

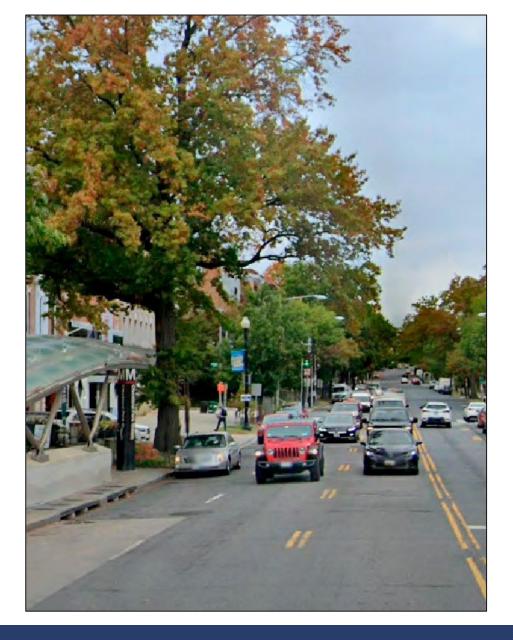
# Cleveland Park Drainage and Watershed Improvements Project Phase 2

ANC 3C Public Meeting May 16, 2022



### **Meeting Agenda**

- Project Overview
- Proposed Project Components
- Environmental Considerations
- Public Involvement
- What Happens Next?





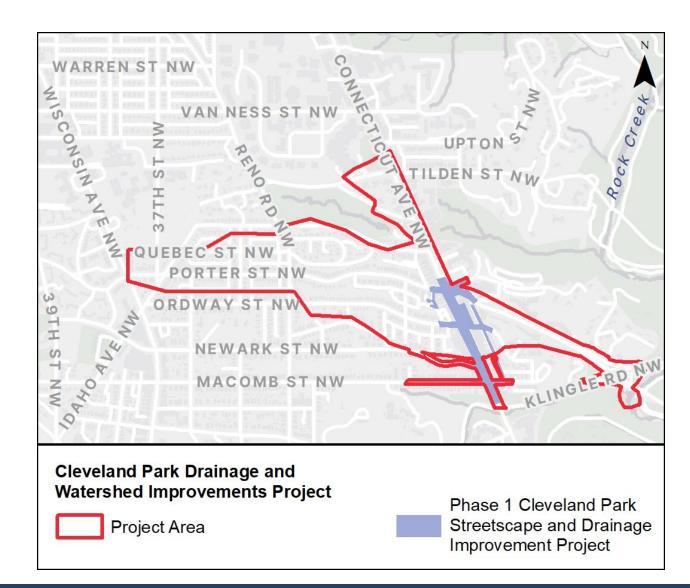
### **Project Overview**

- Purpose of this two-phased project is to mitigate the recurring flooding conditions at Cleveland Park Metro Station and the adjacent roadway (Connecticut Avenue NW), which are caused by the existing undersized stormwater conveyance system
- Phase 1 Cleveland Park Streetscape and Drainage Improvement Project (construction underway)
- Phase 2 Cleveland Park Drainage and Watershed Improvements Project (current project)



