GEI Consultants

Supplemental Investigation Work Plan

Skillman Street Station

Brooklyn, New York
NYSDEC Site #224068

Submitted to:
National Grid
2 Hanson Place
Brooklyn, NY 11271

Submitted by:
GEI Consultants, Inc. DBA GEI Consultants Engineering,
Geology, Architecture & Landscape Architecture
455 Winding Brook Drive
Glastonbury, CT 06033
860.368.5300

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Project No. 093080-2.11

Melissa Felter, PG, LEP
Project Manager

Matthew J. O'Neil, PE
Senior Engineer

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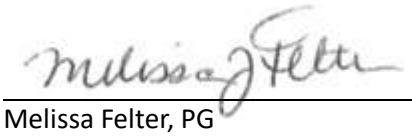
Qualified Environmental Professional's Certification

I, Melissa Felter, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and DER Green Remediation (DER-31).

PREPARED BY:
GEI Consultants, Inc. DBA GEI Consultants Engineering,
Geology, Architecture & Landscape Architecture



Melissa Felter, PG

Acronyms and Abbreviations

CAMP	Community Air Monitoring Plan
DER	Division of Environmental Remediation
ELAP	Environmental Lab Approval Program
EPA	United States Environmental Protection Agency
FSP	Field Sampling Plan
GEI	GEI Consultants, Inc., DBA GEI Consultants Engineering, Geology, Architecture & Landscape Architecture
HASP	Health and Safety Plan
ISMP	Interim Site Management Plan
MGP	Manufactured Gas Plan
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PID	Photoionization Detector
PFAS	Polyfluoroalkyl Substances
PVC	Poly Vinyl Chloride
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
ROD	Record of Decision
RSOI	Remedial System Optimization Investigation
SC	Site Characterization
SI	Supplemental Investigation
SIM	Selected Ion Monitoring
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
USDOT	United State Department of Transportation
VOC	Volatile Organic Compound

1. Introduction

The Brooklyn Union Gas Company, now d/b/a National Grid NY ("National Grid"), entered into an Order on Consent and Administrative Settlement, Index # A2-0552-0606, (the Order) with New York State Department of Environmental Conservation (NYSDEC) in March 2007 (and last amended November 2023). This Order includes investigation and, if necessary, remediation of the Skillman Street Holder Station site (the Site), Site #224068, located in Brooklyn, Kings County, New York (Figure 1). As depicted in Figure 2, the Skillman Street Holder Station occupied Block 1886, Lot 19 and a 10-foot by 90-foot strip (the Bedford Strip) on Lot 44 on the City of New York Tax Map. The Order required that a Site Characterization be performed for the Site.

On behalf of National Grid, GEI Consultants, Inc. DBA GEI Consultants Engineering, Geology, Architecture & Landscape Architecture (GEI) completed the Site Characterization (SC), to assess environmental conditions at the Site, in March 2014. The Record of Decision was issued by NYSDEC in March 2015. An Interim Site Management Plan (ISMP) was prepared by GEI and submitted to NYSDEC in March 2017 and was approved by NYSDEC later that same month. Revision 6 of the ISMP was submitted to NYSDEC in May 2024.

Historically, two gas holders, identified as Holder No. 1 and Holder No. 2, were present at 7 Skillman Street. Holder No. 1 was comprised of three telescoping sections and had a rated capacity of 553,000 cubic feet. The sections were set in a subsurface, open, brick tank with a subgrade concrete foundation. The inner diameter of the tank is approximately 97 feet, and the maximum outside diameter, near the bottom of the tank, is approximately 105 feet. The bottom of the holder tank is approximately 22 feet below the elevation of Skillman Street. The tank had a convex bottom that is shallower in the center than at the perimeter. Holder No. 2 was comprised of three telescoping sections and had a rated capacity of 539,000 cubic feet. The sections were set in an aboveground, open, flat-bottomed, steel tank built on grade with Skillman Street. The inner diameter of the tank was approximately 92 feet, and the maximum outside diameter, at the top of the tank, was approximately 100 feet.

The property owner has submitted an application to transfer the Site into the Brownfield Cleanup Program (BCP) and has provided a redevelopment plan that includes a residential building with elevators and an underground parking garage. The deepest area of excavation is in the area of elevator pits and appears to be approximately 30 feet below ground surface. The property owner is looking to achieve at least Track 2 under the BCP.

On behalf of National Grid, GEI prepared this Supplemental Investigation (SI) Plan as required by the Record of Decision (ROD) dated March 2015. The ROD requires this investigation to determine the nature and extent of impacts at the Site and offsite. A Remedial System Optimization Investigation (RSOI) was implemented in May and June 2023. Despite the RSOI having been approved without identifying additional data gaps, during a phone call on October 1, 2024, NYSDEC stated that additional data would be necessary prior to implementing a remedy. This SI Work Plan is intended to fill data gaps identified during the 2023 RSOI, particularly in areas that were not accessible during previous investigations. The property owner has stated the building will not be demolished until the property is in the BCP. This SI,

together with the RSOI, fulfills the ROD requirement that in accordance with the Site Management Plan: *'… further investigation and remediation will occur if large-scale redevelopment takes place, existing structures are demolished, or the subsurface becomes accessible*.'

2. Scope of Work

The SI will be conducted in accordance with the approved ISMP, Revision 6 dated May 2024, including the Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP), Field Sampling Plan (FSP), and Community Air Monitoring Plan (CAMP). The CAMP will be implemented at the Site during intrusive field activities.

2.1. Soil Borings

Fourteen soil borings (SSSB-24 through SSSB-37) are proposed for installation, as shown in Figure 2. Soil borings SSSB-24 through SSSB-26 and SSSB-29 through SSSB-31 are located in and around Holder No. 1. Soil borings SSSB-27, SSSB-28, and SSSB-35 through SSSB-37 are located within the footprint of Holder No. 2. Soil borings SSSB-32 through SSSB-24 are located north of the Site. Soil borings SSSB-24 through SSSB-30 and SSSB-32 through SSSB-35 and SSSB-37 will terminate at approximately 40 feet below grade. SSSB-36 will terminate at approximately 20 feet below grade. If visual or olfactory impacts, or photoionization detector (PID) readings above 5 parts per million (ppm) are observed within the bottom 10 feet, the boring will continue to be advanced 10 feet beyond observed impacts for the purpose of vertical delineation. Soil boring SSSB-31 will be installed within Holder No. 1 and will terminate at the bottom of the holder.

If impacts are observed at SSSB-24, 29, or 30, additional step out borings will be installed approximately 20 feet away for delineation.

Actual drilling locations will be determined based upon the subsurface utility clearance activities, including a geophysical survey, permanent above-ground structures, and property owner requirements. Each boring location will be hand cleared for utilities to at least 5 feet below grade and will be installed with a Geoprobe or Sonic rig in accordance with drilling methods and procedures in the FSP.

Following the collection of subsurface soil samples, each subsurface soil boring will be abandoned by tremie grouting the boring from the bottom of the boring to the top. Drilling and sampling equipment will be decontaminated between each sample location as described in the FSP. Soil cuttings and decontamination fluids will be contained within United States Department of Transportation (USDOT) 55-gallon drums and disposed at a National Grid-approved disposal facility.

2.2. Soil Sampling

Up to four soil samples will be selected for chemical analysis from borings SSSB-24 through SSSB-30, SSSB-32 through SSSB-35, and SSSB-37. The first sample will be collected from the depth interval indicating the greatest degree of contamination from 0 to approximately 5 feet below grade using a hand auger during utility clearance activities to evaluate subsurface soil conditions at and below the bottom of the holder foundation. A second sample will be collected at the base of the holder at approximately 20 to 25 feet below grade. The third sample will be collected beneath impacts, if present, or at the completion of the boring with the intent to identify soil that meets the Unrestricted SCOs. A fourth

sample will be collected at the depth interval indicating the greatest degree of contamination to evaluate the magnitude of the observed impacts at each boring. The greatest degree of contamination will be identified by field screening of the borings with a PID, and by visual and olfactory observations. If no impacts are observed at a particular on-site boring location, the fourth soil sample will not be collected. Borings SSSB-26, SSSB-27, SSSB-35, and SSSB-37 will include an additional sample at the 10 to 15-foot depth range. Each sample will be analyzed for Target Compound List (TCL) VOCs by EPA Methods 8260D, TCL SVOCs by EPA Method 8270E, and TAL metals by EPA Methods 6000/7000 series (Table 1).

One soil sample will be collected at boring SSSB-36 from 10 to 15 feet and analyzed for TAL metals by EPA Methods 6000/7000 series and TCL SVOCs by EPA Method 8270E.

Select locations will include a full suite of soil analyses to account for the site's possible transfer into the BCP. Boring locations SSSB-25, SSSB-27, SSSB-29, and SSSB-32 will be additionally analyzed for PCBs by EPA Method 8082, pesticides by EPA Method 8081, herbicides by EPA Method 8151, 1,4-dioxane by EPA Method 8270, free cyanide by EPA Method 9014, and PFAS by EPA Method 1633.

One soil sample will be collected from boring SSSB-31 from the bottom 5-foot interval of the boring for waste characterization analysis. Additional samples for waste characterization analysis will be collected from soil borings SSSB-24, SSSB-28, and SSSB 33. These samples will be collected in the top 5 feet and at the depth interval indicating the greatest degree of contamination. Waste characterization samples will be analyzed for TCL VOCs by EPA Methods 8260D, TCL SVOCs by EPA Method 8270E, TAL metals by EPA Methods 6000/7000 series, PCBs, EPH, sulfur, and TCLP analysis (VOCs, SVOCs, RCRA metals, pesticides, and herbicides).

Quality Assurance/Quality Control (QA/QC) procedures are detailed within the QAPP. QA/QC samples will include blind duplicate soil samples, Matrix Spike and Matrix Spike Duplicate (MS/MSD) samples, and equipment rinsate blank samples. The quality control samples will be completed at a frequency of 1/20. One trip blank will be included per shipment of samples to the laboratory.

