormwater Assessment	**$71.96**
Current Effective Annual Stormwater Fee	$87.00
Difference	(15.04)
Change	-17%

Figure 5.3 – Sample Single Family Residential Property (Tier 2)



Parcel Characteristics	
Measured Area	4,090
Billed Area	4,000
Assessment Type	Tier 2
Annual Stormwater Assessment	**$110.71**
Current Effective Annual Stormwater Fee	$87.00
Difference	$23.71
Change	27%

Figure 5.4 – Sample Single Family Residential Property (Tier 3)



Parcel Characteristics	
Measured Area	5,631
Billed Area	5,600
Assessment Type	Tier 3
Annual Stormwater Assessment	**$192.64**
Current Effective Annual Stormwater Fee	$87.00
Difference	$105.84
Change	121%

5.2.2 Non Single-Family Residential Assessment

The following example is provided to demonstrate how the stormwater assessment structure will apply to non single-family residential parcels. Figure 5.5 presents a sample non single family residential property located within the City. The variation in each parcel's assessment is unique to each parcel based on the measured impervious area of the parcel.

Figure 5.5 - Sample Non-Residential Property



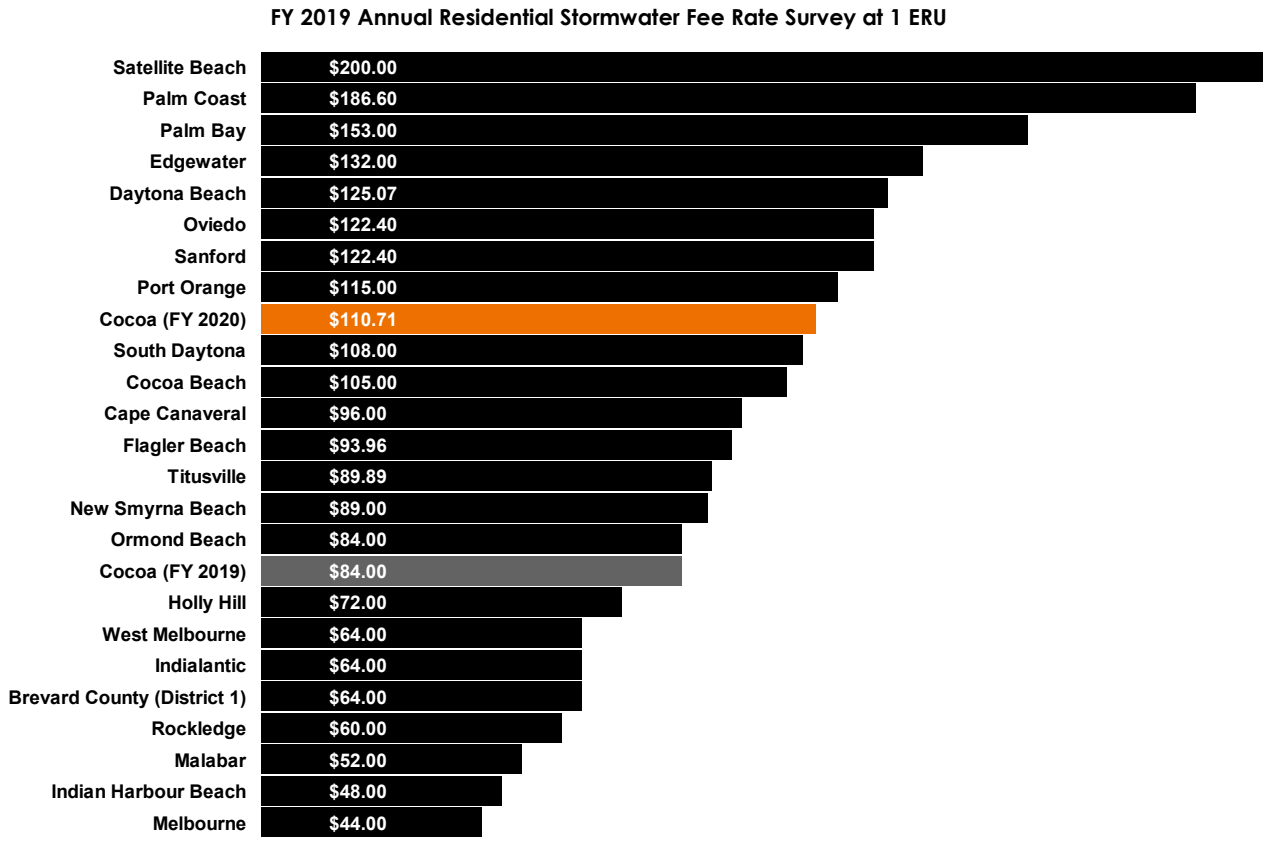
Parcel Characteristics	
Measured Area	34,950
Billed Area	34,900
Billed ERU	10.9
Assessment Type	Measured
Annual Stormwater Assessment	**$1,206.74**
Current Effective Annual Stormwater Fee	$911.28
Difference	$295.46
Change	32%

For parcels containing stacked parcels such as residential condos, the stormwater assessment is generated in the same fashion as a non-single family parcel, but the amount of total impervious area, including common areas, is allocated to each condo parcel by the living area in each taxable condo parcel in order to arrive at an equitable amount of billable impervious area for each stacked condo parcel.

5.3 STORMWATER ASSESSMENT / UTILITY FEE COMPARISON

There are currently approximately 180 communities in Florida with stormwater utilities. To provide insight into how stormwater assessments/utility fees from comparable and local communities align with the assessments calculated in this study, a local benchmarking comparison was developed. Figure 5.6 presents a comparison of the annual stormwater assessments/fees for local utilities.

Figure 5.6 - Stormwater Assessment / Utility Fee Benchmarking Comparison



5.4 STORMWATER CREDITS

We recommend that parcels that engage in onsite stormwater management may receive a credit on their Stormwater Assessment in order to recognize the benefit of the activity to reduce the volume of stormwater leaving the properties, or enhance the quality of the runoff, thereby, reducing the burden on the City's stormwater system. The intent and purpose of the credit is to maintain equity for property owners with onsite stormwater management because such property owners have invested in measures to reduce stormwater runoff from their property and therefore reducing the effort required by the City to manage their stormwater runoff.

We recommend that in order for a property owner to obtain a credit, the property owner must demonstrate a specified reduction of stormwater to the City's stormwater system from the property by providing onsite attenuation for a minimum storm event required by the St. Johns River Water Management District, pursuant to applicable law.

We also recommend that application and eligibility requirements to obtain a credit shall be determined by written administrative policy approved by the City Manager, provided such policy shall be consistent and not in conflict with the Resolution for this assessment, and supported by a written technical memorandum prepared by the City's stormwater assessment consultant evidencing a fair and equitable method of determining the applicable credit.

Disclaimer

This document was produced by Stantec Consulting Services, Inc. ("Stantec") for the City of Cocoa and is based on a specific scope agreed upon by both parties. Stantec's scope of work and services do not include serving as a "municipal advisor" for purposes of the registration requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission. Stantec is not advising the City of Cocoa, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, terms, or other similar matters concerning such products or issuances.

In preparing this report, Stantec utilized information and data obtained from the City of Cocoa or public and/or industry sources. Stantec has relied on the information and data without independent verification, except only to the extent such verification is expressly described in this document. Any projections of future conditions presented in the document are not intended as predictions, as there may be differences between forecasted and actual results, and those differences may be material.

Additionally, the purpose of this document is to summarize Stantec's analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliances on data that are not readily apparent on the face of it. Moreover, the reader should understand that Stantec was called on to provide judgments on a variety of critical factors which are incapable of precise measurement. As such, the use of this document and its findings by the City of Cocoa should only occur after consultation with Stantec, and any use of this document and findings by any other person is done so entirely at their own risk.

APPENDIX A: RSA SUPPORTING SCHEDULES

Schedule 1 - Contains the assumptions of the RSA, including developed property growth assumptions

Schedule 2 - Identifies the end of FY 2018 fund balances that serve as the FY 2019 beginning balances of the analysis

Schedule 3 - Presents a list of all projected cash inflows from FY 2019 - FY 2029

Schedule 4 - Presents a list of all projected cash outflows from FY 2019 - FY 2029

Schedule 5 - Presents a list of all cost escalation factors utilized in the projection of cash outflows

Schedule 6 - Provides a detailed listing the annual capital improvement projects from FY 2019 through FY 2029

Schedule 7 - Contains the FAMS-XL Control Panel that presents a summary of the financial management plan, including annual assessment increases, debt service coverage ratios, total CIP spending levels, property impacts, and fund balances

Schedule 8 - Presents the projected annual net income, debt coverage, and cash flow results

Schedule 9 - Shows the projected funding sources for the capital improvement program

Schedule 10 - Presents a fund-level cash flow reconciliation, providing the beginning balance in each year, the amount utilized for project funding or payment of debt service, interest earnings calculations, and the end of year fund balance

Schedule 11 – Borrowing projections including interest rate and debt service.

Assumptions — Schedule 1

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Increase Adoption Date	10/1/2018	10/1/2019	10/1/2020	10/1/2021	10/1/2022	10/1/2023	10/1/2024	10/1/2025	10/1/2026	10/1/2027	10/1/2028
Annual Growth											
Stormwater											
Ending # of Equivalent Units	24,097	24,190	24,283	24,378	24,473	24,568	24,661	24,758	24,853	24,951	25,048
Equivalent Unit Growth	(115)	93	93	95	95	94	94	96	95	98	97
% Change in Equivalent Units	*-0.47%*	*0.38%*	*0.39%*	*0.39%*	*0.39%*	*0.39%*	*0.38%*	*0.39%*	*0.39%*	*0.39%*	*0.39%*
Capital Spending											
Annual Capital Budget (Future Year Dollars)	$ 385,000	$ 3,033,880	$ 2,241,813	$ 449,492	$ 329,364	$ 1,573,026	$ 194,663	$ 1,617,971	$ 410,490	$ 1,352,494	$ 1,169,089
Annual Percent Executed	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average Annual Interest Earnings Rate											
On Fund Balances	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.00%	2.00%	2.00%
Operating Budget Reserve											
Target (Number of Months of Reserve)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Operating Budget Execution Percentage											
Personal Services	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Variable Operations and Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Fixed Operations and Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Capital Outlay	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

FY 2019 Beginning Balances — Schedule 2

Stantec Grouping of Funds in Model		Revenue Fund
Current Unrestricted Assets		
Cash and Cash Equivalents	$	624,521
Investments		194,349
Accounts Reveivable, Earned		
Billed (net)		224,066
Unbilled		46,348
Interest Receivable		913
Prepaid Items		5,939
Total Assets	**$**	**1,096,136**
Current Liabilities		
Accounts and Claims Payable	$	(282,985)
Accrued Payroll and Related Liabilities		(8,958)
Compensated Absences		(5,680)
Calculated Fund Balance (Assets - Liabilities)	**$**	**798,513**
Plus/(Less): Prepaid Items		(5,939)
Net Unrestricted Fund Balance	**$**	**792,574**
Available Fund Balance	**$**	**792,574**

Fund Summary

Revenue Fund	$	792,574
Total Available Funds	**$**	**792,574**

Projection of Cash Inflows — Schedule 3

		FY 2019[1]	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1	**Rate Revenue Growth Assumptions**											
2	% Change in Revenue	-0.47%	0.38%	0.39%	0.39%	0.39%	0.39%	0.38%	0.39%	0.39%	0.39%	0.39%
3	**Assumed Rate Revenue Increases**	3.70%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
4	**Stormwater Rate Revenue**	$ 1,594,500	$ 1,744,683	$ 1,909,050	$ 2,089,002	$ 2,160,051	$ 2,233,425	$ 2,309,195	$ 2,387,769	$ 2,468,886	$ 2,552,959	$ 2,639,733
5	**Total Stormwater Rate Revenue**	**$ 1,594,500**	**$ 1,744,683**	**$ 1,909,050**	**$ 2,089,002**	**$ 2,160,051**	**$ 2,233,425**	**$ 2,309,195**	**$ 2,387,769**	**$ 2,468,886**	**$ 2,552,959**	**$ 2,639,733**
6	**Interest Income**											
7	Unrestricted	$ 1,970	$ 2,973	$ 3,090	$ 4,243	$ 5,463	$ 6,754	$ 10,755	$ 12,574	$ 10,831	$ 11,132	$ 10,467
8	**Total Interest Income**	**$ 1,970**	**$ 2,973**	**$ 3,090**	**$ 4,243**	**$ 5,463**	**$ 6,754**	**$ 10,755**	**$ 12,574**	**$ 10,831**	**$ 11,132**	**$ 10,467**
9	**Total Cash Inflows**	**$ 1,596,470**	**$ 1,747,656**	**$ 1,912,139**	**$ 2,093,245**	**$ 2,165,514**	**$ 2,240,179**	**$ 2,319,951**	**$ 2,400,343**	**$ 2,479,717**	**$ 2,564,092**	**$ 2,650,200**

[1] The FY 2019 rate revenue increase of 3.70% represents the actual rate increase from $6.75 per SFU per month in FY 2018 to $7.00 per SFU per month in FY 2019.

Projection of Cash Outflows — Schedule 4

	Account Number	Expense Line Item	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
		Personnel Services											
1	423-3570-538.12-00	Regular Salaries & Wages	$ 397,853	$ 409,789	$ 422,082	$ 434,745	$ 447,787	$ 461,221	$ 475,057	$ 489,309	$ 503,988	$ 519,108	$ 534,681
2	423-3570-538.13-00	Other Salaries & Wages	44,089	45,412	46,774	48,177	49,623	51,111	52,645	54,224	55,851	57,526	59,252
3	423-3570-538.14-00	Overtime	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	6,720
4	423-3570-538.20-00	Clothing/Shoe Allowance	550	567	583	601	619	638	657	676	697	718	739
5	423-3570-538.21-00	FICA Taxes	31,629	32,578	33,555	34,562	35,599	36,667	37,767	38,900	40,067	41,269	42,507
6	423-3570-538.22-00	Retirement Contributions	41,798	43,052	44,343	45,674	47,044	48,455	49,909	51,406	52,948	54,537	56,173
7	423-3570-538.23-00	Life/Health Insurance	120,858	129,318	135,784	142,573	149,702	157,187	165,046	173,299	181,963	191,062	200,615
8	423-3570-538.24-00	Worker's Compensation	58,003	59,743	61,535	63,381	65,283	67,241	69,259	71,336	73,476	75,681	77,951
9	423-3570-538.27-00	Cafeteria Plan	7,680	7,910	8,148	8,392	8,644	8,903	9,170	9,445	9,729	10,021	10,321
10		Movement of PS Expenses to GF	-	(183,441)	(188,944)	(194,613)	(200,451)	(206,464)	(212,658)	(219,038)	(225,609)	(232,378)	(239,349)
		Operating Expenses											
11	423-3570-538.31-00	Professional Services	$ 211,441	$ 217,784	$ 224,318	$ 231,047	$ 237,979	$ 245,118	$ 252,472	$ 260,046	$ 267,847	$ 275,883	$ 284,159
12	423-3570-538.31-01	Professional Services	500	515	530	546	563	580	597	615	633	652	672
13	423-3570-538.31-33	Professional Services	6,300	6,489	6,684	6,884	7,091	7,303	7,523	7,748	7,981	8,220	8,467
14	423-3570-538.34-00	Contract Services	7,200	7,416	7,638	7,868	8,104	8,347	8,597	8,855	9,121	9,394	9,676
15	423-3570-538.34-10	Cost of General Fund Services	94,343	172,205	177,371	182,692	188,173	193,818	199,633	205,622	211,790	218,144	224,688
16	423-3570-538.39-00	Contingency	6,666	6,766	6,867	6,970	7,075	7,181	7,289	7,398	7,509	7,622	7,736
17	423-3570-538.40-00	Travel & Per Diem	4,800	4,872	4,945	5,019	5,095	5,171	5,249	5,327	5,407	5,488	5,571
18	423-3570-538.41-00	Communication	1,224	1,242	1,261	1,280	1,299	1,319	1,338	1,358	1,379	1,400	1,421
19	423-3570-538.42-00	Postage & Freight	750	761	773	784	796	808	820	832	845	858	870
20	423-3570-538.43-00	Electric/Water/Sewer	17,456	18,329	19,245	20,207	21,218	22,279	23,393	24,562	25,790	27,080	28,434
21	423-3570-538.44-00	Rentals And Leases	5,000	5,075	5,151	5,228	5,307	5,386	5,467	5,549	5,632	5,717	5,803
22	423-3570-538.45-00	Insurance	4,954	5,202	5,462	5,735	6,022	6,323	6,639	6,971	7,319	7,685	8,070
23	423-3570-538.46-00	Repairs & Maintenance	37,500	38,625	39,784	40,977	42,207	43,473	44,777	46,120	47,504	48,929	50,397
24	423-3570-538.46-03	Repairs & Maintenance	35,873	36,949	38,058	39,199	40,375	41,587	42,834	44,119	45,443	46,806	48,210
25	423-3570-538.47-00	Printing & Binding	1,000	1,015	1,030	1,046	1,061	1,077	1,093	1,110	1,126	1,143	1,161
26	423-3570-538.49-00	Other Charges & Oblig.	2,500	2,538	2,576	2,614	2,653	2,693	2,734	2,775	2,816	2,858	2,901
27	423-3570-538.49-07	Other Charges & Oblig.	10,000	10,150	10,302	10,457	10,614	10,773	10,934	11,098	11,265	11,434	11,605
28	423-3570-538.52-00	Operating Supplies	14,144	14,356	14,572	14,790	15,012	15,237	15,466	15,698	15,933	16,172	16,415
29	423-3570-538.52-30	Operating Supplies	22,934	23,278	23,627	23,982	24,341	24,706	25,077	25,453	25,835	26,223	26,616
30	423-3570-538.52-33	Operating Supplies	3,200	3,248	3,297	3,346	3,396	3,447	3,499	3,552	3,605	3,659	3,714
31	423-3570-538.54-00	Membership/Publications	1,100	1,117	1,133	1,150	1,167	1,185	1,203	1,221	1,239	1,258	1,277
32	423-3570-538.55-00	Training	4,500	4,568	4,636	4,706	4,776	4,848	4,920	4,994	5,069	5,145	5,222
33		Pond Maintenance	-	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
34		Annual Curb & Gutter R&M Program	20,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
35		Additional O&M Expenses[1]	-	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095
		Capital Outlay											
36		Replace or Line Corrugated Metal Pipe (CMP	$ -	$ 193,750	$ 193,750	$ 193,750	$ 193,750	$ 193,750	$ -	$ -	$ -	$ -	$ -
		Total Expenses by Category											
37		Personal Services	$ 707,460	$ 550,077	$ 569,166	$ 588,956	$ 609,477	$ 630,755	$ 652,821	$ 675,707	$ 699,444	$ 724,067	$ 749,610
38		Variable Operations & Maintenance	17,456	18,329	19,245	20,207	21,218	22,279	23,393	24,562	25,790	27,080	28,434
39		Operations & Maintenance	495,929	649,170	665,615	682,540	699,960	717,891	736,346	755,343	774,897	795,026	815,745
40		Capital Outlay	-	193,750	193,750	193,750	193,750	193,750	-	-	-	-	-
41		**Total Expenses**	**$ 1,220,845**	**$ 1,411,326**	**$ 1,447,776**	**$ 1,485,454**	**$ 1,524,405**	**$ 1,564,674**	**$ 1,412,560**	**$ 1,455,612**	**$ 1,500,132**	**$ 1,546,172**	**$ 1,593,789**
		Expense Execution Factors											
42		Personal Services	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
43		Variable Operations & Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
44		Operations & Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
45		Capital Outlay	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
		Total Expenses at Execution											
46		Personal Services	$ 707,460	$ 550,077	$ 569,166	$ 588,956	$ 609,477	$ 630,755	$ 652,821	$ 675,707	$ 699,444	$ 724,067	$ 749,610
47		Variable Operations & Maintenance	17,456	18,329	19,245	20,207	21,218	22,279	23,393	24,562	25,790	27,080	28,434
48		Operations & Maintenance	495,929	649,170	665,615	682,540	699,960	717,891	736,346	755,343	774,897	795,026	815,745
49		Capital Outlay	-	193,750	193,750	193,750	193,750	193,750	-	-	-	-	-
50	`	**Total Expenses at Execution**	**$ 1,220,845**	**$ 1,411,326**	**$ 1,447,776**	**$ 1,485,454**	**$ 1,524,405**	**$ 1,564,674**	**$ 1,412,560**	**$ 1,455,612**	**$ 1,500,132**	**$ 1,546,172**	**$ 1,593,789**
		Debt Service											
51		Cumulative New Debt Service	-	206,863	299,073	299,073	374,729	397,503	397,503	442,809	456,447	456,447	531,224
52		**Total Debt Service**	**$ -**	**$ 206,863**	**$ 299,073**	**$ 299,073**	**$ 374,729**	**$ 397,503**	**$ 397,503**	**$ 442,809**	**$ 456,447**	**$ 456,447**	**$ 531,224**
53		**Total Cash Outflows**	**$ 1,220,845**	**$ 1,618,190**	**$ 1,746,849**	**$ 1,784,527**	**$ 1,899,133**	**$ 1,962,177**	**$ 1,810,063**	**$ 1,898,421**	**$ 1,956,579**	**$ 2,002,620**	**$ 2,125,013**

[1] Reflects O&M costs related to the "Riverfront Park In-Lagoon Nutrient Removal Facility" and the "Diamond Square Verizon Stormwater Pond" projects, per dicussions with City Staff.