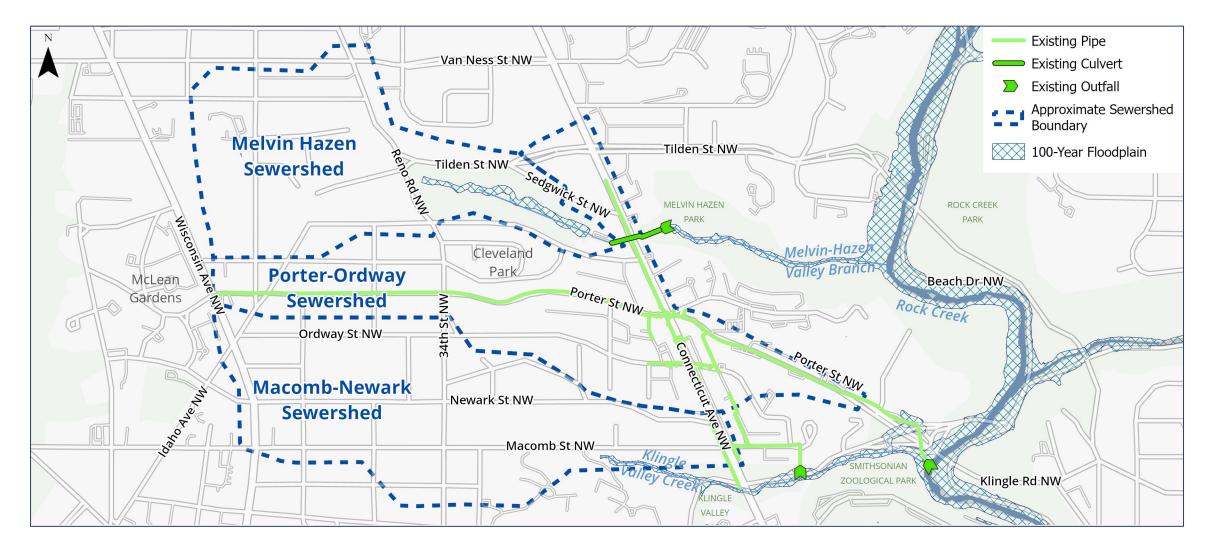


#### **Project Area**





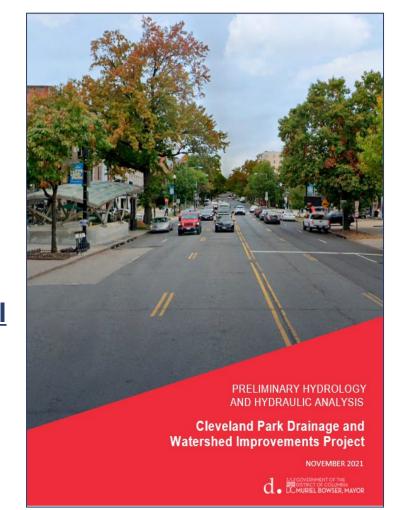
#### **Existing Sewershed Storm Drainage System**



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## **Preliminary Hydrology and Hydraulic Analysis**

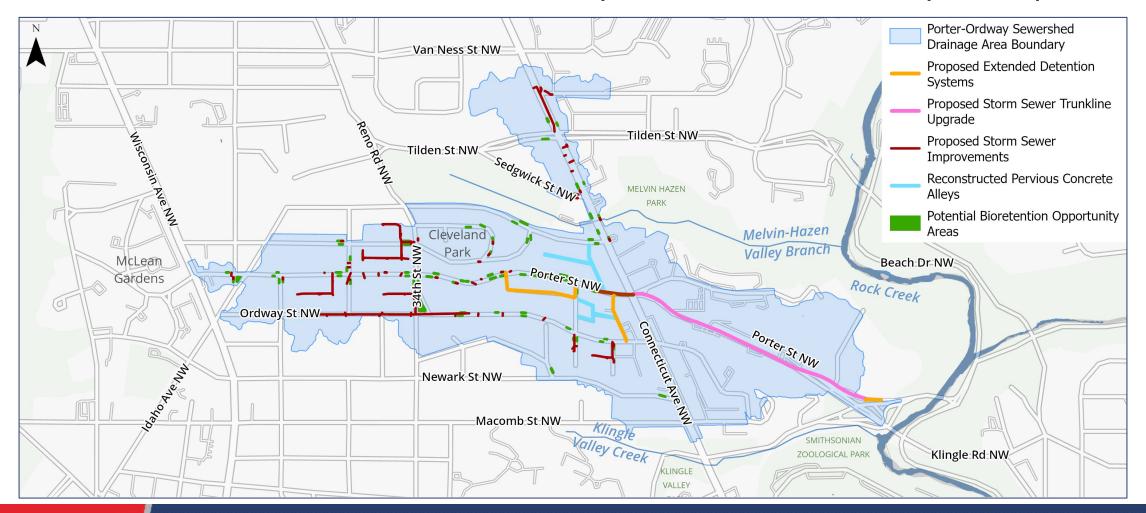
- Porter-Ordway sewershed:
  - Area = 170 Acres
  - Largest existing storm drainage system = 54 inch
  - Maximum storm drainage system capacity = 350 cfs
  - 15-year sewershed peak discharge = 900 cfs
- Rock Creek outfall velocity (15-year storm event) = 18 fps
- Calculated depth of flow on Connecticut Avenue NW (15-year storm event) = 12 - 15 inches
- Existing conveyance system is undersized and requires an overhaul
- Several mitigation alternatives for storm drainage/ stormwater management have been identified
- Selection of multiple project components may be required to address the recurring flooding issues





