

March 26, 2025

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sent via email to oliver.wolfe@dec.ny.gov

**Subject: Supplemental Remedial Investigation Work Plan - Groundwater
Elmwood Preserve (NYSDEC BCP Site No. C360239), 850 Dobbs Ferry Road, White Plains,
NY**

Dear Mr. Wolfe:

Carson Voci Engineering and Geology, D.P.C. (Carson Voci), an affiliate of Terraphase Engineering, Inc., has prepared this *Supplemental Remedial Investigation Work Plan – Groundwater* (SRIWP-G) on behalf of Ridgewood Elmwood Owner, L.L.C. (the “Applicant” and “Participant”) for the New York State (NYS) Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program Site No. C360239 identified as Elmwood Preserve at 850 Dobbs Ferry Road, White Plains, New York (Site; Figure 1).

This SRIWP-G has been prepared to supplement the remedial investigation (RI) activities implemented by Roux Environmental Engineering and Geology, D.P.C. (Roux) and Carson Voci in accordance with the NYSDEC-approved *Remedial Investigation Work Plan* (RIWP [Roux 2024]) and *SRIWP-Soil Investigation* (SRIWP-SI [Carson Voci 2025]), respectively.

1 Introduction

The RI is a component of, and will facilitate but does not constitute, the overall remedy for the Site. The purpose of the RI is to determine the nature and extent of soil, groundwater, and soil vapor contamination at the Site, qualitatively assess the potential exposure to receptors, and collect additional data necessary to support the development of a remedial action work plan (RAWP).

The purpose of this SRIWP-G is to determine the nature and extent of groundwater contamination, if present, at the Site when evaluated against the Class GA Groundwater Ambient Water Quality Standards and Guidance Values in the NYSDEC, Division of Water, 2023 Technical and Operational Guidance Series Memorandum 1.1.1, “Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations” (AWQS). Groundwater is not and will not be used for drinking water as the Site is, and will be, connected to the public water supply yet the Class GA AWQS will still be utilized as the comparison criteria.

This SRIWP-G has been prepared in accordance with Department of Environmental Remediation (DER) procedures set forth in the Program Policy “DER-10 / Technical Requirements for Site Investigation and Remediation” (DER-10 [NYSDEC DER 2010]), and complies with all applicable federal, state, and local laws, regulations, and requirements.

This SRIWP-G will be implemented in accordance with details and governing documents in the SRIWP-SI, including the Quality Assurance Project Plan (QAPP), Health and Safety Plan (HASp), and Community Air Monitoring Plan (CAMP).

2 Background

Roux conducted an initial groundwater investigation as part of the RIWP implementation that was limited to the overburden, the results of which are detailed in the following sections.

2.1 Groundwater Monitoring Well Installation

Roux mobilized to the Site from May 21 through May 24, 2024, to install 11 overburden groundwater monitoring wells at the locations shown on Figure 2 to evaluate groundwater quality conditions across the Site in accordance with the RIWP. Prior to the installation of the overburden groundwater monitoring wells, Roux advanced soil borings at each location to log lithology, sample soil, and evaluate the approximate depths of the groundwater table and bedrock surface. Bedrock was encountered prior to the presence of potential groundwater at the following five of the eleven locations:

- A04/RMW-01
- A09/RMW-02
- C05/RMW-04
- E08/RMW-06
- I01/RMW-09

Overburden groundwater monitoring wells were constructed with 2-inch diameter, Schedule 40 PVC casing, and 0.010-inch slot screen at the remaining six locations:

- A13/RMW-03
- C13/RMW-05
- G05/RMW-07
- G12/RMW-08
- I08/RMW-10
- I15/RMW-11

On Jun 28, 2024, Roux attempted to develop the six monitoring wells. Of the six monitoring wells, only one well, RMW-10, contained groundwater and was developed. The other five monitoring wells, RMW-03, RMW-05, RMW-07, RMW-08, and RMW-11 were observed to be dry.

2.2 Groundwater Monitoring Well Sampling and Laboratory Analysis

On July 15, 2024, Roux mobilized to the Site to conduct low-flow groundwater sampling at monitoring well location RMW-10. RMW-03, RMW-05, RMW-07, RMW-08, and RMW-11 were not sampled because they were dry.

Groundwater monitoring well RMW-10 was sampled consistent with United States Environmental Protection Agency (USEPA) low-flow sampling guidance¹, including the measurement of field parameters (i.e., pH, dissolved oxygen, conductivity, temperature, turbidity, and oxidation reduction potential) by a water quality meter during purging and prior to sampling. The sample collected from RMW-10 was analyzed for NYSDEC Target Compound List (TCL) +30 / Target Analyte List (TAL) and Emerging Contaminants (ECs), which include the following:

- TCL volatile organic compounds (VOCs) + 10 Tentatively Identified Compounds (TICs);
- TCL semi-volatile Organic Compounds (SVOCs) + 20 TICs;
- TCL pesticides/herbicides;
- TCL polychlorinated biphenyls (PCBs);
- TAL metals, including total and hexavalent chromium and mercury;
- Total Cyanide; and
- ECs – Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane.

The groundwater sample was submitted to Pace Analytical Services, an Environmental Laboratory Approval Program-certified laboratory for the parameters analyzed, under chain-of-custody, with the analytical results provided in NYS Analytical Services Protocol (ASP) Category B deliverables.

2.3 Groundwater Sampling Analytical Results

The analytical results for RMW-10 indicate that all analytes were either non-detect at the reporting limit or at concentrations below the AWQS, except for the following analytes:

- Total PCBs detected at a concentration of 1.14 micrograms per liter (µg/L), slightly above the AWQS of 0.09 µg/L.
- Perfluorooctanoic Acid (PFOA) detected at a concentration of 0.012 µg/L, slightly above the AWQS Guidance Value of 0.0067 µg/L.
- Perfluorooctanesulfonic Acid (PFOS) detected at a concentration of 0.011 µg/L, slightly above the AWQS Guidance Value of 0.0027 µg/L.

