Stormwater Major Capital Improvements Projects/Program

Tampa City Council

Update #3

July 27, 2017

Stormwater Improvement Program

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

FY17
Stormwater Major Capital Improvements Projects Report

Tampa City Council Update No. 3 - July, 2017

The following five (5) Major Capital Improvement Projects are regional multi-year flood 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.

July 20, 2017

Upper Peninsula Flooding Relief

(Dale Mabry Trunkline)

City Project #: 1001017

Project Description:

Upper Peninsula Regional Stormwater Improvements is a multi-year flood 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.

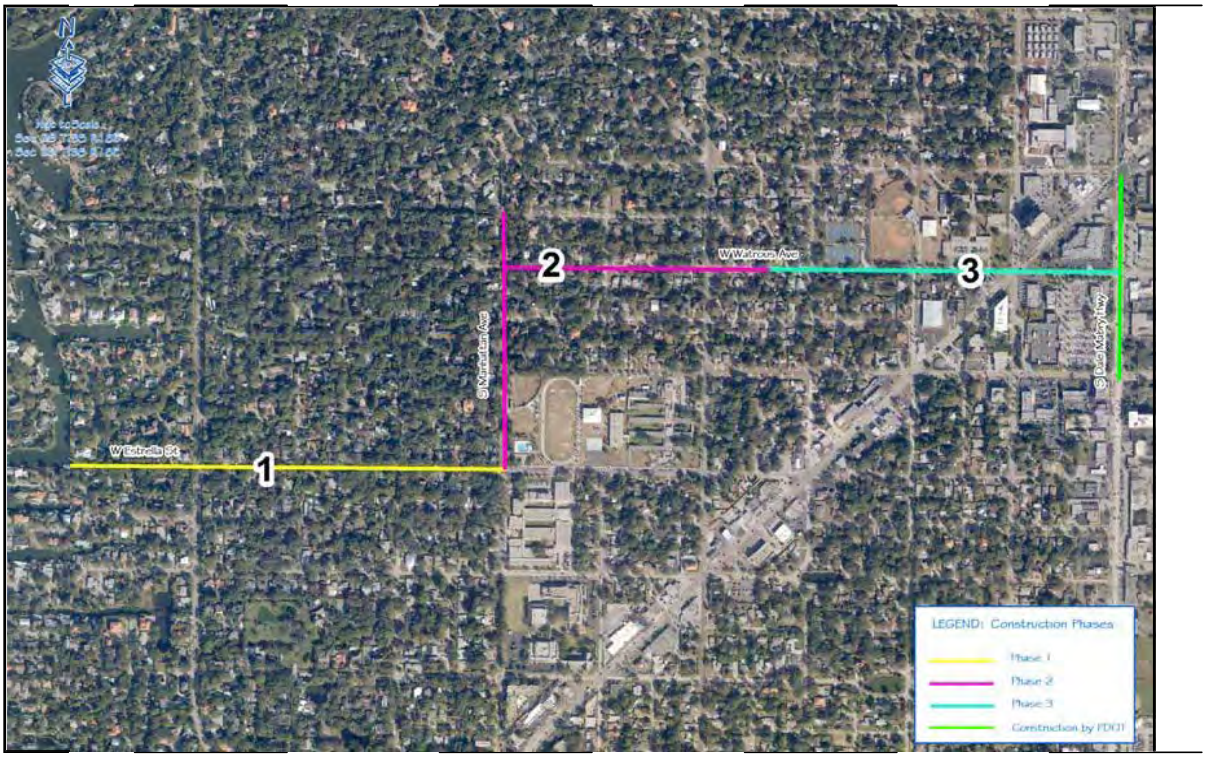
This project will alleviate the severe chronic flooding along Dale Mabry Highway between Henderson Blvd and Neptune Street. The highway is part of the primary evacuation route for South Tampa. Existing pipes will be connected to the trunkline thereby providing basin wide flooding relief.

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.

Location Map:

July 20, 2017

Dale Mabry Trunkline Project Phases



Summary of Project Costs:

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

Timeline:

- The GMP was approved by City Council
- Negotiations for the design/permitting are complete
- The Council has approved the design fee
- The design/permitting phase is moving forward

July 20, 2017

North Tampa Closed Basins Flooding Relief

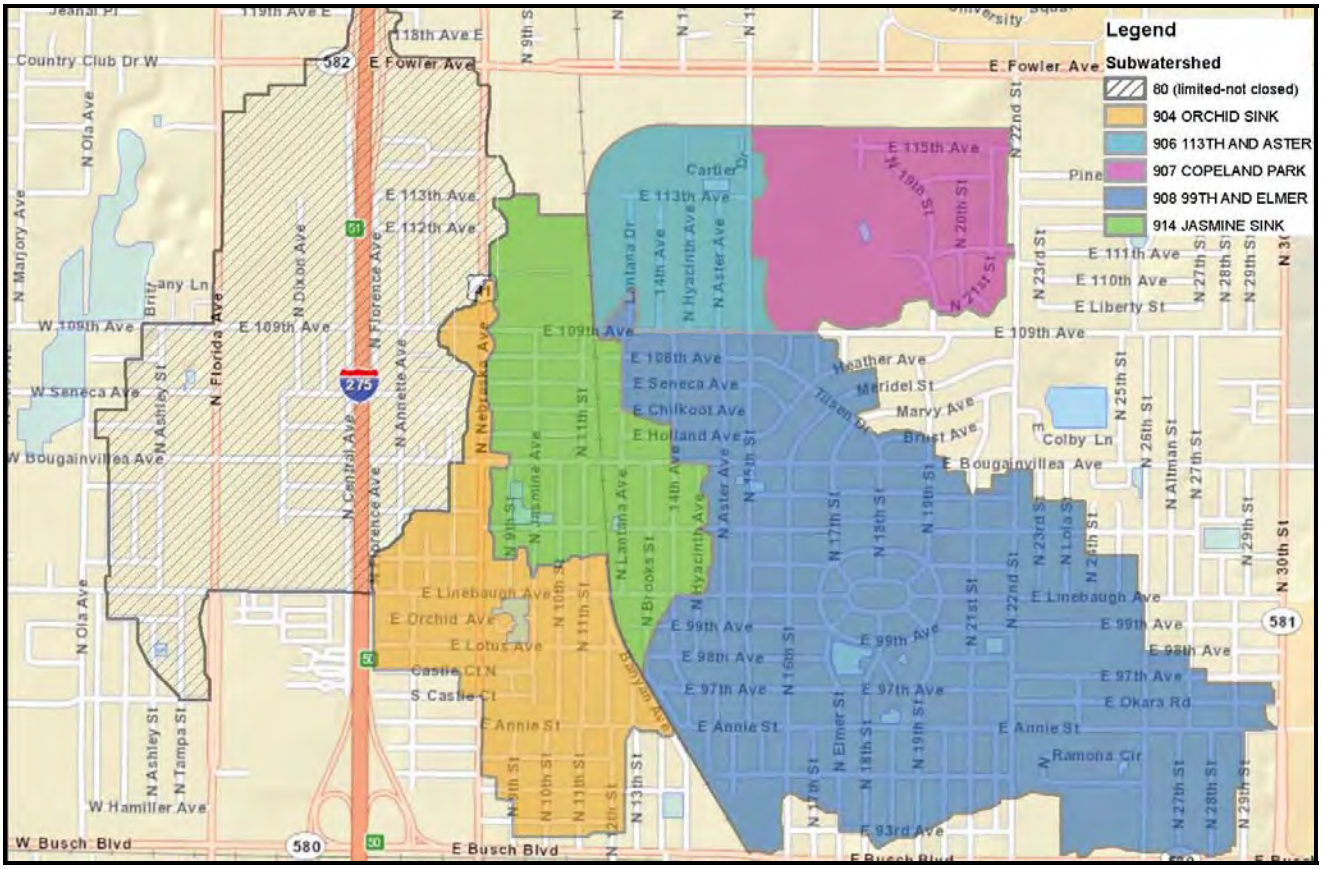
City Project #: 0000403

Project Description:

Portions of the northern part of the City of Tampa flood periodically due to their location within closed drainage basins and the absence of drainage infrastructure to provide relief. The North Tampa Closed Basins (NTCB) study area is generally bounded by Fowler Avenue on the north, 30th Street on the east, Busch Boulevard on the south and Florida Avenue on the west and includes several individual closed basins that comprise a portion of the springshed for Sulphur Springs, which is located on the north bank of the Hillsborough River just west of Nebraska Avenue. These areas rely primarily on discharge to groundwater through sinkholes, whose receiving capacity has been observed to be unreliable due to sedimentation/clogging, high groundwater levels or possible collapse of subsurface conveyances.

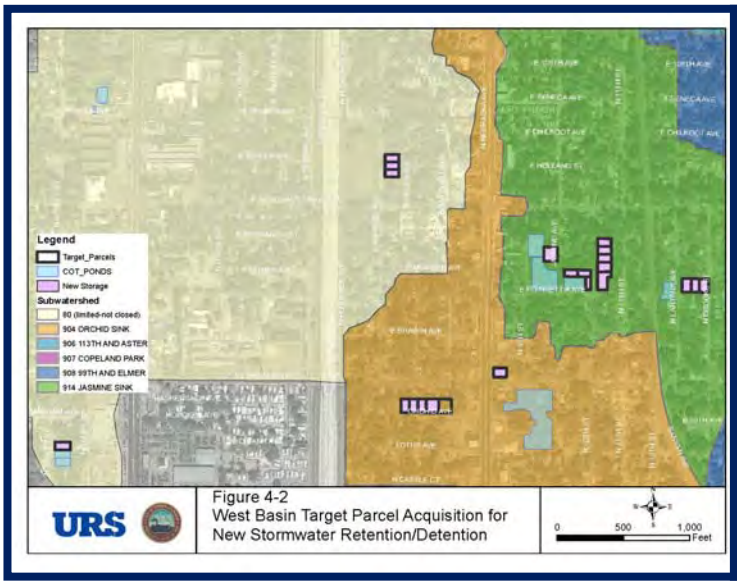
Based on a model and study of the closed basin area, properties are targeted for acquisition and will serve as future stormwater ponds. The project consists of property acquisition in the area experiencing the most severe flooding. Approximately 40 properties have been identified.

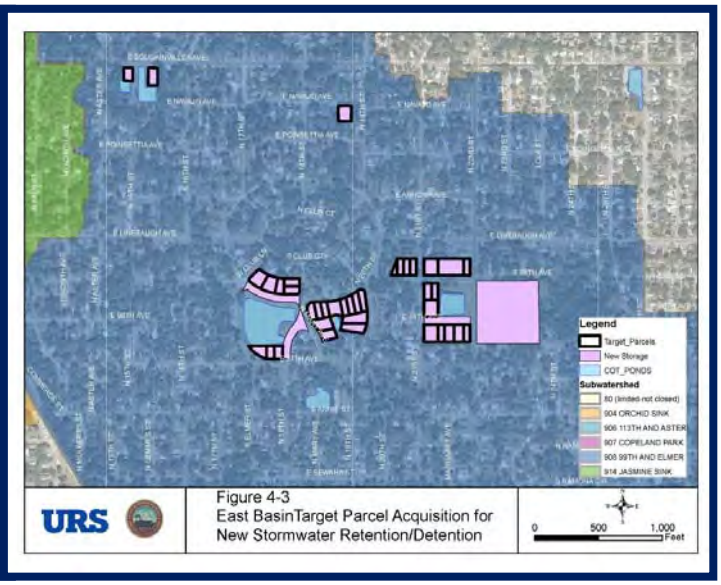
Location Map:



July 20, 2017

Property Acquisition maps:





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	FY 21

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.
- Property acquisition to be completed in FY20
- Construction in FY20-FY21 with In-House Construction Crew.

July 20, 2017

Cypress Street Outfall Extension

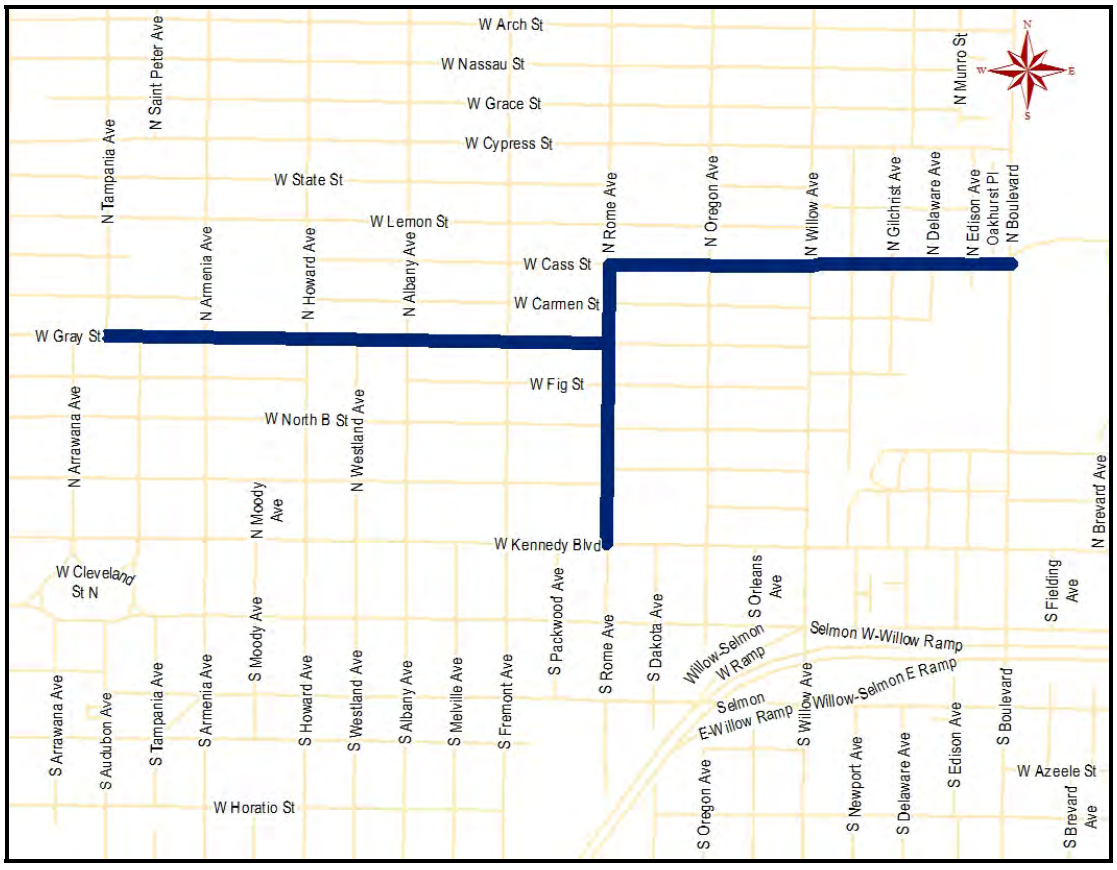
City Project #: 1001018

Project Description:

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.

