

Stormwater Utility and Flood Mitigation Advisory Committee

May 14, 2025 Meeting

Tonight's Agenda

1. Welcome (7:00pm, 5 min)
2. Approval of minutes (7:05pm, 5 min), John
3. Discussion of FY2026 Budget as approved and Committee's Annual Report, (7:10, 10min, Councilman Chapman & John Hill)
4. Program update from City Staff (7:20pm, 40 min, City staff)
 - Large capacity projects: Commonwealth/Ashby/Glebe; Hooffs Run Culvert, Pitt & Gibbon
 - Spot Improvements
 - Sanitary Sewer
 - Communications
 - Maintenance
 - Flood Mitigation Grant program
5. Flood Resiliency Plan (8:05pm, 10min, Jessica Lassetter, City staff)
6. Discussion of Homeowners' Project Cost Associated with Mitigation Grants (8:15, 20min, all)
7. Summer Homework (8:35pm, 10min, John)
8. Public comment (8:45pm, 15 min)
9. Adjourn (9:00pm)

Welcome remarks

AGENDA ITEM #1

Approval of Minutes

AGENDA ITEM #2

FY2026 Budget as approved and Committee's Annual Report

AGENDA ITEM #3

Program Update from City Staff

AGENDA ITEM #4

Flood Action Progress Report: Commonwealth, Ashby, Glebe

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

Project Webpage

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

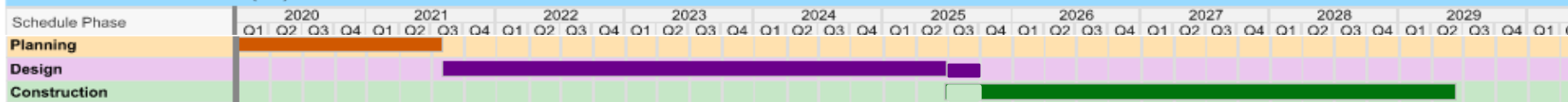
Project Description

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: \$47,166,354.00
Funding Sources: SWU, CFPF

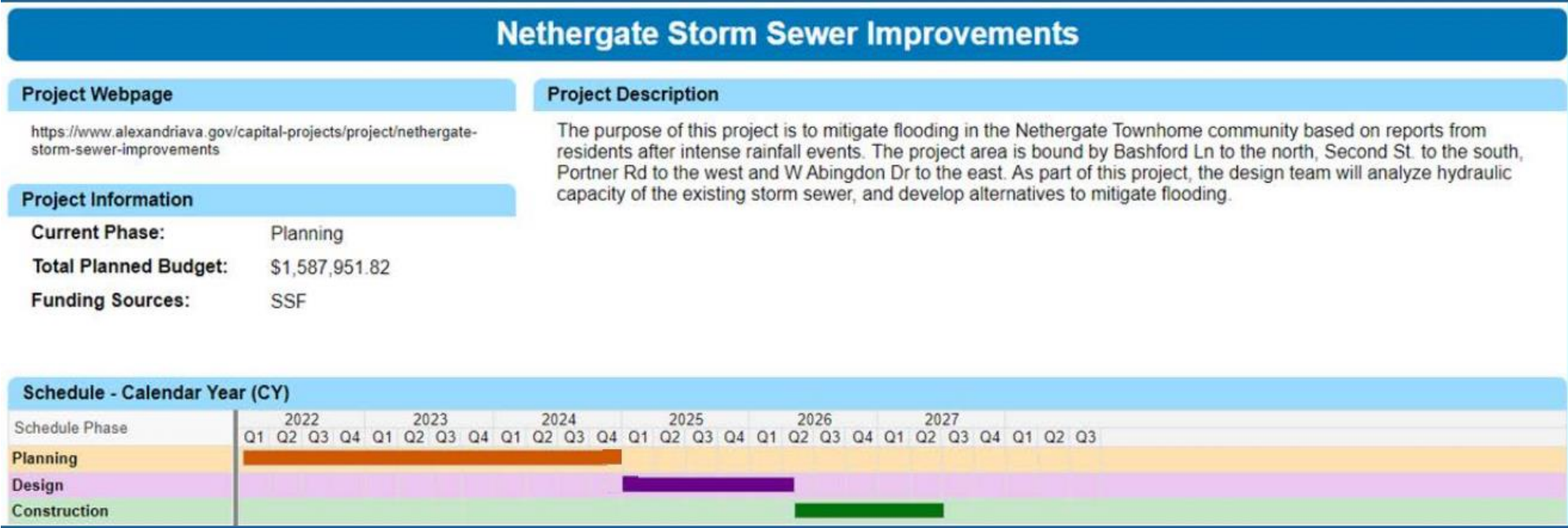
Schedule - Calendar Year (CY)



