

# **Stormwater Utility and Flood Mitigation Advisory Committee**

*May 16, 2024 Meeting*

# Tonight's Agenda

1. Welcome remarks from Chair (6pm, 5 min)
2. Approval of minutes (Committee) (6:05pm, 5 min)
3. Update on Flood Action program (City Staff) (6:10pm, 20 min)
4. Update on FY2025 budget (John) (6:30pm, 10 min)
5. Draft materials for May 22 open house for Commonwealth/Ashby/Glebe (Dan) (6:40pm, 20 min)
6. Discussion on ways to increase attendance to the open house (7:00pm, 20 min) (Committee)
7. Public comments (7:20pm, 20 min)
8. Adjourn (7:40 pm)

# Opening remarks

AGENDA ITEM #1

# Approval of Minutes

AGENDA ITEM #2

# Update on Flood Action Alexandria Program

AGENDA ITEM #3

# Flood Action Progress Report: Large Capacity Projects & CSS

- Commonwealth/Ashby/Glebe (est. \$50M) Large capacity flood mitigation. 60% design submission received on 4/25. City team to review. 90% expected Fall 2024. Public Open House on 5/22 will focus on construction impacts. Virtual Open House will be accessible to review materials and make comments. Continued coordination with utilities for relocation.
- Hooffs Run Culvert Bypass (est. \$60M) Large capacity flood mitigation. Fieldwork component of field survey along Russell Road is complete. Developed model to investigate possible solutions and determine feasibility. Two flow monitoring sites selected. The data collected will allow improvement of the hydraulic model.
- Pitt & Gibbon (\$20-25M) CSO surcharge mitigation. Continued survey collection to perform construction feasibility of preferred alternative. City team reviewing options to increase performance of proposed design (most likely in the form of second phase of construction). Current alternative does limit the flooding during 10-year storm, but City aims to increase level of service.
- Nethergate (\$5M) CSO Surcharge mitigation. Alternatives analysis complete. City collecting additional information on sump pump discharge locations prior to issuing design contract. Flooding seems to occur in basements, where sump pumps cannot discharge or are backing up. This information is critical to determine success of planned project.

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Hume Ave Stormdrain Bypass

### Project Webpage

<https://www.alexandriava.gov/fes/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: \$4,587,216.00  
 Funding Sources: SWU, ARPA

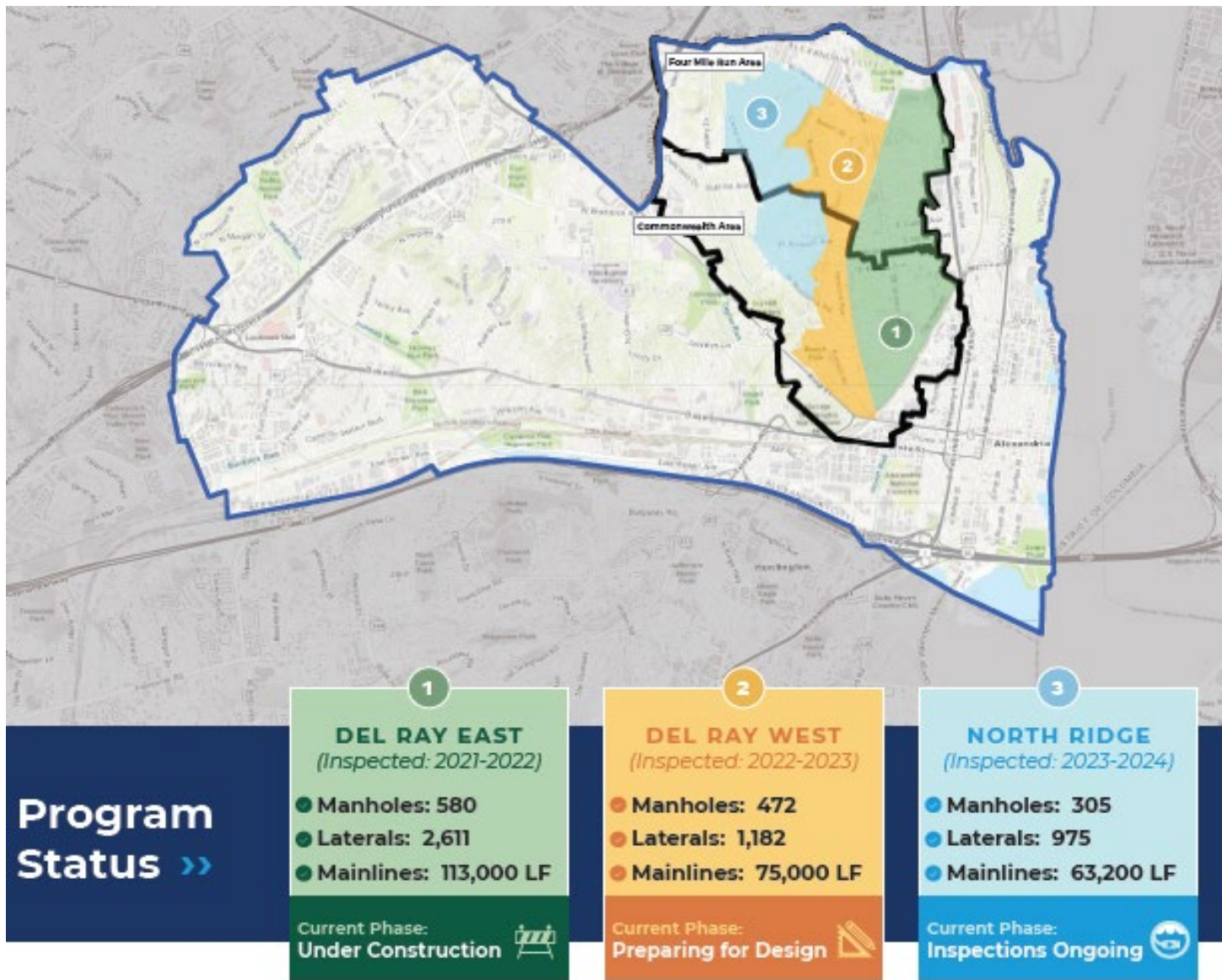
Schedule - Calendar Year (CY)																									
Schedule Phase	2021				2022				2023				2024				2025				2026				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Planning																									
Design																									
Construction																									