2.3. Horizontal Borings

Up to two horizontal borings will be attempted using directional drilling technologies. Locations of borings and number of samples will be determined following completion of soil borings and monitoring wells. An addendum to this work plan will be submitted providing sampling details following completion of the soil borings adjacent to Holder No. 1. The points will be advanced from a location near the property boundary along Flushing Avenue approximately 90 feet from the outer foundation wall of the former gas holder. The goal of the horizontal boring program will be to obtain soil samples from depths between 30 and 40 feet below grade, which will be below the former gas holder foundation, to assess the current soil conditions without penetrating the existing holder foundation. Note that the depth of the holder floor has been established through the previous borings at approximately 26 feet below grade. The ultimate depth of the outer wall foundation elements and the thickness of the holder floor have not been determined. As such, we are targeting a depth greater than 30 feet below grade, or greater than 4 feet below the holder floor, for the directional drilling borehole at the point it intersects the holder wall. If the holder wall foundation is encountered at a depth greater than 30 feet below

grade, an additional borehole may be advanced if the geometry allows, to attempt a deeper depth at the intercept point at the holder wall. In general, the borings will be advanced as follows:

- Borings will be installed from the boundary of the property along Flushing Avenue.
- The location of all utilities will be verified along the alignment of the borings to ensure that the borings do not interfere with any existing utilities.
- Each boring location will be hand cleared for utilities to at least 5 feet below grade. This will be completed by clearing a wedge-shaped trench at each boring location.
- Field locators and instrumentation will be used to accurately determine the exact location of the drilling head and any collected soil samples in the subsurface.
- Discrete and undisturbed soil samples using a specialized horizontal sampling tool will be collected below the holder.

The borehole will be pressure grouted as the drilling tools are extracted from the borehole.

2.4. Monitoring Well Installation

Two monitoring well pairs will be installed at borings SSSB-29/SSMW-09 and SSSB-30/SSMW-10. A third well pair will be installed at one of the two proposed boring locations located at the east side of the building (SSSB-26 or SSSB-27) with monitoring well ID; SSMW-11, the location of the monitoring well will be determined based on greatest degree of impacts observed within these borings. All three well pairs will include one shallow well that will be completed spanning the water table, and the deep monitoring well will be completed at a depth of 25 to 30 feet below grade. The drill rig will advance casing to the required termination depth of the monitoring well. Monitoring wells will be installed at the groundwater table, approximately 15 feet below grade and from approximately 25 to 30 feet below grade. Each water table monitoring well will be constructed with an approximate 10-foot-length of 2-inch-inner-diameter (ID), 0.010-inch-slotted well screen, and each deep monitoring well will have an approximate 5-foot length of the same well screen specification. Both water table and deep monitoring wells will be completed with a 2-inch ID poly vinyl chloride (PVC) riser pipe to the surface and a 2-foot sump. The annular space between the well screen and borehole wall will be backfilled with chemically inert sand to promote sufficient groundwater flow to the well and to minimize the passage of any fine-grained formational material into the well. The sand pack will extend approximately 2 feet above the top of the screen. A bentonite clay seal will be placed above the sand pack. The remaining annular space will be filled to grade with cement/bentonite grout. Each monitoring well will be fitted with a lockable cap and finished with a flush-mounted curb box secured with cement.

At locations SSSB-29/SSMW-09 and SSSB-30/SSMW-10, if visual impacts are observed at depths where the well screens of the monitoring well are proposed to be installed, then step out borings will be installed approximately 20-feet away. The monitoring wells will be installed at the step out locations.

Each newly-installed monitoring well will be developed by alternatively surging and pumping until the turbidity is less than 50 nephelometric turbidity units (NTUs) or until a maximum of 10 well volumes of

water has been removed. A field turbidity meter will be used to monitor the NTU levels. Well development will be completed in general accordance with the FSP.

Each of the newly-installed monitoring wells will be sampled after a minimum of two weeks following completion of well development.

Purge water generated during the installation and sampling of monitoring wells will be collected in 55-gallon USDOT drums or a fractionation tank and will be disposed at a National Grid-approved disposal facility.

2.5. Groundwater Sampling

Groundwater samples will be collected from the monitoring wells (SSMW-09 through SSMW-11) using low-flow methods according to the FSP. All the groundwater samples will be analyzed for TCL VOCs by EPA Method 8260D, TCL SVOCs by EPA Method 8270E, TAL Metals by EPA Method 6000/7000 series (unfiltered), PCBs by EPA Method 8082, pesticides by EPA Method 8081, herbicides by EPA Method 8151, 1,4-dioxane by EPA Method 8270, total cyanide by EPA Method 9014, and PFAS by EPA Method 1633 (Table 1).

QA/QC procedures are detailed within the QAPP. The QA/QC sample will include one blind duplicate groundwater sample. One trip blank will be included per shipment of samples to the laboratory.

2.6. Investigation Derived Waste

Soil cuttings, decontamination fluids, purge water, and personal protective equipment will be contained within properly labeled United States Department of Transportation (USDOT) 55-gallon drums and disposed of at a National Grid-approved disposal facility. Drums will be stored outside at the property at a location agreed upon by the property owner or their representative.

2.7. Survey

The newly installed soil borings and monitoring well locations will be surveyed, following the completion of the field work, by a New York State Licensed Land Surveyor to A 2 standards of accuracy with an approximate horizontal precision of ?0.02 feet. The elevation of each location will be determined to ±0.01 ft and will be tied into the Site benchmark. All locations and elevations will be referenced to the New York State Plane Eastern Zone North American Datum 1983 and North American Vertical Datum 1988.

2.8. Data Validation and Management

The samples will be analyzed by a New York State Environmental Lab Approval Program (ELAP) accredited laboratory. Analytical results will be provided in a New York State Category B data deliverable format. The data will be validated in accordance with New York State Analytical Service Protocols, and a data usability summary report will be prepared documenting the adequacy of the analytical data

obtained from the laboratory and discussing any quality control non-compliance issues or limitations on the use of the data.

2.9. Report Preparation

The information collected as part of the Supplemental Investigation Report will be submitted to NYSDEC following completion of field activities.

3. Schedule

SI field activities can commence following NYSDEC and New York State Department of Health (NYSDOH) approval of this work plan, contractor availability, and obtaining property access. We anticipate commencing work within two weeks of obtaining access. The following approximate schedule will be finalized following the approval of this Work Plan.

- Drilling/groundwater sampling: approximately 30 days.
- Horizontal drilling and sampling: approximately 6 days.
- Submittal of Supplemental Investigation Report: 14 weeks after completion of field activities.

Table

Table 1 Sample Descriptions, Rationale, and Analysis

Table 1. Sample Descriptions, Rationale, and Analysis
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Skillman Street Former Holder Station
Brooklyn, New York

Sample I.D.	Sample Location	Sample Rationale	Depth of Boring (feet)	Number of Samples		Sample Interval (feet)	TCL VOCs (8260)	TCL SVOCs (8270)	TAL Metals (6000/7000)	PCBs (8082)	Pesticides (8081)	Herbicides (8151)	1,4-Dioxane (8270)	Free Cycanide (9014)	PFAS (1633)	Waste Characterization Analyses
				Soil	Groundwater											
Soil Borings																
SSSB-24	North of former gas holder No. 1.	Soil boring to evaluate potential MGP related impacts north of the holder.	40	4	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X							X
SSSB-25	North of former gas holder No. 1.	Soil boring to evaluate potential MGP related impacts north of the holder.	40	4	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X	X	X	X	X	X	X	
SSSB-26[1]	Southeast of former gas holder No. 1.	Soil boring and groundwater sample location to evaluate potential MGP related impacts.	40	5	1	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, sample from 10 to 15 feet if not the greatest impacts, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X	X[3]	X[3]	X[3]	X[3]	X[3]	X[3]	
SSSB-27[1]	Within the footprint of the former gas holder No. 2.	Soil boring and groundwater sample location to evaluate potential MGP related impacts.	40	5	1	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, sample from 10 to 15 feet if not the greatest impacts (VOC, SVOC, and metals only), clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X	X	X	X	X	X	X	
SSSB-28	Within the footprint of the former gas holder No. 2.	Soil boring to evaluate potential MGP related impacts within the holder.	40	4	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X							X
SSSB-29/ SSMW-09S and SSMW-09D[2]	Downgradient location of the former gas holder No. 1 and 2.	Soil boring and groundwater sample location to evaluate potential off site MGP related impacts.	40	4	1	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X	X	X	X	X	X	X	
SSSB-30/ SSMW-10S and SSMW-10D[2]	Downgradient location of the former gas holder No. 1 and 2.	Soil boring and groundwater sample location to evaluate potential off site MGP related impacts.	40	4	1	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X	X[3]	X[3]	X[3]	X[3]	X[3]	X[3]	
SSSB-31	Within former gas holder No. 1.	Soil boring to evaluate disposal options for soil within the holder.	26	1	0	Bottom 5-foot interval of the boring. Holder bottom is anticipated to be 26 feet bgs.	X	X	X							X
SSSB-32	North of former gas holder No. 1.	Soil boring to evaluate potential MGP related impacts north of the holder.	40	4	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X	X	X	X	X	X	X	