- 90% Submission received early May
- Utility test pits completed in April
- Continued utility coordination
- Met with Lynhaven, Del Ray, and Auburn Village Civic Associations in April
- Design completion anticipated in late Summer/early fall

Flood Action Progress Report: CSS

- Pitt & Gibbon (\$20-25M) CSO surcharge mitigation. Project team reviewing alternatives to mitigate flooding.
- Nethergate (\$5M) CSO surcharge mitigation. Design consultant selected. Negotiating scope and fee prior to kickoff. Design kickoff anticipated in late spring/early summer



Flood Action Progress Report: Hooffs Run Culvert Bypass Project

- City staff continues evaluation of potential alternatives

Flood Action Progress Report: Neighborhood Spot Projects

Bellefonte Ave Storm Drain Improvements

Project Webpage

<https://www.alexandriava.gov/capital-projects/project/bellefonte-avenue-storm-drain-improvements>

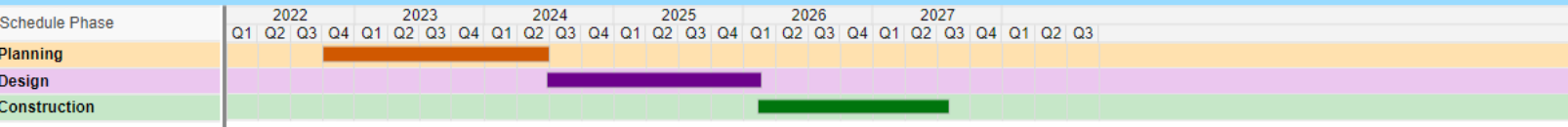
Project Information

Current Phase: Design
Total Planned Budget: \$1,564,869.29
Funding Sources: SWU

Project Description

The Bellefonte Avenue Storm Drain improvement project aims to improve the local storm drainage system along East Bellefonte Avenue and East Howell Avenue to convey the City's 10-year, 24-hour storm event . The project seeks to mitigate the impact of large storm events without worsening flooding elsewhere in the City. A federal grant application for a FY 2025 Community Directed Funding/Earmark grant administered through Housing and Urban Development (HUD) in the amount of \$1,565,000 was submitted to fund this project.

Schedule - Calendar Year (CY)



ON-GOING

- Conducted design kickoff meeting
- Received PMP, schedule, QA plan

FORECASTED

- Begin data collection
- Begin schematic design

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-sewer-improvements>

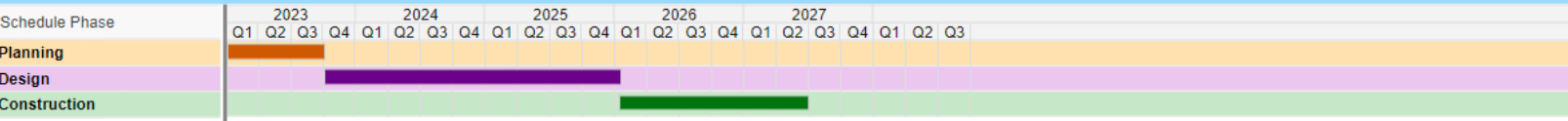
Project Information

Current Phase: Design
Total Planned Budget: \$831,630.00
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. The City received a \$420,000 in grant funding from the Housing and Urban Development (HUD) Community Project Funding to support this project.

Schedule - Calendar Year (CY)



ON-GOING

- Began 90% Design
- Continued alley pipe condition assessment
- Began utility coordination

FORECASTED

- Complete video assessment of alley pipe
- Receive 90% design

Flood Action Progress Report: Neighborhood Spot Projects

Edison St. Storm Sewer Upgrades

Project Webpage

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

Project Information

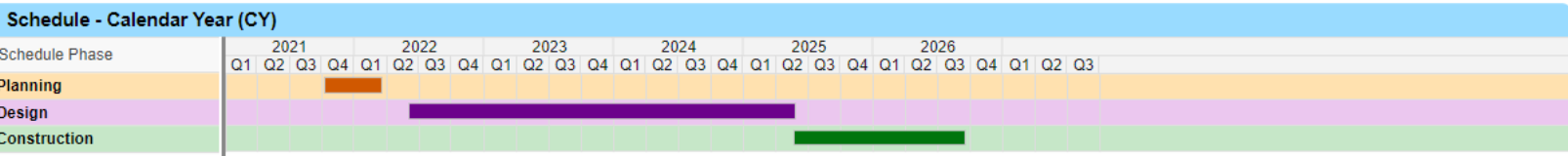
Current Phase: Design

Total Planned Budget: \$979,000.00

Funding Sources: SWU, CFPF

Project Description

The 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 upon receiving funding from Virginia Community Flood Preparedness Fund (CFPF) prior to the funding becoming available in FY 2026.



