



**Department of  
Environmental  
Conservation**

**KATHY HOCHUL**  
Governor

**AMANDA LEFTON**  
Commissioner

October 29, 2025

Jane Forbes  
Division of Environmental Quality  
City Hall  
30 Church Street, Room 300B  
Rochester, New York 14614

Re: Soil Sampling and Analysis Work Plan  
Riverside Cemetery  
Portion of Vacuum Oil Refinery Site  
Site No.: C828190  
City of Rochester, Monroe (C)

Dear Ms. Forbes:

The New York State Department of Environmental Conservation (Department) has completed a review of the October 9, 2025 Soil Sampling and Analysis Work Plan (Work Plan) for the proposed soil sampling event at the Riverside Cemetery to be used for the Beneficial Use Determination (BUD) petition. The Work Plan is approved with the following clarifications and modifications.

1. The Department understands that the analytical laboratory will have the appropriate ELAP certifications for the analytical methods to be completed.
2. The Department understands that the soil samples collected will be analyzed for TCL VOCs plus TICs and TCL SVICs plus TICs.
3. The Department understands that the reporting limits for PFOA and PFOS as presented in the Department's April 2023 guidance.
4. The Department understands that the analytical results will be compared to DER-10 Appendix 5 Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e) and the Department's April 2023 PFOA and PFOS guidance document.

Within fifteen (15) days of the date of this letter and prior to any fieldwork activities, the Applicant must elect in writing (electronic notification is acceptable) one of the following options:

- Option A: Accept the modified work plan;
- Option B: Invoke dispute resolution as set forth in 6 NYCRR Part 35-1.5(b)(2); or
- Option C: Terminate the Brownfield Cleanup Agreement in accordance with 6 NYCRR Part 375-3.5.

If the Applicant chooses to accept Option A then this letter becomes part of the approved Soil Sampling and Analysis Work Plan dated October 9, 2025 for Riverside Cemetery. Also, if Option A is chosen then a copy of the approved Soil Sampling and Analysis Work Plan for Riverside Cemetery along with this

letter attached must be placed in the document repository within 1 week of accepting Option A and prior to any fieldwork activities. Please provide notification to the Department that the Soil Sampling and Analysis Work Plan for Riverside Cemetery and a copy of this letter have been placed in the document repository (electronic notification is acceptable).

NYSDEC seeks to resolve outstanding differences in a mutually agreeable manner which addresses the requirements of the Brownfield Cleanup Agreement, Part 375, and all applicable laws, regulations, and guidance. If you or your technical team have any questions or concerns regarding this request, please contact me via email at [charlotte.theobald@dec.ny.gov](mailto:charlotte.theobald@dec.ny.gov) or at 585-226-5354. If your legal team have any questions or concerns regarding this request, please feel free to contact Deborah Gorman via e-mail at [Deborah.Gorman@dec.ny.gov](mailto:Deborah.Gorman@dec.ny.gov) or at 518-402-9525 and Kyle Pero at [kyle.pero@dec.ny.gov](mailto:kyle.pero@dec.ny.gov).

Sincerely,

A handwritten signature in black ink that reads "Charlotte B. Theobald". The signature is fluid and cursive, with the first name "Charlotte" and last name "Theobald" clearly legible.

Charlotte B. Theobald  
Assistant Engineer

cc:

Anne Spaulding (City of Rochester)  
Greg Andrus (Lu Engineering)  
Jeff Danzinger (Day Environmental)  
Justin Deming (NYSDOH)  
Julia Kenney (NYSDOH)  
Christopher Budd (NYSDOH)  
Starr O'Neil (MCHD)  
Dr. Velez De Brown (MCHD)  
Kyle Pero (NYSDEC)  
Deborah Gorman (NYSDEC)  
David Pratt (NYSDEC)  
Michael Ormanoski (NYSDEC)

## **SOIL SAMPLING AND ANALYSIS PLAN**

**SITE #1  
RIVERSIDE CEMETERY  
2600 LAKE AVENUE  
ROCHESTER, NEW YORK**

**Prepared for:** City of Rochester  
Division of Environmental Quality  
30 Church Street, Room 300B  
Rochester, New York 14614

