



Spa Road Environmental Summary

City of Annapolis
932 and 935 Spa Road, Annapolis, Maryland

July 23, 2025



Agenda

- 1 Site Background and Phase I ESA Summary
- 2 Remedial Standards
- 3 Phase II ESA Findings
- 4 Planned Future Use
- 5 Remedial Options
- 6 EPA Brownfields Grant
- 7 Costing Variables and Timeline

Site Background

- From mid-1910s until 1934, the southwestern corner of the eastern portion of the subject property was used as a landfill.
- In 1934, an incinerator facility was constructed in the vicinity of the former landfill and was in operation until 1949.
- In 1949, the City of Annapolis leased the eastern parcel of the subject property to the Annapolis Athletic Association to develop an athletic field. Weems-Whalen athletic field was completed in 1954 and was in use until approximately 2021.
- The western parcel was undeveloped until approximately 1970 when it was improved with a Department of Public Works automotive garage.
- Automotive garages and offices were present on the eastern portion of the subject property from approximately 1970 until approximately 2018, when the buildings were demolished.



Phase I Environmental Site Assessment, Haley & Aldrich, January 2024

- Completed by Haley & Aldrich for the City of Annapolis Department of Public Works.
- The Phase I ESA identified the following RECs:
 - **REC #1:** Former Landfill and Incinerator Facility with On-Site Disposal
 - **REC #2:** Historical and Current Subject Property Operations
 - Identified areas of concern include:
 - Former and current USTs
 - Former hydraulic lifts
 - Storage yards
 - Oil/water separators

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Remedial Standards

- **Soil:**
 - Maryland Department of the Environment (MDE) Residential Cleanup Standards (RCS)
 - Anticipated Typical Concentrations (ATCs) for select metals
- **Groundwater:**
 - MDE Type I and II Aquifer Standards
- **Sediment:**
 - MDE RCS
 - U.S. Environmental Protection Agency (EPA) Regions 3 and 4, Regional Screening Levels, Freshwater Sediment Screening Values (to be incorporated into the Screening Level Ecological Risk Assessment - SLERA)
- **Surface Water:**
 - MDE Type I and II Aquifer Standards
 - Code of Maryland Regulations Water Quality Standards (to be incorporated into the SLERA)
 - EPA Region 3, Regional Screening Levels, Freshwater Screening Benchmarks (to be incorporated into the SLERA)

Phase II ESA Findings - Spa Road

Soil Sampling

Vicinity of the historical landfill and incinerator

- Exceedances of RCS and/or ATCs for select metals and two semi-volatile organic compounds (SVOCs)

Western side (932 Spa Road)