Table 1. Sample Descriptions, Rationale, and Analysis
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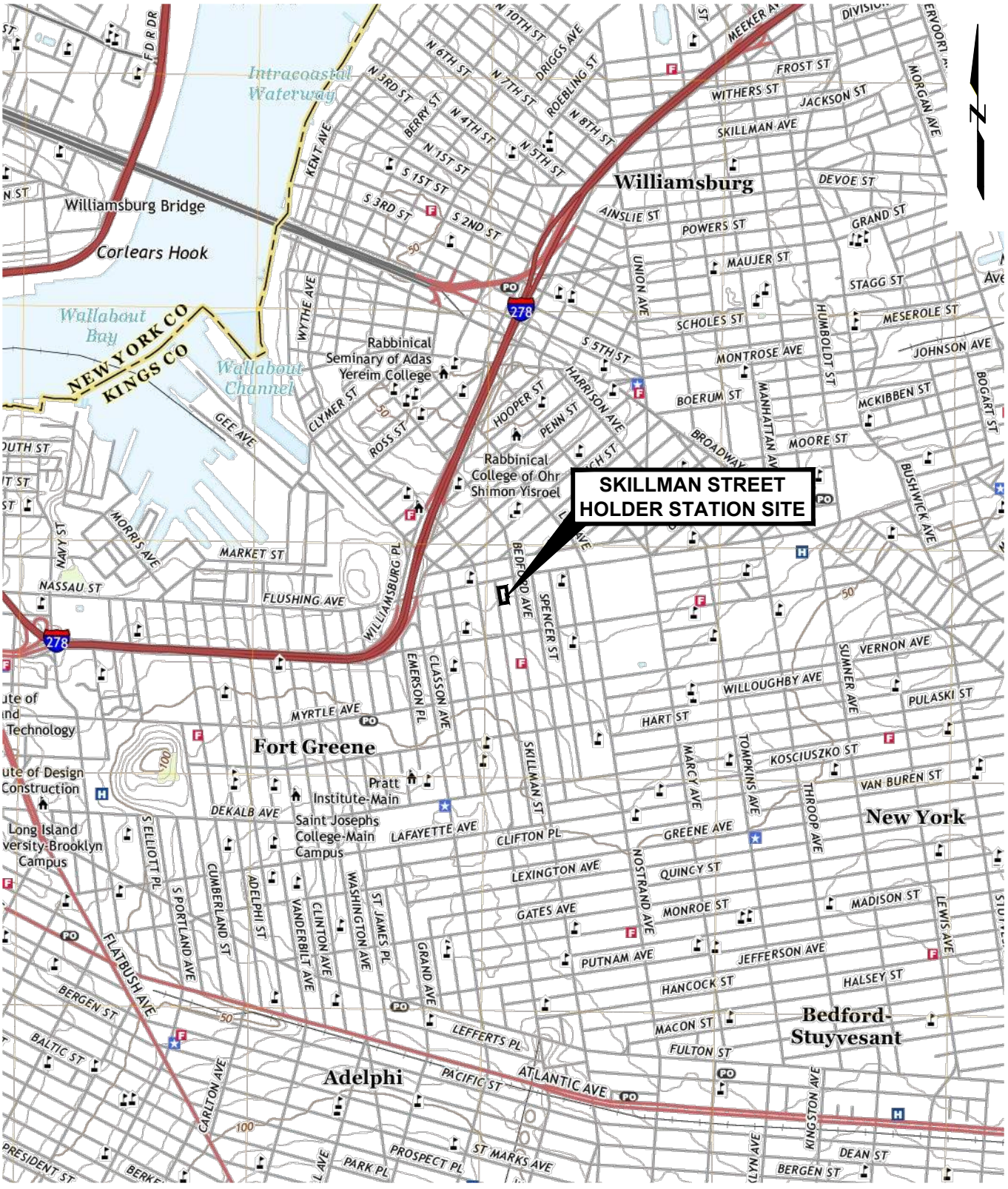
Sample I.D.	Sample Location	Sample Rationale	Depth of Boring (feet)	Number of Samples		Sample Interval (feet)	TCL VOCs (8260)	TCL SVOCs (8270)	TAL Metals (6000/7000)	PCBs (8082)	Pesticides (8081)	Herbicides (8151)	1,4-Dioxane (8270)	Free Cycanide (9014)	PFAS (1633)	Waste Characterization Analyses
				Soil	Groundwater											
SSSB-33	North of former gas holder No. 1.	Soil boring to evaluate potential MGP related impacts north of the holder.	40	4	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X							X
SSSB-34	North of former gas holder No. 1.	Soil boring to evaluate potential MGP related impacts north of the holder.	40	4	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X							
SSSB-35	Within the footprint of former gas holder No. 2.	Soil boring to evaluate potential MGP and LNAPL related impacts.	40	5	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, sample from 10 to 15 feet if not the greatest impacts, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X							
SSSB-36	Within the footprint of former gas holder No. 2.	Soil boring to evaluate the extent of impacts in an interval that was not previously sampled.	20	1	0	Sample from 10 to 15 feet.	X	X								
SSSB-37	Within the footprint of former gas holder No. 2.	Soil boring to evaluate delineate chromium impacts at the completion depth of the boring.	40	5	0	Greatest degree of impacts from 0 to 5 feet, greatest degree of impacts below 5 feet, base of the holder approximately 20 to 25 feet, sample from 10 to 15 feet if not the greatest impacts, clean sample at bottom of boring or 10 feet below impacts if present.	X	X	X							

Notes:
1 - Monitoring wells (shallow and deep) will be installed at either of these boring locations depending on impacts as SSMW-11S and SSMW-11D
2 - If step out borings are installed, the monitoring wells will be installed in the step out location instead of SSSB-29 and 30.
3 - Water sample only
Chemical analysis test methods specified are from U.S. EPA SW-846 test methods
EPA - Environmental Protection Agency
VOCs - Volatile Organic Compounds
SVOCs - Semivolitile Organic Compounds
PCBs - Polychlorinated Biphenyls
PFAS - Polyfluoroalkyl Substances
TAL - Target Analyte List
TCL - Target Compound List
Waste Characterization Analyses will be collected from select intervals and include TCL VOCs, TCL SVOCs, TAL metals, PCBs, EPH, sulfur, and TCLP analysis (VOCs, SVOCs, RCRA metals, pesticides, and herbicides)

Figures

Figure 1 Site Location Map

Figure 2 Property Boundaries and Sample Locations



SOURCE:
MAP CREATED WITH BROOKLYN, NY QUADRANGLE,
7.5-MINUTE USGS TOPOGRAPHIC MAP, 2019.

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nationalgrid

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SITE LOCATION MAP

Project 093080 | April 2025 | Fig. 1

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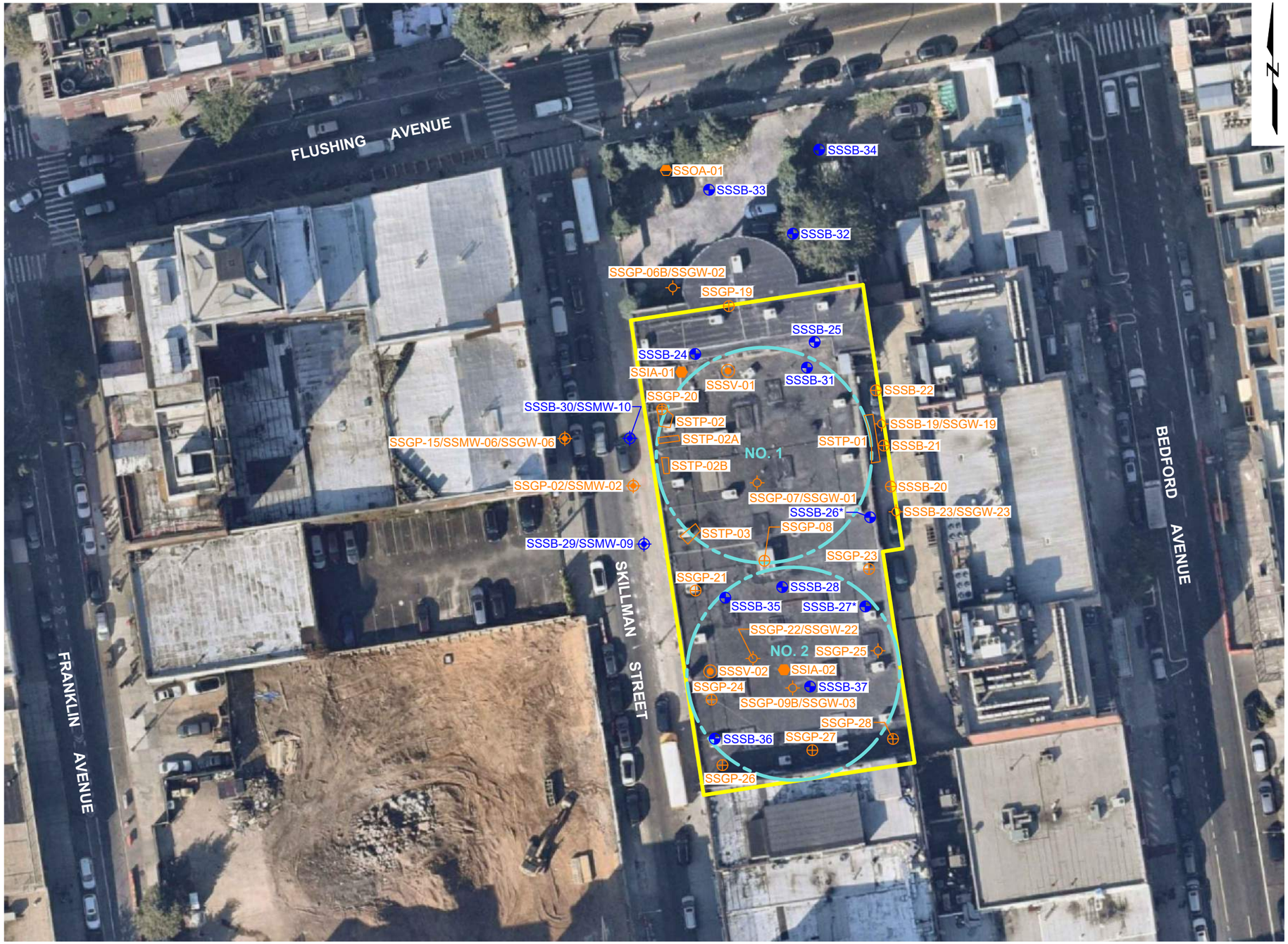

LEGEND:

- SITE BOUNDARY (APPROXIMATE)
- HISTORIC GAS HOLDER

PROPOSED SUPPLEMENTAL REMEDIAL SYSTEM OPTIMIZATION INVESTIGATION EXPLORATIONS

- SOIL BORING / COUPLET MONITORING WELLS (SHALLOW AND DEEP)
- SOIL BORING[1]

PREVIOUS EXPLORATIONS

- SOIL BORING / MONITORING WELL
- SOIL BORING / TEMPORARY GROUNDWATER SAMPLING POINT
- SOIL BORING
- SOIL VAPOR SAMPLE
- OUTDOOR AIR SAMPLE
- INDOOR AIR SAMPLE
- TEST PIT

NOTE:

1. * ONE OF THESE PROPOSED SOIL BORINGS WILL BE INSTALLED AS A COUPLET MONITORING WELLS (SHALLOW AND DEEP) DEPENDING ON FIELD CONDITIONS OBSERVED.

SOURCES:

1. AERIAL IMAGERY: ©2024 NEARMAP, 10/11/2024.
2. SURVEY OF REMEDIAL SYSTEM OPTIMIZATION INVESTIGATION EXPLORATIONS CONDUCTED BY MJ ENGINEERING AND LAND SURVEYING, P.C., CLIFTON PARK, NY ON 7/5/2023. HORIZONTAL DATUM: NAD83/2011, VERTICAL DATUM NAVD88, GEOID18.
3. SURVEY OF SAMPLE LOCATIONS CONDUCTED BY GEI CONSULTANTS, INC. ON 5/31/11, 6/23/11, AND 6/28/13. SURVEY BY NEW YORK STATE LICENSED LAND SURVEYOR NUMBER 050146. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM (NY EAST ZONE), VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD)88.
4. INDOOR AND OUTDOOR AIR SAMPLE LOCATIONS WERE NOT SURVEYED AND ARE APPROXIMATE.

