

## SEWER PROGRAM

The Sewer Program is administered by the Sewer division in the Utilities Department. The program is designed to achieve five primary strategic objectives:

- 1) Replace and or rehabilitate aging infrastructure;
- 2) Maintain or increase system reliability;
- 3) Ensure regulatory compliance;
- 4) Improve system efficiency; and
- 5) Address growth in the system

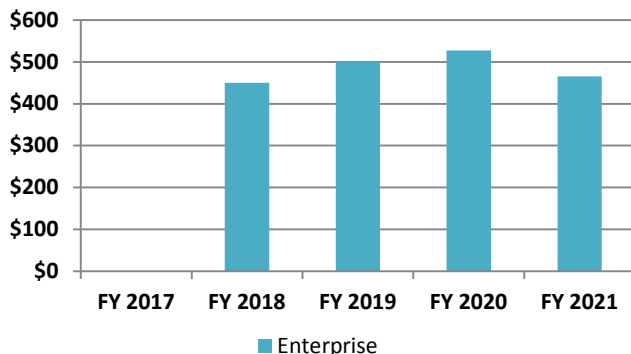
The sewer utility continues to plan and invest in the future of the City by continuing to evaluate the collection system to effectively prioritize the replacement and rehabilitation programs.



### THE FIVE-YEAR PLAN (FY 2017 – FY 2021)

The FY 2017 Adopted Five-Year Capital Improvement Program (CIP) includes \$1,942,000 of Enterprise Funds (Sewer Fund). As shown in the chart below, the Sewer Contribution, when needed, is fairly consistent each year.

There is no funding proposed for FY 2017 because the Sewer Fund is replacing a flush truck in the operating budget for an estimated \$500,000.



(Dollars in Thousands)

### FY 2017 CAPITAL PROJECTS

No new funding for projects is included for FY 2017. This is due to the funding of a new flush truck in the operating budget for \$500,000.

While there are no proposed projects for FY 2017, work continues on the Upper Flat Branch Interceptor project (estimated completion of FY 2019) and Prince William Street Sewer Main Replacement (estimated completion of FY 2018). The work being done as part of the Upper Flat Branch Interceptor, including the sanitary sewer mains and laterals replaced along Portner Avenue, Battle Street, Main Street, and West Street, has resulted in the reduction in the occurrence of sanitary sewer overflows (SSOs).



*Upper Flat Branch Interceptor Project*

### FY 2017 MAINTENANCE CAPITAL PROJECTS

There are no maintenance capital projects in the Sewer Program at this time.

### NEW PROJECTS

There are no new projects in the Sewer Program.

## SUMMARY OF SEWER CAPITAL PROJECTS

(\$ in Thousands)

<b>Cost Estimates:</b>	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>	<b>5-Year CIP</b>
Planning	342	-	50	85	85	105	-	667	325
Land	-	-	-	-	-	-	-	-	-
Construction	1,978	-	400	415	442	360	-	3,595	1,617
<b>Total Cost</b>	<b>2,320</b>	<b>-</b>	<b>450</b>	<b>500</b>	<b>527</b>	<b>465</b>	<b>-</b>	<b>4,262</b>	<b>1,942</b>
<b>Funding Sources:</b>									
General Fund	-	-	-	-	-	-	-	-	-
Enterprise Funds	2,285	-	450	500	527	465	-	4,227	1,942
School Fund	-	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-	-
Other Government	-	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-	-
Gas Taxes	-	-	-	-	-	-	-	-	-
Proffers	35	-	-	-	-	-	-	35	-
Stormwater Escrows	-	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>2,320</b>	<b>-</b>	<b>450</b>	<b>500</b>	<b>527</b>	<b>465</b>	<b>-</b>	<b>4,262</b>	<b>1,942</b>
<b>Operating Impacts:</b>									
Revenue Offset	-	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-	-
Program (Costs) Saving	-	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-	-
<b>Net Revenue</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

### Program Highlights

The FY 2017 Adopted Five-Year CIP includes \$1,942,000 for the Sewer Program, which reflects an increase of \$119,000 or 6%. This is mostly due to the updated cost estimates for Grant Avenue Sewer Main Replacement (increased \$452,000) offset by the fact that no new funding is included in FY 2017.

**SEWER CAPITAL PROJECT LISTING**

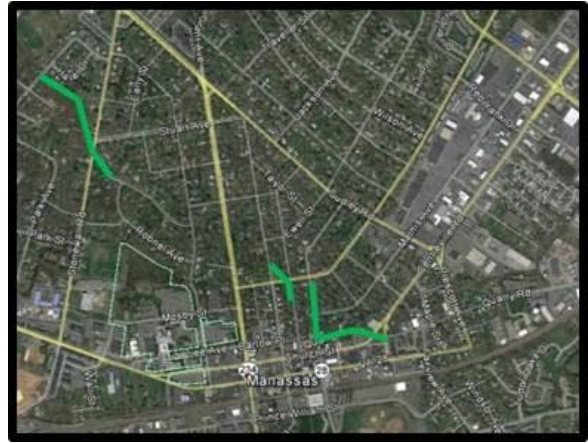
*(\$ in Thousands)*

<b>Project Name</b>	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>	<b>5-Year CIP</b>
Upper Flat Branch Interc	1,670	-	450	-	-	-	-	2,120	450
Prince William Street Se	650	-	-	-	-	-	-	650	-
Grant Avenue Sewer Mai	-	-	-	500	152	-	-	652	652
Buckner Road Sewer Ma	-	-	-	-	-	465	-	465	465
Ellicott Lane Sewer Main	-	-	-	-	375	-	-	375	375
<b>Total</b>	<b>2,320</b>	<b>-</b>	<b>450</b>	<b>500</b>	<b>527</b>	<b>465</b>	<b>-</b>	<b>4,262</b>	<b>1,942</b>

