



CITY OF
ST AUGUSTINETM
EST. 1565

CoSA City Commission

“Public Works Update”

August 12, 2019

Michael G. Cullum, P.E.

Director, Public Works





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Public Works Update Agenda

Key Projects Update

- Paving Program
- Wastewater Spill Report
- Lake Maria Sanchez Flood Mitigation
- S. Whitney & W. King Flood Mitigation
- Macaris Outfalls Resiliency Retrofit
- Water Treatment Plant RO Membrane Replacement

Project Overview

- CIP Overall Status Summary

Paving Program

Completed to date, FY 2019 *

Road Name	From	To	Length (linear feet)	Cost
Bravo St.	Sanford	Weeden	332	\$23,906.39
CedarSt	Riberia	Granada St.	731	\$31,943.46
CenterSt	US1	San Marco Ave.	618	\$31,363.73
Charlotte St.	Bridge St.	South St.	2,507	\$48,997.61
DeHavenSt	MLK	Washington St.	651	\$13,088.90
DeHavenSt	Riberia St.	MLK	744	\$16,298.82
DouglasAve	Hildreth Dr.	Macaris St.	1,516	\$30,511.26
Duero St.	MLK Ave.	Twine St.	264	\$29,094.00
Dumas St.	Bridge St.	St. Francis St.	579	\$13,806.14
EParkAv	Park Ave.	Dead End South	1,442	\$44,672.66
Grant St.	Picolata Road	Perpall St.	1,887	\$39,965.98
Keith St.	ML King Ave	Oneida St.	501	\$20,858.17
KingsFerry	Riberia St.	Washington St.	1,233	\$29,603.88
LincolnSt	Riberia St.	Washington St.	1,235	\$31,187.27
Lovett St.	Riberia St.	Washington St.	1,275	\$32,389.74
PacificSt	US1	San Marco Ave.	658	\$15,064.72
PomarSt	Riberia St.	ML King Ave	681	\$13,352.55
RaineyAve	E. Park Ave.	Macaris St.	658	\$14,513.16
SanMarcoAv	Picolata Ave.	US1	2,792	132,507.37
StBenedict	St. Francis St.	DeHaven St.	331	\$17,630.98
WeedenSt	Bravo St.	Bridge St.	319	\$15,841.05
WeedenSt	Bridge St.	DeHaven St.	868	\$15,841.05
Miles Paved to Date, FY 2019:		4.13	\$529,931.52	

* Includes paving combined in utility improvement projects.

Planned Remaining, FY 2019 **

Road Name	From	To	Length (linear feet)	Cost
Blanco St	Cerro St.	South St.	1,072	\$33,875.20
Cerro St.	Riberia St.	Oneida St.	996	\$28,319.92
DeSoto Pl.	Granada St	ML King Ave	721	\$22,783.60
Duero St.	MLK Ave.	Riberia St.	447	\$12,712.68
Duero St.	Oneida St.	MLK Ave	503	\$14,305.32
MacarisSt	San Marco Ave	Rainey Ave	1,725	\$57,232.34
MLKingAve	DeHaven St.	Cerro St.	2,513	\$91,322.42
Moore St.	Riberia St.	ML King Ave	703	\$19,979.10
SanfordSt	Bridge St.	Cedar St.	511	\$15,347.73
School St.	Pomar St.	Kings Ferry Way	162	\$5,120.78
SouthSt	Riberia St.	ML King Ave.	452	\$16,425.68
StFrancisS	Weeden St.	Park	1,228	\$27,478.59
Twine St.	Lovett St.	Cerro St.	1,559	\$49,270.72
Miles Remaining, Planned by end of FY 2019:			2.38	\$394,174.08

