



Stormwater Projects / Program Report

Tampa City Council Update

No. 10 - April 18, 2019

A) Major Capital Improvements

Projects 1-5 regional multi-year flooding relief projects for the City of Tampa. Each project fact sheet includes a description, location map, and timeline status. Each of these projects is in various stages of development and will continue for a number of years, due to the complexity and comprehensive nature of the project. Project 6 incorporates the Miscellaneous Neighborhood Projects that typically have a six (6) months or less construction timeline and each have their own fact sheet.

Project List CIP = \$251,285,000

1. Upper Peninsula Flooding Relief
2. North Tampa Closed Basin Flooding
3. Cypress Street Outfall Extension
4. Southeast Seminole Heights Flooding Relief
5. Lower Peninsula Flooding Relief
6. Miscellaneous Capital Improvements

B) Stormwater Capital Improvement Bond Program Report

C) Stormwater Service Assessment Program \$14,000,000

1. Upper Peninsula Flooding Relief

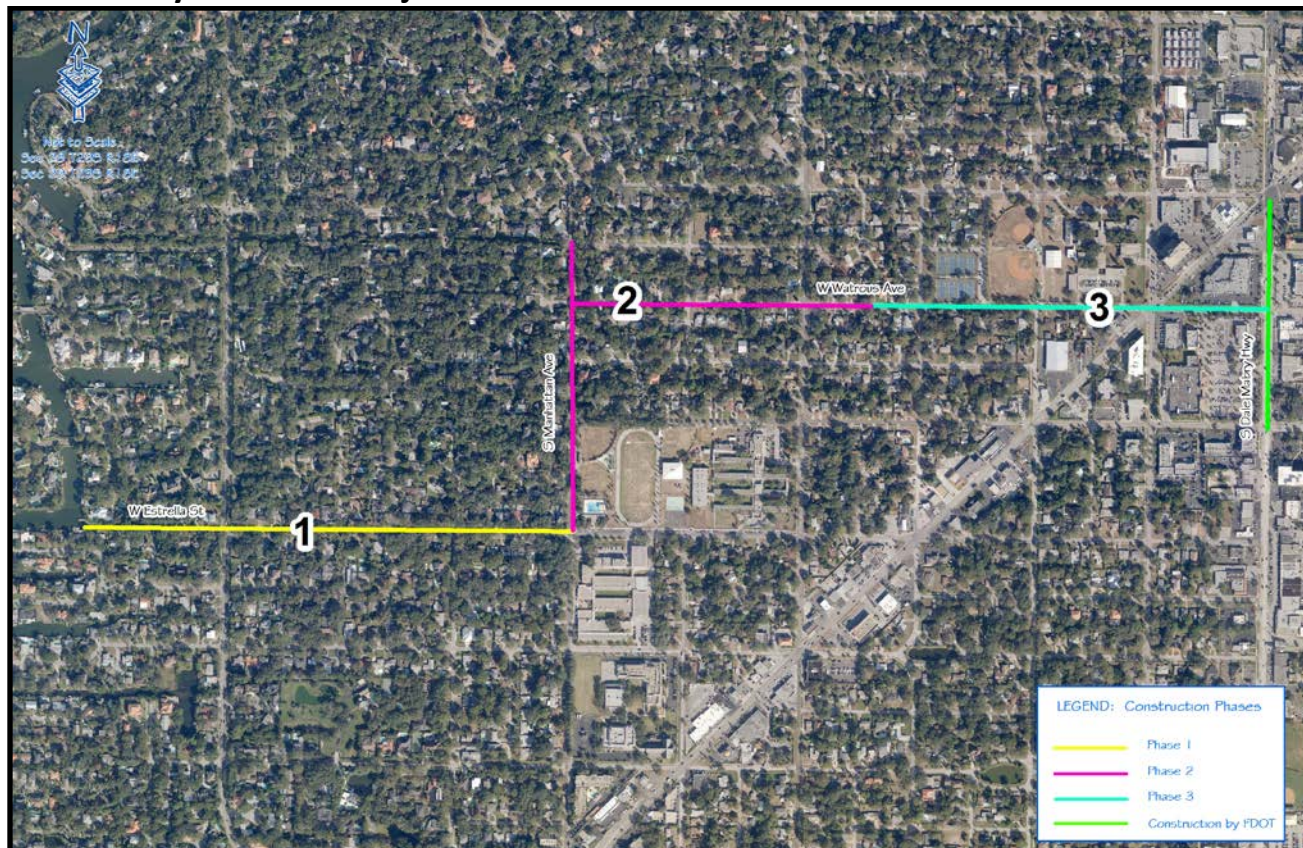
City Project #: 1001017

Upper Peninsula Regional Stormwater Improvements is a multi-year flooding relief project covering approximately 3400 acres of South Tampa from Kennedy Boulevard southward to Euclid Avenue. Stormwater Engineering Division has developed a stormwater model and comprehensive study of the project area, with the goal of providing incremental improvements to the stormwater infrastructure. The main benefit of the project is to provide targeted relief in flood prone areas to address public safety.

Dale Mabry Trunkline project consists of the construction of a box culvert from Dale Mabry/Henderson/Neptune to a new outfall at Estrella Street. The system will also interconnect to improvements along the Watrous Canal, thus providing two outfalls for flooding relief.

The map shows a grid of streets in an urban area. A blue line indicates a proposed bus route. The route starts on the left side of the map, runs east along W Melrose Ave N and W Melrose Ave S, then turns north on S Manhattan Ave. From S Manhattan Ave, the route continues north, passing W Estrella St, W Angeles St, W San Rafael St, W San Nicholas St, W San Miguel St, W San Carlos St, W Palmira Ave, W Barcelona St, and W Granada St. The route then turns east on W Jettison Ave, passing W Zelar St, W Culbreath Ave, W Inman Ave, W Mullen Ave, W Morrison Ave, and W Swann Ave. The route ends on the right side of the map, near S Sterling Ave. A compass rose in the top right corner indicates North (N), South (S), East (E), and West (W). Other streets shown include S Shore, Crest Ct, S Bayshore Dr, S Idlewood Dr, Woodmere Rd, Grove Park Ave, W Bay Way Dr, Lyford Canyon Rd, Saint Clair Dr, S West Shore Blvd, S Curt Cr, S Occident St, W Dryad St, W Juno St, W San Jose St, W Sunset Blvd, W Browning Ave, S Bryant Cr, S Toronto Ave, S Hubert Ave, S Thorton Ct, S Lois Ave, Cameron Ct, Henderson Blvd, Thomas Pl, S Richard Ave, S Church Ave, S Date Mabry Hwy, S Clearview Ave, S Swann Ave, W Swann Ave, W McKay Ave, W Sylvan Ramble St, W Rosemere Rd, S Roxmere Rd, W Beachway Dr, S Fenmore Ave, and S Morriston Ave.

Dale Mabry Trunkline Project Phases



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Design/Build	Kimmins	\$37M	COT/SWFWMD	FY17	FY20

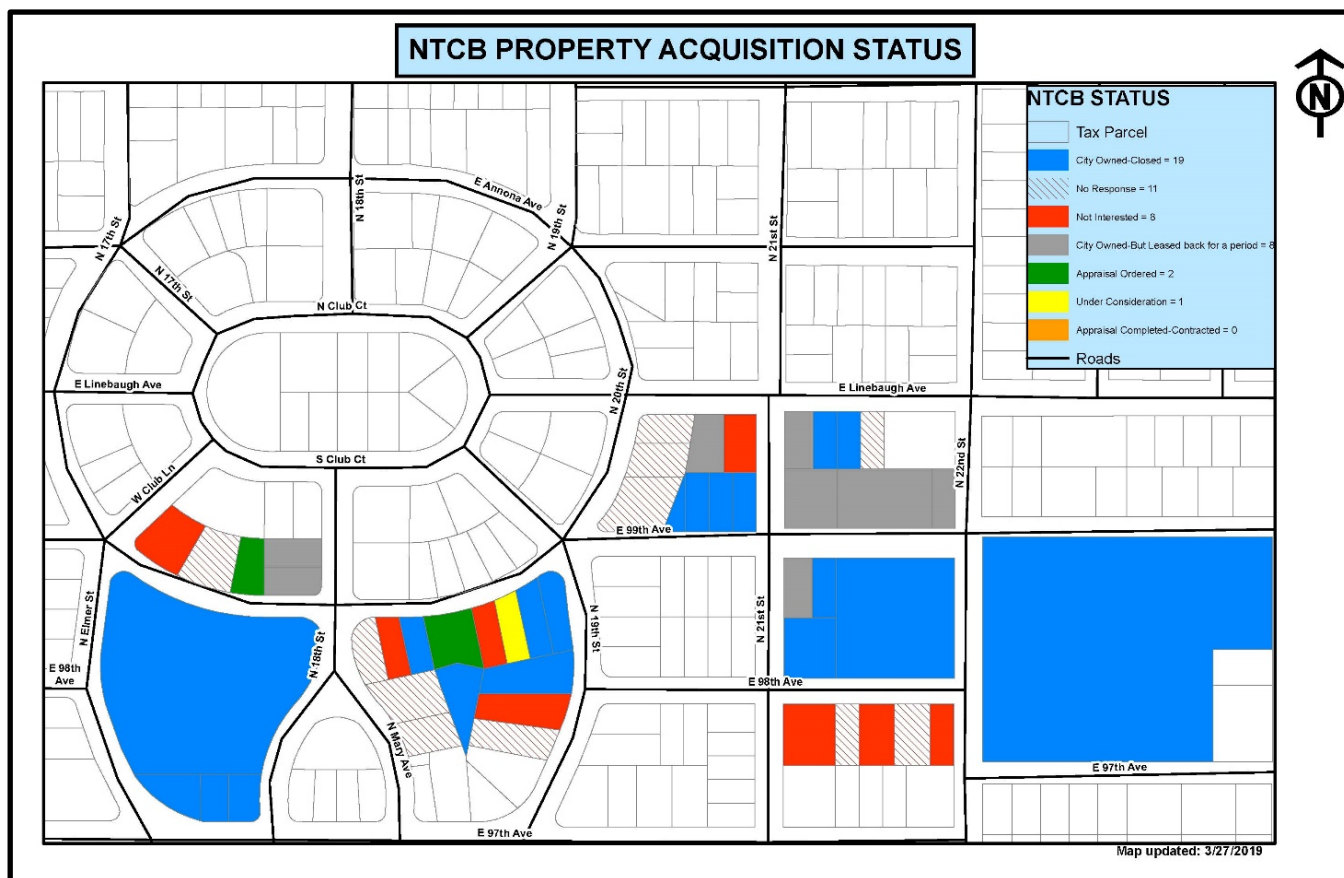
Timeline:

- Construction started June 25, 2018, and the projected completion is January 2021.
- 50% reimbursement by SWFWMD is occurring concurrently with construction.



City Project #: 0000403

Property Acquisition Map:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Property Acquisition	In-House	\$1M/ Year	COT	FY16	FY20
Construction	In-House	\$2M	COT	FY20	FY21

Timeline:

- The City of Tampa Real Estate Division is in the process of acquiring the properties as identified by Transportation and Stormwater Services Department's North Tampa Closed Basin Study. Please see the property acquisition map above.
- The Real Estate Division is currently working with multiple potential sellers.
- Property acquisition to be completed in FY20.
- Construction of David E. West pond and piping system has been bid and in the award process.

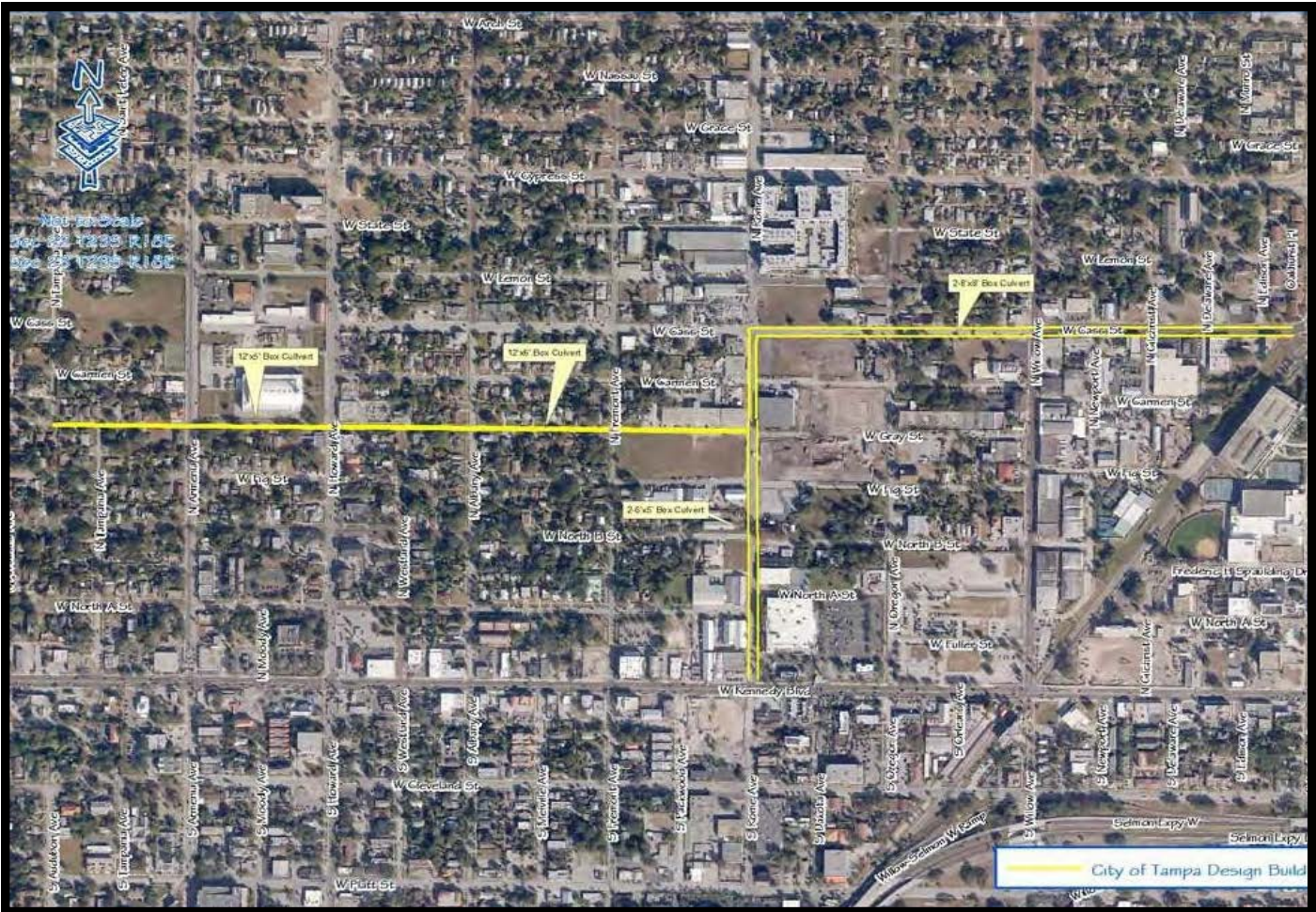
City Project #: 1001018

The drainage basin is generally bounded by Cypress Street on the north, Habana Avenue on the west, Hyde Park Avenue on the east and Swann Avenue on the south. The total basin area is approximately 550 acres and outfalls to the Hillsborough Bay. Several areas within the northern portion of the basin (north of Kennedy Boulevard) have experienced numerous incidences of flooding, which has led to flood damage claims.

Location Map:



Cypress Street Outfall:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Design/Build	Woodruff & Sons	\$30 M	COT/SWFWMD	FY17	FY20

Timeline:

- Design and Permitting is 100% completed.
- This project is scheduled for review/approval by the SWFWMD Board in April 2019.
- The GMP will go in front of city council for review/approval in early May 2019.
- The target construction start date is July 2019.



4. Southeast Seminole Heights Flooding Relief

City Project #: TBD

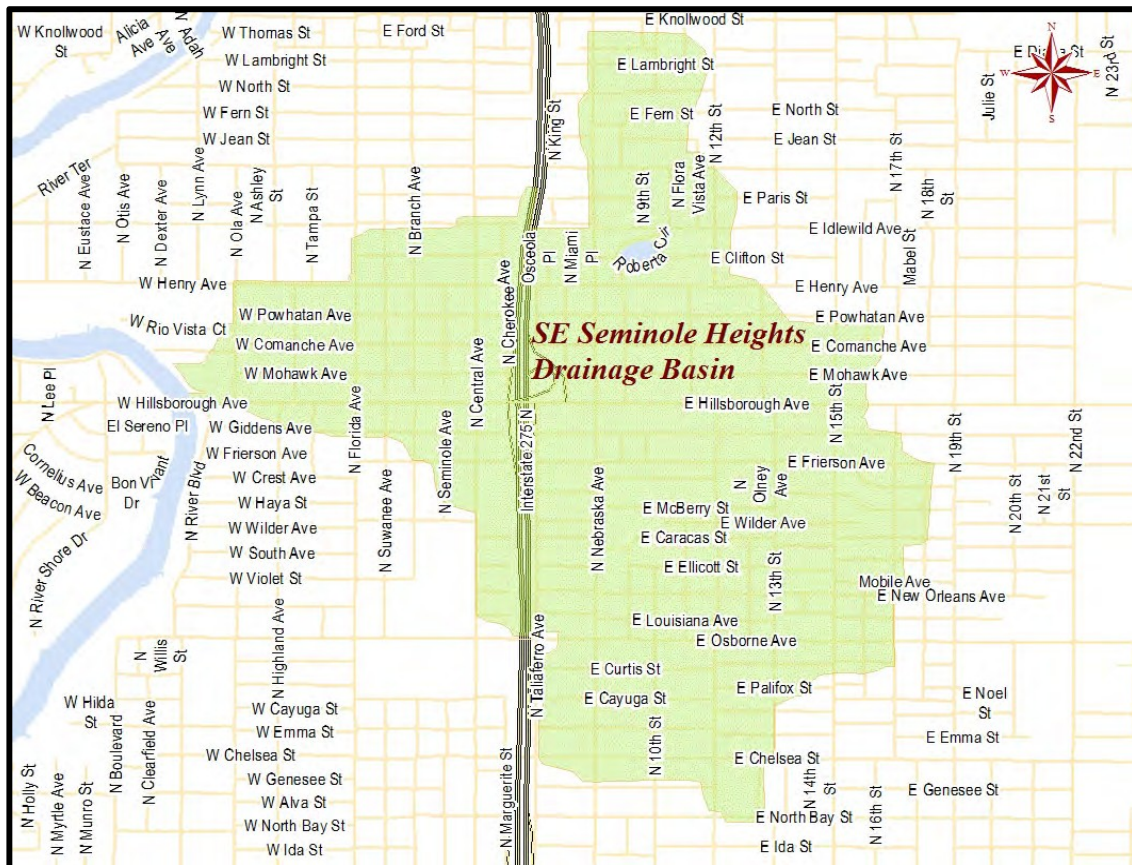
Project Description:

The Southeast Seminole Heights Drainage Basin encompasses 779 acres of urban area that discharges into the Hillsborough River south of the dam. The basin area extends northerly from East Chelsea Street east of I-275 freeway to East Diana Street and easterly to North 18th Street. To the west of I-275, the basin narrows and extends from Giddens Avenue to East North Street. The Basin is part of a historic Tampa neighborhood that had its beginnings in the early 1900's.

