

SANITARY SEWER

Note: Projects with a \$0 total funding are active capital projects funded in prior CIP's that do not require additional resources.

	Prior												FY 2027 -
	Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036		FY 2036
Sanitary Sewers													
AlexRenew Wastewater Treatment Plant Capacity	20,652,680	22,242,000	-	-	-	-	-	-	-	-	-	-	22,242,000
Combined Sewer Assessment & Rehabilitation	15,635,000	-	-	-	-	-	-	-	-	-	-	-	-
Combined Sewer Wet Weather Mitigation	8,465,860	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000	
Holmes Run Trunk Sewer	3,453,863	-	-	-	-	-	-	-	-	-	-	-	-
Pitt and Gibbon Combined Sewer Capacity Project	4,000,000	-	-	-	-	-	-	-	-	-	-	-	-
Reconstructions & Extensions of Sanitary Sewers	20,275,658	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000	
Sanitary Sewer Asset Renewal Program	21,389,998	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000	
Sanitary Sewer Enterprise Maintenance Management System Optimization	3,090,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	-	-	-	6,975,000
Sanitary Sewer Stream Crossing Protection	3,757,700	1,641,000	-	150,000	-	158,000	-	168,000	-	177,000	-	-	2,294,000
Sanitary Sewer Wet Weather Mitigation	5,500,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,500,000	
Staff Relocation to AlexRenew	1,607,000	-	-	-	-	-	-	-	-	-	-	-	-
Grand Total	107,827,759	32,383,000	8,125,000	7,500,000	7,100,000	6,058,000	5,900,000	6,068,000	5,900,000	6,077,000	5,900,000	91,011,000	

Significant Project Changes in the Sanitary Sewers Section

This chart highlights any project funding that increased or decreased by more than 10%, or \$1 million, since the last Approved CIP.

NOTE, the “Change (\$) from Previous Approved CIP” and “Change (%) from Previous Approved CIP” calculations do not include Fiscal Year (FY) 2026 from the Approved FY 2026 – 2035 CIP, or FY 2036 from this Approved FY 2027 – 2036 CIP, since FYs 2027 – 2035 are the years that can be directly compared between the two plans.

CIP Subsection	CIP Document Title	Approved FY 2027 - FY 2036 Total	Change (\$) from Previous Approved CIP	Change (%) from Previous Approved CIP
Sanitary Sewers	AlexRenew Wastewater Treatment Plant Capacity	22,242,000	22,242,000	New Funding; Not in Previous Approved CIP
Sanitary Sewers	Pitt and Gibbon Combined Sewer Capacity Project	-	(24,000,000)	-100.0%

Sanitary Sewer 10-Year Plan: FY 2027 - FY 2036

Revenue Assumptions												
	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Maintenance Fee												
Estimated Usage (in 1,000 gallons)	4,860,734	4,606,000	4,641,000	4,676,000	4,711,000	4,746,000	4,782,000	4,818,000	4,854,000	4,890,000	4,927,000	
Year-over-Year Growth		-5.2%	0.8%	0.8%	0.7%	0.7%	0.8%	0.8%	0.7%	0.7%	0.8%	
Rate per 1,000 gallons	2.28	2.28	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.61	2.61	
Year-over-Year Growth		0.0%	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	
Sewer Line Maintenance Fee Revenue	11,082,473	10,502,000	11,556,000	11,643,000	11,730,000	11,818,000	11,907,000	11,997,000	12,086,000	12,763,000	12,859,000	118,861,000
Connection Fee												
Connection Fee Revenue	3,000,000	7,000,000	7,210,000	7,426,000	7,649,000	7,878,000	8,114,000	8,357,000	8,608,000	8,866,000	9,132,000	
Year-over-Year Growth		133.3%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	

