

# SANITARY SEWER REHABILITATION PROJECT (DEL RAY EAST)

Public Information Meeting
October 12, 2023

Anup Gautam, P.E., PMP, CCM
Technical Project Manager
Department of Project Implementation



### **Tonight's Agenda**

- 1. Welcome and introductions
- 2. Project update by City staff
- 3. Questions and Answers



## Welcome and Introductions

AGENDA ITEM #1



#### **Key Members**

#### 1. City Staff

- Department of Project Implementation (DPI)
  - Anup Gautam
  - Brian Whiteley
  - Rami Chehade
- Transportation and Environmental Services (TES), Sanitary Infrastructure Division
  - Erin Bevis-Carver
  - Lu Zhang

#### 2. Contractor

- AM-Liner East Chris Pace
- 3. Engineer / Construction Management Services
  - Greeley and Hansen Dustin Dvorak



## Project Update By City Staff

AGENDA ITEM #2

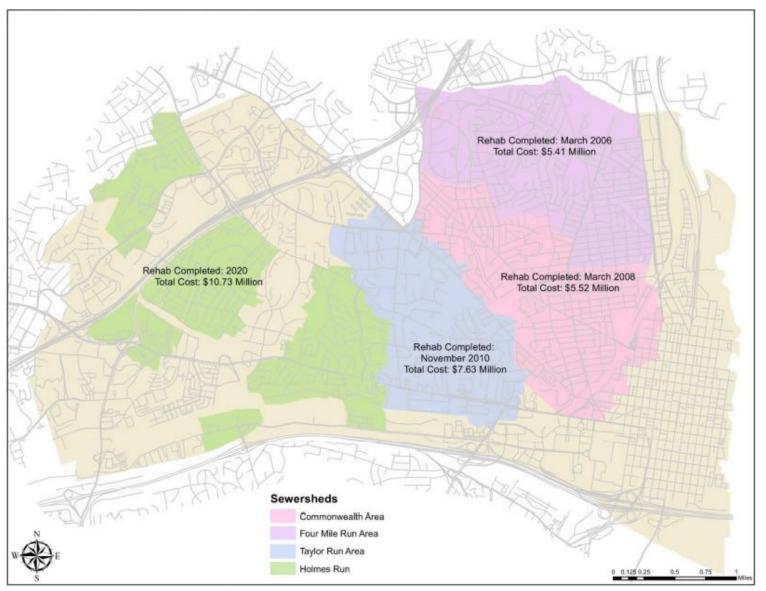


### **Sewer System Overview**

City owns and operates 240 miles of sanitary and combined sewer

Between 2005-2020, approximately 60 miles of sewer has been rehabilitated (25% of the system)

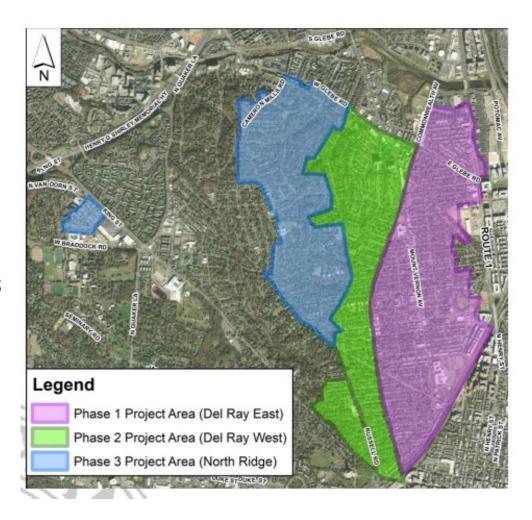
Sanitary Asset Renewal Program (since 2021) builds upon previous work





#### Sanitary Sewer Asset Renewal Program

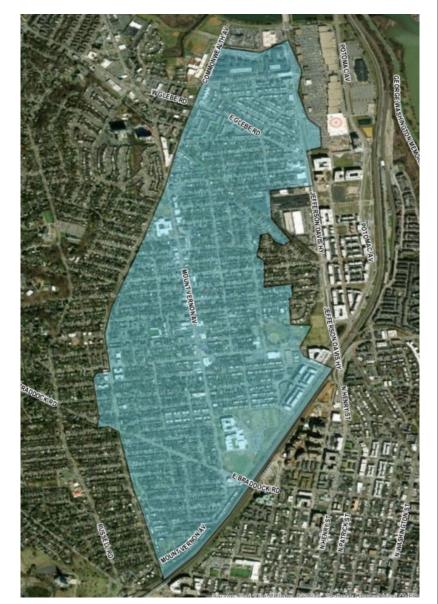
- Inspection and rehabilitation of sanitary sewers, manholes, and City-owned portions of lateral sewers
  - Preserves structural integrity of sewer infrastructure
  - Secondary benefit: will help reduce infiltration and inflow into sewer system
- \$35 million programmed over 10 years as part of the City's Sanitary Sewer Capital Improvement Program (CIP)
- Phase1 inspections:
  - Generally bounded by Commonwealth Avenue,
     Four Mile Run, Route 1, and the Metro rail lines
  - Inspections completed December 2021





#### Phase 1 Inspections

- Inspection Summary
  - 644 pipes inspected (21 miles of sanitary sewer)
  - 580 manholes inspected
  - 2,611 laterals inspected
- Inspection Results
  - 150 pipes require rehabilitation (23 percent)
  - 111 manholes require rehabilitation (19 percent)
  - 491 laterals require rehabilitation (19 percent)