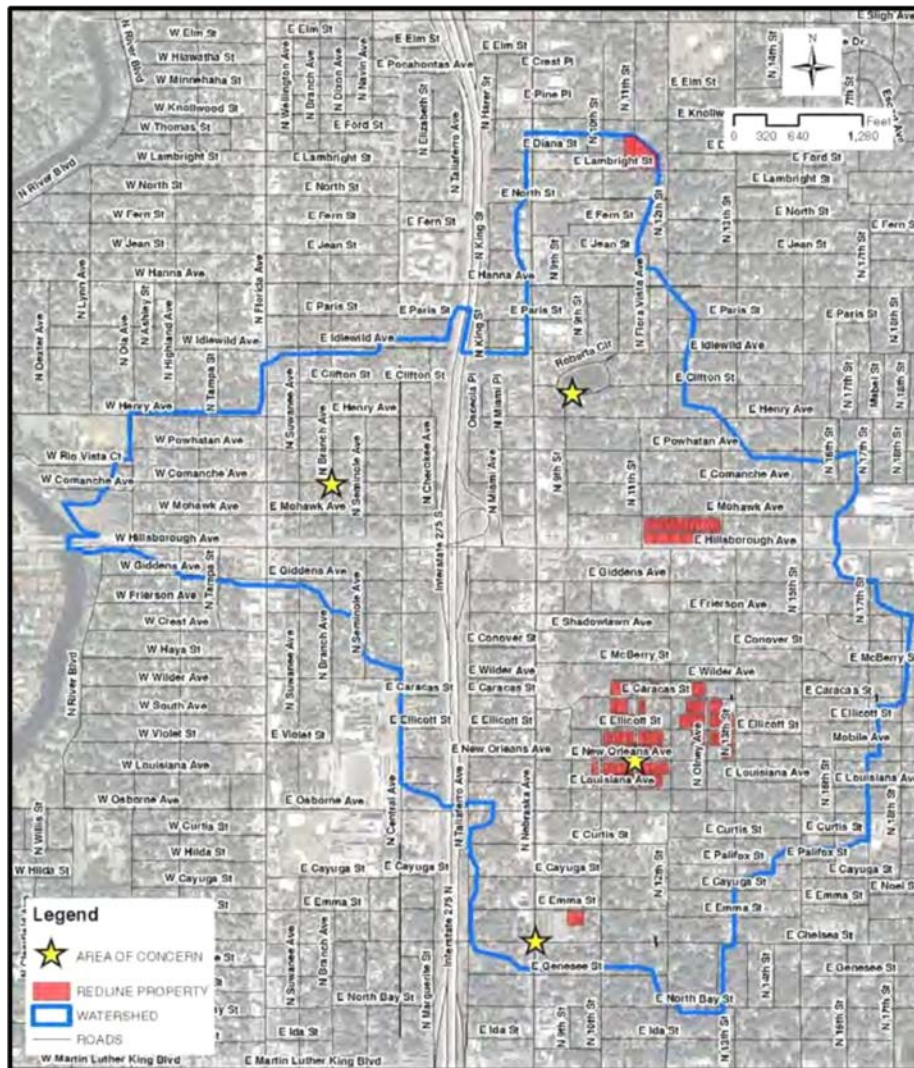
Southeast Seminole Heights Basin has numerous flooding locations, failing and undersized conveyance systems throughout the basin. A recent drainage study identified several potential stormwater improvement projects to alleviate flooding.

A feasibility study will be performed to assess the potential drainage improvement projects as recommended in the previous drainage study. Individual improvement projects will subsequently be designed and constructed throughout the basin areas to improve drainage conditions.

Location Map:



Areas of Flooding Concern:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	LWES	\$90K	COT	FY16	FY16
Feasibility Study	FDC	\$45K	COT	FY17	FY18
Design & Construction	TBD	\$35M	COT/SWFWMD	FY19	FY23

Timeline:

- The Planning and Feasibility studies have been completed.
- The design build team has been selected. The scope of the design and fee are being negotiated. After this step has been completed, the design fee will be presented to City Council for approval.
- The design and permitting will occur in FY19/20.
- Construction will begin in FY20.



5. Lower Peninsula Flooding Relief

City Project #: 1000178

Project Description:

A regional watershed model is needed to provide a baseline for capital project improvement planning and design. The area has numerous flooding locations, failing and undersized conveyance systems throughout the 6,000 acre watershed.

The purpose of the project is to develop a baseline for capital improvement planning and design that provides conceptual solutions to frequent flooding associated with undersized stormwater pipes and relic ditch systems in the region. It is the City's desire to pursue cooperative funding from the South West Florida Water Management District (SWFWMD) for these improvements; therefore, the watershed study must meet SWFWMD's requirements for funding.

Location Map:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	Applied Sciences	\$650K	COT/SWFWMD	FY16	FY18
Ph1 Feasibility study	RFQ	\$200k	COT	FY19	FY20
Ph1 Design	RFQ	\$3M	COT/SWFWMD	FY20	FY20
Ph1 Construction	RFQ	\$30M	COT/SWFWMD	FY21	FY23

Timeline:

- The existing and proposed condition models have been completed.
- SWFWMD is performing 3rd party review of the model.
- The Ph1 Feasibility Study will begin in FY19 and finish in FY20.
- The Ph1 Design will occur in FY20.
- The Ph1 Construction will begin in FY21 and finish in FY23.



6. Miscellaneous Capital Improvement

Project Status

Tampa City Council Update No. 10 - April, 2019

Construction timelines are typically six (6) months or less for neighborhood projects. For additional project descriptions, please see the project fact sheets following this project status report.

PROJECT STATUS KEY	
	Design
	Design Complete and In Construction Queue
	Under construction
	Construction Complete

STATUS	DISTRICT	ESTIMATE
Projects Assigned to Construction Contracts		
1. Knights between Lynwood and MacDill	4	\$200,000
2. 2511 N. Riverside Flooding Relief	5	\$50,000
3. N. River Blvd Outfall	6	\$60,000
4. W. St. Isabel from Gomez to Habana Flooding Relief	6	\$75,000

Projects Bid through CAD		
5. Howard from Swann to Morrison Flooding Relief	4	\$600,000
6. 2nd St. From Interbay to Bay	4	\$200,000
7. Wyoming Flooding Relief PH II	4	\$325,000
8. FY18 Annual CIPP Rehabilitation	Citywide	\$600,000
9. FY19 Annual CIPP Rehabilitation	Citywide	\$600,000
10. Annual Box Culvert Rehabilitation	Citywide	\$650,000
11. Orchid Sink Rehabilitation	6	\$500,000
12. David E West Park Pond	7	\$1,000,000
13. 43rd Street Outfall Regional Drainage Improvements, PH III	5	\$8,800,000
14. 30th St. Outfall	5	\$600,000
15. Forest Hills Park Improvements	7	\$600,000
16. Robles Park Pump Station Replacement	5	\$1,200,000
17. Rogers Park Drainage Improvements	5	\$500,000
18. Poinsettia Pump Station Rehabilitation	7	\$1,400,000
19. Eastridge Pump Station Rehabilitation	7	\$700,000
20. Copeland Park Pumping Station	7	\$800,000
21. Anita Subdivision Drainage Improvements PH II	4	\$800,000
22. 56th St. & Broadway Ave. Flooding Relief	5	\$2,000,000

STATUS	DISTRICT	ESTIMATE
Projects Bid through CAD – <i>continued</i>		
23. Hamilton Creek Water Quality Improvement	6	\$500,000
24. Lamb Canal Rehabilitation	4	\$1,500,000
25. Ditch Rehabilitation PH II	Citywide	\$1,000,000
26. El Prado Green Infrastructure	4	\$170,000
27. Lantana/Poinsettia Pump Station	7	\$625,000
28. Lake Roberta Dredging	5	\$400,000
29. El Portal & Newport Pump Station	6	\$350,000

Projects Assigned to Transportation & Stormwater Services Department In-House Crews		
30. Idell St. Roadway Improvements PH II	5	\$75,000
31. Concordia Pond	4	\$125,000
32. Virginia Park PH III, Lois from Bay to Bay to Palmira	4	\$500,000
33. Virginia Park PH III, Clark from Bay to Bay to Palmira	4	\$325,000
34. Seneca Pump Station Site Improvements	7	\$100,000
35. Gomez Alley between Kennedy & North A	4	\$75,000
36. Binnicker at 4 th St.	4	\$50,000
37. Albany from Barclay to Marianna	7	\$100,000
38. Neptune/Treasure PID	6	\$75,000
39. 3911 Swann Ave.	6	\$50,000
40. 1510 W. Park Ln.	6	\$50,000
41. Rambla Flooding Relief	7	\$100,000
42. 45th St. north of Hillsborough Flooding Relief	6	\$150,000
43. Emma and Seminole Flooding Relief	6	\$100,000
44. Iowa Ave from Sheridan to Sherwood	4	\$75,000
45. W. Jetton Ave. from Armenia to Moody	4	\$125,000
46. North St. & Packwood Pond	6	\$100,000
47. Hale Ave. at Cleveland St.	6	\$100,000
48. Sherrill St. north of Cleveland St.	6	\$100,000
49. North St. & 17 th St. Flooding Relief	5	\$75,000
50. Ballast Point Blvd & MacDill	4	\$125,000
51. Chelsea & 44 th Flooding Relief	5	\$90,000
52. Fair Oaks & Bayshore Flooding Relief	4	\$100,000
53. Everina from Carrington to Coachman	4	\$200,000

Knights Between Lynwood and MacDill

Flooding Relief FY2017, District 4

Estimated cost: \$200K

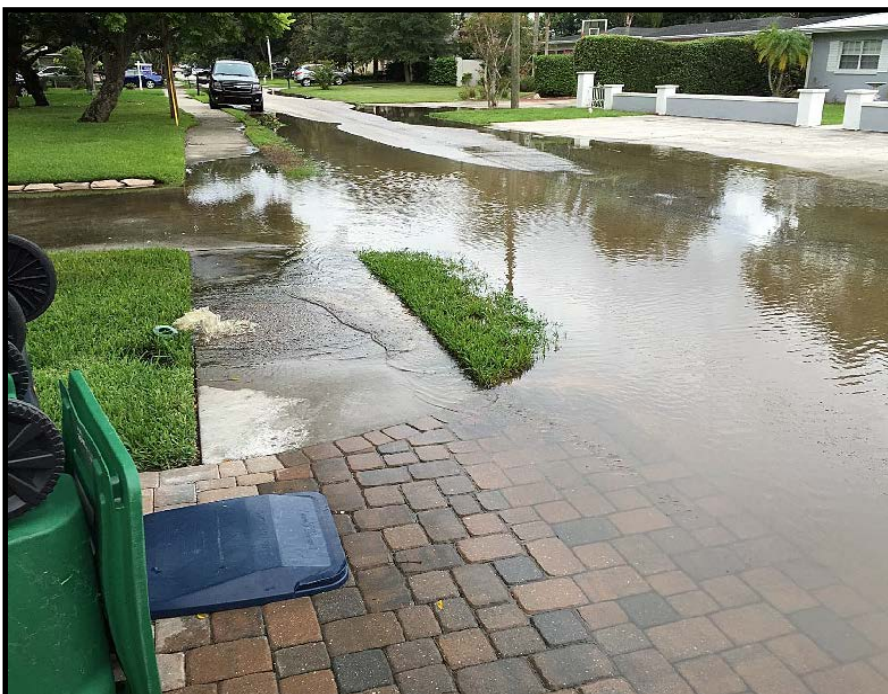
Project Description:

Install a stormwater collection system to drain the street.

Justification:

Pavement grading and new development have affected the conveyance of runoff to the existing stormwater system.

Project Photos



2511 N. Riverside Flooding Relief

Flooding Relief FY2018, District 5

Estimated cost: \$50K

Project Description:

The project consists of removal of existing pipes and inlets, construction of new pipes and inlets, cutting sea wall and sealing opening, and roadway restorations.

Justification:

The existing pipes and inlets are failing.

Project Map



N. River Blvd Outfall Flooding Relief

Flooding Relief FY2018, District 6

Estimated cost: \$60K

Project Description:

This project will install new piping system to collect and convey the surface runoff into the adjacent Hillsborough River. The project consists of construction of new pipes and inlets, regrading along the property lines, and construction of a new outfall.

Justification:

The existing drainage system in the area is inadequate and results in localized flooding in the area.

Project Map



W. St. Isabel From Gomez to Habana Flooding Relief

Flooding Relief FY2018, District 6

Estimated cost: \$75K

Project Description:

The proposed project will replace the existing ditch system with new pipes and inlets.

Justification:

Development in the vicinity utilizes drainage ditches to collect and convey surface runoffs. Over the years, the ditch system has deteriorated and causes localized flooding

Project Map



Howard From Swann to Morrison– Flooding Relief PH II

FY2017, District 4

Estimated cost: \$600K

Project Description:

Roadway re-grading from Morrison to Swann and potential construction of a surface water management system in coordination with roadway surfacing.

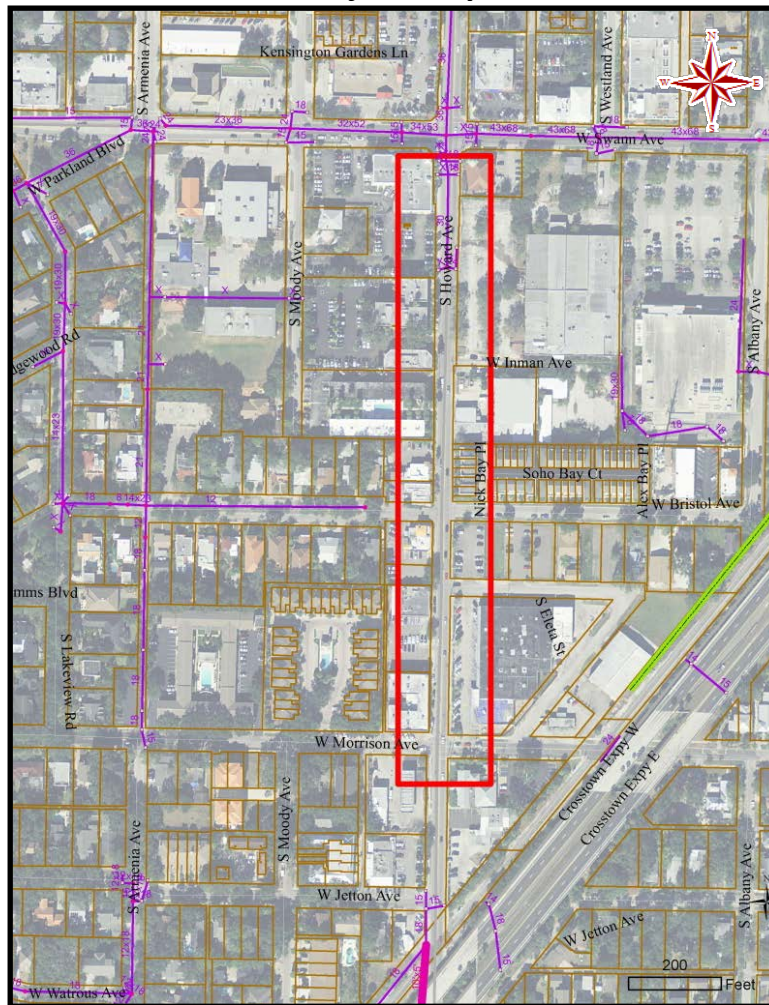
Justification:

Ponding occurs in the travel lanes due to poor grading associated with pavement overlay. The project is needed to convey runoff and relieve the ponding.

Related Issues:

Design and construction will be accomplished in coordination with the Transportation paving project.

Project Map



2nd Street From Interbay to Bay

Flooding Relief FY2017, District 4

Estimated cost: \$200K

Project Description:

New drainage system to be proposed along 2nd Street to connect to box culvert along West Bay Avenue.

Justification:

Severe Street flooding along South 2nd Street from Interbay Boulevard to West Bay Avenue.

Related Issues:

S. 2nd Street dead ends before West Bay Avenue. Easement may be required to connect to existing box culvert along West Bay Avenue.

Project Map & Photo



Wyoming Flooding Relief PH II

Flooding Relief FY2017, District 4

Estimated cost: \$325K

Project Description:

This project will upgrade the drainage system on 2nd Street and provide a connection to box culvert at 3rd Street.

Justification:

Development in the vicinity of Wyoming/Bernie Avenue utilizes a system of drainage ditches to convey runoff to Interbay Boulevard. The ditch system has been compromised by discontinuous driveway culverts and lack of system on Interbay Boulevard.

Related Issues:

This project is a continuation of Wyoming/Trilby Phase I.



Project Map and Photos



Annual C.I.P.P. Rehabilitation

Citywide

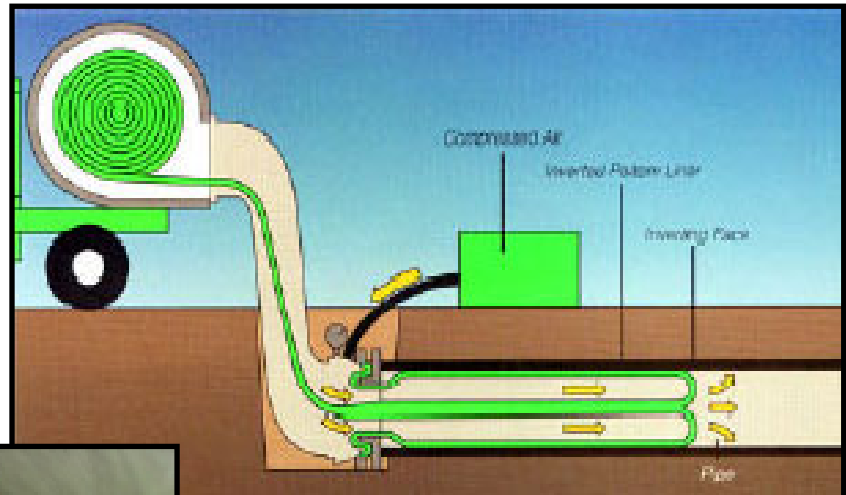
FY18 Estimated cost: \$600K; FY19 Estimated cost: \$600K

Project Description:

The scope of work includes labor, materials, and equipment to rehabilitate gravity stormwater pipes from 12-inch to 48-inch diameter by installation of cured-in-place pipe liner.

Justification:

The project provides rehabilitation of deteriorated stormwater pipe systems.



Project Photos



Annual Box Culvert Rehabilitation

FY2018, Citywide

Estimated cost: \$650K

Project Description:

Create an annual contract to address the repairs in a timely fashion as they become evident.

Justification:

The City has numerous box culverts that are over 75 years old. These structures need remedial work to repair spalled concrete and joint leaks.

Related Issues:

Repair major culverts within roadways prior to resurfacing or rebuilding the roads.



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Project Photos

Orchid Sink Rehabilitation

Flooding Relief FY2018, District 6

Estimated cost: \$500K

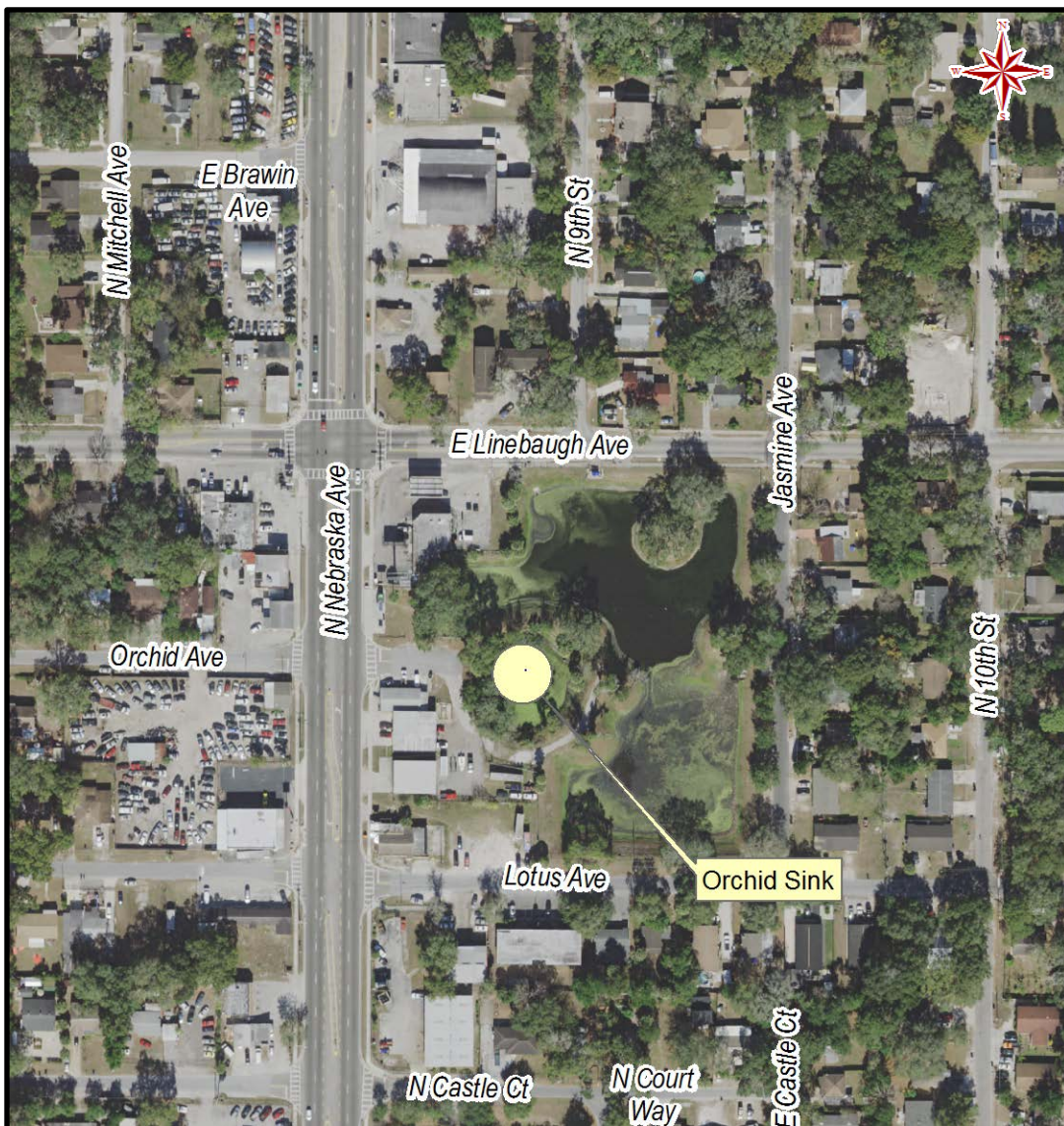
Project Description:

The project consists of removing trash and debris from the sink and stabilizing the embankment.