Operating Budget Revenues												
	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Sewer Line Maintenance Fee	11,082,473	10,502,000	11,556,000	11,643,000	11,730,000	11,818,000	11,907,000	11,997,000	12,086,000	12,763,000	12,859,000	118,861,000
Sewer Connection Fee	3,000,000	7,000,000	7,210,000	7,426,000	7,649,000	7,878,000	8,114,000	8,357,000	8,608,000	8,866,000	9,132,000	80,240,000
Use of Fund Balance	14,625,398	-	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	28,707,871	17,502,000	18,766,000	19,069,000	19,379,000	19,696,000	20,021,000	20,354,000	20,694,000	21,629,000	21,991,000	199,101,000

Operating Budget Expenditures												
	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Personnel Expenditures												
T&S	4,649,859	4,864,260	5,010,000	5,160,000	5,315,000	5,474,000	5,638,000	5,807,000	5,981,000	6,160,000	6,345,000	55,754,260
DEC	55,057	56,300	58,000	60,000	62,000	64,000	66,000	68,000	70,000	72,000	74,000	650,300
P&Z	127,385	139,579	144,000	148,000	152,000	157,000	162,000	167,000	172,000	177,000	182,000	1,600,579
Professional Services												
Consulting Services	379,000	390,000	402,000	414,000	426,000	439,000	452,000	466,000	480,000	494,000	509,000	4,472,000
Leaf Collection in CSO Areas	146,000	146,000	150,000	155,000	160,000	165,000	170,000	175,000	180,000	185,000	191,000	1,677,000
Fat, Oil, Grease (FOG Program)	215,000	218,000	221,000	224,000	227,000	230,000	233,000	236,000	240,000	244,000	248,000	2,321,000
Flow Metering, Sewer Modeling, CMOM	492,000	499,000	506,000	514,000	522,000	530,000	538,000	546,000	554,000	562,000	570,000	5,341,000
Sewer Billing	196,000	199,000	202,000	205,000	208,000	211,000	214,000	217,000	220,000	223,000	226,000	2,125,000
Infrastructure Repairs												
Sewer Jet Cleaning	276,000	280,000	284,000	288,000	292,000	296,000	300,000	305,000	310,000	315,000	320,000	2,990,000
Annual CCTV of Sewers	344,000	349,000	354,000	359,000	364,000	369,000	375,000	381,000	387,000	393,000	399,000	3,730,000
Heavy Cleaning of Sewers	333,000	338,000	343,000	348,000	353,000	358,000	363,000	368,000	374,000	380,000	386,000	3,611,000
Equipment Replacement	659,268	653,000	663,000	673,000	683,000	693,000	703,000	714,000	725,000	736,000	747,000	6,990,000
Corrective Maintenance	167,000	170,000	173,000	176,000	179,000	182,000	185,000	188,000	191,000	194,000	197,000	1,835,000
Other Non-Personnel (Training, Utilities, Rentals, etc.)	271,000	275,000	279,000	283,000	287,000	291,000	295,000	299,000	303,000	308,000	313,000	2,933,000
Building Maintenance												
Rodent Abatement in Sewers	95,000	95,000	96,000	97,000	98,000	99,000	100,000	102,000	104,000	106,000	108,000	1,005,000
Indirect Costs (Transfer to G/F)	1,295,588	1,610,000	1,726,000	1,754,000	1,783,000	1,812,000	1,842,000	1,873,000	1,904,000	1,990,000	2,023,000	18,317,000
Transfers to Capital Program												
Sanitary Sewer Cash Capital	17,533,500	5,060,627	3,552,000	3,506,000	3,431,000	3,075,000	2,624,000	2,650,000	2,626,000	2,689,000	2,219,000	31,432,627
Sanitary Sewer Debt Service	1,473,214	2,159,234	4,600,210	4,704,065	4,832,778	5,249,449	5,756,536	5,789,632	5,868,434	6,399,936	6,933,907	52,294,181
Total Operating Expenditures	28,707,871	17,502,000	18,763,210	19,068,065	19,374,778	19,694,449	20,016,536	20,351,632	20,689,434	21,627,936	21,990,907	199,078,947

Sanitary Sewer 10-Year Plan: FY 2027 - FY 2036 (continued)