- Exceedances of RCS and/or ATCs for select metals and five SVOCs

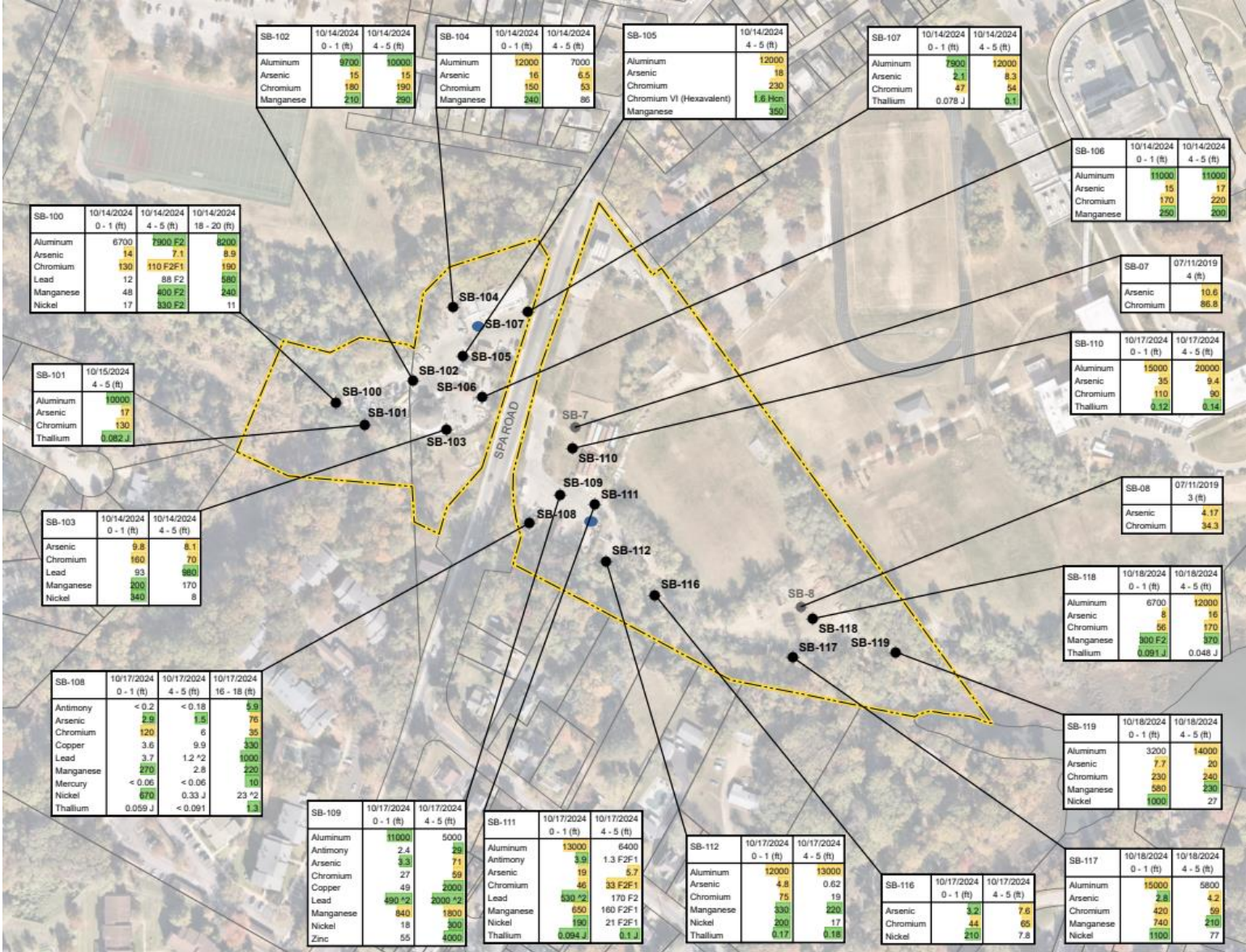
Vicinity of the current and former USTs and below-grade lift areas