Justification:

Orchid sink, which serves as outfall for runoffs from the neighboring area, currently is clogged with trash and debris. This project will re-establish the sinkhole connectivity.

Project Map



David E West Park Pond Enhancements

FY2017, District 7

Estimated cost: \$1M

Project Description:

The project consists of the construction of a stormwater pond, pipes, and inlets on City lands. The pond will be hydraulically equalized with an existing stormwater pond, thus providing additional back-up volume to relieve downstream flooding.

Justification:

Attenuation storage is needed in this area because it is a closed basin with limited receiving capacity in the receiving sink. Multiple flooding complaints have been received.

Project Map



43rd Street Outfall PH III

Regional Drainage Improvement - FY2017, District 5

Estimated cost: \$8.8M

Project Description:

The project consists of the construction of a 48-inch RCP pipe from the Phase 2 regional stormwater pond to the 43rd Street Outfall just upstream of McKay Bay. Additionally, a culvert upgrade will be constructed at the terminus of the 43rd Street ditch to reduce flooding on adjacent properties.

Justification:

The project provides a new secondary outfall to convey runoff from the Phase 2 regional pond to the 43rd Street Outfall. Phase 3 improvements provide additional flood relief for properties and roadways that are severely impacted.

Project Map



30th Street Outfall

FY 2017, District 5

Estimated cost: \$600K

Project Description:

Stormwater has acquired the property on the east side of the outfall. The intent is to enlarge the discharge channel and, if necessary construct a larger outfall structure to accommodate future pipes.

Justification:

Existing 60-inch diameter stormwater pipe outfalls to Hillsborough River at 30th Street, causing continual erosion of adjoining properties. City crews have installed rip-rap to fortify the banks, but erosion has persisted.

Related Issues:

Several stormwater pump stations utilize the existing outfall pipe and expanding the channel will allow for the extension of force mains directly to the river.

Project Map & photos



Forest Hills Park Improvements

FY2017, District 7

Estimated cost of Stormwater Share: \$600K

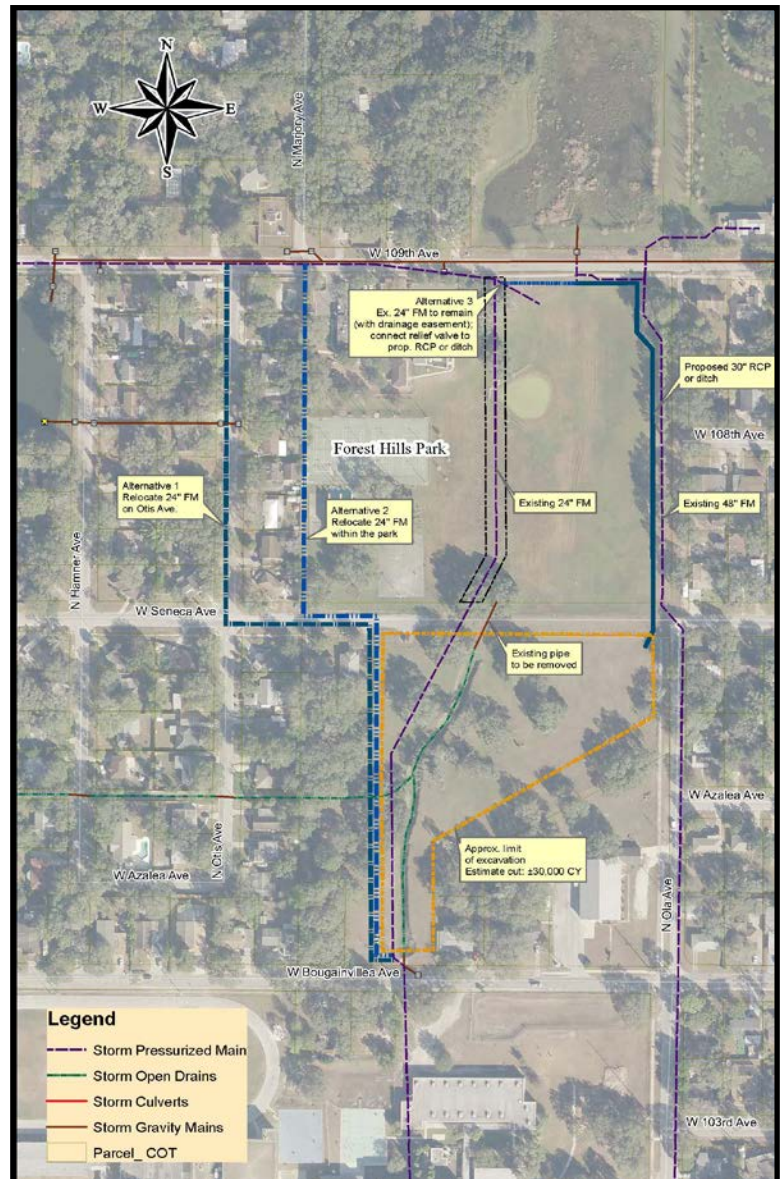
Project Description:

The scope of this project is to design a pond on the southern portion of the property and a stormwater collection system for the field area which will convey runoff to the pond. The pond will require a pumped outfall. The basin analysis shall include the outfall rate for future design of a pumping station by others. Topographic survey will be needed to evaluate what elevation the field can be raised to without impacting abutting properties and to evaluate the disposition of the tennis courts. Surface improvements may include new tennis courts or other recreational facilities and additional parking. The Parks and Recreation Department is co-funding this design with Stormwater Engineering as Stormwater will be a co-funding participant for the construction project. Stormwater has also identified the need to construct a piping system on the south side of 109th Avenue, to convey emergency bypass flow, and to continue the piping system along the east side of the property to collect and convey runoff from 108th Avenue and Seneca Avenue.

Project Map

Justification:

The Parks Department has an existing baseball field located in a low area that holds water during the rainy season causing it to be unusable. Parks would like to raise the low lying areas to provide for a dry playing field during the summer months. Stormwater is providing funding and assistance to relocate the low area.



Robles Park Pump Station Replacement

FY2017, District 5

Estimated cost: \$1.20M

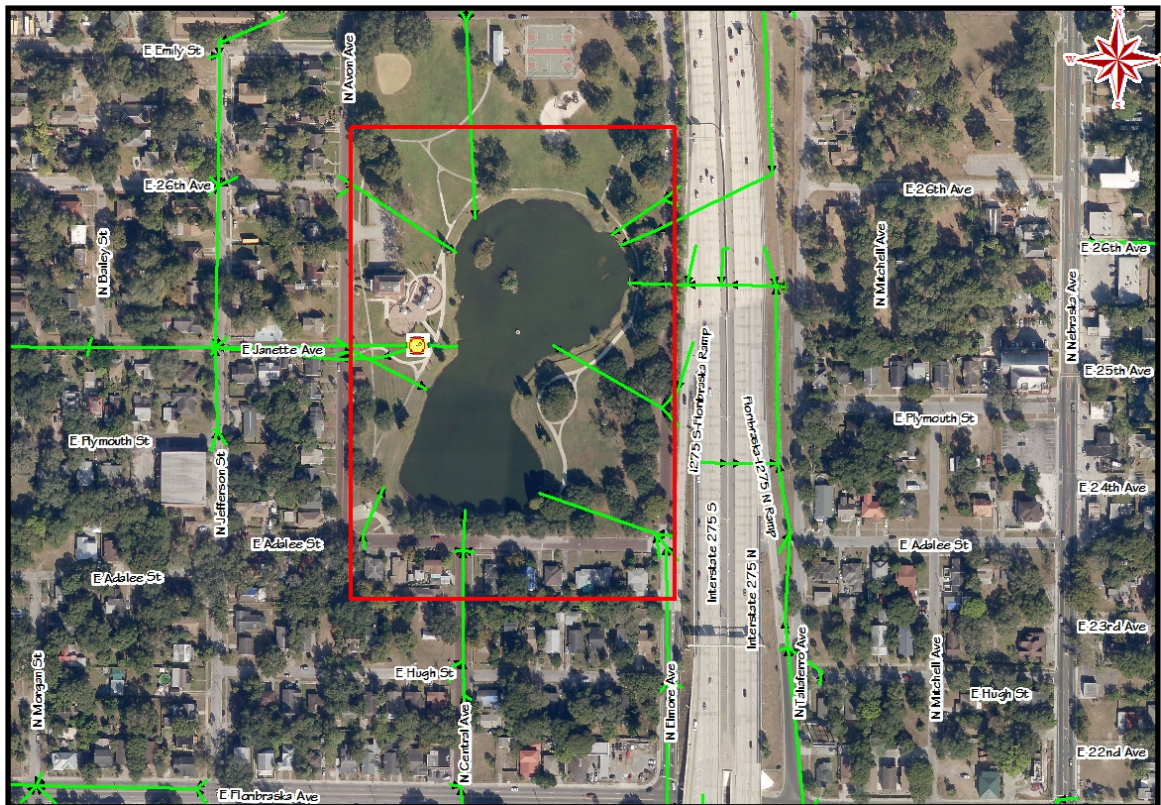
Project Description:

Pump station will be replaced with more efficient pumping equipment.

Justification:

This is an aging facility with ongoing maintenance concerns. Older pump station needs rehab to improve flooding relief.

Project Map



Rogers Park Drainage Improvement

Flooding Relief FY2018, District 5

Estimated cost: \$ 500K

Project Description:

The project consists of replacing/relocating the failed 24 inch pipe and construction of new inlets and new outfall to the river.

Justification:

Recent TV inspection has shown several areas of failed pipe, cave-ins, and root intrusions. Current pipe location is inaccessible due to railroad spur.

Related Issues:

Need to coordinate with the Water Department's reconstruction of the railroad spur.

Project Map



Poinsettia P.S. Rehabilitation

Flooding Relief FY2018, District 7

Estimated cost: \$1.4M

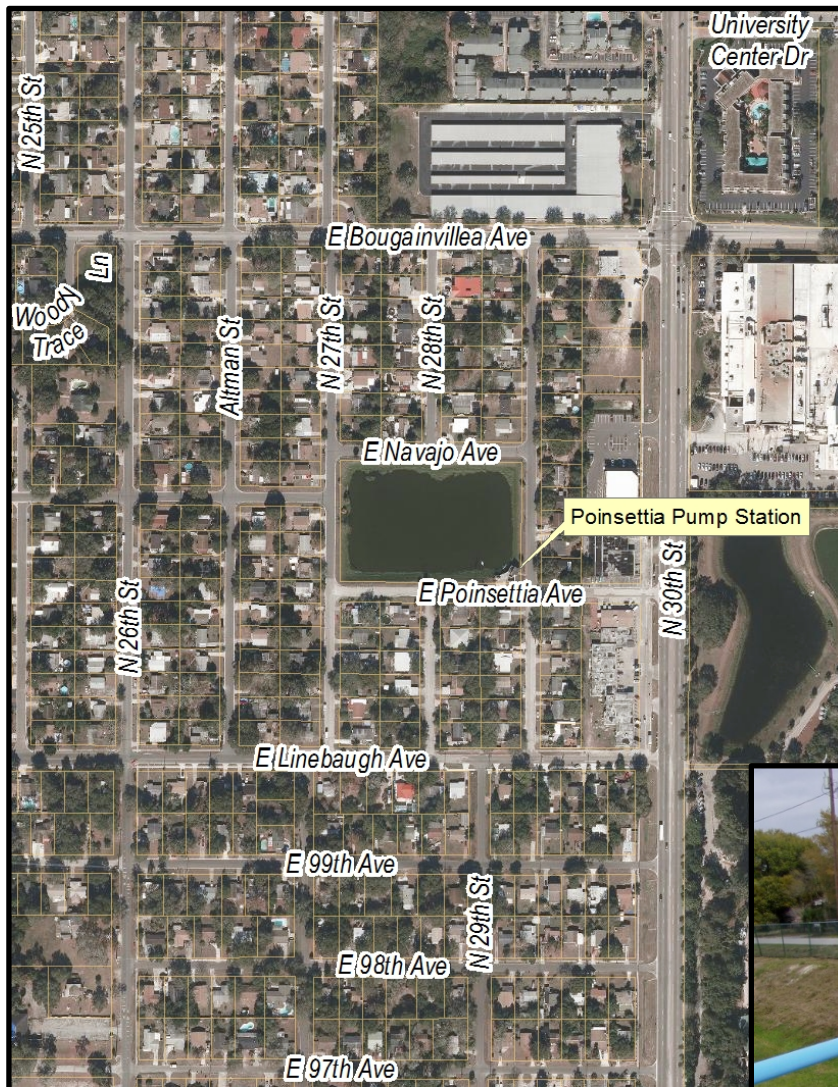
Project Description:

This project consists of removal of the failed hydraulically driven pumps and the installation of two new electric submersible pumps and motor controls. New pumps will match the existing flow and provide a more energy efficient system.

Justification:

The Poinsettia Pump station was equipped in 1988 with hydraulically driven pumps and augmented with additional pumping capacity in 2005 and 2010. When the Donut Pond Pump Station was activated in 2015 upstream of this location, demand at this station was reduced.

Project Map & Photo



Eastridge P.S Rehabilitation

Flooding Relief FY2018, District 7

Estimated cost: \$700K

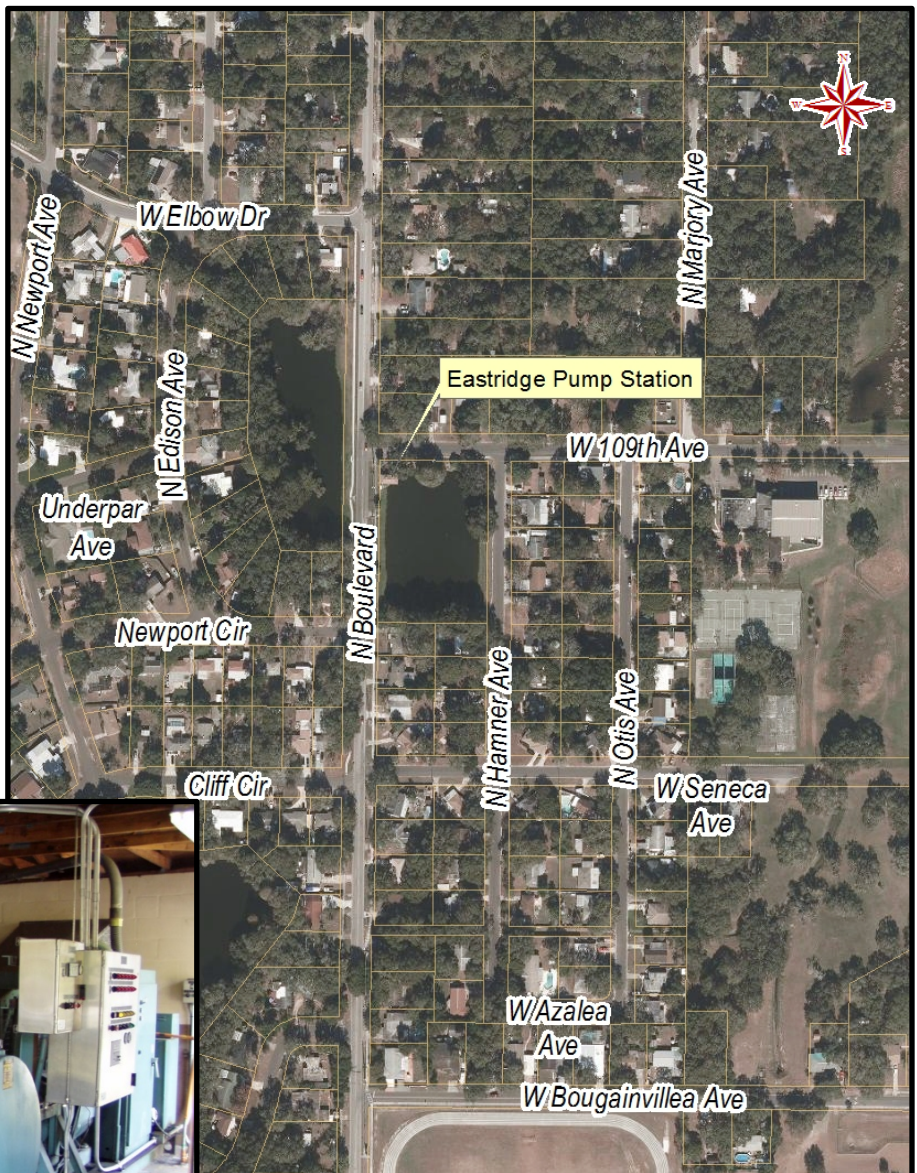
Project Description:

The project consists of removal of the hydraulically driven pump and installation of two electric submersible pumps and motor controls to provide redundancy.

Justification:

The Eastridge Pump Station was constructed in 1983 with a single hydraulically driven pump. Repairs and maintenance has increased in the past five years.

Project Map and Photo



Copeland Park Pumping Station

Flooding Relief FY2018, District 7

Estimated cost: \$800K

Project Description:

The project consists of construction of a new pump station and force main connecting to the existing drainage system on N 22nd Street at Colby Lane area.

Justification:

Currently a temporary pump is utilized to drain the low-lying area in Copeland Park. The proposed project will replace the temporary pump with a permanent pump station and provide a more reliable system to better alleviate the flooding in the area.

Project Map and Photo



Anita Subdivision PH II Drainage Improvements

Flooding Relief FY2018, District 4

Estimated cost: \$800K

Project Description:

This neighborhood was developed with ditches draining to a collection system that discharged the stormwater to a system on Westshore Boulevard. Over the years the ditches have been filled and driveway culverts have been installed improperly. Consultant will evaluate the current drainage patterns and identify areas where ponding occurs. City crews will reestablish the relic ditches and correct the driveway culverts.

Justification:

The project reduces the flooding affecting residential properties and roadways.