- ON-GOING**

 - Completed leadership presentation and circulating for final signatures
- FORECASTED**

 - Pre-construction community meeting
 - Continue utility coordination

Four Mile Run and Hoofs Run Inlet Installation and Enhancement

Project Webpage

<https://www.alexandriava.gov/capital-projects/project/four-mile-run-and-hoofs-run-inlet-installation-and-enhancement>

Project Information

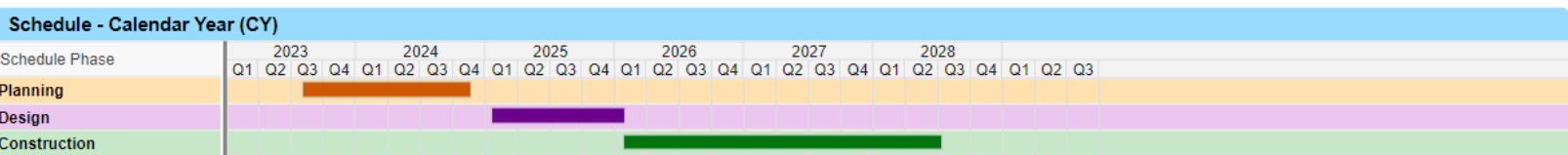
Current Phase: Design

Total Planned Budget: \$1,584,100.00

Funding Sources:

Project Description

This project will focus on comprehensive analysis of the existing stormwater inlet capacity across Four Mile Run and Hooffs Run watersheds. By evaluating the capacity of existing stormwater inlets within these two watersheds, this project will provide recommendations on installing new inlets and upsizing existing ones 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.



- ON-GOING**

 - Issued task order request to pre-qualified bidders
 - Responded to bidder questions
- FORECASTED**

 - Receive & review task order proposals
 - Begin proposal negotiations

Flood Action Progress Report: Neighborhood Spot Projects

Hume Ave Stormdrain Bypass

Project Webpage

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

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.

Project Information

Current Phase: Design
Total Planned Budget: \$5,090,289.00
Funding Sources: SWU, ARPA

Schedule - Calendar Year (CY)

Schedule Phase	2021				2022				2023				2024				2025				2026				2027				2028		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Planning																															
Design																															
Construction																															

ON-GOING

- **Dominion relocation**
- **Preparing Ting relocation**
- **Washington Gas relocation design**

FORECASTED

- **Utility test pits**
- **Complete Dominion relocation**
- **Right-of-Enter Agreement**

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 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 (CFPPF).

Project Information

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

Schedule - Calendar Year (CY)

Schedule Phase	2022				2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Planning																								
Design																								
Construction																								

ON-GOING

- **Completed environmental assessment**
- **Determined extent of culvert repairs**

FORECASTED

- **Receive 60% design**
- **Utility coordination**
- **Submit grant extension**

Flood Action Progress Report:

Neighborhood Spot Projects

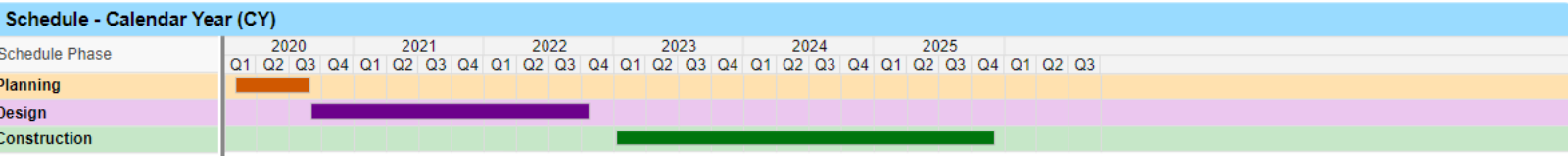
Oakland Terrace Timber Branch Channel Wall Replacement

Project Webpage
<https://www.alexandriava.gov/capital-projects/project/oakland-terrace-timber-branch-channel-wall-reconstruction>

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

Project Information

Current Phase: Construction
Total Planned Budget: \$307,854.00
Funding Sources: SWU



- ON-GOING**
 - Wall replacement complete & vegetation is establishing
 - Other construction
- FORECASTED**
 - Other construction continues

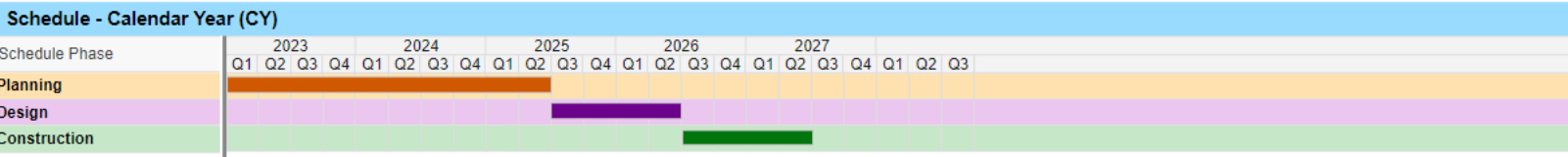
S Jordan St. Stormwater Improvement Phase II