#### **Phase 1 Rehabilitation Contract**

- Rehabilitation of mainline sanitary sewers and manholes
  - \$3.1 Million
- Sanitary Sewer Rehabilitation: Cured-in-place pipe lining
- Manhole Rehabilitation
  - Frame and cover replacement
  - Cementitious spray-on lining
  - Bench and channel repairs
- Laterals to be completed at a later date under separate construction contract



**Before** 



After



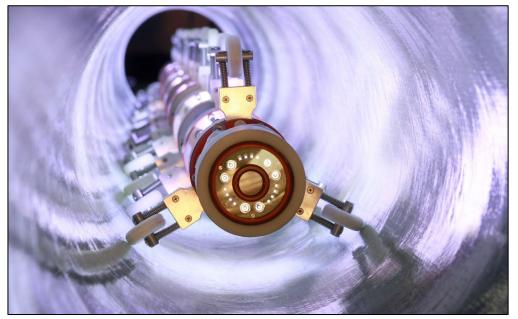
#### Cured-in-Place Pipe (CIPP) Technology

- The City's contractor will use ultraviolet (UV) CIPP technology to rehabilitate the existing sanitary sewers
- The liner is inserted into the host pipe and then inflated with air. UV lights are run through the pipe, which prompts the resin to cure
- CIPP and UV curing benefits:
  - Cost effective
  - Completely trenchless
  - Small construction footprint
  - Faster cure times than other curing methods



**Pre-Lining** 

Post-Lining

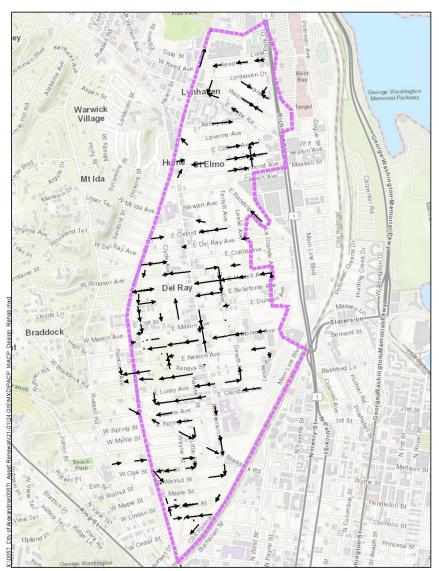


Source: PipeGuard, Inc.

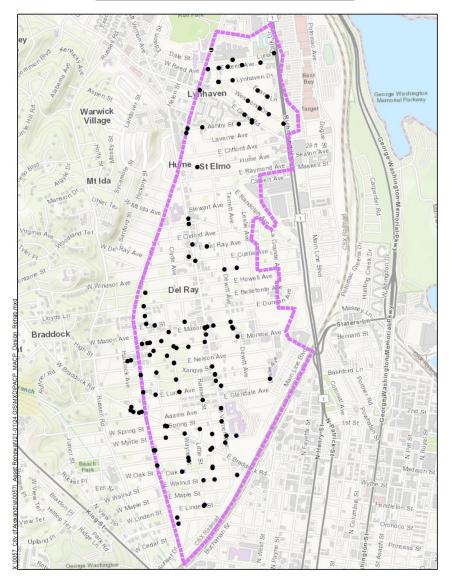


## Area To Be Rehabilitated

Pipes to be Rehabilitated



#### Manholes to be Rehabilitated



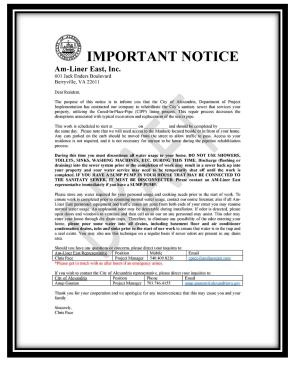


#### **Project Outreach**

#### Resident Notifications

- Residents within 350 feet of construction will be notified via letter in English and Spanish
- Initial notification will be provided approximately 14 days prior to construction
- Contractor will provide notification 48 hours prior to construction
- City project signs to be posted in work areas







### What to Expect During Construction

- Parking
  - No parking signs to be posted 72 hours in advance
- Temporary suspension of water service
  - Sewers must be dry for proper UV curing
  - Length of suspension varies based on pipe size and length, but typically around 6 hours
- Odors
  - Pour small amount of water in any drain taps that might be dry (basement floor drain, for example) to eliminate potential for odors during lining
- Resident notification letters will address what to expect during construction



#### **Project Timeline**

- Construction Timeline
  - Construction contract start date: October 16<sup>th</sup>, 2023
  - Construction duration: Completion within 365 days
- Construction Hours
  - 7am to 6pm Monday Friday
  - 9am to 6pm on Saturday
  - Restricted roads (Commonwealth, Mt Vernon, E Glebe, and E Monroe) are limited to 9am to 3:30pm



#### **More Information**

City Project Manager
 Anup Gautam, P.E., PMP, CCM
 Technical Project Manager
 Department of Project Implementation
 anup.gautam@alexandriava.gov
 703-746-4155

- Asset Renewal Program Website
  - <u>alexandriava.gov/sewers</u>



## **Questions and Answers**

AGENDA ITEM #3



## Thank you!