A summary of the analytes with detected concentrations is provided as Table 1.

¹ The USEPA low-flow sampling techniques can be accessed at:
<https://www.epa.gov/sites/default/files/2017-10/documents/eqasop-gw4.pdf>

2.4 NYSDEC Correspondence

On September 18, 2024, a meeting between Roux and NYSDEC was held to review the RIWP implementation, the NYSDEC comment letter dated August 26, 2024, and additional supplemental RI. As part of this meeting the NYSDEC acting project manager requested an update on groundwater data at the Site. Roux informed NYSDEC that the groundwater table was only encountered at monitoring well RMW-10, near the surface water feature, and the additional wells were not sampled, or proposed wells not installed, due to the groundwater table not being encountered in the overburden across the rest of the Site.

The NYSDEC acting project manager followed up with an email to Roux on September 19, 2024, indicating that based on the lack of overburden groundwater and the presence of shallow bedrock, shallow bedrock monitoring wells installed at least 5 feet into competent rock would be required to evaluate the groundwater table quality at the Site. NYSDEC confirmed this request in subsequent conversations with Carson Voci and as part of the *Revised Remedial Investigation Work Plan Comment Letter*, dated January 14, 2025.

3 Supplemental Remedial Investigation

3.1 Groundwater Investigation

The purpose of the SRI groundwater investigation is to determine the nature and extent of groundwater contamination, if present, at the Site based on NYSDEC's request to evaluate the presence and quality of groundwater in the bedrock at the Site.

This section presents the basis, objectives, scope, and rationale for the proposed SRI groundwater investigation.

3.1.1 Groundwater Monitoring Well Locations

Four bedrock groundwater monitoring wells are anticipated to be installed at the Site at the locations shown on Figure 3, and as detailed below:

- MW-01D – At the A04/RMW-01 location to provide a well upgradient of potential groundwater flow.
- MW-07D – At the G05/RMW-07 location to provide a well on the central portion of the Site, potentially upgradient of RMW-10 and the surface water feature.
- MW-09D – At the I01/RMW-09 location to provide a well on the southwest portion of the Site.
- MW-11D – At the I15/RMW-11 location to provide a well on the portion of the Site east of the Consolidated Edison property.

The wells will be installed pursuant to the procedure described in Section 3.1.2.

3.1.2 Groundwater Monitoring Well Installation

A licensed NYS well driller will be contracted to install the proposed bedrock groundwater monitoring wells, per the details provided below, at the locations shown on Figure 3.

- Each well will be installed by a track-mounted rotary drill rig, capable of both hollow-stem auger and air rotary drilling methods.
- At each location, a 6.25-inch inner diameter hollow-stem auger will be advanced through the overburden and up to 5 feet into the weathered bedrock. Steel casing will be installed to a maximum of 5 feet into the bedrock and grouted to seal off potential impacts from the overburden soil and groundwater (if present). The well will then be completed utilizing air rotary drilling methods to a maximum of 5 feet into competent bedrock.
 - If groundwater is not observed, the well will not be installed as no pathway would exist for the overburden soil to impact potential bedrock groundwater at deeper depths.
- The wells will be constructed of 2-inch, Schedule 40, PVC casing and up to 3 feet of 0.010-inch slot well screen.
- The boring annulus will be filled with #1 gravel pack to 1 foot above the well screen, a 2-foot bentonite seal, and gravel pack or equivalent to the surface.
- The wells will be finished with a steel stick-up protective casing.
- After a minimum of 24 hours, the wells will be developed to remove any silt and sediment from the well and the sand pack. Development water will be collected in 55-gallon steel drums to be characterized and disposed of as detailed in Section 3.4.

3.1.3 Overburden Groundwater Monitoring Well Gauging

The six overburden groundwater monitoring wells installed by Roux will be gauged for the presence of groundwater during the bedrock groundwater monitoring well installations. Overburden groundwater monitoring wells that contain sufficient groundwater will be sampled in accordance with Sections 3.1.4 and 3.1.5.

3.1.4 Groundwater Analytical Parameters

Groundwater samples will be collected from the proposed bedrock groundwater monitoring wells and installed overburden groundwater monitoring wells, if sufficient groundwater is present. Groundwater samples will be analyzed in accordance with Table 2, consisting of NYSDEC TCL +30/TAL and ECs for all wells, except for RMW-10, which will be sampled for site contaminants, Metals and Pesticides, and PCBs (Total and Filtered) and PFAS that were observed in the prior groundwater investigation.

All analyses will be performed by an ELAP certified laboratory for the parameters being analyzed. Results will be provided with ASP Category B deliverables and will be reviewed and validated by a third-party data validator, who will prepare a Data Usability Summary Report (DUSR) before data is incorporated into the RI Report (RIR) for the Site. Additional details regarding laboratory analyses are provided in the

Quality Assurance Project Plan (QAPP), submitted as part of the SRIWP-SI. All data will be submitted to NYSDC in electronic format in accordance with DER-10, Section 1.15.

QA/QC samples, including field duplicates and field blanks, shall be collected in accordance with the QAPP. Blind duplicates will be collected at a frequency of 1 blind duplicate per 20 samples. Field blanks will be collected at a frequency of once per day. A laboratory-prepared trip blank will be provided and analyzed alongside the field samples. Details regarding sampling methods and analyses are provided in the QAPP.