The project consists of the construction of a dual box culvert from the existing stub at Cass and North Blvd to Rome Ave. Another box culvert will connect at Cass and Rome Ave and run South towards Kennedy Blvd. The last leg will connect at Rome and W Gray St and extend west to N Tampania Ave. This project is the second phase of the Cypress Street Outfall Flooding Relief Project that will be Design/Build procurement in coordination with the Water Department.

Location Map:



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Cypress Street Outfall:

Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Design/Build	* RFQ	$30 M	COT/SWFWMD	FY17	FY20

Timeline:

- Feasibility analysis has been completed by consultant
- Cost/Benefit analysis has been completed by consultant
- RFQ submittals have been received
- Anticipated completion of CCNA process is August 2017
- Begin Design and Permitting in 2017
- Begin Construction in 2018

* RFQ = Request for Qualifications

July 20, 2017

Southeast Seminole Heights Flooding Relief

City Project #: TBD

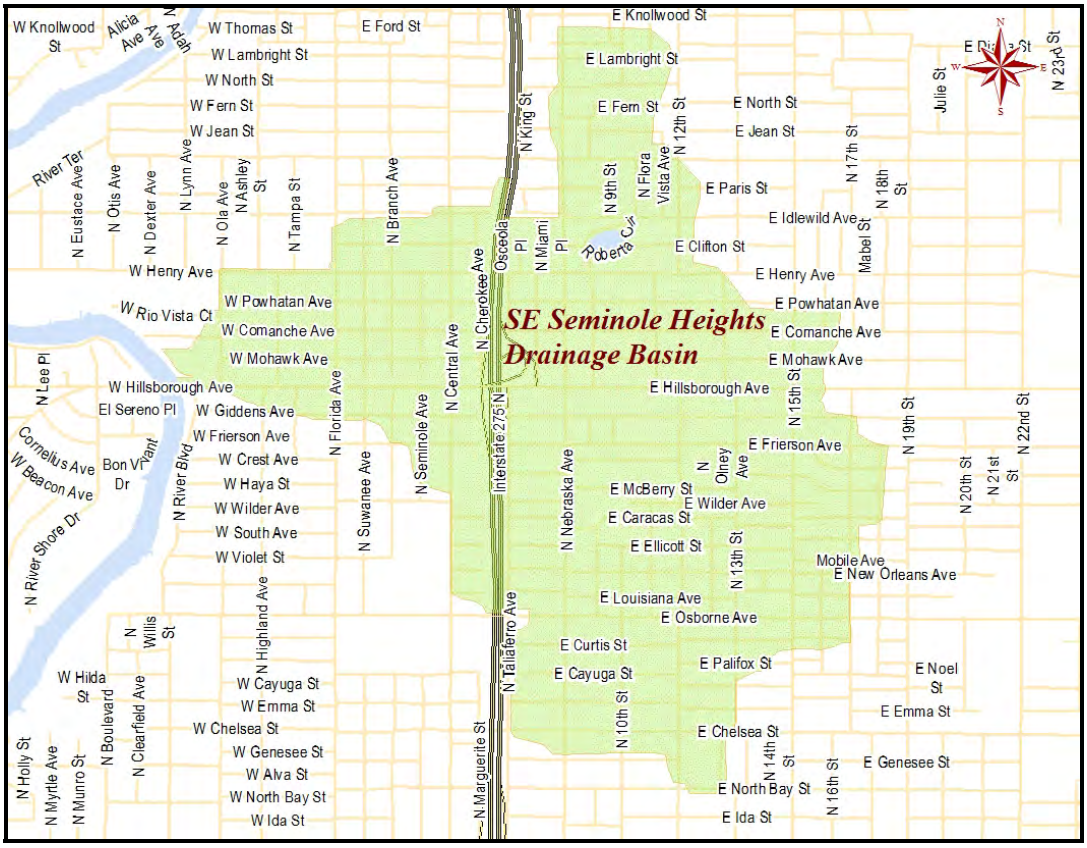
Project Description:

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 E Chelsea St east of I-275 freeway to E Diana Street and easterly to N 18th Street. To the west of I-275, the basin narrows and extends from Giddens Avenue to E 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:



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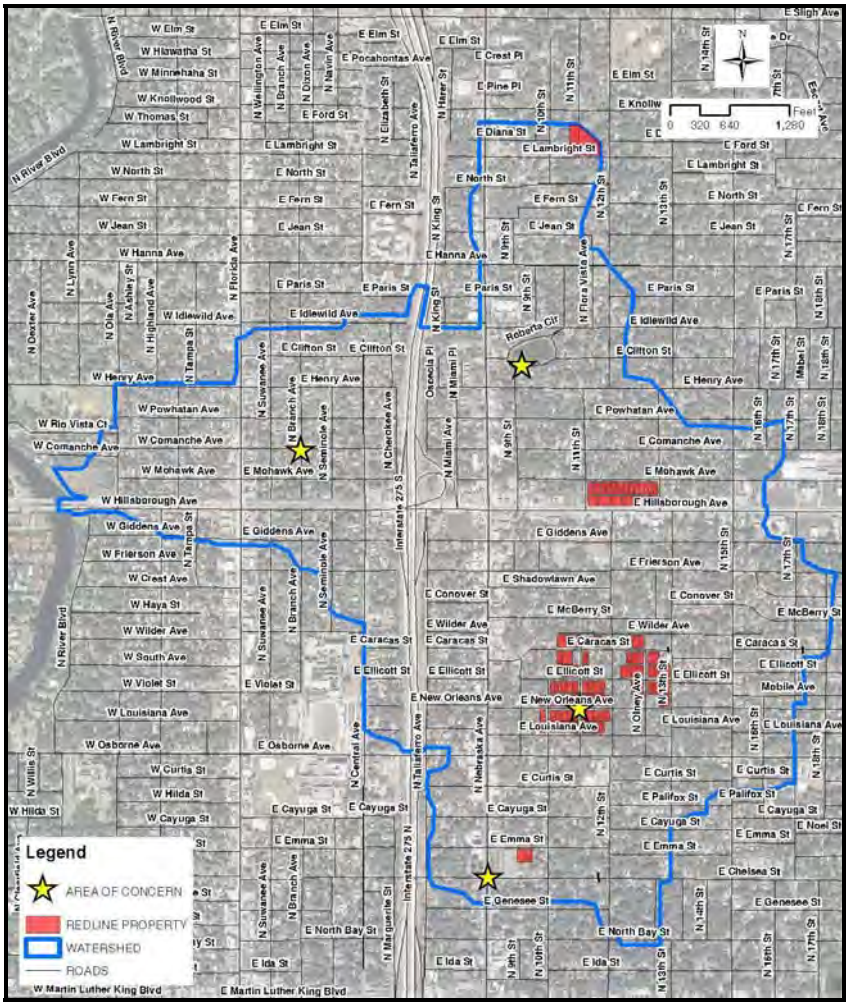
Areas of Flooding Concern:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	LWES	$90K	COT	FY16	FY16
Feasibility	Selection In Process	$45K	COT	FY17	FY18
Design & Construction	TBD	$30M	COT/SWFWMD	FY19	FY23

Timeline:

- Design FY19, $3M / $1.5 each COT and SWFWMD
- Construction FY20, $9M / Year for 3 Years
- Planning Study Completed in FY16
- Feasibility Study to start Third Quarter of 2017
- Design and Construction Phase will begin in FY19

July 20, 2017

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 (SWFWMD) District 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
Design	* RFQ	$3M	COT/SWFWMD	FY19	FY19
Construction	RFQ	$10M/YR	COT/SWFWMD	FY20	FY27

Timeline:

- Planning Study underway and to be completed in FY 2018
- CCNA for Design Phase to start in FY19
- Construction anticipated to start in FY20
- Construction anticipated to be completed in 2027

* RFQ - Request for Qualifications

Stormwater Miscellaneous Capital Improvements Projects/Program

Tampa City Council

Update #3

July 27, 2017

FY17
Stormwater Miscellaneous Capital Improvement Projects Report

Tampa City Council Update No. 3 - July 2017

The anticipated schedule for these projects is to complete all of the designs and assign them to contractors by the end of the fourth Quarter of FY17. Construction timelines are typically six (6) months or less for neighborhood projects. For additional project descriptions, please see the attached project fact sheets.

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

STATUS	DISTRICT	ESTIMATE
Projects Assigned to Construction Contracts		
1. Woodlyn at Parkland Flooding Relief	4	$130,000
2. Knights between Lynwood and MacDill	4	$200,000
3. Fairoaks and MacDill	4	$100,000
4. Carrington at Everina	4	$200,000
5. Howard Flooding Relief	4	$200,000
6. Ardson Pl. & Palm Dr.	4	$50,000
7. Palm Dr. East of Ysabella	4	$50,000
Awarded – projects being scheduled		
8. Swann Ave: Howard to Gomez flooding relief	4	$400,000
9. 47th and Frierson Pond PH II	5	$660,000
10. David E West Park Pond Enhancements	7	$925,000
11. 2nd St.: Interbay to Bay	4	$200,000
12. Wyoming flooding relief PH II	4	$325,000
13. Anita Subdivision PH I Drainage Improvements	4	$540,000
14. 4218 Riverside Dr. Pipe Relocation	6	$100,000

Report Date: July 20, 2017

FY17
Stormwater Miscellaneous Capital Improvement Projects Report

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STATUS	DISTRICT	ESTIMATE
Projects Assigned to Transportation and Stormwater Services Department In-House Crew		
15. 2908 S Westshore Flooding Relief	4	$100,000
16. Idell St. Roadway Improvements PH II	5	$75,000
17. Forest Hills Pond at Lake Eckles	7	$100,000
18. Wyoming Flooding Relief PH I	4	$150,000
19. Concordia Pond	4	$125,000
20. Virginia Park Ph3, Lois from Bay to Bay to Palmira	4	$75,000
21. Virginia Park Ph3, Clark from Bay to Bay to Palmira	4	$75,000
22. Hilda: North Blvd to Clearfield	6	$50,000
23. New Orleans/11th St. Pond	5	$100,000
24. Seneca Pump Station Site Improvements	7	$100,000

Projects Bid through CAD		
25. 43rd Street Outfall Regional Drainage Improvements, PH III	5	$5,000,000
26. Howard: Swann to Morrison Flooding Relief	4	$825,000
27. 7th Ave. & 37th St. Flooding Relief	4	$1,000,000
28. 30th St. Outfall	5	$600,000
29. Forest Hills Park Improvements	7	$250,000
30. Robles Park P.S Replacement	5	$1,200,000

