

Northern Bus Garage Reconstruction Project

Summer Community Meeting

August 14, 2023

This meeting is being recorded



Meeting Etiquette: In-Person

Help keep this meeting productive and respectful:

Please adhere to the Q&A protocol:



Raise your hand to ask a question



Speak clearly into the microphone



Allow presenters, and those speaking, to finish

When speaking:



Maintain a civil tone

Be mindful of time

Meeting Etiquette: Virtual

Help keep this meeting productive and respectful:

Please adhere to the Q&A protocol:



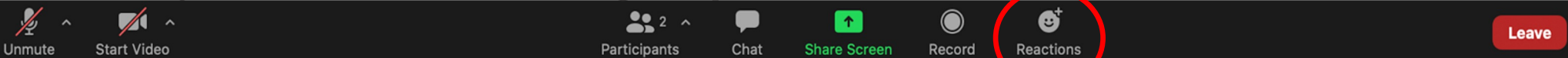
Request to speak by typing your name in the chat



Type questions directly into the chat



Use the raise hand feature in Zoom
To raise your hand while dialing in, **press *9**



Unmute Start Video Participants Chat Share Screen Record Reactions Leave

When speaking:



Maintain a civil tone

Be mindful of time

Agenda



Introductions



Project Overview and Updates



MTPD Update



Environmental Management Update



Metro's Zero-Emission Bus Update



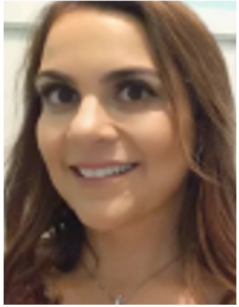
What to Expect in 2023



Introductions

Northern Bus Garage Reconstruction Project

Project Team



Maya Nino
Senior Capital Program
Manager, Capital Delivery



Tom Robinson
PMCM Project Manager



Phil Sheridan
Senior Vice President,
Clark Civil
Clark Construction Group



Jim Ashe
Environmental Coordinator



Amy Mesrobian
Zero-Emission Vehicles
WMATA



**Capt. Maurice
McKinney**
Metropolitan Transit Police
Department (MTPD)

Project Overview & Construction Updates

Northern Bus Garage Reconstruction Project

Housekeeping Best Practices

Construction

- All Erosion and Sedimentation Control (ESC) measures regularly maintained and inspected after each storm event
- Street sweeping to manage tracking from the site and within the site
- Wash construction vehicle wheels before exiting when muddy
- DOEE-compliant dust management being used for demolition activities
- All food waste is captured in dedicated trash receptacles
- Required daily work area clean up

Pest Management

- Pest control subcontractor retained with regular monitoring of project
- Bait stations are maintained at 50 feet on center around perimeter of project inside the fence line (51 total)

Street Sweeping and Dust Control

Hauling Operations

- Street sweeping
- Water application on haul roads
- Wheel washing
- Stone covering

Demolition

- Dust suppression with hose spray



Progress Since Last Meeting

Construction

Q2 – Environmental Remediation

- Completed asbestos abatement
- Managing all excavated soils per DOEE and District regulations

Q2 – Environmental Monitoring

- Completed installation of in-ground monitoring instruments
 - Inclinometers
 - Observation wells
 - Utility monitoring points (UMP's)
 - Ground monitoring points (GMP's)



Progress Since Last Meeting

Construction

Q2 – Mass Demolition

- Completed bulk demolition of historic car barn
- Removed remnants of historic trolley pits discovered under the floor slabs
- Completed hand separation at historic façade
- Continue to process demolition debris for recycling
- Over 95% of demolition waste is being diverted from landfills



Progress Since Last Meeting

Construction

Q2 – Support of Excavation (SOE) and Soils Excavation

- Completed drilling SOE pile installation east of the historic administration building
- Starting installation of lagging and tiebacks
- Completed drilling SOE piles for new storm water cisterns and tanks
- Mass excavation for new building basement underway



Progress Since Last Meeting

Construction

Q2 – Deep Foundations

- Mobilized drilled shaft operations
- Completed pile load test
- Started production drill shaft installation



Progress Since Last Meeting

Construction

Q2 – Steel Fabrication

- Completed QC audit at steel fabricators shop
- Started structural steel fabrication



Battery-Electric Bus (BEB) Design Update

Design

- 40% design reviews completed
- WMATA BEB design criteria finalized
- Initial fire hazard analysis completed and under review
- New service routing being coordinated with PEPCO
 - Will be run underground from the Fort Slocum Substation



Outlook for Q3 2023

Construction

- Complete demolition
- Continue support of excavation
- Continue mass excavation
- Continue drilled shaft installation
- Continue steel fabrication
- Start structural concrete