Project Webpage
<https://www.alexandriava.gov/capital-projects/project/s-jordan-st-stormwater-improvement-project-phase-ii>

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 consultant's recommendations, one small scale project was identified. SWM team to 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 for the storm drain system in this neighborhood as part of this project. Obtaining an easement will allow the City to maintain the storm drain system without having to request permission for entry.

Project Information

Current Phase: Planning
Total Planned Budget: \$1,360,000.00
Funding Sources: SWU



- ON-GOING**
 - Continued solution modeling
 - Title search for easement along the property backyards completed
- FORECASTED**
 - Neighborhood kickoff meeting
 - Planning phase close-out

Flood Action Progress Report: Neighborhood Spot Projects

Valley Drive Storm Drain Improvements

Project Webpage

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

Project Information

Current Phase: Design
Total Planned Budget: \$3,879,999.29
Funding Sources: SWU

Project Description

The Valley Drive Storm Drain improvement project aims to improve the local storm drainage system, specifically targeting areas prone to flooding during the City's standard 10-year, 24-hour storm event along Valley Drive, Crestwood Drive, Summit Avenue, and Dogwood Drive. The project seeks to mitigate the impact of larger storm events while ensuring that improvements do not worsen flooding in other parts of the drainage system. Following City Council approval, staff is working on an application for a state Community Flood Preparedness Fund (CFPF) grant for a 60/40 match in the amount of \$2,160,000 with local Stormwater Utility funding of \$1,440,000 identified for the match.

Schedule - Calendar Year (CY)

Schedule Phase	2022			2023			2024			2025			2026			2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Planning																			
Design																			
Construction																			

ON-GOING

- Continued 30% design
- Requested property boundary review

FORECASTED

- Receive 30% design
- Begin utility relocation coordination

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.

Schedule - Calendar Year (CY)

Schedule Phase	2022				2023				2024				2025				2026							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Planning																								
Design																								
Construction																								

ON-GOING

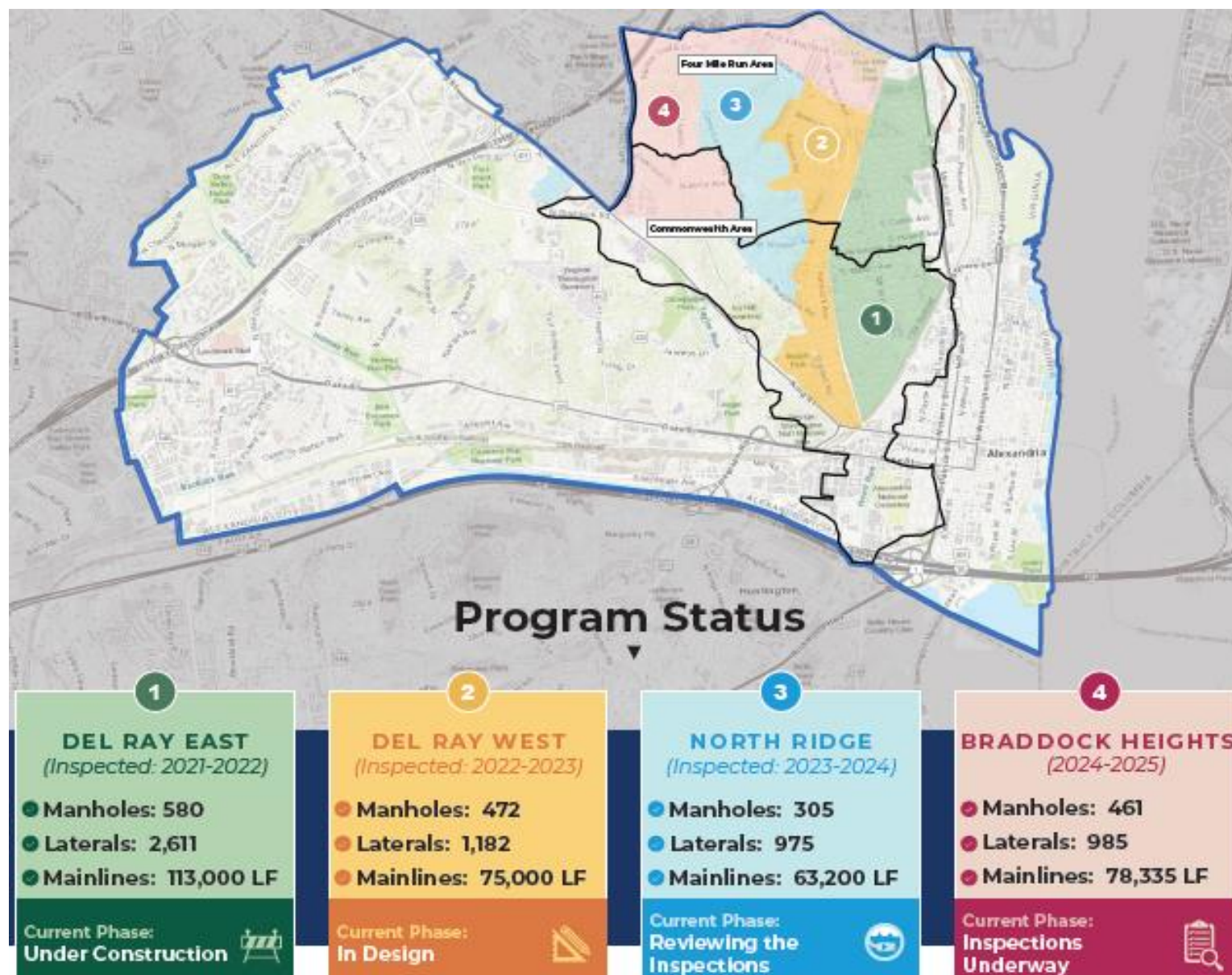
- Final storm sewer design
- Water main test pits
- Washington Gas relocation design