Capital Program Sources												
	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Sanitary Sewer Cash Capital	17,533,500	5,060,627	3,552,000	3,506,000	3,431,000	3,075,000	2,624,000	2,650,000	2,626,000	2,689,000	2,219,000	31,432,627
Sanitary Sewer GO Bonds	-	28,055,000	5,845,000	5,305,000	5,020,000	4,375,000	4,710,000	4,895,000	4,795,000	4,955,000	5,295,000	73,250,000
Total Planned Capital Sources	17,533,500	33,115,627	9,397,000	8,811,000	8,451,000	7,450,000	7,334,000	7,545,000	7,421,000	7,644,000	7,514,000	104,682,627

Capital Program Uses												
	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Reconstruction and Extension of Sanitary Sewers	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
Sanitary Sewer Asset Renewal Program	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000
AlexRenew Wastewater Treatment Plant Capacity	2,400,000	22,242,000	-	-	-	-	-	-	-	-	-	22,242,000
Sanitary Sewer Wet Weather Mitigation	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,500,000
Combined Sewer Wet Weather Mitigation	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Sanitary Sewer Stream Crossing Protection	1,500,000	1,641,000	-	150,000	-	158,000	-	168,000	-	177,000	-	2,294,000
Sanitary Sewer Asset Management and Optimization	2,170,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	-	-	6,975,000
Pitt and Gibbon Combined Sewer Capacity Project	4,000,000	-	-	-	-	-	-	-	-	-	-	-
Capitalized DPI Positions	1,014,400	732,627	1,218,000	1,255,000	1,293,000	1,332,000	1,372,000	1,413,000	1,455,000	1,499,000	1,544,000	13,113,627
Capitalized Sustainability Coordinator	49,100	-	54,000	56,000	58,000	60,000	62,000	64,000	66,000	68,000	70,000	558,000
Total Planned Capital Uses	17,533,500	33,115,627	9,397,000	8,811,000	8,451,000	7,450,000	7,334,000	7,545,000	7,421,000	7,644,000	7,514,000	104,682,627

ALEXRENEW WASTEWATER TREATMENT PLANT CAPACITY

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 1500 Eisenhower Ave.
 REPORTING AREA: Southwest Quadrant

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 21 - 25 Years

AlexRenew Wastewater Treatment Plant Capacity													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	43,000,000	20,758,000	22,242,000	-	-	-	-	-	-	-	-	-	22,242,000
Financing Plan													
GO Bonds (Sanitary)	31,253,000	9,011,000	22,242,000	-	-	-	-	-	-	-	-	-	22,242,000
Sanitary Sewer Fund	11,747,000	11,747,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	43,000,000	20,758,000	22,242,000	-	-	-	-	-	-	-	-	-	22,242,000

CHANGES FROM PRIOR YEAR CIP

Project funding increased by \$22.2 million in FY 2027. In addition to this increase, prior year balances, totaling \$18.4 million, from other Sanitary Sewer capital projects have been reprioritized to help fund the capacity purchase from Fairfax County. New funding added in FY 2027, reprioritized project balances, and this project's FY 2026 appropriation of \$2.4 million totals to \$43.0 million available to fund the capacity purchase.

PROJECT DESCRIPTION & JUSTIFICATION

As a part of the City's 2013 Sanitary Sewer Master Plan and 2021 Sanitary Sewer Master Plan (Master Plan) Update, and in anticipation of future growth, it was recommended that the City seek an additional 4 million gallons per day (mgd) of wastewater treatment capacity at AlexRenew. The City currently has 21.6 mgd of wastewater treatment capacity at AlexRenew, which represents 40% of AlexRenew's annual average capacity of 54 mgd. The remaining 60% (32.4 mgd) of wastewater treatment capacity is allocated to Fairfax County,

The Master Plan Update identified three alternatives to meet this future 4 mgd wastewater treatment need:

- Expand the hydraulic capacity of AlexRenew by 4 mgd
- Purchase 4 mgd of wastewater treatment capacity from Fairfax County
- A combination of the two above alternatives

Over the past year, City staff have been working collaboratively with Fairfax County and AlexRenew on evaluating these alternatives. Based on that evaluation, the City is proposing to move forward with purchasing 2.2 mgd of wastewater treatment capacity from Fairfax County, with the remaining 1.8 mgd being provided by AlexRenew as part of hydraulic capacity upgrades to be provided in the future, which will be funded by AlexRenew.