- Exceedances of RCS for total petroleum hydrocarbons (TPH-DRO/GRO) and two VOCs

Groundwater Sampling

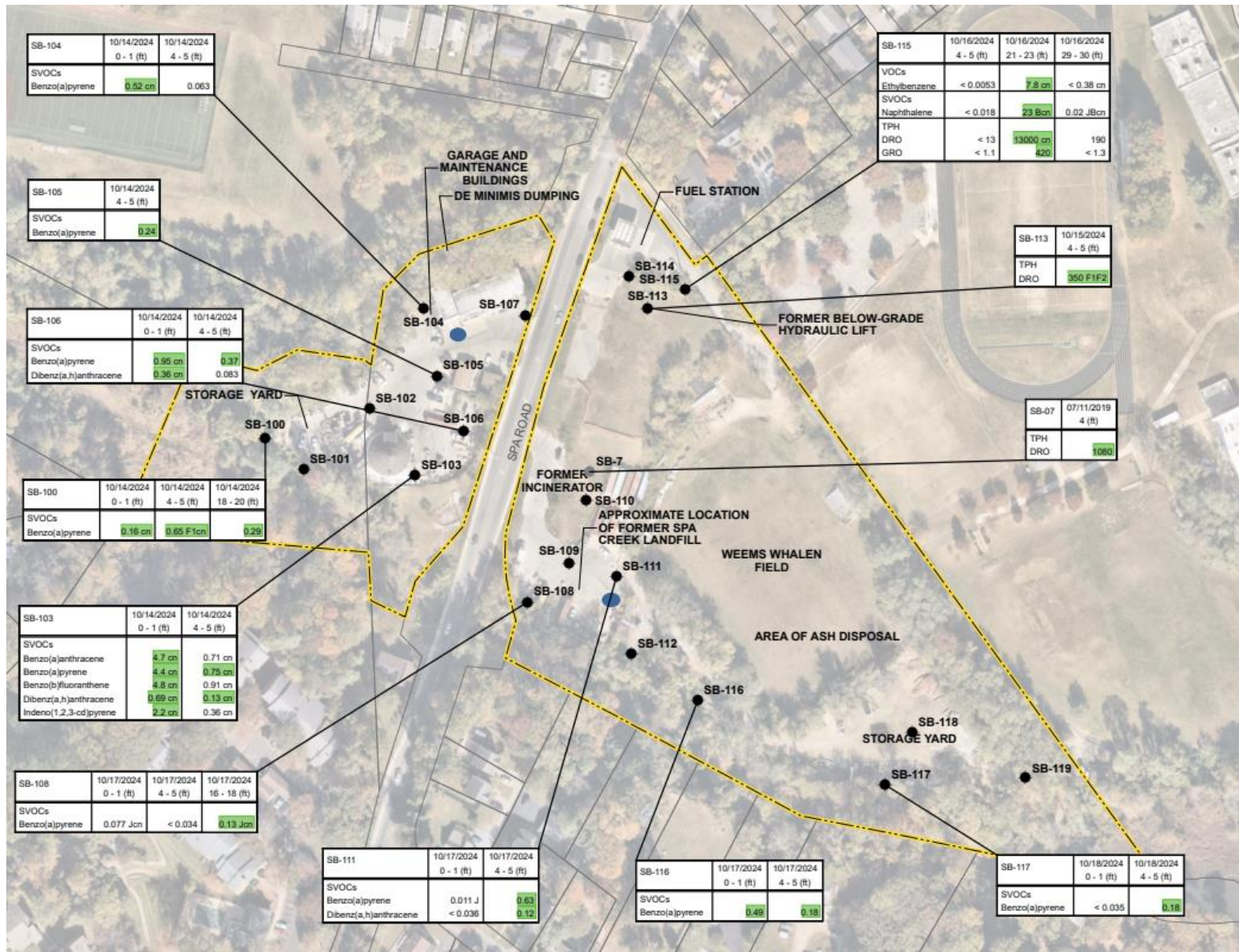
- Exceedances of the MDE Type I and Type II Standard for select metals in total concentrations and manganese in dissolved concentrations.

Phase II ESA Findings - Spa Road Soil (Metals)



