

# **Stormwater Capital Improvement Program**



Report Date 05/13/24

The City of Alexandria's Stormwater Capital Improvement Program Schedule shows planned improvements to the City's storm sewer system. The City's Departments of Project Implementation and Transportation and Environmental Services develop this schedule using information from hired experts, best practices for project management and lessons learned from previous projects. The schedule shows when each project is complete. Project schedules may be impacted by changes in the funding plan, availability of contractors, conflicts with utilities, grant terms or unexpected problems. This version of the schedule shows progress through the report date.

#### Report Definitions

- Project Webpage URL link to the project's public webpage where you can find the most up to date information on the project's progress.
- · Project Description Description of the purpose of the project and/or problem it intends to address.
- Current Phase Designates which of the three phases the project is currently in. Each project progresses through three phases: planning, design, and construction.
- Total Planned Budget The total of prior and current fiscal year authorized funds plus future planned funds through year 10 in the current approved CIP Budget.
   Funding Sources Where the project funding is coming from.
- - · SWU City of Alexandria Stormwater Utility Fee
  - · ARPA Federal Government American Rescue Plan Act
  - CFPF Virginia State Community Flood Preparedness Fund
  - HUD Federal Housing & Urban Development Community Project Fund
  - · SSF Sanitary Sewer Fund
- · Schedule Shown in calendar year, the schedules displays the current timeline for each phase of the project.

# 4300 Block of Loyola Avenue Storm Sewer Upgrade

#### **Project Webpage**

#### **Project Description**

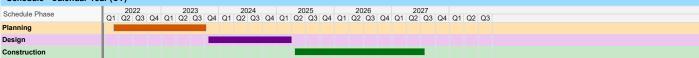
https://www.alexandriava.gov/FloodAction

This project will replace the existing open storm sewer at 4300 block of Loyola Avenue with an enclosed storm sewer

#### **Project Information**

**Current Phase:** Design Total Planned Budget: \$836.500.00 **Funding Sources:** SWU

#### Schedule - Calendar Year (CY)



### **Bellefonte Ave Storm Drain Improvements**

# **Project Webpage**

#### **Project Description**

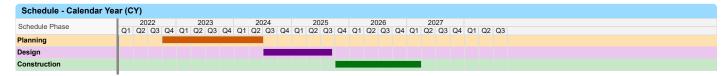
https://www.alexandriava.gov/capital-projects/project/bellefontenue-storm-drain-improvements

The project improves the storm sewer system in E Bellefonte Ave & E Howell Ave to mitigate neighborhood flooding from intense rain events.

#### **Project Information**

**Current Phase:** Planning Total Planned Budget: \$1,564,869.29

**Funding Sources:** 



# Clifford Ave, Fulton St. & Manning St. (CFM) Storm Sewer Improvements

#### **Project Webpage**

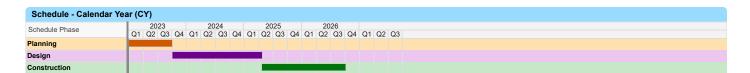
https://www.alexandriava.gov/capital-projects/project/clifford-avenue-fulton-street-and-manning-street-storm-sewerimprovements

# **Project Information**

**Current Phase:** Design Total Planned Budget: \$780,000.00 **Funding Sources:** SWU, HUD (Beyer)

#### **Project Description**

The Clifford Avenue, Fulton Street and Manning Street (CFM) Storm Sewer Improvements Project will provide flooding mitigation to townhouses along the 3000 block of Fulton Street and Manning Street. The alley bound between the two streets will be re-built to channelize surface flow and improve drainage. Inlets and underground storage will be installed to capture and attenuate stormwater runoff. Utility impacts will be identified and resolved during the design phase.



# **Edison St. Storm Sewer Upgrades**

#### **Project Webpage**

https://www.alexandriava.gov/stormwater-management/edison-street-and-dale-street-early-phase

#### **Project Information**

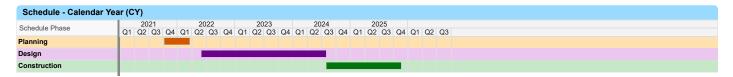
Current Phase: Design

Total Planned Budget: \$979,000.00

Funding Sources: SWU, CFPF

#### **Project Description**

Edison St. Storm Sewer Upgrades Project proposes to upgrade the storm sewer system capacity along the 3800 block of Edison Street to the outfall in Four Mile Run Park. Additional inlets are proposed along Edison Street to increase storm water capture. These storm sewer improvements are a portion of the future Large Capacity Project – Edison and Dale that have been accelerated with Virginia Community Flood Preparedness Fund (CFPF) prior to the funding becoming available in FY 2026.