Report Date: July 20, 2017

Woodlyn at Parkand Flooding Relief

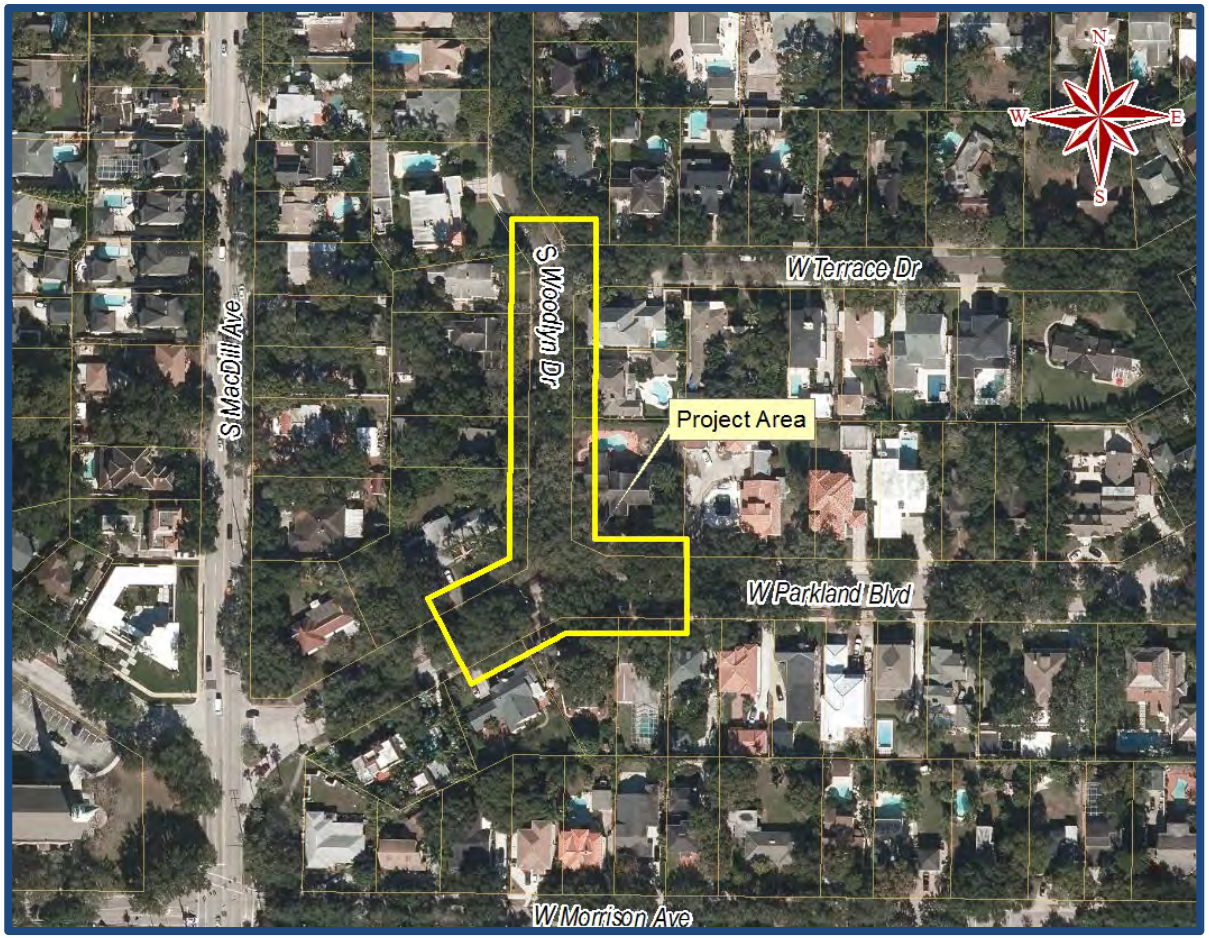
FY2017, District 4

Estimated cost: $130K

- **JUSTIFICATION:**
  Flooding occurs at S Woodlyn Drive and Parkland Blvd due to improper grading and heaving of pavement caused by tree roots.

- **PROJECT DESCRIPTION:**
  The project consists of removing some trees and re-contouring the roadway.

Proposed Project Map



Knights Between Lynwood and MacDill

Flooding Relief FY2017, District 4

Estimated cost: $200K

- **JUSTIFICATION:**
  Pavement grading and new development have affected the conveyance of runoff to the existing stormwater system.
- **PROJECT DESCRIPTION:**
  Install a stormwater collection system to drain the street.

Fairoaks and MacDill

Flooding Relief FY2017, District 4

Estimated cost: $100K

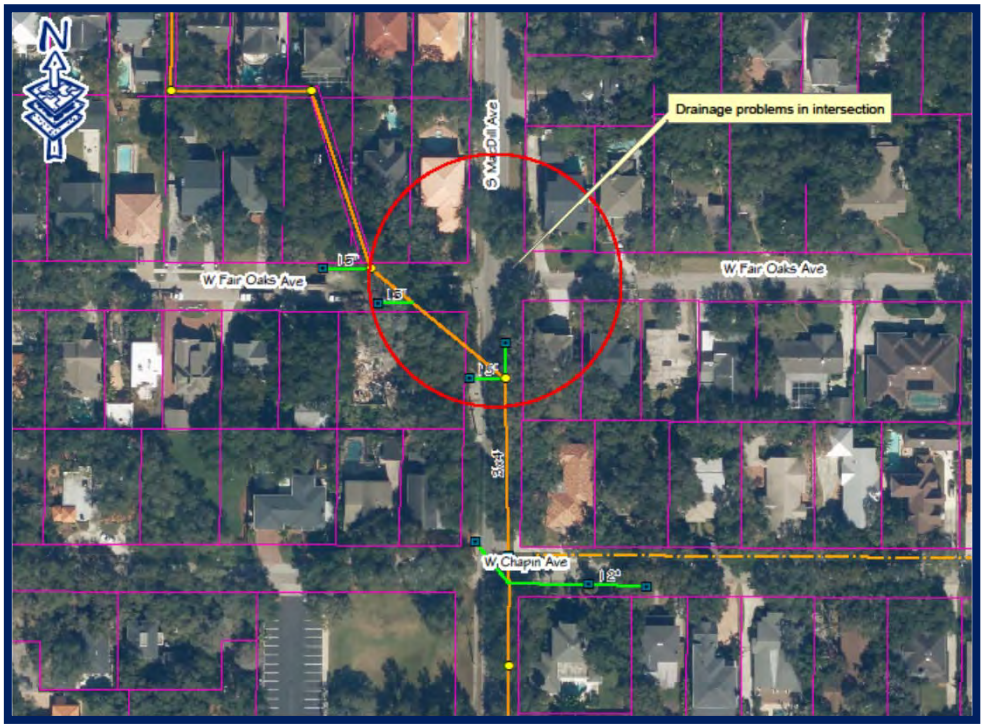
- **JUSTIFICATION:**

  This section of Fair Oaks Ave. has frequent flooding due to improper grading. This project will improve conveyance to relieve flooding.

- **PROJECT DESCRIPTION:**

  The proposed project consists of re-contouring of the existing pavement to improve conveyance of storm flows.

PROPOSED PROJECT MAP



Carrington at Everina

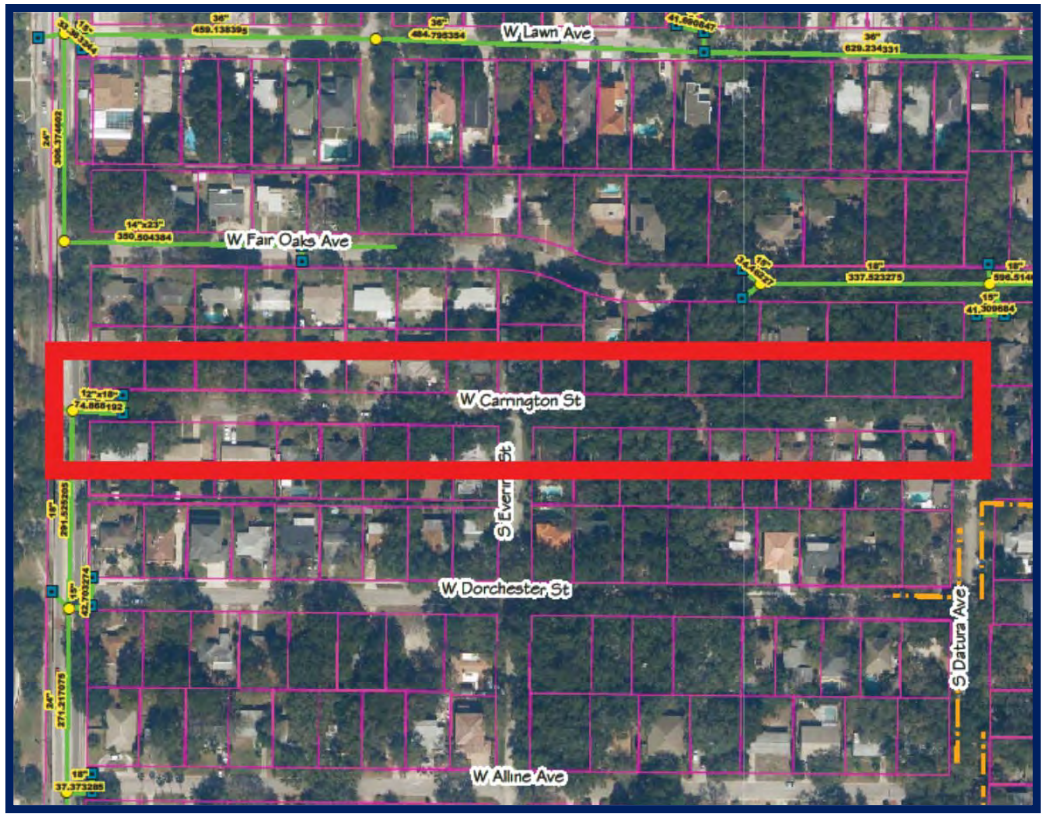
Flooding Relief FY2017, District 4

Estimated cost: $200K

- **JUSTIFICATION:**
  The project reduces the flooding affecting residential properties and roadways.

- **PROJECT DESCRIPTION:**
  The project consists of the regrading of the existing asphalt pavement to improve the drainage.

Proposed Project Map



Howard Flooding Relief

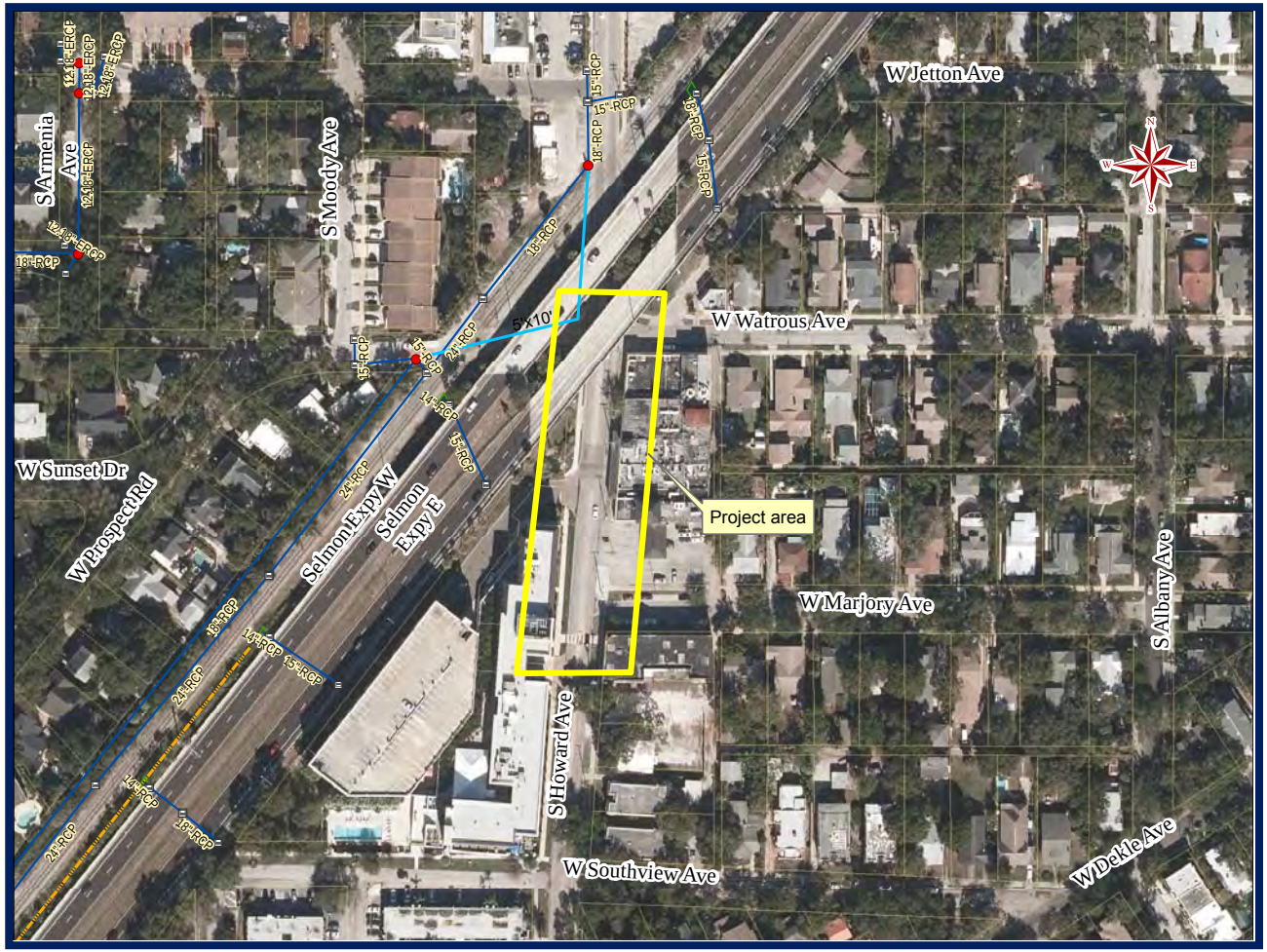
FY 2017, District 4

Estimated cost: $200K

- **JUSTIFICATION:**
  Flooding occurred at the intersection of Howard Ave. and Marjory Ave. due to inadequate drainage capacity. The proposed project will reduce the localized flooding.

- **PROJECT DESCRIPTION:**
  An inlet will be installed at the corner of Howard Ave. and Marjory Ave. Surface runoff will be pumped to an existing inlet at Watrous Ave. and Howard Ave. Project also includes resurfacing Howard Ave. to improve drainage.

Proposed Project Map



Ardson Pl. & Palm Dr.

