

City of Alexandria, Virginia

Alexandria Town Gas (ATG) Oronoco Outfall Remediation Project

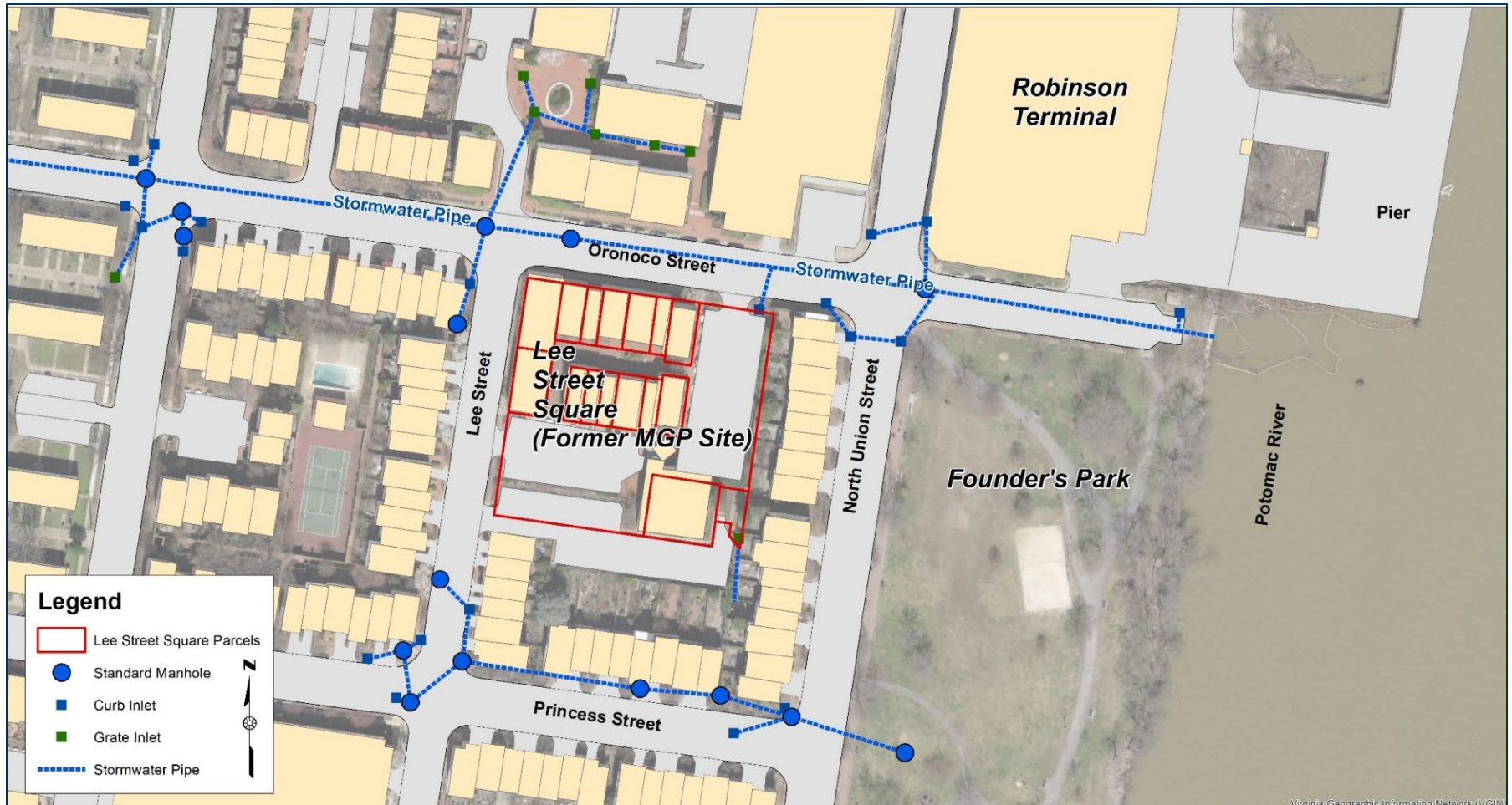
Presentation to the Waterfront Commission
November 28, 2023