**Prepared by:** Lu Engineers  
200 East Broad Street  
Rochester, New York 14606

And

Day Environmental, Inc.  
1563 Lyell Avenue  
Rochester, New York 14606

**Project No.:** 6254S-25

**Date:** October 9, 2025

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## 1.0 INTRODUCTION

The City of Rochester (City) is proposing to complete sampling and analysis of a source of soil at the Riverside Cemetery, 2600 Lake Avenue, Rochester, New York (Site #1). A Locus Map is included as Figure 1-1. The viability of using this soil as a source of imported material at the City-owned former Vacuum Oil Brownfield Cleanup Program (BCP) Site (NYSDEC BCP Site #C828190) is being considered.

On August 14, 2025, Marques and Associates, P.C. (Marques) surveyed the location and elevation of a soil pile at the Riverside Cemetery. The soil pile at Site #1 consists of previously undisturbed surplus native soils that were generated as a result of grave excavations. The horizontal and vertical survey data collected by Marques was entered into a geographic information system (GIS) by Day Environmental, Inc. (DAY). Figure 1-2 shows the survey points and 3-D Analyst modeled topographic contours of the soil pile. In addition, a lower raster to represent a bottom cut elevation surface beneath the soil pile was prepared based on “toe” survey points around the perimeter of the pile. GIS Spatial Analyst was subsequently used to calculate a volume of the soil pile above the lower raster. As provided on Figure 1-2, the available volume above the lower raster was calculated to be 6,502 cubic yards (CY).

As required by the New York State Department of Environmental Conservation (NYSDEC), the soil pile at Site #1 needs to be chemically characterized to determine possible uses at the NYSDEC BCP Site #C828190.

## 2.0 SAMPLING AND ANALYSIS PLAN

NYSDEC Part 360.13(e) and Section 5.4(e) of NYSDEC DER-10 provide guidance on number of samples based on volume, and test parameters to characterize a proposed source. Since the Site is in the BCP, guidance from Section 5.4(e) of NYSDEC DER-10 takes precedence, and is used along with input from the NYSDEC Project Manager for BCP Site #C828190 given the history and nature of Site #1. Based on a volume of 6,502 CY and with input from the NYSDEC Project Manager, it is planned to collect eleven (11) discrete soil samples and three (3) composite soil samples from eleven (11) test boring locations. The eleven planned test boring locations are shown on Figure 1-3.

A drilling subcontractor will be retained to advance the eleven test borings to the desired depths using a direct-push drill-rig. Macro-core samplers will be used to collect soil samples from the ground surface to the bottom of each test boring. Drilling equipment will be decontaminated using an Alconox and water wash/water rinse prior to use at each location.

A representative of DAY or LU will observe, document, and screen the Macro-core samples and associated headspace soil samples in the field for total volatile organic compounds (VOCs) using a photoionization detector (PID). In addition, the representative will observe the samples for visual and olfactory evidence of apparent environmental impact (e.g., odors, staining, and free product). The representative will collect portions of samples for analytical laboratory testing. The samples submitted for testing will be biased towards the portions of the specific depth interval macro-core samples that have the highest field evidence of apparent impact. For test locations with no field evidence of apparent impact, portions of samples for analytical laboratory testing will be collected from random depths within the selected depth interval to be tested at the specific test boring. Test boring logs will be prepared that describe pertinent information (e.g., PID measurements, evidence of contamination, lithology, sample moisture, sample depth intervals, boring depths, evidence of groundwater, etc.).

The test borings advanced during this task will be located via tape measure by reference to existing site features and/or using a global positioning system (GPS) unit. Upon completion of the work, the test borings will be backfilled with soil cuttings.