FORECASTED

- Utility relocation coordination
- Receive final design

Sanitary Sewer Asset Renewal Program

- **Del Ray East Manhole & Mainline Rehabilitation:**
 - Completed, closing out contract
- **Del Ray East Lateral Rehabilitation:**
 - City owns lateral sewers from mainline connection to curb pre-1955
 - Invitation to Bid (ITB) late Spring/early Summer 2025



Sanitary Sewer Backup Mitigation Projects

Sanitary Sewer Capacity Upsizing Project No. 1

Project Webpage

<https://www.alexandriava.gov/capital-projects/project/sanitary-sewer-capacity-up sizing-project-no-1>

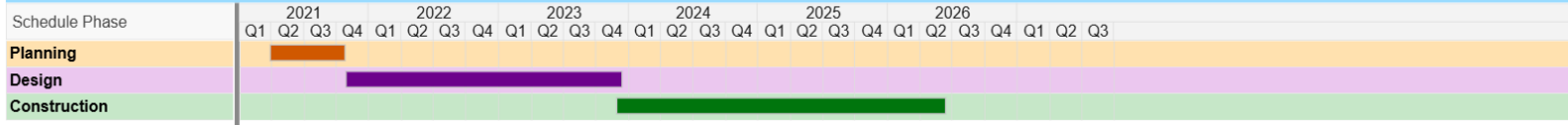
Project Information

Current Phase: Construction
Total Planned Budget: \$2,725,346.24
Funding Sources: Sanitary Sewer

Project Description

This project provides for upsizing of existing sanitary sewer pipes located at five (5) project sites. The project sites include the following: East Alexandria Avenue, Ashby Street, East Oak Street, East Walnut Street, and East Maple Street. This work is being undertaken to help mitigate sanitary sewer backups that occur as a result of significant wet weather.

Schedule - Calendar Year (CY)



ON-GOING

- **Construction underway**
- **Active construction East Maple Street**

FORECASTED

- **Mobilize to next area**
- **Construction through July 2025**

Combined Sewer Upsizing - 300/400 N Alfred St

Project Webpage

<https://www.alexandriava.gov/capital-projects/project/300-400-block-north-alfred-street-combined-sewer-up sizing-project>

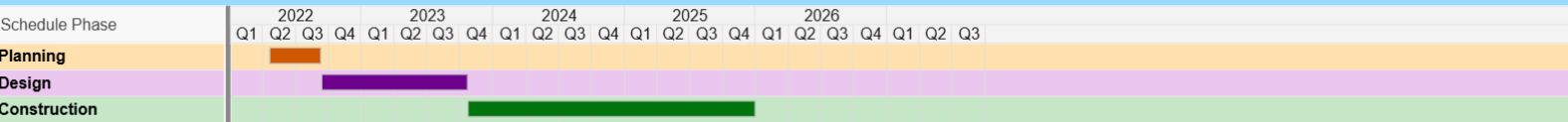
Project Information

Current Phase: Construction
Total Planned Budget: \$781,600.00
Funding Sources: Sanitary Sewer

Project Description

This project includes upsizing 758 feet of existing sanitary and combined sewers along the 300/400 blocks of N Alfred Street. This project was undertaken to address sewer backups from significant wet weather events.