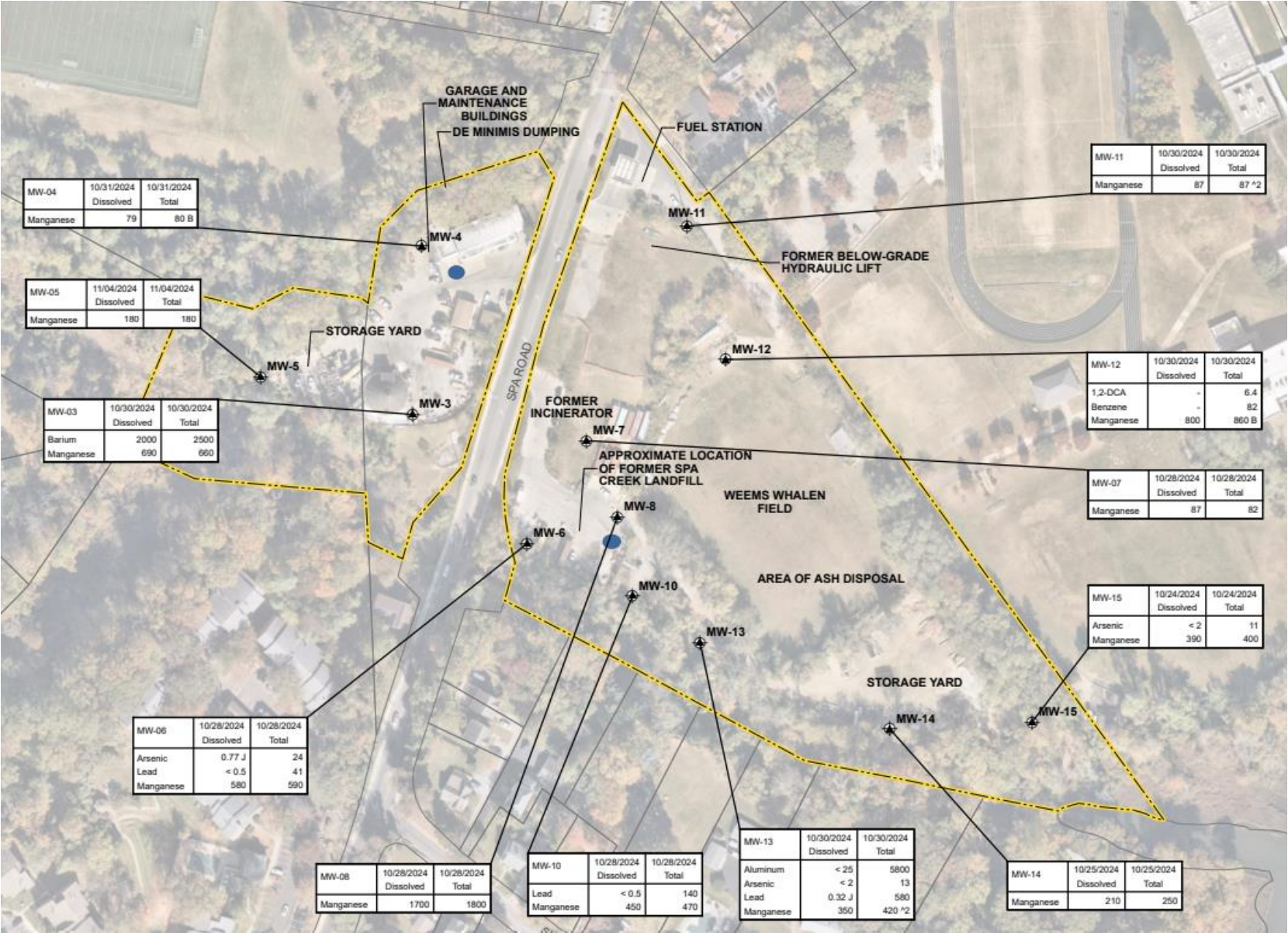
All results reported in milligrams per kilogram (mg/kg).
Exceedances of the RCS are highlighted in green. Exceedances of the RCS and ATC are highlighted in yellow.

Phase II ESA Findings - Spa Road Soil (VOCs, SVOCs, TPH DRO/GRO)



All results reported in milligrams per kilogram (mg/kg). Exceedances of the RCS are highlighted in green.