0 50 100
SCALE, FEET

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nationalgrid

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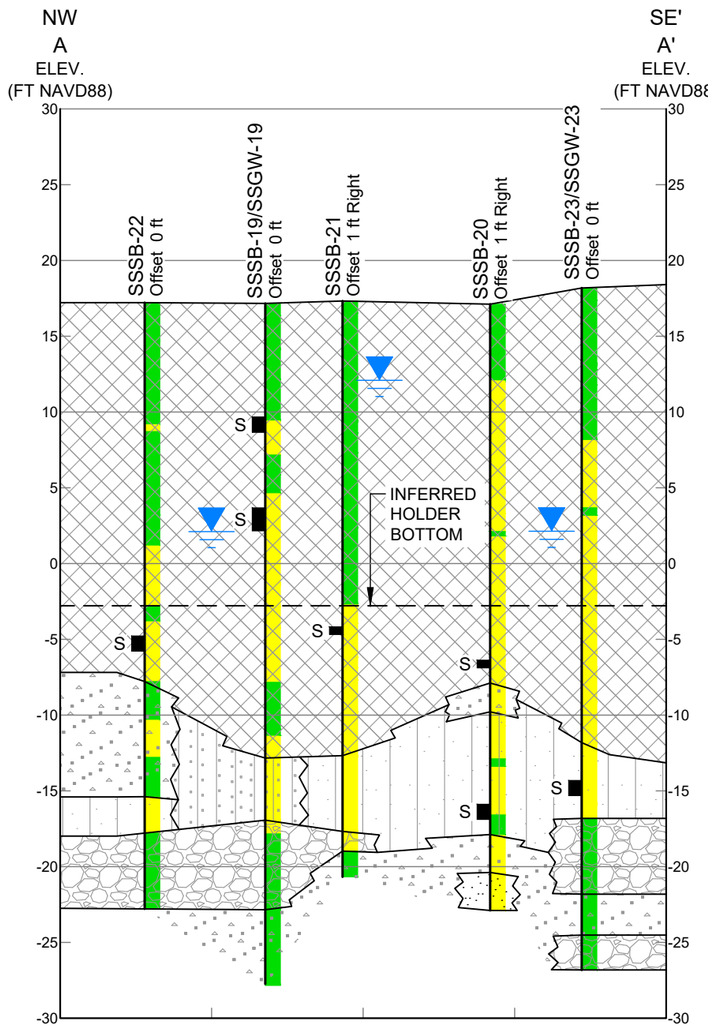
PROPERTY BOUNDARIES AND SAMPLE LOCATIONS

Project 093080 | April 2025 | Fig. 2



HORIZONTAL SCALE: 1" = 20'

0 20 40

0 10 20

VERTICAL SCALE: 1" = 10'

NOTE: 2x VERTICAL EXAGGERATION

LEGEND

SSGP-15/ SSMW-06/ SSGW-06 — SOIL BORING / MONITORING WELL / TEMPORARY GROUNDWATER SAMPLING POINT IDENTIFICATION

OBSERVED APPARENT GROUNDWATER TABLE BASED UPON BORING INFORMATION

S — ANALYTICAL SOIL SAMPLE INTERVAL

WELL SCREEN INTERVAL

NAVD88 — NORTH AMERICAN VERTICAL DATUM (1988)

GEOLOGY

- FILL
- SAND
- SAND WITH SILT
- SAND WITH GRAVEL
- SILT
- SILTY SAND
- SILTY SAND WITH GRAVEL
- GRAVEL

PHYSICAL OBSERVATIONS

- TAR IMPACTS COATED MATERIAL, LENSES
- TAR IMPACTS BLEBS, GLOBS, SHEEN
- TAR IMPACTS STAINING
- PETROLEUM IMPACTS STAINING
- NO IMPACT OBSERVED

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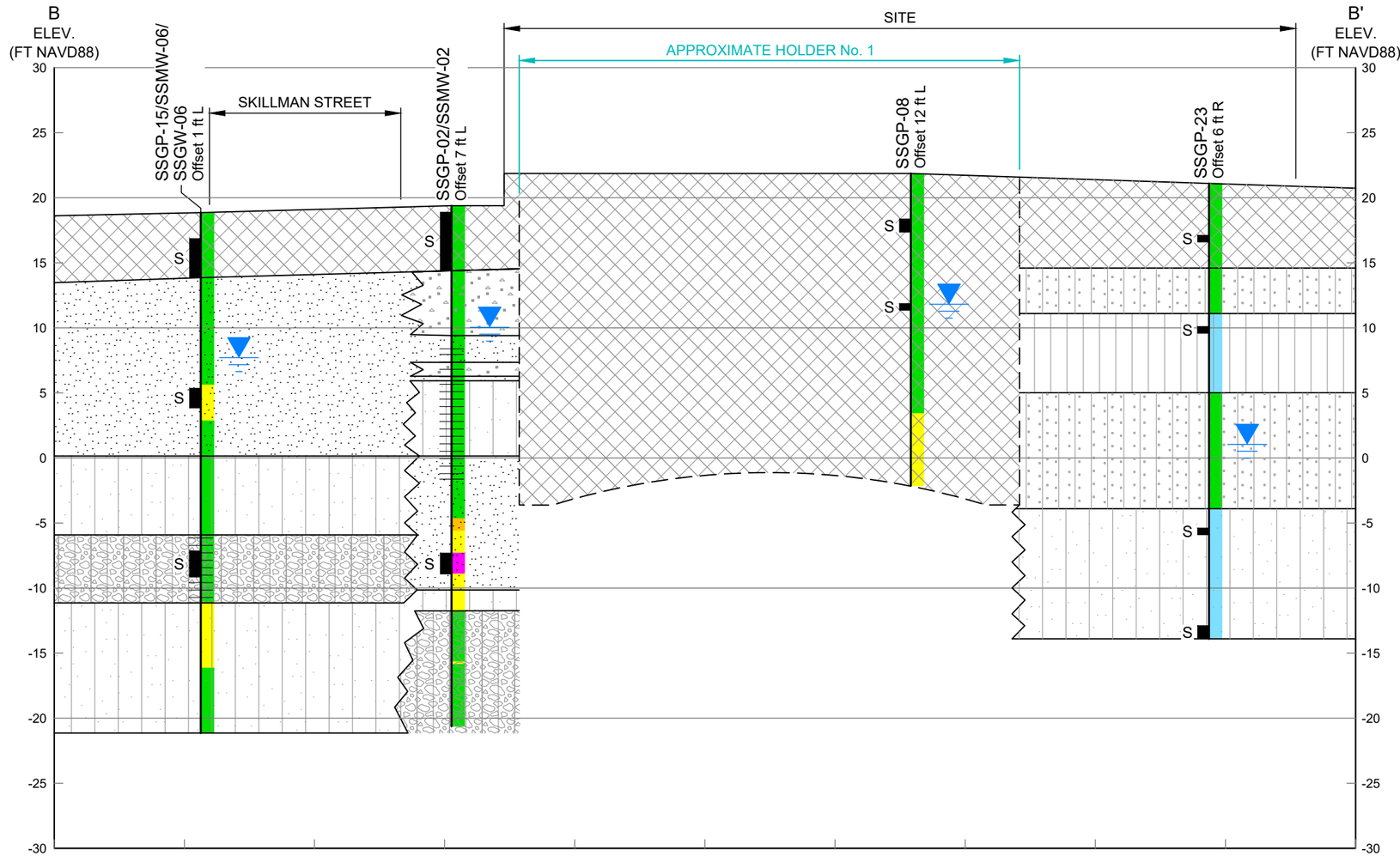
GEOLOGIC CROSS SECTION
A-A'

Project 093080 | April 2025 | Fig. 3



HORIZONTAL SCALE: 1" = 20'

0 20 40

0 10 20

VERTICAL SCALE: 1" = 10'

NOTE: 2x VERTICAL EXAGGERATION

SSGP-15/
SSMW-06/
SSGW-06

SOIL BORING / MONITORING WELL / TEMPORARY GROUNDWATER SAMPLING POINT IDENTIFICATION

OBSERVED APPARENT GROUNDWATER TABLE BASED UPON BORING INFORMATION

S — ANALYTICAL SOIL SAMPLE INTERVAL

WELL SCREEN INTERVAL

NAVD88 — NORTH AMERICAN VERTICAL DATUM (1988)

LEGEND

GEOLOGY

- FILL
- SAND
- SAND WITH SILT
- SAND WITH GRAVEL
- SILT
- SILTY SAND
- SILTY SAND WITH GRAVEL
- GRAVEL

PHYSICAL OBSERVATIONS

- TAR IMPACTS COATED MATERIAL, LENSES
- TAR IMPACTS BLEBS, GLOBS, SHEEN
- TAR IMPACTS STAINING
- PETROLEUM IMPACTS STAINING
- NO IMPACT OBSERVED

Supplemental Investigation
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Skillman Street Holder Station
Brooklyn, New York