Project Map



56th Street & Broadway Avenue Flooding Relief

Flooding Relief FY2019, District 5

Estimated cost: \$2M

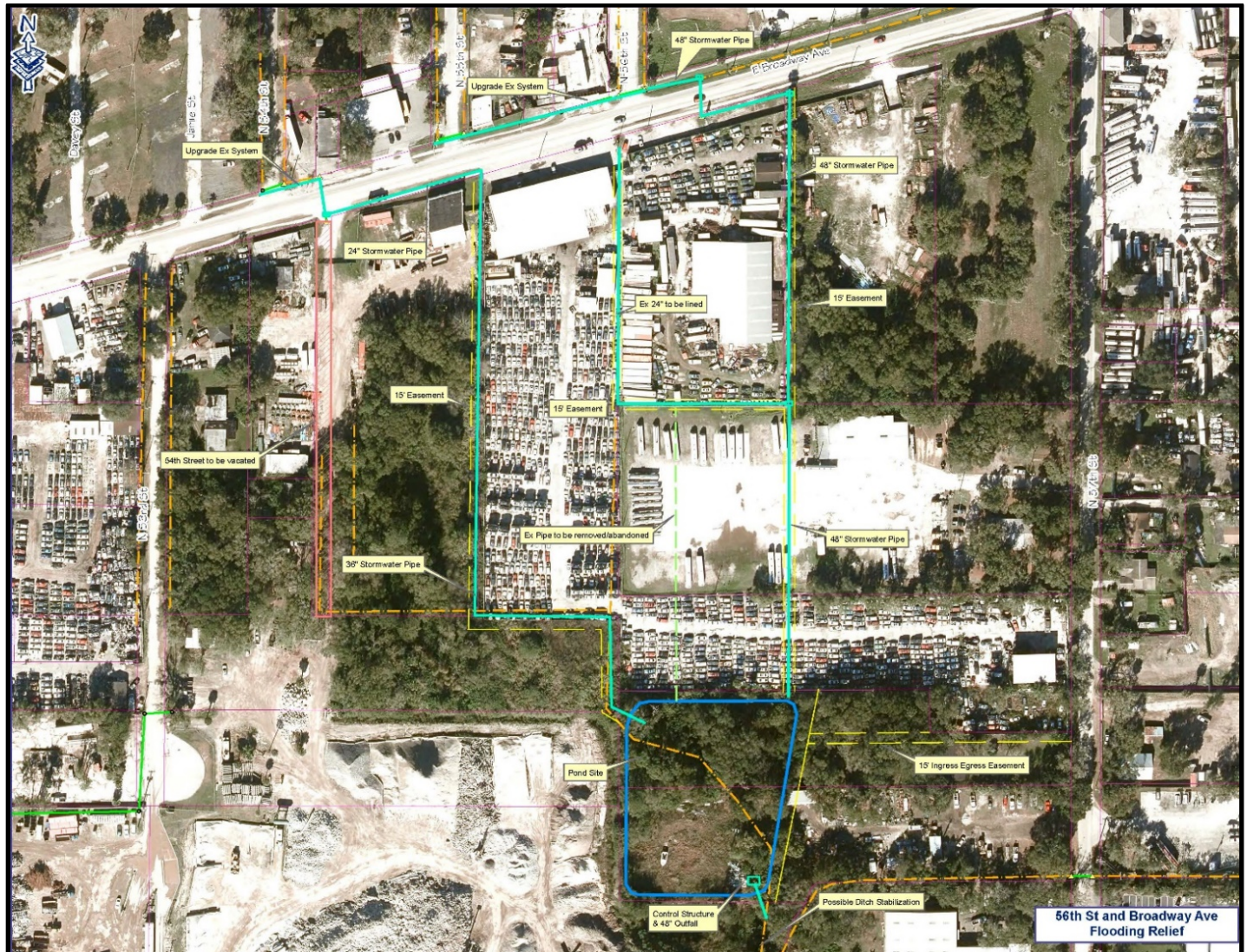
Project Description:

This section of Broadway Avenue experiences frequent flooding resulting from a combination of undersized piping systems and failing ditches. This project consists of property acquisition for a new stormwater pond that will provide water quality treatment and attenuation for the area, and the relocation, replacement and upsizing of pipes and ditches.

Justification:

This section of Broadway Avenue experiences frequent flooding resulting from a combination of undersized piping systems and failing ditches. The proposed project will improve drainage in the area.

Project Map



Hamilton Creek Water Quality Improvements

Water Quality FY2019, District 6

Estimated cost: \$500K

Project Description:

The scope of this project is to construct a five-pond stormwater treatment facility for Hamilton Creek, which outfalls to the Hillsborough River.

Justification:

The receiving section of the river has been listed by the Florida Department of Environmental Protection as impaired for fecal coliforms. This segment of the river was issued a Total Maximum Daily Load (TMDL) for nutrients and fecal coliforms and is currently under Basin Management Action Plan (BMAP) requirements for water quality improvements. The proposed project is part of the effort to improve the Hillsborough River water quality by reducing the amount of fecal coliform and nutrients discharged to the river. The Lowry Park Zoo supports this project and will be cooperative in implementing educational environmental programs on the project site to benefit the public.

Project Map



Lamb Canal Rehabilitation

FY2019, District 4

Estimated cost: \$1.5M

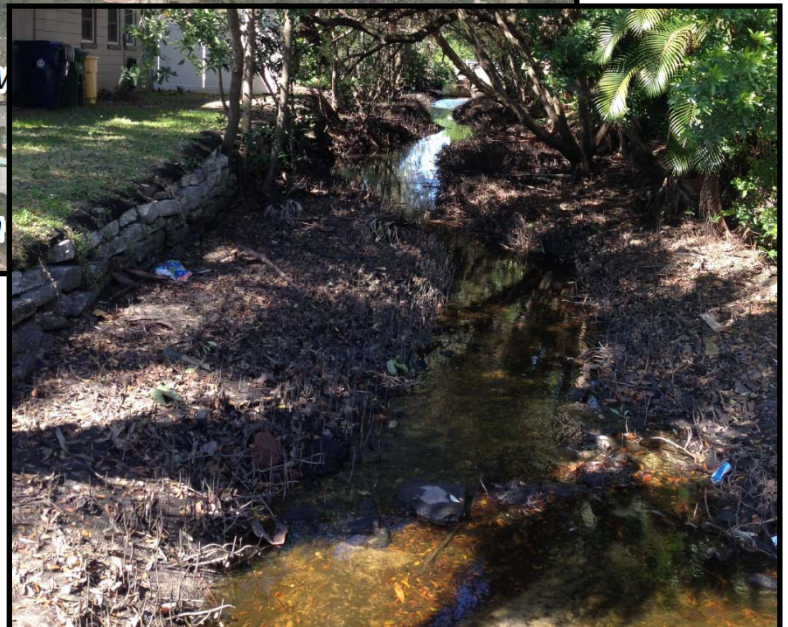
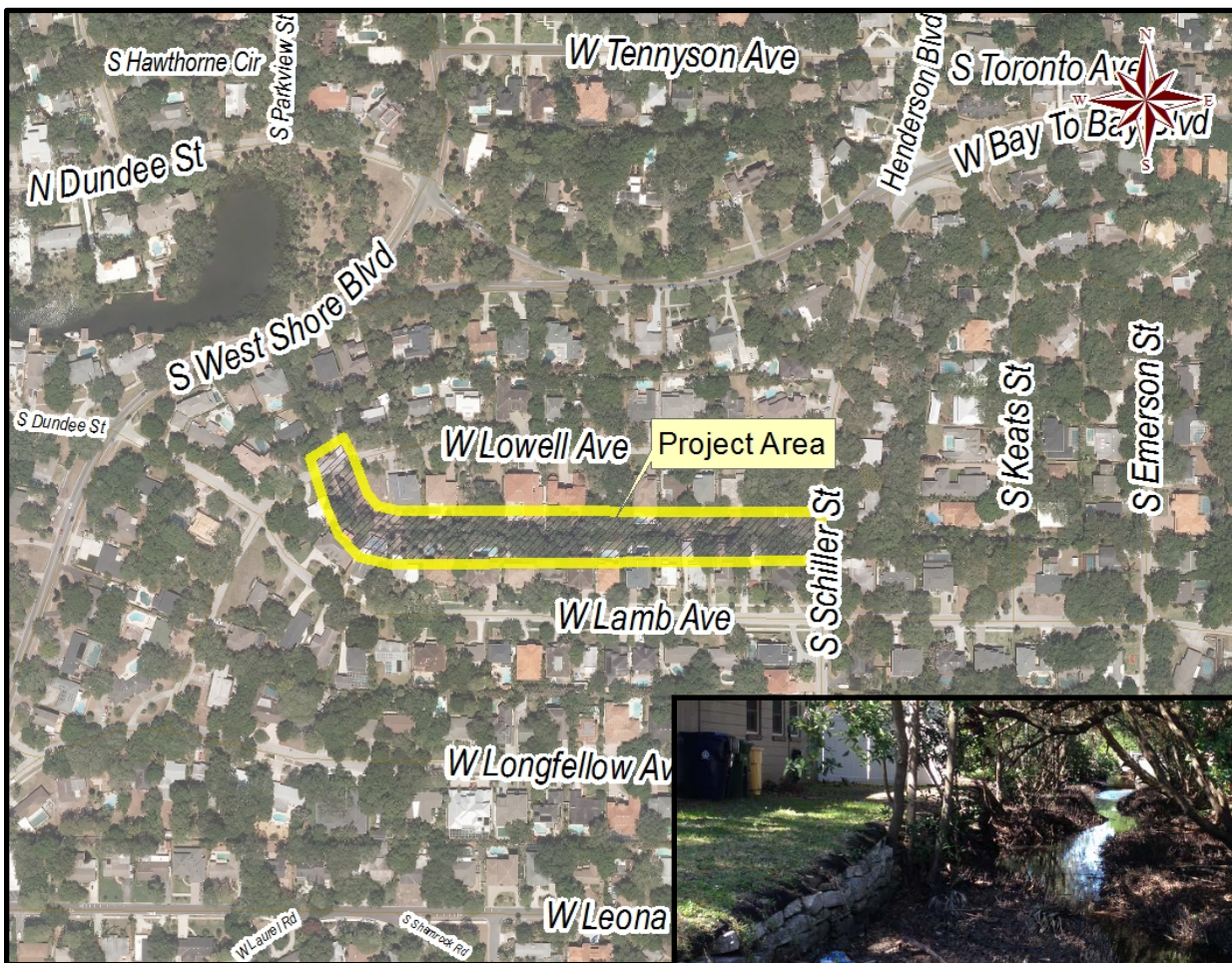
Project Description:

The project will include removal of sediments and reconstruction of the banks of the canal to restore the canal capacity and protect properties from erosion.

Justification:

Lamb canal from South Schiller Street to West Lowell Avenue section has been eroded over the years and in need of rehabilitation. The capacity of the canal is significantly reduced due to embankment deterioration.

Project Map and Photo



Ditch Rehabilitation PH II

FY2019, Citywide

Estimated cost: \$1M

Project Description:

This project creates an annual contract to address ditch improvements and associated upgrades to improve conveyance capacity and embankment stabilization.

Justification:

Rehabilitation is needed for ditches that have diminished capacity due to embankment erosion that cannot be corrected by maintenance.



Project photos

El Prado Green Infrastructure

FY2019, District 4

Estimated cost: \$170k

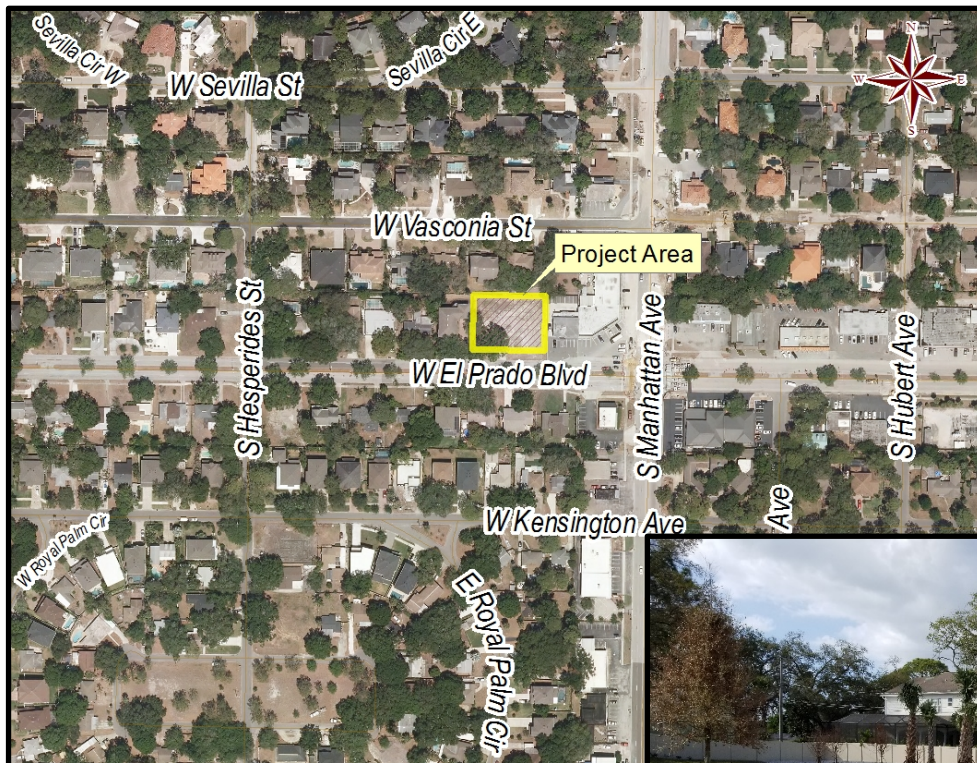
Project Description:

Project implements green infrastructure technology on two vacant lots near the intersection of El Prado Blvd. and S. Manhattan Ave. The green infrastructure provides aesthetics to the residential area in addition to serving as a functional means for capturing, storing, and treating urban stormwater runoff. The green infrastructure technology incorporates Florida-friendly landscaping that allows runoff to slowly percolate into the ground before discharging to the existing stormwater system.

Justification:

This low lying area experiences street and yard flooding. The proposed project will provide water quality treatment, flooding relief, and aesthetics for the neighborhood.

Project Map and Photo



Lantana / Poinsettia Flooding Relief

FY2020, District 7

Estimated cost: \$625k

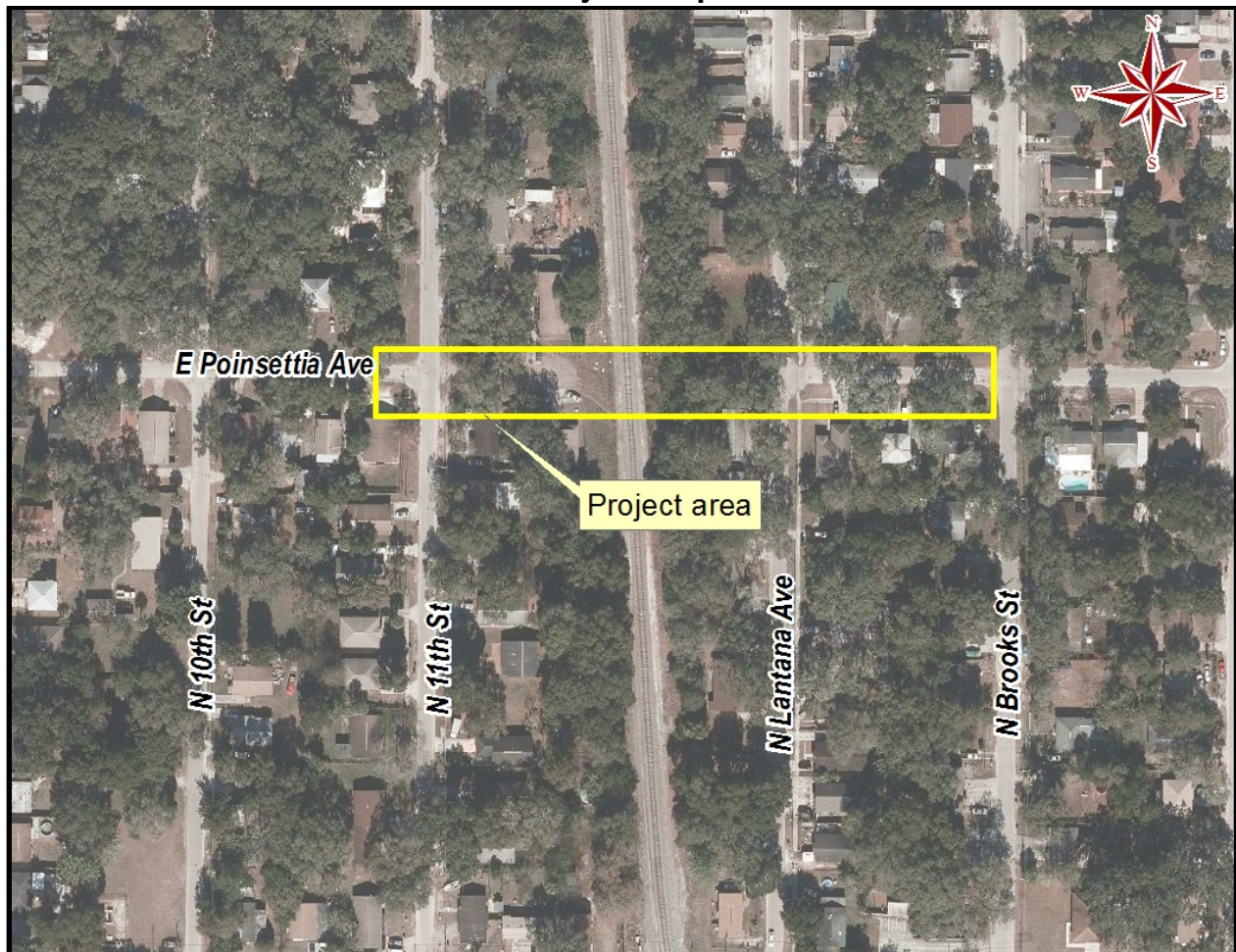
Project Description:

The project consists of property acquisition and construction of a new collection system, a new pump station to replace the temporary pump station, and force main connecting to the existing drainage system on N 11th St.

Justification:

Currently a temporary pump is utilized to drain the low-lying area along E Poinsettia Ave. between N Brood St. and N Lantana Ave. The proposed project will replace the temporary pump with a permanent pump station.