For more project schedules:  
<https://www.alexandriava.gov/FloodAction>

# Sanitary Sewer Asset Renewal Program

## • Del Ray East Sewer Rehabilitation:

- Contractor issued Notice to Proceed Oct 16, 2023
  - Contract period = 1 year
- Construction about 75% completed
  - 150 pipe segments
  - 111 manholes
  - Lateral sewers under separate contract





# Communications

- 11 Total Flood Action/ Stormwater social media posts in April.
- Impressions decreased by 6.5%. (49,452)
- Engagement decreased by 3.2%. (1,828)
- Post link clicks increased by 13.6% (225)
- 3,644 Stormwater Management webpage views
- Average web user engagement is 34:41
- Most popular stormwater webpages:
  - Flood map= 486 views
  - Flood Action = 318 views
  - Sanitary Infrastructure = 219

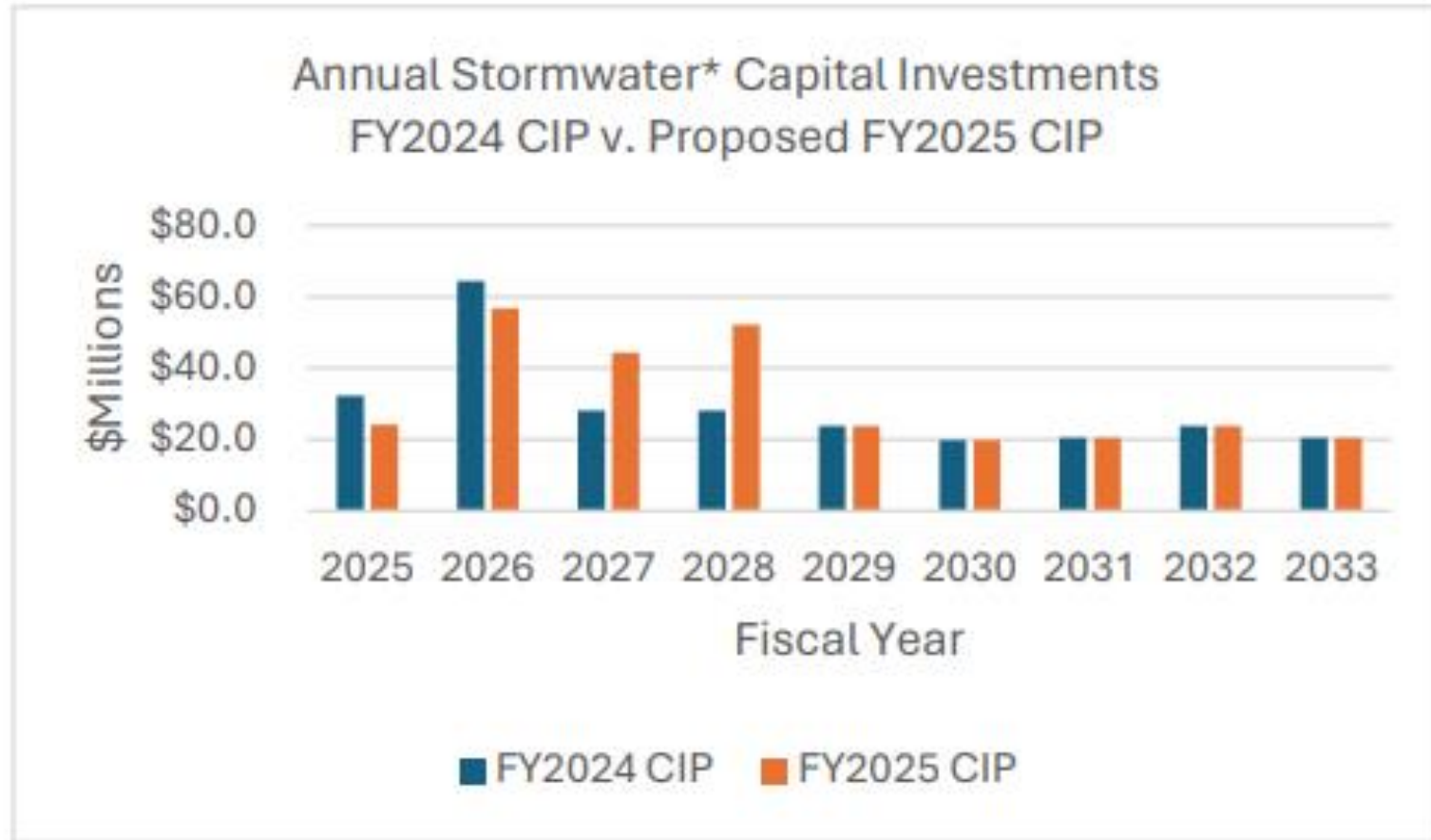
# Maintenance Activities

- Hooffs Run Culvert Inspection
  - Pre and post storm inlet inspections and cleaning ongoing.