Phase II ESA Findings - Groundwater



Phase II ESA Findings

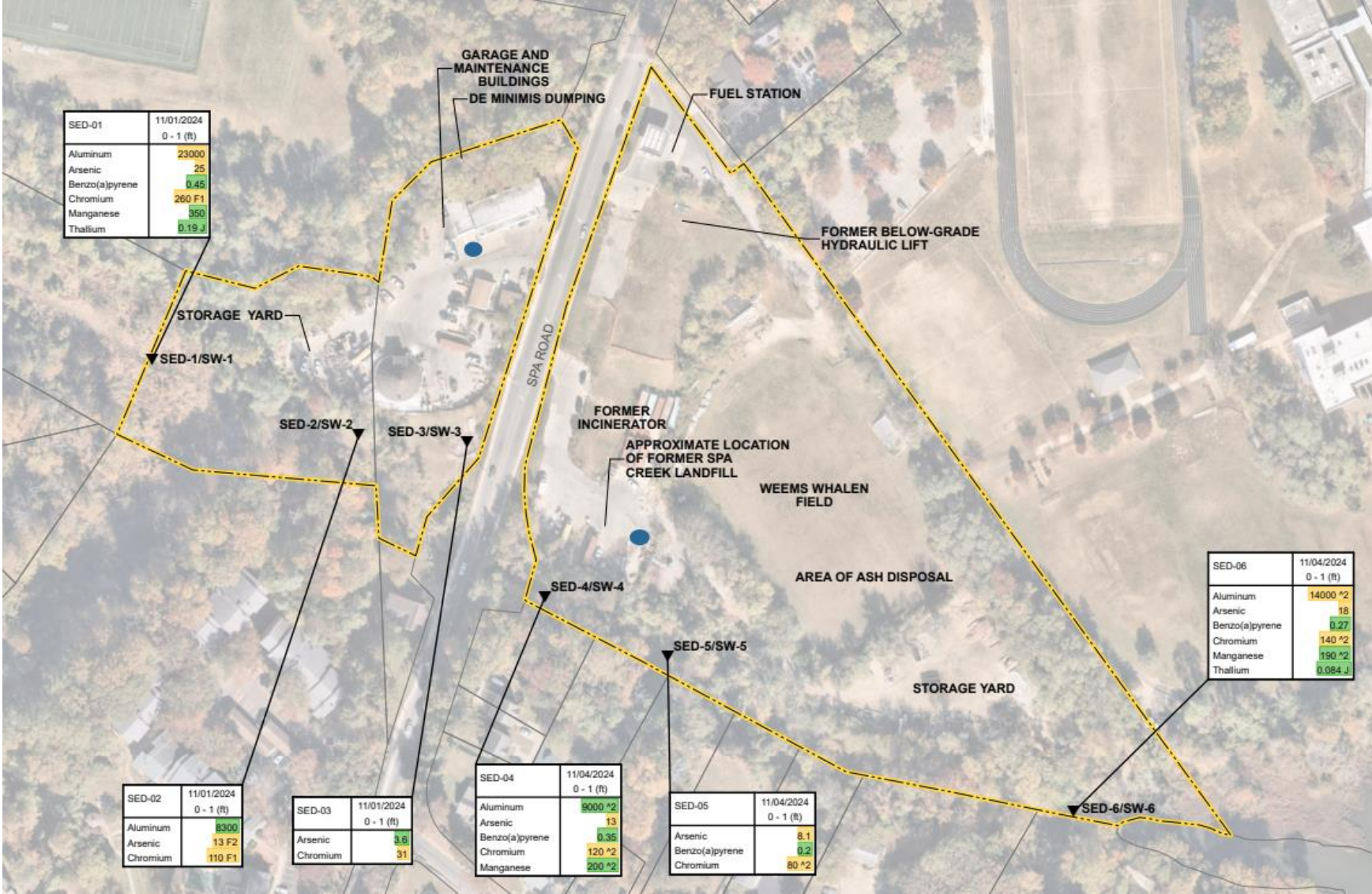
Sediment Sampling

- Exceedances of Ecological Screening Levels for metals and SVOCs.
- Most SVOC exceedances were marginal.