3.1.5 Groundwater Sampling Procedures

Groundwater samples will be collected from the installed wells no sooner than 2 weeks after installation to allow the groundwater to equilibrate. The wells will be sampled following USEPA low-flow sampling techniques, as summarized below:

- The wells will be opened, and the headspace screened with a photoionization detector.
- A water-level gauge will be deployed in the well to measure the depth to water and depth of the well.
- A clean, decontaminated, stainless-steel submersible pump with dedicated Teflon®-lined tubing (or polyethylene tubing for PFAS sampling, as noted below) will be inserted into the groundwater.
- The pump discharge tubing will be attached to a calibrated water quality meter.
- Groundwater quality measurements, including temperature, pH, dissolved oxygen, specific conductance, and oxidation-reduction potential, and the depth to groundwater will be measured every 5 minutes during the well purge.
- Once the groundwater parameters have stabilized pursuant to the USEPA low-flow sampling method specifications, a groundwater sample will be collected directly from the pump effluent into the appropriate sample containers, which will immediately be placed on ice.
- Upon the collection of each groundwater sample, the tubing and any other sampling equipment will be removed and the well closed.
- All non-disposable sampling equipment (defined as any piece of equipment which may contact a sample) will be decontaminated as outlined in Section 3.3 prior to sampling at the next well.
- One blind duplicate sample and one matrix spike/matrix spike duplicate will be collected per 20 groundwater samples.
- A field blank will be collected prior to completion of the groundwater sampling activities.
- Wells will be sampled for PFAS in accordance with Table 2 and the NYSDC Part 375 Remedial Programs *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* guidance document (NYSDEC 2023). Sampling tubing (e.g. HDPE) compatible with both VOC and PFAS sample collection will be used.

3.2 Shallow Soil Investigation

The RIWP NYSDEC comment letter dated August 26, 2024, requested shallow soil samples from 0-2 inches below ground surface, be collected and analyzed for PFAS by USEPA Method 1633 at all the overburden monitoring well locations proposed in the RIWP. Shallow soil samples will be collected at the locations shown in Figure 4 and analyzed in accordance with Table 3.

The following procedures will be utilized to collect the shallow soil samples at each location:

- The shallow soil samples will be collected in accordance with the NYSDEC Part 375 Remedial Programs' 2023 *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* guidance document (NYSDEC 2023), which includes ensuring all materials which may come in contact with the soil to be sampled are compatible.
- Shallow soil samples will be collected with a stainless-steel hand trowel. Surface vegetation will be removed, and a soil sample will be collected from the 0- to 2-inch interval below the bottom of the vegetation. The hand trowel will be decontaminated in accordance with Section 3.3 between each sample location.
- Shallow soil samples will be inspected and field screened utilizing a PID equipped with a 10.6 electron volt lamp and by visual and olfactory inspection for the presence of impacts.
- The soil samples will be collected in laboratory provided glassware, immediately placed on ice, and submitted to the analytical laboratory under chain of custody.
- All non-disposable sampling equipment (defined as any piece of equipment which may contact a sample) will be decontaminated as outlined in Section 3.3 prior to advancing the next sample location.

All analyses will be performed by an ELAP certified laboratory for the parameter being analyzed. Results will be provided with NYS Analytical Services Protocol Category B deliverables and will be reviewed and validated by a third-party data validator who will prepare a DUSR before data is incorporated into the final RIR for the Site. Additional details regarding laboratory analyses are included in the QAPP, submitted as part of the SRIWP-SI. All data will be submitted to NYSDEC in electronic format in accordance with DER-10, Section 1.15.

QA/QC samples, including field duplicates and field blanks, shall be collected pursuant in accordance with the QAPP. Blind duplicates will be collected at a frequency of 1 blind duplicate per 20 samples. Field blanks will be collected at a frequency of once per day. Details regarding sampling methods and analyses are provided in the QAPP.

3.3 Decontamination Procedures

Groundwater and surface soil sampling equipment will be decontaminated between monitoring wells and/or soil sampling locations using the following procedures:

- New disposable gloves will be used for each decontamination procedure to prevent cross-contamination of equipment.
- Equipment shall be scrubbed with brushes using a solution of Alconox™ and distilled water.
- Equipment shall then be triple rinsed with analyte-free distilled water.
- Sampling equipment that is not readily decontaminated shall be discarded after each use. Discarded decontamination solutions shall be accumulated and containerized in United States Department of Transportation 17H-rated drums or equivalent.

3.4 Investigation Derived Waste Management

Investigation-derived waste (IDW) is expected to be generated during the SRI activities and will be managed in accordance with applicable federal, state, and local regulations. The anticipated IDW generated, and the management procedures, are outlined below:

- Soil drilling cuttings are anticipated to be generated during hollow-stem auger drilling through the overburden along with limited material during air-rotary drilling of the bedrock. Soil drilling cuttings will be collected into DOT-approved 55-gallon drums and staged on Site temporarily for off-site disposal at a permitted facility.
- Monitoring well development water and groundwater sampling purge water will be containerized in DOT-approved 55-gallon drums and staged on-Site temporarily for off-site disposal at a permitted facility.
- Unless significantly soiled, personal protective equipment waste will be disposed in the trash.

IDW procedures have been developed to minimize both the risk of exposure to contamination and the spread of contamination during field activities at the Site. All personnel who come into designated work areas, including contractors and observers, will be required to adhere strictly to the conditions imposed herein and to the provisions of the site-specific *Health and Safety Plan*, provided as part of the SRIWP-SI.

3.5 Surveying Assessment

All monitoring wells installed as part of this SRI will be surveyed by a New York Licensed Surveyor to obtain horizontal and vertical coordinates and grade elevations. Measuring point elevations from newly installed monitoring wells will also be surveyed to enable groundwater flow contouring, if applicable. Horizontal coordinates will be based upon the NYS Plane Coordinate System, Long Island Zone, North American Datum of 1983 (NAD 83) in United States survey feet. Vertical elevations will be measured for top-of-casing (measuring point) and grade elevations referenced to North American Vertical Datum of 1988 (NAVD88).