Project Map



Lake Roberta Dredging

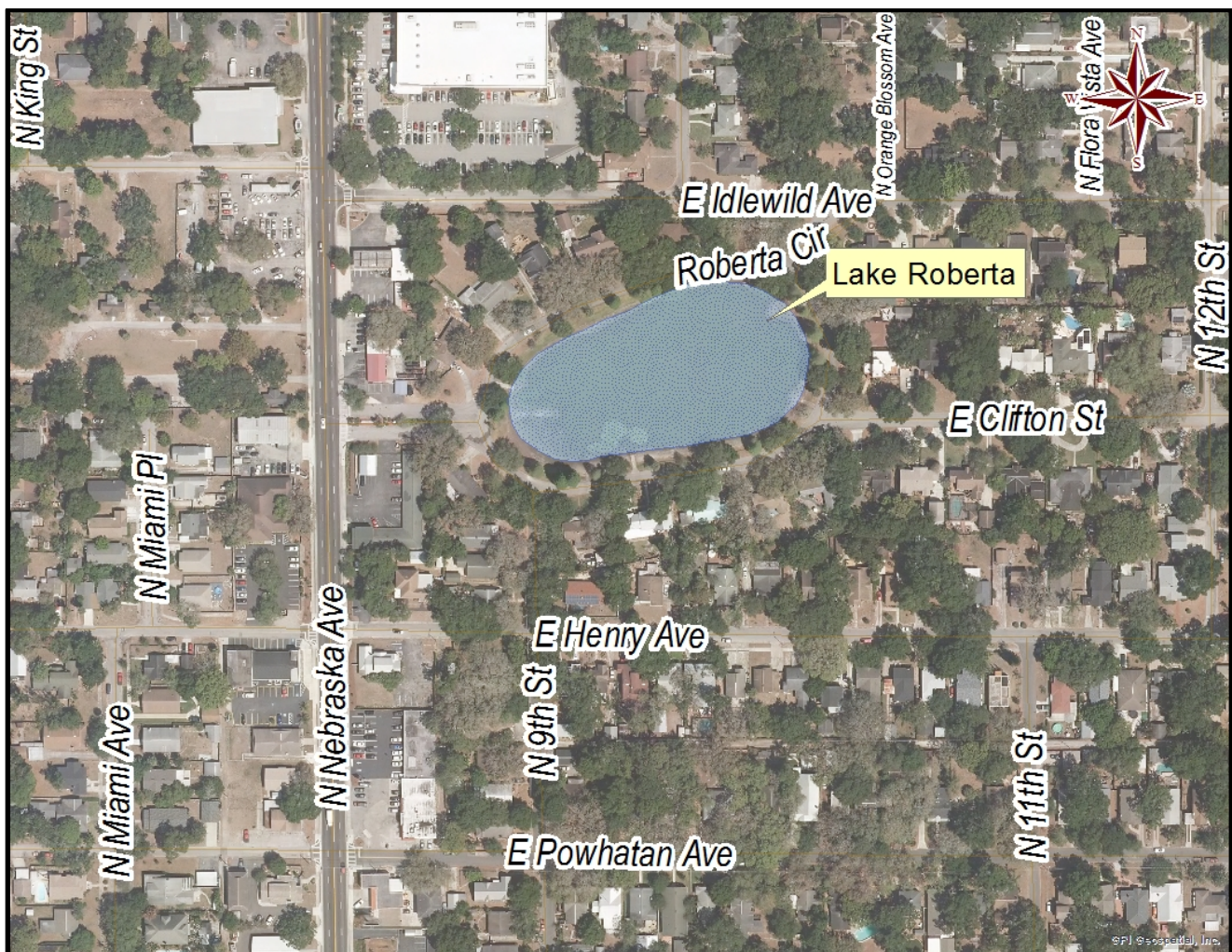
FY2019, District 5

Estimated cost: \$400k

Project Description:

To enhance water quality and to improve the general environmental health of Lake Roberta, the City plans to remove the accumulated lake sediments. Currently, the deepest part of the lake is about 6' deep. The dredging project is targeting a new depth of 10'. It is anticipated that approximately 10,000 cubic yards of wet sediment consisting of silt, sand, muck and decomposed vegetation will be dredged from the lake in this project. The increased storage capacity, called the permanent pool volume, will restore the health of the lake and its ability to provide water quality treatment for the stormwater runoff entering the lake from the surrounding area

Project Map



El Portal/Newport Pump Station

FY2021, District 6

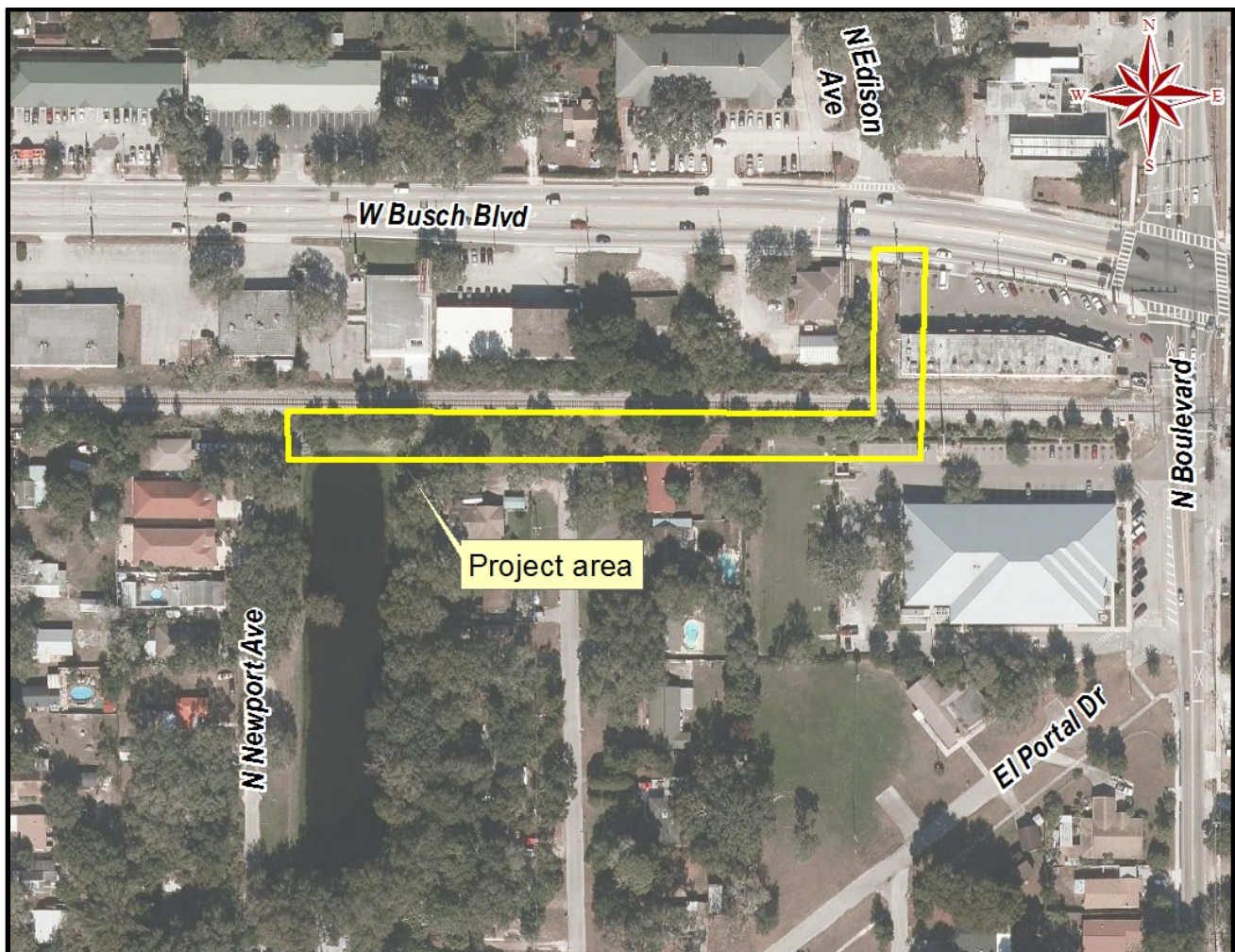
Estimated cost: \$350k

Project Description:

The project consists of construction of a new pump station and force main connecting to the existing drainage system on Busch Blvd.

Justification:

The pond located at N Newport Ave. and Busch Blvd. area currently discharges via a temporary pump. The proposed project will replace the temporary pump with a permanent pump station to provide a more reliable outfall for the pond system.



Idell Street Roadway Improvements PH II

Flooding Relief FY2017, District 5

Estimated cost: \$75K

Project Description:

Construction of new ditch system discharging to the Hillsborough River.

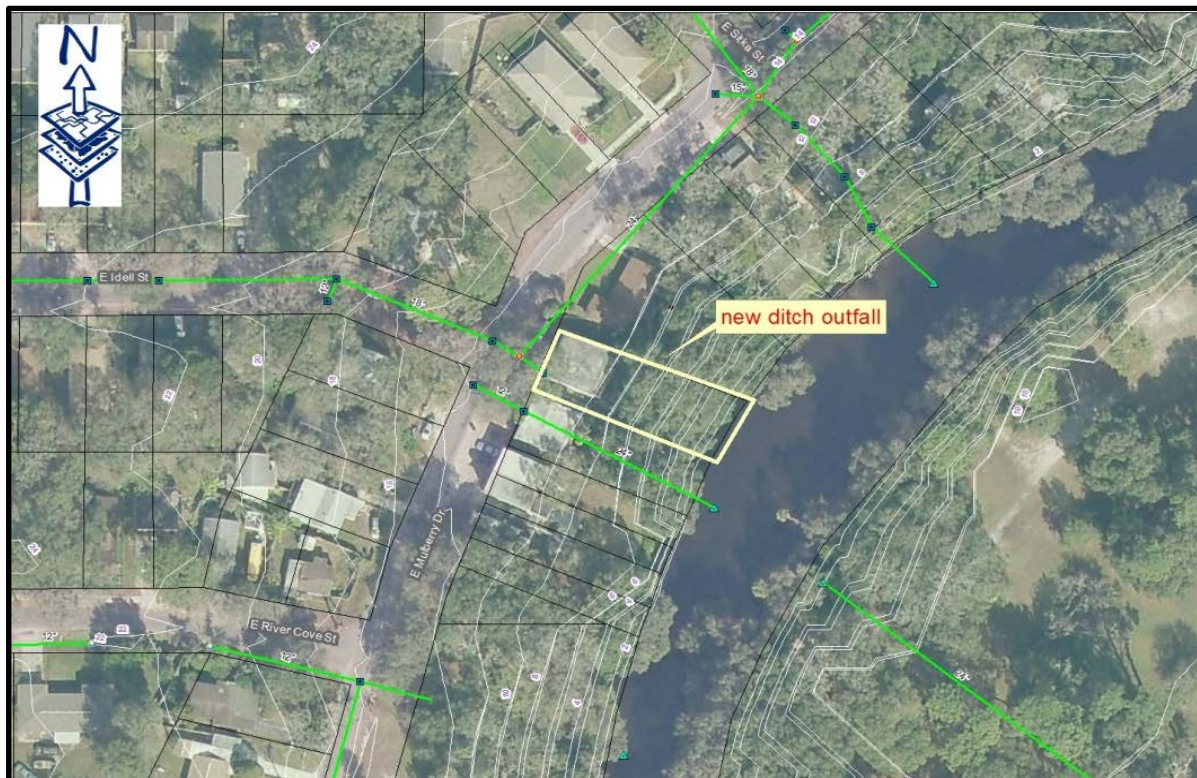
Justification:

Phase 2 of Idell Street Roadway improvements which will provide for a new outfall into the River. Stormwater in-house construction crews will be responsible for installing the new outfall via ditch to the River.

Related Issues:

Site located at 1911 East Mulberry.

Project Map



Concordia Pond

Flooding Relief FY2017, District 4

Estimated cost: \$125K

Project Description:

Four parcels have been acquired to construct a drainage pond to provide additional drainage system capacity before discharge to box culvert in adjacent CSX corridor.

Justification:

During heavy rain events, several parcels at corner of Concordia and Kensington experience flooding due to outdated drainage system.

Related Issues:

CSX drainage connection permit will be obtained before construction.

Project Map and Photo



Virginia Park PH III, Lois From Bay to Bay to Palmira

Flooding Relief FY2017, District 4

Estimated cost: \$500K

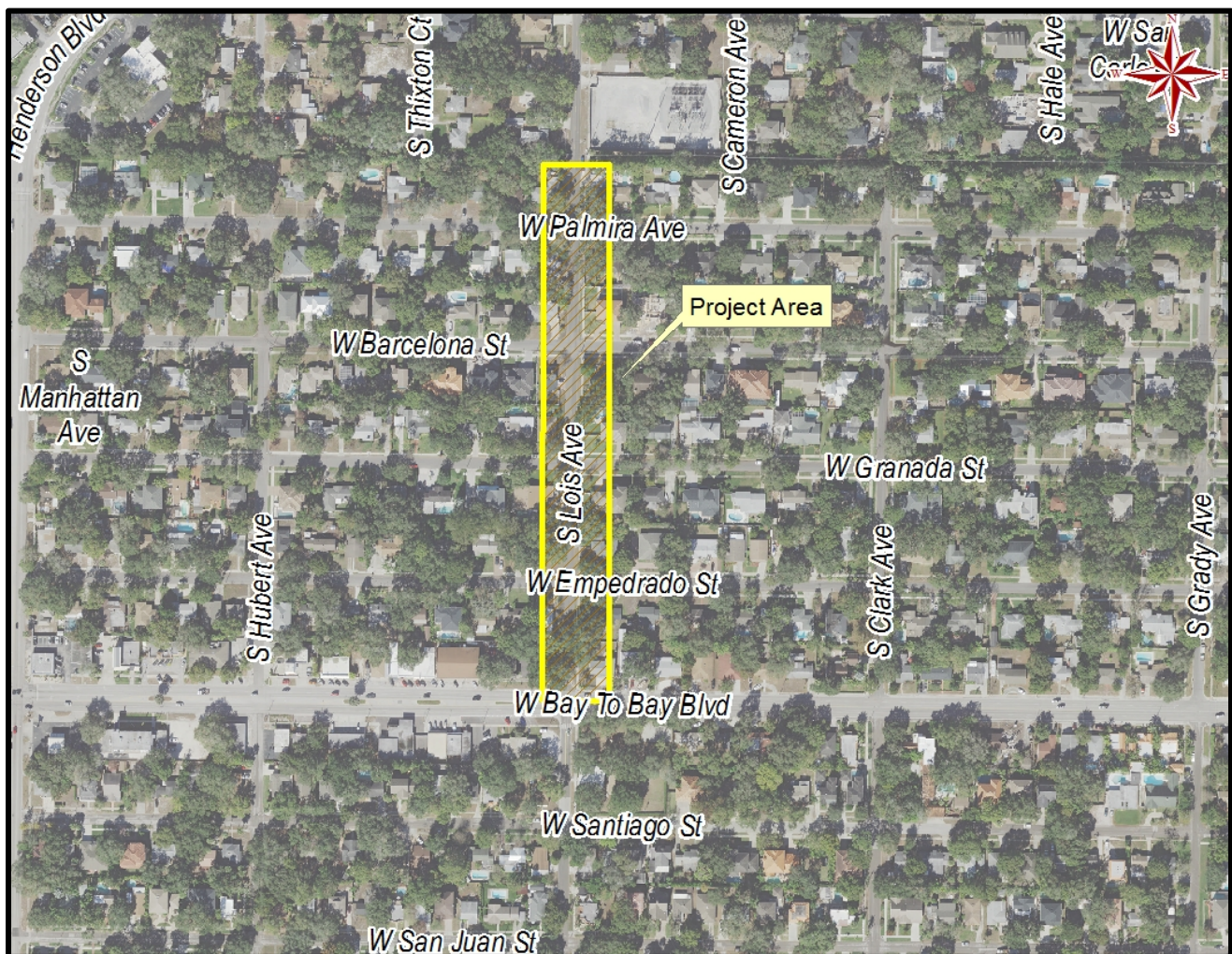
Project Description:

The project consists of regrading of the roadway to improve drainage.

Justification:

Localized flooding occurs at intersections along South Lois Avenue. The proposed project will alleviate the flooding.

Project Map



Virginia Park PH III, Clark From Bay to Bay to Palmira

Flooding Relief FY2017, District 4

Estimated cost: \$325K

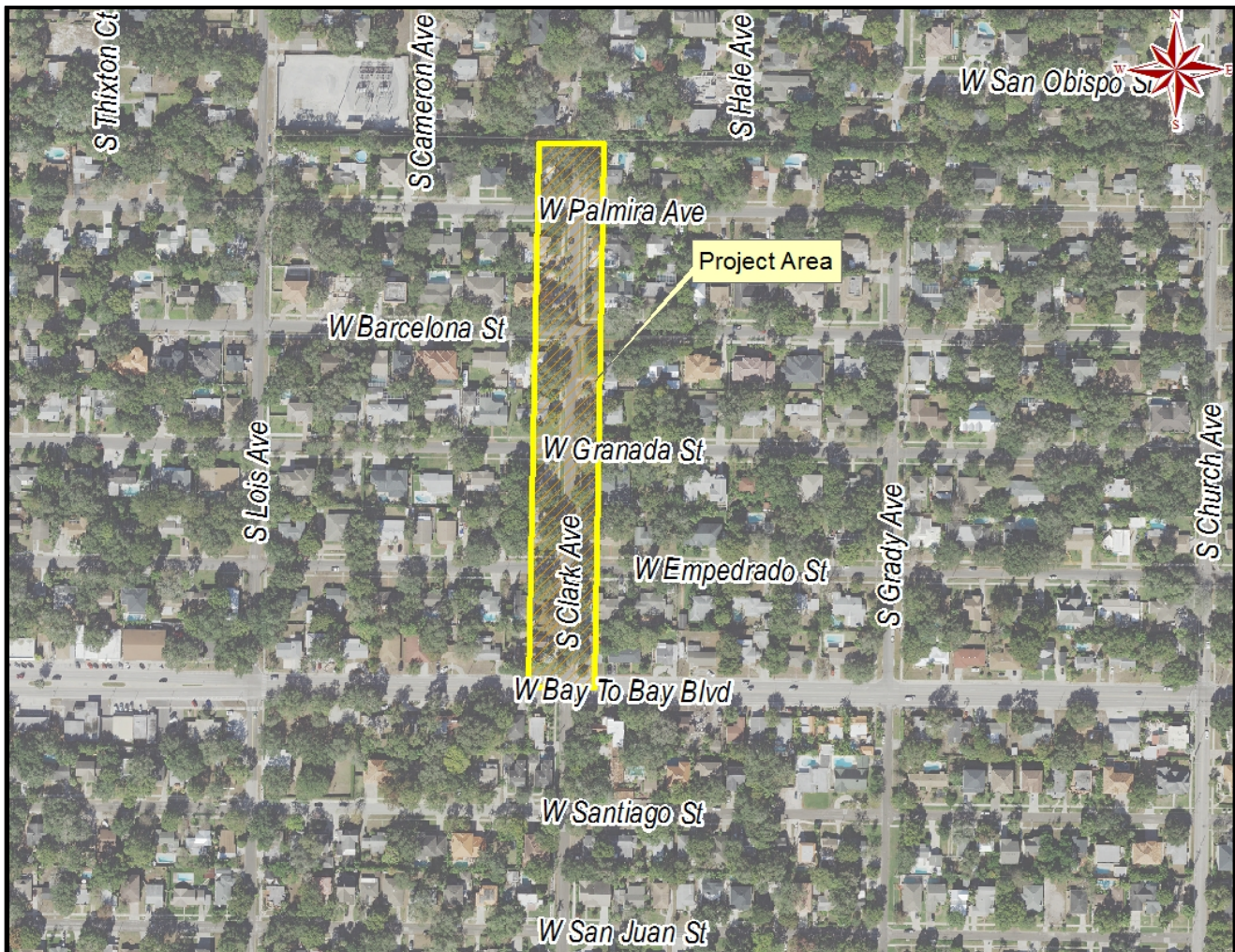
Project Description:

The project consists of regrading of the roadway to improve drainage.

Justification:

Localized flooding occurs at intersections along South Clark Avenue. The proposed project will alleviate the flooding.

Project Map



Seneca Pump Station Site Improvements

FY 2017, District 7

Estimated cost: \$100K

Project Description:

This project will include constructing a new control structure on the existing outflow pipe, stabilizing the pond banks, and controlling erosion caused by runoff flow from adjacent properties.

Justification:

Seneca Pump Station was determined to be obsolete and unnecessary due to reconfigurations of the drainage system serviced by Curiosity Creek Pump Station. Under Phase 1, the pump station building and mechanical equipment were removed. The runoff accumulated in the Seneca pond will flow north to 109th Avenue.

Project Map and Photo



Gomez Alley between Kennedy & North A Street

Flooding Relief FY2019, District 4

Estimated cost: \$75K

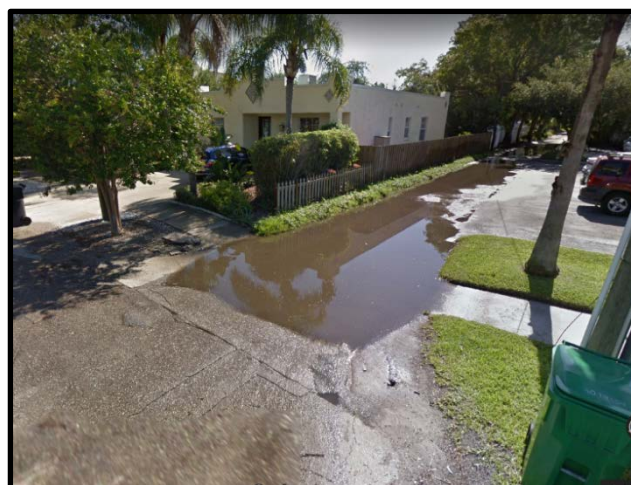
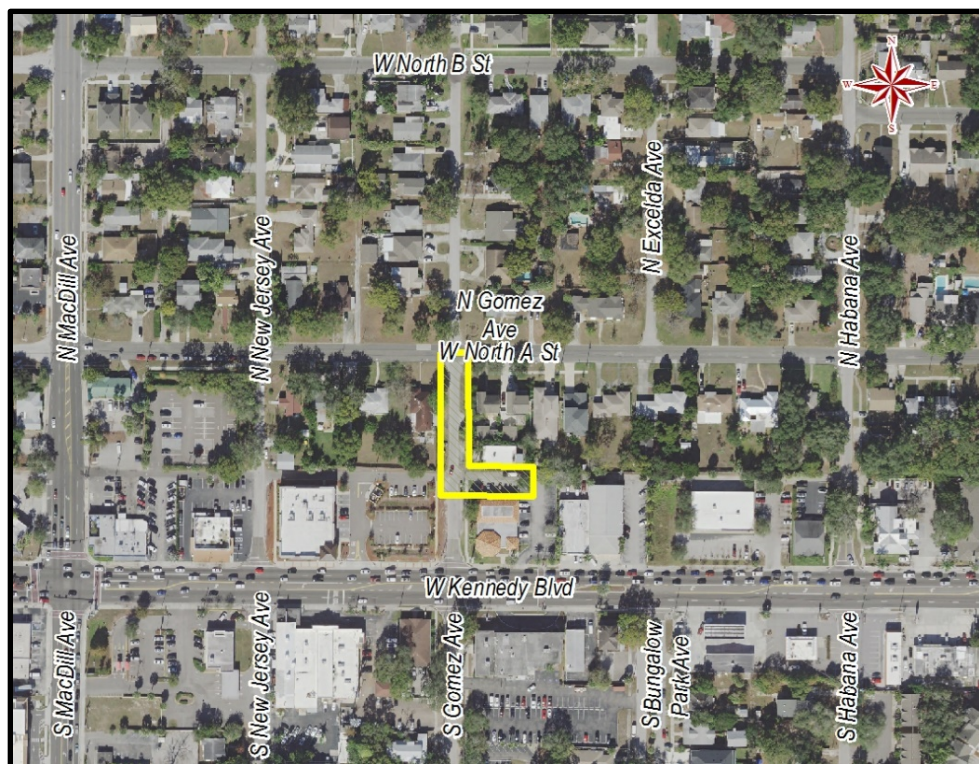
Project Description:

The project consists of construction of new inlets and pipes connecting to the existing drainage system on West North A Street and regrading of the roadway as needed.