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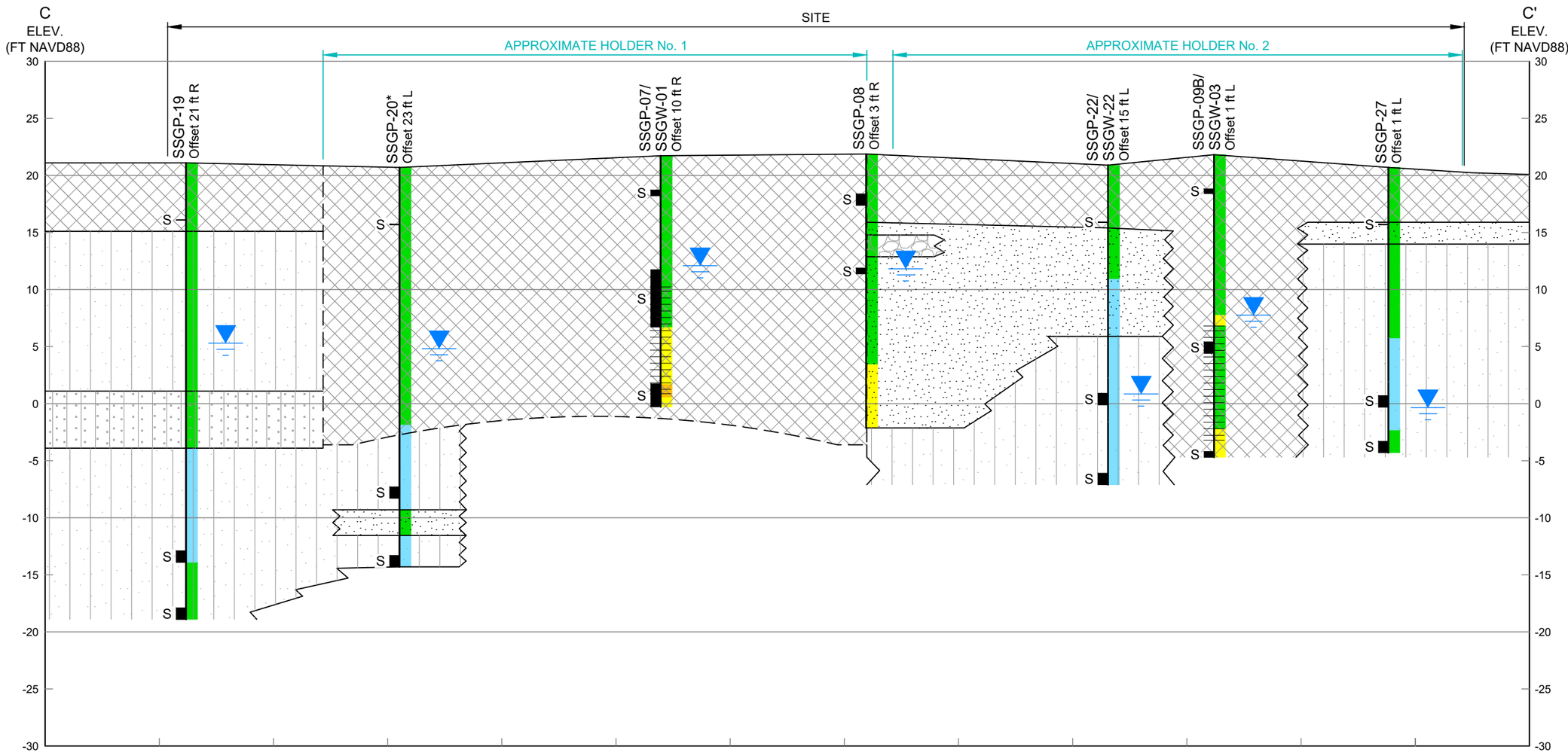
GEOLOGIC CROSS SECTION
B-B'

Project 093080 | April 2025 | Fig. 4



SSGP-15/
SSMW-06/
SSGW-06

SOIL BORING / MONITORING WELL / TEMPORARY GROUNDWATER SAMPLING POINT IDENTIFICATION

OBSERVED APPARENT GROUNDWATER TABLE BASED UPON BORING INFORMATION

S — ANALYTICAL SOIL SAMPLE INTERVAL

WELL SCREEN INTERVAL

NAVD88 — NORTH AMERICAN VERTICAL DATUM (1988)

LEGEND

GEOLOGY

- FILL
- SAND
- SAND WITH SILT
- SAND WITH GRAVEL
- SILT
- SILTY SAND
- SILTY SAND WITH GRAVEL
- GRAVEL

PHYSICAL OBSERVATIONS

- TAR IMPACTS COATED MATERIAL, LENSES
- TAR IMPACTS BLEBS, GLOBS, SHEEN
- TAR IMPACTS STAINING
- PETROLEUM IMPACTS STAINING
- NO IMPACT OBSERVED

NOTE:
* INDICATES BORING IS LOCATED OUTSIDE OF HOLDER NO. 1.

HORIZONTAL SCALE: 1" = 20'

0 20 40

0 10 20

VERTICAL SCALE: 1" = 10'

NOTE: 2x VERTICAL EXAGGERATION

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GEOLOGIC CROSS SECTION
C-C'

Project 093080 | April 2025 | Fig. 5

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSMW-06 (25-30) 5/31/2011	SSMW-06 (25-30) 8/24/2017	Duplicate of SSMW-06 (25-30) 8/24/2017	SSMW-06 (25-30) 8/15/2018	SSMW-06 (25-30) 8/14/2019	SSMW-06 (25-30) 8/12/2020	Duplicate of SSMW-06 (25-30) 8/12/2020	SSMW-06 (25-30) 8/18/2021	SSMW-06 (25-30) 8/17/2022
BTEX (ug/L)										
Benzene	1	**410**	**44**	**46**	**69 J**	**49**	**39**	**47**	**71**	**80**
Toluene	5	**600**	**0.3 J**	**0.35 J**	**2.4 J**	**89**	**490**	**600**	**2100 J**	**1800**
Ethylbenzene	5	**720**	**1.2**	**1.3**	**75 J**	**410**	**930**	**1200**	**2000 J**	**2400**
o-Xylene	5	NA	**8**	**8.2**	**83**	**150**	**290**	**350**	**1100 J**	**1200**
m/p-Xylene	5	NA	**2**	**2**	**6.5 J**	**67**	**210**	**260**	**950 J**	**840**
Total Xylene	5	**1700**	**9.9**	**10**	NA	NA	NA	NA	NA	NA
Total BTEX	NE	**3430**	**55.5**	**57.85**	**235.9**	**765**	**1959**	**2457**	**6221**	**6320**
Other VOCs (ug/L)										
cis-1,2-Dichloroethene	5	**600**	**0.4 J**	**0.4 J**	1 U	2 U	**0.73 J**	5 U	**59**	5 U
Isopropylbenzene	5	NA	**1.7**	**2**	**9.1**	**24**	**63**	**82**	**78**	**160**
Styrene	5	**92**	0.5 U	0.5 U	1 UJ	**10**	**7.3**	**8.4**	**280**	5
Vinyl chloride	2	**290**	0.5 U	**0.21 J**	1 U	2 UJ	2 UJ	5 U	**48**	5 U
Total VOCs	NE	**4412**	**58.96**	**67.03**	**249.92**	**803.91**	**2031.19**	**2547.4**	**6686**	**6485**
PAHs (ug/L)										
Naphthalene	10*	**1200**	**0.451 J**	**0.379 J**	**3.1 J**	**100**	**510 J**	**330 J**	**1100**	**1200**
Total PAHs	NE	**1214**	**1.22**	**1.097**	**4.3**	**101.6**	**510**	**330**	**1105.4**	**1213**
Other SVOCs (ug/L)										
Diethyl phthalate	50*	80 U	5.13 U	5.13 U	10 U	10 U	50 U	50 U	100 U	**180**
2-Methylphenol (o-Cresol)	1	**21 J**	5.13 U	5.13 U	10 U	10 U	50 U	50 U	100 U	**4.4 J**
4-Methylphenol (p-Cresol)	1	80 U	NA	NA	10 U	10 U	**4.8 J**	50 U	100 U	**3.8 J**
Total SVOCs	NE	**1235**	**1.22**	**1.097**	**9.1**	**108.1**	**535.8**	**344**	**1105.4**	**1403.6**
Total Metals (ug/L)										
Iron	300	214	**12100**	**12100**	**14700 J**	**13500**	**15700**	**16000**	**14200**	**11700**
Magnesium	35000*	**18700**	**24100**	**23700**	**27600 J**	**31800**	**36700**	**36500**	**30100**	**25100**
Manganese	300	**3460**	**12700**	**12600**	**14400**	**15900**	**18600**	**18800**	**16600**	**12500**
Sodium	20000	**109000**	**99300**	**98500**	**112000 J**	**129000**	**151000**	**150000**	**152000**	**133000**

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-06 (11-16) 8/25/2010
BTEX (ug/L)		
Toluene	5	**1100**
Ethylbenzene	5	**930**
Total Xylene	5	**3900**
Total BTEX	NE	**5930**
Other VOCs (ug/L)		
Styrene	5	**1800**
Total VOCs	NE	**7730**
PAHs (ug/L)		
Naphthalene	10*	**3300**
Total PAHs	NE	**3400**
Other SVOCs (ug/L)		
Total SVOCs	NE	**3400**
Total Metals (ug/L)		
Iron	300	**6840**
Manganese	300	**5830**
Sodium	20000	**99900**

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSMW-02 (11-21) 5/31/2011	SSMW-02 (11-21) 8/24/2017	SSMW-02 (11-21) 8/15/2018	SSMW-02 (11-21) 8/14/2019	Duplicate of SSMW-02 (11-21) 8/14/2019
BTEX (ug/L)						
Benzene	1	**100 J**	100 U	25 U	50 U	50 U
Toluene	5	**260**	100 U	25 U	50 U	50 U
Ethylbenzene	5	**250**	100 U	25 U	**17 J**	**17 J**
m/p-Xylene	5	NA	200 U	25 U	**17 J**	**21 J**
Total Xylene	5	**800**	300 U	NA	NA	NA
Total BTEX	NE	**1410**	ND	ND	34	38
Other VOCs (ug/L)						
Acetone	50*	**850**	400 UJ	130 U	250 U	250 U
1,1-Dichloroethene	5	250 U	100 U	**8.4 J**	**26 J**	50 U
cis-1,2-Dichloroethene	5	**8000**	**2800**	**2000**	**7200**	**7000**
trans-1,2-Dichloroethene	5	**39 J**	100 U	**11 J**	**31 J**	**35 J**
Styrene	5	**360**	100 U	25 U	50 U	50 U
Tetrachloroethene (PCE)	5	**9400**	**5800**	**8500**	**14000**	**12000**
Trichloroethene (TCE)	5	**1900**	**1700**	**1600**	**3800**	**3400**
Vinyl chloride	2	**380**	**100**	**84**	**300**	**280**
Total VOCs	NE	**22339**	**10400**	**12203.4**	**25391**	**22753**
PAHs (ug/L)						
Naphthalene	10*	**490**	**6.52 J**	**2.1 J**	**53**	**70**
Total PAHs	NE	**500**	**6.9613**	**2.1**	**53**	**70**
Other SVOCs (ug/L)						
Total SVOCs	NE	**500**	**6.9613**	**2.1**	**54**	**71.1**
Total Metals (ug/L)						
Antimony	3	15 U	5 U	2 U	2 U	2 U
Iron	300	**26400**	**18100**	**40800 J**	**55400**	**57100**
Magnesium	35000*	**24200**	**23400**	**53900 J**	**40400**	**42900**
Manganese	300	**7070**	**6350**	**16900**	**11700**	**11800**
Sodium	20000	**114000**	**128000**	**311000 J**	**257000**	**274000**