3.6 Community Air Monitoring Plan

A community air monitoring plan (CAMP) will be implemented during any intrusive subsurface activities to conduct monitoring and protection for potential off-site receptors in accordance with CAMP and details provided in the SRIWP-SI and the *NYSDOH Generic Community Air Monitoring Plan*.

3.7 Green and Sustainable Remediation

Green and sustainable remediation (GSR) principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedial investigation as per “DER-31 / Green Remediation” (DER-31).

Best Management Practices (BMP), as defined by the USEPA, aim to reduce the environmental footprint of activities associated with assessing and remediating contaminated sites. The BMPs involve specific activities to address the core elements of greener cleanups as per DER-31, including (1) reduce total energy use and increase the percentage of energy from renewable resources, (2) reduce air pollutants and greenhouse gas emissions, (3) reduce water use and preserve water quality, (4) conserve material resources and reduce waste, and (5) protect land and ecosystem services.

- BMPs taken for the remedial investigation will include: Selecting service providers, product suppliers, and analytical laboratories from the local area;
- Identifying the nearest facility to be used for disposing of non-hazardous and/or hazardous waste;
- Reducing travel through increased teleconferencing;
- Integrating sources of on-site renewable energy to power hand-held devices, portable equipment, and stationery monitoring systems;
- Using non-invasive or minimally invasive technologies such as portable vapor/gas detection systems using photoionization for screening purposes.
- Choosing products, packing material, and equipment that have reuse or recycling potential;
- Minimizing the need for disposable single-use items, such as plastic bags; and
- Choosing fixed laboratories demonstrating a strong commitment to environmental performance, such as routine use of management practices identified by the International Institute for Sustainable Laboratories.

The following metrics have been identified to be tracked throughout the investigation to truth test assumptions and assess progress towards the GSR goals:

- Materials Management, including off-site disposal and on-site material import quantities;
- Greenhouse Gas Emissions and Air Pollutants; and
- Total Energy Use

The GSR techniques and principles implemented during the investigation activities, including BMPs and the tracking metrics, will be summarized in the RIR.

4 Reporting

Reporting for the implementation of this SRIWP-G will be conducted in accordance with the reporting outlined in the SRIWP-SI.

5 Schedule

The SRIWP-G is anticipated to be implemented shortly after NYSDEC and NYSDOH approval of this work plan and is tentatively scheduled for the week of April 7th, 2025. The overall estimated project schedule presented in the SRIWP-SI is still accurate as the incorporation of the activities of this SRIWP-G is not anticipated to impact the estimated RIR and RAWP preparation and submittal timeframe.

References

- Carson Voci Engineering and Geology D.P.C. (Carson Voci). 2025. *Supplemental Remedial Investigation Work Plan – Soil Investigation*. January 31.
- New York State Department of Environmental Conservation (NYSDEC). 2018. *NYSDEC Electronic Data Deliverable Manual*. November. <https://www.dec.ny.gov/chemical/62440.html>
- . 2023. *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*. April. https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf.
- NYSDEC, Division of Environmental Remediation (DER). 2010. *DER-10 / Technical Guidance for Site Investigation and Remediation (DER-10)*. May 3. <https://www.dec.ny.gov/regulations/67386.html>.
- . 2011. *DER-31 / Green Remediation*. January 20.
- Roux Environmental Engineering and Geology, D.P.C. (Roux). 2024. *Remedial Investigation Work Plan*. August.
- United States Environmental Protection Agency (EPA). 2022. *Standard Operating Procedure for Low-Stress (Low Flow) / Minimal Drawdown Ground-Water Sample Collection*. <https://www.epa.gov/sites/default/files/2015-06/documents/finalsopls1217.pdf>. November 22.

Sincerely,

for Carson Voci Engineering and Geology, D.P.C.
an affiliate of Terraphase Engineering Inc.



Nicholas Krasnecky, P.E.
Senior Associate Engineer

Attachments (7):

- Table 1 – Remedial Investigation Groundwater Data Summary
- Table 2 – Proposed Supplemental Groundwater Sampling Plan
- Table 3 – Proposed Supplemental Shallow Soil Sampling Plan
- Figure 1 – Site Location
- Figure 2 – Remedial Investigation Proposed and Installed Groundwater Monitoring Well Locations
- Figure 3 – Proposed Supplemental Groundwater Monitoring Well and Sampling Locations
- Figure 4 – Proposed Supplemental Shallow Soil Sampling Locations

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Tables

Table 1
Remedial Investigation Groundwater Data Summary
 Elmwood Preserve Site - NYSDEC Site No. C360239
 850 Dobbs Ferry Road, White Plains, New York

Chem Group	Chemical	CASRN	Meas Basis	Conc (ug/L)	Source of Drinking Water Standard (ug/L)	# DW Standard Exceeds	Source of Drinking Water Guidance Value (ug/L)	# DW Guidance Exceeds
PFAS	1H, 1H, 2H, 2H-Perfluorooctane Sulfonic Acid (6:2FTS)	27619-97-2	T	0.075		0		0
PFAS	Perfluorobutanesulfonic Acid (PFBS)	375-73-5	T	0.0013		0		0
PFAS	Perfluorobutanoic Acid (PFBA)	375-22-4	T	0.0031		0		0
PFAS	Perfluoroheptanoic Acid (PFHpA)	375-85-9	T	0.0033		0		0
PFAS	Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	T	0.0011		0		0
PFAS	Perfluorohexanoic Acid (PFHxA)	307-24-4	T	0.010		0		0
PFAS	Perfluorononanoic Acid (PFNA)	375-95-1	T	0.00094		0		0
PFAS	Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	T	0.011		0	0.0027	1
PFAS	Perfluorooctanoic Acid (PFOA)	335-67-1	T	0.012		0	0.0067	1
PFAS	Perfluoropentanoic Acid (PFPeA)	2706-90-3	T	0.0032		0		0
PEST	4,4'-DDT	50-29-3	T	0.0050	0.20	0		0
PCB	PCBs (total)	1336-36-3	T	1.1	0.090	1		0
INORG	Aluminum	7429-90-5	T	8.4		0		0
INORG	Antimony	7440-36-0	T	0.77	3.0	0		0
INORG	Arsenic	7440-38-2	T	2.1	25	0		0
INORG	Barium	7440-39-3	T	43	1000	0		0
INORG	Calcium	7440-70-2	T	19400		0		0
INORG	Iron	7439-89-6	T	566		0		0
INORG	Magnesium	7439-95-4	T	8020		0	35000	0
INORG	Manganese	7439-96-5	T	177		0		0
INORG	Potassium	9/7/7440	T	2340		0		0
INORG	Sodium	7440-23-5	T	4310	20000	0		0