Discrete soil samples are anticipated to be collected from each test boring from the targeted depth intervals in parentheses provided below:

TB1-1 (12-16 ft below the ground surface [bgs])

TB1-2 (0-4 ft bgs)

TB1-3 (4-8 ft bgs)

TB1-4 (8-12 ft bgs)

TB1-5 (0-4 ft bgs)

TB1-6 (12-16 ft bgs)

TB1-7 (8-12 ft bgs)

TB1-8 (4-8 ft bgs)

TB1-9 (8-12 ft bgs)

TB1-10 (4-8 ft bgs)

TB1-11 (0-4 ft bgs)

A separate aliquot for compositing will be collected at each test boring location's planned sample depth interval, which will be composited into the following composite laboratory samples:

Sample 1-1,2,3,4: Composite aliquots from locations TB1-1, TB1-2, TB1-3 and TB1-4

Sample 1-5,6,7,8: Composite aliquots from locations TB1-5, TB1-6, TB1-7 and TB1-8

Sample 1-9,10,11: Composite aliquots from locations TB1-9, TB1-10 and TB1-11

ALS Environmental (ALS) will complete the analytical laboratory testing of discrete samples and composite samples of the surplus soil. ALS is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory (ELAP #10145). The samples will be submitted to ALS under chain-of-custody control, and testing program, including that for associated quality assurance/quality control samples, is provided below.

### **Field Samples**

The eleven (11) discrete soil field samples will be tested for:

- a. Target Compound List (TCL) VOCs via United States Environmental Protection Agency (USEPA) Method 8260.

The three (3) composite soil field samples will be tested for:

- a. TCL semi-volatile organic compounds (SVOCs) via USEPA Method 8270.
- b. Target Analyte List (TAL) Metals via USEPA Method 6010/7470/7471.
- c. Polychlorinated biphenyls (PCBs) via USEPA Method 8082.
- d. Pesticides via USEPA Method 8081.
- e. Herbicides via USEPA Method 8151.
- f. Cyanide via USEPA Method 9012.
- g. Per- and polyfluoroalkyl substances (PFAS) via USEPA Method 1633 [submit samples under a separate chain of custody].
- h. 1,4-dioxane via USEPA Method 8270 SIM [submit samples under a separate chain of custody].

### **Quality Assurance/Quality Control (QA/QC) Samples**

- a. Matrix spike/matrix spike duplicate (MS/MSD) on one (1) discrete sample will be tested for:
  - TCL VOCs via USEPA Method 8260.
- b. MS/MSD on one (1) composite sample will be tested for:
  - TCL SVOCs via USEPA Method 8270.
  - TAL Metals via USEPA Method 6010/7470/7471.
  - PCBs via USEPA Method 8082.
  - Pesticides via USEPA Method 8081.

- Herbicides via USEPA Method 8151.
  - Cyanide via USEPA Method 9012.
  - PFAS via USEPA Method 1633 [submit sample under a separate chain of custody].
  - 1,4-dioxane via USEPA Method 8270 SIM [submit sample under a separate chain of custody].
- c. Blind field duplicates on one (1) discrete sample will be tested for:
- TCL VOCs via USEPA Method 8260.
- d. Blind field duplicate on one (1) composite sample will be tested for:
- TCL SVOCs via USEPA Method 8270.
  - TAL Metals via USEPA Method 6010/7470/7471.
  - PCBs via USEPA Method 8082.
  - Pesticides via USEPA Method 8081.
  - Herbicides via USEPA Method 8151.
  - Cyanide via USEPA Method 9012.
  - PFAS via USEPA Method 1633 [submit sample under a separate chain of custody].
  - 1,4-dioxane via USEPA Method 8270 SIM [submit sample under a separate chain of custody].
- e. One (1) equipment blank will be tested for PFAS via USEPA Method 1633 [submit sample under a separate chain of custody].

ALS will report its findings in analytical services protocol (ASP) Category B deliverables and NYSDEC Equis EXCEL EDD in approximately 10 to 15 business days after receipt of the samples.

Initially, a Data Usability Summary Report (DUSR) will not be completed on the Category B deliverables for the analytical laboratory test results. If subsequent to review of the test results the City decides to pursue a BUD to propose use of the soil from this Site at BCP Site #C828190, the NYSDEC project manager for BCP Site #C828190 will be contacted to determine if NYSDEC requires a DUSR be performed on the test results. If required by the NYSDEC, then a DUSR will be completed and components of the Data Package outlined in Section 3.0 will be updated accordingly.