Cost Escalation Factors

Schedule 5

Account Number	Expense Line Item Description	Inflation Factor	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
	Personnel Services											
423-3570-538.12-00	Regular Salaries & Wages	Salaries & Wages	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.13-00	Other Salaries & Wages	Salaries & Wages	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.14-00	Overtime	Salaries & Wages	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.20-00	Clothing/Shoe Allowance	Personnel Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.21-00	FICA Taxes	Salaries & Wages	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.22-00	Retirement Contributions	Retirement	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.23-00	Life/Health Insurance	Health Insurance	7.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
423-3570-538.24-00	Worker's Compensation	Salaries & Wages	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.27-00	Cafeteria Plan	Personnel Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
	Operating Expenses											
423-3570-538.31-00	Professional Services	Professional/Contract Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.31-01	Professional Services	Professional/Contract Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.31-33	Professional Services	Professional/Contract Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.34-00	Contract Services	Professional/Contract Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.34-10	Contract Services	Professional/Contract Services	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.39-00	Contingency	Default Inflation Factor	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.40-00	Travel & Per Diem	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.41-00	Communication	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.42-00	Postage & Freight	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.43-00	Electric/Water/Sewer	Fuel, Utilities, Chemicals	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
423-3570-538.44-00	Rentals And Leases	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.45-00	Insurance	Other Insurance	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
423-3570-538.46-00	Repairs & Maintenance	Repair & Maintenance	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.46-03	Repairs & Maintenance	Repair & Maintenance	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
423-3570-538.47-00	Printing & Binding	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.49-00	Other Charges & Oblig.	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.49-07	Other Charges & Oblig.	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.52-00	Operating Supplies	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.52-30	Operating Supplies	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.52-33	Operating Supplies	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.54-00	Membership/Publications	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
423-3570-538.55-00	Training	Fixed O&M Costs	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
	Pond Maintenance	Default Inflation Factor	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
	Replace or Line Corrugated Metal Pipe (CMI	CIP Escalation	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
	Annual Curb & Gutter R&M Program	CIP Escalation	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
	Weighted Average Increase in O&M Expenses [1]		-0.27%	2.99%	3.00%	3.02%	3.03%	3.04%	3.05%	3.06%	3.07%	3.08%

[1] The Weighted Average Increase in O&M Expenses is reflective of the cost escalation factors presented on this schedule and the cost execution factors on Schedule 1.

Capital Improvement Program — Schedule 6

		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
	Project Description											
	FY 2019 Capital Improvements											
1	Annual Cured in Place Pipe Lining	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	Stormwater GIS Asset Mapping	50,000	-	-	-	-	-	-	-	-	-	-
3	US1 and Forrest Ave Stormwater Facility	135,000	-	-	-	-	-	-	-	-	-	-
	Flood Mitigation											
4	Range Road Ditch Piping	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 387,000	$ -	$ -	$ -
5	Junction Structure at Plaza Parkway & Highland Drive C	-	-	-	-	-	-	-	-	165,848	-	-
6	Pineda St. Drainage Improvements - Peachtree to Dixor	-	-	-	-	233,415	933,660	-	-	-	-	-
7	Bracco Pond Outfall and Discharge Structure	-	-	-	-	-	-	-	-	-	-	536,445
8	Replace or Line Corrugated Metal Pipe (CMP) Piping[1]	-	-	-	-	-	-	-	-	-	-	-
9	Driveway Culvert Replacements (Cox Road)	-	-	254,709	254,709	-	-	-	-	-	-	-
10	Provost Park / Pinegrove Park Ditch Piping	-	-	-	-	-	-	-	244,125	-	-	-
11	Fairfax Ln. Exfiltration Expansion, Highpoint Subdivision	-	-	353,808	-	-	-	-	-	-	-	-
12	Cocoa North Rear Yard Ditch Piping (London Blvd. to W	-	-	-	-	-	-	99,918	399,672	99,918	399,672	-
13	Annual Curb & Gutter R&M Program[1]	-	-	-	-	-	-	-	-	-	-	-
14	West Dixon Blvd. Stormwater Facility	-	-	-	-	-	-	-	-	-	-	291,564
15	iWorks Integration Between GIS and Operations & Main	-	77,777	-	-	-	-	-	-	-	-	-
16	Comprehensive System Model	-	125,000	-	-	-	-	-	-	-	-	-
17	Mud Lake Improvements	-	-	-	-	-	-	-	77,770	-	-	-
	Water Quality Projects											
18	Project WQ-10: 72" Outfall Baseflow Capture Treatment	$ -	$ 1,216,663	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
19	Project WQ-11: Horseshoe Ponds (North & South) Vege	-	236,670	-	-	-	-	-	-	-	-	-
20	Project WQ-12: Verizon Stormwater Pond in Diamon Sc	-	549,643	-	-	-	-	-	-	-	-	-
21	Project WQ-15: Add Floating Wetlands to Existing Storn	-	206,635	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000
22	Project WQ-16: Riverfront Park In-Lagoon Nutrient Rem	-	-	1,500,000	-	-	-	-	-	-	-	-
23	Project WQ-20: De-muck/Dredge SR 520 Relief Channe	-	282,900	-	-	-	-	-	-	-	-	-
	Major Equipment Replacement Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
24	ISUZU FVR TYMCO 500X	-	338,592	-	-	-	-	-	-	-	-	-
25	FORD F150	-	-	-	25,989	-	-	-	-	-	-	-
26	FORD 350SD	-	-	-	74,991	-	-	-	-	-	-	-
27	International TYMCO 600X	-	-	-	-	-	395,953	-	-	-	-	-
28	Sterling Acterra	-	-	-	-	-	-	-	178,459	-	-	-
29	FORD VAC-CON	-	-	-	-	-	-	-	-	-	599,999	-
30	**Total CIP Budget (in current dollars)[2]**	**$ 385,000**	**$ 3,033,880**	**$ 2,176,517**	**$ 423,689**	**$ 301,415**	**$ 1,397,613**	**$ 167,918**	**$ 1,355,026**	**$ 333,766**	**$ 1,067,671**	**$ 896,009**
31	Cumulative Projected Cost Escalation[3]	0.0%	0.0%	3.0%	6.1%	9.3%	12.6%	15.9%	19.4%	23.0%	26.7%	30.5%
32	**Resulting CIP Funding Level**	**$ 385,000**	**$ 3,033,880**	**$ 2,241,813**	**$ 449,492**	**$ 329,364**	**$ 1,573,026**	**$ 194,663**	**$ 1,617,971**	**$ 410,490**	**$ 1,352,494**	**$ 1,169,089**
33	Annual CIP Execution Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
34	**Final CIP Funding Level**	**$ 385,000**	**$ 3,033,880**	**$ 2,241,813**	**$ 449,492**	**$ 329,364**	**$ 1,573,026**	**$ 194,663**	**$ 1,617,971**	**$ 410,490**	**$ 1,352,494**	**$ 1,169,089**

[1] The replacement of corrugated metal pipe and the annual curb and gutter R&M program are treated as minor capital outlay and O&M expenses, respectively (see schedule 4).

[2] The CIP plan on this schedule was developed per discussions with City Staff and updated on July 30, 2019 per discussions with the engineering team "Mead and Hunt" .

[3] CIP Escalation factors are consistent with the Engineering News Record Construction Cost Index.

FAMS - Control Panel **Schedule 7**

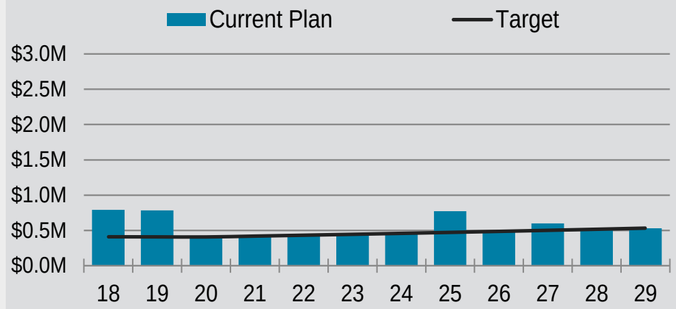
FAMS-XL | CITY OF COCOA

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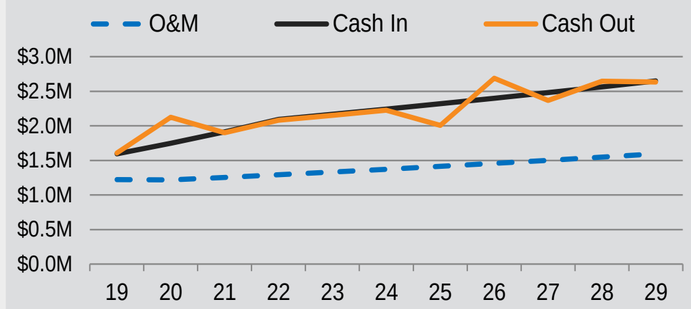
CALC SAVE CTRL LAST OVR

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2025	FY 2029
Revenue Adjusment Plan	0.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	37.39%	59.27%
Senior-Lien DSC	0.00	2.56	2.20	2.68	2.23	2.19	2.28	2.13	2.15	2.23	1.99	Scenario Manager	

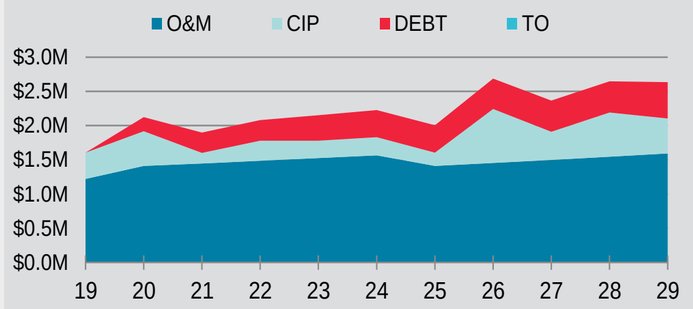
Operating Fund



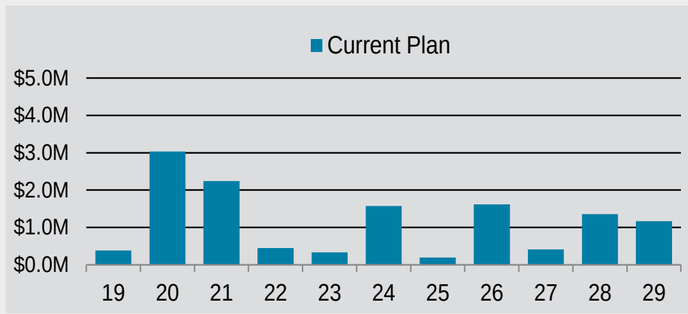
Revenues vs. Expenses



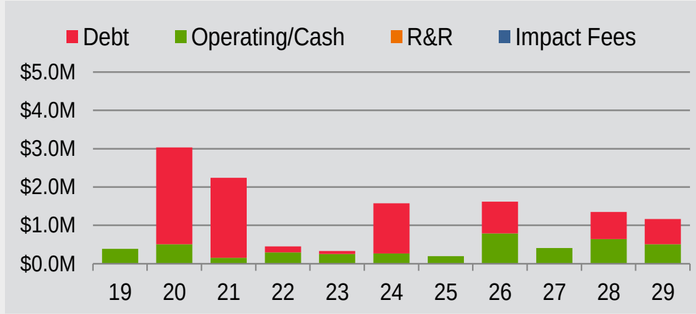
Expenses by Type



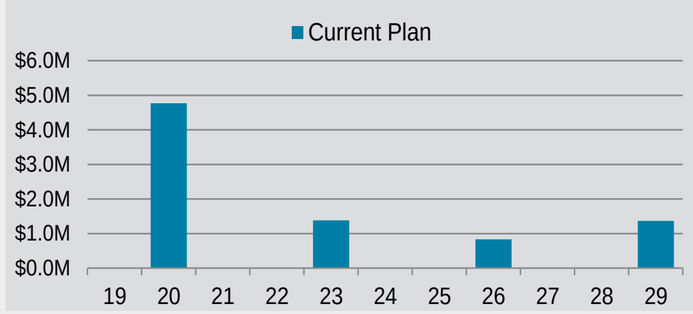
CIP Spending



CIP Funding



Borrowing



Pro Forma — Schedule 8

			FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
	Operating Revenue												
1	Stormwater Rate Revenue		$ 1,594,500	$ 1,594,500	$ 1,744,683	$ 1,909,050	$ 2,089,002	$ 2,160,051	$ 2,233,425	$ 2,309,195	$ 2,387,769	$ 2,468,886	$ 2,552,959
2	Change in Revenue From Growth		-	6,126	6,739	7,466	8,135	8,323	8,512	9,027	9,208	9,715	9,889
3	Subtotal		$ 1,594,500	$ 1,600,627	$ 1,751,422	$ 1,916,515	$ 2,097,136	$ 2,168,374	$ 2,241,937	$ 2,318,223	$ 2,396,977	$ 2,478,601	$ 2,562,848
4	*Weighted Average Rate Increase*		*0.00%*	*9.00%*	*9.00%*	*9.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
5	Additional Rate Revenue From Rate Increase		-	144,056	157,628	172,486	62,914	65,051	67,258	69,547	71,909	74,358	76,885
6	Total Rate Revenue		$ 1,594,500	$ 1,744,683	$ 1,909,050	$ 2,089,002	$ 2,160,051	$ 2,233,425	$ 2,309,195	$ 2,387,769	$ 2,468,886	$ 2,552,959	$ 2,639,733
7	Plus: Other Operating Revenue		-	-	-	-	-	-	-	-	-	-	-
8	**Equals: Total Operating Revenue**		**$ 1,594,500**	**$ 1,744,683**	**$ 1,909,050**	**$ 2,089,002**	**$ 2,160,051**	**$ 2,233,425**	**$ 2,309,195**	**$ 2,387,769**	**$ 2,468,886**	**$ 2,552,959**	**$ 2,639,733**
	Less: Operating Expenses												
9	Personal Services		$ (707,460)	$ (550,077)	$ (569,166)	$ (588,956)	$ (609,477)	$ (630,755)	$ (652,821)	$ (675,707)	$ (699,444)	$ (724,067)	$ (749,610)
10	Variable Operations & Maintenance Costs		(17,456)	(18,329)	(19,245)	(20,207)	(21,218)	(22,279)	(23,393)	(24,562)	(25,790)	(27,080)	(28,434)
11	Operations & Maintenance Costs		(495,929)	(649,170)	(665,615)	(682,540)	(699,960)	(717,891)	(736,346)	(755,343)	(774,897)	(795,026)	(815,745)
12	**Equals: Net Operating Income**		**$ 373,655**	**$ 527,107**	**$ 655,024**	**$ 797,298**	**$ 829,396**	**$ 862,501**	**$ 896,635**	**$ 932,157**	**$ 968,754**	**$ 1,006,787**	**$ 1,045,944**
	Plus: Non-Operating Income/(Expense)												
13	Interest Income		$ 1,970	$ 2,973	$ 3,090	$ 4,243	$ 5,463	$ 6,754	$ 10,755	$ 12,574	$ 10,831	$ 11,132	$ 10,467
14	**Equals: Net Income**		**$ 375,625**	**$ 530,079**	**$ 658,113**	**$ 801,541**	**$ 834,859**	**$ 869,255**	**$ 907,390**	**$ 944,731**	**$ 979,585**	**$ 1,017,920**	**$ 1,056,411**
15	**Equals: Net Income Available For Debt Service**		**$ 375,625**	**$ 530,079**	**$ 658,113**	**$ 801,541**	**$ 834,859**	**$ 869,255**	**$ 907,390**	**$ 944,731**	**$ 979,585**	**$ 1,017,920**	**$ 1,056,411**
	Senior Lien Debt Service Coverage Test												
16	Net Income Available for Senior-Lien Debt Service		**$ 375,625**	**$ 530,079**	**$ 658,113**	**$ 801,541**	**$ 834,859**	**$ 869,255**	**$ 907,390**	**$ 944,731**	**$ 979,585**	**$ 1,017,920**	**$ 1,056,411**
17	Cumulative New Senior Lien Debt Service (calculated)		-	206,863	299,073	299,073	374,729	397,503	397,503	442,809	456,447	456,447	531,224
18	**Total Annual Senior-Lien Debt Service**	**Targ.**	**$ -**	**$ 206,863**	**$ 299,073**	**$ 299,073**	**$ 374,729**	**$ 397,503**	**$ 397,503**	**$ 442,809**	**$ 456,447**	**$ 456,447**	**$ 531,224**
19	*Calculated Senior-Lien Debt Service Coverage*	**1.50**	**-**	**2.56**	**2.20**	**2.68**	**2.23**	**2.19**	**2.28**	**2.13**	**2.15**	**2.23**	**1.99**
	Cash Flow Test												
20	Net Income Available For Debt Service		$ 375,625	$ 530,079	$ 658,113	$ 801,541	$ 834,859	$ 869,255	$ 907,390	$ 944,731	$ 979,585	$ 1,017,920	$ 1,056,411
21	Less: Non-Operating Expenditures												
22	Net Debt Service Payment		-	(206,863)	(299,073)	(299,073)	(374,729)	(397,503)	(397,503)	(442,809)	(456,447)	(456,447)	(531,224)
23	Capital Outlay		-	(193,750)	(193,750)	(193,750)	(193,750)	(193,750)	-	-	-	-	-
24	**Net Cash Flow**		**$ 375,625**	**$ 129,466**	**$ 165,290**	**$ 308,717**	**$ 266,381**	**$ 278,002**	**$ 509,887**	**$ 501,922**	**$ 523,138**	**$ 561,472**	**$ 525,187**
	Unrestricted Reserve Fund Test												
25	Balance At Beginning Of Fiscal Year		$ 792,574	$ 783,199	$ 405,859	$ 418,009	$ 430,568	$ 443,552	$ 456,975	$ 772,199	$ 485,204	$ 597,852	$ 515,391
26	Cash Flow Surplus/(Deficit)		375,625	129,466	165,290	308,717	266,381	278,002	509,887	501,922	523,138	561,472	525,187
27	Projects Designated To Be Paid With Cash		-	(206,635)	(70,040)	(72,141)	(74,305)	(76,535)	(78,831)	(81,196)	(83,631)	(86,140)	(88,725)
28	Projects Paid With Non Specified Funds		(385,000)	(300,171)	(83,100)	(224,017)	(179,091)	(188,044)	(115,832)	(707,722)	(326,859)	(557,793)	(420,590)
29	**Balance At End Of Fiscal Year**		**$ 783,199**	**$ 405,859**	**$ 418,009**	**$ 430,568**	**$ 443,552**	**$ 456,975**	**$ 772,199**	**$ 485,204**	**$ 597,852**	**$ 515,391**	**$ 531,263**
30	Minimum Working Capital Reserve Target		406,948	405,859	418,009	430,568	443,552	456,975	470,853	485,204	500,044	515,391	531,263
31	**Excess/(Deficiency) Of Working Capital To Target**		**$ 376,251**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 301,346**	**$ -**	**$ 97,808**	**$ -**	**$ -**

Capital Project Funding Summary

Schedule 9

Final Capital Projects Funding Sources	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenue Fund	$ 385,000	$ 300,171	$ 83,100	$ 224,017	$ 179,091	$ 188,044	$ 115,832	$ 707,722	$ 326,859	$ 557,793	$ 420,590
Senior-Lien Debt Proceeds	-	2,527,074	2,088,672	153,334	75,967	1,308,447	-	829,054	-	708,561	659,774
Projects Designated To Be Paid With Cash	-	206,635	70,040	72,141	74,305	76,535	78,831	81,196	83,631	86,140	88,725
Total Projects Paid	**$ 385,000**	**$ 3,033,880**	**$ 2,241,813**	**$ 449,492**	**$ 329,364**	**$ 1,573,026**	**$ 194,663**	**$ 1,617,971**	**$ 410,490**	**$ 1,352,494**	**$ 1,169,089**

Funding Summary by Fund — Schedule 10

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenue Fund											
Balance At Beginning Of Fiscal Year	$ 792,574	$ 783,199	$ 405,859	$ 418,009	$ 430,568	$ 443,552	$ 456,975	$ 772,199	$ 485,204	$ 597,852	$ 515,391
Net Cash Flow	375,625	129,466	165,290	308,717	266,381	278,002	509,887	501,922	523,138	561,472	525,187
Less: Cash-Funded Capital Projects	-	(206,635)	(70,040)	(72,141)	(74,305)	(76,535)	(78,831)	(81,196)	(83,631)	(86,140)	(88,725)
Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
Subtotal	$ 1,168,199	$ 706,030	$ 501,109	$ 654,585	$ 622,643	$ 645,019	$ 888,031	$ 1,192,926	$ 924,710	$ 1,073,183	$ 951,853
Less: Restricted Funds	(406,948)	(405,859)	(418,009)	(430,568)	(443,552)	(456,975)	(470,853)	(485,204)	(500,044)	(515,391)	(531,263)
Total Amount Available For Projects	761,251	300,171	83,100	224,017	179,091	188,044	417,178	707,722	424,666	557,793	420,590
Amount Paid For Projects	(385,000)	(300,171)	(83,100)	(224,017)	(179,091)	(188,044)	(115,832)	(707,722)	(326,859)	(557,793)	(420,590)
Subtotal	$ 376,251	$ -	$ -	$ -	$ -	$ -	$ 301,346	$ -	$ 97,808	$ -	$ -
Add Back: Restricted Funds	406,948	405,859	418,009	430,568	443,552	456,975	470,853	485,204	500,044	515,391	531,263
Plus: Interest Earnings	1,970	2,973	3,090	4,243	5,463	6,754	10,755	12,574	10,831	11,132	10,467
Less: Interest Allocated To Cash Flow	(1,970)	(2,973)	(3,090)	(4,243)	(5,463)	(6,754)	(10,755)	(12,574)	(10,831)	(11,132)	(10,467)
Balance At End Of Fiscal Year	**$ 783,199**	**$ 405,859**	**$ 418,009**	**$ 430,568**	**$ 443,552**	**$ 456,975**	**$ 772,199**	**$ 485,204**	**$ 597,852**	**$ 515,391**	**$ 531,263**
Restricted Reserves											
Balance At Beginning Of Fiscal Year	$ -	$ -	$ 299,821	$ 302,070	$ 305,090	$ 407,949	$ 414,068	$ 421,314	$ 489,274	$ 499,060	$ 509,041
Additional Funds:	-	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve On New Debt	$0	$299,073	$0	$0	$98,430	$0	$0	$58,944	$0	$0	$97,287
Other Additional Funds	-	-	-	-	-	-	-	-	-	-	-
Subtotal	$ -	$ 299,073	$ 299,821	$ 302,070	$ 403,520	$ 407,949	$ 414,068	$ 480,259	$ 489,274	$ 499,060	$ 606,328
Plus: Interest Earnings	-	748	2,249	3,021	4,429	6,119	7,246	9,016	9,785	9,981	11,154
Less: Interest Allocated To Cash Flow	-	-	-	-	-	-	-	-	-	-	-
Balance At End Of Fiscal Year	**$ -**	**$ 299,821**	**$ 302,070**	**$ 305,090**	**$ 407,949**	**$ 414,068**	**$ 421,314**	**$ 489,274**	**$ 499,060**	**$ 509,041**	**$ 617,481**

Senior Lien Borrowing Projections — Schedule 11

			FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Term (Years)			30	30	30	30	30	30	30	30	30	30	30
Interest Rate			3.50%	4.00%	4.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Sources of Funds													
Par Amount			$ -	$ 5,171,585	$ -	$ -	$ 1,513,106	$ -	$ -	$ 906,121	$ -	$ -	$ 1,495,532
Uses of Funds													
Proceeds			$ -	$ 4,769,080	$ -	$ -	$ 1,384,414	$ -	$ -	$ 829,054	$ -	$ -	$ 1,368,335
Cost of Issuance	2.00%	of Par	-	103,432	-	-	30,262	-	-	18,122	-	-	29,911
Debt Service Reserve	1	Year(s) of Debt Service	-	299,073	-	-	98,430	-	-	58,944	-	-	97,287
Total Uses			$ -	$ 5,171,585	$ -	$ -	$ 1,513,106	$ -	$ -	$ 906,121	$ -	$ -	$ 1,495,532
1 Year Interest			-	206,863	-	-	75,655	-	-	45,306	-	-	74,777
Annual Debt Service			$ -	$ 299,073	$ -	$ -	$ 98,430	$ -	$ -	$ 58,944	$ -	$ -	$ 97,287
Total Debt Service			-	8,972,198	-	-	2,952,892	-	-	1,768,334	-	-	2,918,595
Cumulative New Annual Senior Lien Debt Service[1]			**$ -**	**$ 206,863**	**$ 299,073**	**$ 299,073**	**$ 374,729**	**$ 397,503**	**$ 397,503**	**$ 442,809**	**$ 456,447**	**$ 456,447**	**$ 531,224**

[1]Reflects interest-only payment due in year of issuance.