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-22 (15-20) 6/14/2023
BTEX (ug/L)		
Benzene	1	**12**
Total BTEX	NE	**16.24**
Other VOCs (ug/L)		
Total VOCs	NE	**29.94**
PAHs (ug/L)		
Total PAHs	NE	ND
Other SVOCs (ug/L)		
Total SVOCs	NE	ND
Total Metals (ug/L)		
Arsenic	25	**61.9**
Barium	1000	**1620**
Beryllium	3*	**29.5**
Cadmium	5	**5.2**
Chromium	50	**709**
Copper	200	**1060**
Iron	300	**937000**
Lead	25	**432**
Magnesium	35000*	**93200**
Manganese	300	**16800**
Nickel	100	**529**
Sodium	20000	**147000**
Thallium	0.5*	**5.7**

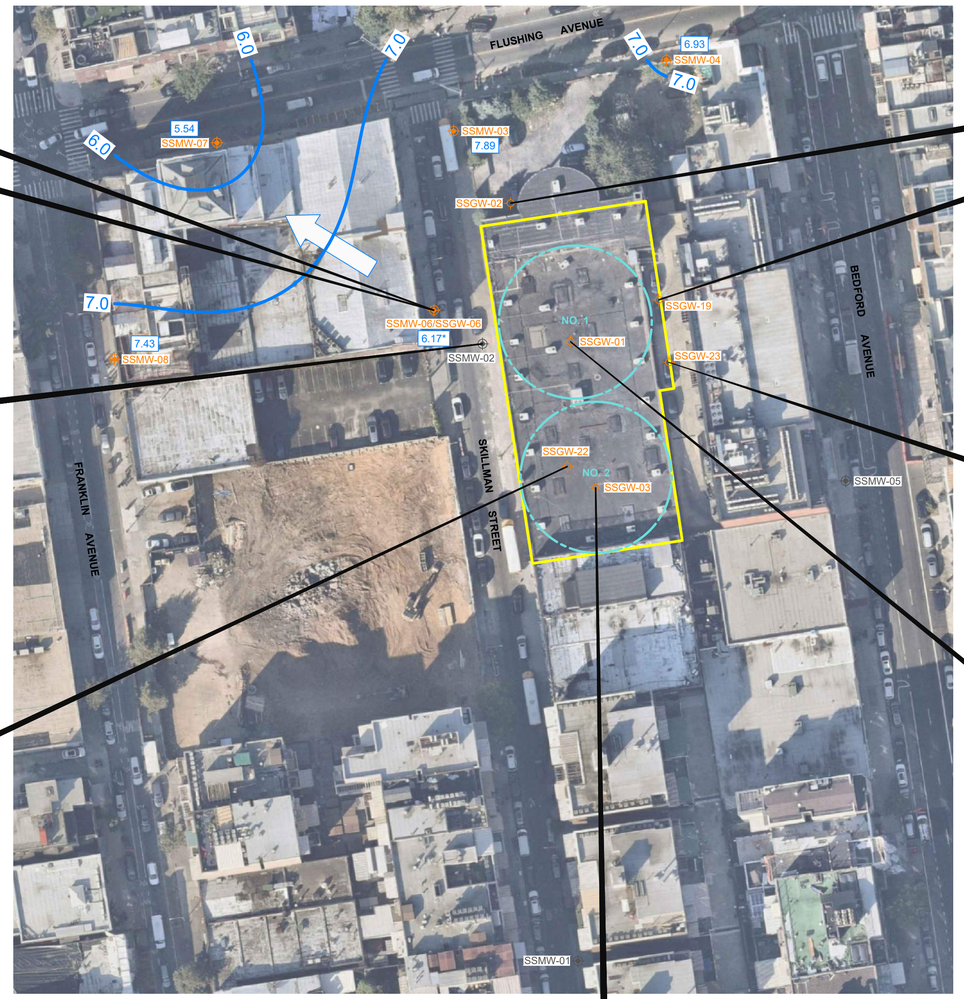
Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-03 (15-25) 6/26/2013
BTEX (ug/L)		
Benzene	1	**13**
Total BTEX	NE	**13**
Other VOCs (ug/L)		
cis-1,2-Dichloroethene	5	**9.2**
Total VOCs	NE	**22.2**
PAHs (ug/L)		
Total PAHs	NE	ND
Other SVOCs (ug/L)		
Total SVOCs	NE	ND
Total Metals (ug/L)		
Chromium	50	**380**
Copper	200	**390**
Iron	300	**410000**
Lead	25	**170**
Magnesium	35000*	**150000**
Manganese	300	**30000**
Nickel	100	**280**
Sodium	20000	**140000**

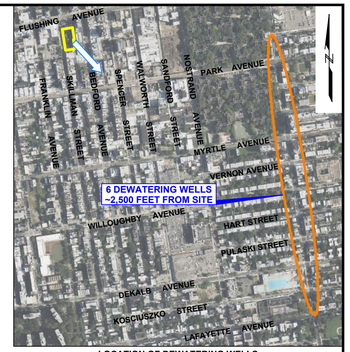
Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-02 (11.5-21.5) 6/26/2013
BTEX (ug/L)		
Benzene	1	**240**
Toluene	5	**79**
Ethylbenzene	5	**32**
o-Xylene	5	**150**
m/p-Xylene	5	**100**
Total BTEX	NE	**601**
Other VOCs (ug/L)		
cis-1,2-Dichloroethene	5	**1900**
Isopropylbenzene	5	**64**
Tetrachloroethene (PCE)	5	**230**
Trichloroethene (TCE)	5	**140**
Vinyl chloride	2	**200**
Total VOCs	NE	**3135**
PAHs (ug/L)		
Naphthalene	10*	**62**
Total PAHs	NE	**62**
Other SVOCs (ug/L)		
Total SVOCs	NE	**62**
Total Metals (ug/L)		
Chromium	50	**68**
Iron	300	**50000**
Lead	25	**75**
Manganese	300	**2700**
Sodium	20000	**83000**
Cyanides (ug/L)		
Total Cyanide	200	**330 J**

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-19 (14-24) 3/11/2016
BTEX (ug/L)		
Total BTEX	NE	ND
Other VOCs (ug/L)		
Chloroform (Trichloromethane)	7	**15**
Total VOCs	NE	**20.8**
PAHs (ug/L)		
Total PAHs	NE	ND
Other SVOCs (ug/L)		
Total SVOCs	NE	ND
Total Metals (ug/L)		
Arsenic	25	**47**
Barium	1000	**1800**
Beryllium	3*	**17**
Chromium	50	**430**
Copper	200	**870**
Iron	300	**420000**
Lead	25	**180**
Magnesium	35000*	**71000**
Manganese	300	**7300**
Nickel	100	**360**
Sodium	20000	**56000**
Cyanides (ug/L)		
Total Cyanide	200	**240**

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-23 (15-25) 3/11/2016	Duplicate of SSGW-23 (15-25) 3/11/2016
BTEX (ug/L)			
Benzene	1	**1.7**	**1.7**
Total BTEX	NE	**3.5**	**4.3**
Other VOCs (ug/L)			
Chloroform (Trichloromethane)	7	**11**	**11**
Total VOCs	NE	**18.1**	**19**
PAHs (ug/L)			
Total PAHs	NE	ND	ND
Other SVOCs (ug/L)			
Bis(2-ethylhexyl)phthalate	5	**5.1**	**5.8**
Total SVOCs	NE	**5.1**	**5.8**
Total Metals (ug/L)			
Iron	300	**18000 J**	**13000 J**
Manganese	300	**2000**	**1700**
Sodium	20000	**82000**	**73000**

Sample Name: / Sample Depth (feet bgs): / Sample Date:	NYS AWQS	SSGW-01 (13-23) 6/27/2013	Duplicate of SSGW-01 (13-23) 6/27/2013
BTEX (ug/L)			
Benzene	1	**4300**	**5600**
Toluene	5	**16000**	**20000**
Ethylbenzene	5	**9500**	**12000**
o-Xylene	5	**4000**	**4900**
m/p-Xylene	5	**7700**	**9400**
Total BTEX	NE	**41500**	**51900**
Other VOCs (ug/L)			
Isopropylbenzene	5	**350**	**420**
Styrene	5	**70 J**	**82**
Total VOCs	NE	**41920**	**52402**
PAHs (ug/L)			
Naphthalene	10*	**5600 J**	**3300 J**
Total PAHs	NE	**5600**	**3500**
Other SVOCs (ug/L)			
Total SVOCs	NE	**5600**	**3500**
Total Metals (ug/L)			
Iron	300	**20000**	**26000**
Lead	25	**83 J**	**280 J**
Manganese	300	**690 J**	**1300 J**
Sodium	20000	**100000**	**110000**
Cyanides (ug/L)			
Total Cyanide	200	**240 J**	**200 J**





LOCATION OF DEWATERING WELLS

0 800

SCALE, FEET

LEGEND:

- SITE BOUNDARY (APPROXIMATE)
- HISTORIC GAS HOLDER
- 5.0 — GROUNDWATER CONTOUR (FEET NAVD)
- 7.89 — GROUNDWATER ELEVATION (FEET NAVD)
- 6.17* — ELEVATION - NOT USED TO GENERATE GROUNDWATER CONTOURS
- INFERRED GROUNDWATER FLOW DIRECTION
- NAVD — NORTH AMERICAN VERTICAL DATUM
- MONITORING WELL
- MONITORING WELL (DESTROYED)
- TEMPORARY GROUNDWATER SAMPLING POINT

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater

ug/L	Micrograms per liter or parts per billion (ppb)
ng/L	Nanogram per liter (ppt)
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
PAH	Polycyclic Aromatic Hydrocarbon
PFAS	Per- and Polyfluoroalkyl Substances
SVOC	Semi-Volatile Organic Compound
VOC	Volatile Organic Compound

Total BTEX, Total VOCs, Total PAHs, Total SVOCs, and Total PFAS are calculated using detects only.