Agency Collaboration & Permitting Status

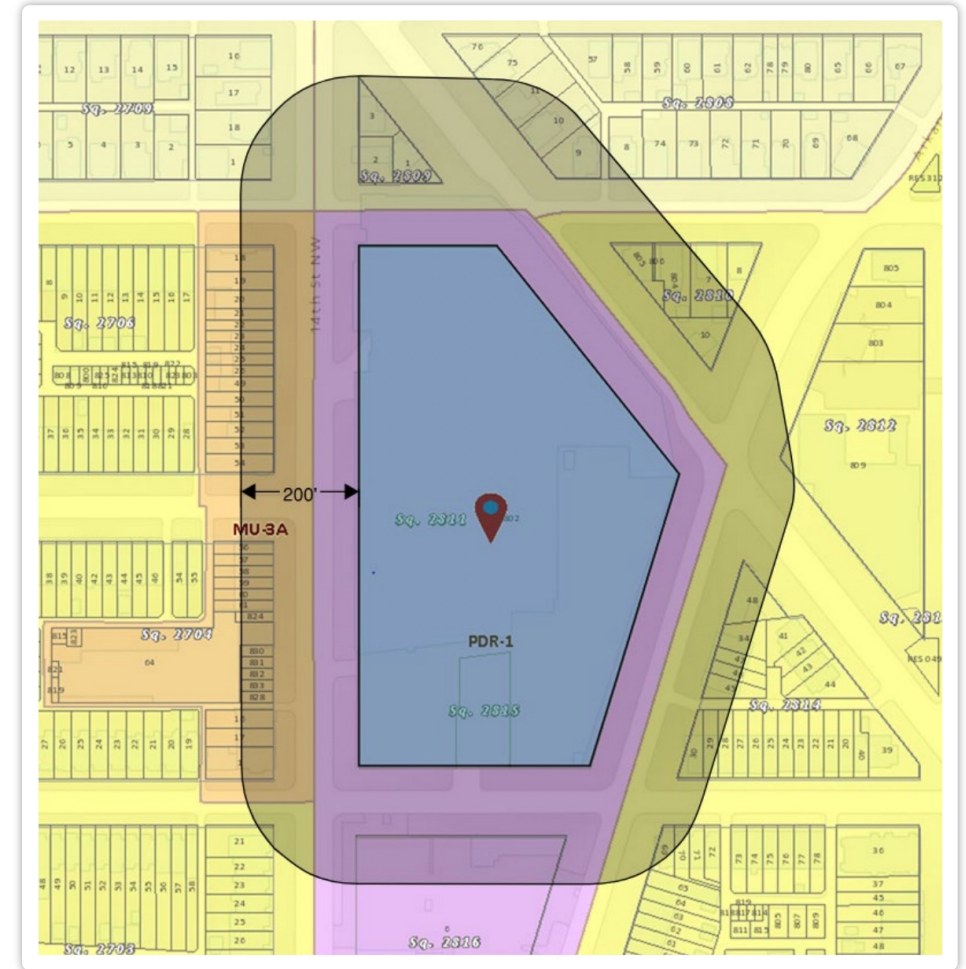
Agency	Status
The District Department of Building (DOB) formerly (DCRA)	▪ Building permit submitted – under round 2 review
Washington Gas	▪ Coordination of new low-pressure service ongoing
The District Department of Transportation (DDOT)	▪ Periodic MOT Inspections ongoing
DC Water	▪ Final approvals received for all new work
PEPCO	▪ Temporary service installed on 14th Street ▪ Ongoing coordination to finalize new building service application (non-BEB and retail) and for BEB Service Coordination
The District Department of Energy & Environment (DOEE)	▪ Ongoing coordination with DOEE (update to follow later in meeting)

Preconstruction Property Survey Update

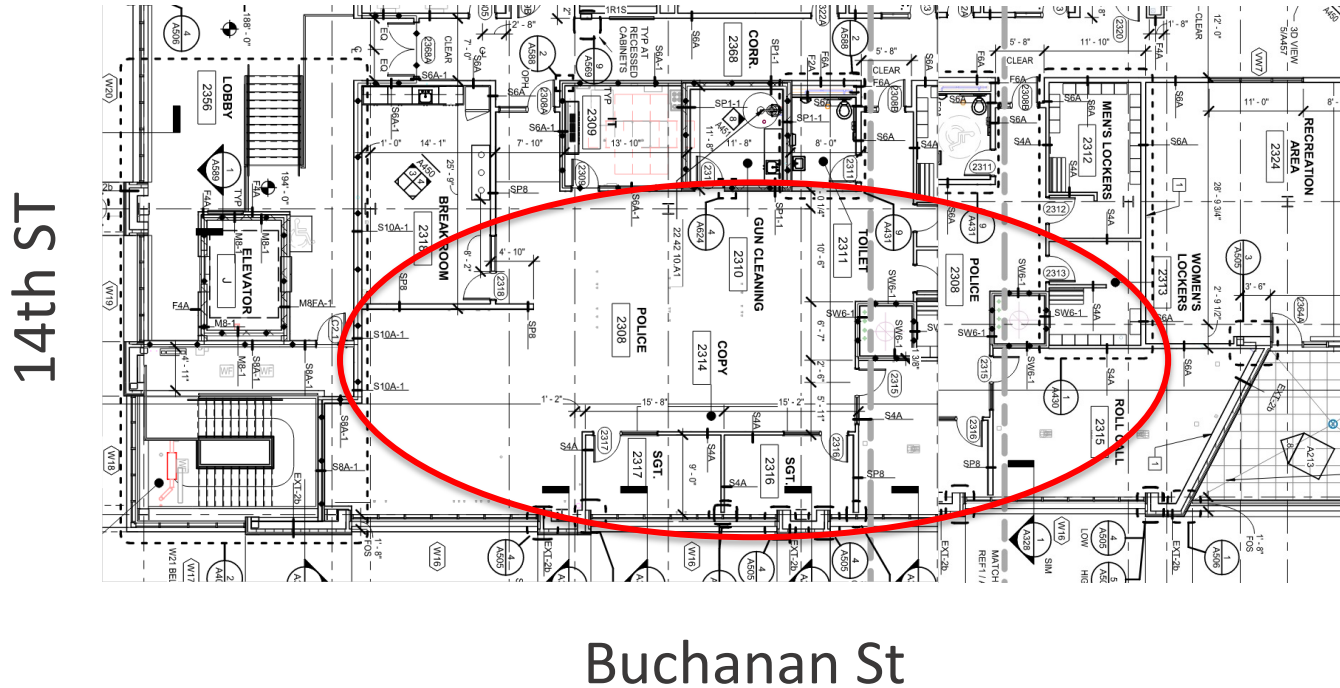
- **Still opportunities to sign up for surveys**
- Multiple dates and times to schedule your survey with the engineer are available. Call TER at **443-221-4493** or email **nbgsurvey@ter-int.com**
- The property owner will receive a copy of the completed pre-construction survey
- The Preconstruction Property Survey Program seeks to document existing conditions only for properties within 200 feet of the Northern Bus Garage Reconstruction Project site
- The Preconstruction Property Survey Program is informed by the Department of Buildings (formerly DCRA) and Federal Transit Administration guidelines