Surface Water Sampling

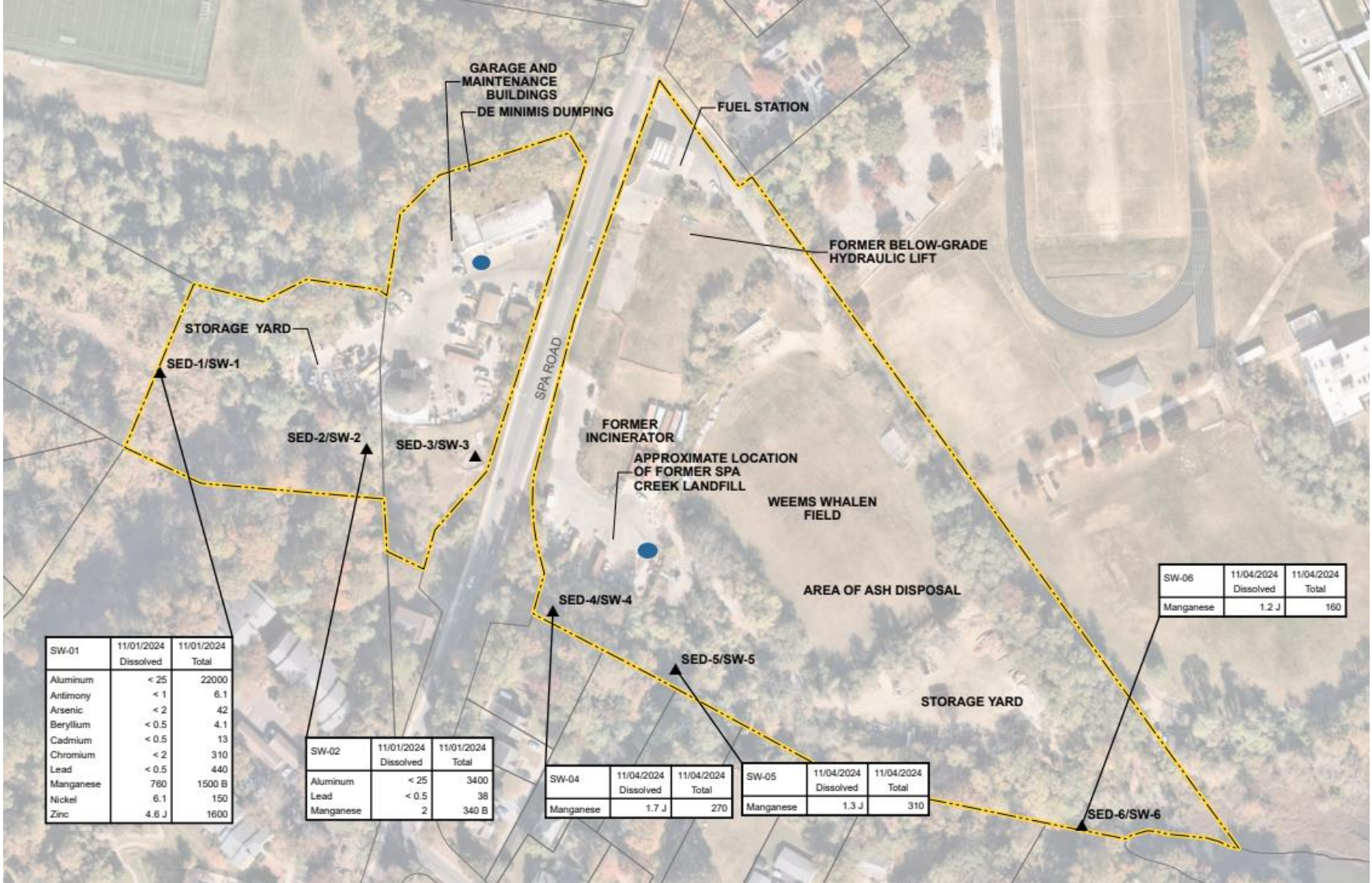
- Exceedances of Ecological Screening Levels for select metals (dissolved concentrations) and SVOCs.