Agenda

- > **Project Overview / Background**
- > **Components of Settlement**
- > **Questions**

Alexandria Town Gas-Oronoco Outfall Site



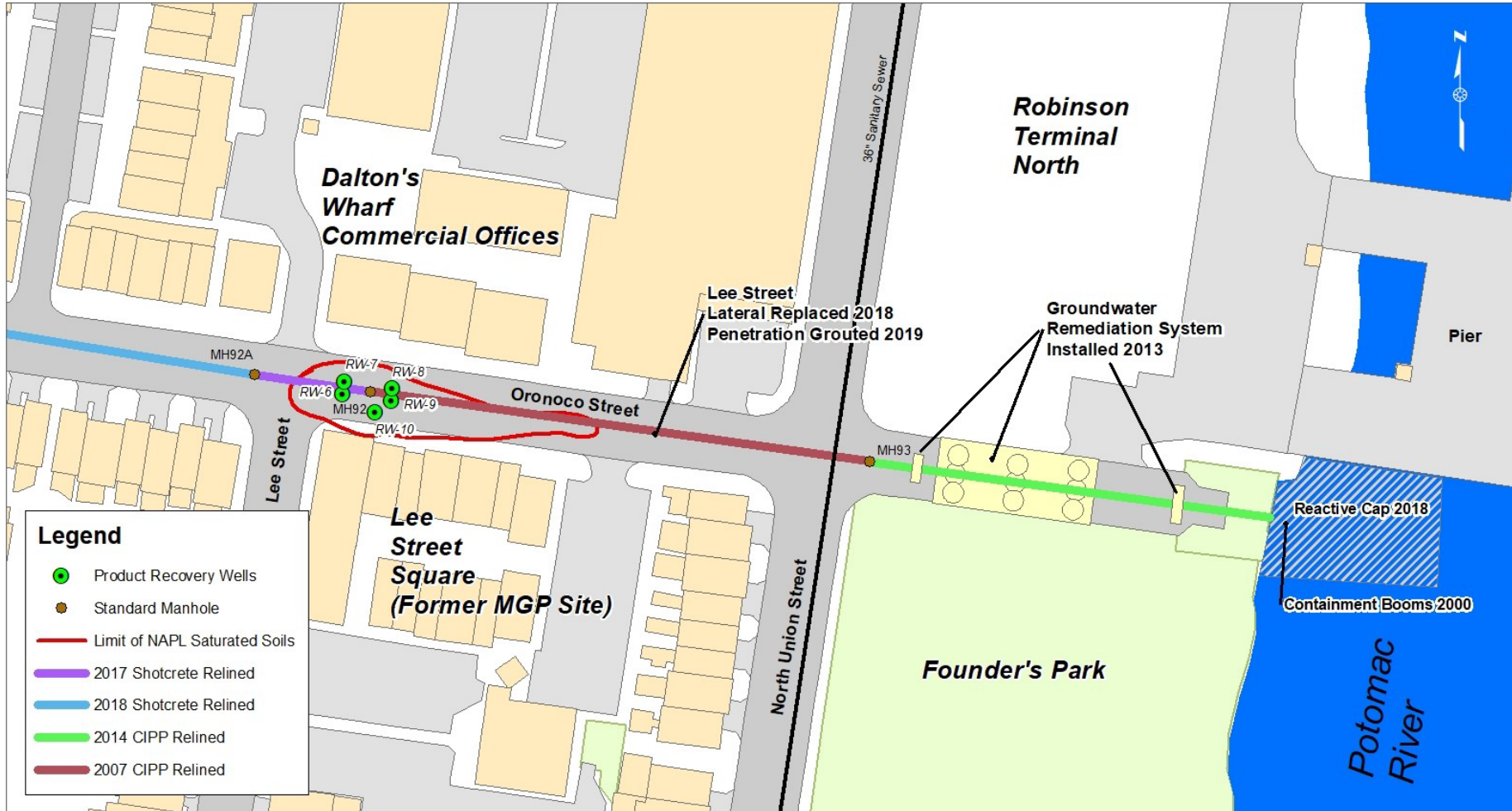
Background

- From 1851-1946, a Manufactured Gas Plant (MGP) operated near North Lee and Oronoco Streets
- MGP produced a coal derived gas for heating, cooking, and lighting for residents/businesses
- Production created wastes, some of which remain at site
- Byproduct (coal tar) leaked from storage / processing facilities into soils and groundwater
- Some onsite remediation occurred as part of the redevelopment of the site, but coal tar migrated offsite and into the storm sewer on Oronoco Street resulted in discharges into the Potomac River
- City entered the Voluntary Remediation Program in 2000 (administered by Virginia Department of Environmental Quality)

Remedial Progress to Date as Part of VDEQ Voluntary Remediation Program

- **2000 – Entered into Virginia Voluntary Remediation Program (VRP)**
- 2000 – Conducted Indoor Air Sampling at Lee Street Square
- 2000 – Installation of oil containment boom around outfall discharge area
- **2003 – Installation of five Free Product Recovery Wells**
- **2007 – Cure in Place Pipe (CIPP) Liner #1 - Oronoco St storm sewer**
- 2009 – Pilot Study for BioSparge Groundwater Treatment System
- **2013 – Installed groundwater treatment system beneath Oronoco St. to treat dissolved phase coal tar constituents before getting to Potomac**
- **2014 – Cure in Place (CIPP) Liner #2 – Oronoco St storm sewer**
- 2017 – Shotcrete Liner – Oronoco St storm sewer
- **2018 – Completed dredge and cap of coal tar impacted sediments in Potomac River near outfall**
- 2018 – Additional Pipe Repairs/Relining - Oronoco St storm sewer
- 2019 – Chemical grouting to repair section of storm sewer
- **2021 – Installed five new free product recovery wells along Oronoco St.**
- 2022 – Completed repair of storm sewer pipe crack (crack led to new coal tar discharges)