The City and Fairfax County have jointly developed a Capacity Sale Agreement that provides for the transfer of 2.2 mgd of wastewater treatment capacity at AlexRenew from the County to the City at a cost of \$43.0 million. The \$43.0 million will be paid for using this project's FY 2026 appropriation (\$2.4 million), reprioritizing prior year balances from other sanitary sewer projects (\$18.4 million), and new borrowing in FY 2027 (\$22.2 million).

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

COMBINED SEWER ASSESSMENT & REHABILITATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Old Town CSO Area
 REPORTING AREA: Old Town

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 30+ Years

Combined Sewer Assessment & Rehabilitation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	15,635,000	15,635,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
GO Bonds	121,125	121,125	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	6,383,875	6,383,875	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	7,630,000	7,630,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	1,500,000	1,500,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	15,635,000	15,635,000	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the condition assessment of sewers in the combined sewer service area in Old Town and remediation of structurally deficient sewers.

The City has completed the field work phase of this project which included cleaning and televising sewer lines and inspecting manholes and other structures in order to provide a condition assessment of these sewer assets and determining if rehabilitation is needed. Rehabilitation recommendations have been developed as part of the field work and planning phase, and the project has transitioned to the design phase. Design is anticipated to continue through FY 2027 and will transition to the construction phase in FY 2028. Project funding may be adjusted in a future CIP year based on the cost estimate developed during the design phase of the project.

Completion of this project will repair and renew the City’s sewer infrastructure, extend the infrastructure’s useful life, and reduce the number of pipe collapses and other emergency repairs.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

COMBINED SEWER WET WEATHER MITIGATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Combined Sewer Wet Weather Mitigation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	18,465,860	8,465,860	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Financing Plan													
GO Bonds (Sanitary)	8,160,000	1,750,000	850,000	1,000,000	835,000	540,000	500,000	500,000	500,000	500,000	500,000	685,000	6,410,000
Sanitary Sewer Fund	10,305,860	6,715,860	150,000	-	165,000	460,000	500,000	500,000	500,000	500,000	500,000	315,000	3,590,000
Financing Plan Total	18,465,860	8,465,860	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project funds the planning, design, construction and construction management of a variety of sewer capacity projects in combined sewer areas of the City where sewer backups and/or flooding have been documented to occur as a result of extreme wet weather. Currently, a number of areas are under study for potential wet weather mitigation within the combined sewer service area. These studies will evaluate existing system capacity, identify capacity deficiencies and then propose alternatives for capacity improvements. This project is intended to include both capacity improvement projects and combined sewer separation projects.

Projects currently in either the planning, design or construction phase include the following areas:

- Nethergate community
- Colonial Avenue and Powhatan Streets
- 400 block Wolfe Street

For smaller-scale projects, it is anticipated this project will fund all phases of the projects. Larger projects will need to be added to the CIP as a standalone project.

Funding for this project is provided on an annual basis and funding adjustments may be needed each year.

Completion of these projects will help to both reduce flooding and sewer backups in the combined sewer area that occur as a result of extreme wet weather events.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

HOLMES RUN TRUNK SEWER

DOCUMENT SUBSECTION: Sanitary Sewers	PROJECT LOCATION: AlexRenew Plant to the City/Fairfax Border
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Citywide
	PROJECT CATEGORY: 3
	ESTIMATE USEFUL LIFE: 30+ Years