Preconstruction Survey Update

- Map shows an overlay with the properties that fall within 200 ft of the proposed new bus garage
- For more detailed information on the preconstruction survey, please visit https://wmata.com/initiatives/plans/northern-bus-garage/upload/Northern_June15_FINAL_Slides.pdf (slides 29 – 33)



MTPD Substation Space at NBG



- 3,890 square feet
- 13 officer workstations
- 2 offices for sergeants
- Officer break room
- Firearm maintenance room
- Roll Call / Conference room
- Separate locker rooms for men and women
- Unisex restroom
- IT room

Q&A Listening Session



In-person

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Virtual

- Type comments directly into the chat
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Environmental Plan and Remediation

Northern Bus Garage Reconstruction Project

Activities Since June Meeting

- Continued discussions with DOEE including a field visit –most recent meeting was August 10th
- Received UST closure letter
- Developed and submitted Baseline Risk Assessment (Submitted August 10th to DOEE)
- Received formal guidance on land remediation measures

UST Closure Letter

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

Environmental Services Administration

Underground Storage Tank Branch

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Toxic Substance Division

LETTER OF PERMANENT TANK CLOSURE

(Registered Underground Storage Tank System)

June 13, 2023

Washington Metro Area Transit Authority (WMATA)

c/o R. Claire Fox

3500 Pennsy Drive

Room C-172

Hyattsville, MD 20785

RE:

FACILITY NAME:

FACILITY ADDRESS:

FACILITY ID #:

WMATA Northern Bus Garage

4615 14th Street, NW, Washington, DC 20011

4000709

Dear R. Claire Fox:

The Department of Energy & Environment ("DOEE"), Underground Storage Tank Branch ("UST Branch") hereby issues this Permanent Tank Closure Letter, in reference to the seven (7) USTs (sizes 4K through 20K gallons) formerly located at 4615 14th Street, NW (the "Facilities"), and currently owned/operated by WMATA (the "Owner"), pursuant to the Underground Storage Tank Management Act of 1990, (D.C. Code § 8-113.01, et seq.), and the District of Columbia Underground Storage Tank Regulations, as set forth at Title 20 of the District of Columbia Municipal Regulations, Chapters 55-70 (20 DCMR 55-70). Specifically, this tank closure status is being issued pursuant to 20 DCMR § 6101.

Upon review of the UST Closure Reports prepared by ACE Environmental Holding, LLC dated February 13, 2023, for tanks 1 through 6 and June 2, 2023 for tank 7, submitted to this office on February 16, 2023 and June 5, 2023 respectively pertaining to the removal of the seven (7) above referenced underground storage tank systems, this office hereby certifies that the closure of the said tank systems is in accordance with the provisions of Chapter 61 of the District of Columbia UST Regulations.

A leaking underground storage tank LUST Case# 2021011 was opened on 11/9/20 when due diligence report showed exceedences of COCs than the LUST #89018 closing status at this site. Three soil and one groundwater samples were collected from the bottom of the pit during the removal of the seventh tank on May 4, 2023. TPH-DRO exceeded DOEE applicable standards. Therefore, additional excavation to remove the impacted soils from the bottom of the pit is requested. DOEE appreciates your compliance to date with UST and LUST requirements.

While WMATA has complied with the current tank closure requirements of this Program, District of Columbia's Underground Storage Tank Management Act, and the regulations promulgated pursuant to that Act, this Permanent Tank Closure shall not absolve the Owner, Operator, or a responsible party from previously incurred or potential future liability arising under the provisions of the Act or its Regulations. Should you have any

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1200 First Street NE, 5th Floor, Washington, DC 20002 | (202) 535-2600 | doee.dc.gov

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questions or concerns about this Letter of Permanent Tank Closure, please, call Mr. Sylvester Mode at (202) 535-2529 or email him at sylvester.mode@dc.gov.

Sincerely,



Fianna Phill, Branch Chief
Underground Storage Tank Branch

cc. James A. Ashe (WMATA) jashe@wmata.com
Yvonne McMahon (ACE Environmental) ymcmahon@aceenvironmental.net
Philip J. Sheridan (Clark Civil, LLC) phil.sheridan@clarkfoundationsllc.com

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Land Remediation Directive

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment
Environmental Services Administration
Toxic Substances Division

Toxic Substances Division

Land Remediation and Development Branch

Directive for Site Characterization

July 27, 2023

Ms. Claire Fox
Washington Metropolitan Area Transit Authority
Office of Environmental Management & Industrial Hygiene
3500 Pennsy Drive
Landover, MD 20785

Re: FACILITY NAME: WMATA Northern Bus Division
FACILITY ADDRESS: 4615 14th Street, NW, Washington, DC 20011
LUSTCASE #: 2021011
LRDB CASE#: SR-175-2023

Dear Ms. Fox,

The Department of Energy and Environment (DOEE), Land Remediation and Development Branch (LRDB), is issuing this Directive Letter in reference to the property located at 4615 14th Street, NW, Washington, DC 20011 (the "Site"), pursuant to the Brownfield Revitalization Act of 2000 (D.C. Code § 8-631 et seq.) (the "Act").

