Sanitary Sewer Asset Renewal Program Sewers, Manholes, and Laterals Investigation Project

Four Mile Run and Commonwealth Sewersheds

The City's Sanitary Infrastructure Division of the Department of Transportation and Environmental Services is about to embark on a program to inspect the sanitary sewers, manholes, and laterals in the Four Mile Run and Commonwealth Sewersheds. Phase 1 consisted of inspections east of Commonwealth Avenue which is now complete. Phase 2 consists of inspections West of Commonwealth Avenue from West Glebe Road to King Street. This program is being implemented to determine the condition of individual sanitary sewers and sewer structures in order to perform needed repairs to extend the useful life of the sanitary sewer system. The City has hired an engineering firm, Greeley and Hansen LLC, and its contractor, Mobile Dredging and Video Pipe Inc., to assist in the implementation of this program by inspecting all public sanitary sewers, sanitary manholes, and City-owned sanitary laterals in the project area shown on the figure to the right. This work is part of a greater ongoing citywide initiative to renew and improve the performance of the existing sanitary sewer system. This work is separate from the City's ongoing stormwater management program, including projects to address stormwater flooding.

Phase 2 Project Area (Del Ray) Phase 2 Project Area (Del Ray West) Projec

What to Expect

As part of the condition assessment investigation project, contractor crews will be inspecting all public sanitary sewers, sanitary manholes, and Cityowned laterals in the project area. Assessing the condition of these structures is vital for the proper operation and maintenance of the sewer system. Most

of these sewer structures are in the public right-of-way and may require short-term changes to traffic patterns or parking in the City while the inspections are being conducted.



Example of typical CCTV inspection truck setup. In order to conduct CCTV inspections two trucks are needed, one at either end of the sewer.

Inspection of individual sewer segments typically takes 2-4 hours, depending on the length of sewer and number of lateral connections. The sewer segment inspections will consist of opening the manholes at either end of the sewer, inserting a crawling CCTV camera unit at one end and a jetting hose with a cleaning nozzle and root cutter at the other. The sewer will first be cleaned with the jetting hose and root cutter, then once the sewer has been confirmed to be appropriately cleaned the CCTV camera inspection will be performed which will identify the location of defects in the structure of the sewer and any sanitary laterals that enter the sewer from surrounding buildings. Once the sewer inspection is completed an inspection of the City-owned laterals (from the connection to the mainline sewer to just past the curb) will be performed. A different type of CCTV camera will be inserted in the sewer and will inspect each of the laterals individually.

Inspection of each manhole typically takes no longer than 30-40 minutes. These inspections will consist of opening the structure, recording measurements of the structure components and taking photos of the inside. No heavy equipment is required and access to the structure will be limited to foot traffic and small equipment carried by hand.

Some City sewers, manholes, and laterals are located on private property and the contractor will need access to these sewer structures to perform inspections. Residents will be notified if crews need access to private property and



Typical Manhole Inspection, Digital Image. Municipal Sewer and Water Magazine. July 2011.

https://www.mswmag.com/editorial/2011/07/get_in_get_out

arrangements will be planned with residents accordingly. There should be minimal disturbance to private property during this work during the sewer inspection. There should be no disturbance to private property during manhole inspections. Sewer service will not be interrupted during the sewer, manhole, or lateral inspections.

The condition assessment investigation project is expected to begin June 2022 and will take approximately one year to complete. The next phase of the program will consist of rehabilitation of any sanitary sewers, manholes, and City-owned laterals determined to be in poor condition within the project area.

We appreciate your cooperation as we work to improve and maintain our City's sewer infrastructure. Should you have any questions please feel free to contact Lu Zhang, Sanitary Infrastructure Division, Department of Transportation and Environmental Services at 703.746.4289 or by email at Lu.Zhang@alexandria.gov. For more information about the City's Sanitary Infrastructure Division, please visit alexandriava.gov/sewers. For more information about the City's Stormwater Management Program, including efforts to address flooding, please visit alexandriava.gov/stormwater.