Holmes Run Trunk Sewer													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	3,453,863	3,453,863	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Cash Capital	500,000	500,000	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Sanitary)	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	2,853,863	2,853,863	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	3,453,863	3,453,863	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Prior year funding totaling \$5.6 million transferred from this project to support the AlexRenew Wastewater Treatment Plant Capacity project's purchase of capacity from Fairfax County. Project maintains sufficient balances to meet current project scope.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for an increase in capacity in the Holmes Run Trunk Sewer (HRTS) line, which is owned and operated by Alexandria Renew Enterprises (AlexRenew). Both the City of Alexandria and Fairfax County send wastewater flows to this sewer and share in the capacity of this sewer. The City has a sanitary sewer Service Agreement with AlexRenew that provides for peak flow capacities in this sewer, as well as the other AlexRenew interceptor sewers.

Increased capacity is required to support development occurring in the Eisenhower Valley, as well as future development and redevelopment in the West End. In 2008, the western portion of the trunk sewer from I-395 to Cameron Run was lined for additional capacity. Additional follow-up engineering and analysis has determined further improvements are needed to address long term capacity issues.

Engineering analysis between the City, Fairfax County, and AlexRenew was completed in FY 2017 which evaluated capacity issues in the HRTS, and provided a recommendation to enlarge an existing parallel, Fairfax County Holmes Run Sewer so that flows from the AlexRenew HRTS could be diverted to this sewer. Enlargement of the Fairfax County Holmes Run Sewer are proposed from the City/County line to Cameron Run, where the Fairfax sewer discharges in the the AlexRenew HRTS. A subsequent study was completed in FY 2019 that confirms construction of this sewer will have sufficient capacity to serve the proposed growth as anticipated in the Eisenhower West Small Area Plan. This study also included analysis of the Fairfax County Backlick Sewers, located in the City, and concluded that no infrastructure improvements would be required. The timing of the capacity upgrades is anticipated sometime after 2025. Design of the capacity upgrades is anticipated to be completed in two years and construction in three years.

The City, Fairfax County and AlexRenew are working to update the 2017 and 2019 studies by installing flow meters in the sewer system and recalibrating the AlexRenew sewer interceptor model. The update will also include a reevaluation of the project alternatives and selection of a project to move forward to design and construction, if necessary. Additional funding for design and construction will be included in a future year CIP and will be based on a cost sharing agreement between the City, Fairfax County and AlexRenew.

Completion of this project will help mitigate any potential sanitary sewer overflows during periods of wet weather. Additionally, the project will improve the City's readiness for accommodating quality economic growth.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

PITT AND GIBBON COMBINED SEWER CAPACITY PROJECT

DOCUMENT SUBSECTION: Sanitary Sewers	PROJECT LOCATION: Gibbon St. between S. Pitt and S. Royal
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Old Town
	PROJECT CATEGORY: Category 3
	ESTIMATE USEFUL LIFE: 30+ years

Pitt and Gibbon Combined Sewer Capacity Project													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	4,000,000	4,000,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Sanitary Sewer Fund	4,000,000	4,000,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	4,000,000	4,000,000	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Funding totaling \$24.0 million originally planned for FY 2028 has been removed from this project, based upon changes in scope to this project. Prior year balances are sufficient for the property-level flood mitigation efforts now being considered.

PROJECT DESCRIPTION & JUSTIFICATION

This project is for the design and implementation of capacity upgrades of an existing combined sewer along Gibbon Street between South Pitt and South Royal Streets and along Royal Street to the Royal Street combined sewer outfall. This project is in response to stormwater flooding into residential homes that occur as a result of significant wet weather, including flooding events that took place July 2019, July and September 2020, August 2021, and August 2023. During these high intensity storm events, the existing combined sewer capacity is exceeded and overflows out of manholes near the intersection of Pitt and Gibbon Streets, floods Gibbon Street and then into adjacent homes (basements and first floors). A total of 2,520 feet of new combined sewer infrastructure is proposed with this project in order to alleviate flooding. This project is being implemented as part of the City's Flood Action Program.