Notes:

Only detected constituents are shown.

Meas Basis - measured basis; T = total, D = dissolved

Chem Group - chemical group; INORG - metals; PCB - polychlorinated biphenyls; PEST - pesticides; PFAS - per- and polyfluoroalkyl substances

Conc - concentration

Table 2
Proposed Supplemental Groundwater Sampling Plan
 Elmwood Preserve Site - NYSDEC Site No. C360239
 850 Dobbs Ferry Road, White Plains, New York

Area	Groundwater Well	Groundwater Sample IDs	TCL VOCs + 10 TICs	TCL SVOCs ¹ + 20 TICs	TAL Metals	Chromium (VI)	Mercury	TCL PCBs	TCL Pest	TCL Herb	PFAS	Total Cyanide
Western Parcel	RMW-03 ²	RMW-03-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-05 ²	RMW-05-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-07 ²	RMW-07-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-08 ²	RMW-08-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-10	RMW-10-yymmdd			X			X ³	X		X	
	RMW-01D	RMW-01D-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-07D	RMW-07D-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-09D	RMW-09D-yymmdd	X	X	X	X	X	X	X	X	X	X
Eastern Parcel	RMW-11 ²	RMW-11-yymmdd	X	X	X	X	X	X	X	X	X	X
	RMW-11D	RMW-11D-yymmdd	X	X	X	X	X	X	X	X	X	X

X = Sample to be collected for proposed analysis

1. SVOCs analysis to include 1,4-Dioxane

2. Only to be sampled if sufficient groundwater is present.

3. Analyzed for PCBs for Total and Filtered.

* See QAPP for additional details on laboratory methods, sampling containers, and associated sampling requirements

** Quality Assurance and Quality Control samples to be collected in accordance with the SRIWP and QAPP

Acronyms

Herb = herbicides
 PCBs = polychlorinated biphenyls
 Pest = pesticides
 PFAS = per- and polyfluoroalkyl substances
 SVOCs = semi-volatile organic compounds
 TAL = target analyte list
 TCL = target compound list
 TICs = tentatively identified compounds
 VOCs = volatile organic compounds
 yymmdd = year/month/day

Table 3**Proposed Supplemental Shallow Soil Sampling Plan**

Elmwood Preserve Site - NYSDEC Site No. C360239

850 Dobbs Ferry Road, White Plains, New York

Area	Location ID	Sample ID	Sample Depth (ft bgs)	Soil Analyses	Sampling Rationale
				PFAS	
Western Parcel	A04/RMW-01	A04-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	A09/RMW-02	A09-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	A13/RMW-03	A13-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	C05/RMW-04	C05-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	C13/RMW-05	C13-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	E08/RMW-06	E08-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	G05/RMW-07	G05-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	G12/RMW-08	G12-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	I01/RMW-09	I01-0-0.2	0-0.2	X	Shallow soil PFAS investigation
	I08/RMW-10	I08-0-0.2	0-0.2	X	Shallow soil PFAS investigation
Eastern Parcel	I15/RMW-11	I15-0-0.2	0-0.2	X	Shallow soil PFAS investigation