Justification:

Localized flooding occurs in the low lying Gomez alley area. The proposed project will alleviate the flooding.

Project Map and Photo



Binnicker at 4th Street

Flooding Relief FY2018, District 4

Estimated cost: \$50K

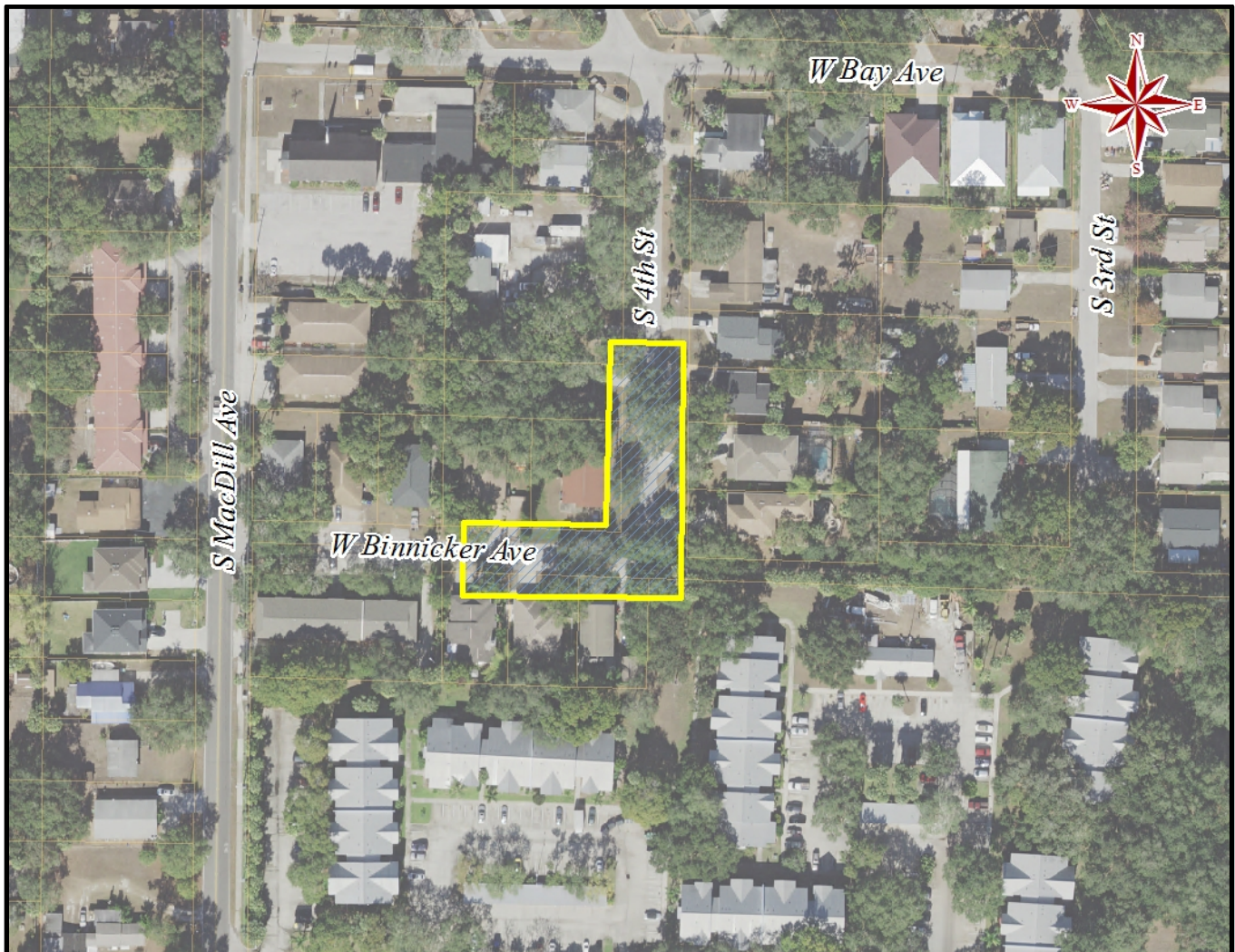
Project Description:

The project consists of construction of new pipes and inlets and regrading of the roadway as needed.

Justification:

Localized flooding occurs at intersection of West Binnicker Avenue and South 4th Street. The proposed project will alleviate the flooding.

Project Map



Albany From Barclay Road to Marianna Street

Flooding Relief FY2018 – CCC, District 7

Estimated cost: \$100K

Project Description:

Evaluating Exfiltration trench option. Construction of approximately 1,100 of new pipe inlets to convey runoff to existing system in Barclay Avenue is option B.

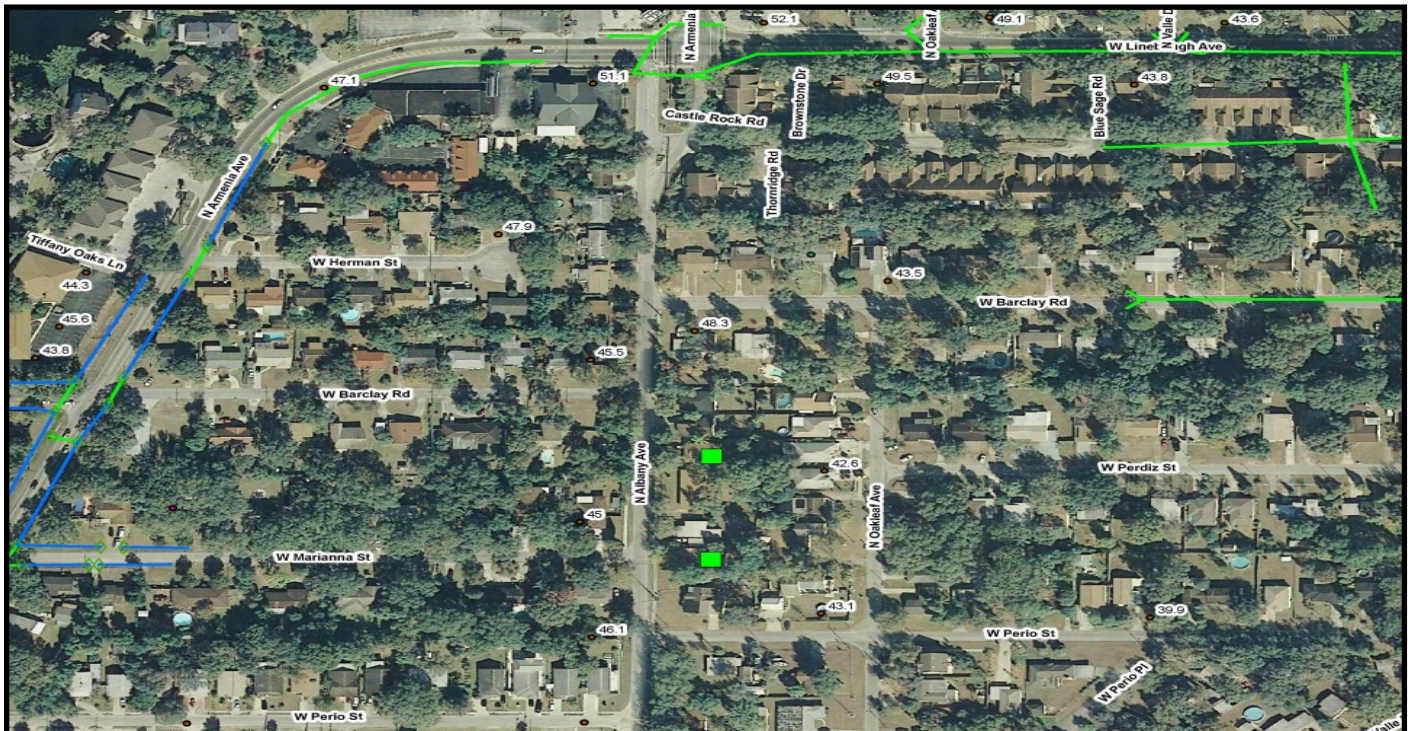
Justification:

Roadway and yard flooding occurs along Albany Street at Mariana Street. The project will relieve flooding.

Related Issues:

Commitment letter sent for FY 2015.

Project Map



Neptune/Treasure PID

FY2018, District 6

Estimated cost: \$75K

Project Description:

The proposed project will pipe in the existing ditch with a shallow swale.

Justification:

The ditch is eroded and in need of restoration. The proposed project will prevent further erosion and enhance public safety.

Project Map



3911 Swann Avenue
Flooding Relief FY2018, District 6
 Estimated cost: \$50K

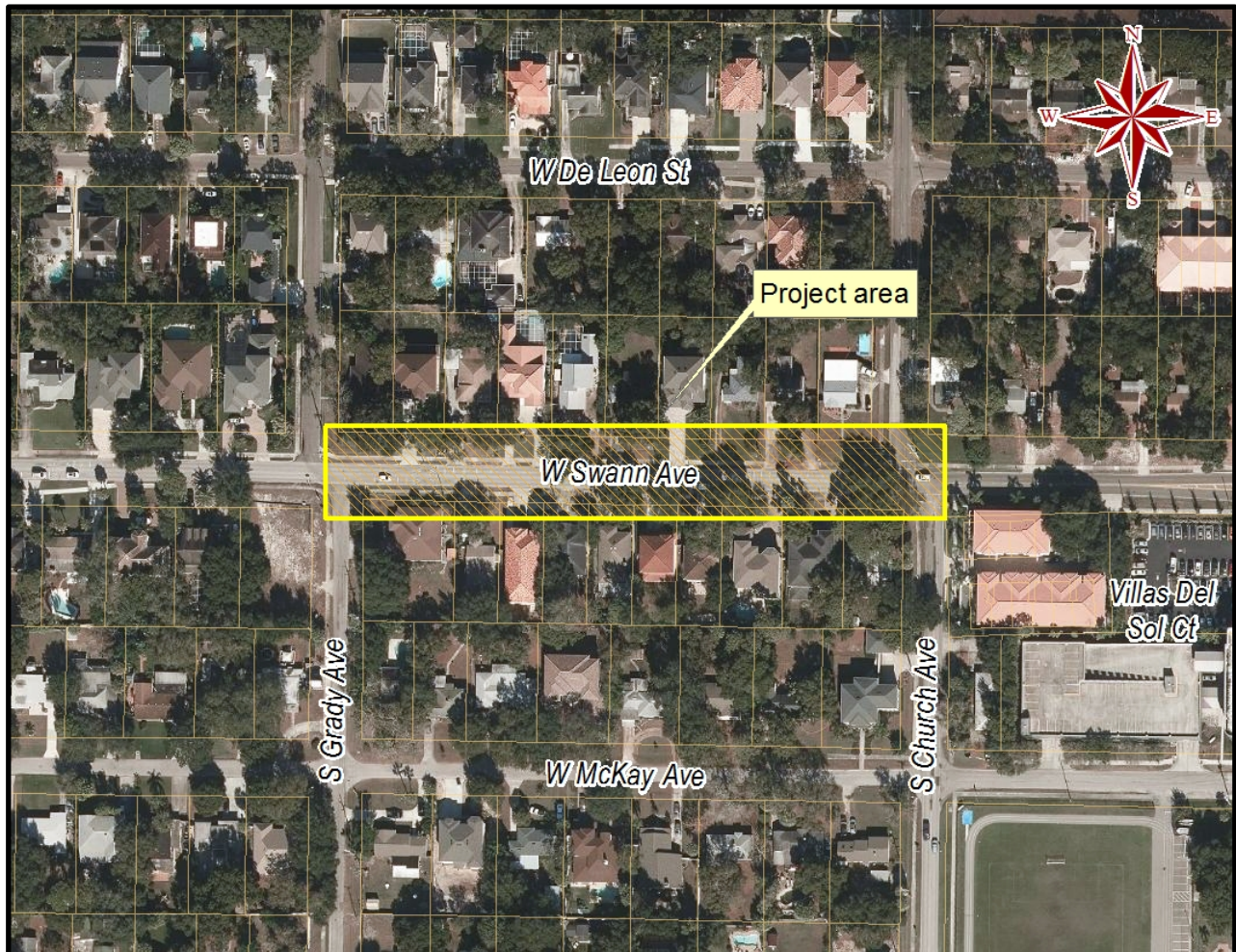
Project Description:

The proposed project consists of converting some existing manholes to inlets.

Justification:

Low lying areas on the street experience street and yard flooding. This project will alleviate the localized flooding.

Project Map



1510 W. Park PID

FY2017, District 6

Estimated cost: \$50K

Project Description:

The proposed project will pipe in the existing ditch.

Justification:

The ditch is eroded and had been repaired multiple times in the past. The proposed project will enhance public safety and reduce maintenance cost.

Project Map



Rambla Flooding Relief

FY2018, District 7

Estimated cost: \$100K

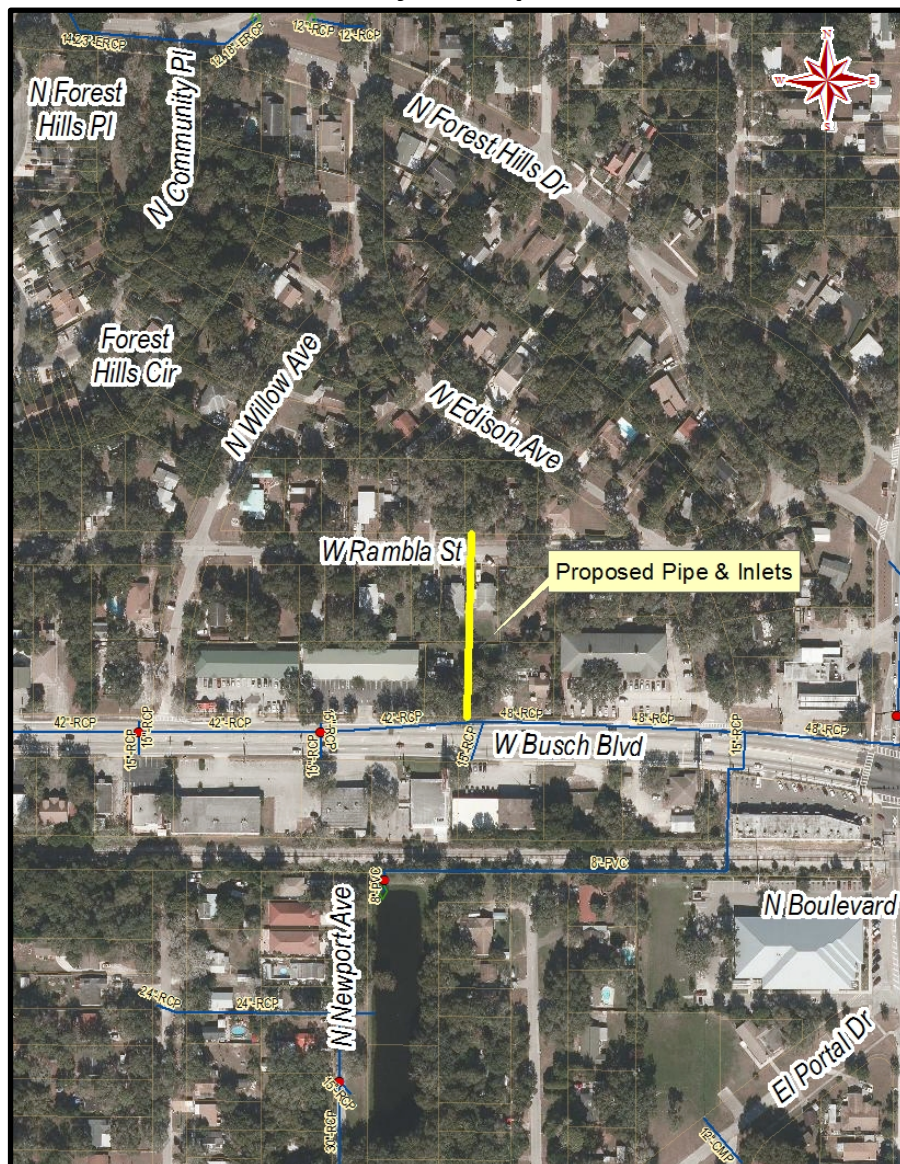
Project Description:

The proposed project will consist of construction of new inlets and pipes connecting to the existing drainage system.

Justification:

Properties on Rambla Street between Edison Avenue and Willow Avenue experience chronic flooding. The project will alleviate the flooding in the area.

Project Map



45th Street North of Hillsborough Flooding Relief

FY2019, District 6

Estimated cost: \$150K

Project Description:

The proposed project will replace the temporary pump with a permanent pump station to alleviate the neighborhood flooding.

Justification:

Currently a temporary pump is utilized to drain the low-lying North 45th Street area north of East Hillsborough Avenue. This project will provide a more reliable system to better alleviate the flooding in the area.

Project Map and Photo



Emma Street and Seminole Avenue

Flooding Relief FY2019, District 6

Estimated cost: \$100K

Project Description:

The project consists of construction of new pipes and inlets and regrading of the roadway as needed to alleviate the flooding in the area.

Justification:

The proposed project will reduce the localized flooding.