Total PAHs are calculated using the list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, 2-Methylnaphthalene, Phenanthrene, and Pyrene

*	Value is a guidance value and not a standard
NA	Not analyzed
ND	Not detected
NE	Not established
BOLD	A detected result concentration
BOLD	Indicates that the detected result value exceeds the NYS AWQS

VALIDATION QUALIFIERS:

J	The result is an estimated value.
R	The result is rejected.
U	The result was not detected above the reporting limit.
UJ	The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

SOURCES:

1. DEWATERING WELL AERIAL IMAGERY: BING ©2023 MICROSOFT CORPORATION ©2023 MAXAR ©CNES (2023) DISTRIBUTION AIRBUS DS ACCESSED VIA CIVIL3D ON 08/02/2023.
2. SITE AERIAL IMAGERY: ©2024 NEARMAP, 10/11/2024.
3. SURVEY OF REMEDIAL SYSTEM OPTIMIZATION INVESTIGATION EXPLORATIONS CONDUCTED BY MJ ENGINEERING AND LAND SURVEYING, P.C., CLIFTON PARK, NY ON 7/5/2023. HORIZONTAL DATUM: NAD83/2011, VERTICAL DATUM NAVD88, GEOID18.
4. SURVEY OF SAMPLE LOCATIONS CONDUCTED BY GEI CONSULTANTS, INC. ON 5/31/11, 6/23/11, AND 6/28/13. SURVEY BY NEW YORK STATE LICENSED LAND SURVEYOR NUMBER 050146. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM (NY EAST ZONE), VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD)88.

0 50' 100'

SCALE: 1" = 50'

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Work Plan
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GROUNDWATER CONTOURS (AUGUST 23, 2023) AND GROUNDWATER ANALYTICAL SUMMARY

Project 093080 | April 2025 | Fig. 6

HERIOT, PAULA B:\Working\NATIONAL GRID\093080 - NG-SKILLMAN\00_CAD\Figures\SRSO\WP\6_093080_SRSOIWP_GWCT.dwg - 4/30/2025

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-07 (3-4) 6/26/2013	Duplicate of SSGP-07 (3-4) 6/26/2013	SSGP-07 (10-15) 6/26/2013	SSGP-07 (20-22) 6/26/2013
BTEX (mg/kg)						
Benzene	0.06	4.8	**0.0013 J**	**0.0011 J**	0.0013 UJ	**0.61 J**
Toluene	0.7	100	0.0012 UJ	0.0011 UJ	0.0013 UJ	**12 J**
Ethylbenzene	1	41	0.0012 UJ	0.0011 UJ	0.0013 UJ	**29 J**
o-Xylene	0.26	100	0.0012 UJ	0.0011 UJ	0.0013 UJ	**11 J**
m/p-Xylene	0.26	100	0.0024 UJ	0.0023 UJ	0.0026 UJ	**25 J**
Total BTEX	NE	NE	**0.0013**	**0.0011**	ND	**77.61**
Other VOCs (mg/kg)						
Total VOCs	NE	NE	**0.0358**	**0.0291**	ND	**80.85**
PAHs (mg/kg)						
Benzo(a)anthracene	1	1	**0.85**	**1.3**	0.043 U	0.22 U
Benzo(b)fluoranthene	1	1	**1.1**	**1.5**	**0.055**	0.22 U
Benzo(a)pyrene	1	1	**0.86**	**1.4**	0.043 U	0.22 U
Chrysene	1	3.9	**0.96**	**1.5**	0.43 U	2.2 U
Indeno(1,2,3-cd)pyrene	0.5	0.5	**0.61 J**	**1.2 J**	0.043 U	0.22 U
Naphthalene	12	100	0.37 U	0.37 U	0.43 U	**38 J**
Total PAHs	NE	NE	**10.638**	**16.58**	**0.055**	**46.1**
Other SVOCs (mg/kg)						
Total SVOCs	NE	NE	**10.638**	**16.58**	**0.055**	**46.1**
Metals (mg/kg)						
Lead	63	400	**270 J**	**330 J**	**56 J**	**160 J**
Mercury	0.18	0.81	**0.31**	**0.28**	**0.033**	**0.07**
Nickel	30	310	**21**	**20**	**69**	**41**
Zinc	109	10000	**230**	**170**	**49**	**80**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-20 (5) 6/8/2023	SSGP-20 (28-29) 6/8/2023	SSGP-20 (34-35) 6/8/2023	Duplicate of SSGP-20 (34-35) 6/8/2023
BTEX (mg/kg)						
Total BTEX	NE	NE	ND	**0.0612**	**0.0589**	**0.0668**
Other VOCs (mg/kg)						
Total VOCs	NE	NE	ND	**0.0893**	**0.078**	**0.09987**
PAHs (mg/kg)						
Benzo(b)fluoranthene	1	1	**1.3**	0.038 U	**0.03 J**	0.037 U
Benzo(a)pyrene	1	1	**1.2**	0.038 U	**0.028 J**	0.037 U
Indeno(1,2,3-cd)pyrene	0.5	0.5	**1.2**	0.038 U	**0.034 J**	0.037 U
Total PAHs	NE	NE	**9.925**	**0.25**	**0.484**	**0.24**
Other SVOCs (mg/kg)						
Total SVOCs	NE	NE	**10.031**	**0.25**	**0.544**	**0.24**
Metals (mg/kg)						
Chromium	30	180	**17.2 J**	**15 J**	**28.1 J**	**50.4 J**
Lead	63	400	**81.1 J**	**6.5 J**	**6.7 J**	**7.3 J**
Mercury	0.18	0.81	**0.19**	0.018 U	0.019 U	0.019 U

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-06 (3-3.5) 6/27/2013	SSGP-06 (15-17) 6/27/2013	SSGP-06 (31-32) 6/27/2013
BTEX (mg/kg)					
Total BTEX	NE	NE	ND	ND	ND
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**0.0313**	**0.0586**	ND
PAHs (mg/kg)					
Benzo(b)fluoranthene	1	1	**1.1**	0.039 U	0.036 U
Total PAHs	NE	NE	**10.587**	ND	ND
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**10.587**	ND	ND
Metals (mg/kg)					
Copper	50	270	**63**	**22**	**25**
Lead	63	400	**160 J**	**4.6 J**	**7.1 J**
Mercury	0.18	0.81	**0.38**	0.02 U	0.018 U
Nickel	30	310	**31**	8.7 U	**11**
Zinc	109	10000	**280**	**23**	**31**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-19 (5) 6/9/2023	SSGP-19 (34-35) 6/9/2023	Duplicate of SSGP-19 (34-35) 6/9/2023	SSGP-19 (39-40) 6/9/2023
BTEX (mg/kg)						
Total BTEX	NE	NE	ND	**0.0016**	ND	ND
Other VOCs (mg/kg)						
Total VOCs	NE	NE	**0.018**	**0.00759**	ND	**0.0008**
PAHs (mg/kg)						
Total PAHs	NE	NE	**3.878**	ND	**0.069**	**1.262**
Other SVOCs (mg/kg)						
Total SVOCs	NE	NE	**3.984**	ND	**0.069**	**1.297**
PFAS-Soil (mg/kg)						
Perfluorooctanoic Acid (PFOA)	0.00066	0.033	**0.00089**	0.0002 U	0.0002 U	**8.4E-05 J**
Metals (mg/kg)						
Lead	63	400	**247 J**	**2.6 J**	**3 J**	**13.5 J**
Mercury	0.18	0.81	**1.4 J**	**0.013 J**	**0.015 J**	**0.026 J**
Zinc	109	10000	**503 J**	**16.8 J**	**17.6 J**	**51.7 J**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSSB-22 (20-23) 3/10/2016
BTEX (mg/kg)			
Total BTEX	NE	NE	ND
Other VOCs (mg/kg)			
Total VOCs	NE	NE	**0.00081**
PAHs (mg/kg)			
Total PAHs	NE	NE	ND
Other SVOCs (mg/kg)			
Total SVOCs	NE	NE	ND

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSSB-19 (7.5-8.5) 3/11/2016	Duplicate of SSSB-19 (7.5-8.5) 3/11/2016	SSSB-19 (13.5-15) 3/11/2016	SSSB-19 (33-34) 3/11/2016
BTEX (mg/kg)						
Total BTEX	NE	NE	ND	**0.0024**	ND	**0.2346**
Other VOCs (mg/kg)						
Total VOCs	NE	NE	**0.0011**	**0.0034**	ND	**0.2548**
PAHs (mg/kg)						
Total PAHs	NE	NE	ND	ND	ND	**0.69**
Other SVOCs (mg/kg)						
Total SVOCs	NE	NE	ND	ND	ND	**0.69**
Metals (mg/kg)						
Chromium	30	180	**16**	**14**	**32**	**18**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSSB-21 (21.5-22) 3/9/2016
BTEX (mg/kg)			
Total BTEX	NE	NE	**0.002**
Other VOCs (mg/kg)			
Total VOCs	NE	NE	**0.003**
PAHs (mg/kg)			
Total PAHs	NE	NE	ND
Other SVOCs (mg/kg)			
Total SVOCs	NE	NE	ND