### Four Mile Run and Hoofs Run Inlet Installation and Enhancement

#### **Project Webpage**

 $\label{lem:https://www.alexandriava.gov/capital-projects/project/four-mile-run-and-hooffs-run-inlet-installation-and-enhancement$ 

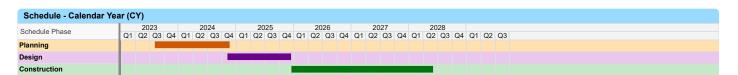
#### **Project Information**

Current Phase: Planning
Total Planned Budget: \$1,584,100.00

Funding Sources: SWU

#### **Project Description**

This project will focus on comprehensive analysis of the existing stormwater inlet capacity across Four Mile Run and Hoofs Run watersheds. By evaluating the capacity of existing stormwater inlets within these two watersheds, this project will provide recommendations on installing or replacing inlets to mitigate local flash floods and to enhance the overall conveyance efficiency of the storm sewer system. The project receives funding from the City's Stormwater Utility and the Virginia Community Flood Preparedness Fund (CFPF) grant.



# **Hume Ave Stormdrain Bypass**

#### **Project Webpage**

https://www.alexandriava.gov/tes/hume-avenue-bypass-project

#### **Project Information**

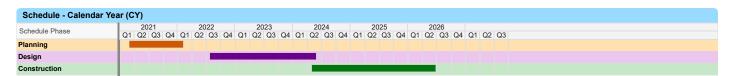
Current Phase: Design

Total Planned Budget: \$4,567,216.00

Funding Sources: SWU, ARPA

#### **Project Description**

The Hume Avenue Storm Sewer Bypass Project will install storm sewer and inlets along the 100 block of Hume Avenue and E. Raymond Avenue. The addition of a new utility within each right-of-way requires the relocation of gas, electric, water and sanitary systems. On E. Raymond Avenue the sanitary sewer will be upgraded to a larger pipe in tandem with its re-location. Hume Avenue will be re-built to restore conveyance along the curb and gutter.



# Large Capacity - Commonwealth Ave & E.Glebe/Ashby St & Glebe Rd

#### **Project Webpage**

https://www.alexandriava.gov/stormwater-management/commonwealth-ashby-glebe-flood-mitigation-project

# **Project Description**

This project will improve storm sewer system to mitigate flooding for the future 10-year design storm at two problem areas: the intersection of Commonwealth Ave and Ashby St, and at the intersection of Ashby St and E Glebe Rd

### **Project Information**

Current Phase: Design
Total Planned Budget: \$47,256,858.00
Funding Sources: SWU, CPFP

Schedule - Calendar Year (CY)

Schedule Phase

2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
Planning
Design

Construction

# **Large Capacity - Hooffs Run Culvert Bypass**

#### **Project Webpage**

https://www.alexandriava.gov/stormwater-management/hooffs-run-culvert-bypass-project

#### **Project Information**

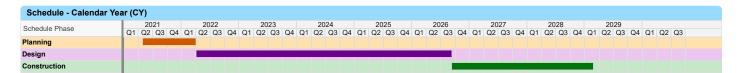
Current Phase: Design

Total Planned Budget: \$59,315,200.00

Funding Sources: SWU

#### **Project Description**

This project involves stormwater system improvements to reduce flooding along the alignment of the existing Hooffs Run culvert. The improvements may include a combination of storage, large conveyance storm sewers, and green infrastructure to reduce flood risk. The design of these systems will consider the impact of climate change.



# Mt Vernon and Edison Dual Culvert Replacement Project

#### **Project Webpage**

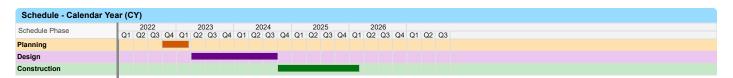
https://www.alexandriava.gov/stormwater-management/mount-vernon-dual-corrugated-metal-pipe-cmp-culvert-replacement-project

### **Project Information**

Current Phase: Design
Total Planned Budget: \$2,500,000.00
Funding Sources: SWU, CFPF

#### **Project Description**

The project upgrades an existing Dual Corrugated Metal Pipe (CMP) culvert system to convey larger storm events, reducing the chance of surcharging in Mount Vernon Avenue. The project receives funding from the City's Stormwater Utility and a grant from the Virginia Community Flood Preparedness Fund (CFPF).