The LRDB has received and reviewed the Comprehensive Site Assessment Report dated March 10, 2023, Supplemental Site Assessment Addendum dated May 15, 2023, and Soil and Groundwater Management Plan dated February 23, 2023 prepared by Intertek PSI for the above mentioned Site. These reports confirm that chlorinated volatile organic compounds (CVOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and heavy metals have been detected in soil and groundwater in addition to the petroleum contaminants associated with LUST Case 2021011. The LRDB has determined that the owner of the Site is WMATA under the Act and is a responsible party (RP) for the cleanup. Therefore, WMATA must perform the following:

1. **Work Plan** - Within 30 days of the date of this Directive, WMATA must submit a Work Plan that defines the scope, schedule, sampling methods, and approaches for installing permanent monitoring wells to characterize and delineate the CVOCs plume along 14th Street and Buchanan Street. The monitoring well locations must be positioned so that samples taken from them accurately represent the nature and extent of contamination released on the Site. The investigation must be started within 30 days of approval of the work plan.

*** DEPARTMENT OF ENERGY & ENVIRONMENT

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July 27, 2023
Directive for site characterization
Facility: 4615 14th Street NW, Washington, D.C.

2. **Revised Comprehensive Site Assessment (CSA) Report** – Once the CVOC plume has been characterized and delineated, WMATA must submit a revised CSA Report within 45 days of completion of the field work. The Revised CSA should include ecological and human health risk assessment.

3. **Corrective Action Plan** - Within 30 calendar days of the submission of the Revised CSA, WMATA must prepare and submit a Corrective Action Plan (CAP) for DOEE's approval that proposes a remedial strategy to address the contamination in the soil and groundwater in a reasonable period of time. Since the nature and extent of the CVOC contamination is not known (for example whether there are high-level residuals, the location of residuals, and whether those residuals are diffused into soil and rock providing a long-term source), a pump-and-treat system may not be effective in removing the CVOC contamination. Other technologies, such as intrinsic and enhanced bioremediation and chemical oxidation, may be needed to remove CVOCs in a reasonable period of time. These technologies require a thorough understanding of where the contamination resides and of the subsurface groundwater flow. The CVOCs plume maps generated by DOEE suggest attenuation of CVOCs on the Site or poor knowledge of flow velocities or both. The CAP should demonstrate WMATA's ability to effectively evaluate the subsurface, evaluate remediation options, and employ the selected options during or after construction of the new bus garage.

4. **Soil Sampling Requirements During Construction Activities** - As discussed during the Site visit on June 29, 2023, and as detailed in the email from Apurva Patil dated June 29, 2023, WMATA is required to:

a) Collect soil samples from bottom and walls of the excavation in a grid pattern and analyze the soil samples for EPA Priority Pollutant List (PPL).

b) The excavated soil cannot be used for backfilling at the WMATA Site, unless the soil analytical results for EPA PPL are below EPA Industrial Regional Screening Levels (RSLs.)

Within 15 days of this directive, WMATA must submit a soil sampling plan presenting the proposed soil sampling grid pattern. The plan should also include the strategy for sampling the excavated soil, including the method of composting, number of cubic yards of material represented by each composite sample, methods for segregation of the sampled material prior to receiving sample results and proposed total number of composite soil samples.

5. **Quarterly Groundwater Monitoring Reports** – WMATA must continue to monitor the Site and submit quarterly monitoring reports until DOEE determines that no further action is necessary at the Site.

Any requests for extensions of time in which to complete each of the tasks listed above must be received by our office in writing no later than ten (10) days before the prescribed deadline. DOEE reserves the right to amend this schedule at any time. If and when changes are made to the schedule, you will be notified in writing of such changes.

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July 27, 2023
Directive for site characterization
Facility: 4615 14th Street NW, Washington, D.C.

This office will review the results of this assessment in accordance with the above-mentioned law and the implementing regulations to determine whether additional assessment or corrective action is necessary. Please note that a District Department of Buildings construction permit is required for any site operations.

If you have any questions, please feel free to contact Apurva Patil at 202-654-6004, Apurva.patil@dc.gov. Thank you for your cooperation.

Sincerely,



Dave Tomlinson
Associate Director
Toxic Substances Division
District Department of the Environment