Flooding Relief FY2017, District 4

Estimated cost: $50K

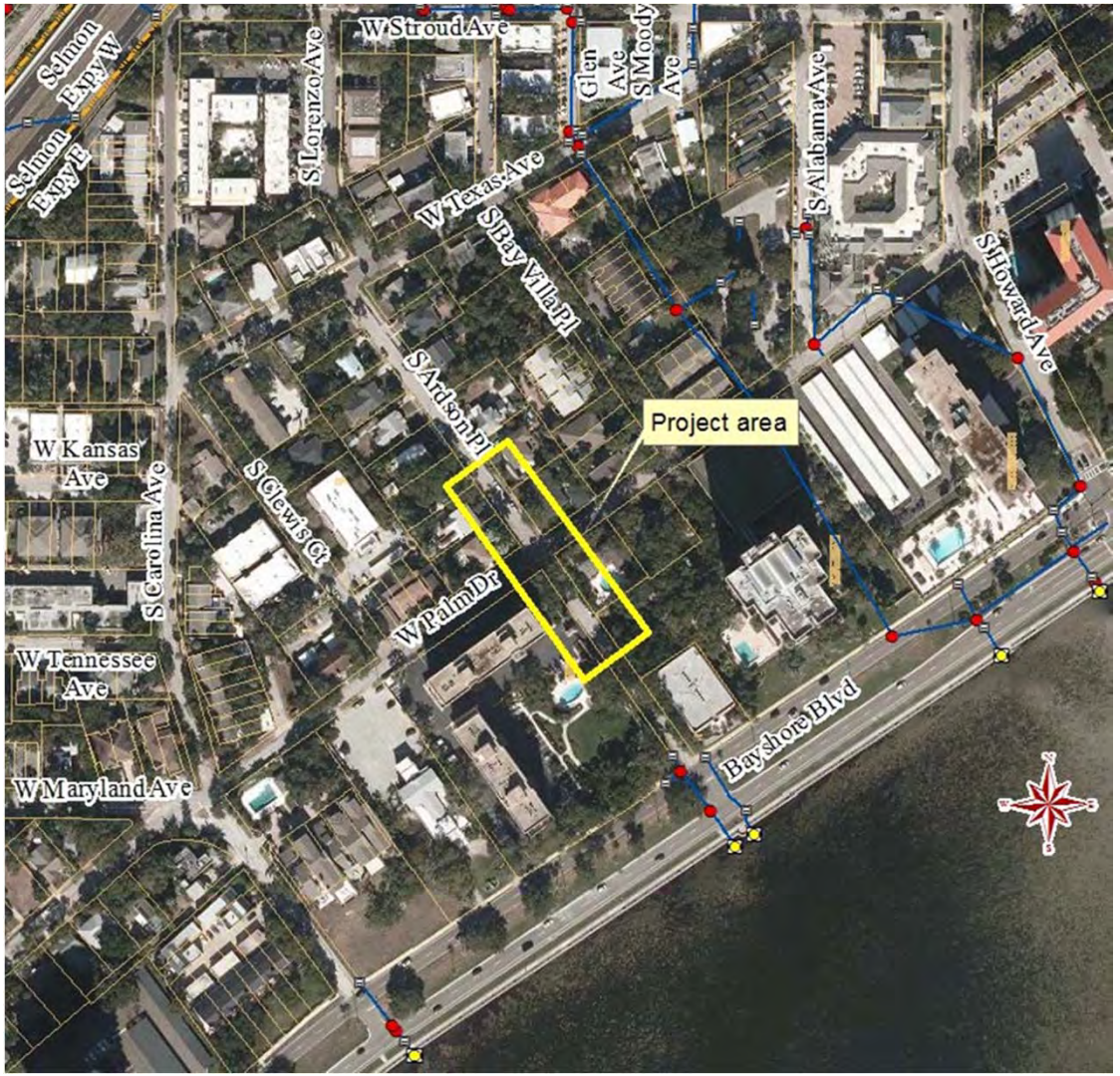
- **JUSTIFICATION:**

  This intersection experiences flooding due to improper grading. The project will improve conveyance to relieve localized flooding in the intersection.

- **PROJECT DESCRIPTION:**

  The project consists of regrading of the roadway.

Proposed Project Map



Palm Dr. East of Ysabella

Flooding Relief FY2017, District 4

Estimated cost: $100K

- **JUSTIFICATION:**
  Frequent flooding from blocked drainage due to pavement overlays. Regrading and resurfacing will improve conveyance to relieve flooding.

- **PROJECT DESCRIPTION:**
  Modifications to the existing surface water management to improve the conveyance of runoff to the existing stormwater system.

PROPOSED PROJECT MAP

47th and Frierson Pond PH II

Flooding Relief FY2017, District 5

Estimated cost: $660K

- **JUSTIFICATION:**

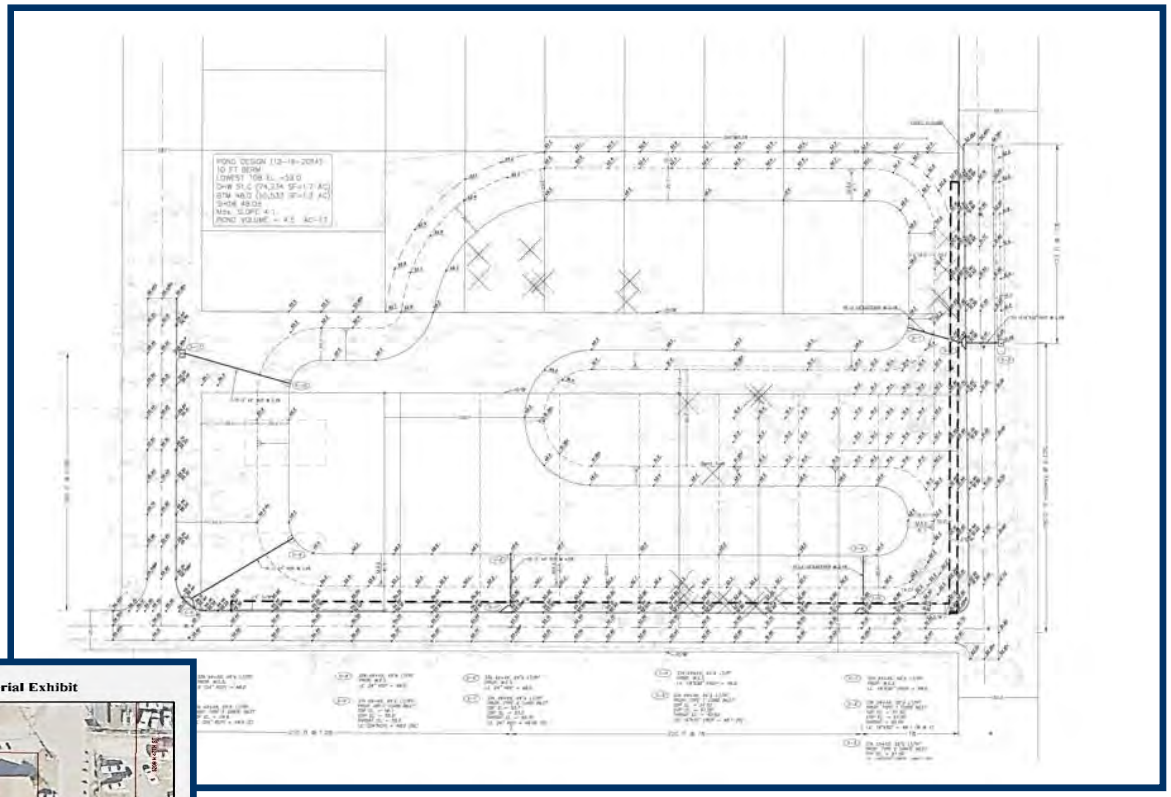
  Due to closed basin and lack of drainage system, City will be expanding drainage capacity in the Frierson Ave & 47th Street area to help alleviate flooding problems. Besides pond expansion in Phase 2, roadway repaving and re-routing of water system will be part of the pond construction work.

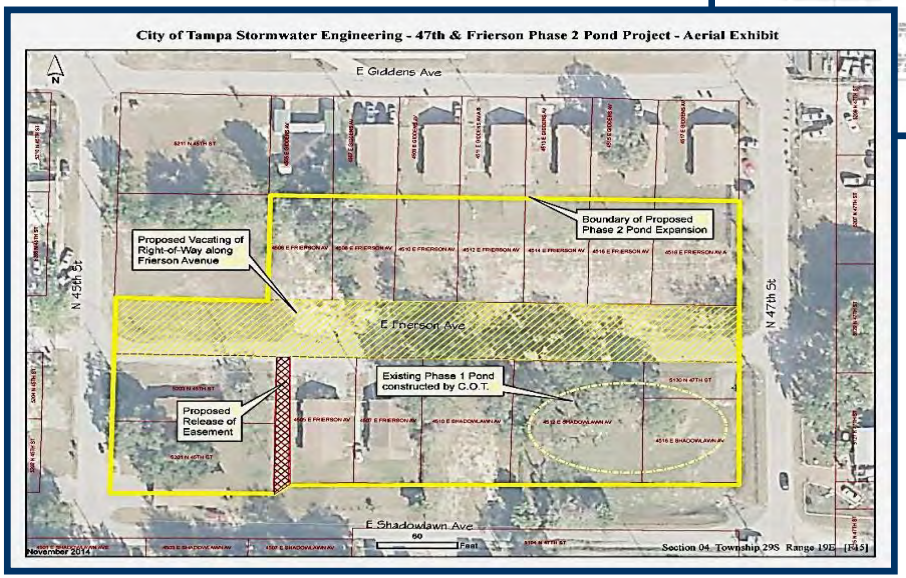
- **PROJECT DESCRIPTION:**

  City has completed land acquisition phase and Frierson Ave will be completely vacated between 47th St and 45th St.

- **RELATED ISSUES:**

  Existing pond built in phase 1 will be expanded in Phase 2.





PROPOSED PROJECT MAP

David E West Park Pond Enhancements

Flooding Relief FY2017, District 7

Estimated cost: $925K

- **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 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

- **RELATED ISSUES:**

  North Tampa Closed Basin model was utilized for design.

Proposed Project Map

Anita Subdivision PH I Drainage Improvements

Flooding Relief FY2017, District 4

Estimated cost: $540K

- **JUSTIFICATION:**

  This neighborhood was developed with ditches draining to a collection system that discharged the stormwater to a system on Westshore Blvd. Over the years the ditches have been filled and driveway culverts have been installed improperly.

- **PROJECT DESCRIPTION:**

  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.

Proposed Project Map

4218 Riverside Dr. Pipe Relocation

FY 2017, District 6

Estimated cost: $100K

- **JUSTIFICATION:**
  Aging pipe under structure and failing pipe reported by residents in the area. The proposed project will enhance public safety and improve drainage in the area.

- **PROJECT DESCRIPTION:**
  The Project will replace/reroute the pipe under structure and the failing pipe.

Proposed Project Map

2908 S Westshore Flooding Relief

Flooding Relief FY2017, District 4

Estimated cost: $100K

- **JUSTIFICATION:**

  The location has inadequate surface water conveyance due to roadway super elevation resulting in frequent yard and street flooding. The project is desirable because it will provide relief for localized flooding.

- **PROJECT DESCRIPTION:**

  The project consists of installation of a trench drain system to alleviate flooding at a low lying area at 2908 S. Westshore.

Proposed Project Map

Project Photo

Idell St. Roadway Improvements PH II

Flooding Relief FY2017, District 5

Estimated cost: $75K

Proposed Project Map

- **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.
- **PROJECT DESCRIPTION:**
  Construction of new ditch system discharging to the Hillsborough River.
- **Related Issues:**
  Site located at 1911 E. Mulberry.

Forest Hills Pond at Lake Eckles

Flooding Relief FY2017, District 7

Estimated cost: $100K

- **JUSTIFICATION:**

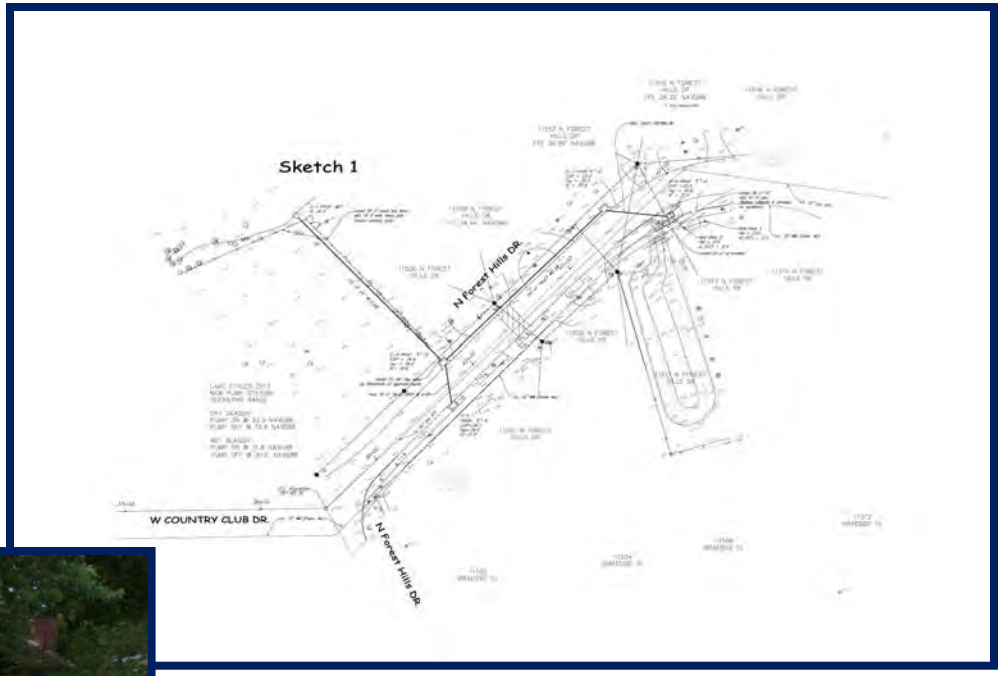
  The surrounding street and the resident at 11513 N Forest Hills Drive has been experiencing flooding during rain events.