Project Map



Iowa Avenue – Sheridan to Sherwood

Flooding Relief, FY2018, District 4

Estimated cost: \$75K

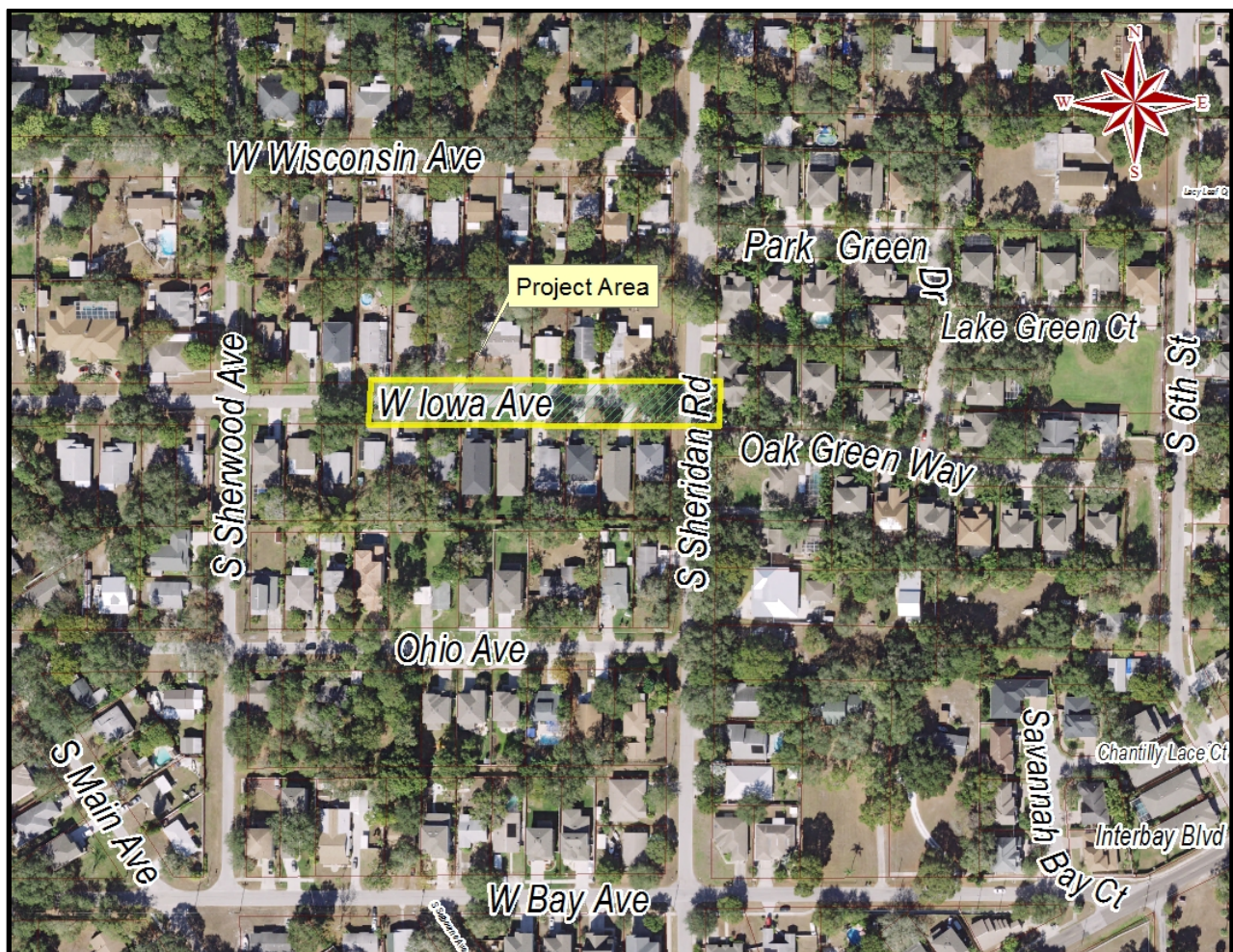
Project Description:

The proposed project will replace/upgrade the system to improve drainage in the area.

Justification:

Development in the vicinity utilizes a system of drainage ditches and pipes to convey runoff. The ditch system has been eroded and some of the pipes and other structures have failed and in need of restoration or replacement.

Project Map



West Jetton Avenue From Armenia To Moody

Flooding Relief FY 2017, District 4

Estimated cost: \$125K

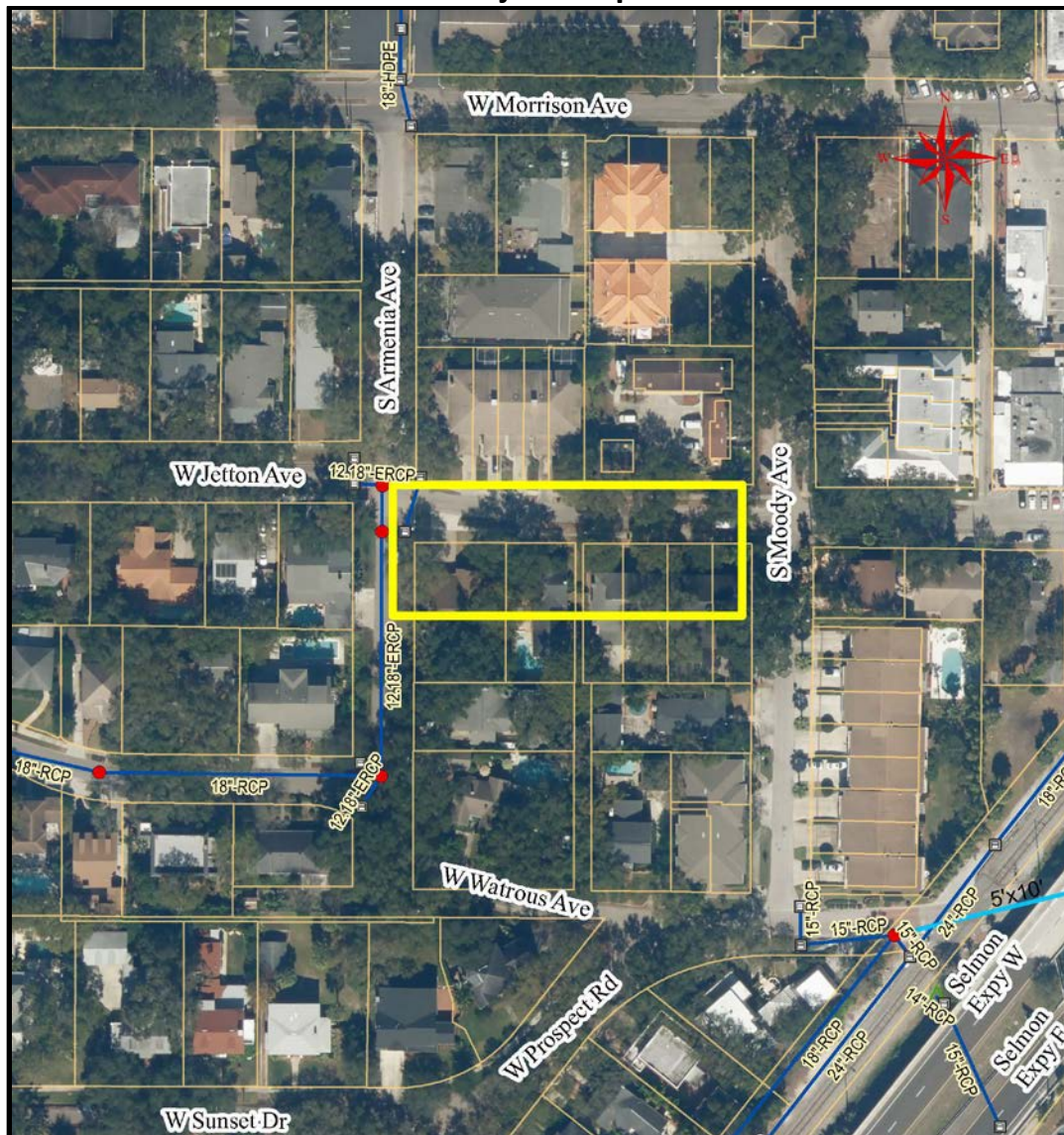
Project Description:

Storm pipe and inlet system will be installed and connected to the existing stormwater system to reduce flooding in the area.

Justification:

Flooding complaint reported from residents on 2400 block Jetton Avenue. The proposed project will alleviate the localized flooding.

Project Map



North Street & Packwood Pond

Flooding Relief FY 2019, District 6

Estimated cost: \$100K

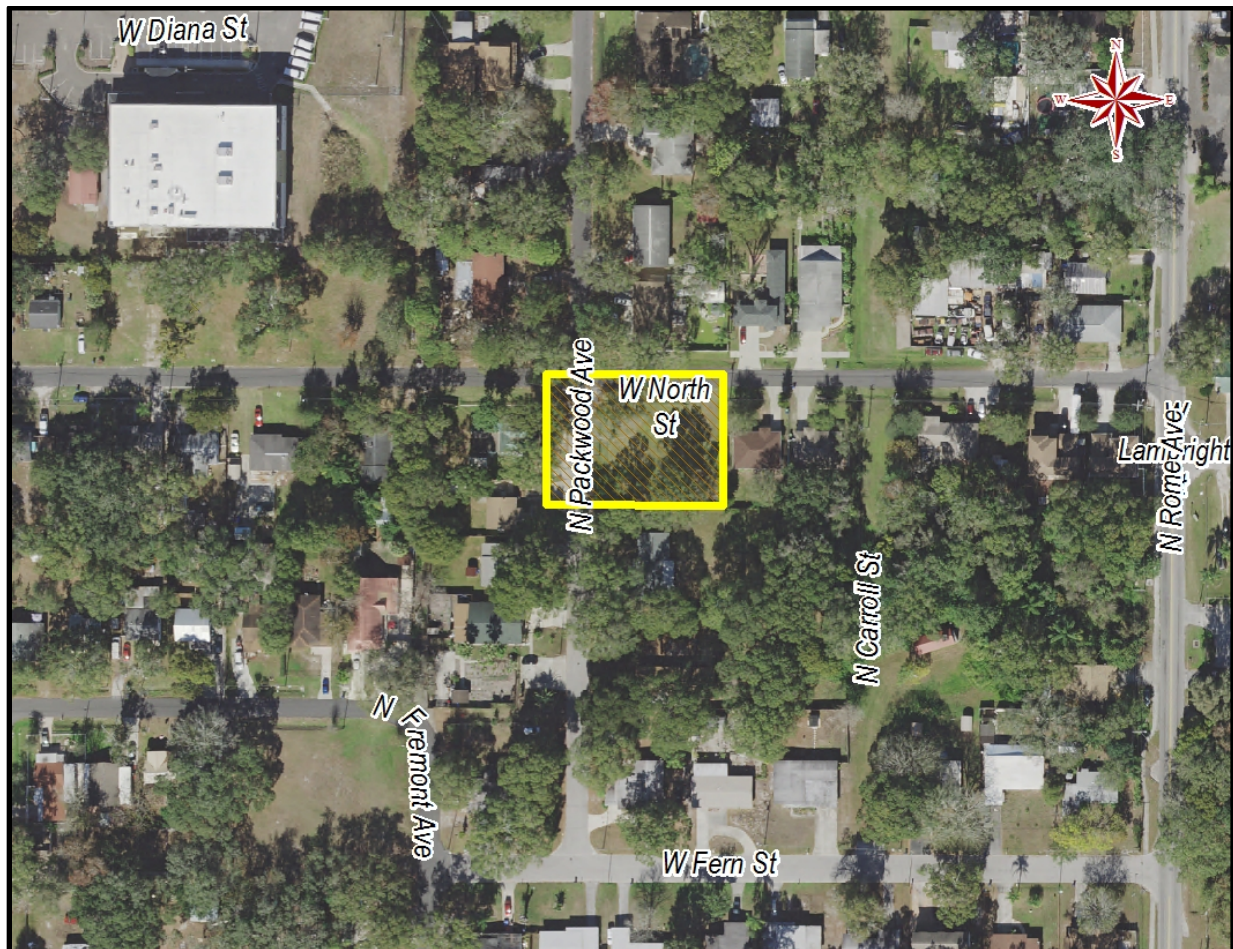
Project Description:

The proposed project consists of construction of a new pond, new pipes and inlets, and regrading of the roadway as needed.

Justification:

Flooding complaints have been reported from the residents in the area. The proposed project will alleviate the localized flooding and provide water quality treatment.

Project Map



Hale Avenue at Cleveland Street Flooding Relief

Flooding Relief FY 2020, District 6

Estimated cost: \$100K

Project Description:

The proposed project consists of construction of new pipes and inlets, and regrading of the roadway as needed.

Justification:

South Hale Avenue between West Kennedy Boulevard and West Cleveland Street experiences frequent and dangerous flooding during short, intense rainfalls. The existing stormwater infrastructure on South Hale Avenue is old and undersized. The proposed project will alleviate the current flooding situation and ultimately reduce flood stages.

Project Map and Photo



Sherrill Street North of Cleveland Street

FY 2018, District 6

Estimated cost: \$100K

Project Description:

The proposed project consists of construction of new pipes and inlets.

Justification:

Currently there is a small ditch on the east side of Sherrill Street between Kennedy Boulevard and Cleveland Street that drains to the private pond located on 5119 West Cleveland Street. The proposed project will divert the flow to the existing city system rather than to the private pond.

Project Map



North Street & 17th Street

Flooding Relief FY 2018, District 5

Estimated cost: \$75K

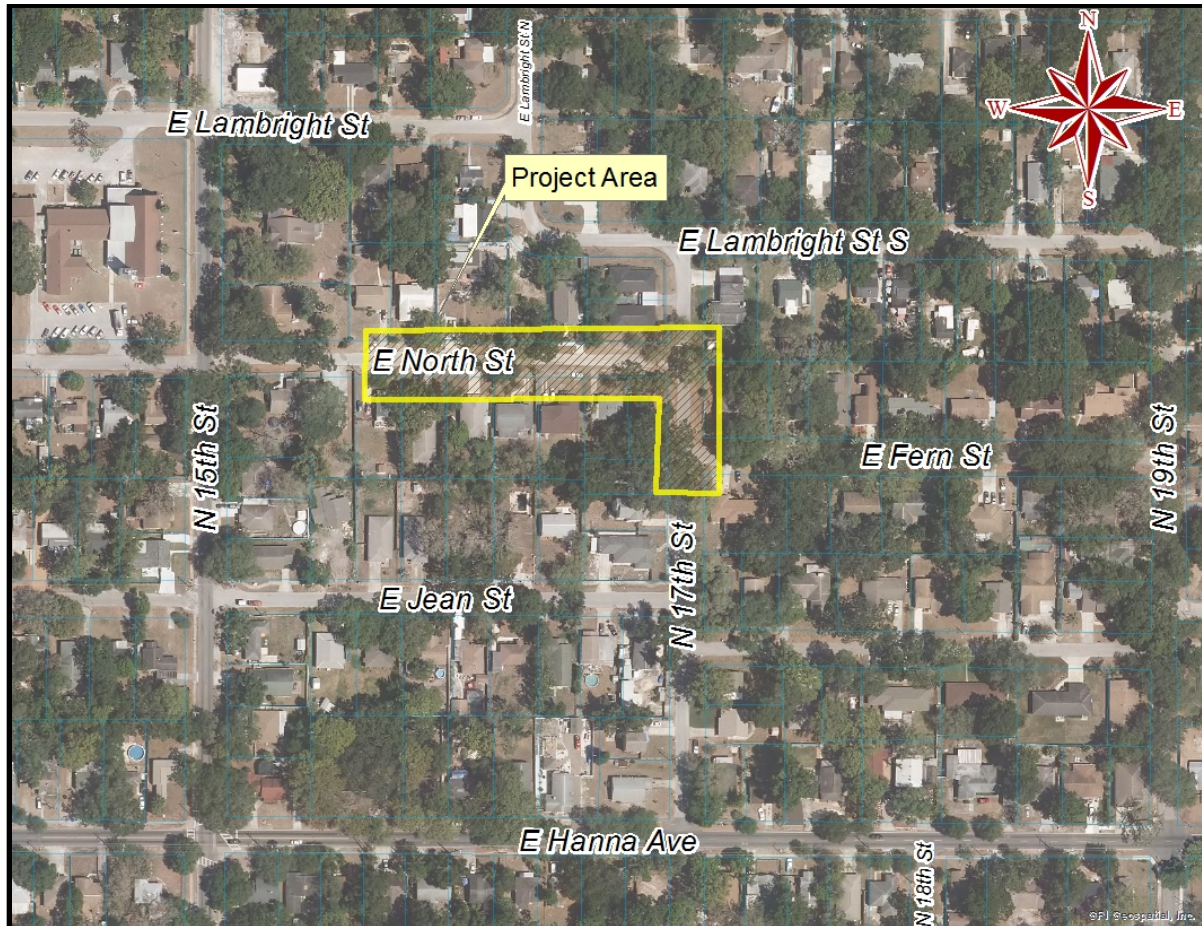
Project Description:

The project consists of construction of new pipes and inlets and regrading of the roadway as needed.

Justification:

Localized flooding occurs in the low area of East North Street due to improper grading/lack of drainage system.

Project Map



Ballast Point Boulevard at MacDill Avenue

Flooding Relief FY 2019, District 4

Estimated cost: \$125K

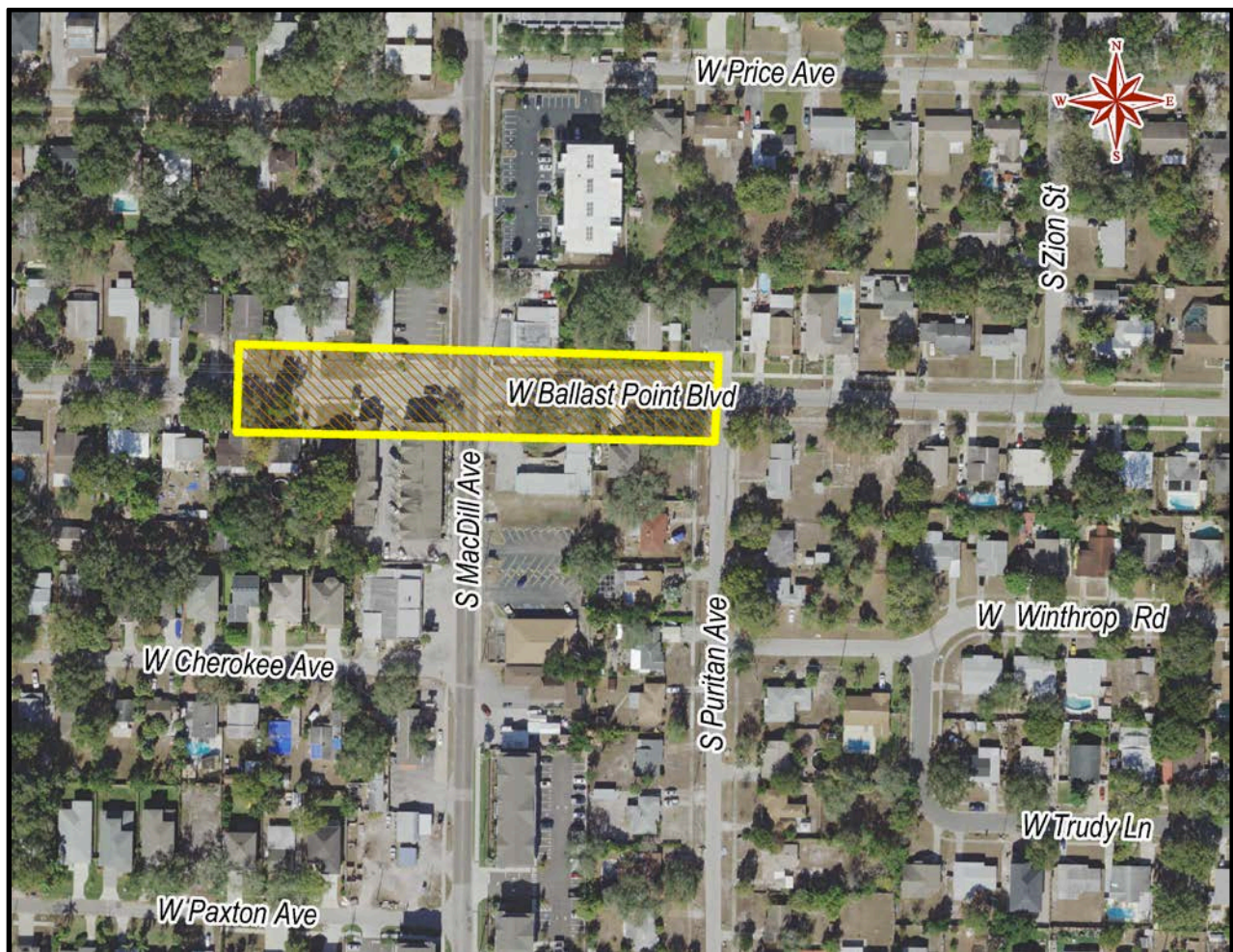
Project Description:

The project consists of construction of new surface water management facilities and roadway re-grading.

Justification:

The intersection experiences frequent flooding from blocked drainage resulting from the cumulative impact of sidewalk additions and street overlayment. The project will improve conveyance to relieve flooding in the intersection.