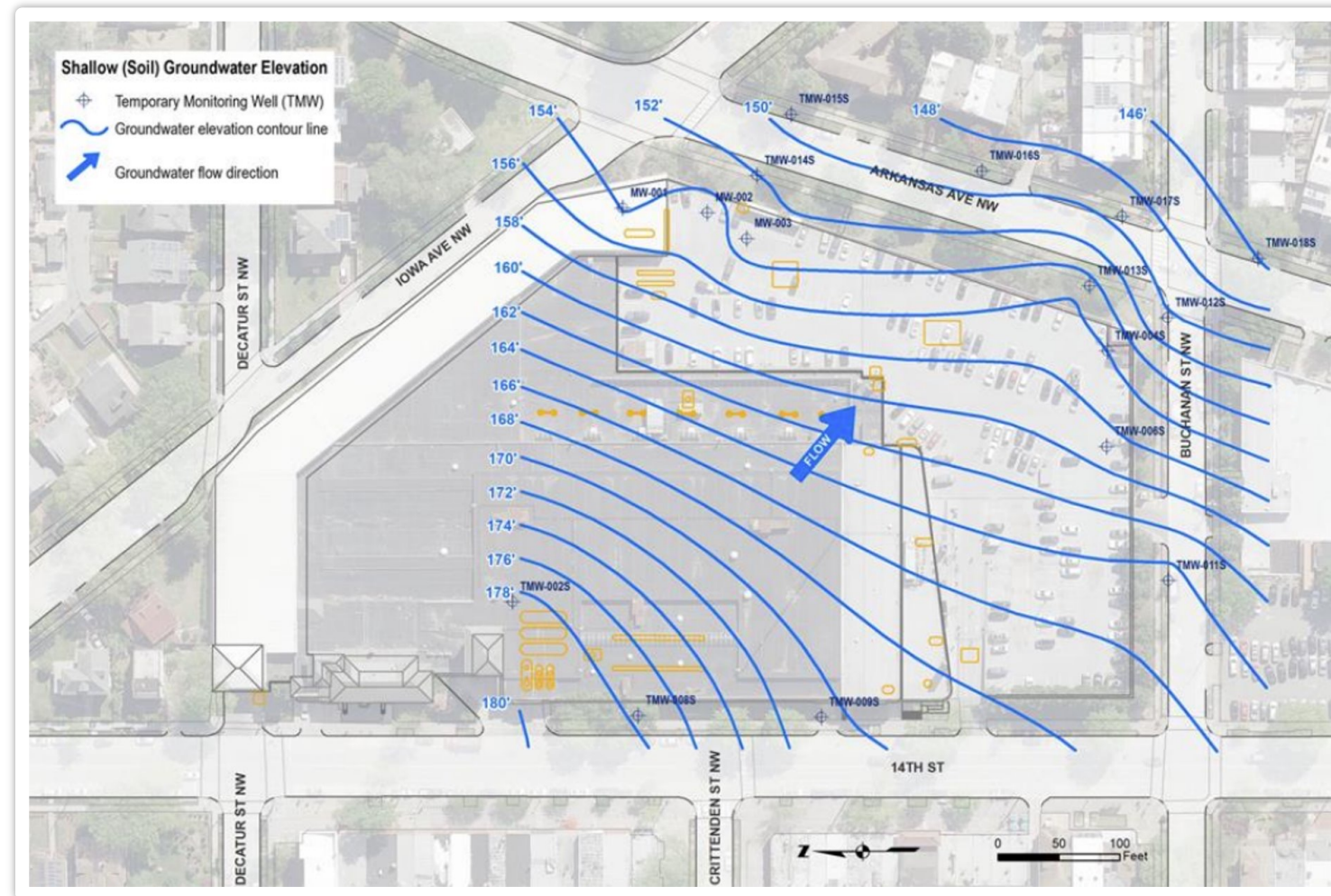
CC: James Ashe – WMATA
Nazmul Haque – DOEE UST Branch

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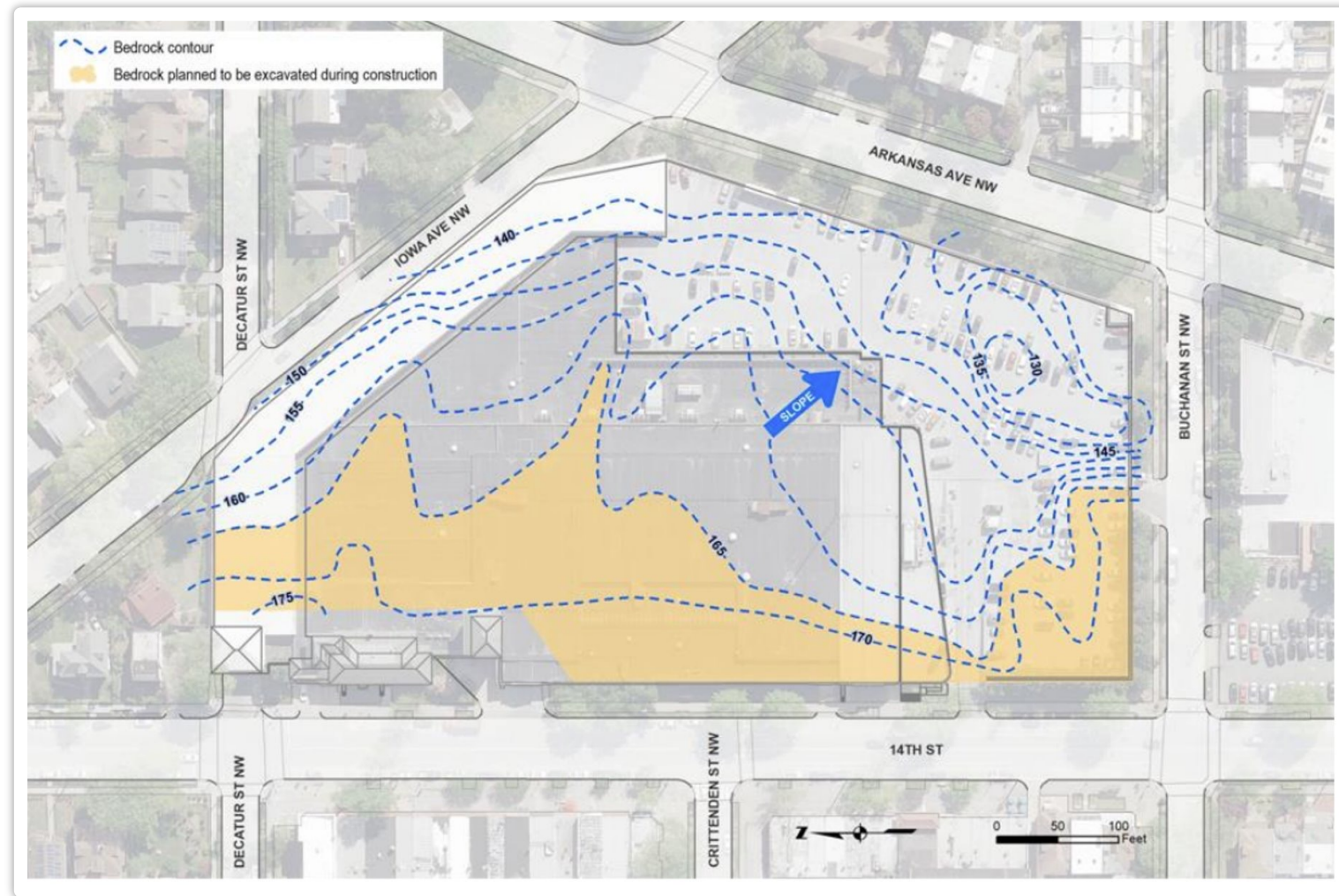
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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Groundwater Flow