Legislation Details (With Text)

File #:	19-393	**Version:**	1	**Name:**	
Type:	Resolution			**Status:**	Multi-Year Contract
File created:	8/9/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	

Title: Approve a Resolution Amending the FY19 Budget to Reallocate Funds from the “Surface Water Plant Clearwell Addition and Reject Pond Improvements”, Project No. WS1402 in the amount of $49,396.62, and from the “Dyal TTHM Prevention and/or Reduction”, Project No. WS18DT in the amount of $45,393.01 into the Groundwater Cal-Flo pH Adjustment Project, Project No. WS19CF; To Approve a Resolution Waiving the Competitive Bidding Process to Purchase a 48-inch PCCP Tap Services from Thompson Pipe Group; To Approve the Cal Flo Project as a Multi-Year Project; To Approve a Resolution Authorizing the City Manager to Approve Change Orders in an amount Not To Exceed $8,617.24 (10% of the contract amount); To Authorize the City Manager to Execute the Contract. (Utilities Director)

Sponsors:

Indexes:

Code sections:

Attachments:
Budget Resolution FY 2019 (rev 11-13-18).pdf
Cocoa Task Order 2019-101_Cal-Flo Groundwater Chemical Feed Automation.pdf
Cocoa Task Order 2019-101 Cal-Flo Groundwater Chemical Feed Automation - Labor Hours
2019 07 18 Proposal for Additional Pump.pdf
Tap Quote-02.pdf
(08 14 2019) Resolution - Sole Source - Thompson.pdf
BAF 19-113-UT-SCADA, New Pump and Tap (08-28-19) Agenda 19-393.pdf
Cal Flo Contingency Resolution.pdf
TO (2019-101)-UT-CH2M(8-12-19) $32339.39.pdf

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 9, 2019
Agenda Date: August 28, 2019
Prepared By: Maria I. Arenas, E.I., Utilities Associate Engineer I
Through: John A. Walsh, P.E., Utilities Director
Requested Action:
To Approve a Resolution Amending the FY19 Budget to Reallocate Funds from the “Surface Water Plant Clearwell Addition and Reject Pond Improvements”, Project No. WS1402 in the amount of $49,396.62, and from the “Dyal TTHM Prevention and/or Reduction”, Project No. WS18DT in the amount of $45,393.01 into the Groundwater Cal-Flo pH Adjustment Project, Project No. WS19CF; To Approve a Resolution Waiving the Competitive Bidding Process to Purchase a 48-inch PCCP Tap Services from Thompson Pipe Group; To Approve the Cal Flo Project as a Multi-Year Project; To Approve a Resolution Authorizing the City Manager to Approve Change Orders in an amount Not To Exceed $8,617.24 (10% of the contract amount); To Authorize the City Manager to Execute the

Contract

BACKGROUND:

In April 2017, the failure of the underdrain systems of Filter No. 5 and Filter No. 6 during routine backwash operations led to the assessment of the probable cause for their failure. On June 6, 2017, Leopold, the filter manufacturer, inspected the filter underdrain system and found that the underdrain caps had clogged with calcium carbonate precipitation and impeded the flow of water, leading to the catastrophic failure of the underdrain system.

The City of Cocoa distributes water with a pH above 8.8 for nitrification control and to promote the formation of a thin calcium carbonate layer on pipe interiors to protect drinking water against corrosion. Currently, the last location to adjust the pH of the water is before the water enters the media filters. Unfortunately, the higher pH water is also the cause of the undesirable calcium carbonate precipitation forming on the media filters and their underdrain systems.

To prevent any additional failures of the media filters in the future, a new pH adjustment location needs to be added after the filters for nitrification and corrosion control. The urgently needed Groundwater Cal-Flo pH Adjustment Project, (Project No. WS19CF) will add a new chemical injection point after the filters to control finished water pH. By adding a new chemical addition point, the City would have flexibility to vary pH for each treatment process, as required, and thus, extend the life of the filters media and their underdrain system. Staff anticipates the Cal-Flo pH Adjustment Project to be a multi-year project.

Rather than going to a general contractor to complete this Project, the City has delegated some tasks to City Staff to save costs. Tasks to be completed by the City include the installation of a carrier pipe to connect the Cal-Flo chemical to its insert location, the installation of a carrier pipe to connect the new pH analyzer into Dyal's SCADA system, and the excavation of a trench to tap the blended water pipe for pH measurements.

City staff, however, cannot accomplish other tasks, and as such, the City has received proposals to complete all necessary work. Staff have previously transferred funds for design of the project, installation of a new pH monitor, and three above-ground pipe taps for chemical injectors from other budgeted sources. Until now, the total costs of these project items have not exceeded the City Manager's signing authority.

The following additional proposals have been reviewed and approved by City staff and are deemed necessary to finish the project:

Company	Scope of Work and Cost	Cost
Burnett Lime Company	Furnish and install a new pump, chemical feed tubes, and necessary wiring	$43,100.00
Jacobs Engineering, Inc.	Program SCADA to control new Cal Flo system	$32,339.39
Thompson Pipe Group	Complete a 1-inch tap on a 48-inch tee to sample blended water pH	$10,733.00
Subtotal		$86,172.39

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10% Contingency	$8,617.24
Total Cost	**$94,789.63**

To this end, City Staff is requesting Council authorization to reallocate money into the Groundwater Cal-Flo Project from the remaining budget of the following projects:

- Surface Water Plant Clearwell Addition and Reject Pond Improvements (Project No. WS1402)
- Dyal TTHM Prevention and/or Reduction (Project No. WS18DT)

The Surface Water Plant Clearwell Addition and Reject Pond Improvements, Project No. WS1402 is complete and has money remaining in the project budget. The Dyal TTHM Prevention and/or Reduction, Project No. WS18DT was a study conducted by Jacobs Engineering and is also complete. The report and recommendations are the basis of the current project to modify the chemical injection points and Staff is requesting to reallocate the remaining funds into the construction project.

The Thompson Pipe Group (then Price Brothers) was the manufacturer of the ~2,300 feet of PCCP installed at Dyal, which is a reinforced concrete pipe. As such, they are exclusively familiar with the means and methods used in the assembly of the pipe and fittings, and can perform a specialized form of tapping via the chip-and-weld method. Since this service is unique and specific to the type of pipe installed, Staff is requesting Thompson Pipe Group to be a single-source for this work.

City staff is also requesting that City Council approve an additional $8,617.24 as a contingency for the project. The additional amount is 10% of the contract amounts with Burnett, CH2M, and Thompson, and will be used for change orders with approval by the City Manager. Although City Staff does not anticipate change orders, there is a possibility of unknown obstacles in the field that would require changes to the project budget and/or schedule. If a change order is needed, the additional amount will allow the project to continue to move forward.

Staff recommends the approval of the reallocation of funds from the “Surface Water Plant Clearwell Addition and Reject Pond Improvements” (Project No. WS1402) in the amount of $49,396.62, and from the “Dyal TTHM Prevention and/or Reduction” (Project No. WS18DT) in the amount of $45,393.01 into the Groundwater Cal-Flo pH Adjustment Project (Project No. WS19CF).

STRATEGIC PLAN CONNECTION:

N/A

BUDGETARY IMPACT:

Budgeted	No
If not budgeted, is amendment/transfer attached?	Yes

Budget Adjustment Form # 19-113

Amount Requested	$ 94,791

Account Number	421-4020-536.63-00 WS19CF
Account Name	Infrastructure

Source of Funds: 421-4055-536.63-00, WS1402 ($49,397); 421-4055-536.68-10, WS18DT ($45,394) for a total of ($94,791), inclusive of the 10% Contingency.

PREVIOUS ACTION:

N/A

RECOMMENDED MOTION:

To Approve a Resolution Amending the FY19 Budget to Reallocate Funds from the “Surface Water Plant Clearwell Addition and Reject Pond Improvements”, Project No. WS1402 in the amount of $49,396.62, and from the “Dyal TTHM Prevention and/or Reduction”, Project No. WS18DT in the amount of $45,393.01 into the Groundwater Cal-Flo pH Adjustment Project, Project No. WS19CF; To Approve a Resolution Waiving the Competitive Bidding Process to Purchase a 48-inch PCCP Tap Services from Thompson Pipe Group; To Approve the Cal Flo Project as a Multi-Year Project; To Approve a Resolution Authorizing the City Manager to Approve Change Orders in an amount Not To Exceed $8,617.24 (10% of the contract amount); To Authorize the City Manager to Execute the Contract.

RESOLUTION NO. 2019-076

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, AMENDING THE CITY OF COCOA BUDGET FOR FISCAL YEAR 2019; PROVIDING FOR THE REPEAL OF PRIOR INCONSISTENT RESOLUTIONS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Cocoa adopted the final budget for the fiscal year commencing on October 1, 2018, and ending on September 30, 2019, at a Special meeting held on September 13, 2018; and

WHEREAS, in accordance with Article XII, Section 5 of the City of Cocoa Charter, whereby the Council may, at any time by resolution, transfer any unused and unencumbered appropriation or portion thereof from one office or department to another; and

WHEREAS, the City Council deems it to be in the best interest of the City of Cocoa to amend its budget as provided in this resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, as follows:

SECTION 1. The 2018-2019 fiscal year budget shall be amended as detailed in the attached sheets.

SECTION 2. All prior resolutions or prior resolutions inconsistent with this resolution are hereby repealed to the extent of the conflict.

SECTION 3. This resolution shall become effective immediately upon its adoption by the City Council of the City of Cocoa, Florida.

ADOPTED by the City Council of the City of Cocoa, Florida, in a regular meeting assembled on the 28th day of August, 2019.

_____
Jake Williams, Jr., Mayor

ATTEST:

_____
Carie Shealy, MMC, City Clerk

City of Cocoa
Cal-Flo Ground Water Chemical Feed Automation Programming Task Order 2019-101

Services proposed by CH2M HILL Engineers Inc. in this Task Order will be performed in accordance with the Agreement for Engineering Services for Water Supply, Treatment, Transmission and Distribution System Projects (AGREEMENT) approved by the City of Cocoa on November 11, 2008.

Background

The overall Cal-Flo chemical storage and feed equipment is a package system provided by Burnett, Inc. and originally installed in 2008 for the Surface Water treatment system. A new PLC was installed in 2018 by Burnett Lime and included PLC/HMI logic improvements for the Surface Water Treatment Plant (SWTP) unit process.

The City is modifying the current system to add one additional metering pump to be used for the ground water treatment process.

This scope of work describes the services to be provided by CH2M including:

- Setup and maintaining the development system
- Control narrative refinement
- PLC SCADA automation code development
- HMI SCADA and Historian automation configuration
- In –House Automation Testing
- Field Operational Readiness Testing (ORT) 2 and Performance Acceptance Testing (PAT)
- Training
- Automation Coordination Services

The work performed under this proposal will be implemented at the Dyal WTP and is required for the Groundwater Water Treatment Plant (GWTP).

General

This work order includes configuration of PLCs, HMI servers, Historian server, PLC process logic configuration, HMI graphic linking and object animation, alarm configuration, trend configuration, HMI security configuration, driver configuration, system testing, training, and commissioning of a complete system for the unit process areas as defined in this document.

Unit Process Areas

The specific unit process areas identified below will be included in this task order. Only I/O that is wired to each Process Control Panel (PCP) and functional will be included. In some cases

I/O exist for complete automatic control of the device and in other cases only monitoring /alarms.

Automation improvements will be based on a written control narrative but will be limited to functions that will support the wired I/O points. If the I/O points needed for complete unit process automation are not currently wired, the application programming to support the missing I/O points will not be included in this scope.

Unit process areas included in this work order for PLC and HMI programming:

Cal-Flo Chemical Feed PLC

- Cal-Flo Feed Pump (1)
- Feed Pump 3 Way Valves (1)
- Hand/Off/Auto Switch, Alarms, and Status
- Finished Water pH Analyzer Monitoring

Task 1 – Application Software Development

The PLC standards, HMI standards, I/O List, and the control system narratives previously developed with the City of Cocoa will be used as the basis of configuration. A control narrative for the system will be developed working in conjunction with the City, with details required for development of the PLC and HMI software.

The City of Cocoa will provide information specific to the unit processes associated with this application programming project for existing instrumentation and controls which is needed by CH2M for software configuration but which is not available from CH2M files. Such information is expected to consist of alarm set points, high/low signal settings for interlocks and other functions, input process ranges and scales, existing controller tuning constants and such other process or equipment specific functional requirements needed for implementing software.

Task 1.1 Task Kickoff and Workplan

A task kickoff meeting will be held via telecom. This task includes preparation of the project work plan, workshop agenda, and development of meeting minutes. The workshop will include a team charter session which will review the details of the scope of work and assignment of team roles.
Deliverable: Meeting Minutes

Task 1.2 Development System

The development system for application software development was provided by the City of Cocoa under a previous project. CH2M will continue to maintain the development system for use in developing application software for this project. The existing SCADA development servers located at the CH2M offices will remain at CH2M throughout the remainder of software development. Hardware and software components to make a fully functional development system will be provided by the City.

As part of the development system, the City of Cocoa will continue to provide the current versions of Siemens TIA Portal programming software including one copy of master key disk

for PLC programming. For HMI programming, City of Cocoa will continue to provide Wonderware Archestra licenses sufficient for each server, historian, which support programming from one location. The City will provide all other base software products as identified during configuration.

This effort consists of:

- Maintain application software for the PLC/HMI.
- Maintain existing Cocoa provided hardware and software for the development system.
- Perform periodic backups on system to protect incremental work from being lost in the event of a failure.
- Maintain a list of hardware and software supplied to CH2M including serial numbers, and maintenance and repair history log, so that problems with hardware and software can be quickly traced and documented. Maintain records of software versions, revisions, and installation dates.
- Installation of new software to support development.
- Updates to the base software package for Wonderware or Siemens are not included in this work and will need to be provided as a T&M type task under a maintenance contract.

Deliverable: Hardware and Software Inventory

Task 1.3 - PLC Programming

PLC programming scope includes the automation for plant processes as defined in the Unit Process Section of this document.

Task 1.3.1 Narrative Refinement Meeting

CH2M will host a telecom meeting to review the current SCADA control system narratives with the City. The purpose of this meeting is to refine the narrative document with sufficient detail to allow PLC and HMI programming. This scope of work control narrative basis includes no flow pacing and no feedback trim control. Operators will set a feed rate and adjust manually through the HMI.
Automatic functions include start/stop based on transfer pumps and automatic flushing after the feed pump turns off.

Deliverable: Meeting Minutes

Task 1.3.2 – Develop PLC Application Software

PLC logic and sequencing will be configured based on the latest version of the control system narrative document and the latest version of the I/O list at the time this contract is issued.

CH2M will:

- Identify location (e.g. HMI or specific PLC) for control and calculation functions.
- Configure PLC-to-PLC data communication
- Configure PLC – HMI data communications
- Define PLC programming formats and configuration blocks
- Assign objects to physical devices
- Configure PLC alarm management

- Configure PLC analog scaling
- Configure automation logic based on control narratives
- Define sequential logic and analog control requirements for special control strategies executed in the PLC
- Define virtual points required for HMI monitoring and control functions
- Generate object and PLC programs for each PLC
- Configure control strategies
- Develop the PLC functional software requirements and define analog control loop tuning parameters
- Configure PLC reporting and totalization calculations as defined in the control narratives
- Document programs
- Define and implement transfer of data to HMI interface
- Spare or future equipment will not be configured

Deliverable:
- One electronic file copy of annotated and documented PLC logic

Task 1.4 HMI Programming

HMI programming will be performed based on the existing approved graphics, control narratives, and I/O list.

Task 1.4.1 HMI Graphics

Existing graphics will be used as the basis for development. Graphics will be modified to support the use of PLC standard objects. In addition, specific information that is required to support the auto controls (sequences, setpoints, lead/lag selections) will be added.
- Develop graphic animation
- Link equipment displays to appropriate faceplates
- Develop new graphics to support automation controls and sequences
- Minor modifications to existing graphics are included to reflect the new process flow changes identified with this scope

Task 1.4.2 HMI Alarm Configuration

- Configure additional alarm parameters to support modifications

Task 1.4.3 Historical Data

Task 1.4.3.1 Historical Data Configuration

Historical data consists of data that is required for trending of analog values to analyze process performance.

CH2M will provide the following:
- It is anticipated that all analog I/O points, reporting calculated values, and selected digital points will be stored.
- Configure the Historical server to read the appropriate historical data
- Configure each users' profile to access the Historical data through the Historian client

HMI Task Deliverable:

- One electronic file copy of the Galaxy Repository and HMI screen shots

Task 2 Testing and Field Services

Control system application software testing will consist of In-House software testing, field ORT Part 2, and field PAT.

Prior to testing, CH2M will develop and submit to the City of Cocoa a test plan. The City of Cocoa will have two weeks to review the test plan. Upon receipt of the comments from the test plan, CH2M will revise the test plan to incorporate appropriate comments.

Task 2.1 In-House Software Testing

Task 2.1.1 Develop In-House Software Test Procedures

CH2M will develop a document to be used as a guideline for documenting and testing of the PLC and HMI application software. The document will be submitted to the City of Cocoa for review, and comments will be incorporated into the document. The In-House Factory Test Procedure document will be issued to the City of Cocoa as a deliverable, and the document will serve as the basis for testing of the PLC/HMI application software at CH2M's office.

Deliverable: In-House Factory Testing Forms

Task 2.1.2 In House Application Software Testing

One In-House application software test will be performed prior to loading software in the field. The purpose of the test is to demonstrate that the control system application software is complete and ready for installation at the plant site. The City of Cocoa will witness the In-House software test and provide comments of any software deficiencies for correction by CH2M. The criteria for acceptance of control system strategies is based upon the previously agreed upon control system narrative criteria and I/O documents. All items found deficient will be corrected and re-tested by CH2M.

To aid in the in-house application software testing, a simulation program file will be developed to provide appropriate limit switch feedback, equipment run status feedback, and appropriate analog data entry values.

Deliverable: In-House Factory Test Completion Form

Task 2.2 Field Operational Readiness Test Part 2

Task 2.2.1 Develop Operational Readiness Test Part 2 Procedures

CH2M will develop an Operational Readiness Test Part 2 (ORT2) procedure document to be used as a guideline for documenting and testing of the PLC and HMI application software in the field. This document will include I/O checkout sheets and detailed testing to prove the control system functions correctly in the local control mode with HMI remote monitoring display in the local mode and remote manual control functionality. The document will be submitted to the City of Cocoa for review, and comments will be incorporated into the

document. The Operational Readiness Testing document will serve as the basis for testing of the PLC/HMI in the field.

Deliverable: Operational Readiness Test Procedures

Task 2.2.2 Operational Readiness Testing (ORT)

ORT1 - Prior to loading software at the plant site, the City will require Burnett, Inc. to complete the following tests; calibration of instruments, installation of all PLCs/HMI and remote I/O, communication verification of all PLCs/HMI and remote I/O, I/O checkout (including verification of instrument scaling) from the field device to the PLC, and local field testing of all equipment in the local manual mode. Services associated with ORT1 are not included in this scope of work. It is assumed the city has completed this test and instrument verification prior to the start of ORT2.

ORT2 – The purpose of this testing is to confirm that the control system including application software is ready for operation in local mode with remote monitoring and in remote manual control from the HMI system. Burnett, Inc. will perform and complete ORT1 prior to start of ORT2. In a combined effort between Burnett, Inc. or City SCADA personnel and the Application Programming team, verify that the I/O assignment is correct by performing a complete I/O checkout from the field device to the PLC and to the HMI displays. Verify analog scaling is correct, all modes of local and remote manual operation function correctly, and verify the passing of data between all PLCs and HMI. During this testing, each part of the control system will be operated with live process (where appropriate and practical) to verify correct functionality. The City will perform all direct electrical simulation of each control signal from the final control element. The City is encouraged along with the Application Programming team to signoff after each test completed. Any items found deficient will be corrected, re-tested, and verified.

Deliverable: ORT2 Test Completion Form

Task 2.3 Field Performance Acceptance Testing (PAT)

Task 2.3.1 Develop Performance Acceptance Testing (PAT) Procedures

CH2M will develop a document to be used as a guideline for documenting and testing software, graphic displays, and remote automatic control functions that satisfy requirements of this work order. This document will be submitted to the City for review, and comments will be incorporated into the document. The document will serve as the basis for the performance acceptance testing protocol.

Deliverable: Performance Acceptance Testing Procedure

Task 2.3.2 Performance Acceptance Testing

CH2M will perform a witnessed performance acceptance test (PAT) at the plant site with the City staff to verify remote automatic control functions satisfy the requirements of the control narratives. Testing for the remote automatic control functions will be based upon the current approved control system narrative document and Input/Output (I/O) list. Each unit process

area will be tested on a loop by loop basis to verify correct remote automatic functions. This test is similar to the remote auto testing that was performed in the in-house software test, but is based on the field inputs and outputs and not simulation.

