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GEOTECHNICAL
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WATER
CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of New York
324 South Service Road
Melville, NY 11747

July 22, 2025
GZA File No.: 41.0163263.00

Jolene Lozewski, P.G.
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation - Remedial Bureau A, Section A
625 Broadway, Albany, NY 12233-7015

Re: Supplemental Remedial Investigation Sampling
55 Eckford Street
Brooklyn, New York 11222
Block 2698, Lot 32
BCP Site No. C224168

Dear Ms. Lozewski:

On behalf of the 55 Eckford St LLC (BCP Volunteer/Owner), Goldberg-Zoino Associates of New York P.C. d/b/a GZA GeoEnvironmental of New York (GZA) is pleased to submit this Supplemental Remedial Investigation Work Plan (RIWP) for the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C224168 (Site). The Site is located at 55 Eckford Street, Brooklyn, NY. A Site Location Plan is attached as **Figure 1**.

The objective of this Supplemental Remedial Investigation Work Plan (RIWP) is to address the comments stated in a letter dated July 1, 2025, and the discussion during the recent meeting between NYSDEC and New York State Department of Health (NYSDOH), which required additional Remedial Investigation work.

BACKGROUND

The 55 Eckford St LLC Site (The Site) is located in an area zoned for residential (R6A, R6B), light manufacturing (M1-2). The 10,376 square feet (approximately 0.238 acres) Site is identified as Block 2698, Lot 32. The proposed Site redevelopment includes the construction of a new 5-story multi-family residential building with a cellar. The building will provide twenty-one residential units, an eight-car garage and a landscaped rear yard on-grade (at the western portion of the Site), and a cellar that will be used for bike parking and utility spaces.

SUPPLEMENTAL REMEDIAL INVESTIGATION WORK PLAN

Based on our discussion and our subsequent correspondence, we propose the following:

- Install four (4) monitoring wells (designated as GMW-07 to MW-10) to 20 feet below ground surface (bgs);
- Collect and analyze groundwater samples from the four installed wells; and
- Advanced four (4) soil vapor probes (designated GSV-09 to GSV-12) to a depth of 2 feet above the groundwater interface;
- Collect and analyze four soil vapor samples.

The proposed locations of the monitoring wells and soil vapor probes are shown in **Figure 1**. During ground intrusive activities, continuous, real-time air monitoring for VOCs and particulate levels at the perimeter of the work area will be performed in accordance with the approved Community Air Monitoring Plan (CAMP) dated November 2024.

Monitoring Well Installation

In accordance with the project Quality Assurance Project Plan (QAPP) dated November 2024, included as part of the approved RI work plan, the monitoring wells will be comprised of two-inch diameter PVC that will be installed to a maximum depth of approximately 20 feet bgs (i.e. approximately 6 to 8 feet into the water table). Groundwater monitoring wells will be constructed of threaded two-inch diameter PVC well casing and 20-slot well screen (to investigate the potential of floating product). The 10-foot screen will be set seven feet below the measured water table. Clean silica sand, Morie No. 1 or equivalent, will be placed in the annular space around the well to a minimum of one foot above the top of the well screen, two feet being optimal. Solid PVC riser, attached to the well screen, will extend to grade or above if the well is a stick-up. For a two-inch diameter well, the annular space for the filter pack should be 4 inches thick. A two-foot thick bentonite seal will then be placed above the sand pack and moistened with potable water for a minimum of 15 minutes before backfilling the remaining space with a cement-bentonite grout.

The monitoring wells will be developed using a submersible pump equipped with dedicated high-density polyethylene (HDPE) tubing to remove fine materials generated during well installation activities. The groundwater will be pumped until it was nearly free of turbidity (i.e., <20 NTU), or 5 well volumes has been removed. The development water and soil cuttings will be containerized in 55-gallon drums and characterized for off-site disposal.

Groundwater Sampling

GZA will return to the Site one week after well development to collect groundwater samples from the new wells, as shown in **Figure 1**. Prior to sampling each monitoring well, the headspace will be measured using a Photo-Ionization Detector (PID) and the water level will be measured using an electronic oil-water interface probe to measure the groundwater depth and detect for the presence of light non-aqueous phase liquids (LNAPL), or dense non-aqueous phase liquids (DNAPL) in the well.

Prior to the collection of groundwater samples, GZA will purge the monitoring wells in accordance with EPA low-flow sampling techniques, by purging at least three well volumes of groundwater, or until the water quality parameters become stabilized for three consecutive readings collected 3 to 5 minutes apart. Purging will be performed with the pump intake placed at approximately 3 feet above the bottom of the well screen. Field water

quality and gauging measurements will be documented during sampling. A groundwater sample will then be collected from each monitoring well utilizing dedicated HDPE tubing and pump. Each groundwater sample will be transferred directly from the sampling equipment to laboratory provided sample bottles.