Bedrock



Northern Bus Garage (ca. 1984)



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



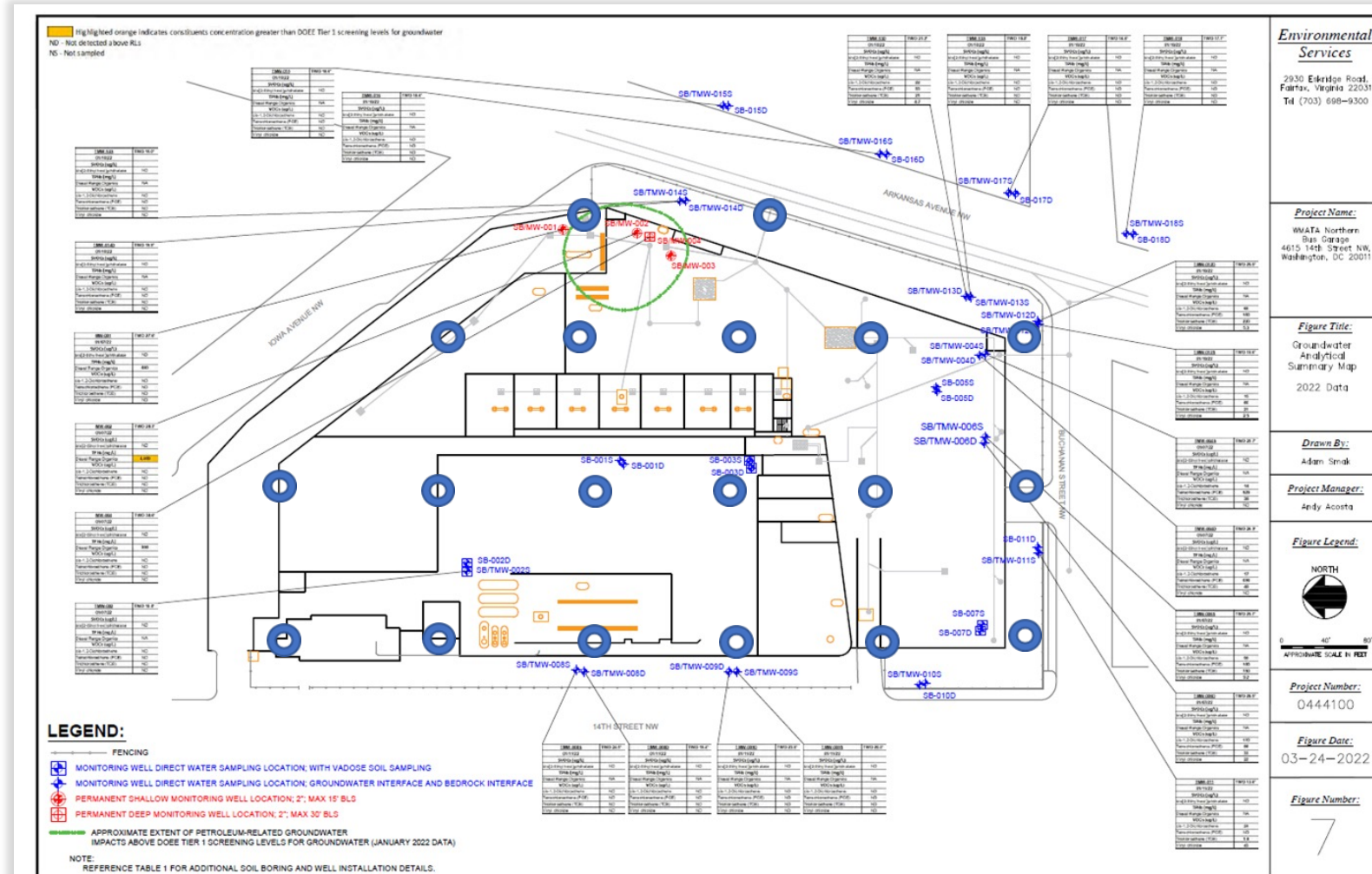
Investigation Tasks

- Develop a Work Plan (Sept 10, 2023)
 - Well Locations
- Submit an interim CAP including 30% design for vapor mitigation system (As soon as possible)
 - Soil sampling plan and grid
- Install additional wells (seven proposed)
- Sample wells quarterly
- Submit revised CSA [SSA] report
- Submit a final CAP

Soil Sample Approach

- Samples collected on 100 ft rectangular grid. Focused sampling when needed (especially source areas). (To be reviewed by DOEE)
- Samples analyzed for TCL VOCs, SVOCs, Pesticides & PCBs, and TAL metals.
- Soil will not be used for backfill, as this is an excavation task.
- Planned subgrade above groundwater table.