# S-016 Upper Flat Branch Interceptor Replacement

**Year Introduced:** 2009  
**Change:** No change  
**Associated Proj:** D-021  
**Program Area:** Sewer  
**Managing Dept:** Utilities  
**Manager:** T. Dawood  
**Plan Conformance:**  
 Comprehensive Plan 7.7

**Est. Start:** 7/1/2010  
**Est. Complete:** 6/30/2019



**Description:**

Replace sections of gravity sewer main along the Upper Flat Branch Interceptor currently deficient in capacity. Undersized sanitary sewer will be upsized to meet current standards, future growth, and preclude overflows.

<b>PROJECT-TO-DATE</b>	
<i>Account #</i>	<i>CP3669</i>
<b>Budget:</b>	<b>\$ 1,669,525</b>
<b>Expend. / PO:</b>	<b>\$ 987,096</b>
<b>Balance:</b>	<b>\$ 682,429</b>

<b>Cost Estimate:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Planning	342	-	50	-	-	-	-	392
Land	-	-	-	-	-	-	-	-
Construction	1,328	-	400	-	-	-	-	1,728
<b>Total Cost</b>	<b>1,670</b>	<b>-</b>	<b>450</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,120</b>

**Funding Sources:** (\$ in 1,000s)

General Fund	-	-	-	-	-	-	-	-
Enterprise Funds	1,635	-	450	-	-	-	-	2,085
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
Other Government	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
Gas Taxes	-	-	-	-	-	-	-	-
Proffers	35	-	-	-	-	-	-	35
Stormwater Escrows	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>1,670</b>	<b>-</b>	<b>450</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,120</b>

**Operating Impacts:** (\$ in 1,000s)

Revenue Offset	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
<b>Net Revenue</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# S-017 Prince William Street Sewer Main Replacement

**Year Introduced:** 2010  
**Change:** No change  
**Associated Proj:** D025;E014;T019;W063  
**Program Area:** Sewer  
**Managing Dept:** Utilities  
**Manager:** T. Dawood  
**Plan Conformance:**  
 Comprehensive Plan 7.7  
 Old Town Sector Plan

**Est. Start:** 1/1/2016  
**Est. Complete:** 6/30/2018



**Description:**

Install, repair, or rehabilitate the 8" sewer main along Prince William Street from Wellington Road to Grant Avenue in conjunction with T-019. This will require the installation of approximately 670 feet of 8" sewer main and 36 laterals, which will increase reliability of service by reducing blockages and defects. Pipe material has outlasted its recommended life span.

<b>PROJECT-TO-DATE</b>	
<i>Account #</i>	<i>CP3682</i>
<b>Budget:</b>	\$ 650,000
<b>Expend. / PO:</b>	\$ -
<b>Balance:</b>	\$ 650,000

<b>Cost Estimate:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	650	-	-	-	-	-	-	650
<b>Total Cost</b>	<b>650</b>	-	-	-	-	-	-	<b>650</b>

<b>Funding Sources:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
General Fund	-	-	-	-	-	-	-	-
Enterprise Funds	650	-	-	-	-	-	-	650
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
Other Government	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
Gas Taxes	-	-	-	-	-	-	-	-
Proffers	-	-	-	-	-	-	-	-
Stormwater Escrows	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>650</b>	-	-	-	-	-	-	<b>650</b>

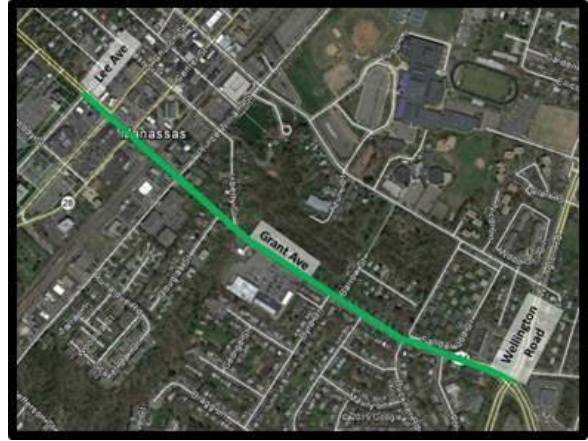
<b>Operating Impacts:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Revenue Offset	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
<b>Net Revenue</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# S-018 Grant Avenue Sewer Main Replacement (from Lee Ave to W

**Year Introduced:** 2010  
**Change:** Expanded Scope  
**Associated Proj:** T021;W061;E015  
**Program Area:** Sewer  
**Managing Dept:** Utilities  
**Manager:** T. Dawood

**Plan Conformance:**  
 Comprehensive Plan 7.7  
 Old Town Sector Plan

**Est. Start:** 7/1/2018  
**Est. Complete:** 6/30/2020



**Description:**

Install, repair, or rehabilitate the sewer main along Grant Avenue from Lee Avenue to Wellington Rd in conjunction with T-021. This project will require the installation of approximately 800' of sewer main and up to 90 laterals, which will increase reliability of service by reducing blockages and defects. Pipe material has outlasted its recommended life span.