### **3.0 DATA PACKAGE**

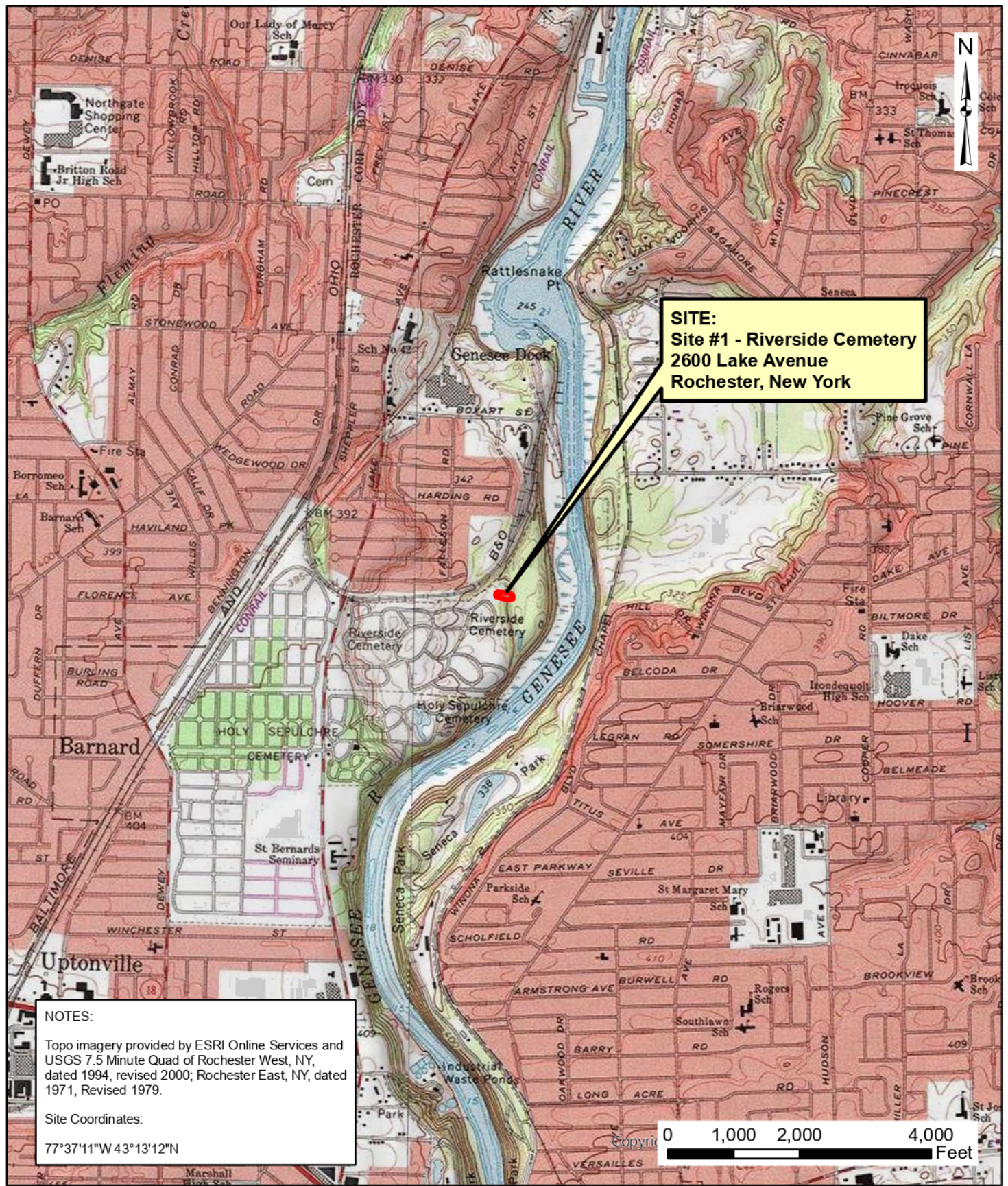
Subsequent to receipt of the analytical laboratory results, a data package will be prepared that includes, a project locus map, a figure depicting test locations in relation to pile topography, the analytical laboratory report, field logs for each test location that include a description of soil lithology, sample intervals, peak PID readings on sample intervals screened, observations concerning environmental impact (if present), and one or more data table that include comparison of field sample test results to NYSDEC Restricted Residential Use soil cleanup objectives (RRSCOs) and Protection of Groundwater soil cleanup objectives (PGSCOs) as set forth in Table 375-6.8(b) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375. These SCOs are the criteria that need to be met for imported materials at BCP Site #C828190.