  - The culvert CCTV Inspection has been completed.
    - Findings:
      - The quantity of sediment is much less than the prior inspection.
      - The sediment deposits are located at the Duke Street outfall.
    - Staff is developing a sediment removal package.
    - Sediment removal is being coordinated with AlexRenew.
    - Anticipated to be completed by late Summer 2024.

# Update on FY2025 budget

AGENDA ITEM #4

## The FY 2025 Budget Approved by City Council



\*includes Wet Weather projects from the Sanitary Sewer CIP

The CIP in the FY 2024 budget called for a total of \$262 million in stormwater capital projects for the period FY 2025 through FY 2033. The proposed CIP in the FY 2025 budget calls for a total of \$286 million over the same period.

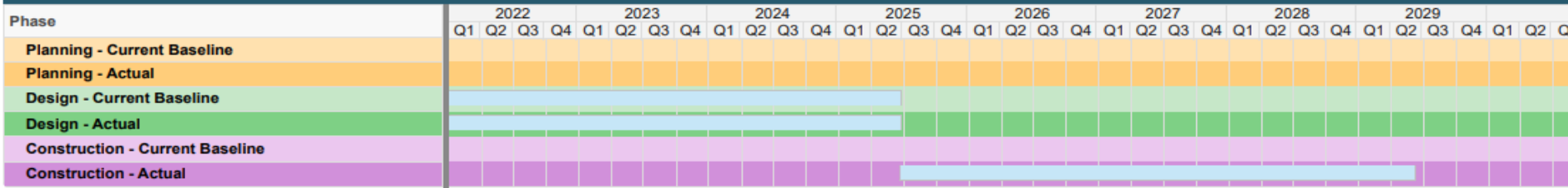
This \$24 million increase is due to the inclusion of a new stormwater mitigation project at the intersection of Pitt and Gibbon in the Combined Sewer Area.