# Mt. Vernon Cul-de-sac Inlets and Alley Storm Sewer Improvements

#### **Project Webpage**

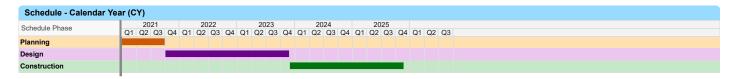
https://www.alexandriava.gov/capital-projects/project/mt-vernon-cul-de-sac-inlets-and-alley-storm-sewer-improvements

## **Project Information**

Current Phase: Construction
Total Planned Budget: \$1,232,784.00
Funding Sources: SWU, ARPA

#### **Project Description**

The Mt. Vernon Cul-de-sac Inlets and Alley Improvements Project will provide flood mitigation for townhomes on the 100 block of Mt. Vernon Avenue. Inlets and underground storage vaults will be installed on Mt. Vernon Avenue and it's adjacent alleyway to capture and attenuate storm water runoff. In tandem with work, the alleyway will be re-graded to improve surface drainage into the downstream swale. The addition of new underground utilities requires the relocation of the local water utility.



# **N** Overlook Drainage Improvements

#### **Project Webpage**

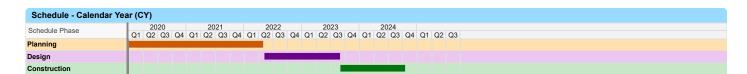
 ${\tt https://www.alexandriava.gov/capital-projects/new-capital-project-webpage-under-construction}$ 

### **Project Information**

Current Phase: Construction
Total Planned Budget: \$387,979.35
Funding Sources: SWU

#### **Project Description**

Runoff from N Overlook Dr flows to a driveway access between 701 N Overlook Dr and 615 N Overlook Dr. Runoff overtops the north curb of the driveway access and flows towards Pullman Pl. This project will increase inlet capture and storm sewer capacity to mitigate flooding for the 10-year storm. In addition, project will ensure no increases in downstream storm sewer for the 10-year storm.



# **Nethergate Storm Sewer Improvements**

#### Project Webpage

https://www.alexandriava.gov/capital-projects/project/nethergate storm-sewer-improvement

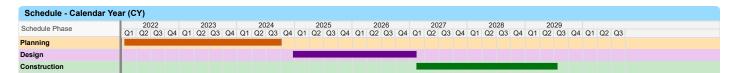
#### **Project Information**

**Current Phase:** Planning \$1,431,583.85 **Funding Sources:** 

# **Project Description**

The purpose of this project is to mitigate flooding in the Nethergate Townhome community based on reports from residents after intense rainfall events. The project area is bound by Bashford Ln to the north, Second St. to the south, Portner Rd to the west and W Abingdon Dr to the east. As part of this project, the design team will analyze hydraulic capacity of the existing storm sewer, and develop alternatives to mitigate flooding.

# Total Planned Budget:



### Oakland Terrace Timber Branch Channel Wall Replacement

#### **Project Webpage**

https://www.alexandriava.gov/capital-projects/project/oakland-terrace-timber-branch-channel-wall-reconstruction terrace-timber-branch-cha

#### **Project Information**

**Current Phase:** Construction

#### **Project Description**

This project replaces approximately 205 linear feet of an existing concrete retaining wall with a vegetative reinforced revetment and bioengineered soil.

**Total Planned Budget:** \$2,500,000.00 **Funding Sources:** SWU

#### Schedule - Calendar Year (CY) 2020 2021 2022 2023 2024 2025 2026 2027 Q1 Q2 Q3 Q4 Q1 Schedule Phase Planning Design Construction

# Pitt and Gibbon Combined Sewer Surcharging Mitigation

#### Project Webpage

https://www.alexandriava.gov/capital-projects/project/pitt-and-gibbon-combined-sewer-surcharging-mitigation

SSF

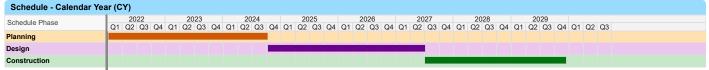
### **Project Information**

**Funding Sources:** 

**Current Phase:** Planning Total Planned Budget: \$28,483,347.00

# **Project Description**

Mitigate private property overland flooding occurring during high intensity rainfall events that cause combined sewer manhole surcharging near the intersection of South Pitt and Gibbon Streets. Project solutions developed and implemented shall meet the City's design standards for a 10-year storm.