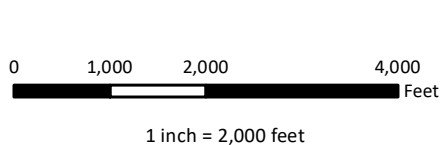
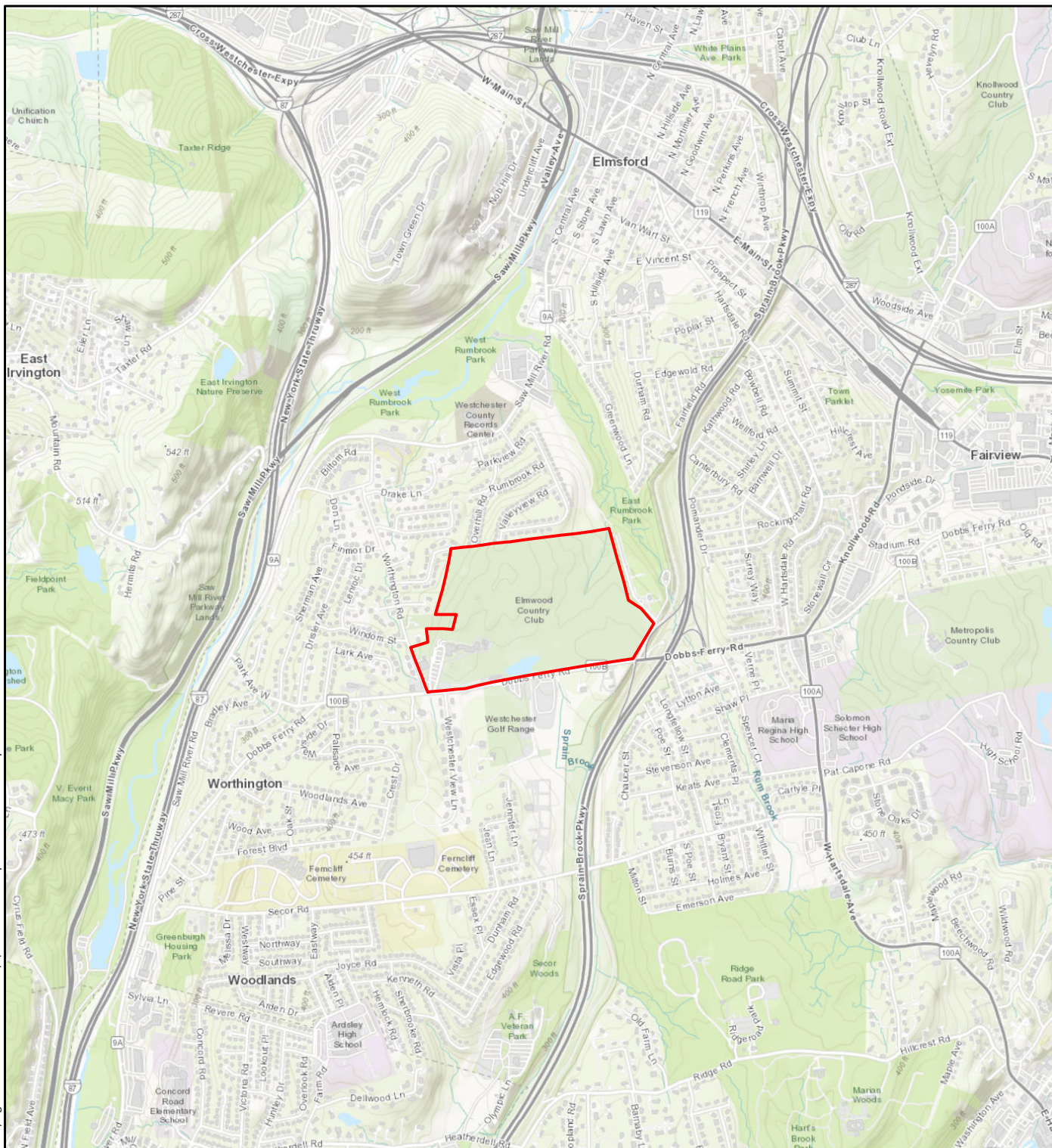
Abbreviations:

X - run analysis

ft bgs - feet below ground surface

PFAS - per- and polyfluoroalkyl substances

Figures



Legend

 Approximate Site Boundary

Base Map: ESRI World Topographic Map
(data providers include HERE, Garmin, USGS, et al.)

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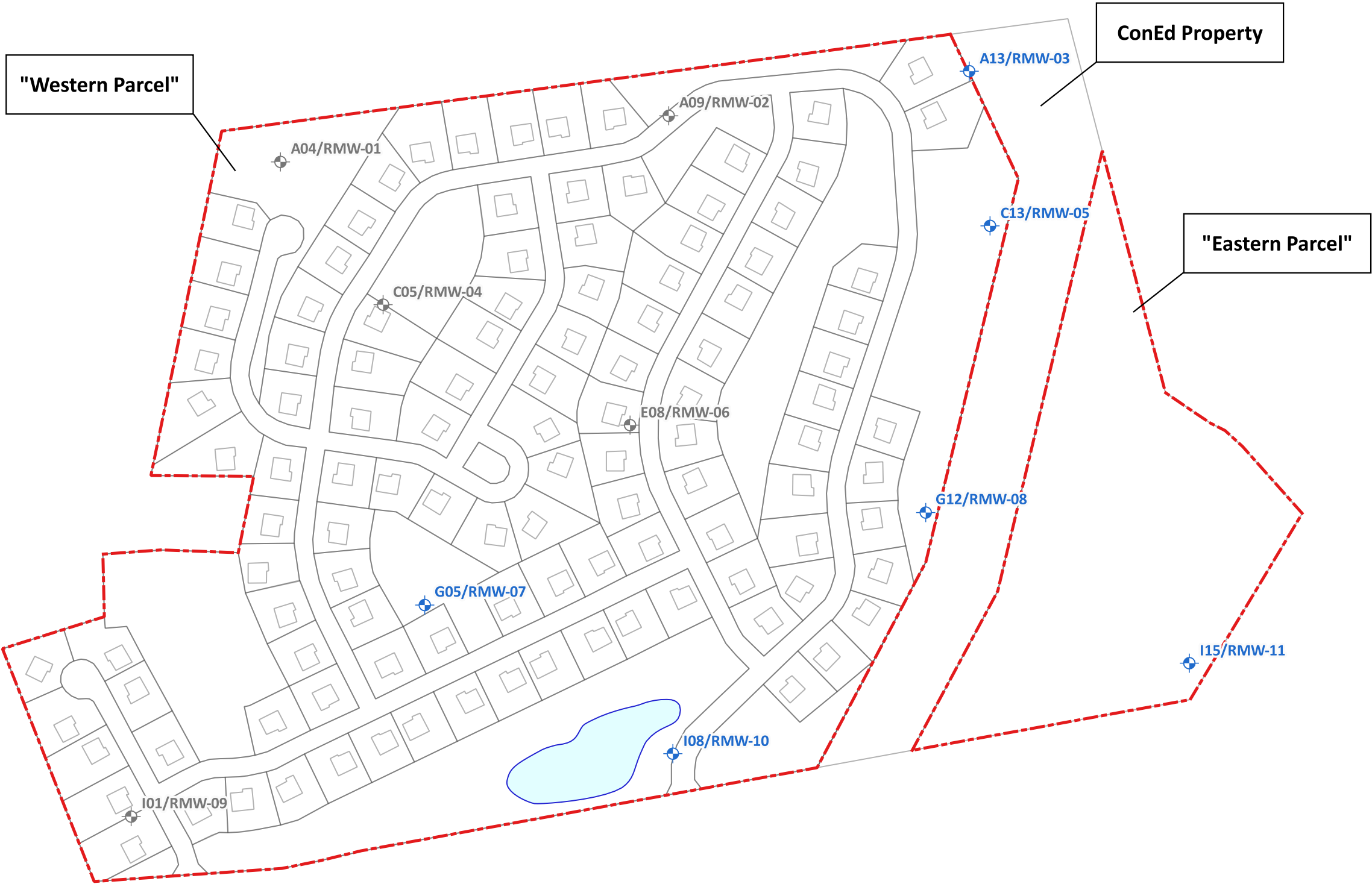
PROJECT: Elmwood Preserve Site
NYSDEC Site No. C360239
850 Dobbs Ferry Road, White Plains, New York