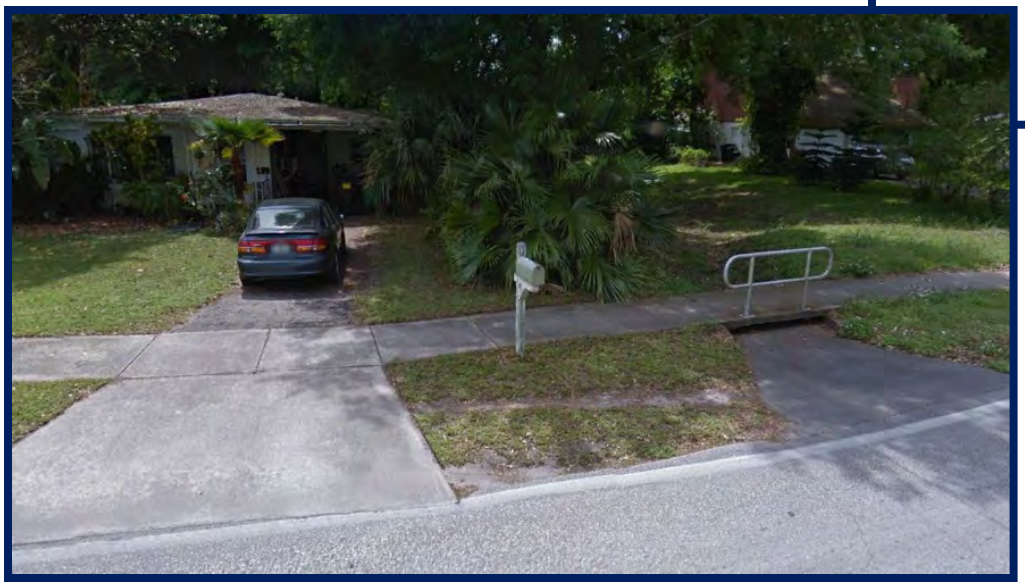
- **PROJECT DESCRIPTION:**

  Proposing drainage system in the ROW to bring provide conveyance of flooding water to Lake Eckles.

- **RELATED ISSUES:**

  The existing stormwater pump station has been completely rebuilt recently, which is the discharge mechanism for Lake Eckles.





PROPOSED PROJECT DESIGN & PHOTO

Wyoming Flooding Relief PH I

Flooding Relief FY2017, District 4

Estimated cost: $150K

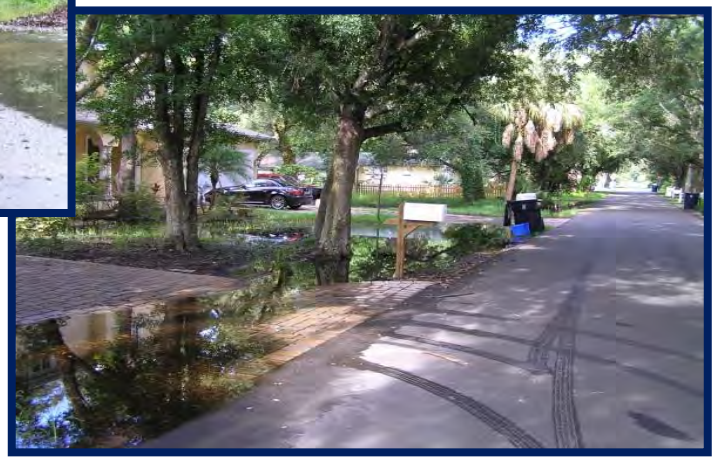
- **JUSTIFICATION:**

  Development in the vicinity of Wyoming/Trilby/Thornton Avenue. utilizes a system of drainage ditches to collect runoff. The ditch system has been compromised by roots of large trees and improper installation of culverts.

- **PROJECT DESCRIPTION:**

  This project will evaluate the entire neighborhood and provide a solution to reduce flooding and convey water to existing system on Leila and Elkins Ave.

PROPOSED PROJECT MAP



PROJECT PHOTOS

RELATED ISSUES:

This project will be phased over two years.

Concordia Pond

Flooding Relief FY2017, District 4

Estimated cost: $125K

- **JUSTIFICATION:**

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

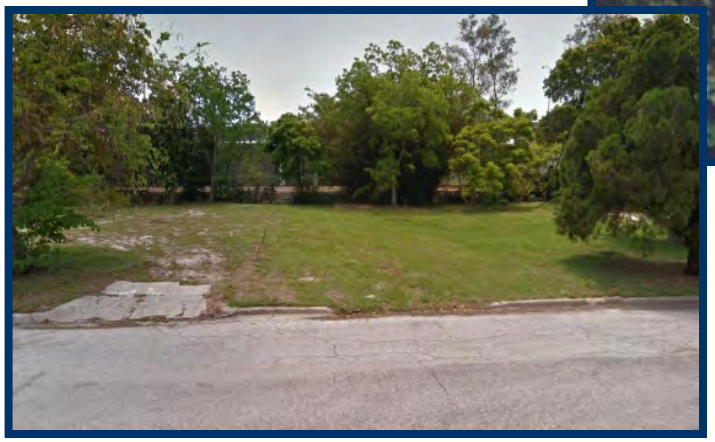
- **PROJECT DESCRIPTION:**

  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.

- **Related Issues:**

  CSX drainage connection permit will be obtained before construction.

PROPOSED PROJECT MAP



Virginia Park, Lois: Bay to Bay to Palmira

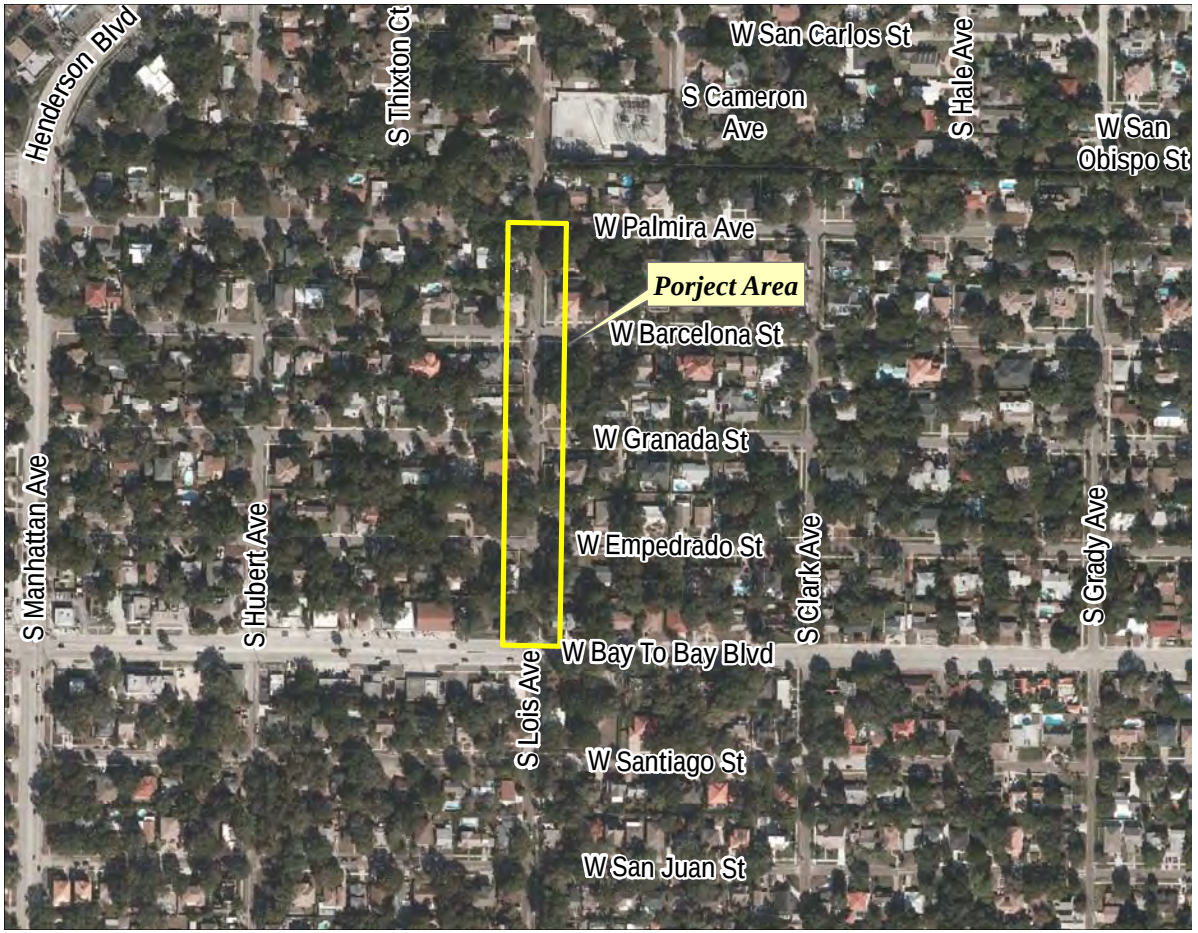
Flooding Relief - FY2017, District 4

Estimated cost: $75K

- **JUSTIFICATION:**
  Localized flooding occurs at intersections along S. Lois Ave. The proposed project will alleviate the flooding.

- **PROJECT DESCRIPTION:**
  The project consists of regrading of the roadway to improve drainage.

PROPOSED PROJECT MAP



Virginia Park, Clark: Bay to Bay to Palmira

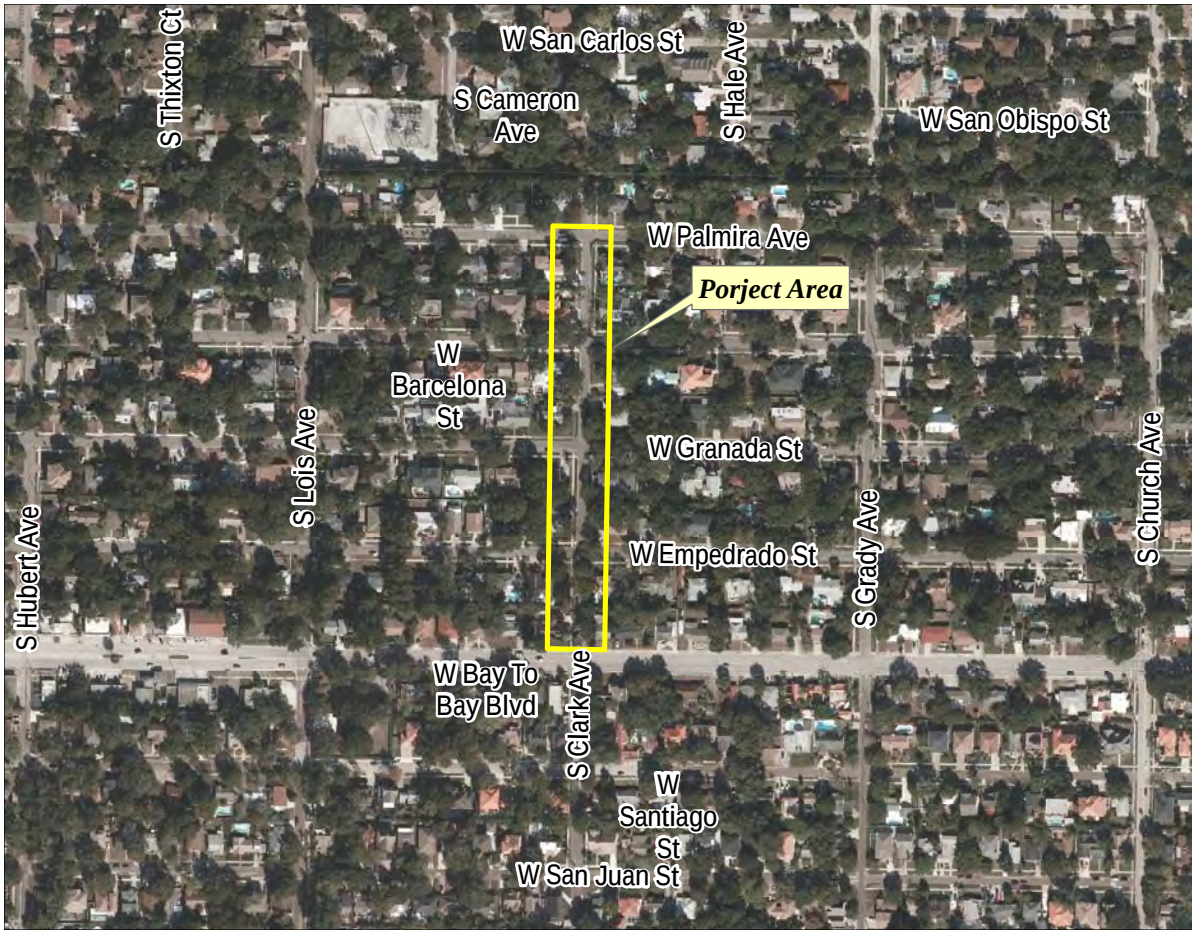
Flooding Relief FY2017, District 4

Estimated cost: $75K

PROPOSED PROJECT MAP

- **JUSTIFICATION:**
  Localized flooding occurs at intersections along S. Clark Ave. The proposed project will alleviate the flooding.

- **PROJECT DESCRIPTION:**
  The project consists of regrading of the roadway to improve drainage.