# S Jordan St. Stormwater Improvement Phase II

#### **Project Webpage**

https://www.alexandriava.gov/capital-projects/project/s-jordon-ststormwater-improvement-project-phase

#### **Project Information**

**Current Phase:** Planning Total Planned Budget: \$530.000.00 **Funding Sources:** 

#### **Project Description**

This project will design a solution to reduce backyard flooding risk to the maximum extent practicable on the north side of the block of 95 to 127 South Jordan Street. After the field investigation, reviewing CCTV recordings and reading the consultants recommendations, two small scale projects were identified as Phase-1 and Phase-2 projects. Few minor repair works are recommended for Phase -1, which will be completed by Public Works Services team. Phase 2 work with private property owners along S Jordan St and 4600 Duke to improve the existing swale and conveyance on private property. The City will plan to obtain a 15-ft. wide permanent easement the storm drain system in this neighborhood as part of Phase II projects. Obtaining an easement will allow the City to provide maintenance to the storm drain system without having to request permission.

## Schedule - Calendar Year (CY)

2023 2024 2025 2026 2027 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Schedule Phase Design Construction

# **Valley Drive Storm Drain Improvements**

#### **Project Webpage**

https://www.alexandriava.gov/capital-projects/project/valley-drive-storm-drain-improvements

# Project Information

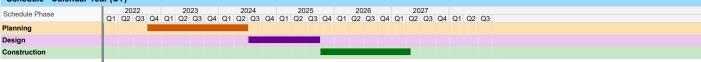
Current Phase: Planning
Total Planned Budget: \$3,639,999.29

Funding Sources: SWU

#### **Project Description**

The project improves the storm sewer system in Valley Drive & Crestwood Drive to mitigate neighborhood flooding from intense rain events.

### Schedule - Calendar Year (CY)



# W. Reed Ave & Dale St Storm Sewer Improvements

#### **Project Webpage**

https://www.alexandriava.gov/stormwater-management/edison-street-and-dale-street-early-phase

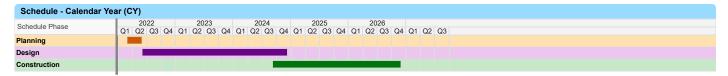
#### **Project Information**

Current Phase: Design
Total Planned Budget: \$2,230,000.00

Funding Sources: SWU

# **Project Description**

W. Reed Ave & Dale St. Storm Sewer Improvements Project proposes new inlets and storm sewer along the 100 block of W. Reed Ave and capacity improvements along the downstream system to the outfall in Four Mile Run Park. These storm sewer improvements are a portion of the future Large Capacity Project – Edison and Dale that have been accelerated with Virginia Community Flood Preparedness Fund (CFPF) prior to the funding becoming available in FY 2026.



# **Forecasted Projects**

The table below lists upcoming projects and the start date for associated planning activities

Project Name	Project Description	Start Quarter/Year
E. Alexandria & E. Luray Ave Curb Inlets	This project will upsize existing inlets to increase runoff capture and reduce spread at the intersection of E. Alexandria and E. Luray Avenue. This potential project was identified during Neighborhood Investigations. Feasibility and solution are dependent on the Hooffs Run Culvert Bypass.	2025 Q3
E. Mason Ave & E. Duncan Ave Stormdrain Connection	This project will install a new pipe run connecting the Duncan Avenue and East Mason Avenue storm sewer system to better service both neighborhoods. This potential project was identified during Neighborhood Investigations. Feasibility and solutions are dependent on the Hooffs Run Culwet Bypass.	2025 Q3
E. Mason Ave Curb Inlets	This project will upsize existing inlets to increase runoff capture if underlying pipes have adequate capacity. However, the feasibility of this potential project identified during Neighborhood Investigations is dependent on the Hooffs Run Culvert Bypass.	2025 Q3
E. Mason Ave Stormdrain Extension	This project will add additional storm sewer and inlet capture to mitigate flooding north of E. Mason Ave. This potential project was identified during Neighborhood Investigations. Feasibility and solutions are dependent on the Hooffs Run Culvert Bypass.	2025 Q3
Skyhill Rd. Stormdrain Extension	This project will install a new pipe run and inlets along Skyhill Rd. to improve the neighborhood's drainage. This potential project was identified during Neighborhood Investigations.	2025 Q3
Walleston Court Stream Stabilization	Stabilize eroding banks of approximately 900-feet of unnamed tributary to Taylor Run along Francis Hammond Parkway in the Walleston Court neighborhood. Work will be done within the existing City easement.	2025 Q3