The City and the startup team shall witness the Performance Acceptance Test. Completion of the Performance Acceptance Test provides acknowledgement that the application programming is complete and satisfies the requirements of the work order.

Deliverable: Witnessed PAT acceptance test results with final signoff

Task 2.4 Training

CH2M will provide training on PLC control narrative function and HMI operator use. Training will be performed for one 4-hour onsite visit during startup testing and suitable for operations staff. Copy of the control narrative to be used as a guide for the training.

Deliverable:

- 10 printed copies of the control narrative training material

Task 3 Documentation

Task 3.1 Narrative and I/O List Update

CH2M will provide one update to the narrative document and I/O list at the completion of the PAT testing.

Deliverable:

- One electronic file copy of the control system narratives utilized for software development
- Updated I/O list (Electronic Media - Excel format)

Assumptions

- Physical installation of pumps and control cabinet wiring will be performed by the City or Burnett, Inc.
- ORT2 field support that is normally provided by a PICS provider will be provided by the City SCADA staff.
- Any special or custom software drivers required will be provided by the City with the equipment (such as power monitoring devices, etc.). This scope does not include development of custom drivers or procurement of base software products.
- CH2M will allot sufficient time for the City staff to review work at formal review points and the City will provide written acceptance of work or notification for correction. A maximum of 7 calendar days after receipt will be allowed for the City response or work will be considered acceptable as submitted.
- Testing durations for ORT2 and PAT for each unit process area are budgeted at 2 working days for ORT2 and 2 working days for PAT. Longer testing durations, re-testing, or additional contractor defined startup support will require additional funding.

- Network configuration services such as loading City network software, configuring switches, and troubleshooting network problems related to the City network are provided by the City staff. City will install all required network software including virus software, configure the City network switches, and provide troubleshooting assistance for all City network related problems.
- Field wiring, design, and construction type activities are not included with this scope of supply.
- Development of reports and updates to the reporting database are not included in this scope of work.
- Updates to the base HMI software and PLC firmware and not included in this scope of work.
- CH2M will reasonably rely upon the accuracy, and completeness of any information/data provided by the City, or any other third parties.
- Use of the Owners Allowance will be authorized by the City of Cocoa for specific tasks as defined by the City.

Schedule

A detailed project work plan will be developed in conjunction with the City of Cocoa's scheduling requirements. CH2M will commence work within 3 weeks of receiving a written notice to proceed with the project.

Task	Description	Completed
Task 1	Application Software Development	6 weeks
Task 2	Testing, Field Services, and Training	8 weeks
Task 3	Documentation	10 weeks

Note: Completion dates shown are based from notice to proceed (NTP). Testing dates are driven by the City construction schedule and completion or ORT1 testing by the City.

Compensation

Compensation for the services authorized under this task order will be provided using the time and materials basis method with budgets between tasks being interchangeable. Project and subtask fee are shown in the Compensation Table below.

Compensation Table – Summary
Shown below is the time and material estimate for this work order.

Task	Hours	Sub Total
Task 1 Application Software Development	84	$12,211.83
Task 2 Testing, Field Services, Training	104	$14,063.76
Task 3 Documentation	14	$2,113.80
Travel and Expense		$1,950.00
Owners Allowance		$2,000.00
Grand Total	**202**	**$32,339.39**

Levels of effort for tasks are estimates based on the best information available at the time of task order development. As project scopes are better defined, actual levels of effort required and associated fees might differ and require coordination between the Program Management Team and the City. The Consultant's rates will be billed in accordance with rates defined in Attachment A.
This proposal is effective for 90 days.

Acceptance

This Task Order shall become part of the Agreement upon execution by both parties.

Approved for City of Cocoa

By: _____

Title: _____

Date: _____

Accepted for CH2M HILL Engineers Inc.

By: _____
François Didier Menard

Title: Client Account Manager

Date: August 5th, 2019

Attachment A
CH2M FY2019 Per Diem Schedule

Classification	Description	FY2019 Rate
Engineer 9	Principal	$199.17
Engineer 8	Senior Reviewer/Consultant	$199.17
Engineer 7	Senior Project Manager	$199.17
Engineer 6	Senior Professional Engineer/Scientist/Consultant	$188.40
Engineer 5	Mid-Level Professional Engineer/Scientist/Consultant/Project Manager	$166.44
Engineer 4	Professional Engineer/Scientist/Consultant/Project Manager	$138.96
Engineer 3	Junior Professional Engineer/Scientist/Consultant	$120.84
Engineer 2	Project Engineer/Scientist/Consultant	$101.84
Engineer 1	Junior Project Engineer/Scientist/Consultant	$95.27
Engineer 0	Engineering Intern	$85.28
Technician 5	Senior Construction Manager/Senior Designer	$155.59
Technician 4	Construction Manager/Senior Technician	$125.06
Technician 3	Senior Construction Inspector	$111.34
Technician 2	Construction Inspector/Technician	$86.17
Technician 1	Junior Construction Inspector/Junior Technician	$76.53
Technical Aide	Technical Aide	$66.56
Office	Office/Project Administration	$69.99

Notes:

1. Billing rates were negotiated rates for Year 2012. However, these rates will be held firm for use on this task order.

2. These rates do not include other direct expense costs. Reimbursable other direct expenses shall be billed in accordance with the terms of the contract.

3. Billing rate schedule is for time basis work orders and City will be billed based on actual hours by category designated for an individual employee.

City of Cocoa
Cal-Flo Ground Water Chemical Feed Automation
Task Order 2019-101
Labor Hour Breakdown

		Per Diem Schedule Description								
		Senior Project Manager	Senior Professional Engineer/Scientist/Consultant	Mid- Level Professional Engineer/Scientist/Consultant	Professional Engineer/Scientist/Consultant/Project Manager	Junior Professional Engineer/Scientist/Consultant	Project Engineer/Scientist/Consultant		Labor Hours	Labor Fee
TASK #	**TASK NAME**	$199.17	$188.40	$166.44	$138.96	$120.84	$101.84			
1	**Application Software Development**									
1.1	Project Kickoff and Workplan	8			2	2			12	$2,112.96
1.2	Development System				4	4			8	$1,039.20
1.3	PLC Programming	3	4		24				31	$4,686.15
	Narrative Development (draft, final)	1			4	1			6	$875.85
1.4	HMI Programming	3				24			27	$3,497.67
								Task Subtotals	**84**	**$12,211.83**
2	**Testing and Field Services**									
2.1	In house testing	2			12	12			26	$3,515.94
2.2	ORT2	2			16	16			34	$4,555.14
2.3	PAT	2			16	16			34	$4,555.14
2.4	Training	2			4	4			10	$1,437.54
								Task Subtotals	**104**	**$14,063.76**
3	**Training and Documentation**									
	Documentation	4			6	4			14	$2,113.80
								Task Subtotals	**14**	**$2,113.80**
4	**Owner's Allowance**									
	Owner's Allowance									**$2,000.00**
								Labor Total	**202**	**$30,389.39**
								Tavel and Expenses		**$1,950.00**
		27	**4**	**0**	**88**	**83**		**Task Order Fee Total**		**$32,339.39**

BURNETT LIME COMPANY, INC.

7095 HIGHWAY 11 • CAMPOBELLO, SC 29322 • 864-592-1658 • FAX: 864-592-1690 WWW.BURNETT-INC.COM

July 18, 2019

Kristoffer Smith, Utilities Associate Engineer II
Claude H Dyal WTP
351 Shearer Blvd
Cocoa, FL 32922

RE: CAL~FLO® Upgrades – Additional Pump

Kristoffer:

Burnett Lime Company, Inc. appreciates the opportunity to provide a quote to Dyal WTP in Cocoa, FL for a new pump to be installed on the Lime Slurry Storage tank of your existing CAL~FLO system.

Burnett proposes to provide the new metering pump and associated hardware to enable the new pump to function.

This proposal includes the following:

- Furnish and install a new Pulsafeeder pump, Pulsa series 7120
- Furnish and install a new 3-way automatic flush valve
- Furnish and install tubing from existing flush header to new 3-way automatic flush valve
- Furnish and install a new Cater
- Furnish and install new components in electrical panel
    - Red Lion pressure readout
    - High and Low pressure lights
    - Pump selector switch
    - Pump “run” and “fault” lights
    - Terminal blocks
- Wiring
    - Existing pinch valve open / closed limit switches
    - New pump
    - New 3-way flush valve, including return of position feedbacks to PLC
    - Panel wiring to support new pump, 3-way flush valve
    - Panel wiring to Siemens PLC panel
- Update electrical drawings (current as-built’s attached to this email)
- On-site time by Burnett’s electrician
- Expenses

BURNETT LIME COMPANY, INC.

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Please note that the programming for the existing Pinch Valve, new 3-way Flush Valve, and new Pump will be by others.

Additional items requested beyond the original additional pump proposal:

- Furnish and install four new feed tubes, through conduits installed by others prior to Burnett's arrival on-site
  - Transfer Pump 1 (with injection quill installed)
  - Transfer Pump 2 (with injection quill installed)
  - Transfer Pump 3 (with injection quill installed)
  - Spare
- Furnish injection quill assemblies with corporate stops for each of the three new feed tubes, within two weeks of receipt of PO (corporate stops to be sent early)
- Review construction plan for conduit piping within two weeks of receipt of plan
- Determination and, if necessary, procurement of Orange County building permit
- Equipment tags, 316 SS
- Additional on-site time to support Automation Solution Provider (8 hours)
- On-site safety coordinator
- Operation and Maintenance Manual

Schedule:

1. Receipt of PO
   a. Burnett to initiate building permit requirements
   b. Within two weeks of PO – Burnett to provide injection quills with corporate stops to plant (corporate stops to be provided early)
   c. Within two weeks – Burnett to provide submittal
      i. Electrical Panel modifications, with Bill of Materials
      ii. I/O List for new PLC I/O points
      iii. Electrical Elementaries (wiring diagrams)
      iv. Equipment information
   d. Burnett available via phone to Automation Solution Provider up to day of mobilization (anticipated maximum of two such calls)
2. Receipt of conduit piping construction plan
   a. Within two weeks – Burnett to review and provide comments
3. Receipt of approved Submittal
   a. Within one week – Burnett to initiate procurement of pump, valve, all tubing, electrical panel components
4. Receipt of pump, valve, all tubing, electrical panel components
   a. Burnett prepared to be on-site, plant notified
5. Burnett will not mobilize until receipt of approval from Owner and the following items are complete:
   a. Injection quills installed in new taps
   b. Conduit piping completely installed from CAL~FLO building to vault
6. Notification to mobilize by Dyal personnel and receipt of any required building permit

a. Day 1
    i. Burnett to arrive on-site
    ii. Burnett to pull tubing through conduit piping previously installed by others (could potentially execute sooner)
    iii. Burnett to install tubing to injection quills
    iv. Burnett to install pump, valve, flush water tubing
    v. Burnett to install panel components
    vi. Burnett to begin installation of conduit / wiring in CAL~FLO building
b. Day 2
    i. Burnett to finish conduit / wiring in CAL~FLO building for new components
    ii. Burnett to perform and document Operational Readiness Test to confirm functionality of all signals between Burnett's system, equipment and instruments, and confirm proper operation of all controls internal to Burnett's system or equipment.
c. Day 3
    i. Burnett to provide assistance to Automation Solution Provider and perform Operational Readiness Test 2.
d. Day 4
    i. Burnett to provide assistance to Automation Solution Provider
    ii. Burnett to depart

7. Provide finalized O&M

To design, furnish, install, and test the new pump and appurtenances, Burnett proposes a fixed cost of $43,100.00.

We would be pleased to review our proposal in detail.

Thank you,

Tom Burnett

Tom Burnett
7095 Highway 11
Campobello, SC 29322
Phone: 864-592-1658
Fax: 864-592-1690
Email: tburnett@burnett-inc.com
Web: www.burnett-inc.com

CAL≋FLO® PATENTED
SYSTEM & SLURRY
NSF/ANSI-61 CERTIFIED

THOMPSON PIPE GROUP

1003 MacArthur Blvd
Grand Prairie, Texas 75050
Phone: 972-262-3600

Quote #:
190808-053

Mia Arenas MS EI
City of Cocoa
351 Shearer Blvd.
351 Shearer Blvd.
Cocoa, FL 32922-7203

Phone: (321) 433-8832
Fax: (321) 433-8708
Email: marenas@cocoafl.org

Date: 8/9/2019
Rep.: Colin Brown

Qty	Item #	Name	Price	Total
1		48" x 1" Hot Tap - Direct Weld - 1" Corp-Stop (Male IP x Female IP) - 1" Threaded Boss w/ Collar - Air Pressure Test - Dye Penetration Test - Hot Tap - Travel to Site and Return - Welding of Assembly	$8,817.00	$8,817.00
1		***Additional Travel	$1,916.00	$1,916.00
		General Job Description: 1. Chip mortar of exposed concrete cylinder fitting 2. Cut steel reinforcment 3. Weld threaded boss 4. Test weld 4. Install valve 5. Mount drill 6. Perform hot tap 7. Extract drill		
		Sub Total		$10,733.00
		Shipping & Handling		
		Taxes	0.000%	$.00
		TOTAL		$10,733.00

Comments: See Terms and Conditions Attached.	Office Use Only:

Thank you for your business.

RESOLUTION NO. 2019-077

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, WAIVING THE COMPETITIVE BIDDING PROCESS AND SETTING FORTH THE BASIS OF THE CITY MANAGER'S RECOMMENDATION THEREOF BY EXHIBIT; PROVIDING FOR THE REPEAL OF PRIOR INCONSISTENT RESOLUTIONS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 2 of Article XIII of the City Charter of the City of Cocoa and Section 2-4 of the City Code of the City of Cocoa provides that competitive bidding is required for all purchases unless certain requirements are met for exceptions to the bidding requirement; and

WHEREAS, the City Manager has recommended that the competitive bidding requirement be waived for the purchase or public improvement described in Exhibit "A" attached to this Resolution and by this reference incorporated herein; and

WHEREAS, the City Council has determined that competitive bidding for the purchase or public improvement described in Exhibit "A" would not be in the City's best interest.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA, AS FOLLOWS:

SECTION 1. The purchase or public improvement described in Exhibit "A" is hereby approved and the competitive bidding requirement is hereby waived. The basis for the City Manager's recommendation that a competitive bidding procedure would not be in the City's best interest is attached to this Resolution and by this reference incorporated herein.

SECTION 2. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of the conflict.

SECTION 3. This resolution shall become effective immediately upon adoption by the Cocoa City Council.

ADOPTED by the City Council of the City of Cocoa, Florida, in a regular meeting assembled this 28th day of August, 2019.

_____

ATTEST: JAKE WILLIAMS, JR., MAYOR

_____

CARIE SHEALY, MMC, CITY CLERK

EXHIBIT “A”

To Resolution No. 2019-077

The City Manager recommends that the competitive bidding requirement be waived, by reason of single source purchase, for the purpose of completing a 48-inch PCCP tap via a specialized form of tapping that involves exposing the steel cylinder inside, welding on an outlet, and reforming the re-grout around the type, from the pipe and fittings manufacturer, Thompson Pipe Group, Palatka, Florida.

The Department Director provided supporting documentation toward justification of the waiver, based on sole source, as an exception to the sealed bidding process; and based on this documentation, I support approval of the Resolution.

_____

John A. Titkanich, Jr., City Manager

City of Cocoa Budget Adjustment Form FY 2019 - 19-113

SELECT ADJUSTMENT TYPE: BUDGET TRANSFER | REQUESTING DEPARTMENT #: 4055 | DATE PREPARED: 08/09/19

'FROM' ACCOUNT(S)

ADJUSTMENT AMOUNT	ACCOUNT NUMBER	PROJECT NUMBER	ACCOUNT NAME	ORIGINAL BUDGET	AMENDED BUDGET	ADJUSTED BUDGET	UNENCUMBERED BALANCE
($ 49,397)	421-4055-536.63-00	WS1402	Infrastructure	$ 23,508,649	$ 5,013,744	$ 4,964,347	$ 2,021,037
($ 45,394)	421-4055-536.68-10	WS18DT	Software & Other Intangibles	$ 250,000	$ 283,698	$ 238,304	$ 67,866
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
($ 94,791)	TOTAL						

'TO' ACCOUNT(S)

ADJUSTMENT AMOUNT	ACCOUNT NUMBER	PROJECT NUMBER	ACCOUNT NAME	ORIGINAL BUDGET	AMENDED BUDGET	ADJUSTED BUDGET	UNENCUMBERED BALANCE
$ 94,791	421-4020-536.63-00	WS19CF	Infrastructure	$ 2,106,413	$ 2,200,490	$ 2,295,281	$ 567,583
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 0				$ 0	$ 0	$ 0	$ 0
$ 94,791	TOTAL						

REASON/JUSTIFICATION FOR ADJUSTMENT:

This budget transfer is to pay for a more urgently needed project. Project WS19CF needs a Cal Flo injection point added to the groundwater plant at Dyal to allow for a pH adjustment point downstream of the filters, allowing for a lower pH to be run across the filters. Services by 1. Burnett include furnishing and installing a new pump, chemical feed, and wiring; 2. CH2M include SCADA programming; and 3. Thompson Pipe include a 1-inch tap on a 48-inch tee to sample blended water pH. Agenda 19-393

CITY COUNCIL APPROVAL REQUIRED? *YES* (●) *NO* ( ) *DATE APPROVED:* 08/28/19 *RESOLUTION #:* 2019-076

City Council approval is needed for all transfers greater than $50,000 and transfers between Departments / Funds. Attach copy of agenda item and City Clerk's Journal noting approval.

8/9/19	Maria Arenas	8/12/19	Lea Taylor Digitally signed by Lea Taylor Date: 2019.08.12 09:17:34 -04'00'		
Date	Requestor's Signature	Date	Finance Approval Signature	Date	Finance Director's Signature
8/9/19	John "Jack" Walsh	8/15/19	Lora Howell Digitally signed by Lora Howell Date: 2019.08.15 14:30:19 -04'00'		
Date	Department Director's Signature	Date	Deputy Fin. Director's Signature	Date	City Manager's Signature

FINANCE USE ONLY:

Date Entered: _____ Entered By: _____ Group #: _____

RESOLUTION NO. 2019-078

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COCOA, FLORIDA; TO AMEND THE CITY MANAGER'S SPENDING AUTHORITY RELATED TO ANY FUTURE CHANGE ORDERS TO THE PRIMARY CONSTRUCTION CONTRACT AND ANY ADDITIONAL SERVICE CONTRACTS RELATED TO THE COMPLETION OF THE PROJECT REGARDING THE DYAL'S GROUNDWATER CAL-FLO pH ADJUSTMENT, PROJECT NO. WS19CF BY INCREASING THE AMOUNT OF THE CONTINGENCY TO A TOTAL OF $8,617.24 TO BE SET ASIDE FOR TOTAL CHANGE ORDERS AND TO INCREASE THE TOTAL CONTRACT PRICE INCLUSIVE OF THE INCREASED CONTINGENCY FOR THE PROJECT; PROVIDING AN EFFECTIVE DATE.

WHEREAS, Section 2-4 of the City Code provides that with respect to construction contracts approved by the City Council, the City Council may authorize by resolution the City Manager to approve change orders to the primary construction contract and any additional service contracts related to the completion of the construction project authorized by the City Council in excess of the spending authority limits under this section provided the amount is within the unexpended construction budget approved by the City Council for the project including any contingency funds approved by the City Council for said contract; and

WHEREAS, on August 28, 2019, the City Council authorized the City Manager to proceed with the Claude H. Dyal's Groundwater Cal-Flo pH Adjustment, Project No. WS19CF, subject to certain terms and conditions and budget adjustments approved by the City Council; and

WHEREAS, in conjunction with this authorization, the City Council desires to streamline the approval of change orders and any additional service contracts to the extent necessary in order to expedite the construction of the project; and

WHEREAS, the City Council deems it to be in the best interest of the City of Cocoa to authorize the City Manager to approve the aforementioned change orders and any additional service contracts consistent with the terms of this Resolution and Section 2-4 of the City Code even if said amounts exceed the City Manager's general spending authority approved by the City Council.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COCOA, as follows:

SECTION 1.

(A) Pursuant to Section 2-4 of the City Code, the City Manager is hereby authorized to approve any change orders to the primary construction contract and any additional service contracts related to the construction project regarding the Claude H. Dyal's Groundwater Cal-Flo pH Adjustment, Project No. WS19CF, provided the total amount of approved change orders and any additional service contracts do not exceed the construction budget. The project budget is $94,789.83 inclusive of a 10% contingency in the amount of $8,617.24 set aside for possible change orders, for a total of $94,789.63 for the project. This grant of spending authority shall be interpreted and construed in accordance with the provisions of Section 2-4 of the City Code.

(B) Pursuant to Section 2-4 of the City Code, the City Manager shall also provide notice of any such approved change orders and any additional service contracts to the City Council in the form of an agenda item at the next scheduled City Council meeting or as soon as practicable thereafter.

SECTION 2. All prior resolutions or prior resolutions inconsistent with this resolution are hereby repealed to the extent of the conflict.

SECTION 3. This resolution shall become effective immediately upon its adoption by the City Council of the City of Cocoa, Florida.

ADOPTED by the City Council of the City of Cocoa, Florida, in a regular meeting assembled on August 28, 2019.

_____
Jake Williams, Mayor

ATTEST:

_____
Carie Shealy, MMC, City Clerk

Embedded Secure Document

The file *https://cocoa.legistar.com/View.ashx?M=F&ID=7664480&GUID=DCCA6530-BB99-43DB-8828-6F62AB8D8838* is a secure document that has been embedded in this document. Double click the pushpin to view.



Legislation Details (With Text)

File #:	19-377	**Version:**	1	**Name:**	July, 2019 Monthly Purchasing Approval Information
Type:	Informational Item			**Status:**	Agenda Ready
File created:	8/1/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	Council request to review the cumulative purchase approvals over $35,000 and under $50,000 for period 10/01/2018 to 07/31/2019.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	PO Monthy Report to City Council 10.01.18 thru 07.31.19.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date:	August 1, 2019
Agenda Date:	August 28, 2019
Prepared By:	Diane Kozlak, Senior Buyer
Through:	Rebecca Bowman, Finance Director/Purchasing Manager

Requested Action:
Council request to review the cumulative purchase approvals over $35,000 and under $50,000 for period 10/01/2018 to 07/31/2019**.**

BACKGROUND:

The following reports for the period October 01, 2018 through July 31, 2019 provide a summary of all the purchases $35,000 and over up to $50,000.