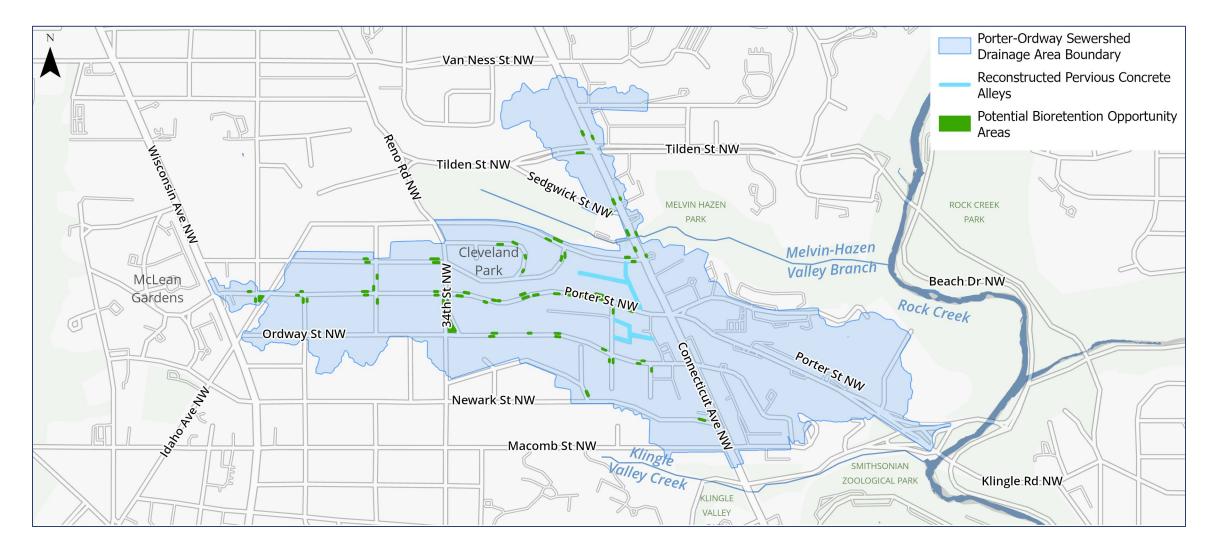
### **Proposed Project Components to Address Flooding**

Green Infrastructure Extended Detention Systems Storm Sewer System Improvements



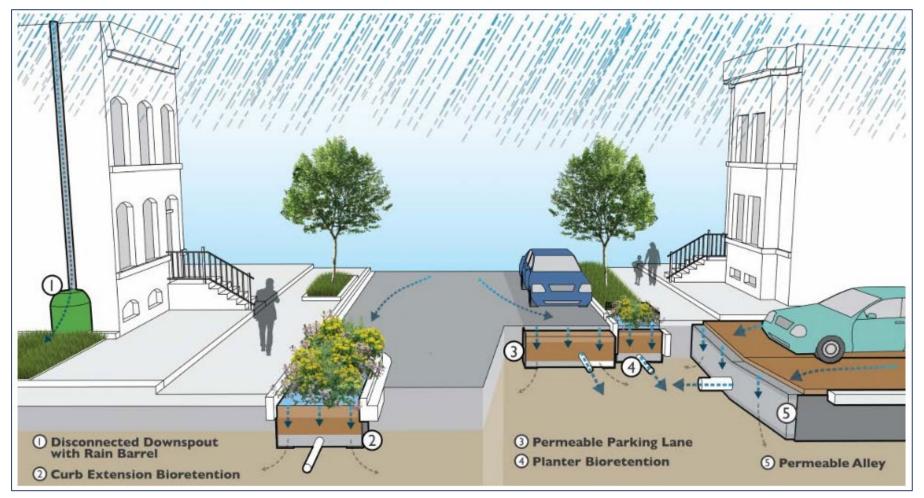


#### **Green Infrastructure Locations**



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#### **Examples of Green Infrastructure**