PROJECT NUMBER: CV04.001

Site Location

FIGURE 1

N:\GIS\Proj\105.004_Elmwood Country Club\QGIS\20240927-Terraphase-Elmwood-50.qgz 20250305_Roux_PlannedMW 2024-09-26T18:29:52.000 Created by: M.Civillio Checked by: N. Krasnecky



Legend

Site Boundary

Pond

Proposed Development Plan

RI Overburden Groundwater Monitoring

Well Location

Installed

Not Installed

Abbreviation:

RI - Remedial Investigation

DRAFT



1 Inch = 300 Feet



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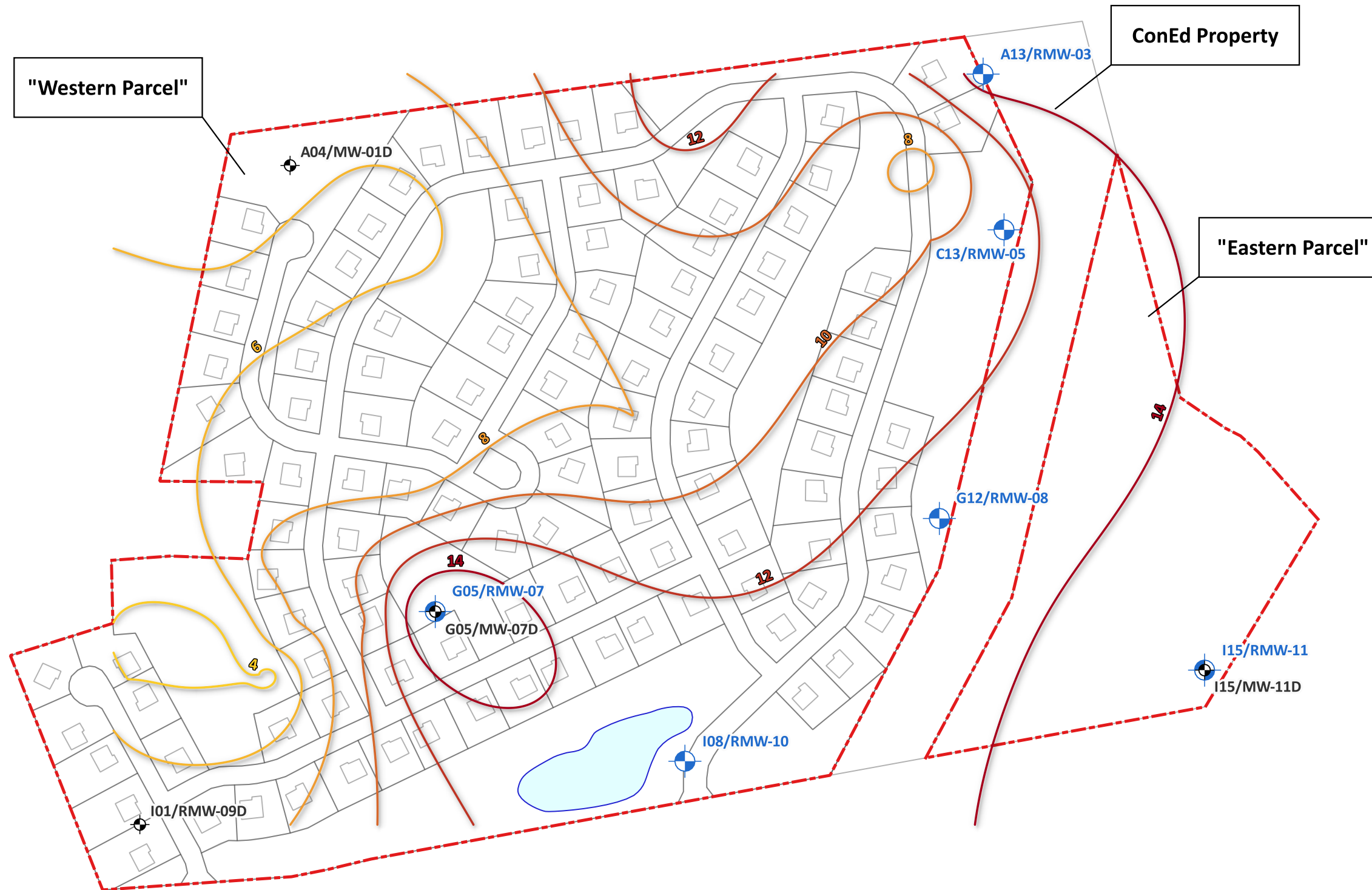
PROJECT: Elmwood Preserve Site
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PROJECT NUMBER: CV04.001