Proposed Sampling Grid



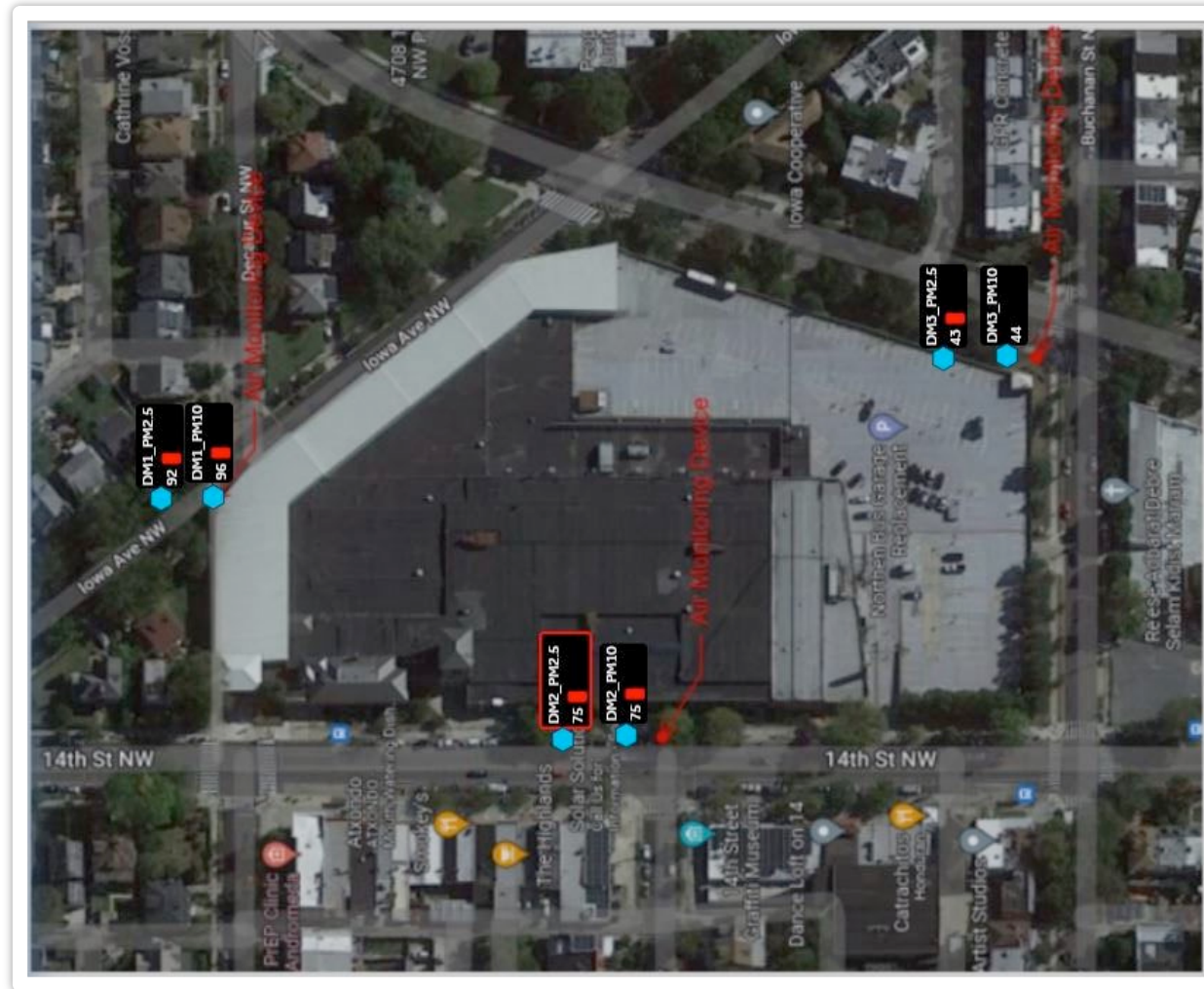
Remediation Activities

- Task 1: Removal of underground structures and storage vessels
- Task 2: Impacted soil excavation and disposal
 - 2a. Documented Petroleum-Impacted Soil Area
 - 2b. Other Areas of Impact (if encountered)
- Task 3: Free phase petroleum product removal and disposal
- Task 4: Dense non-aqueous phase liquids removal and disposal (if encountered)
- Task 5: Vapor management system [Vapor barrier and a PVC air collection system]
- Task 6: Sentinel well installation and monitoring; groundwater remediation if necessary