Schedule - Calendar Year (CY)



ON-GOING

- **Construction underway since March 2025**

FORECASTED

- **Construction through July 2025**

Sanitary Sewer Backup Mitigation Projects

Madison St and N St Asaph St Sewer Replacement

Project Webpage

<https://www.alexandriava.gov/capital-projects/project/madison-street-and-north-saint-asaph-street-sewer-replacement>

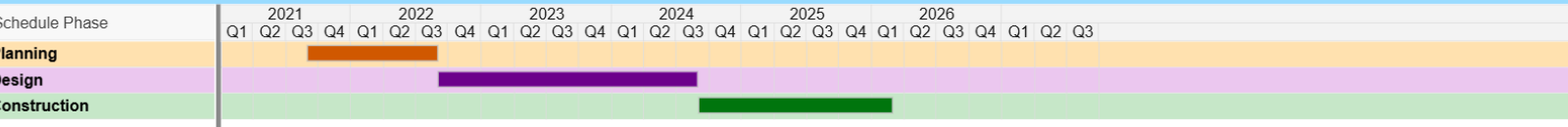
Project Information

Current Phase: Construction
Total Planned Budget: \$500,000.00
Funding Sources: Sanitary Sewer

Project Description

This project includes upsizing of the existing combined sewer and stormwater conveyance improvements at the intersection of Madison and N Saint Asaph Streets. This project is being done to help mitigate flooding in the intersection and flooding onto neighboring properties.

Schedule - Calendar Year (CY)



ON-GOING

- **Contract award March 5th**
- **Pre-construction meeting held April 14th**

FORECASTED

- **Active construction to start May-June**
- **Construction for 120 days**

600 Block of N Columbus Street Sewer Separation Project

Project Webpage

<https://www.alexandriava.gov/capital-projects/project/600-block-of-north-columbus-street-sewer-separation-project>

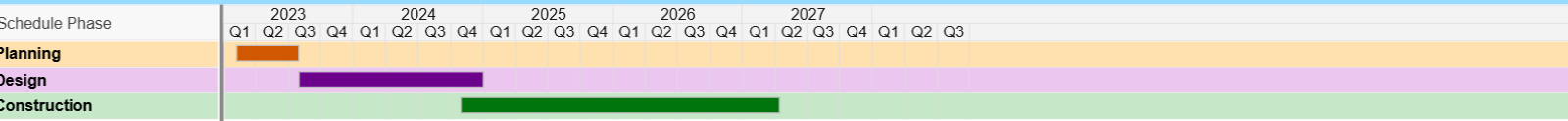
Project Information

Current Phase: Design
Total Planned Budget: \$1,001,913.28
Funding Sources: Sanitary Sewer

Project Description

This project is a sewer separation project at 600 Block of N Columbus Street where the sanitary sewer is being disconnected from the combined sewer system and reconnected to a fully separated sanitary sewer. This project is being undertaken to mitigate the potential for sewer basement backups from the combined sewer being over capacity during periods of significant wet weather.

Schedule - Calendar Year (CY)



ON-GOING

- **Design completed, transferring to construction phase**
- **Invitation to Bid (ITB) being prepared**

FORECASTED

- **ITB to be issued by end of Spring 2025**
- **Construction Award end of Summer 2025**

Sanitary Sewer Backup Mitigation Projects

400 Block Wolfe St Sanitary Sewer Upsizing

Project Webpage

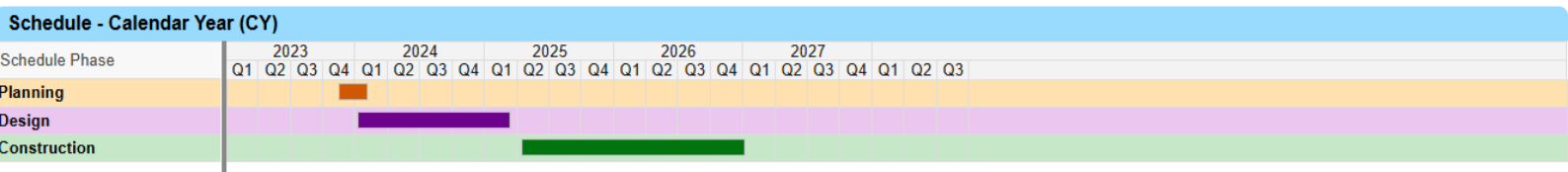
<https://www.alexandriava.gov/sewers/400-block-of-wolfe-street-sanitary-sewer-up sizing-project>

Project Information

Current Phase: Construction
Total Planned Budget: \$1,667,900.00
Funding Sources: Sanitary Sewer

Project Description

This project calls for the planning, design and construction of an upsized sewer network along the 400 block of Wolfe Street in the Old Town combined sewershed. This project was initiated in response to multiple sewer backups that have occurred during periods of wet weather.