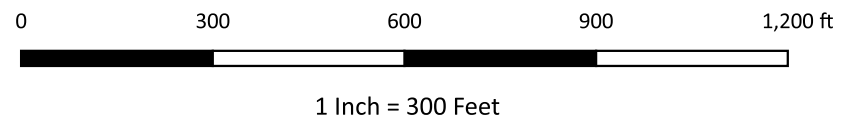
**Remedial Investigation Proposed
and Installed Groundwater
Monitoring Well Locations**

Figure 2

N:\GIS\Prj\105.004_Elmwood Country Club\QGIS\20240927-Terraphase-Elmwood-50.qgz 20250305_ProposedMW 2024-09-26T18:29:52.000 Created by: M.Civilillo Checked by: N. Krasnecky



DRAFT



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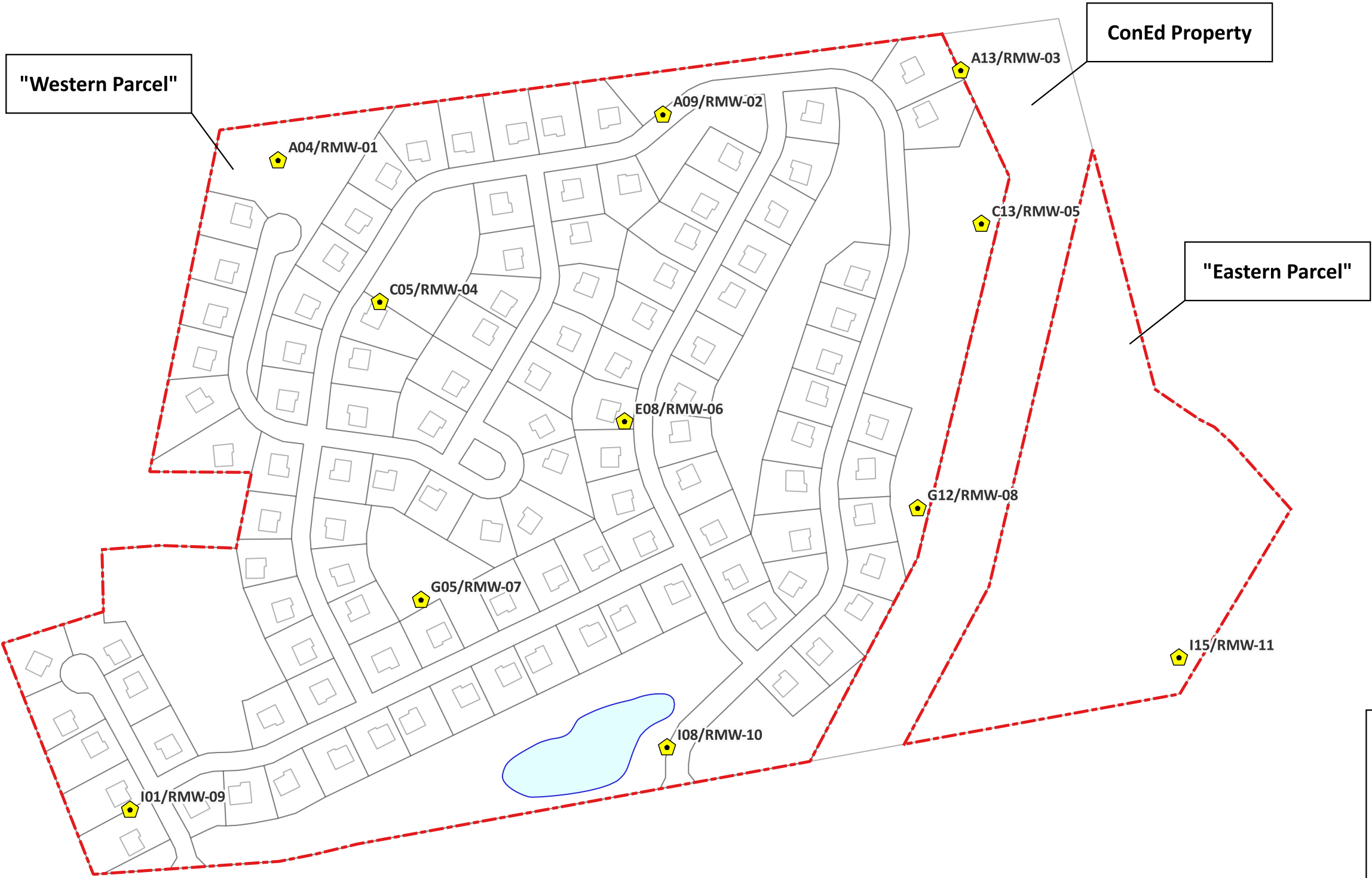
PROJECT: Elmwood Preserve Site
NYSDEC Site No. C360239
850 Dobbs Ferry Road, White Plains, New York

PROJECT NUMBER: CV04.001

**Proposed Supplemental
Groundwater Monitoring
Well and Sampling Locations**

Figure 3

N:\GIS\Proj\105.004_Elmwood Country Club\QGIS\20240927-Terraphase-Elmwood-50.qgz 20250319-ProposedSuppSamplingLocations 2024-09-26T18:29:52.000 Created by: M.Civittilo Checked by: N. Krasnecky



Legend

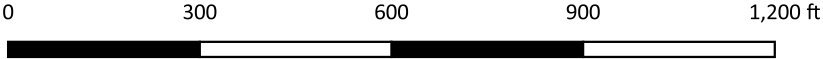
- Site Boundary
- Pond
- Proposed Development Plan
- Proposed Supplemental Shallow Soil Sampling Location

Note:
Proposed soil sampling locations are located at the RI groundwater monitoring well locations. See Table 3 for the proposed sampling depths and analyses for each location.

SAFETY FIRST	CLIENT: Ridgewood Elmwood Owner, LLC	Proposed Supplemental Shallow Soil Sampling Locations
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	PROJECT NUMBER: CV04.001	

Figure 4

DRAFT



1 Inch = 300 Feet



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