Project Map



Chelsea Street at 44th Street

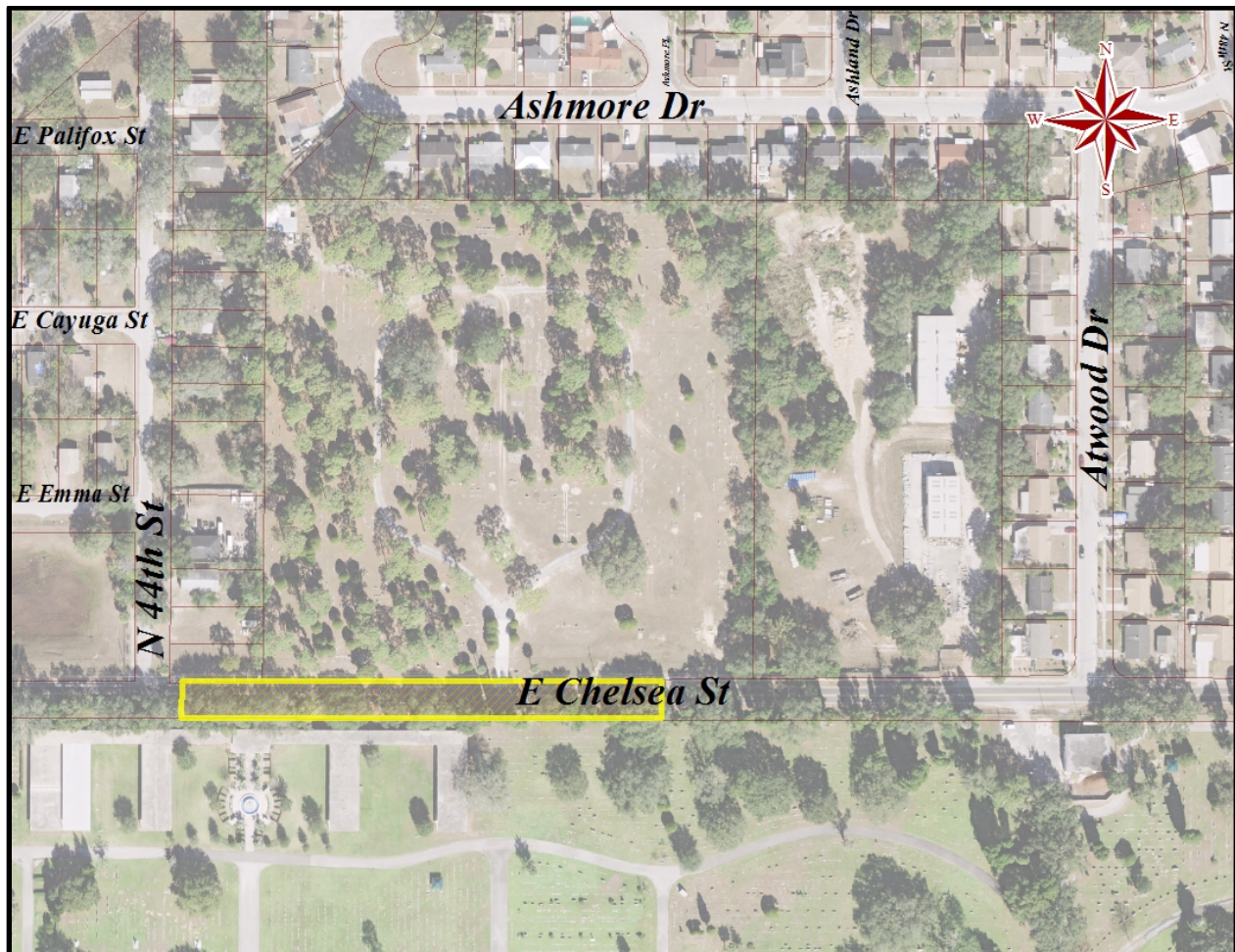
Flooding Relief FY 2020, District 5

Estimated cost: \$90K

Project Description:

Low-lying areas on East Chelsea Street between North 44th Street and Atwood Drive experiences frequent flooding. The proposed project consists of construction of new pipes and inlets connecting to the existing drainage system to alleviate the current flooding situation.

Project Map



Fair Oaks and Bayshore Flooding Relief

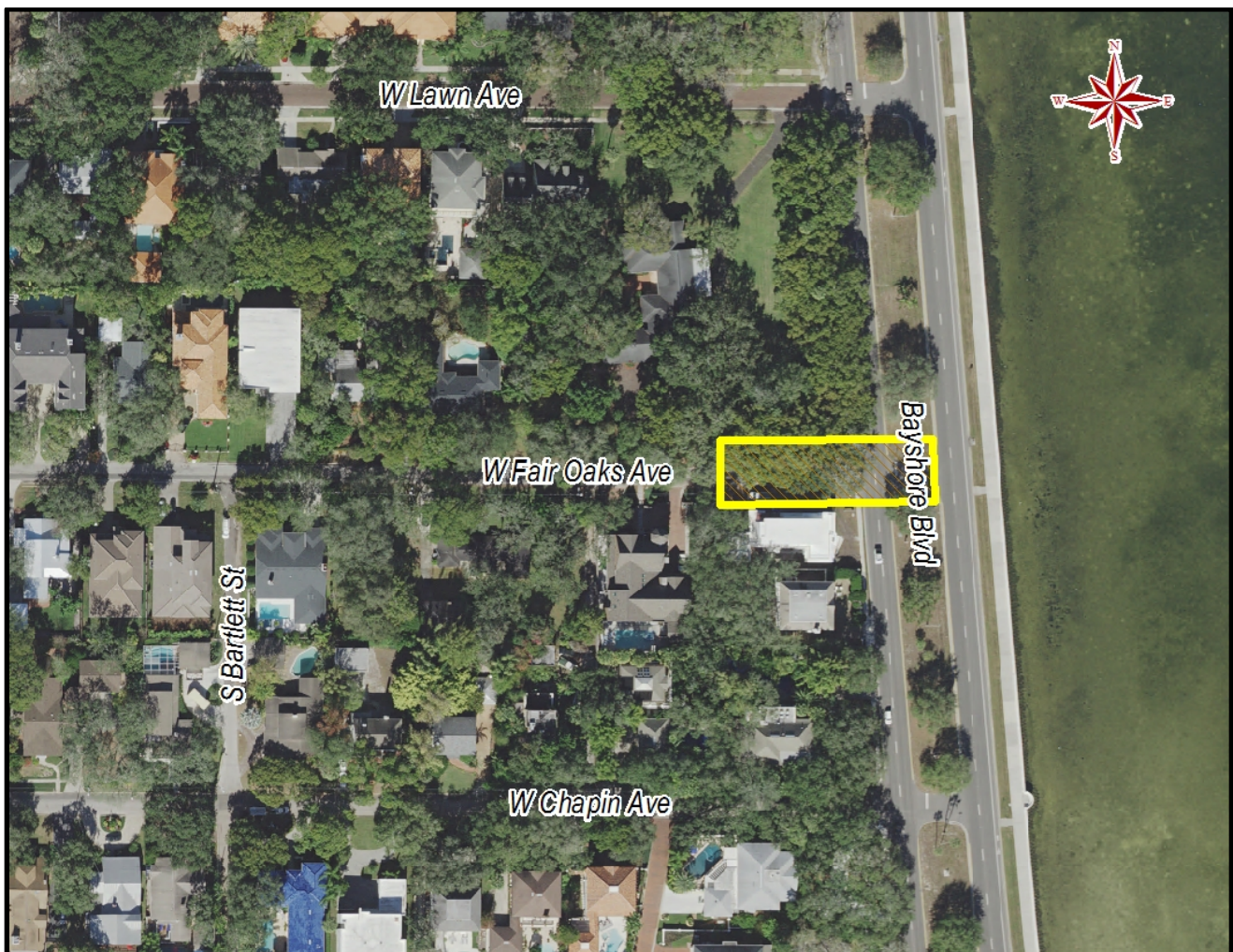
Flooding Relief FY 2019, District 4

Estimated cost: \$100K

Project Description:

Localized flooding occurs in the area. The proposed project consists of construction of new pipes and inlets and regrading of the roadway as needed to alleviate the flooding.

Project Map



Everina Street From Carrington to Coachman

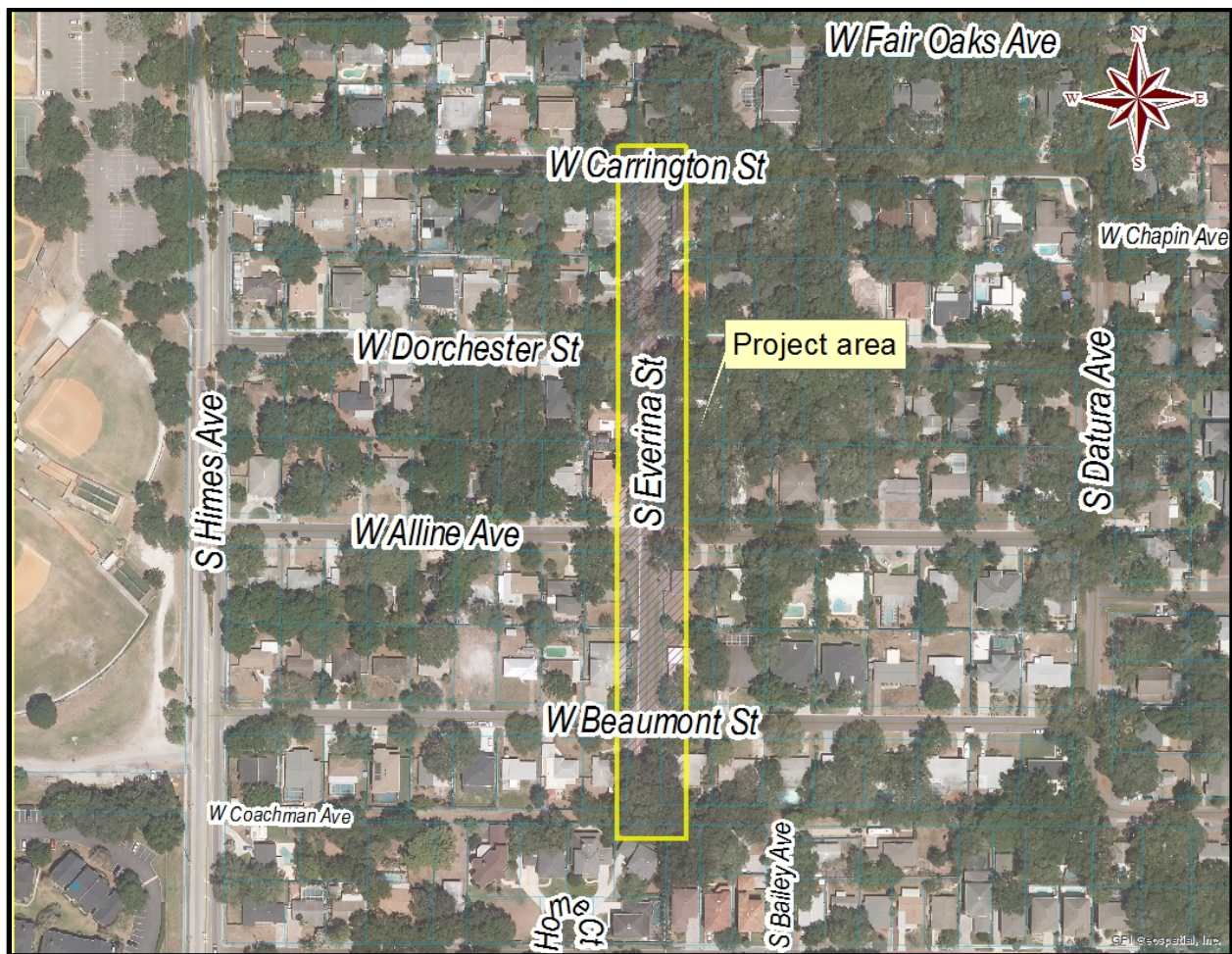
Flooding Relief FY 2020, District 4

Estimated cost: \$200K

Project Description:

This section of S Everina St. has experienced localized flooding in the past. The scope of this project is to install new pipes and inlets connecting to the existing system to provide flooding relief for the residential neighborhood.

Project Map





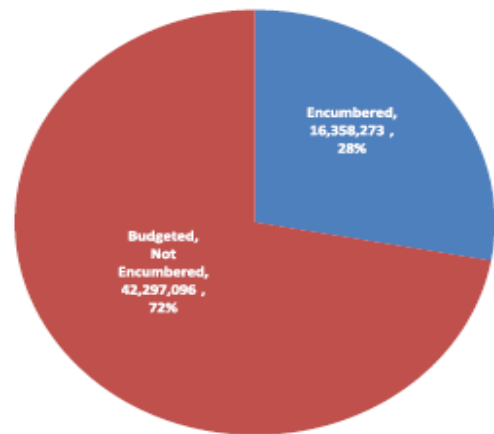
Section B

Stormwater Capital Improvement Bond Program Report

City of Tampa Budget Office Stormwater Assessment Revenue Bonds, Series 2018 As of February 28, 2019

Available Funding for Projects:

Bond Proceeds	97,782,033.00
Underwriters & Other Fees	(706,444)
Bank Note Refunding	(26,220,000)
Transfer to Capital Project Fund	<u>70,855,589</u>
Amount Expended to Date	(12,660,159)
Accounts Payable	382,473
Unused Fees and Interest Earnings	464,897
Appropriation of Earned Interest	<u>459,940</u>
Remaining Bond Proceeds	<u>59,502,739</u>
Accounts Payable	382,473
Encumbered	16,358,273
Budgeted, Not Encumbered	<u>42,297,096</u>
Available for Projects ⁽¹⁾	<u>\$464,897</u>



Spend-Down Schedule:

6 Months (10/26/2018)	10%	\$7,131,553
12 Months (04/26/2019)	45%	\$32,091,988
18 Months (10/26/2019)	75%	\$53,486,647
24 Months (04/26/2020)	100%	\$71,315,529
Percentage Spent - February 2019		18%
Bond Issuance Date		4/26/2018

Project Details:

Project Name	Project Number	Budget	Actuals	Encumbrance	Balance
43rd Street Outfall Regional Drainage Improv Ph III	1000151	\$4,417,342	\$103,214	\$6,374	\$4,307,754
Cypress Street Outfall Pipeline Extension	1000176	19,753	0	0	19,753
Upper Peninsula Flooding Relief, Ph. II - Vasconia	1000178	3,695,927	3,651,786	0	44,141
Orchid Sink Rehabilitation	1000384	580,935	513,094	0	67,841
Watrous Ditch Rehabilitation	1000386	90,604	60,581	188	29,835
Edison Avenue	1000571	66,865	0	0	66,865
Kensington Avenue	1000573	39,273	0	0	39,273
30th Street Outfall	1000580	40,000	0	39,757	243
Box Culvert Rehabilitation	1000581	1,013,749	614,265	194,535	204,949

Project Name	Project Number	Budget	Actuals	Encumbrance	Balance
Neptune Lagoon	1000582	128,483	0	0	128,483
Howard Avenue Flooding Relief Swann to Jetton	1000749	640,752	0	615,891	24,861
Lower Peninsula Watershed Plan	1000750	1,856,890	52,389	107,829	1,696,673
Ditch Rehabilitation	1000751	1,149,259	107,849	0	1,041,410
Southeast Seminole Heights Flood Relief	1000773	11,500,000	0	0	11,500,000
Upper Peninsula Watershed Drainage Improvement	1001017	16,873,600	2,739,856	13,712,968	420,776
Cypress Street Outfall Regional Stormwater	1001018	14,500,000	1,744,126	429,792	12,326,083
99th Avenue Pumping Station	1001164	925,000	0	0	925,000
6901 Sparkman Flooding Relief	1001165	325,000	0	0	325,000
Hamilton Creek Water Quality Improvements	1001169	500,000	0	0	500,000
Rogers Park Drainage Improvements	1001170	431,442	0	0	431,442
Lamb Canal Rehabilitation	1001171	1,500,000	0	0	1,500,000
North Tampa Closed Basins FY2018 - FY2022	1001173	4,231,653	2,355,483	21,887	1,854,283
Failed Pipe CIPP FY2018 - FY2022	1001175	2,459,696	17,805	890,176	1,551,715
In House Flooding Relief/Failed Pipe Replacement	1001176	124,522	34,715	48,970	40,837
Stormwater Improv Annual Contract FY2018-FY2022	1001177	1,000,056	0	0	1,000,056
Consultants and Land Acquisition FY2018 - FY2022	1001218	1,179,788	137,310	76,369	966,109
In House Flooding Relief - 15th Street at Ellicott Street	1001405	125,000	0	0	125,000
In House Flooding Relief - 45th Street North of Hillsborough	1001406	240,000	132,170	106,187	1,643
In House Flooding Relief - Annette Ave & Bougainvillea Ave	1001407	150,000	0	0	150,000
In House Flooding Relief - Emma Street and Seminole Ave	1001408	100,000	0	0	100,000
In House Flooding Relief - Fair Oaks and Bayshore	1001409	100,000	0	0	100,000
In House Flooding Relief - North Street & Packwood Pond	1001410	100,000	0	0	100,000
In House Flooding Relief - South Ave: Grady Ave to Cortez Ave	1001411	150,000	0	0	150,000
In House Flooding Relief - 17th Street and Annona Avenue	1001412	150,000	0	0	150,000
In House Flooding Relief - Ballast Point Blvd at MacDill Ave	1001413	125,000	0	0	125,000
In House Flooding Relief - Gomez Alley (Kennedy & North A)	1001414	100,000	0	0	100,000
In House Flooding Relief - Rambla Street	1001428	100,000	35,479	2,471	62,050
West Saint Isabel from Gomez to Habana Flooding Relief	1001437	125,000	19,236	104,880	884
Project 000000 ⁽²⁾	0000000	459,940	340,803	0	119,137
Grand Total⁽²⁾		\$71,315,529	\$12,660,159	\$16,358,273	\$42,297,096

⁽¹⁾ Available balance from unused issuance cost budget and interest earnings.

⁽²⁾ Includes \$459,940 of anticipated interest earnings. Additional anticipated revenue will cover any internal project management fees.



Section C

Stormwater Service Assessment Program Report

Tampa City Council Update No. 10 - April 2019

Maintenance activities are reported based on service level frequency. Below is a list of the primary maintenance categories that are being tracked. Along with service level cycle times, we have also provided maintenance statistics for the quarter.

Operations and Maintenance Activities	Pre Fee Service Levels	Fee Target Service Levels	2 nd Quarter FY19 & Year-to-Date Service Levels
Ditches	10-Year Cycle	7-Year Cycle	7.8-Year Cycle (2 nd Qtr.) 5.8-Year Cycle (Y.T.D)
Ponds	Minimal	3-Year Cycle	3-Year Cycle (2 nd Qtr.) 3-Year Cycle (Y.T.D)
Pipes	10-Year Cycle	7-Year Cycle	5.1-Year Cycle (2 nd Qtr.) 4.5-Year Cycle (Y.T.D)
Outfalls	15-Year Cycle	5-Year Cycle	5.9-Year Cycle (2 nd Qtr.) 3.1-Year Cycle (Y.T.D)
Pumps	Low Preventative Maintenance	Annual Preventative Maintenance	1-Year Cycle
Street Sweeping	90-Day Cycle	60-Day Cycle	61-Day Cycle (2 nd Qtr.) 59-Day Cycle (Y.T.D)
Operations and Maintenance Activities	2 nd Quarter Maintenance Statistics		
Ditches	31,766 linear feet of ditches maintained with 8,990 tons removed, 18 fallen trees removed, 441,765 linear feet of ditch mowed monthly.		
Ponds	4.2 tons of trash and illegal dumping have been disposed of, there have been 112 herbicide treatments to various ponds, 3 pond harvesting activities were conducted removing 236 tons of vegetation removed, 123 stormwater ponds mowed monthly. 120 LF of fencing was repaired while adding three new gates for access.		
Pipes	136,226 linear feet of storm drain pipe inspected and maintained, 2,062 storm drain inlets and manholes inspected and maintained with 387 tons of debris removed. 12 sediment traps cleaned removing 12 tons of debris. 47 cave-ins and 42 inlet tops repaired. 474 linear feet of box culvert cleaned removing 40.55 tons of debris.		
Outfalls	60 outfalls maintained.		
Pumps	Preventative Maintenance provided to all thirteen (13) stormwater pump stations. Continuous monitoring is ongoing with proactive maintenance and inspections.		
Street Sweeping	5,215 curb miles were swept, approximately 1,286 tons of debris removed.		

Elmwood Terrace Concrete Flume Ditch

Before



After



S. Church Ave Right-of-Way Concrete Flume

Before



After



E. Park Circle Hillsborough River Outfall

Before



After