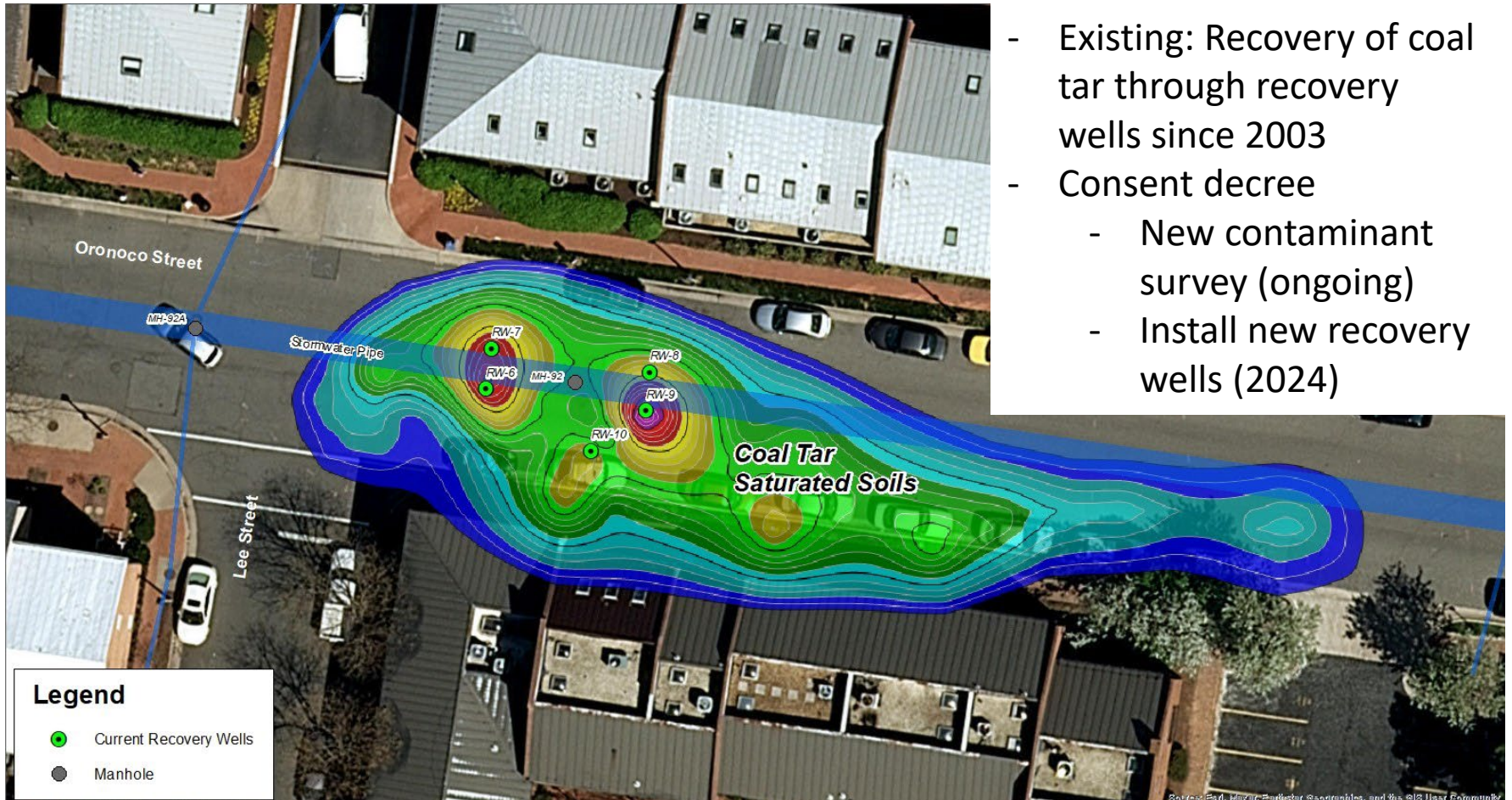
Remedial Progress to Date



Potomac Riverkeeper Network (PRK) Lawsuit Timeline

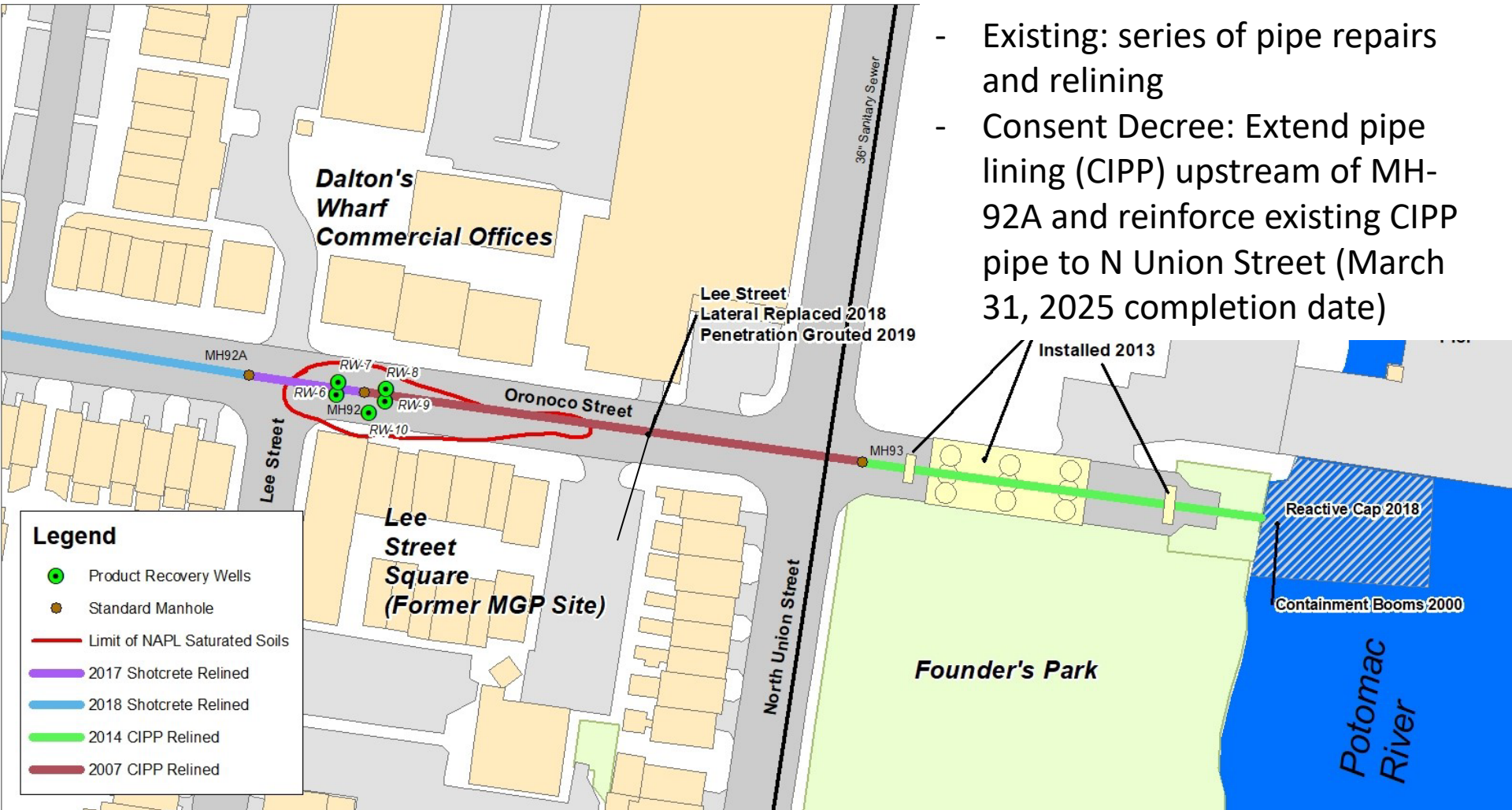
- > City working with PRK since 2016
- > Increase in sheens at the stormwater outfall observed February 2022
 - > Source of sheens discovered July 2022; repair made October 2022
- > Lawsuit filed May 9, 2022
- > Components of Settlement
 - > Upland Remediation – continuation of existing remedial activities
 - > Pipe Rehabilitation – continuation of existing remedial activities
 - > Pier Removal and Sediment Remediation – continuation of existing remedial activities
 - > Environmentally Beneficial Project – NEW; introduction of freshwater mussels into the Potomac River