1. Purchases approved by the City Manager or designee.

2. Purchases approved by the CRA Board.

3. Purchases approved by the City Council.

These reports are date/time driven and any differences between the summary and detailed information is a timing issue.

RECOMMENDED MOTION:

None. Information only.

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Purchase Order Approvals 10-01-18 thru 07-31-19

$35,000 to $50,000 Recap Sheet

Total Purchase Orders Issued = 40

City Manager = 22

City of Cocoa CRA Board = 0

City Council = 18

Purchase Order Approvals 10-01-18 thru 07-31-19
$35,000 to $50,000 By City Manager

PO #	PO Date	Vendor	PO Amount	Approval Date	By Whom
73571	10/23/2018	Verizon Wireless	$ 48,360.00	10/22/2018	Matthew J. Fuhrer (Acting)
73649	10/26/2018	Garganese, Weiss, D'Agresta	$ 35,000.00	10/26/2018	John A. Titkanich, Jr. AICP
73653	10/26/2018	G4S Secure Solutions	$ 49,567.00	10/26/2018	John A. Titkanich, Jr. AICP
73655	10/26/2018	Trane Orlando	$ 45,650.00	10/26/2018	John A. Titkanich, Jr. AICP
73731	11/5/2018	Ring Power	$ 42,589.00	10/30/2018	John A. Titkanich, Jr. AICP
73786	11/14/2018	Insource Software	$ 38,939.70	11/9/2018	John A. Titkanich, Jr. AICP
73826	11/20/2018	Champion Solutions	$ 44,674.22	11/19/2018	John A. Titkanich, Jr. AICP
73848	11/27/2018	Carollo Engineers Inc.	$ 45,370.99	11/21/2018	John A. Titkanich, Jr. AICP
73906	12/4/2018	Pro Co Inc.	$ 35,280.00	12/4/2018	John A. Titkanich, Jr. AICP
73926	12/7/2018	S&L Materials	$ 35,000.00	12/6/2018	John A. Titkanich, Jr. AICP
73977	12/12/2018	Robinson Equipment	$ 37,423.13	12/11/2018	John A. Titkanich, Jr. AICP
74015	12/26/2018	Ferguson Enterprises Inc.	$ 42,800.00	12/21/2018	John A. Titkanich, Jr. AICP
74097	1/14/2019	Bussen Mayer Engineering Group	$ 37,515.00	1/14/2019	John A. Titkanich, Jr. AICP
74152	1/25/2019	CH2M Hill Engineers Inc.	$ 39,606.00	1/24/2019	John A. Titkanich, Jr. AICP
74153	1/25/2019	CDM Smith Inc.	$ 42,680.00	1/24/2019	John A. Titkanich, Jr. AICP
74186	2/1/2019	CDM Smith Inc.	$ 40,960.00	1/31/2019	John A. Titkanich, Jr. AICP
74249	2/13/2019	Carollo Engineers Inc.	$ 38,540.00	2/13/2019	John A. Titkanich, Jr. AICP
74412	3/19/2019	Tyler Technologies	$ 43,256.00	3/19/2019	John A. Titkanich, Jr. AICP
74413	3/19/2019	CH2M Hill Engineers Inc.	$ 40,611.00	3/19/2019	John A. Titkanich, Jr. AICP
74421	3/21/2019	DMD Consultants	$ 49,984.00	3/21/2019	John A. Titkanich, Jr. AICP
74901	7/22/2019	Mead & Hunt	$ 44,444.50	7/19/2019	Samantha Senger (Acting)
74917	7/22/2019	Florida Mulch	$ 49,896.00	7/19/2019	Samantha Senger (Acting)

22 Purchase Order Approved by City Manager

Purchase Order Approvals 10-01-18 thru 07-31-19
$35,000 to $50,000 By CRA Board

PO #	PO Date	Vendor	PO Amount	Approval Date	By Whom

0 Purchase Order Approved by CRA

Prepared by Purchasing 8/1/2019

Purchase Order Approvals 10-01-18 thru 07-31-19
$35,000 to $50,000 By City Council

PO #	PO Date	Vendor	PO Amount	Approval Date	By Whom
73370	10/8/2018	Flowers Chemical Laboratories	$ 41,754.00	9/25/2018	City Council
73401	10/9/2018	Moore Stephens Lovelace	$ 40,000.00	7/10/2018	City Council
73413	10/10/2018	Moore Stephens Lovelace	$ 40,000.00	7/10/2018	City Council
73448	10/15/2018	Industrial Chemicals	$ 35,200.00	9/25/2018	City Council
73501	10/18/2018	United Self Insured Services	$ 50,000.00	8/22/2017	City Council
73524	10/18/2018	Lisa Cullen Tax Collector	$ 39,600.00	4/28/2018	City Council
73590	10/23/2018	Water Resource Assoc.	$ 49,520.00	11/14/2017	City Council
73648	10/26/2018	Axon Enterprises	$ 49,902.00	10/24/2017	City Council
73711	11/5/2018	Empire Computing	$ 47,876.80	10/10/2018	City Council
73714	11/5/2018	Florida Power & Light	$ 35,270.00	10/10/2018	City Council
73723	11/5/2018	Sunstate Meter and Supply	$ 35,836.00	10/28/2014	City Council
73728	11/5/2018	FL Dept of Corrections	$ 43,122.75	12/2/2017	City Council
73759	11/7/2018	Sunstate Meter and Supply	$ 43,350.00	10/28/2014	City Council
73903	12/4/2018	Integrity Public Finance	$ 37,500.00	11/28/2019	City Council
73969	12/12/2018	Alan Jay Chevrolet	$ 39,291.25	11/28/2018	City Council
74017	12/26/2018	Space Coast Auto Supply	$ 37,200.00	7/24/2018	City Council
74037	12/26/2018	JSR Enterprises	$ 47,334.00	7/24/2018	City Council
74864	7/15/2019	Brev Cty Bd of Cty Comm	$ 50,000.00	11/27/2012	City Council

18 Purchase Order Approved by City Council

Prepared by Purchasing 8/1/2019

Legislation Details (With Text)

File #:	19-404	**Version:**	1	**Name:**	
Type:	Informational Item			**Status:**	Agenda Ready
File created:	8/14/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	In accordance with the Financial Operations Manual (FOM) the City Manager shall submit to City Council in the form of an agenda item any approved change orders to construction contracts that the City Council has authorized the City Manager, by resolution, to approve in excess of the City Manager's spending authority. (Finance Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	July 2019 Contingency-Change Orders.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 14, 2019
Agenda Date: August 28, 2019
Prepared By: Lora Howell, Deputy Finance Director
Through: Rebecca Bowman, MBA, CGFO, CGFM, Finance Director
Requested Action:
In accordance with the Financial Operations Manual (FOM) the City Manager shall submit to City Council in the form of an agenda item any approved change orders to construction contracts that the City Council has authorized the City Manager, by resolution, to approve in excess of the City Manager's spending authority.

BACKGROUND:

The attached spreadsheets reference construction projects with a previously authorized "contingency" as of July 31, 2019. The report provides the project number, project description, construction contract cost of project, contingency amount authorized, date of City Council approval, resolution number for authorization of contingency, requisition numbers, and expenditure by fiscal year.

The second line of each project in the third column under "Construction contract not to exceed $" references the contingency amount that the City Council or City Manager, if within his purchasing authority, has approved. The last line of each project provides the remaining balance as of the report date.

STRATEGIC PLAN CONNECTION:

N/A

BUDGETARY IMPACT:

None

PREVIOUS ACTION:

None

RECOMMENDED MOTION:

Informational Item Only.

Change Orders - CM authorized to execute

applied to contingency | as of: 7/31/2019

Project #	Project Description + Details	Construction contract not to exceed $	Date Approved	Resolution #	Requisition #	Requisition $ by Account #	All Fiscal Years Cumulative	FY19 Cum.	FY2019 Expenditures	FY2018 Expenditures
WS19MH	Manhole Rehabilitation									
Op. Rev.		150,000.00	6/26/2019	2019-059						
Project Manager:		14,254.73	contingency authorized							
account #	421-4125-536.46-00	135,745.27	exp authorized before contingency				Cumulative	FY19 cum		
	Manhole Rehab Services			FY2019			-			
	Contractor PO#									
WS19FR	Dyal Groundwater Filters 1 & 4									
Op. Rev.		569,880.30	6/26/2019	2019-056						
Project Manager:		51,807.30	contingency authorized							
account #	421-4020-536.63-00	518,073.00	exp authorized before contingency				Cumulative	FY19 cum		
	Water Sales and Service			FY2019			-			
	Contractor PO#									
		51,807	**^contingency balance-->**							
WS11VR	12" Tapping Valve									
Op. Rev.		221,106.50	2/27/2019	2019-012						
Project Manager:		20,100.00	contingency authorized							
account #	421-4025-536.46-00	201,006.50	exp authorized before contingency				Cumulative	FY19 cum		
	Atlantic Development		*FY 19 PO ISSUE*	FY2019	38149	201,006.50	201,006.50			
	Contractor PO# 74414									
		20,100	**^contingency balance-->**							
CP1504	Dr. Joe Lee Smith Center									
Op. Rev.		3,445,839.00	1/9/2019	2019-004						
Project Manager:		150,000.00	contingency authorized							
account #	301-3580-519.62-00	3,295,839.00	exp authorized before contingency				Cumulative	FY19 cum		
	W & J Construction		*FY 19 PO ISSUE*	FY2019	37879	170,144.00	4,550,013.00	$ 4,379,869.00	$ 365,211.49	
	Contractor PO# 74150		CO#1		38708	4,379,869.00				
		150,000	**^contingency balance-->**							
WS18DP	Reactor Clarifier									
Op. Rev.		286,874.50	12/12/2018	2018-116						
Project Manager:		26,079.50	contingency authorized							
account #	426-4055-536.63-00	260,795.00	exp authorized before contingency				Cumulative	FY19 cum		
	E & D Contracting Services Inc.		*FY 19 PO ISSUE*	FY2019	37754	260,795.00	260,795.00		$ 19,205.00	
	Contractor PO# 74040									

*Bond

111,913 **^contingency balance-->**

Project #	Project Description + Details	Construction contract not to exceed $	Date Approved	Resolution #	Requisition #	Requisition $ by Account #	All Fiscal Years Cumulative	FY19 Cum.	FY2019 Expenditures	FY2018 Expenditures
WS1431	North Tropical Trail Looping Improvements									
Op. Rev.		1,231,048.17	12/12/2018	2018-114						
Project Manager:		111,913.47	contingency authorized							
account #	426-4055-536.63-00	1,119,134.70	exp authorized before contingency				Cumulative	FY19 cum		
	Atlantic Development of Cocoa		*FY 19 PO ISSUE*	FY2019	37710	1,119,134.70	1,159,239.19	1,159,239.19	$ 586,684.47	
	Contractor PO# 074042		CO#1		37978	16,542.60				
			CO#2		38879	23,561.89				
*Bond										
		71,809	**^contingency balance-->**							
	Lift Station 29 Gravity Main									
Op. Rev.		178,739.00	9/25/2018	2018-084						
Project Manager:		16,249.00	contingency authorized							
account #	421-4025-536.46-00	162,490.00	exp authorized before contingency				Cumulative	FY19 cum		
										$ -
	Danus Utilities		*FY 19 PO ISSUE*	FY2019			-			
	Contractor PO#									
		20,100	**^contingency balance-->**							
WS11VR	Valve Improvements									
Op. Rev.		574,914.93	10/24/2017	2018-014						
Project Manager:		52,265.00	contingency authorized							
account #	421-4025-536.46-00	522,649.93	exp authorized before contingency				Cumulative	FY19 cum		
	JoBear		*FY 18 PO ISSUE*	FY2018	35607	522,649.93	448,510.00	(74,139.93)	$ 426,084.59	
	Contractor PO#72425		CO#1		38043	(74,139.93)				
			CO#2		38451	1,140.00				
		52,265	^contingency balance-->							
WS1001	Industrial Park Pump Station									
Op. Rev.		4,889,500.00	11/25/14, VIII.8	2014-138						
Project Manager:		444,500.00	10% contingency authorized			63-00				
account #421-4055-536.63-00		4,445,000.00	exp authorized before contingency				Cumulative	FY19 cum		
	Brandes Design-Build, PO #67318/69608/71924		FY15 PO Issue	FY 2015	26451	4,445,000.00	4,445,000.00			
	Bid No. B-15-01-COC		*CO #1 for electric actuated butterfly valves*	FY 2015	27931	41,985.41	4,486,985.41			
			CO#2 for necessary modifications to electrical design	FY 2015	28332	14,574.50	4,501,559.91			
	Quentin Hampton P.O. #67460/69493		*PO **65207** FY15 Year-End PO Liquidation*			(1,542,102.38)	2,959,457.53			
			*FY16 PO Issue PO# **67318***	FY2016	29192	**1,542,102.38**	4,501,559.91	v		
	Mead & Hunt (formerly QLH) PO #70943/71880		*TO 2015-67 P.O. **67455** TO CH2M for Scada Programing*		29315	21,434.07	4,522,993.98	v		
			*PO# **67460** to QLH for SDC*		29381	53,001.11	4,575,995.09	v		
	CH2M Hill PO #67455/		*CO # 1 PO **67460** Additional Services Industrial Park*		29593	23,033.00	4,599,028.09			
			*CO#1 PO **67318***		29647	**53,686.38**	4,652,714.47			
	RM Packard $ Assoc. Inc. 73686		*CO#2 install electronic indicators PO **67318***		30007	**8,917.65**	4,661,632.12			
			*CO#2 additional inspection services PO# **67460***		30758	18,000.00	4,679,632.12			
			PO 67318 FY16 Year-End PO Liquidation			(806,347.80)	3,873,284.32			
			PO 67460 FY16 Year-End PO Liquidation			(26,064.34)	3,847,219.98			
			PO 67455 FY16 Year-End PO Liquidation			(12,619.15)	3,834,600.83			
			PO#69493 Quentin Hampton (reissue PO#67460)	FY 2017	31910	26,064.34	3,860,665.17			$ 14,779.95
			PO#69608 Brandes Design-Build (reissue PO#67318)		31980	806,347.80	4,667,012.97			$ 386,032.50
			PO#69493 QLH liquidated balance; reissue to Mead and Hunt		33725	(11,284.39)	4,655,728.58			
			PO#70943 Mead & Hunt (reissue PO#69493)		33736	11,284.39	4,667,012.97			$ 1,300.00
							4,667,012.97			
			PO#69608 Brandes Design-Build (reissue PO#67318)		31980	(420,315.30)	4,246,697.67			
			PO#70943 Mead & Hunt (reissue PO#69493)		33736	(9,984.39)	4,236,713.28			
			PO#71924 Brandes Design-Build (reissue PO#69608)	FY2018	34892	420,315.30	4,657,028.58			$ -
					34893	9,984.39	4,667,012.97			$ 6,739.35
										$ 1,000.00
			PO#73686	FY2019		1,000.00				
		209,868	^contingency balance-->							

Project #	Project Description + Details	Construction contract not to exceed $	Date Approved	Resolution #	Requisition #	Requisition $ by Account #	All Fiscal Years Cumulative	FY19 Cum.	FY2019 Expenditures	FY2018 Expenditures
WS1222	BNR Process Improvements									
DER restricted + Op.Rev		3,356,475.06	08/13/13 VIII.7	2013-083						
account #421-4120-536.63-00 + 64-00		603,099.13	contingency authorized							
		2,753,375.93	constr' exp authorized before contingency							
				2018-083						
		86,000	7/28/15 VIII. 3. for **Maxwell Contracting**	2015-037						
$5k reimburse check for overpmt of retainage in error - NOT a change order		10,000	contingency authorized for emergency task order							
		76,000	Emergency Task Order authorized ($76k before task order contingency)							
						63-00	64-00	Cumulative	FY19 cum	FY19 FY18
Brandes Design-Build, Inc. FY2013 PO# 62086										
Bid No. B-13-11-COC										
Brandes Design-Build, Inc. FY2014 PO# 62605				FY2013	22658	1,250,550.00	1,528,450.00	2,779,000.00	$ 98,983.65	
Brandes Design-Build, Inc. FY2015 PO# 64940			FY13 Year-End PO Liquidation			(1,200,550.00)	(1,528,450.00)		$ 98,983.65	
			FY14 PO Reissue	FY2014	23304	1,200,550.00	1,528,450.00	2,779,000.00		
Brandes Design-Build, Inc. FY2016 PO# 67346			CO #1 Modification to drain lines in BNR tanks		24840	22,776.29		2,801,776.29		
CDM Smith FY2016 PO# 67329 + 67528 + 67529			FY14 Year-End PO Liquidation				(728,344.56)	2,073,431.73		
JoBear Contracting FY2016 PO# 68561			FY15 PO Reissue	FY2015	26276	728,344.56		2,801,776.29		
			CO #2 Exploratory excavation		26423	11,040.00		2,812,816.29		
					26917	10,200.00		2,823,016.29		
Brandes FY2017 PO# 69615 / FY2018 PO#71959			CO #3 Cable Tray		27079	5,978.14		2,828,994.43		
			CO #4 to Remove Sludge		27209	10,000.00		2,838,994.43		
CDM Smith FY17 PO# 69522/69955/69956; FY18 PO#71534			*FY15 Year End PO Liquidation*			(79,836.05)		2,759,158.38		
			FY16 PO Issue	FY2016	29212	79,836.05		2,838,994.43		
					29249	32,800.00		2,871,794.43		
			CO#1		29329	(5,000.00)		2,866,794.43		
			CO#2		29212	4,151.50		2,870,945.93		
			CO#3		29905	5,327.32		2,876,273.25		
			CO#4		30046	(5,327.32)		2,870,945.93		
			Jobear P.O. 68561		30751	100,378.50		2,971,324.43		
			FY16 Liquidated		30751	(83,785.50)		2,887,538.93		
SISCO FY2016 PO# 68047			SISCO PO#68047 EVALUATE/REPAIR 4 ELECTRIC VALVE ACTUATORS		30111	5,085.16		2,892,624.09		$ 5,085.16
			FY16 Year End PO Liquidation			(34,482.06)		2,858,142.03		
			FY17PO#69615 Brandes	FY2017	31932	33,812.06		2,891,954.09	-	$ -
			PO# 69522 CDM Smith		31954	670.00		2,892,624.09	84,072.06	$ 13,906.75
			PO# 69522 CDM Smith		32776	13,250.00		2,905,874.09	84,072.06	$ 58,955.00
						(33,812.06)		2,872,062.03	84,072.06	$ 169,885.00
						(13.25)		2,872,048.78		$ 1,458,803.25
			PO#71534: Reissue PO#69522 CDM Smith	FY2018	34520	13.25		2,872,062.03		
			CO#1 PO#69522 CDM Smith		34650	36,340.00		2,908,402.03	1	$ 76,622.86
			CO#2 CDM SMITH			86,975.40				
			PO#71959: Reissue PO#69615 Brandes Design-Build		34988	33,812.06	2,942,214.09			
			CO#1		36547	11,430.00	2,953,644.09	11,430.00		
Maxwell Contracting, Inc. FY2015 PO#066365			Task Order 2015-12 to Maxwell Contracting, Inc.		27986	76,000.00	76,000.00			$ -
Emergency - compromise of existing expansion joint						this portion is complete; project is incomplete				
		341,480	^contingency balance--> for Brandes Design-Build							
		10,000	^contingency balance--> for Maxwell Contracting							

Legislation Details (With Text)

File #:	19-405	**Version:**	1	**Name:**	
Type:	Informational Item			**Status:**	Agenda Ready
File created:	8/14/2019			**In control:**	City Council
On agenda:	8/28/2019			**Final action:**	
Title:	FY 2019 Budget Adjustment Report. (Finance Director)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	July FY 2019 EXPENSE Budget Tracking Worksheet.pdf July FY 2019 REVENUE Budget Tracking Worksheet.pdf				

Date	Ver.	Action By	Action	Result

CITY COUNCIL AGENDA ITEM

Memo Date: August 14, 2019
Agenda Date: August 28, 2019
Prepared By: Anthony Hagan / Grants Administrator
Through: Rebecca Bowman, MBA, CGFO, CGFM Finance Director
Requested Action:
FY 2019 Budget Adjustment Report

BACKGROUND:

Pursuant to the Cocoa City Charter, Article XII, Section 5.b., the following report details the budget adjustments that were approved in Fiscal Year 2019 thru June 30, 2019.

STRATEGIC PLAN CONNECTION:

The information contained in this report provides to stakeholders increased transparency related to budget adjustments.