# Commonwealth/Ashby/Glebe Project (from 'Capital Projects Status Report FY2024-Q2', March 2024)

## Current Progress

The 30% design drawings, basis of design report, and cost estimate were submitted to the City on 9/20/23. Value engineering workshop held the week of 10/02/23. City team reviewed 30% design and provided comments back to designer on 10/19/23. Grant applications for FEMA BRIC and FMA grants were submitted to VDEM on 11/22/23. Design team is working on 60% submission, which is scheduled to be completed end of 04/2024.

## Schedule



## Explanation of Schedule Variance

30% Design received on 9/20/23. This is the first formal review of construction drawings. Several key decisions were required before progressing to next phase of design. This included changes to design methodology, and changes to horizontal alignment to avoid easements and utility conflicts.

## Cost Metrics

### Planning

<b>Planning Phase Budget</b>	<b>Percent Spent</b>
\$0.00	0%
<b>Actual Costs</b>	<b>Work Progress</b>
\$0.00	100%

### Design

<b>Design Phase Budget</b>	<b>Percent Spent</b>
\$3,904,010.00	50%
<b>Actual Costs</b>	<b>Work Progress</b>
\$1,948,533.10	56.92%

### Construction

<b>Construction Phase Budget</b>	<b>Percent Spent</b>
\$43,260,287.00	0%
<b>Actual Costs</b>	<b>Work Progress</b>
\$0.00	0.00%

## Explanation of Cost Variance

Spending is consistent with plan  
As a result of the City's recent transition to a new project management system, in-progress projects do not have cost data displayed for previously completed phases. Please see the Capital Funds Summary for CIP funding and cost data.

## Communication

### Completed Public Communication

Open house at Leonard Chick Armstrong Center on Sept. 28, 2023, Ad Hoc Updates, Flood Action Newsletter updates, and responding to resident inquiries

### Delivery Date

09/28/23

### Planned Public Communication

Public Meeting will be held in Spring ahead of 60%, regular Ad Hoc meeting updates, Flood Action Newsletter updates, and responding to resident inquiries.

### Scheduled Date

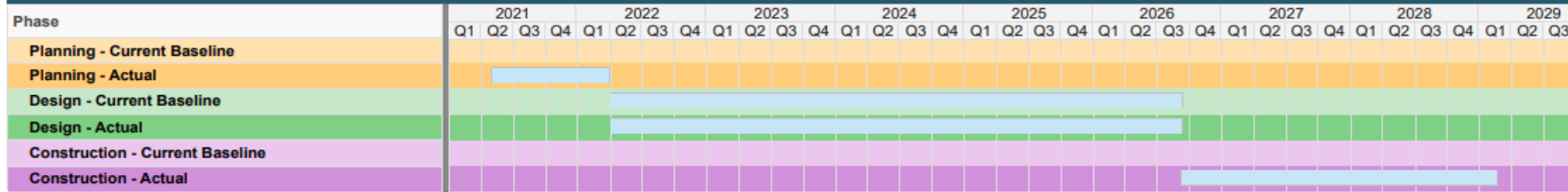
Spring 2024

# Hooff's Run Culvert Bypass Project (from 'Capital Projects Status Report FY2024-Q2', March 2024)

## Current Progress

The main section of survey down Russell Road is nearly complete and has undergone a preliminary completeness review. The existing conditions hydraulic model of the project area and accompanying technical memorandum is complete and has been reviewed by the City. The alternatives to be vetted within an Optimizer model have been reviewed by the City. The design team is currently working to run Optimizer with the provided alternatives. Preliminary optimization results have been reviewed by the City and feedback provided. The City is working to procure flow monitoring at three locations in the project area to provide an additional mechanism to validate the existing conditions model.

## Schedule



## Explanation of Schedule Variance

Schedule progress is consistent with plan.

## Cost Metrics

Planning		Design		Construction	
<b>Planning Phase Budget</b>	<b>Percent Spent</b>	<b>Design Phase Budget</b>	<b>Percent Spent</b>	<b>Construction Phase Budget</b>	<b>Percent Spent</b>
\$0.00	0%	\$5,690,864.00	5%	\$53,624,336.00	0%
<b>Actual Costs</b>	<b>Work Progress</b>	<b>Actual Costs</b>	<b>Work Progress</b>	<b>Actual Costs</b>	<b>Work Progress</b>
\$0.00	100%	\$309,869.28	21.82%	\$0.00	0.00%

## Explanation of Cost Variance

22% work progress includes various non-cost activities, which may contribute to the perceived discrepancy between progress and spending. However, the spending is aligned with the actual work.