Phase II ESA Findings - Sediment



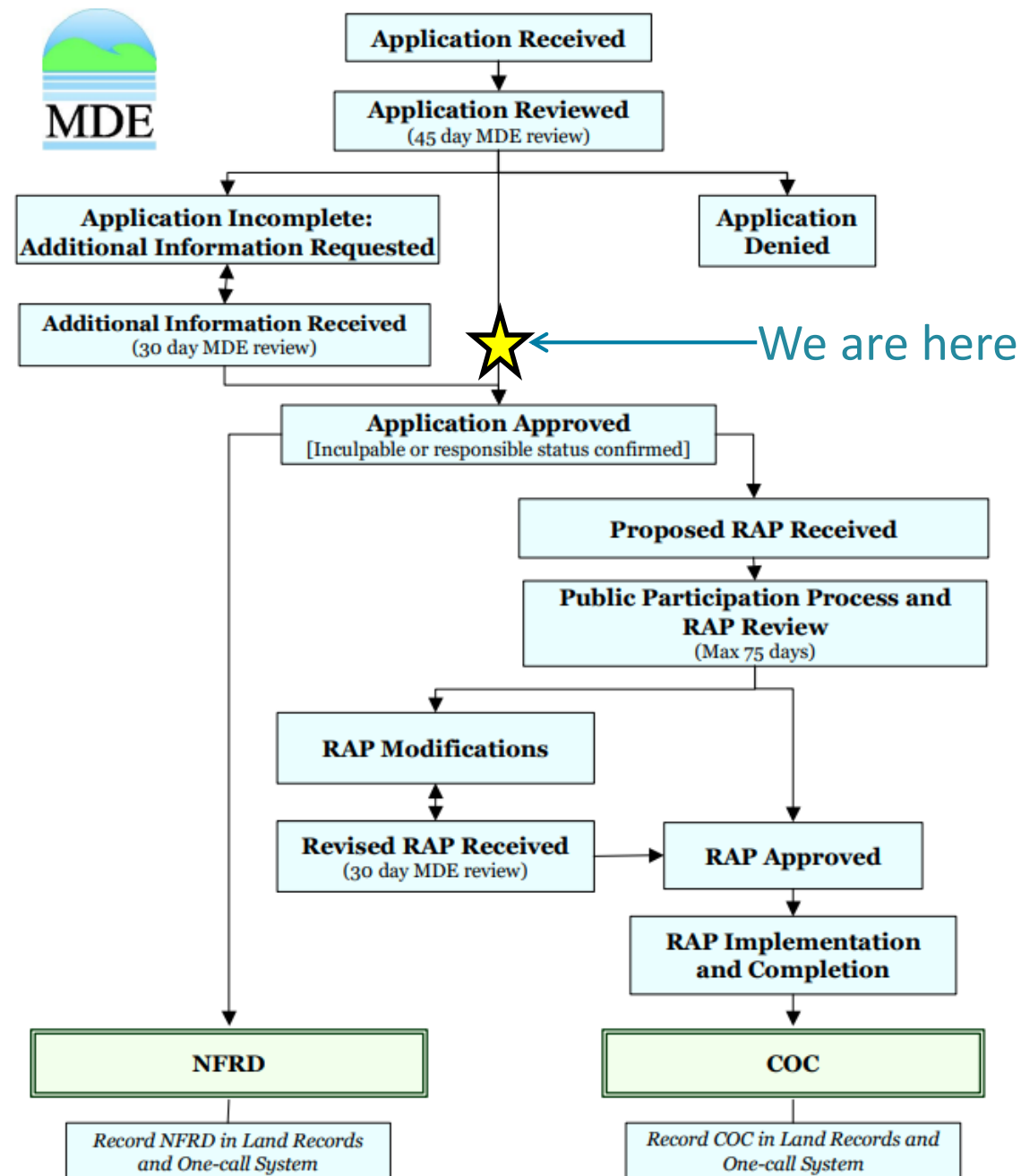
All results reported in milligrams per kilogram (mg/kg).
Exceedances of the RCS are highlighted in green. Exceedances of the RCS and ATC are highlighted in yellow.

Phase II ESA Findings – Surface Water



All results reported in micrograms per liter (µg/L). Exceedances of the Type I & II Aquifer Standards are shown.

MDE Regulatory Process



Anticipated Future Use (Preliminary)



Remedial Options

Remediation Types

- Soil Management Plan (SMP) for appropriate soil disposal
- Capping (earthen and asphalt/concrete)
- Hot spot removal
- Vapor barrier beneath all future occupied buildings
- Stream restoration, dependent on additional sediment sampling and results of the Screening-Level Ecological Risk Assessment.

Land Use Controls

- Goal to eliminate pathways to exposure through institutional and engineering controls.
- Groundwater use prohibition.
- Future excavation/intrusive activities to follow site-specific Health and Safety Plan (HASP) and SMP.
- Maintenance of cap, vapor barriers, etc. in the future.

EPA Brownfields Grant

- Subdivide Weems-Whalen Field – City retains ownership and redevelopment.
- Transfer remainder of property for access to EPA Brownfields grant funding.
- Cleanup funding available, potentially up to \$4M.
- Notice of Funding Opportunity anticipated in September; application likely due mid-November.
- If awarded, can be used for remediation costs, such as soil disposal, construction of engineered caps and vapor barriers, etc.

Costing Variables and Timeline

- Costing is based on:
 - The final design (area of capping, footprint of buildings, depth of excavations, parking garages)
 - Volume of soil anticipated to be removed
 - Transportation and disposal costs
- Based on the Phase II ESA findings, no active remedial systems are anticipated to be required.
- Input for remedial options in the design phase is critical.
- Timeline of remedy is closely integrated and follows the redevelopment timeline.