BUDGETARY IMPACT:

None

PREVIOUS ACTION:

None

RECOMMENDED MOTION:
Information Item Only

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
1000 - CITY COUNCIL					
01/10/19	001-1000-511.52-00	($100)	BA #44 - BUSINESS CARDS FOR NEW COUNCIL MEMBERS		1285
	001-1000-511.47-00	$100			
04/30/19	001-1000-511.48-00	($203)	BA #72 - MARCH CLEANUP FLOWER PURCHASE		2823
	001-1000-511.49-00	$203			
2	Budget Amendments/Transfers		Division 1000 Total	$0.00	
1100 - CITY MANAGER'S OFFICE					
11/28/18	001-1100-512.49-00	$3,231	BA #21 - WEBSITE ADA COMPLIANCE		655
05/22/19	001-1100-512.24-00	$56	BA# 60 - NEW POSITION DIGITAL COMMUNICATIONS COORDINATOR		3243
	001-1100-512.27-00	$850			
	001-1100-512.21-00	$1,754			
	001-1100-512.22-00	$1,824			
	001-1100-512.23-00	$6,363			
	001-1100-512.12-00	$22,072			
07/18/19	001-1100-512.49-00	($500)	BA #88 - MAY/JUNE CLEANUP HURRICANE PREP ITEMS		3942
	001-1100-512.42-00	$500			
	001-1100-512.48-00	($500)	BA #88 - MAY/JUNE CLEANUP UNEXPECTED IT PURCHASE		3942
	001-1100-512.52-00	$500			
4	Budget Amendments/Transfers		Division 1100 Total	$36,150.00	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
1103 - INFORMATION TECHNOLOGY					
01/09/19	001-1103-516.68-10	($8,000)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL		1324
	001-1103-516.68-10	($7,059)			
	001-1103-516.64-15	($6,000)			
	001-1103-516.52-00	$21,059			
04/01/19	001-1103-516.52-00	($135)	BA #68 - PROPERTY TAX ON LEASED RICOH COPIERS		2361
	001-1103-516.49-00	$135			
2	Budget Amendments/Transfers		Division 1103 Total	$0.00	
1190 - LEISURE SERVICES					
04/10/19	001-1190-574.23-00	$6,940	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
07/18/19	001-1190-574.13-00	(102)	BA #88 - MAY/JUNE CLEANUP LEISURE SERVICES OVERTIME		3942
	001-1190-574.14-00	102			
2	Budget Amendments/Transfers		Division 1190 Total	$6,940.00	
1500 - FINANCE GENERAL ACCOUNTNG					
01/09/19	001-1500-513.64-00	($3,500)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL		1324
	001-1500-513.52-00	$3,500			
04/10/19	001-1500-513.12-00	($4,495)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-1500-513.12-12	$187			
	001-1500-513.27-00	$593			
	001-1500-513.22-00	$3,715			
04/30/19	001-1500-513.52-00	($465)	BA #72 - MARCH CLEANUP BUDGET DOCUMENT COVERS / TABS		2823
	001-1500-513.47-00	$465			
07/18/19	001-1500-513.12-00	($2,178)	BA #88 - MAY/JUNE CLEANUP FINANCE ACCRUAL PAYOUTS		3942
	001-1500-513.12-12	$2,178			
4	Budget Amendments/Transfers		Division 1500 Total	$0.00	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
1510 - FINANCE UTILITY ACCOUNTNG					
01/09/19	001-1510-536.34-00	$32,256	BA #34 - UNANTICIPATED INCREASE IN PHONE COSTS		1324
04/10/19	001-1510-536.27-00	$1,328	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-1510-536.21-00	$1,799			
	001-1510-536.22-00	$3,037			
	001-1510-536.13-00	$22,969			
07/18/19	001-1510-536.12-00	($4,632)	BA #88 - MAY/JUNE CLEANUP FINANCE UTILITY OVERTIME		3942
	001-1510-536.14-00	$4,632			
	001-1510-536.41-00	($1,288)	BA #88 - MAY/JUNE CLEANUP SAFE ROOM VIDEO CABLING		3942
	001-1510-536.54-00	$179			
	001-1510-536.46-02	$1,109			
4	Budget Amendments/Transfers		Division 1510 Total	$61,389.00	
1600 - GENERAL OPERATIONS					
11/14/18	001-1600-513.39-00	($6,000)	BA #14 - MILESTONE PROFFESIONAL SERVICES - DEBT COMP, FIN REP		647
	001-1600-513.31-00	$6,000			
11/28/18	001-1600-513.39-00	($10,000)	BA #21 - INTEGRITY FINANCE LLC - TAX EXEMPT CALCULATIONS		942
	001-1600-513.31-00	$10,000			
01/09/19	001-1600-513.39-00	($32,256)	BA #34 - UNANTICIPATED INCREASE IN PHONE COSTS		1324
03/13/19	001-1600-513.39-00	($8,213)	BA# 62 - PART-TIME RECORD SECRETARY FOR FY2019		2191
	001-1600-513.49-00	$130,000	BA# 63 - FMIT DEDUCTIBLE PAYMENT FOR FY19		2189
	001-1600-513.39-00	($70,000)	BA# 65 - 3RD PARTY PROFFESIONAL PLANNING SERVICES		2192
	001-1600-513.83-01	$50,000	BA# 70 - LEASE OF CITY PROPERTY / FLORIDA HISTORY MUSEUM		2193
04/10/19	001-1600-513.39-00	($88,112)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-1600-513.39-00	($29,133)			
	001-1600-513.39-00	($20,144)			
	001-1600-513.39-00	($6,940)			

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
04/24/19	001-1600-513.39-00	($109,000)	BA #79 - NON RETAINER FEE PAID TO CITY ATTORNEY		2879
	001-1600-513.31-01	$109,000			
04/30/19	001-1600-513.52-00	($2)	BA #72 - MARCH CLEANUP INCREMENTAL CRA TAXES		2823
	001-1600-513.81-00	$2			
	001-1600-513.31-00	($400)	BA #72 - MARCH CLEANUP LEADERSHIP RETREAT RENTAL		2823
	001-1600-513.44-00	$400			
05/22/19	001-1600-513.39-00	($32,919)	BA# 60 - NEW POSITION DIGITAL COMMUNICATIONS COORDINATOR		3243
06/12/19	001-1600-581.91-03	$1,324,369	BA #101 - CONSTRUCTION FOR JOE LEE SMITH CENTER		3490
	001-1600-513.39-00	($19,937)	BA #99 - COVER LOAN FEE FOR CDBG 108 LOAN		3489
	001-1600-581.91-03	$19,937			
06/26/19	001-1600-581.91-23	($232,864)	BA #106 - UNUSED BUDGET AND MEDIAN MAINTENANCE		3758
	001-1600-513.23-00	($300)	BA #78 - APRIL CLEANUP SUMMER YOUTH PROGRAM		3663
	001-1600-513.34-00	$300			
07/18/19	001-1600-513.31-02	($500)	BA #88 - MAY/JUNE CLEANUP SUMMER YOUTH PROGRAM		3942
	001-1600-513.34-00	$500			
17	Budget Amendments/Transfers		Division 1600 Total	$983,788.00	
1601 - EMERGENCY/DISASTER SVS					
11/28/18	001-1601-525.63-00	$35,074	BA #21 - HURRICANE IRMA DAMAGES		655
01/09/19	001-1601-525.41-00	$2,400	BA #34 - FIRE STATION REPEATER		1322
2	Budget Amendments/Transfers		Division 1601 Total	$37,474.00	
1801 - HUMAN RESOURCES					
01/29/19	001-1801-513.23-00	($1,250)	BA #47 - CONTRACT WORK SAFETY RISK MANAGER		1518
	001-1801-513.34-00	$1,250			
04/01/19	001-1801-513.23-00	($432)	BA #68 - COVER VERIZON BILLS FOR HR REMAINDER FY		2361
	001-1801-513.41-00	$432			
04/10/19	001-1801-513.12-00	($1,558)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-1801-513.12-12	$1,558			
3	Budget Amendments/Transfers		Division 1801 Total	$0.00	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
1805 - CITY CLERK				
03/13/19	001-1805-513.24-00	$13	BA# 62 - PART-TIME RECORD SECRETARY FOR FY2019	2191
	001-1805-513.21-00	$542		
	001-1805-513.22-00	$585		
	001-1805-513.12-00	$7,073		
04/10/19	001-1805-513.22-00	$825	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-1805-513.21-00	$852		
	001-1805-513.23-00	$7,778		
	001-1805-513.12-00	$10,689		
2	Budget Amendments/Transfers		Division 1805 Total	$28,357.00
2100 - POLICE ADMIN/OPERATIONS				
10/25/18	001-2100-521.52-00	($742)	BA #9 - PD SYMPHONY CONSOLE, NOTARY RENEWAL, & INTOXILYZER REPLENISH	267
	001-2100-521.46-00	$742		
11/14/18	001-2100-521.64-15	($50,400)	BA #11 - PD LAPTOP REPLACEMENT PROGRAM (NO LONGER CAPITAL)	645
	001-2100-521.52-00	$50,400		
01/09/19	001-2100-521.64-01	($24,879)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	001-2100-521.64-00	($8,075)		
	001-2100-521.64-00	($3,846)		
	001-2100-521.52-00	$3,846		
	001-2100-521.52-00	$8,075		
	001-2100-521.52-11	$24,879		
04/01/19	001-2100-521.44-00	($6,144)	BA #68 - CORRECT ACCOUNT FOR TASER CARTRIDGE LEASE	2361
	001-2100-521.52-00	$6,144		
04/10/19	001-2100-521.12-00	($25,163)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-2100-521.12-06	$1,660		
	001-2100-521.15-00	$2,060		
	001-2100-521.12-12	$21,443		

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
06/26/19	001-2100-521.44-00	($18,000)	BA #78 - APRIL CLEANUP BODYWORN CAMERA GRANT	3663
	001-2100-521.52-00	($16,000)		
	001-2100-521.40-00	($2,000)		
	001-2100-521.40-00	$2,000		
	001-2100-521.52-00	$16,000		
	001-2100-521.44-00	$18,000		
07/18/19	001-2100-521.64-00	($1,753)	BA #88 - MAY/JUNE CLEANUP CJIS AUDIT & IT PURCHASE	3942
	001-2100-521.64-15	($1,607)		
	001-2100-521.56-15	$3,360		
	001-2100-521.12-00	($6,988)	BA #88 - MAY/JUNE CLEANUP PD ACCRUAL PAYOUTS	3942
	001-2100-521.12-06	$1,453		
	001-2100-521.12-12	$5,535		
8	Budget Amendments/Transfers		Division 2100 Total	$0.00
2101 - POLICE COMMUNICATIONS				
10/25/18	001-2101-521.34-00	($2,772)	BA #9 - PD SYMPHONY CONSOLE, NOTARY RENEWAL, & INTOXILYZER REPLENISH	267
	001-2101-521.46-00	$2,772		
04/10/19	001-2101-521.12-00	($7,607)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-2101-521.12-12	$7,607		
06/26/19	001-2101-521.55-00	($2,280)	BA #78 - APRIL CLEANUP BATTERY BACKUPS FOR PD	3663
	001-2101-521.46-00	$2,280		
3	Budget Amendments/Transfers		Division 2101 Total	$0.00
2132 - CODE ENFORCEMENT				
10/25/18	001-2132-524.52-00	($85)	BA #9 - PD SYMPHONY CONSOLE, NOTARY RENEWAL, & INTOXILYZER REPLENISH	267
	001-2132-524.54-00	$85		
04/10/19	001-2132-524.12-00	($1,307)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-2132-524.27-00	$1,307		

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
04/30/19	001-2132-524.52-00	($50)	BA #72 - MARCH CLEANUP CODE ENFORCEMENT MEMBERSHIP	2823
	001-2132-524.54-00	$50		
07/18/19	001-2132-524.12-00	($451)	BA #88 - MAY/JUNE CLEANUP PD ACCRUAL PAYOUTS	3942
	001-2132-524.12-12	$451		
4 Budget Amendments/Transfers			Division 2132 Total	$0.00
2200 - FIRE ADMINISTRATION				
04/01/19	001-2200-522.42-00	$500	BA #68 - ADD POSTAGE FOR FIRE INSPECTOR	2361
04/10/19	001-2200-522.12-00	($1,167)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-2200-522.13-00	$1,167		
04/24/19	001-2200-522.56-16	$36,650	BA #80 - FIRE DEPARTMENT STATE EMS GRANT AWARD	2878
07/18/19	001-2200-522.45-00	$94	BA #88 - MAY/JUNE CLEANUP FIRE INSURANCE PREMIUMS	3942
4 Budget Amendments/Transfers			Division 2200 Total	$37,244.00
2201 - FIRE OPERATIONS				
11/28/18	001-2201-522.64-00	$90,520	BA #21 - FIRE TRUCK REFURBISHMENT	655
01/17/19	001-2201-522.64-00	($8,717)	BA #45 - PURCHASE SCBA GEAR - NO LONGER CAPITAL	1384
	001-2201-522.52-00	$8,717		
04/01/19	001-2201-522.42-00	($500)	BA #68 - ADD POSTAGE FOR FIRE INSPECTOR	2361
04/10/19	001-2201-522.12-00	($53,720)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-2201-522.21-00	$11,507		
	001-2201-522.13-00	$42,213		
	001-2201-522.12-12	$88,112		
04/30/19	001-2201-522.52-05	($1,700)	BA #72 - MARCH CLEANUP COVER UTILITY BILLS / FPL	2823
	001-2201-522.43-00	$1,700		
	001-2201-522.52-05	($3,963)	BA #72 - MARCH CLEANUP PAY FPL AND FL CITY GAS	2823
	001-2201-522.47-00	($172)		
	001-2201-522.52-10	$365		
	001-2201-522.43-00	$3,770		

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
07/18/19	001-2201-522.12-00	($3,254)	BA #88 - MAY/JUNE CLEANUP FIRE ACCRUAL PAYOUTS		3942
	001-2201-522.12-12	$3,254			
	001-2201-522.55-00	($1,024)	BA #88 - MAY/JUNE CLEANUP FIRE INSURANCE PREMIUMS		3942
	001-2201-522.45-00	$930			
	001-2201-522.64-15	($9,777)	BA #88 - MAY/JUNE CLEANUP FIRE STATION ALERTING		3942
	001-2201-522.52-00	$9,777			
9	Budget Amendments/Transfers		Division 2201 Total	$178,038.00	
3200 - ADMINISTRATION					
11/28/18	001-3200-515.34-02	$77,200	BA #19 - FDEP GRANT WAS AWARDED - ACCEPT GRANT		940
	001-3200-515.31-00	$4,888	BA #21 - PARKING STUDY OF COCOA VILLAGE		655
01/09/19	001-3200-515.64-15	($2,500)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL		1324
	001-3200-515.64-15	($1,800)			
	001-3200-515.52-00	$4,300			
01/14/19	001-3200-515.12-00	($25,000)	BA #40 - PAY FOR INSPECTION SERVICES DUE TO LACK OF STAFF		1321
	001-3200-515.34-00	$25,000			
03/13/19	001-3200-515.52-00	($30,250)	BA #64 - SOFTWARE LICENSE FOR EAR BASED AMENDMENTS		2134
	001-3200-515.31-00	$30,250			
	001-3200-515.31-00	$25,000	BA# 65 - 3RD PARTY PROFFESIONAL PLANNING SERVICES		2192
	001-3200-515.34-00	$45,000			
04/01/19	001-3200-515.49-00	$3,000	BA #68 - PAY FOR LEGAL ADS AND RECORDING		2361
04/10/19	001-3200-515.12-00	($11,687)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-3200-515.13-00	$1,548			
	001-3200-515.12-12	$10,139			
07/18/19	001-3200-515.52-00	($2,250)	BA #88 - MAY/JUNE CLEANUP COM SERVICES IT EQUIP		3942
	001-3200-515.64-15	$2,250			
	001-3200-515.12-00	($4,000)	BA #88 - MAY/JUNE CLEANUP ZONING MEETINGS ADS		3942
	001-3200-515.49-00	$4,000			
10	Budget Amendments/Transfers		Division 3200 Total	$155,088.00	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
3205 - ECONOMIC DEVELOPMENT					
11/28/18	001-3205-559.31-00	$7,112	BA #21 - CONSULTING FOR HUD LOAN		655
01/23/19	001-3205-559.34-03	$20,000	BA #50 - FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY GRANT		1520
03/13/19	001-3205-559.47-00	($40)	BA #46 - STAGE RENTAL FOR ANNUAL ECONOMIC DEVELOPMENT BREAKFAST		2134
	001-3205-559.44-00	$40			
	001-3205-559.48-00	($2,500)	BA #52 - SPONSOR HABITAT FOR HUMANITY WOMEN'S VETERAN HOUSING		2134
	001-3205-559.46-00	($2,000)			
	001-3205-559.47-00	($1,500)			
	001-3205-559.82-01	$6,000			
	001-3205-559.12-00	($4,350)	BA #53 - COVER TAX BILL FOR GROVE AVENUE - CITY OWNS		2134
	001-3205-559.49-00	$4,350			
04/01/19	001-3205-559.12-00	($3,000)	BA #68 - PAY FOR LEGAL ADS AND RECORDING		2361
04/10/19	001-3205-559.12-00	($6,656)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-3205-559.12-12	$6,656			
06/26/19	001-3205-559.82-01	$2,000,000	BA #104 - WALMART ECONOMIC DEV. INCENTIVE		3761
07/18/19	001-3205-559.47-00	($500)	BA #88 - MAY/JUNE CLEANUP LEGAL ADS FOR ORDINANCES		3942
	001-3205-559.49-02	$500			
9	Budget Amendments/Transfers		Division 3205 Total	$2,024,112.00	
3500 - ADMINISTRATION					
04/10/19	001-3500-519.14-00	$4	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-3500-519.21-00	$42			
	001-3500-519.27-00	$1,880			
07/18/19	001-3500-519.12-00	($10)	BA #88 - MAY/JUNE CLEANUP PUBLIC WORKS OVERTIME		3942
	001-3500-519.14-00	$10			
2	Budget Amendments/Transfers		Division 3500 Total	$1,926.00	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
3510 - STREET MANAGEMENT				
10/10/18	001-3510-541.63-00	($339,797)	BAF#3 - GOODSON PAVING AGREEMENTS FOR FY19	135
	001-3510-541.46-00	$339,797		
	001-3510-541.63-00	($60,203)	BAF#4 - GOODSON PAVING COCOA VILLAGE SIDEWALKS	136
	001-3510-541.63-00	($25,117)		
	001-3510-541.46-00	$25,117		
	001-3510-541.46-00	$60,203		
11/28/18	001-3510-541.63-00	$15,153	BA #21 - FISKE BLVD COMPLETE STREET	655
	001-3510-541.46-00	$44,988	BA #21 - US1 CORRIDOR LIGHTING	655
03/13/19	001-3510-541.46-00	($5,000)	BA #51 - ADDITIONAL FUNDS DESIGN SERVICES SR520	2134
	001-3510-541.31-00	$5,000		
04/10/19	001-3510-541.23-00	($14,029)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-3510-541.12-00	($135)		
	001-3510-541.20-00	$135		
04/30/19	001-3510-541.52-00	($300)	BA #72 - MARCH CLEANUP COST OF LINE LOCATES	2823
	001-3510-541.34-00	$300		
07/18/19	001-3510-541.46-00	($480)	BA #88 - MAY/JUNE CLEANUP PW CELL PHONE EXPENSES	3942
	001-3510-541.41-00	$480		
	001-3510-541.46-00	($5,000)	BA #88 - MAY/JUNE CLEANUP PW IN HOUSE CONCRETE WK	3942
	001-3510-541.53-00	$5,000		
	001-3510-541.46-00	($500)	BA #88 - MAY/JUNE CLEANUP PW LOCATE SERVICES	3942
	001-3510-541.34-00	$500		
	001-3510-541.12-00	($480)	BA #88 - MAY/JUNE CLEANUP PW SHOE ALLOWANCE	3942
	001-3510-541.20-00	$480		
07/24/19	001-3510-541.63-00	($69,883)	BA #111 - PURCHASE NEW CONCRETE TRANSIT MIXER	4163
	001-3510-541.53-00	$24,883		
	001-3510-541.64-00	$45,000		
12	Budget Amendments/Transfers		Division 3510 Total	$46,112.00

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
3520 - PARKS & BEAUTIFICATION				
12/14/18	001-3520-572.34-00	($14,000)	BA #29 - OVERTIME FOR MOWER & PRESSURE WASHER RENTAL	944
	001-3520-572.44-00	$6,000		
	001-3520-572.14-00	$8,000		
	001-3520-572.34-00	($33,456)	BA #30 - MOWING AND MAINTENANCE OF US1 & SR520	944
	001-3520-572.34-09	$33,456		
04/10/19	001-3520-572.12-00	($4,614)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-3520-572.12-00	($585)		
	001-3520-572.20-00	$90		
	001-3520-572.12-12	$495		
06/26/19	001-3520-572.14-00	$3,000	BA #106 - UNUSED BUDGET AND MEDIAN MAINTENANCE	3758
	001-3520-572.52-00	$48,000		
	001-3520-572.34-00	$49,000		
07/18/19	001-3520-572.12-00	($1,244)	BA #88 - MAY/JUNE CLEANUP PW SHOE ALLOWANCE	3942
	001-3520-572.20-00	$360		
	001-3520-572.14-00	$884		
5	Budget Amendments/Transfers		Division 3520 Total	$95,386.00
3540 - PUBLIC WORKS- FLEET MAINT				
11/28/18	001-3540-519.34-00	$8,000	BA #21 - NAPA PARTS CONTRACT	655
04/10/19	001-3540-519.12-00	($1,926)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-3540-519.12-00	($50)		
	001-3540-519.20-00	$50		
04/30/19	001-3540-519.55-00	($280)	BA #72 - MARCH CLEANUP COVER REPAIR COSTS FY19	2823
	001-3540-519.46-03	$280		
3	Budget Amendments/Transfers		Division 3540 Total	$6,074.00

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
3560 - FACILITY MANAGEMENT				
11/28/18	001-3560-519.46-02	$6,529.00	BA #21 - HEART OF COCOA MEETING ROOM	655
01/09/19	001-3560-519.46-02	$2,800.00	BA #34 - COMPLETION OF MEETING ROOM	1322
	001-3560-519.64-00	($4,000.00)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	001-3560-519.64-00	($3,000.00)		
	001-3560-519.64-00	($2,500.00)		
	001-3560-519.64-00	($1,500.00)		
	001-3560-519.52-00	$11,000.00		
	001-3560-519.34-00	($12,000.00)	BA #34 - UNBUDGETED A/C REPAIR COSTS FOR FY19	1324
	001-3560-519.46-02	$12,000.00		
01/23/19	001-3560-519.52-00	$21,470.00	BA #43 - PURCHASE OF TWO CITY WELCOME SIGNS	1519
03/13/19	001-3560-519.46-02	($5,000.00)	BA #57 - G4S RISK SERVICES SECURITY SCAN OF COUNCIL	2134
	001-3560-519.31-00	$5,000.00		
04/10/19	001-3560-519.12-00	($440.00)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	001-3560-519.20-00	$440.00		
06/26/19	001-3560-519.52-00	($5,100)	BA #78 - APRIL CLEANUP LEE WENNER LIGHT POLE	3663
	001-3560-519.63-00	$5,100		
	001-3560-519.52-00	($40,000)	BA #78 - APRIL CLEANUP LEE WENNER MAINTENANCE	3663
	001-3560-519.46-02	$40,000		
07/18/19	001-3560-519.46-02	($1,291)	BA #88 - MAY/JUNE CLEANUP PW INSURANCE PREMIUMS	3942
	001-3560-519.45-00	$1,291		
	001-3560-519.46-00	($2,000)	BA #88 - MAY/JUNE CLEANUP PW OVERTIME COSTS	3942
	001-3560-519.14-00	$2,000		
11	Budget Amendments/Transfers		Division 3560 Total	$30,799.00