## Communication

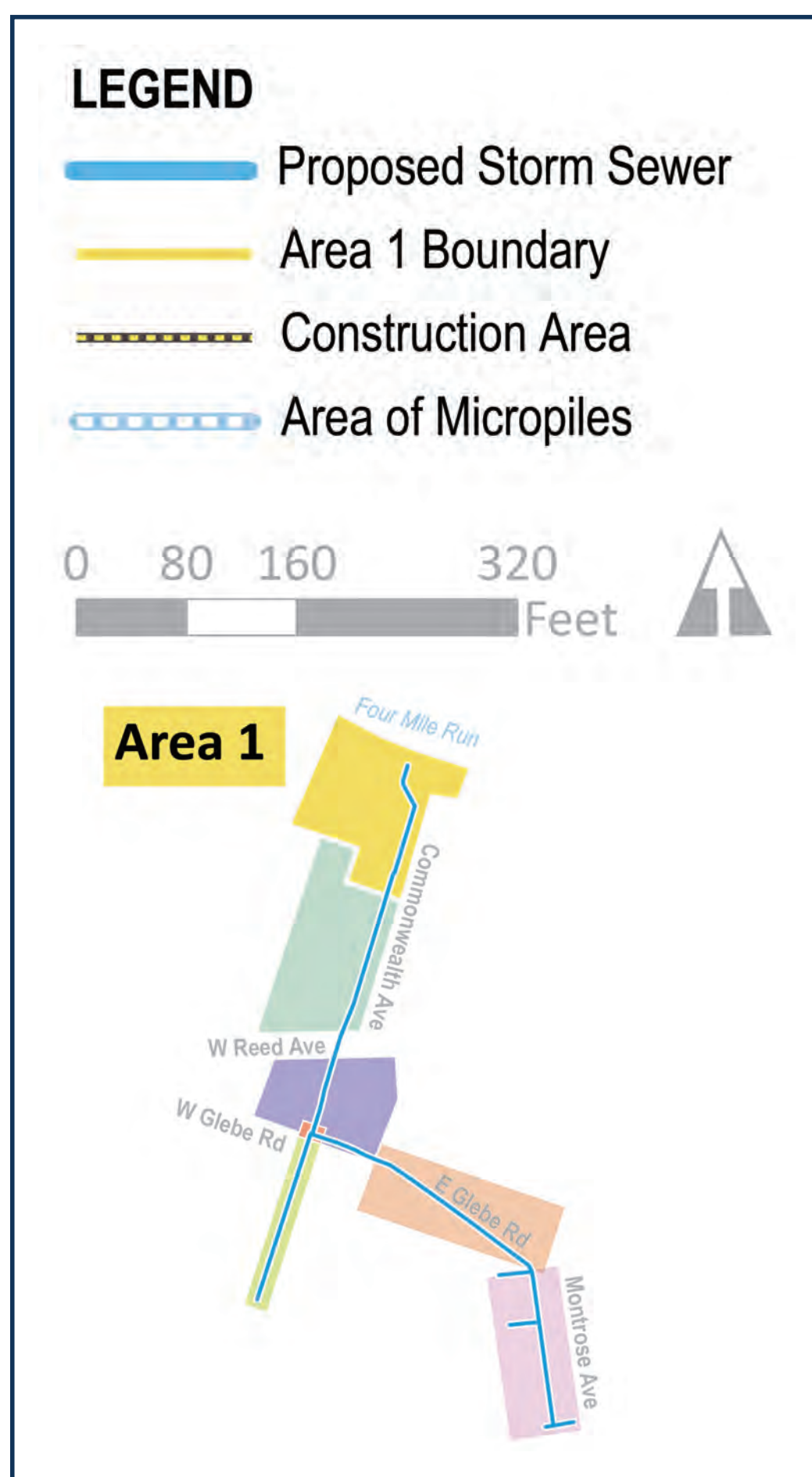
Completed Public Communication	Delivery Date	Planned Public Communication	Scheduled Date
Project questionnaire remains open until 12/8/23. Project status update was provided at latest Alexandria Stormwater Ad Hoc Group meeting 11/8/23. Coordination comments provided on VPRA bridge crossing plans at Commonwealth Ave and King St 11/29/23. Project social media posts began 12/1/23. Regular updates provided in Flood Action Newsletter. Responded to resident inquiries.	12/01/23	Coordinate with VPRA on project comments 12/13/23. Continue social media posts (ongoing). Regular updates on Flood Action Newsletter and Ad Hoc Meetings. Respond to resident inquiries.	12/13/23