The resulting sampling and analysis information and data in the data package may subsequently be used in a Beneficial Use Determination (BUD) petition for NYSDEC BCP Site #C828190.

#### **4.0 LIST OF ACRONYMS AND ABBREVIATIONS**

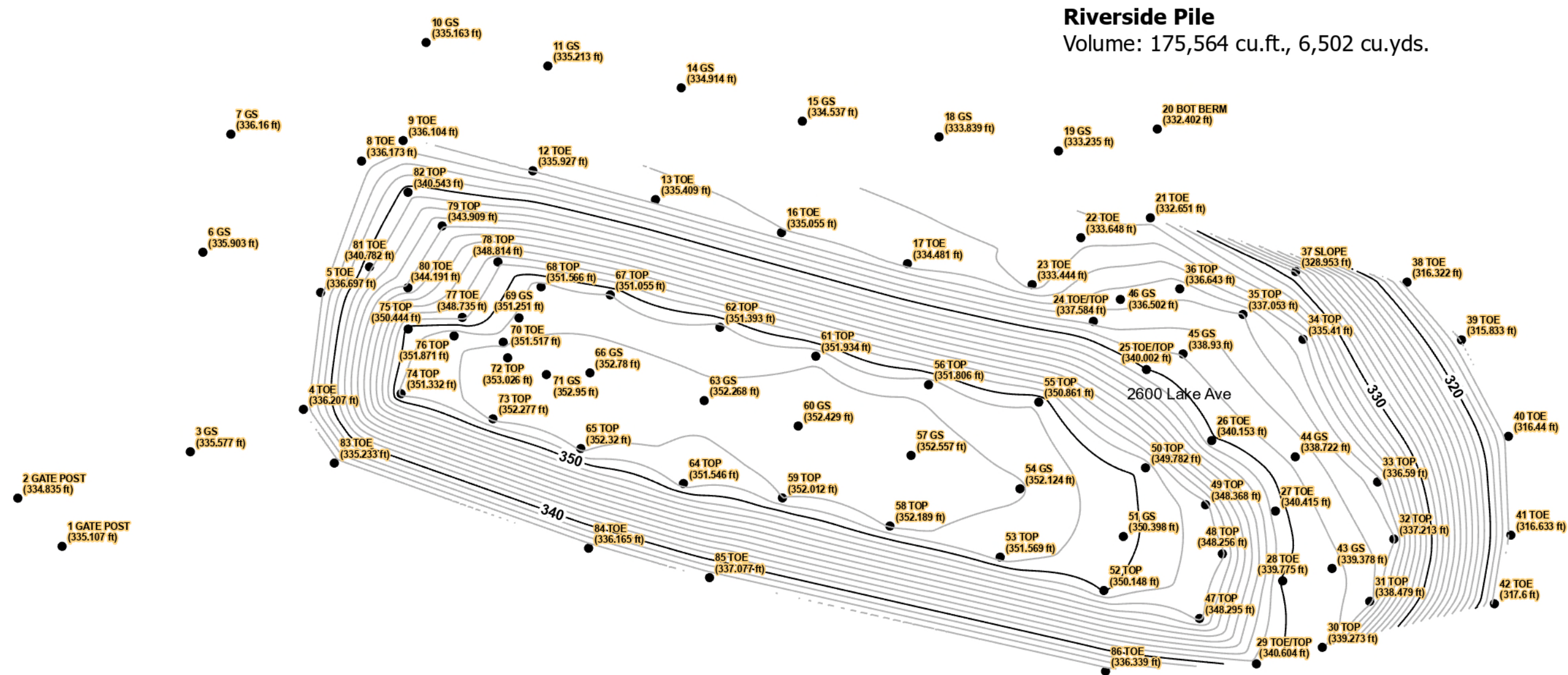
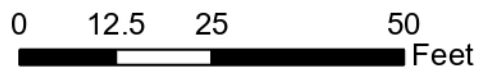
|         |                                                         |
|---------|---------------------------------------------------------|
| ALS     | ALS Environmental                                       |
| ASP     | Analytical Services Protocol                            |
| BCP     | Brownfield Cleanup Program                              |
| BGS     | Below the Ground Surface                                |
| BUD     | Beneficial Use Determination                            |
| City    | City of Rochester                                       |
| CY      | Cubic Yard                                              |
| DAY     | Day Environmental, Inc.                                 |
| ELAP    | Environmental Laboratory Approval Program               |
| GIS     | Geographic Information System                           |
| GPS     | Global Positioning System                               |
| Marques | Marques and Associates, P.C.                            |
| MS/MSD  | Matrix Spike/Matrix Spike Duplicate                     |
| NYCRR   | New York Codes, Rules and Regulations                   |
| NYSDEC  | New York State Department of Environmental Conservation |
| NYSDOH  | New York State Department of Health                     |
| PCB     | Polychlorinated Biphenyl                                |
| PFAS    | Per- and polyfluoroalkyl substances                     |
| PGSCO   | Protection of Groundwater Soil Cleanup Objective        |
| PID     | Photoionization Detector                                |
| QA/QC   | Quality Assurance/Quality Control                       |
| RRSCO   | Restricted Residential Use Soil Cleanup Objective       |
| SVOC    | Semi-Volatile Organic Compound                          |
| TAL     | Target Analyte List                                     |
| TCL     | Target Compound List                                    |
| USEPA   | United States Environmental Protection Agency           |
| VOC     | Volatile Organic Compound                               |