The groundwater monitoring wells will be sampled for the following:

- Total and dissolved Target Analyte List (TAL) Metals by EPA Method 6010C/6020/7471B;
- Total and dissolved Cyanide by EPA method 9010/9012; and
- Total and dissolved Mercury by EPA method 7471;

Groundwater purge water collected during sampling will be drummed for off-site disposal with the well development water.

Vapor Probe Installation and Soil Vapor Sampling

Soil vapor samples will be collected using a stainless-steel probe, consisting of a drive point and internal perforated sampling port with a retractable tip, connected to Teflon™ sampling tubing. Soil vapor samples will be collected using batch pre-cleaned, laboratory-supplied, 6-liter sample canisters over a 2-hour duration. Flow rate for sampling will not exceed 0.2 L/min.

Samples will be collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH VI Guidance dated October 2006 as amended May 2017). A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling location, identity of samplers, sampling methods and devices, sample volumes, vacuum of canisters before and after the samples are collected, and chain of custody protocols. The soil vapor samples will be analyzed for the following:

- VOCs by EPA method TO-15.

Soil vapor probes will be removed from the ground after the samples have been collected.

Quality Assurance/Quality Control Procedures

Quality Assurance/Quality Control (QA/QC) procedures will be used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analysis for this investigation. Field QA/QC procedures will be used to document that samples are representative of actual conditions at the Site. Laboratory QA/QC procedures and analyses will be used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process. QA/QC samples (field and trip blanks, duplicates, etc.) will be collected by GZA and analyzed at an ELAP-certified laboratory. QA/QC samples will be collected at the frequency outlined in Quality Assurance Project Plan, dated November 2024.

Data Management and Validation

GZA will subcontract with a third-party quality assurance company that will develop the Data Usability Summary Report (DUSR) in accordance with *DER-10 Appendix 2B* for laboratory data that will be relied upon from:

- The NYSDEC Analytical Services Protocol (ASP) Category B Data Deliverable; or
- The EPA Contract Laboratory Program National Functional Data Validation Standard Operating Procedures for Data Evaluation and Validation.

The DUSR's primary objective is to determine whether or not the data from the remedial investigation, as presented, meets the site/project specific criteria for data quality and data use. The NYSDEC requires that the development of the DUSR must be conducted by an experienced environmental scientist, such as the project Quality Assurance Officer, who is fully capable of conducting a full data validation.

HEALTH AND SAFETY

The RIWP included a Health and Safety Plan (HASP) which will be implemented during the Supplemental RI work to protect worker safety. The Site Safety Coordinator will document compliance of the HASP in accordance with applicable health and safety laws and regulations. All field personnel involved in investigation activities will participate in training required under OSHA HAZWOPER 29 CFR 1910.120, including 40-hour hazardous waste operator training and annual 8-hour refresher training. Emergency telephone numbers will be posted at the site location before any work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; PPE levels and other relevant safety topics including a highlighted route map to the nearest hospital/emergency room. The CHASP is included in RIWP dated November 2024.

The Community Air Monitoring Plan (CAMP) will provide for the collection and analysis of air samples during remedial construction activities to ensure proper protections were employed to protect workers and the neighboring community. CAMP stations will be located on the upgradient and downgradient of the Site. CAMP stations will be moved as needed during construction activities. CAMP data summary tables will be delivered to the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) on a weekly basis and any exceedances of CAMP action levels and corrective measures taken will be reported to NYSDEC and NYSDOH immediately (within 24 hours); in addition to inclusion in daily reports. The CAMP is included in the RIWP dated November 2024.

REPORTING

Upon completion of the field activities, GZA will included the results in the Final Remedial Investigation Report to document the findings of the investigations performed at the Site.

SCHEDULE

GZA is scheduled to mobilize on July 30, 2025, to perform the Supplement RI Work sampling contingent upon the approval of this work plan. The well installation, well development soil vapor probe installation and soil vapor sampling will be performed during a single week. GZA will return to the Site after one calendar week to sample the developed wells. Typically, analytical results will be available with two weeks of sampling. Preliminary results will be reported to the NYSDEC and NYSDOH. The Final RI report will be finalized within one week of receiving final results from the laboratory.

Should you have any questions, please contact Victoria Whelan at (631) 793-8821 or Victoria.Whelan@gza.com.