Work done to date includes an initial planning study to identify alternatives aimed at addressing the flooding, which lead to an alternatives evaluation. Alternatives evaluated included storage, storm sewer separation, pipe upsizing and a combination of these alternatives. The recommended alternative selected was upsizing of the existing combined sewer, based on effectiveness and constructability. Following the alternatives evaluation, a sewer hydraulic model was developed to determine the sizing needed in order to mitigate flooding for the 10-year 24-hour storm event. In order to build the model, field survey data of the existing sewer system was collected, along with other utilities in the project corridor area. Verification of the model was performed using an existing depth meter in the sewer.

The results of the modeling work indicated that upsizing the combined sewer system would not be successful in mitigating flooding due to size constraints and other structure constraints downstream of the project area. A meeting was held with residents in the area to discuss the results of the study work and next steps forward. The City is now evaluating what property-level floodproofing measures can be taken to protect residents in the area and is developing a property-level flood mitigation program. This effort is focused on identifying practical and implementable strategies to reduce flood risk for affected properties.

A total of \$4.0 million was programmed for design in FY 2026. Funding in FY 2028 has been removed as it is estimated that the \$4.0 million in prior year programming will be sufficient to provide for property-level flood mitigation. The City continues to provide updates on this project to the Stormwater Utility and Flood Mitigation Advisory Group, along with neighboring residents.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

RECONSTRUCTIONS & EXTENSIONS OF SANITARY SEWERS

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 30+ Years

Reconstructions & Extensions of Sanitary Sewers													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	29,275,658	20,275,658	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
Financing Plan													
Cash Capital	2,173,980	2,173,980	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Sanitary)	11,468,253	3,913,253	750,000	875,000	750,000	750,000	680,000	750,000	750,000	750,000	750,000	750,000	7,555,000
Sanitary Sewer Fund	15,633,425	14,188,425	150,000	25,000	150,000	150,000	220,000	150,000	150,000	150,000	150,000	150,000	1,445,000
Financing Plan Total	29,275,658	20,275,658	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the construction of new sewer mains, the replacement of old sewer lines as needed, sewer improvements that can help address capacity constraints, repairs to City streets disturbed by sewer line repairs, and reconstruction and funds for the City's share of the cost of sewer extensions required for development.

Some projects are in early planning stages, while others are currently in design and construction. Obstacles to construction may include the moving of buried utility lines, such as power, water, and gas lines by the various utility owners that if not moved would interfere with the construction.

Projects currently in the design or construction phase (either active construction or construction procurement) include:

100 block Strand Street

- Taylor Run Sewer Relocation to accommodate the CSX 4th Rail Project
- N Saint Asaph Street/Madison Street Sewer Improvements

Completion of these projects improves the City's sanitary sewer infrastructure while reducing the frequency of unplanned repairs due to deferred maintenance.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER ASSET RENEWAL PROGRAM

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE: 30+ Years

Sanitary Sewer Asset Renewal Program													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	56,389,998	21,389,998	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000
Financing Plan													
Cash Capital	117,707	117,707	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Sanitary)	34,370,000	1,250,000	3,500,000	3,500,000	3,375,000	3,375,000	3,000,000	3,140,000	3,240,000	3,175,000	3,330,000	3,485,000	33,120,000
Sanitary Sewer Fund	21,902,291	20,022,291	-	-	125,000	125,000	500,000	360,000	260,000	325,000	170,000	15,000	1,880,000
Financing Plan Total	56,389,998	21,389,998	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

The City’s sanitary sewer system is comprised of over 240 miles of sewer line, some lines dating back over 100 years. This program provides for annual inspection, condition assessment, and rehabilitation of sanitary sewers, City-owned lateral sewers, and sewer appurtenances as part of an ongoing sewer asset management initiative.

This program provides for closed circuit television (CCTV) inspection of all sewers and City-owned laterals and visual inspection of all sewer appurtenances (manholes and other structures). Inspections will be performed with a goal of inspecting 10 percent of the system each year. The condition of all sewers and sewer appurtenances will be assessed using industry standards of cataloguing inspections and recommendations will be made as to which sewers and sewer appurtenances are vulnerable to breakage or collapse. Sewers and sewer appurtenances that are vulnerable will be rehabilitated primarily using trenchless technologies, which are significantly less costly than dig-and-replace repairs.