Hilda: North Blvd to Clearfield

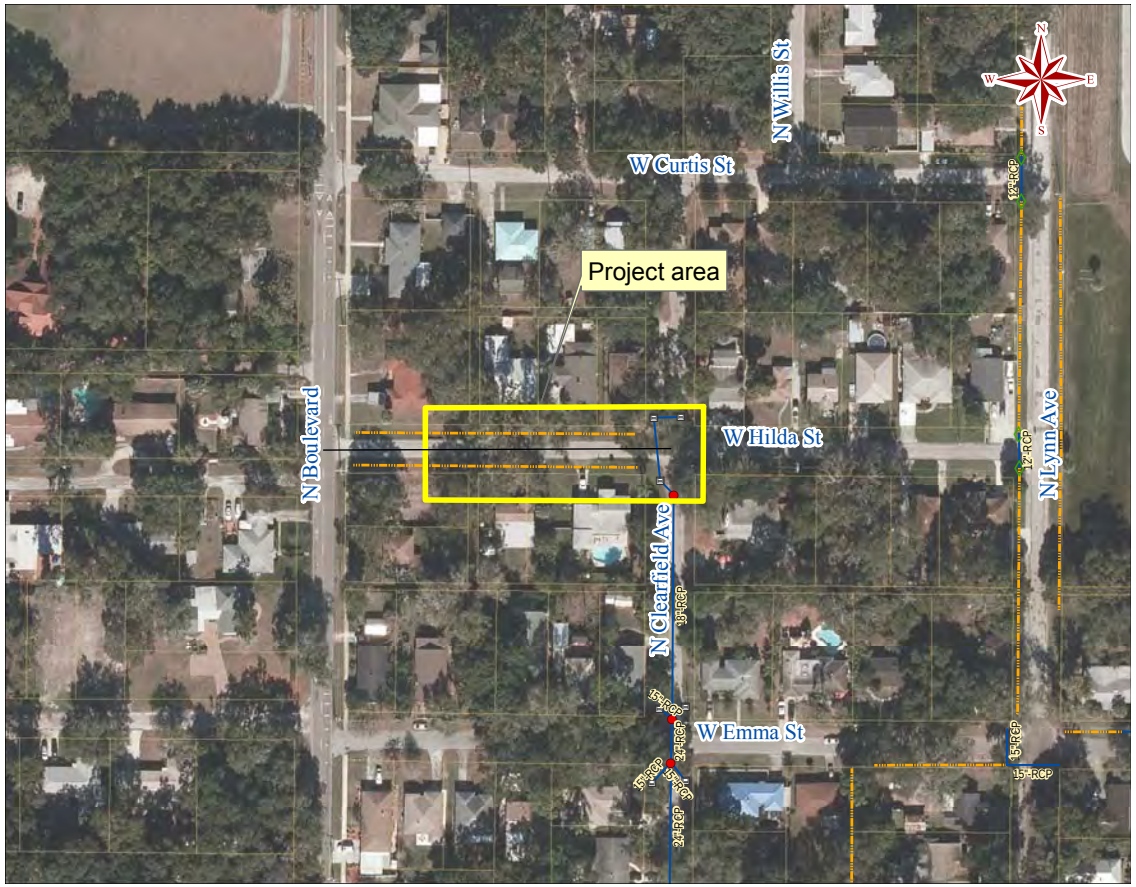
FY 2017, District 6

Estimated cost: $50K

Proposed Project Map

- **JUSTIFICATION:**
  Flooding occurred on W Hilda St. between North Blvd and Clearfield Ave. due to inadequate drainage capacity. The proposed project will alleviate the localized flooding.

- **PROJECT DESCRIPTION:**
  New inlets and pipes will be installed and connected to the existing system on Clearfield Ave.



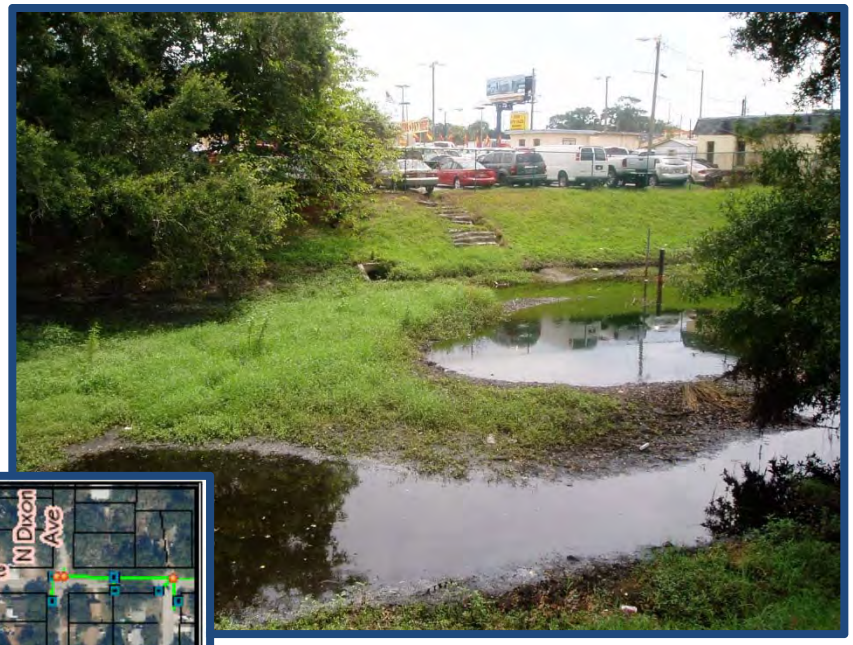
Seneca Pump Station Site Improvements

FY 2017, District 7

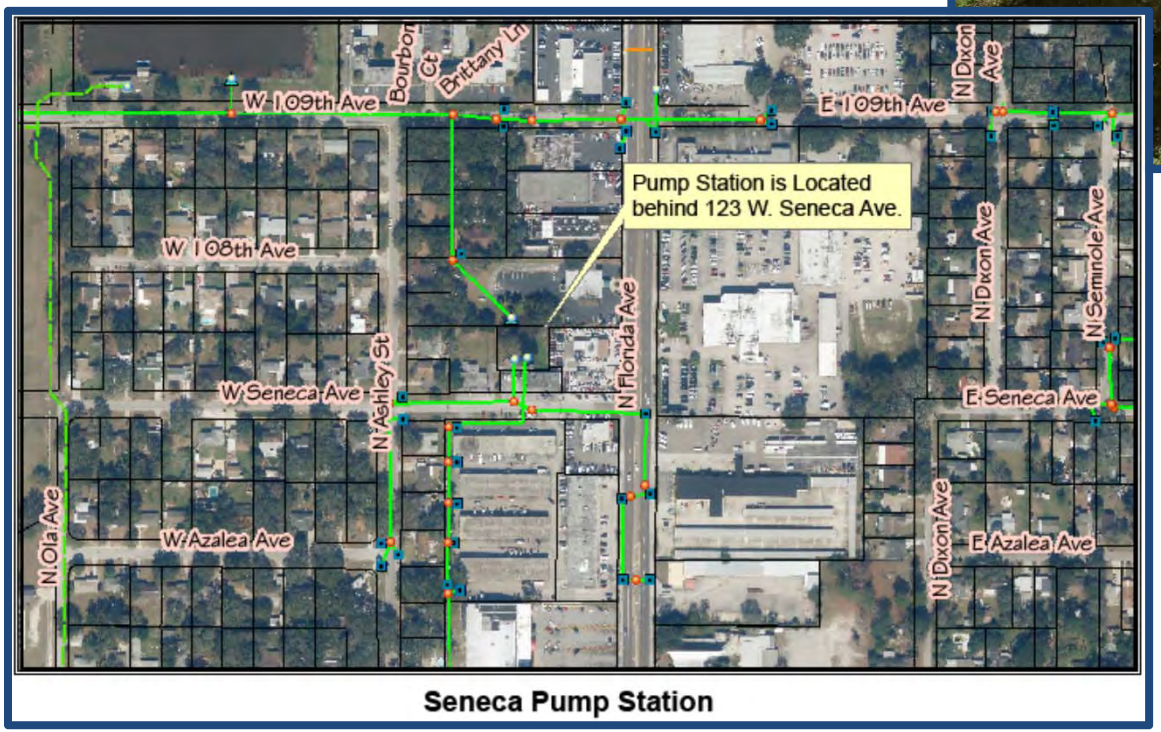
Estimated cost: $100K

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 Ave.



Proposed Project Map



Seneca Pump Station

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.

Swann Ave: Howard to Gomez flooding relief

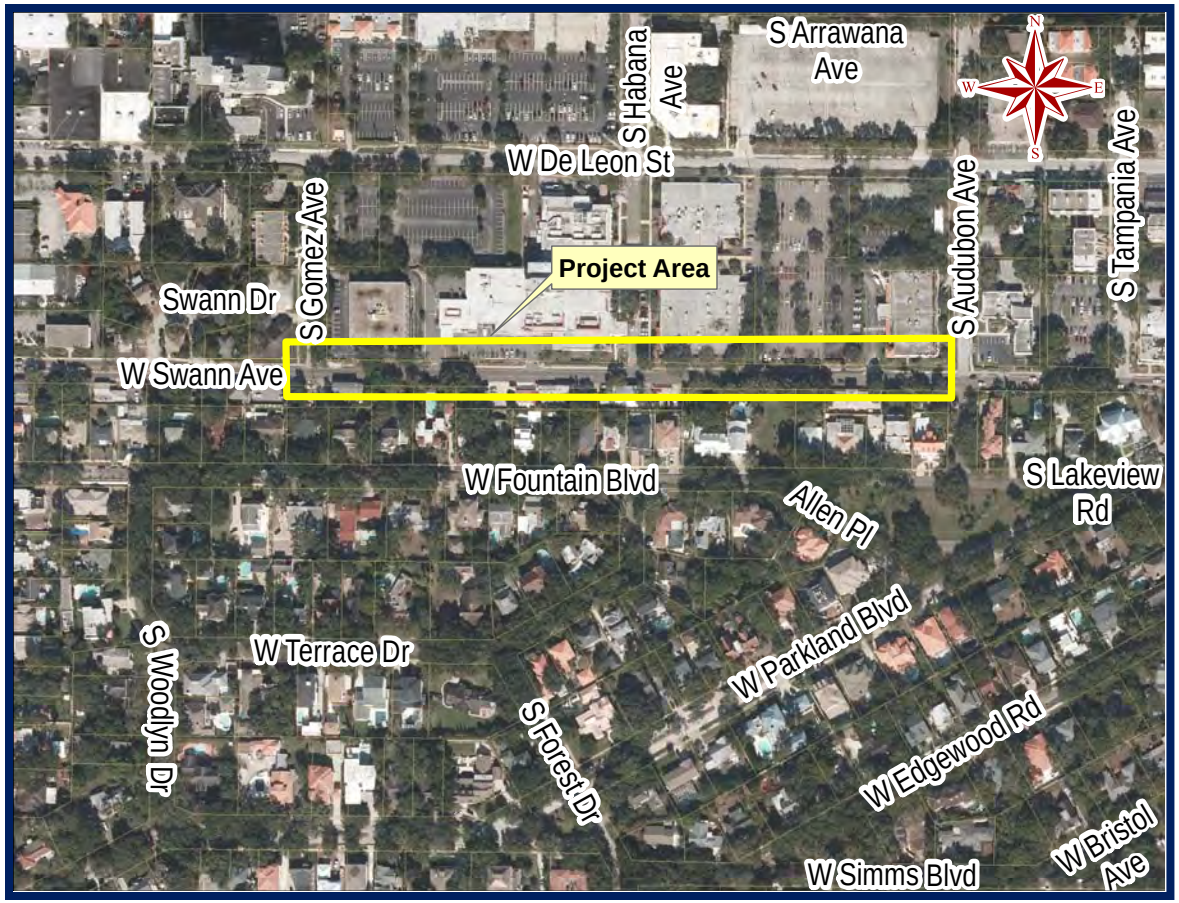
FY 2017, District 4,6

Estimated cost: $400K

Proposed Project Map

- **JUSTIFICATION:**
  Flooding occurs along Swann Ave. between Gomez Ave. Audubon Ave. This project will alleviate the localized flooding.

- **PROJECT DESCRIPTION:**
  The project will construct a stormwater conveyance system to relieve the flooding on Swann Ave. from Gomez Ave. to Audubon Ave. in the vicinity of the Memorial Hospital.



2nd Street: Interbay to Bay

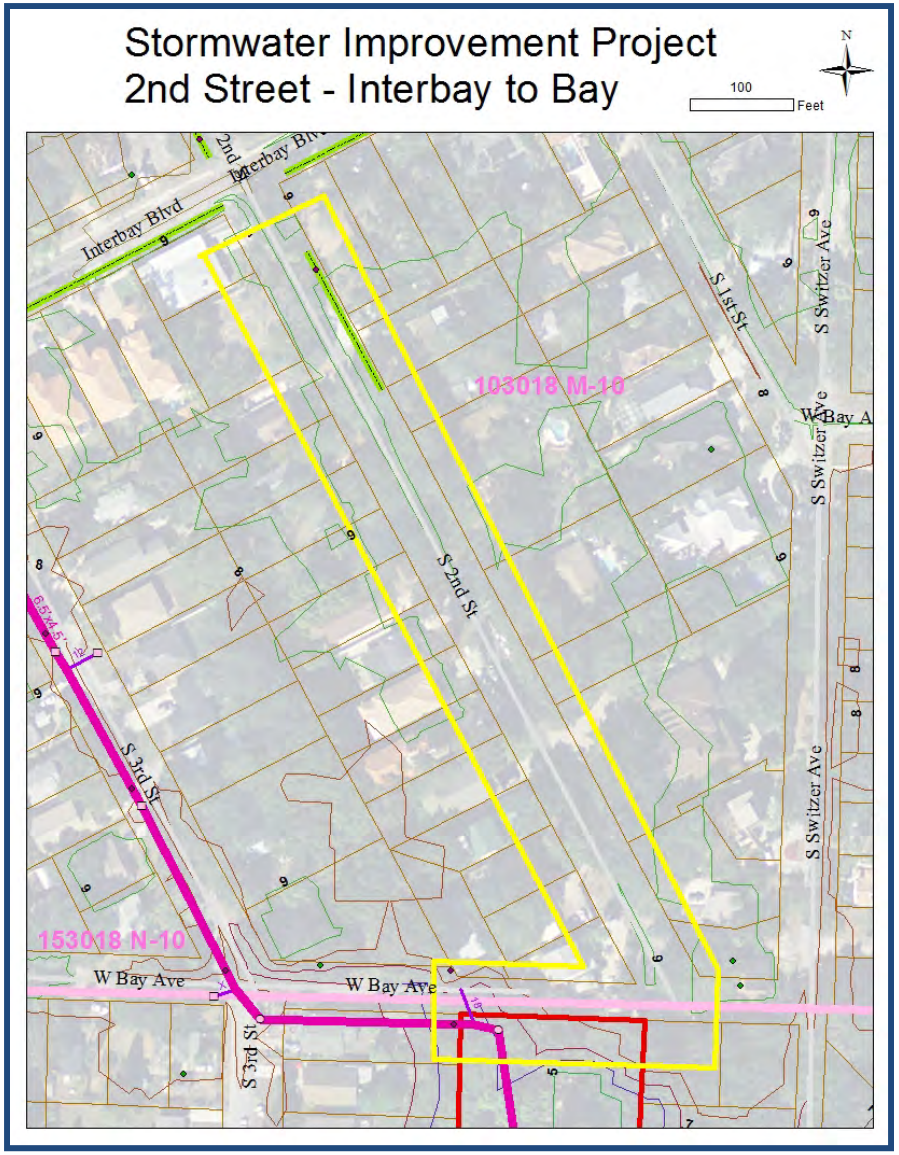
Flooding Relief FY2017, District 4

Estimated cost: $200K

- **JUSTIFICATION:**
  Severe street flooding along S 2nd Street between Interbay Blvd to W Bay Ave.