 - > Settlement provides milestones for remedial activities in settlement

Upland Remediation



- Existing: Recovery of coal tar through recovery wells since 2003
- Consent decree
 - New contaminant survey (ongoing)
 - Install new recovery wells (2024)

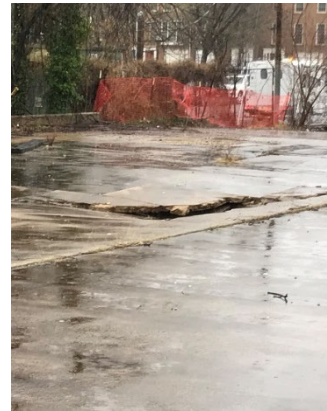
Pipe Rehabilitation



- Existing: series of pipe repairs and relining
- Consent Decree: Extend pipe lining (CIPP) upstream of MH-92A and reinforce existing CIPP pipe to N Union Street (March 31, 2025 completion date)

Robinson Terminal North (RTN) Pier Removal and Sediment Remediation

- > City has entered into an agreement with RTN for removal of wood supported decking and removal/stabilization of wooden piles
 - > RTN to complete around September 2025
- > City to then perform characterization of sediments and develop a remedial action plan for any contaminated sediments (end 2025/early 2026)
- > Implementation of potential remedial activities to be implemented around July 1, 2026



Environmentally Beneficial Project – Freshwater Mussels

- > Project to help introduce and reestablish population of mussels in the Potomac River
 - > Over 20,000 freshwater mussels to be introduced into the Potomac River
 - > Mussels act as natural filters, removing pollutants from waterways, thus enhancing water quality
 - > City working with Virginia Department of Wildlife Resources (DWR)
 - > Not related to the project/outfall site



QUESTIONS?