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSSB-20 (23.5-24) 3/10/2016	SSSB-20 (33-34) 3/10/2016
BTEX (mg/kg)				
Benzene	0.06	4.8	**0.0025**	**0.096**
m/p-Xylene	0.26	100	0.00077 U	**0.33**
Total BTEX	NE	NE	**0.0038**	**1.142**
Other VOCs (mg/kg)				
Total VOCs	NE	NE	**0.00703**	**1.2**
PAHs (mg/kg)				
Total PAHs	NE	NE	ND	**1.2**
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	ND	**1.2**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSSB-23 (32.5-33.5) 3/11/2016
BTEX (mg/kg)			
Total BTEX	NE	NE	**0.1371**
Other VOCs (mg/kg)			
Total VOCs	NE	NE	**0.1495**
PAHs (mg/kg)			
Total PAHs	NE	NE	**0.42**
Other SVOCs (mg/kg)			
Total SVOCs	NE	NE	**0.42**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-02 (0.5-5) 8/9/2010	SSGP-02 (26.7-28.3) 8/9/2010
BTEX (mg/kg)				
Toluene	0.7	100	0.0057 U	**160**
Ethylbenzene	1	41	0.0057 U	**220**
Total Xylene	0.26	100	0.0057 U	**540**
Total BTEX	NE	NE	**0.001**	**1220**
Other VOCs (mg/kg)				
Total VOCs	NE	NE	**0.092**	**1620**
PAHs (mg/kg)				
Naphthalene	12	100	**0.21 J**	**1000**
Total PAHs	NE	NE	**2.067**	**1218.7**
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**2.113**	**1218.7**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-08 (3.5-4.5) 6/25/2013	SSGP-08 (10-10.5) 6/25/2013
BTEX (mg/kg)				
Total BTEX	NE	NE	ND	ND
Other VOCs (mg/kg)				
Total VOCs	NE	NE	ND	ND
PAHs (mg/kg)				
Total PAHs	NE	NE	**0.338**	ND
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**0.338**	ND
Metals (mg/kg)				
Copper	50	270	**63**	**25**
Lead	63	400	**330 J**	**73 J**
Nickel	30	310	**170**	**36**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-21 (0.4-5) 6/2/2023	SSGP-21 (16.5-17) 6/6/2023	SSGP-21 (34-35) 6/8/2023
BTEX (mg/kg)					
Benzene	0.06	4.8	0.0015 U	**0.73 J**	**0.0018**
Toluene	0.7	100	0.0015 U	**3.5**	**0.0017**
Ethylbenzene	1	41	0.0015 U	**170**	**0.018**
o-Xylene	0.26	100	0.0015 U	**92**	**0.027**
m/p-Xylene	0.26	100	**0.00038 J**	**210**	**0.022**
Total Xylene	0.26	100	**0.00038 J**	**300**	**0.048**
Total BTEX	NE	NE	**0.00038**	**476.23**	**0.0705**
Other VOCs (mg/kg)					
n-Propylbenzene	3.9	100	0.0015 U	**10**	**0.0012**
1,2,4-Trimethylbenzene	3.6	52	0.0015 U	**170**	**0.026**
1,3,5-Trimethylbenzene	8.4	52	0.0015 U	**53**	**0.0019**
Total VOCs	NE	NE	**0.00038**	**736.57**	**0.10205**
PAHs (mg/kg)					
Indeno(1,2,3-cd)pyrene	0.5	0.5	**0.72 J**	**0.13**	0.037 U
Naphthalene	12	100	**0.027 J**	**180**	**2.8**
Total PAHs	NE	NE	**6.06**	**208.346**	**2.836**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**6.134**	**209.171**	**2.836**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-22 (5) 6/9/2023	SSGP-22 (20-21) 6/9/2023	SSGP-22 (27-28) 6/14/2023
BTEX (mg/kg)					
Total BTEX	NE	NE	ND	ND	**0.1006**
Other VOCs (mg/kg)					
Total VOCs	NE	NE	ND	**0.01362**	**0.13355**
PAHs (mg/kg)					
Total PAHs	NE	NE	**1.032**	ND	**0.18**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**1.12**	ND	**0.18**
Metals (mg/kg)					
Mercury	0.18	0.81	**0.22 J**	**0.014 J**	**0.016 J**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-24 (4-5) 6/7/2023	SSGP-24 (25-26) 6/8/2023	SSGP-24 (34-35) 6/8/2023
BTEX (mg/kg)					
Total BTEX	NE	NE	**0.00042**	**0.00658**	ND
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**0.00042**	**0.01188**	**0.0102**
PAHs (mg/kg)					
Indeno(1,2,3-cd)pyrene	0.5	0.5	**0.53**	**0.04**	0.037 U
Total PAHs	NE	NE	**9.654**	**0.921**	ND
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**9.958**	**0.921**	ND
Metals (mg/kg)					
Lead	63	400	**260**	**15.5 J**	**3.2 J**
Mercury	0.18	0.81	**1.6**	**0.035**	0.018 U
Zinc	109	10000	**180**	**50.3**	**16.9**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-23 (4-4.5) 6/6/2023	SSGP-23 (26.5-27) 6/7/2023	SSGP-23 (34-35) 6/8/2023
BTEX (mg/kg)					
Benzene	0.06	4.8	**1.5**	**0.005**	**0.033**
Toluene	0.7	100	**2.1**	**0.001 J**	**0.0054**
o-Xylene	0.26	100	**1.1**	**0.0029**	**0.051**
m/p-Xylene	0.26	100	**1.9**	**0.0076**	**0.042**
Total Xylene	0.26	100	**3**	**0.011**	**0.094**
Total BTEX	NE	NE	**7.29**	**0.0246**	**0.2314**
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**9.499**	**0.04272**	**0.2604**
PAHs (mg/kg)					
Benzo(a)anthracene	1	1	**3.9**	0.037 U	0.037 U
Benzo(b)fluoranthene	1	1	**5.9**	0.037 U	**0.017 J**
Benzo(k)fluoranthene	0.8	3.9	**2.4**	0.037 U	**0.0076 J**
Benzo(a)pyrene	1	1	**5.4 J**	0.037 U	**0.014 J**
Chrysene	1	3.9	**3.5**	0.37 U	**0.017 J**
Dibenz(a,h)anthracene	0.33	0.33	**1.1**	0.037 U	0.037 U
Indeno(1,2,3-cd)pyrene	0.5	0.5	**4.7 J**	0.037 U	0.037 U
Total PAHs	NE	NE	**43.66**	**0.66**	**0.3156**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**44.271**	**0.66**	**0.3156**
PFAS-Soil (mg/kg)					
Perfluorooctanoic Acid (PFOA)	0.00066	0.033	**0.00131**	**0.00056**	**0.00024**
Metals (mg/kg)					
Lead	63	400	**1060**	**5.7**	**7.3 J**
Mercury	0.18	0.81	**0.7**	0.019 U	0.018 U
Zinc	109	10000	**172**	**31**	**28.7**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-25 (0.5-2.5) 6/6/2023	SSGP-25 (24-24.8) 6/6/2023	SSGP-25 (38-39) 6/6/2023
BTEX (mg/kg)					
Total BTEX	NE	NE	**0.00385**	**0.0087**	**0.00356**
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**0.00555**	**0.02826**	**0.01036**
PAHs (mg/kg)					
Total PAHs	NE	NE	**0.08**	**0.822**	**0.11**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**0.08**	**0.865**	**0.11**
Metals (mg/kg)					
Copper	50	270	**34.8**	**64.6**	**19.7**
Lead	63	400	**179**	**18.7**	**6.2**
Zinc	109	10000	**176**	**56.8**	**27.5**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-26 (0.4-4) 6/2/2023	SSGP-26 (11-12) 6/7/2023	SSGP-26 (29-30) 6/7/2023
BTEX (mg/kg)					
Total BTEX	NE	NE	**0.00041**	ND	ND
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**0.01051**	ND	ND
PAHs (mg/kg)					
Total PAHs	NE	NE	**1.175**	**0.079**	ND
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**1.239**	**0.079**	ND

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-09 (3.0-3.4) 6/25/2013	SSGP-09 (16.4-17.4) 6/25/2013	SSGP-09B (26-26.5) 6/26/2013
BTEX (mg/kg)					
Total BTEX	NE	NE	ND	ND	ND
Other VOCs (mg/kg)					
Total VOCs	NE	NE	ND	ND	ND
PAHs (mg/kg)					
Total PAHs	NE	NE	ND	ND	ND
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	ND	ND	ND
Metals (mg/kg)					
Chromium	30	180	**20 J**	**23 J**	**41 J**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-27 (5) 6/8/2023	SSGP-27 (20-21) 6/8/2023	SSGP-27 (24-25) 6/8/2023
BTEX (mg/kg)					
Total BTEX	NE	NE	**0.00067**	**0.00157**	ND
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**0.00211**	**0.04207**	**0.0199**
PAHs (mg/kg)					
Total PAHs	NE	NE	ND	**2.3747**	**0.097**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	ND	**2.5487**	**0.132**
Metals (mg/kg)					
Chromium	30	180	**20 J**	**38 J**	**24.3 J**

Sample Name: Sample Depth (feet bgs): Sample Date:	Unrestricted SCO	Restricted-Residential SCO	SSGP-28 (4-5) 6/7/2023	SSGP-28 (26-28) 6/7/2023	SSGP-28 (39-40) 6/7/2023
BTEX (mg/kg)					
Total BTEX	NE	NE	ND	ND	**0.00099**
Other VOCs (mg/kg)					
Total VOCs	NE	NE	ND	**0.013**	**0.00188**
PAHs (mg/kg)					
Total PAHs	NE	NE	ND	**0.083**	**0.072**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	ND	**0.083**	**0.072**

0 50 100
SCALE, FEET

LEGEND:

SITE BOUNDARY (APPROXIMATE)

HISTORIC GAS HOLDER

SOIL BORING

6 NYCRR - New York State register and official compilation of codes, rules and regulations of the state of New York

mg/kg	Milligrams/kilogram or parts per million (ppm)
ng/L	Nanogram per liter (ppt)
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PFAS	Per- and Polyfluoroalkyl Substances
SVOC	Semi-Volatile Organic Compound
VOC	Volatile Organic Compound

Total PFAS ARE CALCULATED USING DETECTS ONLY

Total BTEX, Total VOCs, Total PAHs, and Total SVOCs are calculated using detects only.

Total PAHS are calculated using the list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, 2-Methylnaphthalene, Phenanthrene, and Pyrene

Comparison of detected results are performed against one or more of the following NYCRR, Chapter IV, Part 375-6 Soil Cleanup Objectives (SCO)S: Unrestricted Use, Residential, Restricted-Residential, Commercial, Industrial, Protection of Ecological Resources, or Protection of Groundwater

NA	Not analyzed
ND	Not detected
NE	Not established
BOLD	A detected result concentration
BOLD	The detected concentration is above the Unrestricted SCO
BOLD	The detected concentration is above the Restricted-Residential SCO

VALIDATION QUALIFIERS:

J	The result is an estimated value.
R	The result is rejected.
U	The result was not detected above the reporting limit.
UJ	The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

SOURCES:

1. AERIAL IMAGERY: ©2024 NEARMAP, 10/11/2024.
2. SURVEY OF REMEDIAL SYSTEM OPTIMIZATION INVESTIGATION EXPLORATIONS CONDUCTED BY MJ ENGINEERING AND LAND SURVEYING, P.C., CLIFTON PARK, NY ON 7/5/2023. HORIZONTAL DATUM: NAD83/2011, VERTICAL DATUM NAVD88, GEOID18.
3. SURVEY OF SAMPLE LOCATIONS CONDUCTED BY GEI CONSULTANTS, INC. ON 5/31/11, 6/23/11, AND 6/28/13. SURVEY BY NEW YORK STATE LICENSED LAND SURVEYOR NUMBER 050146. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM (NY EAST ZONE), VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD)88.
4. INDOOR AND OUTDOOR AIR SAMPLE LOCATIONS WERE NOT SURVEYED AND ARE APPROXIMATE.

Supplemental Investigation
Work Plan
Skillman Street Holder Station
Brooklyn, New York

nationalgrid

GEI Consultants

SUBSURFACE SOIL ANALYTICAL SUMMARY

Project 093080 | April 2025 | Fig. 7

HERIOT, PAULA B:\Working\NATIONAL GRID\093080 - NG-SKILLMAN\00_CAD\Figures\SRSO\WP\7_093080_SRSOIWP_SOIL.dwg - 4/30/2025