<b>PROJECT-TO-DATE</b>	
Account #	N/A
<b>Budget:</b>	\$ -
<b>Expend. / PO:</b>	\$ -
<b>Balance:</b>	\$ -

<b>Cost Estimate:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Planning	-	-	-	85	-	-	-	85
Land	-	-	-	-	-	-	-	-
Construction	-	-	-	415	152	-	-	567
<b>Total Cost</b>	-	-	-	<b>500</b>	<b>152</b>	-	-	<b>652</b>

<b>Funding Sources:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
General Fund	-	-	-	-	-	-	-	-
Enterprise Funds	-	-	-	500	152	-	-	652
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
Other Government	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
Gas Taxes	-	-	-	-	-	-	-	-
Proffers	-	-	-	-	-	-	-	-
Stormwater Escrows	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
<b>Total Funding</b>	-	-	-	<b>500</b>	<b>152</b>	-	-	<b>652</b>

<b>Operating Impacts:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Revenue Offset	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
<b>Net Revenue</b>	-	-	-	-	-	-	-	-

# S-020 Buckner Road Sewer Main Replacement

**Year Introduced:** 2016  
**Change:** Timeline  
**Associated Proj:** N/A  
**Program Area:** Sewer  
**Managing Dept:** Utilities  
**Manager:** T. Dawood  
**Plan Conformance:**  
 Comprehensive Plan 7.7

**Est. Start:** 7/1/2020  
**Est. Complete:** 6/30/2021



**Description:**

Install, repair, or rehabilitate the sewer main along Buckner Road from Maury Lane to Taney Road. This project will require the replacement of approximately 625' of sewer main and 50 laterals, which will increase reliability of service by reducing blockages and defects. Pipe material has outlasted its recommended life span.

<b>PROJECT-TO-DATE</b>		
Account #	N/A	
<b>Budget:</b>	\$	-
<b>Expend. / PO:</b>	\$	-
<b>Balance:</b>	\$	-

<b>Cost Estimate:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Planning	-	-	-	-	-	105	-	105
Land	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	360	-	360
<b>Total Cost</b>	-	-	-	-	-	<b>465</b>	-	<b>465</b>

<b>Funding Sources:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
General Fund	-	-	-	-	-	-	-	-
Enterprise Funds	-	-	-	-	-	465	-	465
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
Other Government	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
Gas Taxes	-	-	-	-	-	-	-	-
Proffers	-	-	-	-	-	-	-	-
Stormwater Escrows	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
<b>Total Funding</b>	-	-	-	-	-	<b>465</b>	-	<b>465</b>

<b>Operating Impacts:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Revenue Offset	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
<b>Net Revenue</b>	-	-	-	-	-	-	-	-

# S-021 Ellicott Lane Sewer Main Replacement

**Year Introduced:** 2016  
**Change:** No change  
**Associated Proj:** N/A  
**Program Area:** Sewer  
**Managing Dept:** Utilities  
**Manager:** T. Dawood

**Plan Conformance:**  
 Comprehensive Plan 7.7

**Est. Start:** 7/1/2019  
**Est. Complete:** 6/30/2020



**Description:**

Install, repair, or rehabilitate the sewer main in Ellicott Lane from Wesley Ave to Wellington Road. This project will require the replacement of approximately 770' of sewer main and 13 laterals, which will increase reliability of service by reducing blockages and defects. Pipe material has outlasted its recommended life span.

<b>PROJECT-TO-DATE</b>	
Account #	N/A
<b>Budget:</b>	\$ -
<b>Expend. / PO:</b>	\$ -
<b>Balance:</b>	\$ -

<b>Cost Estimate:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Planning	-	-	-	-	85	-	-	85
Land	-	-	-	-	-	-	-	-
Construction	-	-	-	-	290	-	-	290
<b>Total Cost</b>	-	-	-	-	<b>375</b>	-	-	<b>375</b>

<b>Funding Sources:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
General Fund	-	-	-	-	-	-	-	-
Enterprise Funds	-	-	-	-	375	-	-	375
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
Other Government	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
Gas Taxes	-	-	-	-	-	-	-	-
Proffers	-	-	-	-	-	-	-	-
Stormwater Escrows	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
<b>Total Funding</b>	-	-	-	-	<b>375</b>	-	-	<b>375</b>

<b>Operating Impacts:</b> (\$ in 1,000s)	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Future</b>	<b>Total Project</b>
Revenue Offset	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
<b>Net Revenue</b>	-	-	-	-	-	-	-	-