A summary of ongoing work related to the program is provided below:

- Phase 1 (areas generally east of Commonwealth Avenue) – rehabilitation (construction) phase has been ongoing since October 2023. All sanitary sewer mains and manholes have been rehabilitated. Rehabilitation of City-owned laterals is scheduled for construction in FY 2027.
- Phase 2 (areas generally between Commonwealth Avenue and Russell Road) – inspections have been completed and design drawings have been prepared. Construction is anticipated to begin in on sewer mains and manholes in FY 2027.
- Phase 3 (areas generally within the North Ridge neighborhood) – inspections have been completed, and the data collected is currently under review. The project will transfer to the design phase in FY 2027.
- Phase 4 inspections (Braddock Heights, Park Fairfax and Arlandria) were completed in FY 2026, and the inspections are currently being reviewed. This review will be completed in FY 2027 and the project will be transferred to the design phase in FY 2028.

Implementation of this project improves the City’s sanitary sewer infrastructure and extends the infrastructure’s useful life by reducing the potential of pipe collapse and other emergency repairs. Additionally, this project will help reduce the amount of infiltration and inflow (I&I) into the sanitary sewer system, which helps reduce the frequency and magnitude of sanitary sewer overflows and sewer back-ups into homes and businesses.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER ENTERPRISE MAINTENANCE MANAGEMENT SYSTEM OPTIMIZATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Sanitary Sewer Enterprise Maintenance Management System Optimization													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	10,065,000	3,090,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	-	-	6,975,000
Financing Plan													
Sanitary Sewer Fund	10,065,000	3,090,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	-	-	6,975,000
Financing Plan Total	10,065,000	3,090,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	-	-	6,975,000

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the development and implementation of a plan to optimize how Cityworks (City’s enterprise maintenance management system) is utilized to meet existing asset management needs related to over 240 miles of sanitary and combined sewer located in the City. Due to the similarities between sanitary, combined, and stormwater infrastructure, this project will also include asset management optimization for stormwater infrastructure. Ultimately, this effort will result in a system that can also be used for asset management of other City public infrastructure, including transportation.

Program funding for this initiative started in FY 2025, with much of the initial work being performed by outside technical consultants and being managed jointly between T&ES and IT departments. Funding will also be required at the project startup to invest in additional Cityworks software modules and programming, along with other programs that support Cityworks, including GIS.

This project aims to achieve the following:

- Develop a robust asset inventory of City-owned sewers.
- Identify the risk for failure for sewer assets, including the likelihood and failure and the consequence.
- Utilize the asset management system, along with subject matter expertise, to optimize schedules for inspections and preventative maintenance.
- Facilitate efficient capital improvement planning over the long term.
- Make information accessible within the organization and with stakeholders, including the community.

The benefit of having an optimized asset management program is to save money in the long-term by optimizing funding towards proactive maintenance rather than reactive maintenance, including costly sewer point repairs and replacement projects. It will also allow staff to make more data-based decisions by utilizing predictive modeling.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER STREAM CROSSING PROTECTION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Sanitary Sewer Stream Crossing Protection													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	6,051,700	3,757,700	1,641,000	-	150,000	-	158,000	-	168,000	-	177,000	-	2,294,000
Financing Plan													
Sanitary Sewer Fund	6,051,700	3,757,700	1,641,000	-	150,000	-	158,000	-	168,000	-	177,000	-	2,294,000
Financing Plan Total	6,051,700	3,757,700	1,641,000	-	150,000	-	158,000	-	168,000	-	177,000	-	2,294,000

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2035.

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund sanitary sewer inspections in stream areas, along with design, construction, and construction management for those sanitary sewers at risk of breakage due to erosion of stream areas. In 2020, the City embarked on a project to inspect all sanitary sewers located in stream areas. These inspections included CCTV inspections of sanitary sewers, along with performing field inspections to review the external condition of the sanitary sewer and sewer assets. A report was finalized in 2023 that provided an analysis of the likelihood and consequence of potential failure of the sanitary sewers and prioritized a list of sewer segments to be considered for enhanced protection.