- **PROJECT DESCRIPTION:**
  New Drainage system to be proposed along 2nd Street to connect to box culvert along W. Bay Ave.

- **RELATED ISSUES:**
  S. 2nd Street dead ends before W. Bay Ave. Easement may be required to connect to existing box culvert along W Bay Ave.



PROPOSED PROJECT MAP & PHOTO

Wyoming Flooding Relief PH II

Flooding Relief FY2017, District 4

Estimated cost: $325K

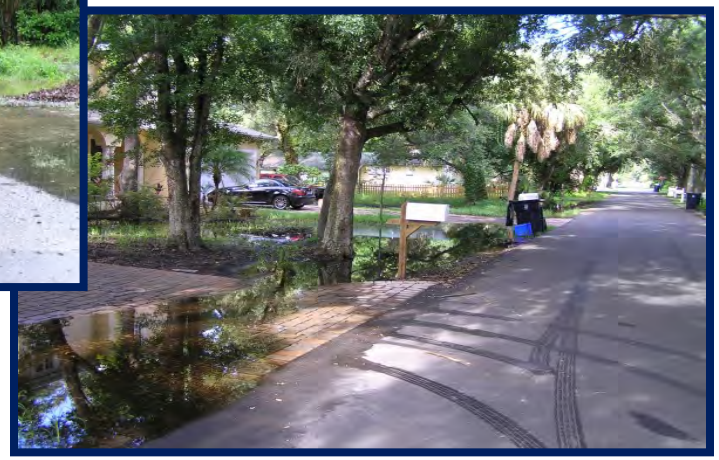
- **JUSTIFICATION:**

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

- **PROJECT DESCRIPTION:**

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

PROPOSED PROJECT MAP



PROJECT PHOTOS

RELATED ISSUES:

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

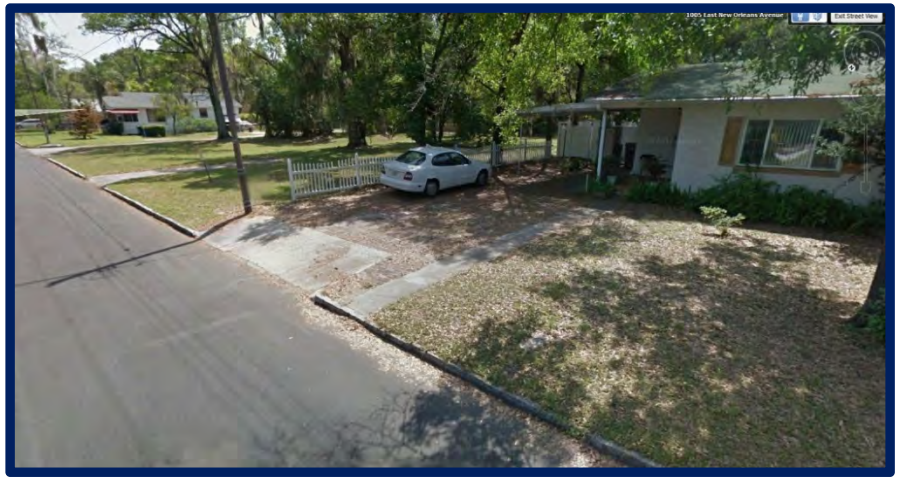
New Orleans / 11th Street Pond

FY2017, District 5

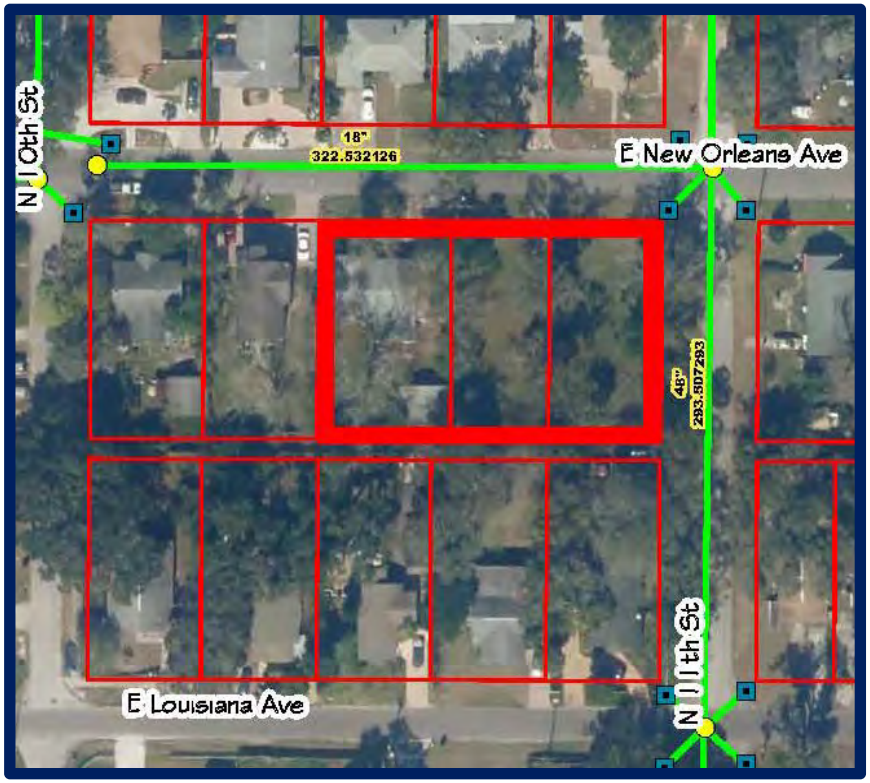
Estimated cost: $100K

- **JUSTIFICATION:**
  Frequent roadway flooding due to an existing low capacity system. The excess of runoff needs to be stored, before the system can drain.

- **PROJECT DESCRIPTION:**
  The project consists of the construction of a dry pond to retain runoff and alleviate flooding in the neighborhood.



PROPOSED PROJECT MAP



43rd Street Outfall PH III

Regional Drainage Improvement - FY2017, District 5

Estimated cost: $5M (City Share $2.5M)

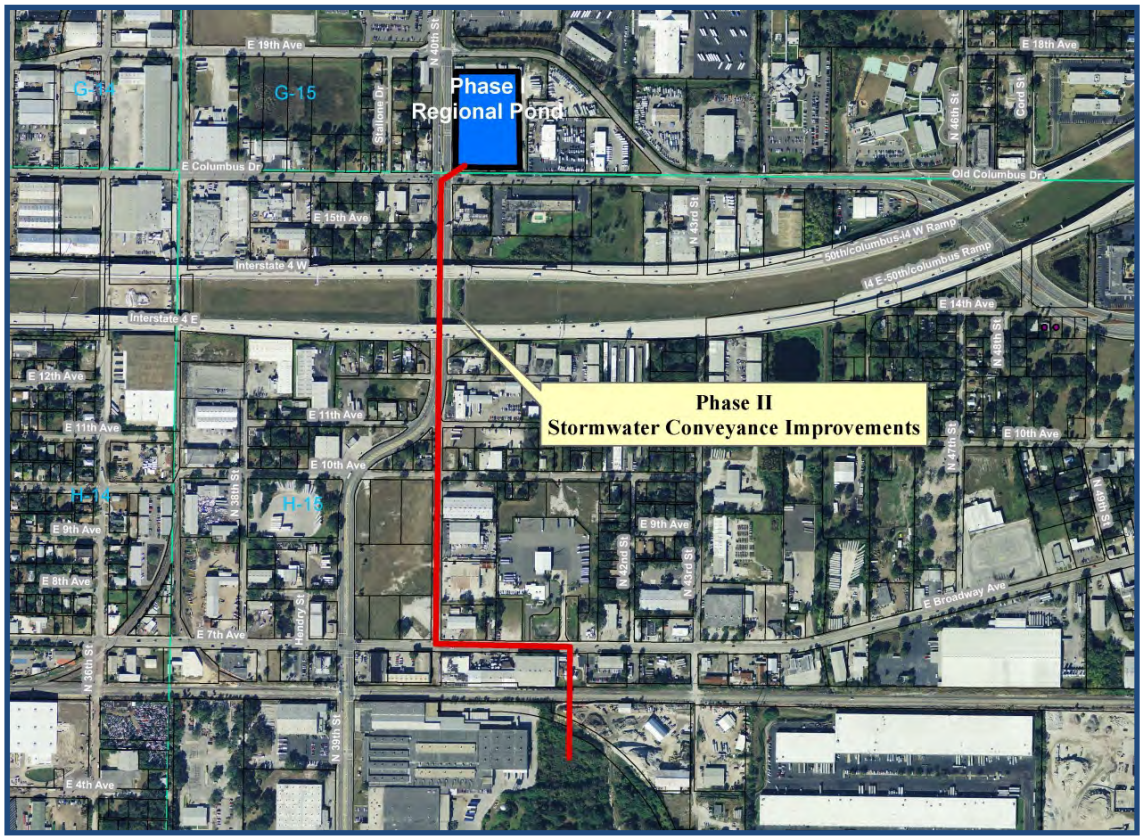
- **JUSTIFICATION:**

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

- **PROJECT DESCRIPTION:**

  The project consists of the construction of a 48-inch RCP pipe from the Phase I 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.

PROPOSED PROJECT MAP



Howard: Swann to Morrison– Flooding Relief PH II

FY2017, District 4

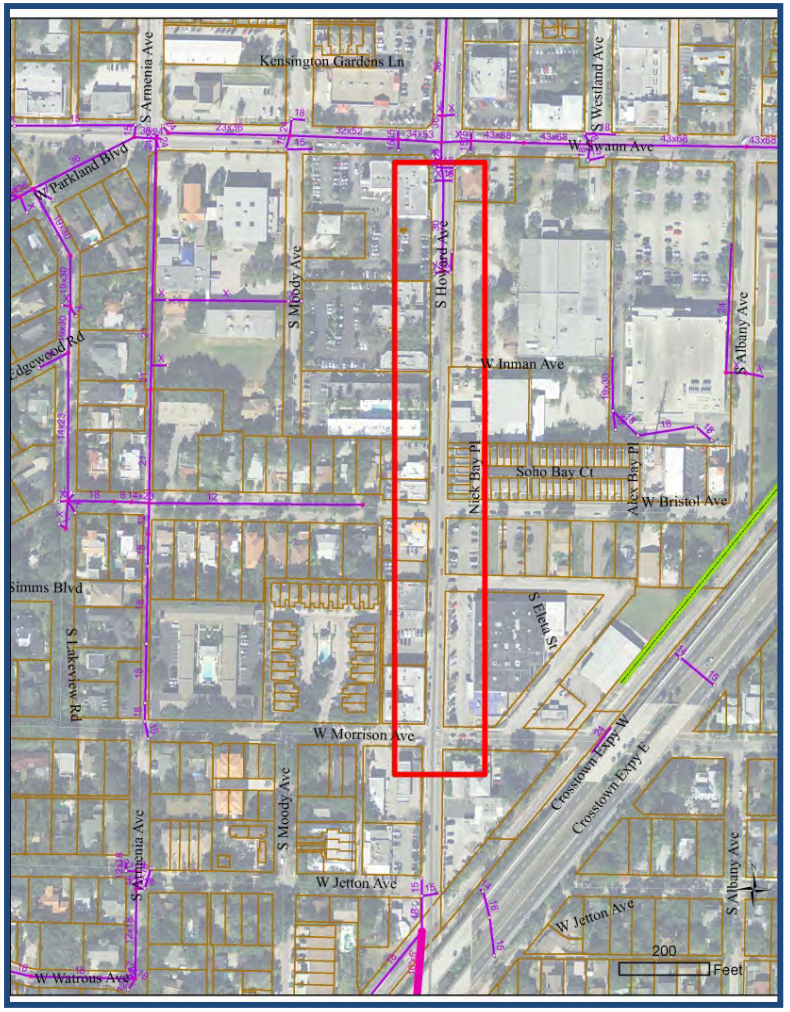
Estimated cost: $825K

- **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.

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

- **RELATED ISSUES:**
  Design and construction will be accomplished in coordination with the Transportation paving project.