- ### ON-GOING

 - Design completed
 - Invitation to Bid (ITB) preparation completed

FORECASTED

 - ITB to be issued by end of May 2025
 - Construction Award late Summer 2025

Colonial Avenue Sewer Separation Project

Project Webpage

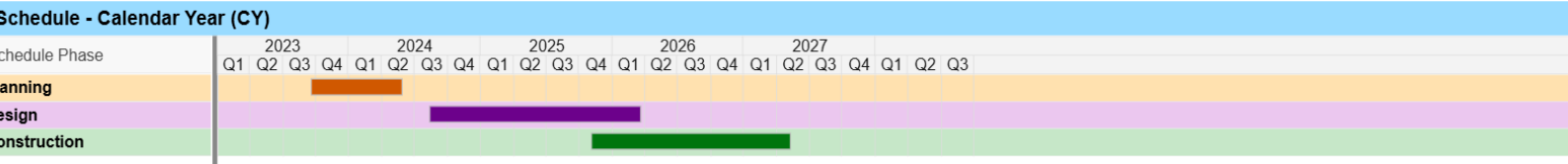
<https://www.alexandriava.gov/sewers/colonial-avenue-sewer-separation-project>

Project Information

Current Phase: Design
Total Planned Budget: \$1,678,104.00
Funding Sources: Sanitary Sewer

Project Description

The Colonial Ave Sewer Separation project consists of separating the existing sanitary sewer from the combined sewer system and connecting it to a fully separate sanitary sewer. This project is being undertaken to mitigate the potential for sewer backups during significant wet weather.



- ### ON-GOING

 - Field survey completed
 - 60% design submitted April 2025

FORECASTED

 - 90% design to be submitted Summer 2025

Communications

March-April

- 23 Total Flood Action/ Stormwater social media posts
 - *VA Flood Awareness Week, Earth Month Activities, Commonwealth, Ashby, Glebe*
- Impressions: 62,199 decreased by 51%
- Engagements: 2,196 decreased by 65%
- Post link clicks: 214 decreased by 76%

*Compared to previous 2 months (January - February)

*Decrease engagements following snow events

- 5,613 Stormwater Management webpage views

*86 total pages under Stormwater Management web group

- Average engagement rate: 66%, Average events per session: 4

- Most popular stormwater webpages:

- [Flood Map](#) = 672 views
- [Flood Action](#) = 563 views
- [Types of Sewer Systems](#): 531 views

Additional Top Ten Pages:

- [Flood Mitigation Grant Program](#): 199 views
- [Rain Barrels and Water Harvesting](#): 138 views

Communications

March – April 2024

- 6,932 Stormwater Management webpage views
- Average engagement rate: 55%,
- Average events per session: 4
- Most popular stormwater webpages:
 - [Flood Map](#) = 990 views
 - [Flood Action](#) = 678 views
 - [Sanitary Infrastructure](#): 429 views

Peaks:

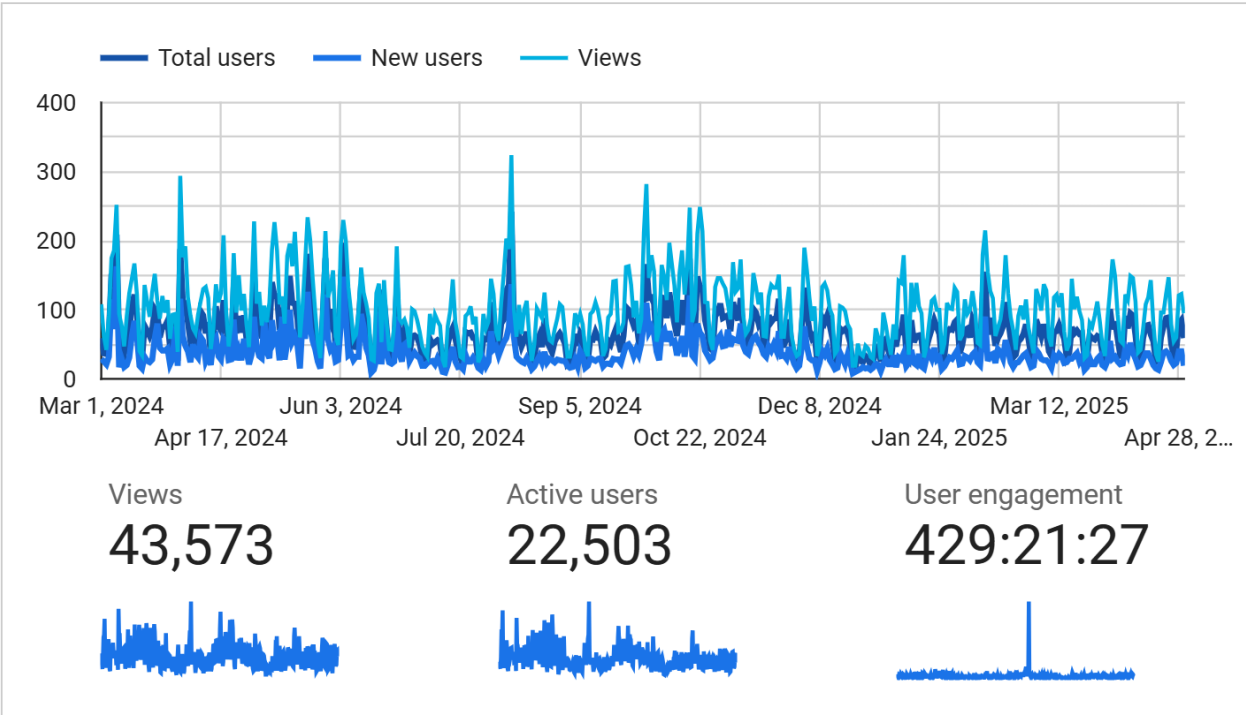
March 7, 2024: 252 views

April 1, 2024: 294 views

August 9, 2024: 324 views

October 1, 2024: 282 views

March 2024 – April 2025



Communications

Upcoming Communications Priorities

- Flood Mitigation Grant Program
- Commonwealth, Ashby, Glebe
- Spot Projects
- Hurricane Season

Maintenance Activities

- Hooffs Run Culvert Maintenance and Cleaning from Linden Street to Duke Street
 - Maintenance work is underway and expected to continue through June 2025.
 - The sediment removal is complete.
 - 2700 CF of sediment was removed.
 - Concrete repairs are ongoing.
 - Staging areas are located in Linden Street Alley, Mount Vernon Avenue cul-de-sac and Hooffs Run Park.

Flood Mitigation Grant Program

- Reimbursed a total of \$1,135,315.42 since July 2021 inception.
- So far in FY2025: 85 applications with 10 in various stages of approval with a total of \$144,468.19 paid.
- FY2024: Approved 101 applications, reimbursed \$235,145.16.
- FY2023: Approved 73 applications, reimbursed \$167,538.49.
- FY2022: Approved 148 applications, reimbursed \$588,163.58.

Flood Resiliency Plan Update

AGENDA ITEM #5

Overview

- To remain eligible for DCR's Community Flood Preparedness Fund (CFPF) grant program, must develop and maintain an 'approved' Resilience Plan
 - Compilation of existing programs and plans was submitted in 2021 and approved for 5-years (2026); City has received over \$6.4 million to date
- 2023 Energy & Climate Change Action Plan identified flooding as a major concern; recommended developing a strategy to identify hazards and disseminate information; mitigate for flooding; and prepare for and respond to floods; and update policies for flood resilience
- This project to develop the plan received CFPF grant funding.
- ***The Flood Resilience Plan will build on the work undertaken by Flood Action Alexandria and work to build a Plan that represents all Alexandrians***

Flood Resilience Plan Tasks

- Review of Studies and Reports
- 2-D Screening-Level Model
- Flood Vulnerability Assessment
- Flood Mitigation Strategy and Implementation
- Flood Resilience Plan Development
- Equitable Outreach, Engagement, and Communication



Community Engagement Activities



Online Survey

- Launch and promote survey: June 2025
- Close survey: September 2025

Summer Pop-up Events

- Planning: May – June 2025
- Attend pop-ups: June – August 2025

Community Meetings (In-Person/ Virtual)

- Planning: Summer 2025
- First Meeting: September 2025
- Second Meeting: Winter 2025 (TBD)

Advisory Committee Touchpoints

- Presentations: May 2025 and September 2025
- Third meeting TBD

Community Input

- A brief survey for the community to provide details about how flooding impacts them, what types of flooding they experience, and what the impact is to them.
- Survey will be hosted on City's website and shared with the community in a variety of ways:
 - Link in the Flood Action Alexandria e-newsletter
 - Through the City's social media channels
 - QR code to the survey posted in City libraries and community centers
 - Pop-up events this summer
 - Coordinate with community-based organizations to share out the survey URL

Next Steps

- Review and provide feedback on community flood survey
- Help disseminate information about the Flood Resilience Plan to the community
- Provide input and feedback into the Plan

Discussion of Homeowners' Project Cost Associated with Flood Mitigation Grants

AGENDA ITEM #6

Summer Homework

AGENDA ITEM #7

Public Comment

AGENDA ITEM #8

Adjourn

AGENDA ITEM #9