# Open house materials preview

AGENDA ITEM #5



# Area 1: Outfall



## Description of Work

- ▶ New outfall to Four Mile Run - 20' x 40' concrete structure to be installed along the bank of Four Mile Run
- ▶ Two 8' x 9' box culverts to be installed (largest in the project)
- ▶ Cul-de-sac to be replaced with a gravel road to allow for future upgrade of Four Mile Run Park
- ▶ Construction Technique: Micropiles to be used in soft soils will also reduce noise, vibration and dust

## Construction Impacts



**Four Mile Run Trail** – will be detoured during outfall construction (3-4 months) and then re-opened



**Bicyclists** – access to Four Mile Run trail will be diverted around the baseball field. Bicyclists on the road will continue to share the lane with vehicles



**Pedestrians** – sidewalk on west side of Commonwealth Ave will be open during construction



**Boaters** – access to boat ramp will be detoured around construction. Boat launch parking will be at Four Mile Run Park parking area; approximately 3 months

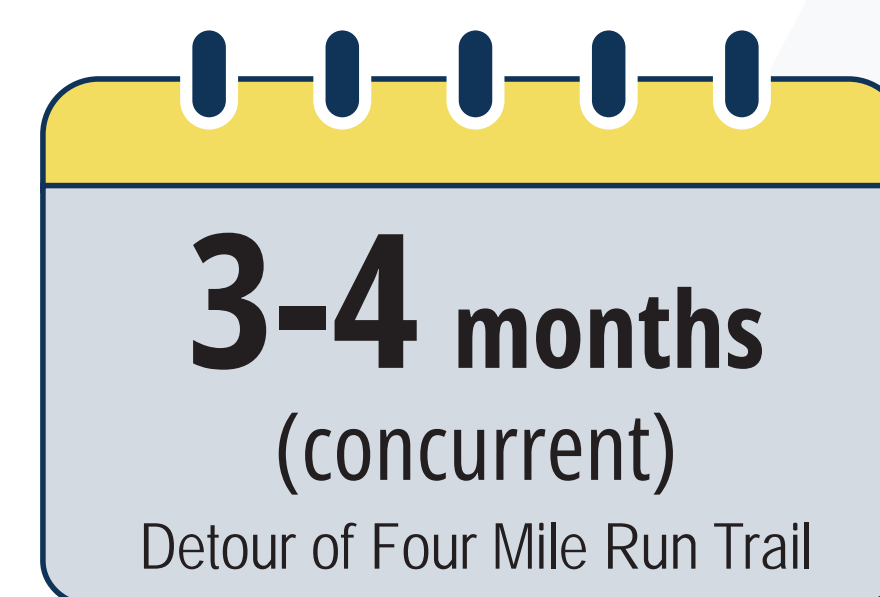
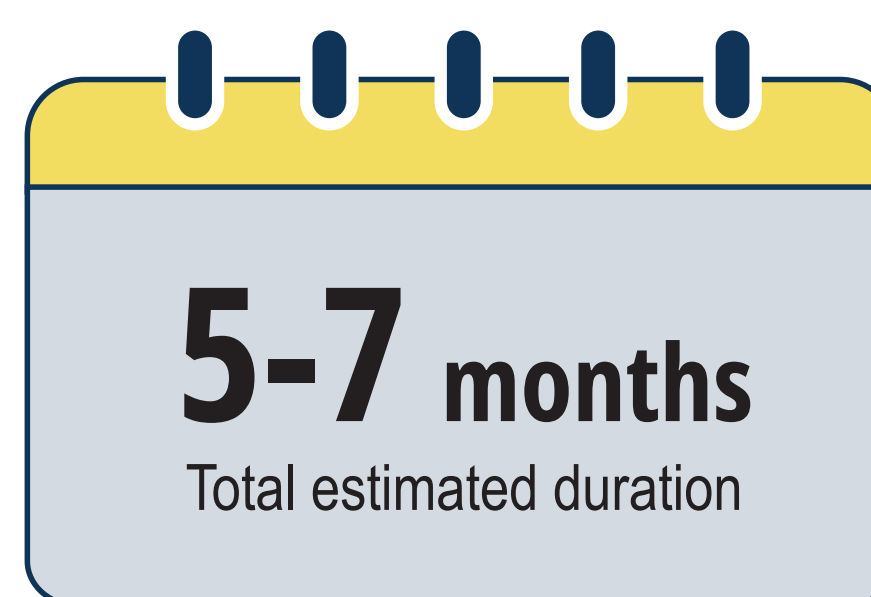


**Four Mile Run Park Ballfield** – will be closed for the duration of project construction; estimated to be 3 years



New culvert will be similar but double, not triple.