The sanitary sewer determined most at-risk crosses Holmes Run just upstream of I-395. The pipe is exposed within the stream as the concrete armoring has cracked with portions broken off. The downstream sewer segment has also been undermined by erosive forces as well. It is recommended that these two sewer segments be protected and encased. The project is currently in the design phase, with design to be completed in FY 2027 and construction to start in FY 2028. Funding will also be used to provide sewer armoring for two crossings along Taylor Run, which is currently in the design phase.

This project also provides for periodic inspections of these sewers. The CIP may be updated in the future to include additional projects based on the results of these inspections.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER WET WEATHER MITIGATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Sanitary Sewer Wet Weather Mitigation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	11,000,000	5,500,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,500,000
Financing Plan													
GO Bonds (Sanitary)	3,971,844	49,471	712,373	470,000	345,000	355,000	195,000	320,000	405,000	370,000	375,000	375,000	3,922,373
Sanitary Sewer Fund	7,028,156	5,450,529	287,627	30,000	155,000	145,000	305,000	180,000	95,000	130,000	125,000	125,000	1,577,627
Financing Plan Total	11,000,000	5,500,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,500,000

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund the design, construction, and construction management of a variety of sanitary sewer upsizing projects in areas of the City where sewer backups have been documented to occur as a result of extreme wet weather. This project follows a study that was completed in 2021 which identified areas where sewer upsizing may be feasible in an effort to reduce the impacts of sanitary sewer backups. Survey data was collected for five of the identified areas and moved forward for design and construction. Construction was completed in FY 2026 for the following four areas:

- 300 block Ashby Street
- 500 block E Alexandria Avenue
- 000-100 block E Maple Avenue
- 200-300 block E Oak Street

It should be noted that the 100 block of Raymond Avenue was removed from the above project and upsizing of this sewer has been included as part of the Hume Avenue Storm Drain Bypass Project.

A review of other areas subject to sanitary sewer backups is currently ongoing and will be added to the CIP as these projects are identified and developed. Completion of these projects will help to reduce the potential for sanitary sewer backups that occur as a result of extreme wet weather events. Funding is provided for on an annual basis and funding adjustments may be needed each year based on the identification of future projects.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STAFF RELOCATION TO ALEXRENEW

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 1500 Eisenhower Ave.
 REPORTING AREA: Southwest Quadrant

PROJECT CATEGORY: Category 3
 ESTIMATE USEFUL LIFE: Varies

Staff Relocation to AlexRenew													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C/L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	1,607,000	1,607,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Sanitary Sewer Fund	1,607,000	1,607,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	1,607,000	1,607,000	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

AlexRenew, the wastewater treatment authority of the City of Alexandria and parts of Fairfax County has offered to enter into an agreement that will provide the City 5,600 square feet of office space in the Environmental Center at the AlexRenew headquarters located at 1800 Limerick Street. The space would provide for the relocation of the Department of Transportation and Environmental Services’ (T&ES) Office of Environmental Quality, including approximately 30 staff, from their current location at 2900 Business Center Drive. The 10-year agreement with AlexRenew has been executed. As part of this agreement, the City provided \$1.5 million in capital funding to support necessary improvements to the space. In lieu of rent, the City will also provide an annual \$25,000 operating payment to AlexRenew, which will support their Lifeline Emergency Assistance Program (LEAP). . There will be no additional rent or operating costs incurred by the City for the use of this space.

The relocation of these City operations from 2900 Business Center Drive will not only allow for regular City engagement with relevant AlexRenew operations but will provide the space required to relocate other T&ES operations from City Hall to the vacated space at 2900 Business Center Drive. The relocation of T&ES staff from City Hall will provide additional space to accommodate the results of the space planning and reconfiguration that will occur during the City Hall renovation project.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.