Proposed Project Map



7th Ave. and 37th St. Flooding Relief

FY2017, District 4

Estimated cost: $1M

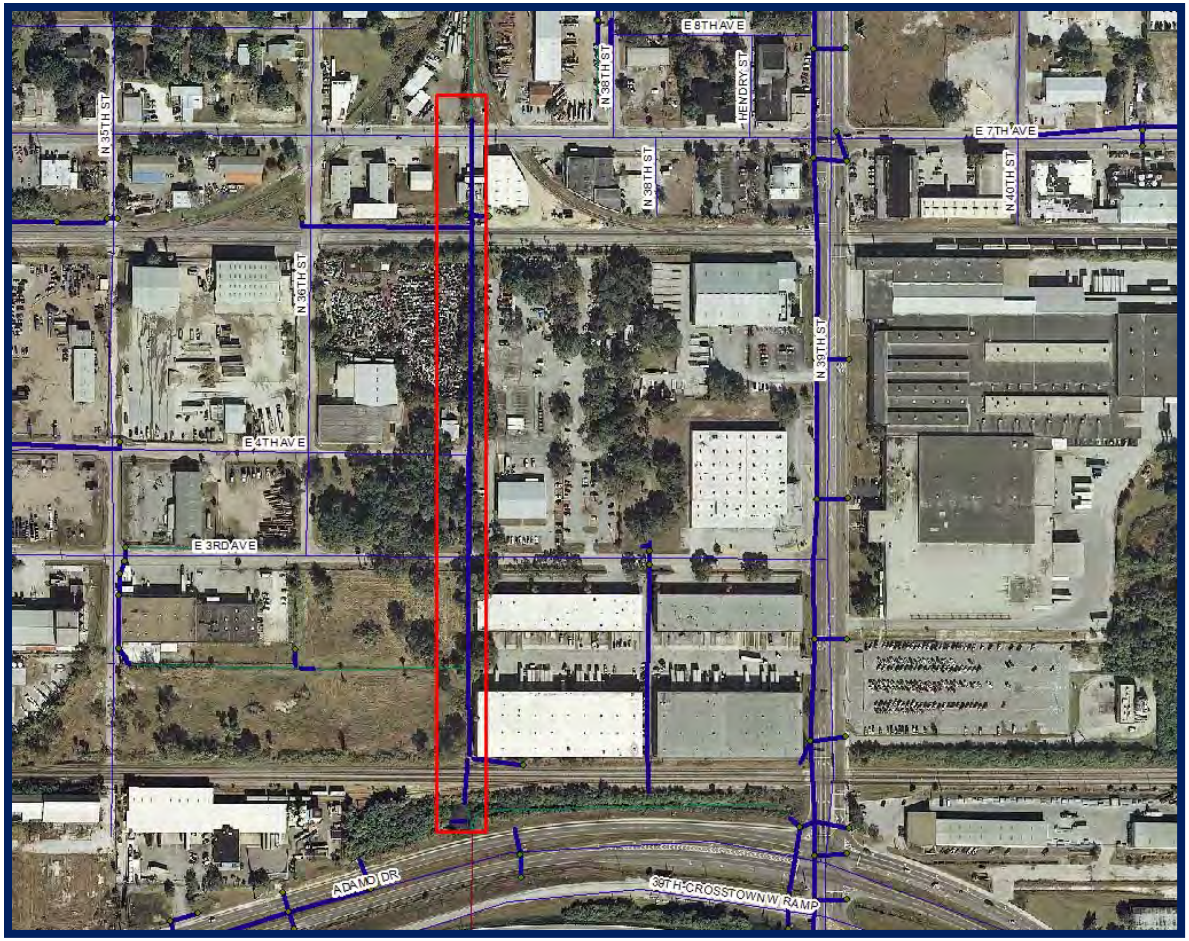
- **JUSTIFICATION:**

  Chronic severe flooding occurs along 7th Avenue between 36th and 37th Street, affecting commercial properties and the roadway. The existing line is undersized for the contributing basin and has a diminished capacity due to root intrusion and cracks.

- **PROJECT DESCRIPTION:**

  The project consists of the removal of the existing 24" inch pipe from just north of 7th Avenue to the box culvert under Adamo Drive and replacing with a 48" inch or equivalent pipe.

PROPOSED PROJECT MAP



30th Street Outfall

FY 2017, District 5

Estimated cost: $600K

- **JUSTIFICATION:**

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

- **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.

- **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.

Proposed Project Map

Forest Hills Park Improvements

FY2017, District 7

Estimated cost of Stormwater Share: $250K

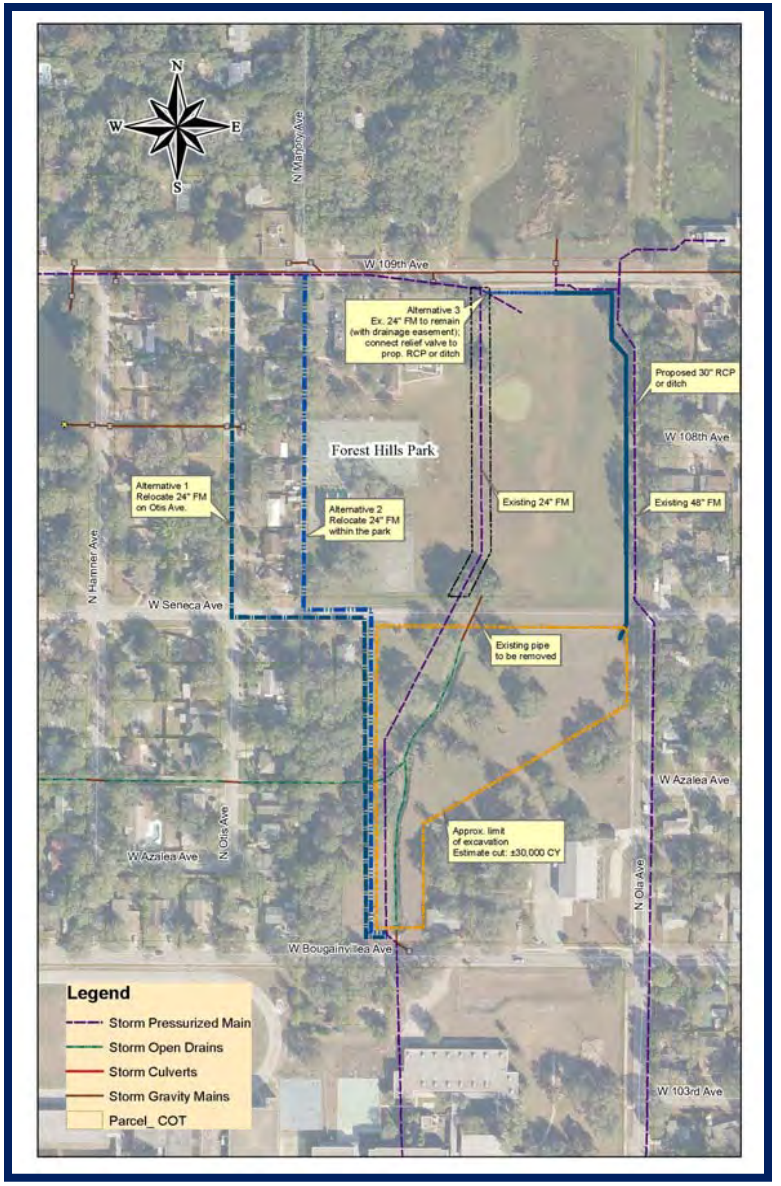
- **JUSTIFICATION:**

  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.

- **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. Parks and Rec is co-funding this design with Stormwater Enginering 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 Ave., 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 Ave. and Seneca Ave.

PROPOSED PROJECT MAP



Robles Park Pump Station Replacement

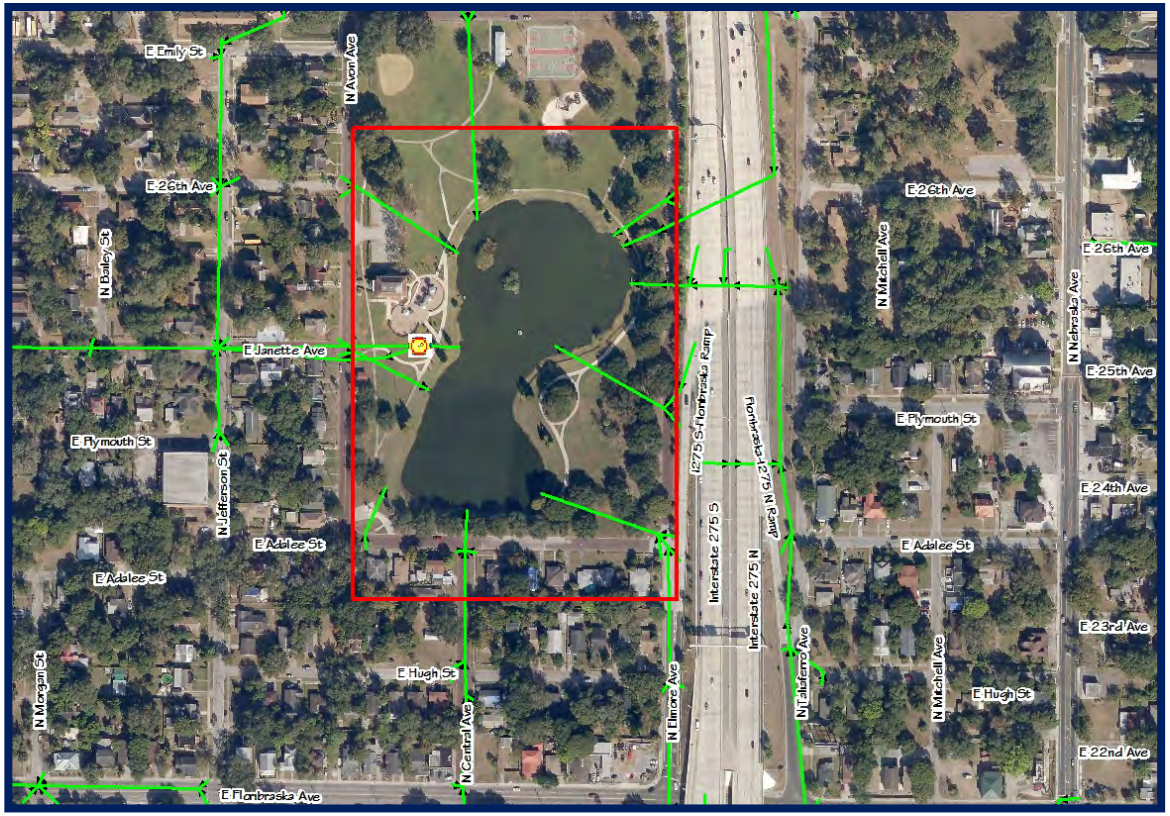
FY2017, District 5

Estimated cost: $1.20M

Proposed Project Map

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

- **PROJECT DESCRIPTION:**
  Pump station will be replaced with more efficient pumping equipment



Stormwater Services/Maintenance Improvements

Tampa City Council

Update #3

July 27, 2017

Service Assessment: Citywide Operations and Maintenance

Operations and Maintenance Activities	Current Service Levels	Improved Service Levels
Ditches	10-Year Cycle	7-Year Cycle
Ponds	Minimal	3-Year Cycle
Pipes	10-Year Cycle	7-Year Cycle
Outfalls	15-Year Cycle	5-Year Cycle
Pumps	Low Preventative Maintenance	Annual Preventative Maintenance
Construction and Restoration	Reactive	Planned
Street Sweeping	90-Day Cycle	60-Day Cycle
Miscellaneous	Backlog Increases	Backlog Decreases
Engineering	Reactive	Planned

FY17
Stormwater Service Assessment Program Report

Tampa City Council Update No. 3 - July 2017

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	3rd Quarter–Rainy Season & Year-to-Date Service Levels
Ditches	10-Year Cycle	7-Year Cycle	12.9-Year Cycle (3rd Qtr.)* 10.6-Year Cycle (Y.T.D)
Ponds	Minimal	3-Year Cycle	3-Year Cycle (3rd Qtr.) 3-Year Cycle (Y.T.D)
Pipes	10-Year Cycle	7-Year Cycle	4.2-Year Cycle (3rd Qtr.) 4.8-Year Cycle (Y.T.D)
Outfalls	15-Year Cycle	5-Year Cycle	5.2-Year Cycle (3rd Qtr.) 4.6-Year Cycle (Y.T.D)
Pumps	Low Preventative Maintenance	Annual Preventative Maintenance	1-Year Cycle
Street Sweeping	90-Day Cycle	60-Day Cycle	41-Day Cycle (3rd Qtr.) 51-Day Cycle (Y.T.D)

Operations and Maintenance Activities	3rd Quarter Maintenance Statistics
Ditches	18,940 linear feet of ditches maintained, 441,765 linear feet of ditch mowed monthly *3rd quarter maintenance activities severely affected by weather
Ponds	3,709 tons of aquatic vegetation removed from stormwater ponds, ten (10) ponds have been treated with herbicide, 369.42 tons of trash and illegal dumping have been disposed of, 120 stormwater ponds mowed monthly
Pipes	159,764 linear feet of storm drain pipe maintained, 2,601 storm drain inlets and manholes maintained
Outfalls	27 outfalls cleaned and maintained, 37.8 tons of debris and trash removed from outfalls,
Pumps	Preventative Maintenance Services provided to nine (9) of the thirteen (13) stormwater pump stations
Street Sweeping	4,479 curb miles were swept, approximately 2,279 tons of debris removed

Peter O'Knight Airport - - - Before

Peter O'Knight Airport - - - After

Ballast Point Park - - - Before

Ballast Point Park - - - After

Obstructed Ditch - - - Before

Restored Ditch - - - After