**Bioretention and Permeable Pavement Schematic** 

(Source: DC Water Clean Rivers Project)



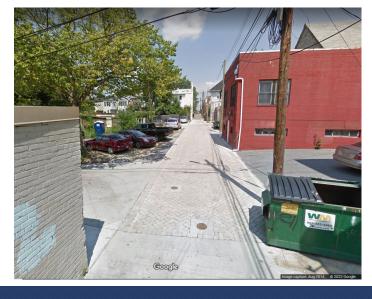
### **Examples of Green Infrastructure**



Streetscape "Curb Extension"



Streetscape "Planters"



Permeable Pavement (Paver Configuration Shown)

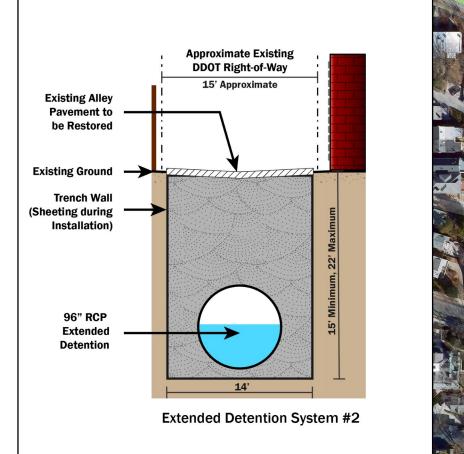


### **Extended Detention System #1**





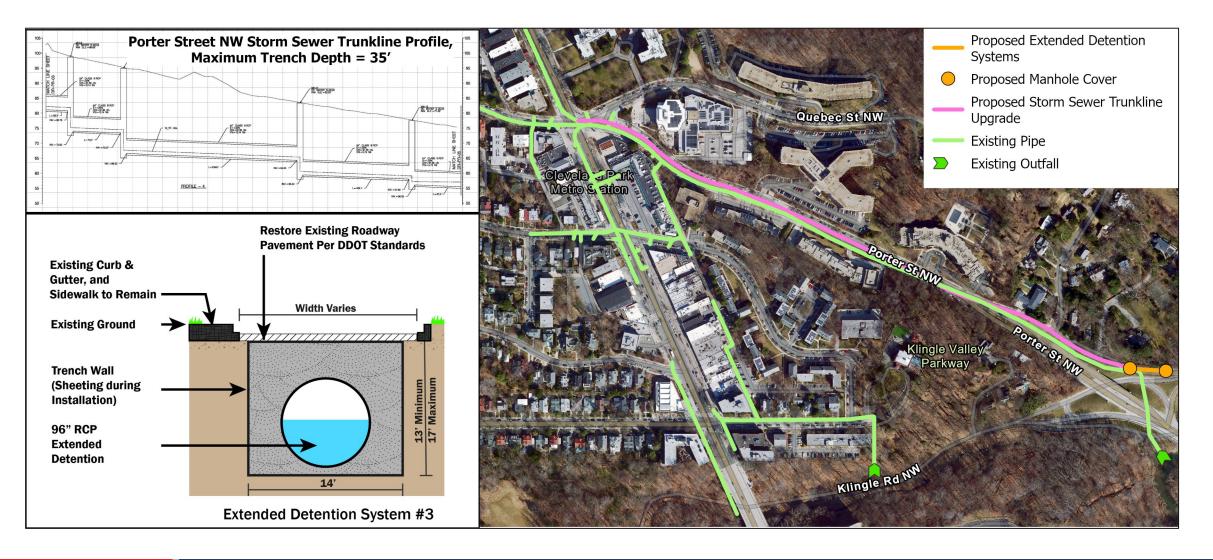
#### **Extended Detention System #2**







### **Trunk Line Upgrade and Extended Detention System #3**



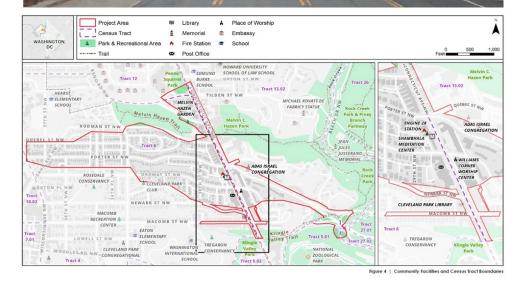


### **Environmental Considerations**

- Inventory conducted of social, economic, and environmental resources in the project area that could be affected by the proposed improvements
- Inventory Report posted on the project website
- Level of National Environmental Policy Act (NEPA) documentation to be determined after preferred alternative is identified and as design progresses

#### District Department of Transportation Cleveland Park Drainage & Watershed Improvements Environmental Conditions Inventory Report May 2022







## **Public Involvement**

- Project Fact Sheet
- Project Website with Updates
- ANC Presentations
- Public Information Meetings at Project Milestones
- Special Events
- Informational Materials

#### **District Department of Transportation**

Cleveland Park Drainage and Watershed Improvements

Mayor Bowser is committed to providing safe streets across the District, and the Cleveland Park Drainage and Watershed Improvements Project is an important part of that commitment.

#### PROJECT OVERVIEW

The District Department of Transportation (DDOT) has initiated a design study to improve stormwater systems and alleviate flooding conditions on Connecticut Avenue NW at the Cleveland Park Metro Station and nearby intersections. The study will evaluate drainage improvements and stormwater management practices within the Porter-Ordway sewershed and assess the storm sewer system along Porter Street NW, east of Connecticut Avenue NW to its outfall at Rock Creek.



#### DESIGN OBJECTIVES

This design study builds upon the ongoing Phase 1 Cleveland Park Streetscope and Drainage Improvement Project, which encompasses the area in the map that is shaded in blue. As part of this Phase 2 study, comprehensive field survey, geotechnical investigation, and utility designation work will be conducted within the project area on all streets west of