## FIGURES



|                                                                                                               |                                                                                                                                                                                               |                                                                                                                                                                                                                |                                                                  |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <div>Date</div> <div>09-12-2025</div> <div>Drawn By</div> <div>CPS</div> <div>Scale</div> <div>AS NOTED</div> | <div><br/><b>DAY ENVIRONMENTAL, INC.</b><br/>Environmental Consultants<br/>Rochester, New York 14606</div> | <div>Project Title</div> <div>SITE #1 – RIVERSIDE CEMETERY<br/>2600 LAKE AVENUE<br/>ROCHESTER, NEW YORK</div> <div>SOIL SAMPLING AND ANALYSIS PLAN</div> <div>Drawing Title</div> <div>Project Locus Map</div> | <div>Project No.</div> <div>6254S-25</div> <div>FIGURE 1-1</div> |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|

Document Path: E:\GIS Mapping\LuEng\0254R-25 - Vacuum Oil - Soil Piles\0254R-25 - Vacuum Oil - Soil Piles.aprx  
Name of Map: 1-2 - Riverside  
Last Date Saved: 9/12/2025 4:33 PM



Legend

●

Surveyed elevation data

—

Contour line

—

Primary contour line



Project Title

RIVERSIDE CEMETERY  
ROCHESTER, NEW YORK

Project No.