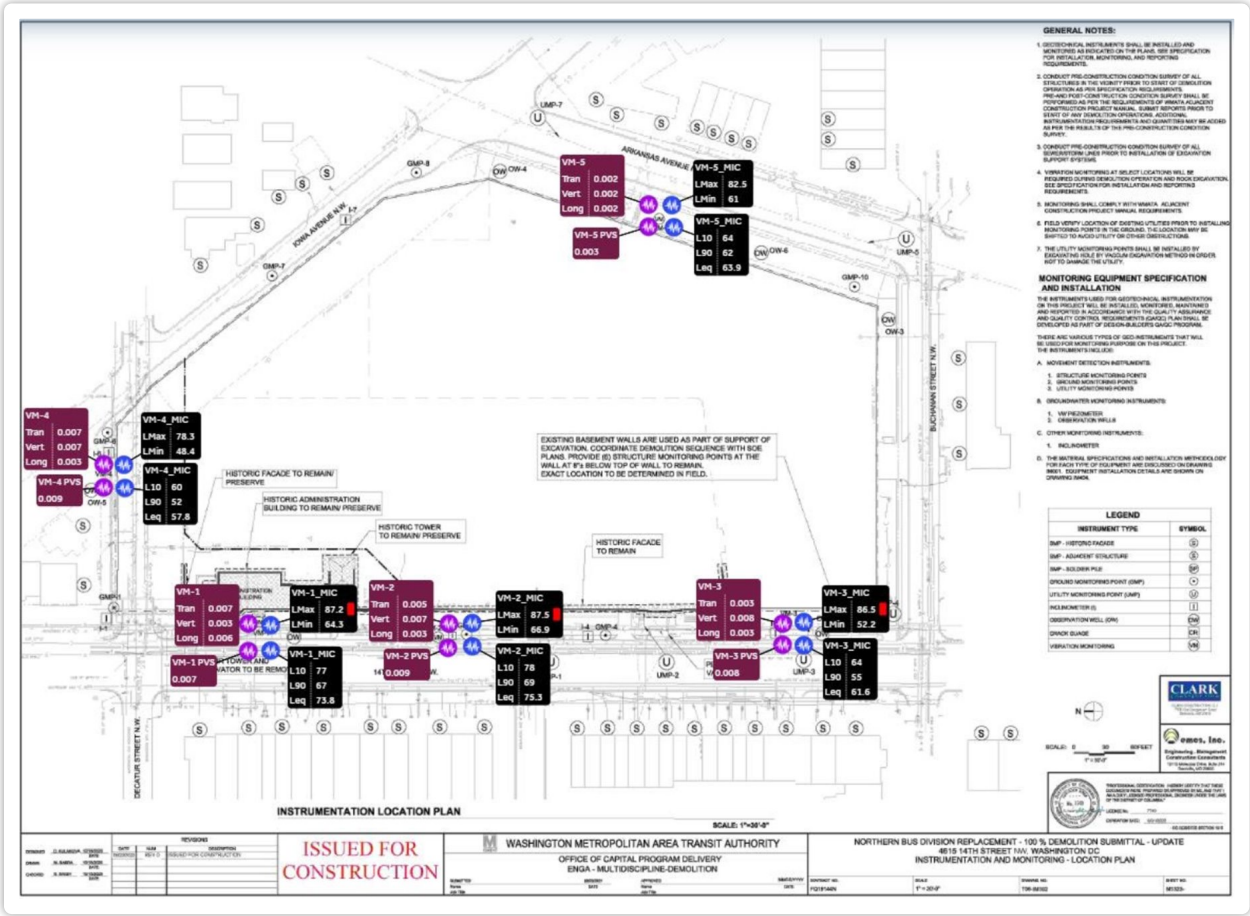
Dust Monitoring, Noise, Vibration

- June 2023 report has been posted.
- July 2023 report is in preparation.
- Dust Monitoring
 - 3 monitors
 - Exceedances June 7-9 and Jun 29, which correlate to wildfires and regional events.
- Noise Monitoring
 - 5 monitors
 - Multiple exceedances reported.
 - Issues:
 - Unable to distinguish site-related noise from ambient noise.
 - Multiple exceedances reported in the evenings and on weekends
- Will consult with DOEE about how to address this.
- Vibration Monitoring
 - 5 monitors
 - VM2 reported an exceedance that was caused by a faulty sensor.

Dust Monitors



Vibration and Noise Monitors



Q&A Listening Session



In-person

- Raise your hand if you'd like to ask a question



Virtual

- Type comments directly into the chat
- Raise your hand if you'd like to ask a question

Metro's Zero-Emission Bus Update

Metro Advancing Zero-Emission Bus Program

- Metro is accelerating work to transition our entire fleet of nearly 1,600 buses to zero-emission by 2042
- First of 12 battery-electric buses delivered in June
- FTA awarded Metro \$104 million to purchase buses for the region and convert Cinder Bed Road Bus Division to support battery-electric buses



Metro's new battery-electric bus

Zero-Emission Buses at Northern

- Northern Bus Garage will be a 100% zero-emission bus facility on opening
- The garage is being designed and built to accommodate a fleet of up to 150 battery-electric buses
- Only battery-electric buses on opening



Metro's new battery-electric bus

Q&A Listening Session



In-person

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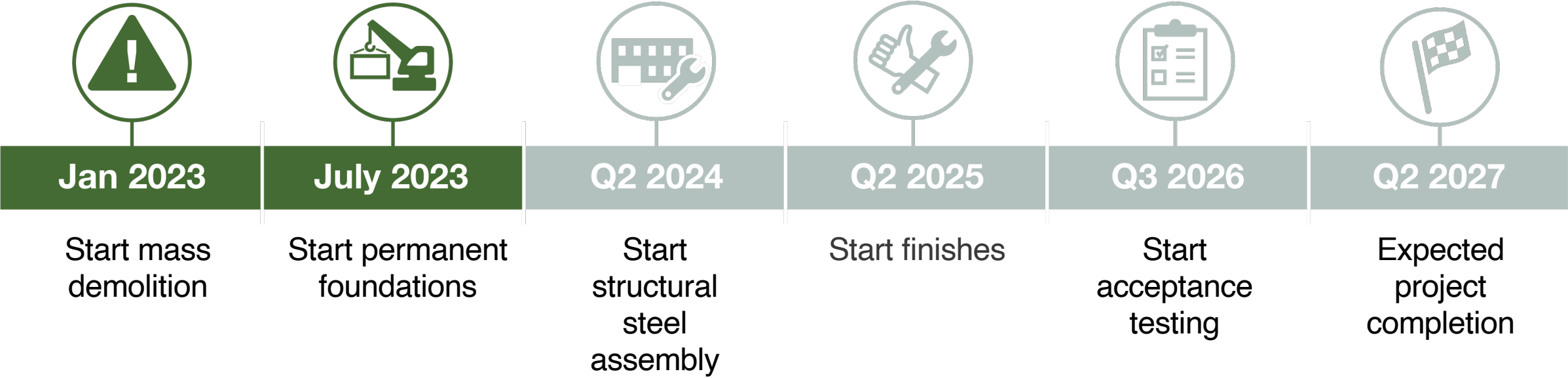


Virtual

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What to Expect for 2023 & Beyond

Current Schedule



This schedule is subject to change due to the BEB change

How to Follow-Up on the Project



**Sign Up For
Project & Newsletter
Updates**

*MCAP_NBG_Reconstruction
_Project@wmata.com*



**Project
Website**

*wmata.com/
NorthernBusGarage*



**Quarterly Community
Meetings**

Next meeting:
Winter 2023

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Q&A Listening Session



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Thank You!