Very truly yours,

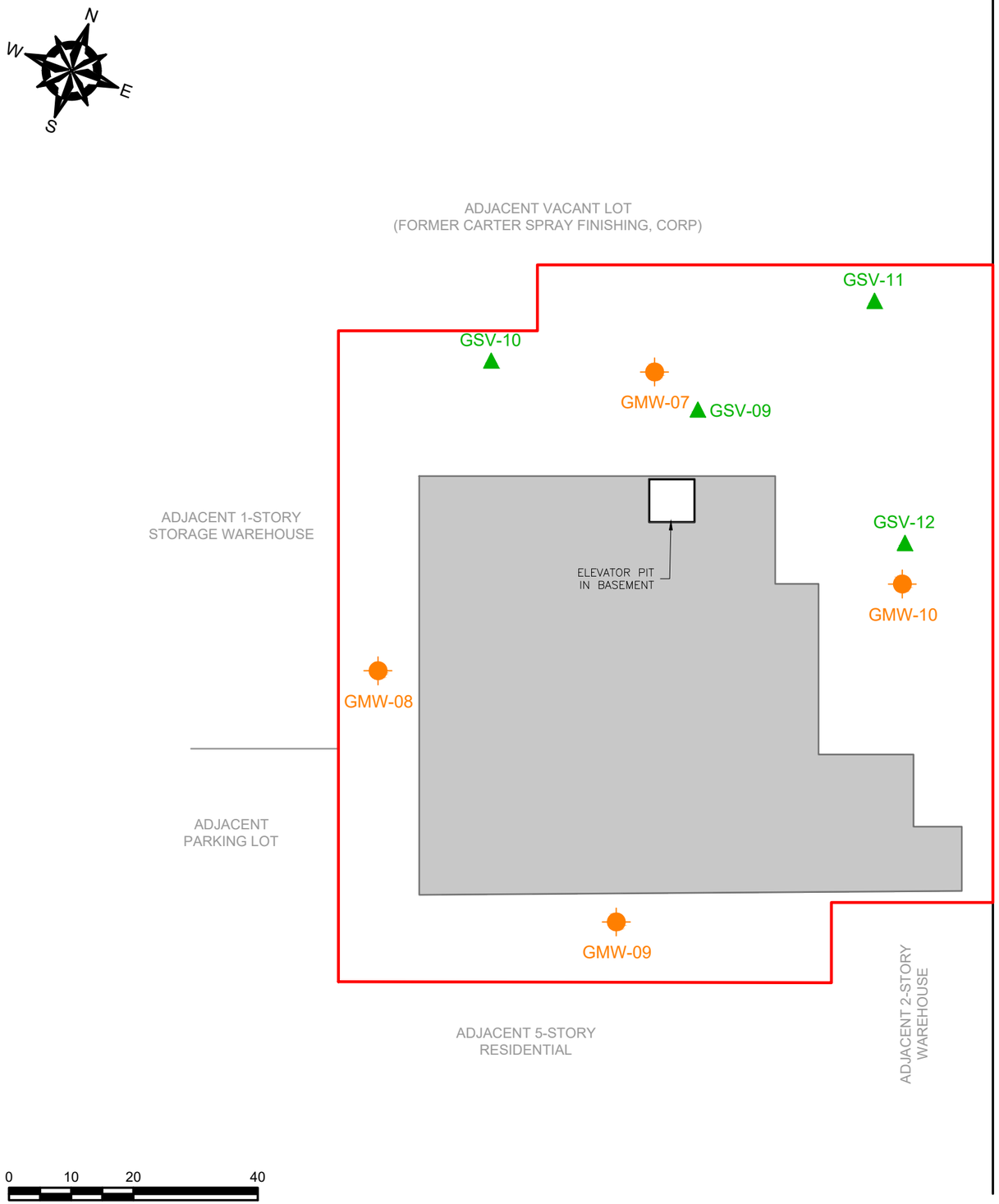
GZA GEOENVIRONMENTAL OF NEW YORK

Reinbill P. Maniquez, CHMM
Senior Project Manager

Victoria D. Whelan, PG
Associate Principal

ATTACHMENTS

Figure 1: Supplemental Remedial Investigation Sample Locations



GENERAL NOTES

1. BASE MAP DEVELOPED FROM DRAWING TITLED "ADDITIONAL EXCAVATION AREA DIAGRAM, SKC–1", DATED AUGUST 30, 2024.
2. DRAWING DISPLAYS EXISTING CELLAR LAYOUT.

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARTIAL CELLAR (INACCESIBLE)
- GMW-07 — PROPOSED GROUNDWATER MONITORING WELL LOCATION
- GSV-09 — PROPOSED SOIL VAPOR SAMPLING LOCATION

NO.	ISSUE/DESCRIPTION	BY	DATE

55 ECKFORD STREET
BROOKLYN, NY, 11222

PROPOSED SAMPLE LOCATION MAP

PREPARED BY:		PREPARED FOR:	
GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		55 ECKFORD LLC	
PROJ MGR: RM	REVIEWED BY: RM	CHECKED BY: VW	FIGURE 1
DESIGNED BY: SG	DRAWN BY: SG	SCALE: 1" = 20'	
DATE: JULY 2025	PROJECT NO. 41.0163263.00	REVISION NO. -	SHEET NO.