** Utility work to be completed prior to paving.

Summary

Previously Paved 2014 – 2017:	12.8 miles
* Paved FY 2018:	6.4 miles (actual)
* Completed to date, FY 2019:	4.13 miles (actual)
Total Miles Paved to Date:	23.33 miles (actual)
** Planned Remaining, FY 2019:	2.38 miles (estimate)
Total Miles Including Forecast Through End of Fiscal Year:	25.71 miles



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Wastewater Spill Report

Location: Solano Avenue

- ❖ Event Date: March 2, 2019
- ❖ Cause: Utility pole installation damaged gravity sewer main
- ❖ Spill Volume: 13,700 gallons (500 gallons recovered; 13,200 gallons released)
- ❖ Status: Sewer main has been repaired. Currently negotiating with the franchise utility subcontractor.

Location: Coquina Avenue - Lift Station 52

- ❖ Event Date: June 20, 2019
- ❖ Cause: Vehicle struck City's lift station
- ❖ Spill Volume: 10,154 Gallons (8,400 gallons recovered; 1,754 gallons released)
- ❖ Status: Lift station has been repaired. League of Cities Insurance is covering claim.

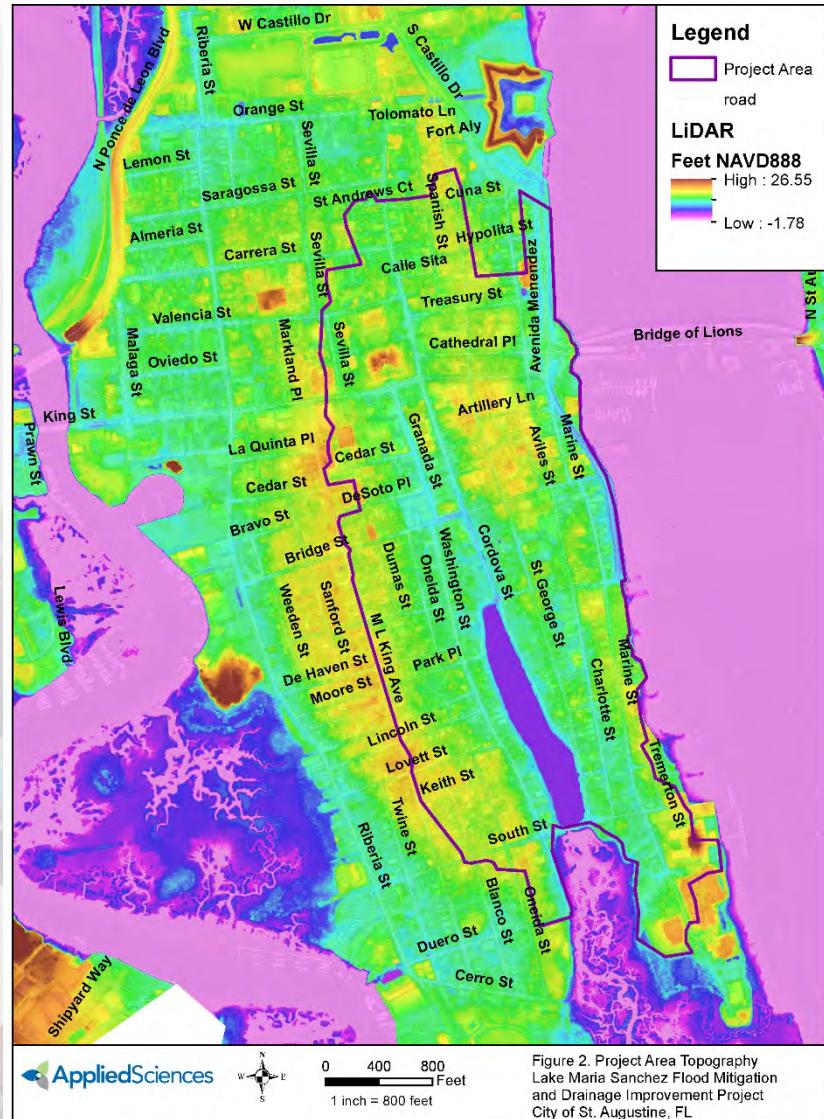




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Project Status:

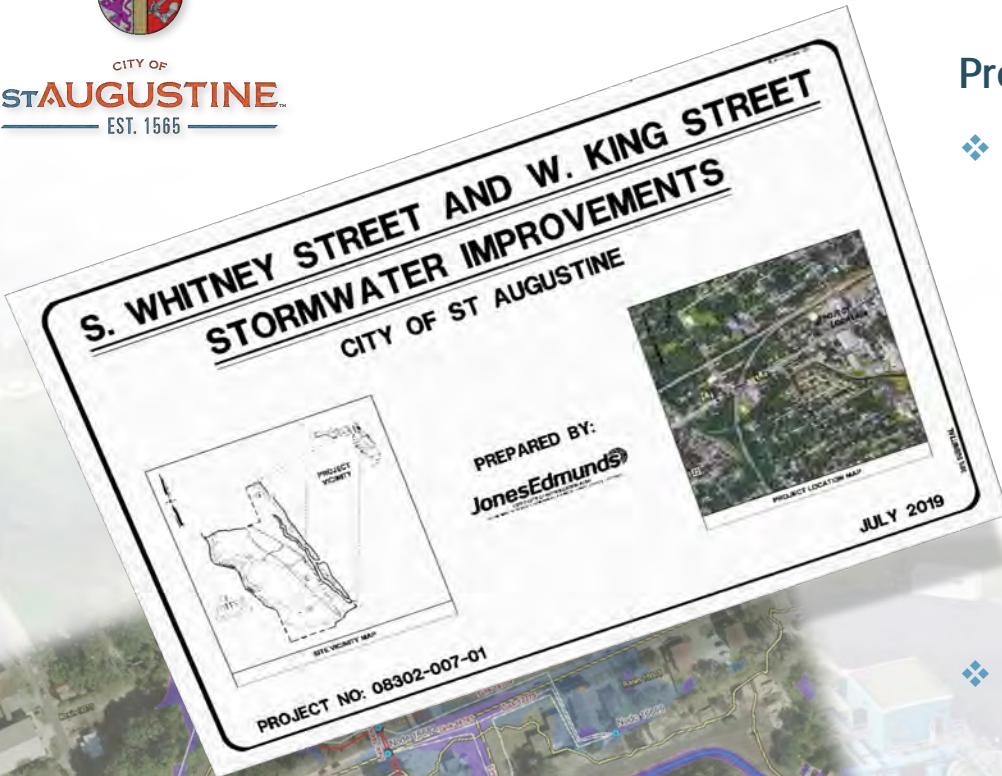
- ❖ Draft 30% Basis of Design Report (BDR) received; currently under review/comment/revision
- ❖ Evaluating proposed storm infrastructure upgrades
- ❖ Evaluating proposed pump station location, layout and configuration
- ❖ Evaluating location and layout for proposed flood wall (or bulkhead)
- ❖ Evaluating potential for dredging portion of Lake to accommodate stormwater infrastructure
- ❖ Once the 30% BDR is completed, the City will schedule public information meetings to solicit the public's input and comments





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S. Whitney & W. King Flood Mitigation



Project Status:

- ❖ Jones Edmonds & Associates under contract for design work:
 - ❖ Field survey and subsurface geotechnical investigations
 - ❖ Stormwater computer modeling
 - ❖ Design of drainage improvements
 - ❖ Obtaining Environmental, road right-of-way permits and developing maintenance of traffic during construction of the improvements
- ❖ Survey, preliminary design and modeling are complete
- ❖ Design for the project is at 30%
- ❖ FEMA is cost sharing 75% of the project costs
- ❖ The City is cost sharing the remaining 25%



Macaris Outfalls Resiliency Retrofit

Project Complete! – Project Summary:

Task	Schedule	Comment
Design	Dec. 2017 – Nov. 2018	Included cost share application support
SJRWMD Cost Share Application	<ul style="list-style-type: none"> Submitted Application – February 2018 Application review and award – Feb. – Apr. 2018 Contract – October 2018 – September 2019 	33% Reimbursable Construction Costs up to \$60,747
30-inch Valve Install	Valve – 3 weeks Installation <u>Complete</u> – < 1 day	Self-performed install \$11,130* (*includes valve, labor, materials)
66-inch Valve Install	Valve – custom order – 3 months (12 weeks) Installation <u>Complete</u> – 1 week	Contractor install \$104,440* (*includes valve, labor, materials)





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Water Treatment Plant RO Membrane Replacement

Project Complete! – Project Summary:

- ❖ Reduced Power Consumption!
 - ❖ Went from operating at 140 psi to 100 psi for each skid.
- ❖ Slightly more recovery – The old membranes were producing about 81%-85% recovery. The new membranes are recovering around 85%-86%.
- ❖ Better Flux rate - This is the rate at which water permeates the membrane.



CIP Overall Status Summary

Design-Bid-Build Active Projects – through August 12, 2019



Fish Island Management Plan	Lift Station 14 Replacement	Sevilla Street Brick Roadway & Utility Improvements	West 5 th Street Gravity Sewer and Septic to Sewer	LPRO Concentrate Discharge (*)	Clean & Inspect Collection Basins 10 & 22	West 2nd Street Gravity Sewer and Septic to Sewer	Macaris Outfalls Resiliency Retrofit	WWTP Headworks Assessment (moving into 30%-60% design phase)
Hurricane Irma FEMA LS-2 and LS-51 Rehabilitation	St. Francis Street Utility Improvements	Lincolnville Utility & Drainage – Project 3 ⁽¹⁾ [Cerro St & Duero St (portion)]	Coquina Park and Stormwater Improvements		Lincolnville Drainage – Project 1 ⁽¹⁾ [South St & DeHaven St]	Wells D-8, D-9, and D-10 Investigation and Repairs		WTP LPRO Membrane Replacement
Smoke Testing and Manhole Inflow	Althea/Fern/ Seminole/Atlantic Neighborhood Drainage	Inlet Drive Shoreline Restoration	WWTP Headworks Rehabilitation			Pump Station 3 Replacement		WWTP Clarifier/RAS
Dishes for Collection Basins 21, 22, 44, 45, 49, 54, 58, 60, 64 & 70	WWTP Resiliency Analysis ^{(1) (**)}	Court Theophelia Neighborhood Drainage	Hurricane Matthew FEMA Lift Station Rehabilitation (13 stations) and CMAR Pre-Construction Services			North City Water Main Improvements		Smoke Testing and Manhole Inflow Dishes for Collection Basins 5, 7, 12 & 51
Sanitary Sewer Manhole Rehabilitation			Force Main Replacement LS-51 to LS-52			Cleaning & Inspection of Sanitary Collection Basin 23		Cleaning & Inspections of Sanitary Collection Basins 45 and Part of 20
Sanitary Sewer Cleaning & CIPP Lining			S. Whitney & W. King Flood Mitigation ⁽¹⁾			West Augustine Septic to Sewer		
Sanitary Sewer Cleaning & Inspection of Basins 4 & 11			Lake Maria Sanchez Flood Mitigation			Davis Shores Backflow		
Flood Mitigation at Avenida Menendez Seawall; Bayfront Connectivity ⁽¹⁾			City-wide TIDE Valve Master Planning			Charlotte St. Roadway & Utility Improvements		
						Water Meter Replacements		
						2019 Paving Projects		
						Prawn & Heron Streets Reconstruction ⁽²⁾		

Key:

- (1) Grant Dependent
- (2) Developer Dependent
- (*) Postponed
- (**) Phase Complete



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Additional Questions and Commission Discussion