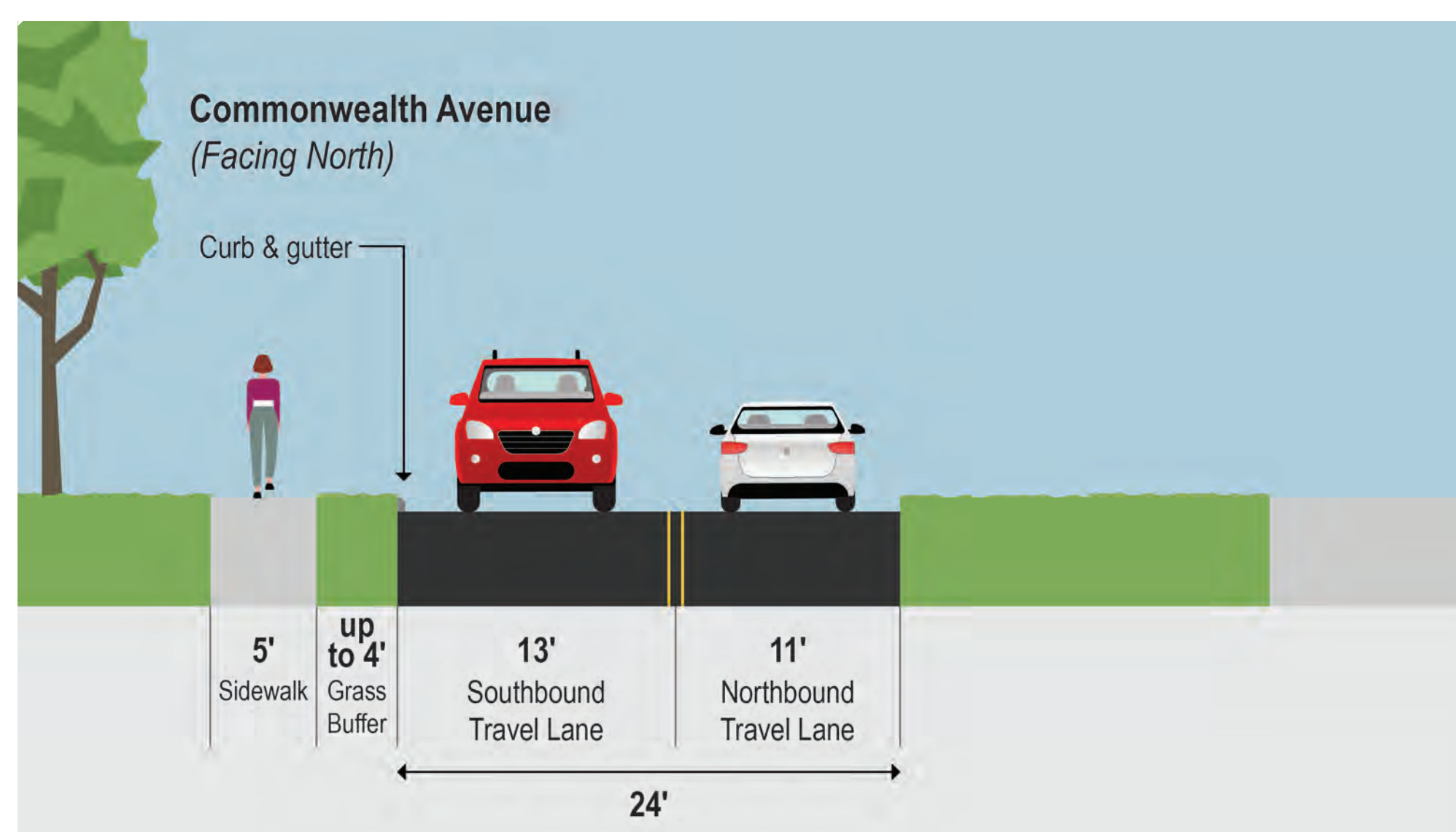
## Estimated Duration of Construction



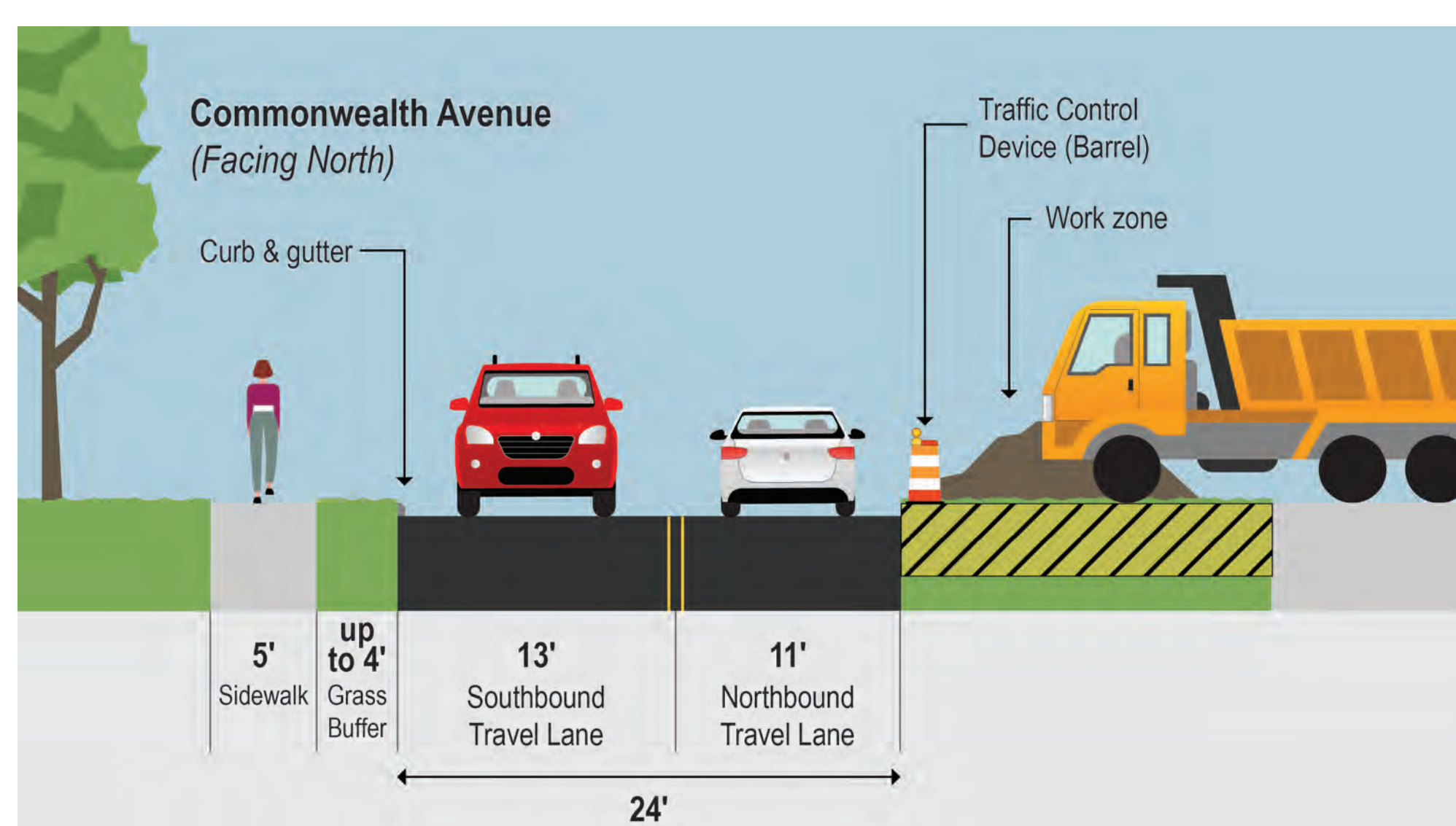
## Traffic Management During Construction

- ▶ Two-way traffic will remain on Commonwealth Avenue
- ▶ Bike traffic along Commonwealth Ave will continue to share-the-lane with vehicles; no change

### Travel Lanes Now



### Travel Lanes During Construction





# Increasing attendance to the Open House

AGENDA ITEM #6

# Public Comment

AGENDA ITEM #7

# Adjourn

AGENDA ITEM #10