6254R-25

Drawing Title

SOIL SAMPLING AND ANALYSIS PLAN

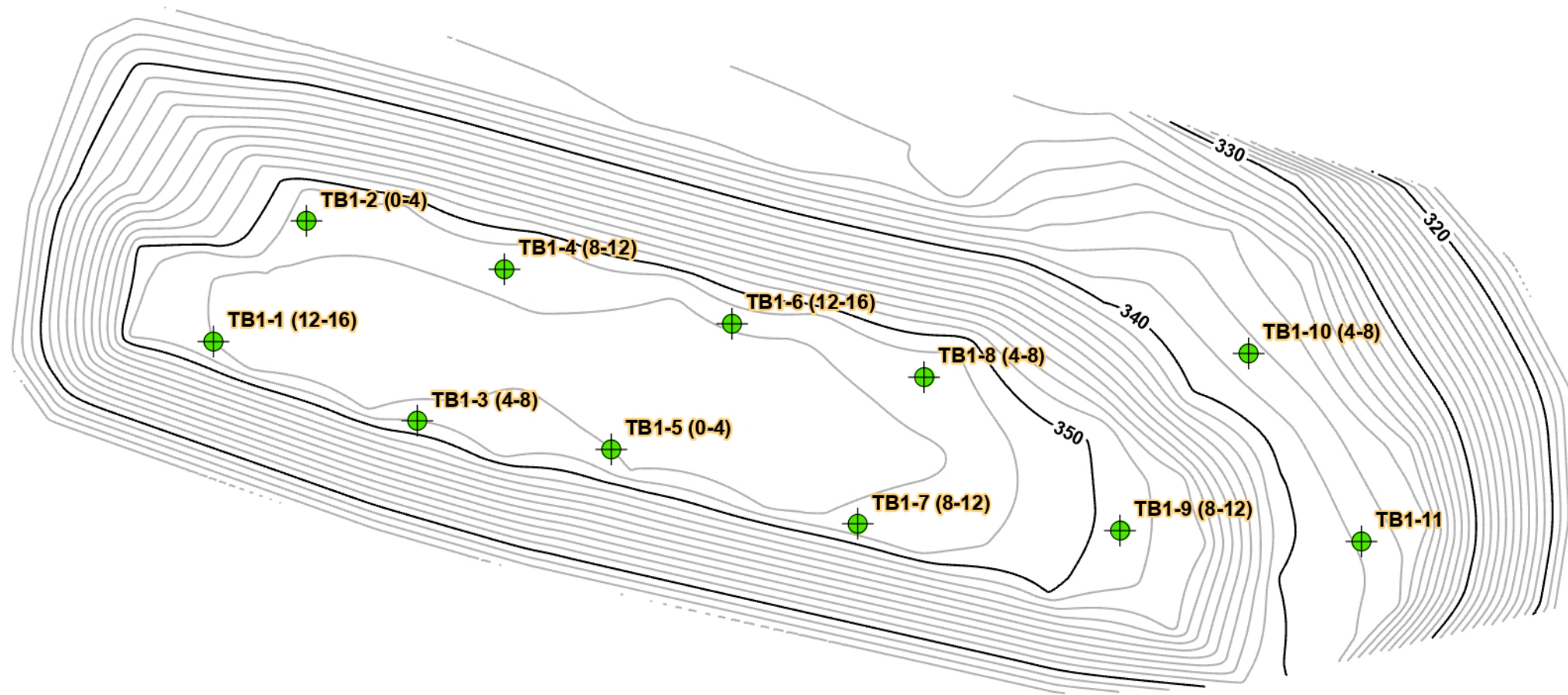
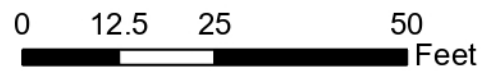
FIGURE 1-2

DAY ENVIRONMENTAL, INC.

Environmental Consultants

Rochester, New York 14606

|                 |          |             |            |
|-----------------|----------|-------------|------------|
| PROJECT MANAGER | JAD      | DATE        | 08-2025    |
| SCALE           | AS NOTED | DATE DRAWN  | 08-2025    |
|                 |          | DATE ISSUED | 08-29-2025 |



**Riverside Pile**  
Volume: 175,564 cu.ft., 6,502 cu.yds.

Legend

Test location

Contour line

Project Title

RIVERSIDE CEMETERY  
ROCHESTER, NEW YORK

Project No.

6254R-25

Drawing Title

SOIL SAMPLING AND ANALYSIS PLAN

FIGURE 1-3

Project Manager

JAD

DATE

09-2025

Scale

AS NOTED

DATE DRAWN

09-2025

Date Issued

09-12-2025

DAY ENVIRONMENTAL, INC.

Environmental Consultants  
Rochester, New York 14606