Project Area Streticspe and Drainag Improvement Project

Connecticut Avenue NW and along Porter Street NW east of Connecticut Avenue NW. Based on the analysis, the study will recommend storm drain upgrades and stormwater management improvements.

East of Connecticut Avenue NW, the study includes analysis of the capacity of the sever trunk on Porter Street NW and evaluation of the outfall where the stormwater drains into Rock Creek. Improvements will be considered to manage stormwater runoff to the stream that may result from increased flows from the sever system. Finally, stormwater management measures will be designed where needed in the remainder of the project area to the west of Connecticut Avenue NW based on the findings and recommendations from a hydrologic and hydraulic analysis of the entire Porter-Ordway severshed.

#### STAKEHOLDER CONSULTATION

DDOT, in partnership with the National Park Service, US Fish & Wildlife Service, National Zoo, District Department of Energy and Environment, District Historic Preservation Office, Washington Metropolitan Area Transit Authority, and local utility companies, will engage with residents and other key stakeholders regularly during the various phases of the project.

#### PROJECT TIMELINE

It is anticipated that the study and final designs will be completed by Spring 2023 and the project will be advertised for construction by the end of 2023.

#### INFORMATION RESOURCES AND UPDATES

Please contact Tesfalem Tekle, DDOT Project Manager, at tesfalem.tekle@dc.gov. Please visit the project website at https://ddot-cp-cleveland-park-dcgis.hub.arcgis.com/



District Department of Transportation 250 M Street, SE

Washington, DC 20003



### What Happens Next?

- Preliminary Design Plans (30% Submission) May 2022
- Public Information Meeting June/July 2022
- Intermediate Design Plans (65% Submission) Summer 2022
- Final Design Plans & Bid Documents Submission Winter 2023
- Construction Procurement Summer 2023





#### **For Further Information**

- Please contact Tesfalem Tekle, DDOT Project Manager, at <u>tesfalem.tekle@dc.gov</u>
- For project updates, please visit the project website at <a href="https://ddot-cp-cleveland-park-dcgis.hub.arcgis.com">https://ddot-cp-cleveland-park-dcgis.hub.arcgis.com</a>









# **Cleveland Park Drainage and Watershed Improvements Project**