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
3580 - CAPITAL PROJECTS MNGMT					
11/28/18	001-3580-519.63-00	$59,390	BA #21 - HURRICANE IRMA DAMAGES		655
	001-3580-519.63-00	$303,900			
01/09/19	001-3580-519.64-00	($28,000)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL		1324
	001-3580-519.52-00	$28,000			
04/10/19	001-3580-519.22-00	$352	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	001-3580-519.12-00	$4,262			
	001-3580-519.23-00	$14,029			
07/18/19	001-3580-519.46-03	($10)	BA #88 - MAY/JUNE CLEANUP PW INSURANCE PREMIUMS		3942
	001-3580-519.45-00	$10			
4	Budget Amendments/Transfers		Division 3580 Total	$381,933.00	
126	Total Budget Amendments/Transfers		**GENERAL FUND**	**$4,110,810**	
3240 - HOUSING GRANTS					
11/28/18	103-3240-554.83-00	$350	BA #21 - INSPECTION SERVICES		655
	103-3240-554.83-00	$225	BA #21 - REHAB INSPECTION SERVICES		655
01/10/19	103-3240-554.83-00	($17,833)	BA #39 - PURCHASE 2019 FORD FUSION FOR COMMUNITY SERVICES DIRECTOR		1285
	103-3240-554.64-00	$17,833			
04/10/19	103-3240-554.12-00	($1,363)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	103-3240-554.12-12	$124			
	103-3240-554.13-00	$1,239			
06/12/19	103-3240-517.73-00	$19,937	BA #100 - COVER FEES FOR CDBG SECTION 108 LOAN		3755
	103-3240-554.62-00	$1,324,369	BA #102 - CONSTRUCTION FOR JOE LEE SMITH CENTER		3491
	103-3240-554.62-00	$894,000	BA #97 - ACCEPT LOAN FUND FROM CDBG LOAN PROGRAM		3488
06/26/19	103-3240-554.40-00	($37)	BA #78 - APRIL CLEANUP 108 LOAN APPLICATION SHIP		3663
	103-3240-554.42-00	$37			
07/18/19	103-3240-554.40-00	($700)	BA #88 - MAY/JUNE CLEANUP CS HOUSING GRANTS		3942
	103-3240-554.49-00	$700			
9	Budget Amendments/Transfers		Division 3240 Total	$2,238,881.00	
9	Total Budget Amendments/Transfers		**CDBG**	**$2,238,881**	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
3240 - HOUSING GRANTS					
12/12/18	104-3240-554.83-00	($95,355)	BA #31 - REDUCE HOME AMOUNT TO MATCH DISBURSEMENT AGREEMNT		1031
04/10/19	104-3240-554.12-00	($341)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	104-3240-554.12-12	$31			
	104-3240-554.13-00	$310			
2	Budget Amendments/Transfers		Division 3240 Total	($95,355.00)	
	2 Total Budget Amendments/Transfers		**BREVARD COUNTY HOME**	**($95,355)**	
3240 - HOUSING GRANTS					
11/28/18	105-3240-554.83-00	$450	BA #21 - 425 BERNARD APPRAISAL		655
	105-3240-554.34-00	$1,780	BA #21 - HOUSING COUNSELING		655
2	Budget Amendments/Transfers		Division 3240 Total	$2,230.00	
	2 Total Budget Amendments/Transfers		**SHIP / COCOA HOUSING TRUST**	**$2,230**	
3230 - CRA ADMIN/OPERATIONS					
11/28/18	110-3230-559.31-00	$6,075	BA #21 - CONSULTANT SERVICES		655
	110-3230-559.63-00	$2,000	BA #21 - LEE WENNER PARK		655
	110-3230-559.83-00	$7,000	BA #21 - OLEANDER STREET FACADE GRANT		655
12/20/18	110-3230-559.52-00	($200)	BA #15 - FUNDS NOT BUDGETED FOR CHARLENE NEUTERMAN CELL PHONE		1033
	110-3230-559.41-00	$200			
	110-3230-559.63-00	($95,000)	BA #33 - MOVE FUNDS TO NEW PROJECT NUMBER FOR TDOCK		1032
	110-3230-559.63-00	$95,000			
01/09/19	110-3230-559.39-00	($2,000)	BA #34 - LABOR FOR CAMERA NOT IN ORIGINAL QUOTE		1324
	110-3230-559.64-15	$2,000			
02/21/19	110-3230-559.34-00	($10,000)	BA #58 - SECURITY LIGHTS AT LEE WENNER PARK & LEGAL FEES		1844
	110-3230-559.40-00	($2,478)			
	110-3230-559.55-00	($1,051)			
	110-3230-559.31-01	$3,529			
	110-3230-559.63-00	$10,000			

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
	110-3230-559.39-00	($140,000)	BA #59 - MOVE CONTINGENCY FOR CRA ASSESSMENTS		1844
	110-3230-559.31-00	$140,000			
05/16/19	110-3230-559.39-00	($91,500)	BA #71 - MOVE FUNDS FOR NEW CIVIC CENTER ANALYSIS		3088
	110-3230-559.31-00	$91,500			
	110-3230-559.39-00	($28,500)	BA #73 - COVER ISS TASK ORDER / NEW CIVIC CENTER		3088
	110-3230-559.31-00	$28,500			
	110-3230-559.39-00	($234,490)	BA #82 - MOVE CRA FUNDS FOR DAY SLIPS / T-DOCK		3088
	110-3230-559.63-00	($50,000)			
	110-3230-559.63-00	($45,000)			
	110-3230-581.91-32	$329,490			
05/29/19	110-3230-559.42-00	($9)	BA #76 - INSURANCE COSTS FOR BREVARD CRA PROPERTY		3241
	110-3230-559.45-00	$9			
06/12/19	110-3230-559.34-00	($15,052)	3 Solor Compactors for Riverfront Park		4067
	110-3230-559.64-00	$15,052			
13	Budget Amendments/Transfers		Division 3230 Total	$15,075.00	
	13 Total Budget Amendments/Transfers		**CRA COCOA RDA**	**$15,075**	
3230 - CRA ADMIN/OPERATIONS					
11/19/18	111-3230-559.63-00	($60,000)	BA #6 - WOMEN'S VETERAN HOUSING - MOVE FUNDS		567
	111-3230-559.34-00	$60,000			
12/03/18	111-3230-559.52-00	($300)	BA #16 - CELL PHONE FOR CHARLENE NEUTERMAN		724
	111-3230-559.41-00	$300			
12/31/18	111-3230-559.64-00	($3,051)	BA #24 - MOVE FUNDS DUE TO CAPITAL THRESHOLD INCREASE		1129
	111-3230-559.42-00	$295			
	111-3230-559.52-00	$2,756			
02/21/19	111-3230-559.55-00	($800)	BA #56 - HABITAT FOR HUMANITY APPRAISAL & CLOSING COST		1844
	111-3230-559.40-00	($280)			
	111-3230-559.31-00	$1,080			
4	Budget Amendments/Transfers		Division 3230 Total	$0.00	
	4 Total Budget Amendments/Transfers		**CRA DIAMOND SQUARE 626**	**$0**	

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3230 - CRA ADMIN/OPERATIONS					
05/02/19	112-3230-559.34-00	($90)	BA #77 - COVER INSURANCE COSTS TWO CITY PROPERTIES		2880
	112-3230-559.45-00	$90			
1 Budget Amendments/Transfers			Division 3230 Total	$0.00	
1 Total Budget Amendments/Transfers			**CRA US 1 CORRIDOR**	**$0**	
2100 - POLICE ADMIN/OPERATIONS					
10/10/18	141-2100-521.52-00	$5,000	BAF#2 - GIFT CARDS FOR PD GUNS BUY BACK PROGRAM		133
11/14/18	141-2100-521.52-00	$7,488	BA #12 - REPLACE EQUIPMENT IN INTERVIEW ROOMS		646
2 Budget Amendments/Transfers			Division 2100 Total	$12,488.00	
2 Total Budget Amendments/Transfers			**POLICE CONFISCATED FUND**	**$12,488**	
3580 - CAPITAL PROJECTS MNGMT					
01/09/19	301-3580-519.62-00	($2,800)	BA #34 - REPLENISH DEPARTMENT BUDGET		1324
	301-3580-581.91-01	$2,800			
01/30/19	301-3580-519.62-00	($17,360)	BA #42 - MOVE FUNDS TO COVER ARCHITECT SVCS		1543
	301-3580-519.31-00	$17,360			
04/30/19	301-3580-519.62-00	($7,000)	BA #72 - MARCH CLEANUP CIVIL ENGINEERING SERVICE		2823
	301-3580-519.31-00	$7,000			
06/12/19	301-3580-519.62-00	($1,214,365)	BA #98 - CONSTRUCTION FOR JOE LEE SMITH CENTER		3492
	301-3580-519.64-00	$600,720			
	301-3580-519.63-00	$613,645			
4 Budget Amendments/Transfers			Division 3580 Total	$0.00	
4 Total Budget Amendments/Transfers			**CAPITAL PROJECTS FUND**	**$0**	
3580 - CAPITAL PROJECTS MNGMT					
04/29/19	302-3580-519.63-00	($1,719,250)	BA #72 - MARCH CLEANUP BUDGET IN WRONG ACCOUNT		2807
	302-3580-572.63-04	$1,719,250			
05/08/19	302-3580-572.63-01	$149,200	BA #84 - MOVE CRA FUNDS FOR DAY SLIPS / T-DOCK		3091
	302-3580-572.63-03	$180,290			

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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
	302-3580-572.63-03	$25,000	BA #85 - ACCEPT TWO FIND GRANTS FOR RIVERFRONT		3093
	302-3580-572.63-01	$200,000			
	302-3580-572.63-04	$427,100			
3	Budget Amendments/Transfers		Division 3580 Total	$981,590.00	
	3 Total Budget Amendments/Transfers		**RIVERFRONT / LEE WENNER PARK**	**$981,590**	
3580 - CAPITAL PROJECTS MNGMT					
04/29/19	303-3580-519.63-00	($1,500,000)	BA #72 - MARCH CLEANUP BUDGET IN WRONG ACCOUNT		2807
	303-3580-541.63-00	$1,500,000			
1	Budget Amendments/Transfers		Division 3580 Total	$0.00	
	1 Total Budget Amendments/Transfers		**FISKE BLVD COMPLETE STREETSCAPE**	**$0**	
1515 - UTILITY SUPPORT SERVICES					
01/09/19	421-1515-536.46-00	$700	BA #34 - TIMECLOCK AND WINDOW TINTS		1322
	421-1515-536.46-00	$2,900			
	421-1515-536.64-15	($4,483)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL		1324
	421-1515-536.64-15	($2,799)			
	421-1515-536.64-15	($1,684)			
	421-1515-536.46-00	$2,038			
	421-1515-536.52-00	$2,445			
	421-1515-536.52-00	$4,483			
	421-1515-536.34-00	$2,900	BA #34 - UNANTICIPATED PHONE LINE COST INCREASE		1324
04/01/19	421-1515-536.52-00	($4,483)	BA #68 - REVERSING BAF #34 - ENTERED TWICE		2361
	421-1515-536.64-15	$4,483			
04/10/19	421-1515-536.34-00	($4,000)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
	421-1515-536.46-00	($3,161)			
	421-1515-536.34-00	($2,900)			
	421-1515-536.12-00	($373)			
	421-1515-536.20-00	$373			
	421-1515-536.46-03	$3,161			
	421-1515-536.52-00	$4,000			

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EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
07/18/19	421-1515-536.34-00	($2,265)	BA #88 - MAY/JUNE CLEANUP UTILITY CUSTOMER REFUNDS	3942
	421-1515-536.55-00	($500)		
	421-1515-536.49-00	$2,765		
	421-1515-536.12-00	($802)	BA #88 - MAY/JUNE CLEANUP W/S ACCRUAL PAYOUTS	3942
	421-1515-536.12-12	$202		
	421-1515-536.20-00	$600		
7	Budget Amendments/Transfers		Division 1515 Total	$3,600.00
4010 - WATER ADMINISTRATION				
10/10/18	421-4010-536.39-00	($119,034)	BAF#1 - CONE ROAD DRAIN IMPROVEMENTS - WS17CD	132
11/14/18	421-4010-536.39-00	($6,000)	BA #14 - MILESTONE PROFFESIONAL SERVICES - DEBT COMP, FIN REP	647
	421-4010-536.31-00	$6,000		
11/28/18	421-4010-536.31-00	$1,800	BA #21 - BOND CERTIFICATION	655
	421-4010-536.31-00	$88	BA #21 - FDEP VIOLATION INSERTS	655
	421-4010-536.31-00	$28,740	BA #21 - REQUIRED EPA TESTING	655
12/31/18	421-4010-536.31-00	($1,110)	BA #35 - COVER INCREASE IN VEHICLE PURCHASE COST	1129
	421-4010-536.64-00	$1,110		
01/09/19	421-4010-536.39-00	($78,476)	BA #34 - COSTS NOT BUDGETED IN FY19	1324
	421-4010-536.39-00	($112,490)	BA #34 - PROVIDE ADDITIONAL BUDGET FOR PROJECT	1324
	421-4010-536.39-00	$22,799	BA #34 - REDUCE AMOUNT TO TASK ORDER AMOUNT	1324
	421-4010-536.64-15	($500)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	421-4010-536.52-00	$500		
	421-4010-536.39-00	($2,900)	BA #34 - UNANTICIPATED PHONE LINE COST INCREASE	1324
04/10/19	421-4010-536.39-00	($399,499)	BA #69 - CURED IN PLACE PIPE LINING NOT BUDGETED	2673
	421-4010-581.91-25	($16,814)	BA #75 - AMEND THE WATER / SEWER RESTRICTED FUND BUDGET	2621

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
	421-4010-536.39-00	($194,541)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	421-4010-536.12-00	($3,046)		
	421-4010-536.20-00	$600		
	421-4010-536.27-00	$769		
	421-4010-536.12-12	$1,677		
	421-4010-536.39-00	$2,900		
05/22/19	421-4010-536.39-00	($26,000)	BA# 22 - CONTRACT WITH PUBLIC FINANCE LLC YEAR 1	3242
	421-4010-536.31-00	$26,000		
06/26/19	421-4010-536.39-00	($400,000)	BA #105 - COVER REPAIR AND MAINTENANCE FY19	3756
16	Budget Amendments/Transfers		Division 4010 Total	($1,267,427.00)
4020 - DYAL PLANT				
10/29/18	421-4020-536.63-00	($42,362)	TRANSFER FOR OFF SCOPE SERVICES	299
11/28/18	421-4020-536.63-00	($506,413)	BA #20 - AUTOMATIC TRANSFER SWITCH	654
	421-4020-536.63-00	($600,000)	BA #20 - DYAL SURFACE WATER WELL	654
	421-4020-536.63-00	($500,000)	BA #20 - FILTER REHAB 1-5	654
	421-4020-536.46-00	$3,380	BA #21 - BUBBLER BOX GROUNDWATER	655
	421-4020-536.55-00	$8,035	BA #21 - ELECTRICAL SAFETY EDUCATION PROGRAM	655
	421-4020-536.63-00	$507,254	BA #21 - FILTERS #5 & #6	655
	421-4020-536.63-00	$37,850	BA #21 - SCADA SERVER REPLACEMENT	655
	421-4020-536.46-00	$6,395	BA #21 - SEWAGE GRINDER	655
	421-4020-536.42-00	$500	BA #21 - SHIPPING	655
	421-4020-536.63-00	$22,131	BA #21 - TCR ATS / PUMP CONTROL	655
12/12/18	421-4020-536.63-00	($229,496)	BA #26 - REPLACE TWO HVAC CHILLERS FOR DYAL WTP	1030
	421-4020-536.63-00	$229,496		
12/14/18	421-4020-536.64-00	($47,334)	BA #28 - DYAL WTP REPLACE DIESEL FUEL TANK BANANA RIVER	943
	421-4020-536.64-00	$47,334		

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EXPENSE TRANSFER/AMENDMENT DETAIL
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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
01/09/19	421-4020-536.63-00	$78,476	BA #34 - COSTS NOT BUDGETED IN FY19	1324
	421-4020-536.64-00	($6,000)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	421-4020-536.64-00	($4,200)		
	421-4020-536.64-00	($4,000)		
	421-4020-536.52-00	$14,200		
	421-4020-536.63-00	$506,413	BA #34 - TRUE UP FY19 BUDGET FOR FY18 PO'S	1322
04/01/19	421-4020-536.64-00	($40,611)	BA #68 - ADD FUNDS FOR CAL FLO INJECTION POINT	2361
	421-4020-536.63-00	$40,611		
04/10/19	421-4020-536.63-00	$506,413	BA #75 - AMEND THE WATER / SEWER RESTRICTED FUND BUDGET	2621
	421-4020-536.12-00	($2,325)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	421-4020-536.20-00	$215		
	421-4020-536.12-12	$2,110		
	421-4020-536.63-00	$42,362		
05/22/19	421-4020-536.63-00	($20,504)	BA# 81 - REPAIRS NEEDED FOR DYAL HVAC PROJECTS	3244
	421-4020-536.46-02	($1,342)		
	421-4020-536.63-00	$21,846		
06/26/19	421-4020-536.34-00	($45,000)	BA #78 - APRIL CLEANUP NEW MECHANIC SHOP A/C	3663
	421-4020-536.64-00	$45,000		
	421-4020-536.34-00	($53,787)	BA #93 - REPLACE CLUTCH DYAL HIGH SERVICE PUMP 1	3653
	421-4020-536.46-00	$53,787		
	421-4020-536.34-00	($17,000)	BA #94 - REPLACE DYAL WTP DISSOLVED OZONE ANALYZER	3652
	421-4020-536.46-00	$17,000		
	421-4020-536.34-00	($12,000)	BA #95 - PURCHASE AMMONIA ANALYZER FOR DYAL WTP	3654
	421-4020-536.64-00	$12,000		

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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
07/18/19	421-4020-536.55-00	($5,000)	BA #88 - MAY/JUNE CLEANUP DYAL FUEL OIL & LUBRICANT	3942
	421-4020-536.52-30	$5,000		
	421-4020-536.46-02	($15,000)	BA #88 - MAY/JUNE CLEANUP W/S FUEL OIL FUNDS LOW	3942
	421-4020-536.52-30	$15,000		
	421-4020-536.52-09	($15,000)	BA #88 - MAY/JUNE CLEANUP W/S LAB TESTING EQUIPMENT	3942
	421-4020-536.52-00	$15,000		
	421-4020-536.12-00	($1,994)	BA #88 - MAY/JUNE CLEANUP W/S OVERTIME & ACCRUALS	3942
	421-4020-536.20-00	$600		
	421-4020-536.12-12	$1,394		
	421-4020-536.34-00	($2,500)	BA #88 - MAY/JUNE CLEANUP W/S RENTALS AND LEASES	3942
	421-4020-536.44-00	$2,500		
07/24/19	421-4020-536.46-02	($43,861)	BA #109 - FOUR NEW A/C UNITS FOR DYAL WTP	4162
	421-4020-536.64-00	$43,861		
30	Budget Amendments/Transfers		Division 4020 Total	$70,434.00
4025 - WATER FIELD OPERATIONS				
10/10/18	421-4025-536.46-00	$119,034	BAF#1 - CONE ROAD DRAINAGE IMPROVEMENTS - WS17CD	132
11/28/18	421-4025-536.46-00	$2,855	BA #21 - CONE ROAD PROJECT	655
	421-4025-536.46-00	$2,208	BA #21 - EAST COAST CC FIRELINE	655
	421-4025-536.46-00	$4,268	BA #21 - METER STATION	655
	421-4025-536.46-00	$357,878	BA #21 - ROAD RESTORATION	655
	421-4025-536.46-00	$52,265	BA #21 - VALVE IMPROVEMNT	655
	421-4025-536.46-00	$116,131		
	421-4025-536.46-00	$1,650	BA #21 -PIPING FOR WILSON STREET FORCE MAIN	655
01/09/19	421-4025-536.46-00	($90,389)	BA #34 - ADJUST PROFFESIONAL FEE DUE TO BUDGETARY OVERAGE	1324
	421-4025-536.31-03	$90,389		
	421-4025-536.64-15	($13,500)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	421-4025-536.52-00	$13,500		

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04/10/19	421-4025-536.12-00	($3,638)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	421-4025-536.20-00	$310		
	421-4025-536.12-12	$3,328		
	421-4025-536.22-00	$194,541		
04/30/19	421-4025-536.52-00	($780)	BA #72 - MARCH CLEANUP COVER ADDITIONAL TRAINING	2823
	421-4025-536.55-00	$780		
05/22/19	421-4025-536.46-00	($63,226)	BA# 91 - EMERGENCY AIR CONDITIONER REPLACEMENT AT UTILITIES	3245
	421-4025-536.64-00	$63,226		
06/26/19	421-4025-536.52-00	$45,000	BA #105 - COVER REPAIR AND MAINTENANCE FY19	3756
	421-4025-536.46-00	$355,000		
07/18/19	421-4025-536.12-00	($777)	BA #88 - MAY/JUNE CLEANUP WFO ACCRUAL PAYOUTS	3942
	421-4025-536.12-12	$297		
	421-4025-536.20-00	$480		
	421-4025-536.46-02	($10,100)	BA #88 - MAY/JUNE CLEANUP WFO CAPITAL EQUIPMENT	3942
	421-4025-536.34-00	($7,000)		
	421-4025-536.64-00	$17,100		
15 Budget Amendments/Transfers			Division 4025 Total	$1,250,830.00
4055 - ENGINEERING				
10/29/18	421-4055-536.63-00	$42,362	TRANSFER FOR OFF SCOPE SERVICES	299
11/14/18	421-4055-536.63-00	($325,116)	BA #17 - CIP PROJECTS COVERED UNDER BOND	648
	421-4055-536.63-00	$325,116		
11/28/18	421-4055-536.63-00	($400,000)	BA #20 - CAPE CANAVERAL WATER MAIN REPLACEMENT	654
	421-4055-536.63-00	($5,200,000)	BA #20 - DYAL CHEMICAL CONVERSION	654
	421-4055-536.63-00	($330,000)	BA #20 - DYAL GROUNDWATER WTP REACTOR	654
	421-4055-536.63-00	($974,656)	BA #20 - FISKE BLVD PIPELINE REPLACEMENT	654
	421-4055-536.63-00	($698,664)	BA #20 - MICHIGAN AVENUE FORCE MAIN	654
	421-4055-536.63-00	($10,062,500)	BA #20 - PINEDA CROSSING	654
	421-4055-536.63-00	($2,461,274)	BA #20 - PIPE INFRASTRUCTURE	654
	421-4055-536.63-00	($1,997,743)	BA #20 - RAW WATER PIPELINE UPGRADE	654

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Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
	421-4055-536.68-10	$35,118	BA #21 - CAPITAL PLAN - WATER	655
	421-4055-536.63-00	$77,906	BA #21 - GW/SW CLEARWELL	655
	421-4055-536.63-00	$5,497	BA #21 - INDUSTRIAL PARK PUMP STATION	655
	421-4055-536.63-00	$209,868		
	421-4055-536.63-00	$420,316		
	421-4055-536.31-00	$34,307	BA #21 - INSPECTION OF FIBER OPTIC CABLE	655
	421-4055-536.63-00	$33,785	BA #21 - MICHIGAN AVENUE FORCE MAIN EXTENSION	655
	421-4055-536.63-00	$6,429	BA #21 - SR 520	655
	421-4055-536.63-00	$488	BA #21-CHASE/ NORTH TROPICAL TRAIL LOOPING IMPROVEMENTS	655
01/09/19	421-4055-536.64-15	($3,500)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	421-4055-536.64-15	($1,800)		
	421-4055-536.52-00	$5,300		
	421-4055-536.63-00	$2,741	BA #34 - TRUE UP FY19 BUDGET FOR FY18 PO'S	1322
	421-4055-536.63-00	$35,720		
	421-4055-536.63-00	$2,326,022		
04/10/19	421-4055-536.63-00	$3,906	BA #75 - AMEND THE WATER / SEWER RESTRICTED FUND BUDGET	2621
	421-4055-536.63-00	$507,254		
	421-4055-536.63-00	($42,362)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	421-4055-536.12-00	($4,033)		
	421-4055-536.12-12	$4,033		
04/30/19	421-4055-536.68-10	($1,420)	BA #72 - MARCH CLEANUP PORTABLE METER KITS	2823
	421-4055-536.52-00	$1,420		
07/18/19	421-4055-536.12-00	($499)	BA #88 - MAY/JUNE CLEANUP UT ACCRUAL PAYOUTS	3942
	421-4055-536.12-12	$499		
	421-4055-536.52-00	($300)	BA #88 - MAY/JUNE CLEANUP UT FREIGHT AND POSTAGE	3942
	421-4055-536.42-00	$300		
	421-4055-536.52-00	($126)	BA #88 - MAY/JUNE CLEANUP UT VEHICLE INSURANCE	3942
	421-4055-536.45-00	$126		
25	Budget Amendments/Transfers		Division 4055 Total	($18,425,480.00)

4120 - WATER RECLAMATION

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
11/01/18	421-4120-536.46-00	($150)	BA #10 - COVER PRINTING FOR SELLERS WORK ORDERS	346
	421-4120-536.47-00	$150		
11/28/18	421-4120-536.63-00	($2,836,250)	BA #20 - JERRY SELLERS FLOW	654
	421-4120-536.63-00	($130,000)	BA #20 - REPLACE RUSTED CONNECTIONS	654
	421-4120-536.63-00	($130,000)	BA #20 - SPALLING REPAIR OF FILTER	654
	421-4120-536.63-00	$219,098	BA #21 - BNR IMPROVEMENTS	655
	421-4120-536.63-00	$72,799	BA #21 - CAROLLO TASK ORDER 2018-03	655
	421-4120-536.63-00	$76,528	BA #21 - MCC 1-6 IMPROVEMENTS	655
	421-4120-536.46-00	$8,445	BA #21 - REPLACE WASTE WATER PUMP	655
01/09/19	421-4120-536.63-00	($22,799)	BA #34 - REDUCE AMOUNT TO TASK ORDER AMOUNT	1324
	421-4120-536.64-00	($6,000)	BA #34 - TRANSFER TO OPERATING FROM CAPITAL	1324
	421-4120-536.64-00	($5,000)		
	421-4120-536.52-00	$5,000		
	421-4120-536.52-00	$6,000		
	421-4120-536.63-00	$45,243	BA #34 - TRUE UP FY19 BUDGET FOR FY18 PO'S	1322
	421-4120-536.63-00	$49,576		
	421-4120-536.63-00	$128,132		
	421-4120-536.63-00	$155,000		
03/13/19	421-4120-536.46-00	($5,133)	BA #54 - NEW A/C UNITS FOR SELLERS & SHOE ALLOWANCE	2134
	421-4120-536.52-00	($1,247)		
	421-4120-536.42-00	$200		
	421-4120-536.20-00	$225		
	421-4120-536.64-00	$5,955		
04/10/19	421-4120-536.23-00	($1,536)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	421-4120-536.12-12	$34		
	421-4120-536.20-00	$127		
	421-4120-536.12-00	$1,413		
	421-4120-536.23-00	$1,536		
	421-4120-536.27-00	$2,693		
	421-4120-536.13-00	$3,251		

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
05/08/19	421-4120-536.31-03	($34,347)	BA #83 - COVER TASK ORDER FOR SCADA PROGRAMMING		3090
	421-4120-536.46-00	$34,347			
06/26/19	421-4120-536.52-00	($2,340)	BA #78 - APRIL CLEANUP SEWER VEHICLE INSURANCE		3663
	421-4120-536.45-00	$2,340			
07/10/19	421-4120-536.31-03	($5,000)	Bar Screen Control Panel for Sellers Plant		4068
	421-4120-536.63-00	$5,000			
07/18/19	421-4120-536.46-00	($75)	BA #88 - MAY/JUNE CLEANUP UT REPLACEMENT EMPLOYEES		3942
	421-4120-536.20-00	$75			
17	Budget Amendments/Transfers		Division 4120 Total	($2,356,710.00)	
4125 - SEWER FIELD OPERATIONS					
11/28/18	421-4125-536.63-00	($400,000)	BA #20 - CIPP REHABILITATION		654
	421-4125-536.46-00	$49,929	BA #21 - MANHOLE ASSESSMENT		655
	421-4125-536.46-00	$22,870	BA #21 - REPLACE LIFT STATION PUMPS		655
	421-4125-536.46-00	$75,000	BA #21 - RESTORATION SERVICES		655
01/09/19	421-4125-536.46-00	$112,490	BA #34 - PROVIDE ADDITIONAL BUDGET FOR PROJECT		1324
04/10/19	421-4125-536.46-00	$399,499	BA #69 - CURED IN PLACE PIPE LINING NOT BUDGETED		2673
	421-4125-536.12-00	($7,518)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2622
04/30/19	421-4125-536.52-00	($2,374)	BA #72 - MARCH CLEANUP CONFINED SPACE TRAINING		2823
	421-4125-536.55-00	$2,374			
07/18/19	421-4125-536.12-00	($26,100)	BA #88 - MAY/JUNE CLEANUP UT OPERATING EXPENSES		3942
	421-4125-536.46-03	($12,250)			
	421-4125-536.46-00	($8,000)			
	421-4125-536.64-00	$8,000			
	421-4125-536.52-00	$12,250			
	421-4125-536.14-00	$26,100			
9	Budget Amendments/Transfers		Division 4125 Total	$252,270.00	
119	Total Budget Amendments/Transfers		**WATER / SEWER ENTERPRISE**	**($20,472,483)**	

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
3570 - STORMWATER UTILITY				
11/28/18	423-3570-538.31-00	$660	BA #21 - CARRY FORWARD FROM FY17	655
	423-3570-538.63-00	$3,703	BA #21 - CURB / GUTTER / SIDEWALK REPLACEMENT	655
	423-3570-538.63-00	$3,258	BA #21 - FISKE BLVD COMPLETE STREETS	655
	423-3570-538.46-03	$4,708	BA #21 - REPAIR OF CASE BACKHOE	655
01/23/19	423-3570-538.31-00	$65,120	BA #48 - STORMWATER 10 YR PLAN - MEAD AND HUNT	1521
	423-3570-538.31-00	$34,327	BA #49 - BILLING SYSTEM AND RATES ANALYSIS	1522
04/10/19	423-3570-538.63-00	($200,000)	BA #74 - CURED IN PLACE PIPE LINING NOT BUDGETED	2620
	423-3570-538.63-00	$200,000		
	423-3570-538.39-00	($2,251)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS	2622
	423-3570-538.21-00	$447		
	423-3570-538.27-00	$1,804		
04/30/19	423-3570-538.46-00	($456)	BA #72 - MARCH CLEANUP TEMPORARY METER INSTALL	2823
	423-3570-538.43-00	$456		
05/22/19	423-3570-538.63-00	($60,000)	BA# 92 - STORMWATER AREA ANALYSIS FOR TIERED RATES	3246
	423-3570-538.31-00	$60,000		
06/26/19	423-3570-538.63-00	($232,864)	BA #106 - UNUSED BUDGET AND MEDIAN MAINTENANCE	3758
	423-3570-538.31-00	($3,600)	BA #78 - APRIL CLEANUP AUTO INSURANCE PAYMENTS	3663
	423-3570-538.45-00	$3,600		
	423-3570-538.63-00	($30,000)	BA #78 - APRIL CLEANUP STANTEC CONSULTING INC	3663
	423-3570-538.31-00	$30,000		
07/18/19	423-3570-538.63-00	($20,000)	BA #88 - MAY/JUNE CLEANUP STORM WATER OPERATING	3942
	423-3570-538.43-00	$3,000		
	423-3570-538.52-00	$4,500		
	423-3570-538.34-00	$12,500		
14 Budget Amendments/Transfers			Division 3570 Total	($121,088.00)
14 Total Budget Amendments/Transfers			**STORMWATER UTILITY**	**($121,088)**

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
4010 - WATER ADMINISTRATION					
01/09/19	426-4010-581.91-21	$2,870,896	BA #34 - MOVE FUNDS BACK TO 421 FOR FY18 POS		1324
1	Budget Amendments/Transfers		Division 4010 Total	$2,870,896.00	
4020 - DYAL PLANT					
11/28/18	426-4020-536.63-00	$506,413	BA #20 - AUTOMATIC TRANSFER SWITCH		654
	426-4020-536.63-00	$600,000	BA #20 - DYAL SURFACE WATER WELL		654
	426-4020-536.63-00	$500,000	BA #20 - FILTER REHAB 1-5		654
01/09/19	426-4020-536.63-00	($506,413)	BA #34 - MOVE FUNDS BACK TO 421 FOR FY18 POS		1324
04/10/19	426-4020-536.63-00	($506,413)	BA #75 - AMEND THE WATER / SEWER RESTRICTED FUND BUDGET		2621
	426-4020-536.63-00	($3,906)			
06/26/19	426-4020-536.63-00	$69,881	BA #103 - REPLACEMENT OF FILTER MEDIA AT DYAL WTP		3757
6	Budget Amendments/Transfers		Division 4020 Total	$659,562.00	
4055 - ENGINEERING					
11/28/18	426-4055-536.63-00	$400,000	BA #20 - CAPE CANAVERAL WATER MAIN REPLACEMENT		654
	426-4055-536.63-00	$5,200,000	BA #20 - DYAL CHEMICAL CONVERSION		654
	426-4055-536.63-00	$330,000	BA #20 - DYAL GROUNDWATER WTP REACTOR		654
	426-4055-536.63-00	$974,656	BA #20 - FISKE BLVD PIPELINE REPLACEMENT		654
	426-4055-536.63-00	$698,664	BA #20 - MICHIGAN AVE FORCE MAIN		654
	426-4055-536.63-00	$10,062,500	BA #20 - PINEDA CROSSING		654
	426-4055-536.63-00	$2,461,274	BA #20 - PIPE INFRASTRCTURE		654
	426-4055-536.63-00	$1,997,743	BA #20 - RAW WATER PIPELINE UPGRADE		654
12/12/18	426-4055-536.63-00	($1,231,049)	BA #27 - MOVE FUNDS TO NORTH TROPICAL TRAIL PROJECT		1029
	426-4055-536.63-00	$1,231,049			
01/09/19	426-4055-536.63-00	($2,326,022)	BA #34 - MOVE FUNDS BACK TO 421 FOR FY18 POS		1324
	426-4055-536.63-00	($35,720)			
	426-4055-536.63-00	($2,741)			

FY 2019 EXPENSE BUDGET TRACKING WORKSHEET

EXPENSE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
06/26/19	426-4055-536.63-00	($69,881)	BA #103 - REPLACEMENT OF FILTER MEDIA AT DYAL WTP		3757
07/18/19	426-4055-536.63-00	($44,445)	BA #88 - MAY/JUNE CLEANUP BOND PROJ MEAD AND HUNT		3942
	426-4055-536.63-00	$44,445			
12	Budget Amendments/Transfers		Division 4055 Total	$19,690,473.00	
4120 - WATER RECLAMATION					
11/28/18	426-4120-536.63-00	$2,836,250	BA #20 - JERRY SELLERS FLOW		654
	426-4120-536.63-00	$130,000	BA #20 - REPLACE RUSTED CONNECTIONS		654
	426-4120-536.63-00	$130,000	BA #20 - SPALLING REPAIR OF FILTER		654
05/16/19	426-4120-536.63-00	($130,000)	BA #37 - MOVE BOND FUNDS TO DIFFERENT CAPITAL PROJECTS		3087
	426-4120-536.63-00	$130,000			
4	Budget Amendments/Transfers		Division 4120 Total	$3,096,250.00	
4125 - SEWER FIELD OPERATIONS					
11/28/18	426-4125-536.63-00	$400,000	BA #20 - CIPP REHABILITATION		654
1	Budget Amendments/Transfers		Division 4125 Total	$400,000.00	
24	Total Budget Amendments/Transfers		**W/S CAPITAL PROJECTS 2018B**	**$26,717,181**	

324 Transfers & Amendments between 10/1/2018 and 7/31/2019

13,389,329

NOTE: Group #s represent a complete transaction that will net to zero. Add all expenses for each group number, then subtract the revenues related to the same group number and your total will equal zero.

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FY 2019 BUDGET TRACKING WORKSHEET

REVENUE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
11/28/18	001-0000-331.50-03	$77,200.00	BA #19 - FDEP GRANT WAS AWARDED - ACCEPT GRANT		940
	001-0000-389.99-50	$578,785.00	BA #21 - FUND BALANCE RESERVES		655
01/09/19	001-0000-381.91-30	$2,800.00	BA #34 - COMPLETION OF MEETING ROOM		1322
	001-0000-389.99-50	$2,400.00	BA #34 - FIRE STATION REPEATER		1322
01/23/19	001-0000-389.99-50	$21,470.00	BA #43 - PURCHASE OF TWO CITY WELCOME SIGNS		1519
	001-0000-334.50-04	$20,000.00	BA #50 - FLORIDA DEPT. OF ECONOMIC OPPORTUNITY GRANT		1520
03/13/19	001-0000-389.99-50	$130,000.00	BA# 63 - FMIT DEDUCTIBLE PAYMENT FOR FY19		2189
	001-0000-389.99-50	$50,000.00	BA# 70 - LEASE OF CITY PROPERTY / FL HISTORY MUSEUM		2193
04/24/19	001-0000-331.20-18	$36,650.00	BA #80 - FIRE DEPARTMENT STATE EMS GRANT AWARD		2878
06/12/19	001-0000-389.99-50	$1,324,369.00	BA #101 - CONSTRUCTION FOR JOE LEE SMITH CENTER		3490
06/26/19	001-0000-389.99-50	$2,000,000.00	BA #104 - WALMART ECONOMIC DEV. INCENTIVE		3761
	001-0000-389.99-50	($232,864.00)	BA #106 - UNUSED BUDGET AND MEDIAN MAINTENANCE		3758
	001-0000-389.99-50	$100,000.00			
12 Budget Amendments/Transfers			Division 0000 Total	$4,110,810.00	
12 Total Budget Amendments/Transfers			**GENERAL FUND**	**$4,110,810.00**	
11/28/18	103-0000-389.99-10	$575	BA #21 - FUND BALANCE		655
03/13/19	103-0000-389.99-10	($179,195)	BA# 66 - MOVE FUNDS FROM DEMOLITION TO SIGNAGE		2190
	103-0000-331.54-00	$179,195			
06/12/19	103-0000-381.91-01	$19,937	BA #100 - COVER FEES FOR CDBG SECTION 108 LOAN		3755
	103-0000-381.91-01	$1,324,369	BA #102 - CONSTRUCTION FOR JOE LEE SMITH CENTER		3491
	103-0000-384.00-00	$894,000	BA #97 - ACCEPT LOAN FUNDS FROM CDBG LOAN PROGRAM		3488
5 Budget Amendments/Transfers			Division 0000 Total	$2,238,881.00	
5 Total Budget Amendments/Transfers			**CDBG**	**$2,238,881.00**	
12/12/18	104-0000-389.99-10	($95,355)	BA #31 - REDUCE HOME AMOUNT TO MATCH DISBURSEMENT AGREEMENT		1031

FY 2019 BUDGET TRACKING WORKSHEET

REVENUE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
03/13/19	104-0000-389.99-10	($64,367)	BA #67 - CORRECT ACCOUNT FOR HOME PROGRAM FUNDS		2188
	104-0000-331.54-00	$64,367			
2	Budget Amendments/Transfers		Division 0000 Total	($95,355.00)	
	2 Total Budget Amendments/Transfers		**BREVARD COUNTY HOME**	**($95,355.00)**	
11/28/18	105-0000-389.99-10	$2,230	BA #21 - FUND BALANCE		655
1	Budget Amendments/Transfers		Division 0000 Total	$2,230.00	
	1 Total Budget Amendments/Transfers		**SHIP / COCOA HOUSING TRUST**	**$2,230.00**	
11/28/18	110-0000-389.99-10	$15,075	BA #21 - FUND BALANCE		655
1	Budget Amendments/Transfers		Division 0000 Total	$15,075.00	
	1 Total Budget Amendments/Transfers		**CRA COCOA RDA**	**$15,075.00**	
10/10/18	141-0000-389.99-11	$5,000	BAF#2 - GIFT CARDS FOR PD GUNS BUY BACK PROGRAM		133
11/14/18	141-0000-389.99-11	$7,488	BA #12 - REPLACE EQUIPMENT IN INTERVIEW ROOMS		646
2	Budget Amendments/Transfers		Division 0000 Total	$12,488.00	
	2 Total Budget Amendments/Transfers		**POLICE CONFISCATED FUND**	**$12,488.00**	
05/08/19	302-0000-381.91-01	$329,490	BA #84 - MOVE CRA FUNDS FOR DAY SLIPS / T-DOCK		3091
	302-0000-337.30-15	$225,000	BA #85 - ACCEPT TWO FIND GRANTS FOR RIVERFRONT		3093
	302-0000-337.30-16	$427,100			
2	Budget Amendments/Transfers		Division 0000 Total	$981,590.00	
	2 Total Budget Amendments/Transfers		**RIVERFRONT / LEE WENNER PARK**	**$981,590.00**	
11/28/18	421-0000-389.99-50	($1,606,413)	BA #20 - FUND BALANCE RESERVES		654
	421-0000-389.99-50	($22,124,837)	BA #20 - WS FUND BALANCE RESERVES		654
	421-0000-389.99-50	($3,096,250)			
	421-0000-389.99-50	($400,000)			
	421-0000-389.99-50	$2,501,811	BA #21 - FUND BALANCE RESERVES		655
01/09/19	421-0000-389.99-50	$3,600	BA #34 - TIMECLOCK AND WINDOW TINTS		1322
	421-0000-389.99-50	$377,951	BA #34 - TRUE UP FY19 BUDGET FOR FY18 PO'S		1322
	421-0000-381.91-26	$2,870,896			
04/10/19	421-0000-389.99-50	($16,814)	BA #75 - AMEND THE WATER / SEWER RESTRICTED FUND BUDGET		2621
	421-0000-389.99-50	$3,906			

FY 2019 BUDGET TRACKING WORKSHEET

REVENUE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment		Group #
	421-0000-389.99-50	$506,413			
	421-0000-389.99-50	$507,254			
6	Budget Amendments/Transfers		Division 0000 Total	($20,472,483.00)	
	6 Total Budget Amendments/Transfers		**WATER / SEWER ENTERPRISE**	**($20,472,483.00)**	
10/10/18	423-0000-389.99-50	($20,856)	BAF#5 - INDIAN RIVER LAGOON GRANT FUNDING / BAFFLE BOX		134
	423-0000-338.10-02	$20,856			
11/28/18	423-0000-389.99-50	$12,329	BA #21 - FUND BALANCE RESERVES		655
01/23/19	423-0000-389.99-50	$65,120	BA #48 - STORMWATER 10 YR PLAN - MEAD AND HUNT		1521
	423-0000-389.99-50	$34,327	BA #49 - BILLING SYSTEM AND RATES ANALYSIS		1522
06/26/19	423-0000-381.91-01	($232,864)	BA #106 - UNUSED BUDGET AND MEDIAN MAINTENANCE		3758
5	Budget Amendments/Transfers		Division 0000 Total	($121,088.00)	
	5 Total Budget Amendments/Transfers		**STORMWATER UTILITY**	**($121,088.00)**	
04/10/19	425-0000-381.91-21	($16,814)	BA #75 - MID YEAR REVIEW BUDGET TRANSFERS		2780
	425-0000-389.99-50	$16,814			
1	Budget Amendments/Transfers		Division 0000 Total	$0.00	
	1 Total Budget Amendments/Transfers		**WATER / SEWER RESTRICTED ASSETS**	**$0.00**	
11/28/18	426-0000-389.99-50	$400,000	BA #20 - WS CAPITAL PROJECT FUND BALANCE RESERVES		654
	426-0000-389.99-50	$3,096,250			
	426-0000-389.99-50	$22,124,837			
	426-0000-389.99-50	$1,606,413	BA #20 - WS CAPITAL PROJECT FUND BALANCE RESERVES		654
04/10/19	426-0000-389.99-50	($506,413)	BA #75 - AMEND THE WATER / SEWER RESTRICTED FUND BUDGET		2621
	426-0000-389.99-50	($3,906)			
3	Budget Amendments/Transfers		Division 0000 Total	$26,717,181.00	
	3 Total Budget Amendments/Transfers		**WATER / SEWER CAPITAL PROJECTS 2018 B BOND**	**$26,717,181.00**	
40	**Transfers & Amendments between 10/1/2018 and 7/31/2019**				
			FY2019 TOTAL TRANSFERS & AMENDMENTS	**$13,389,329**	

FY 2019 BUDGET TRACKING WORKSHEET

REVENUE TRANSFER/AMENDMENT DETAIL
AS OF: 7/31/2019

Date	Accounts	Transaction	Resolution # / Description of Transfer or Amendment	Group #
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