

# BROOK 156

740 BROOK AVENUE  
BRONX, NEW YORK

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## Site Management Plan

NYSDEC Site Number: C203078

**Prepared for:**

Brook 156 HDFC  
902 Broadway, 13<sup>th</sup> Floor  
New York, New York 10010  
and  
Brook 156 Associates, L.P.  
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**Revisions to Final Approved Site Management Plan:**

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

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**DECEMBER 2021**

## CERTIFICATION STATEMENT

I, **MICHELLE LAPIN**, P.E., certify that I am currently a New York State registered Professional Engineer (P.E.) and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).



073934-1

NYS Professional Engineer #

12-21-21

Date

Signature

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## LIST OF ACRONYMS

Acronym	Definition
1,2-DCA	1,2-Dichloroethane
ACM	Asbestos Containing Material
AGV	Air Guidance Values
AKRF, Inc.	AKRF
AWQSGV	Ambient Water Quality Standards and Guidance Values
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	Below grade surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
CAMP	Community Air Monitoring Plan
COC	Certificate of Completion
cfm	Cubic feet per minute
CP	Commissioner's Policy
CPP	Citizen Participation Plan
DD	Decision Document
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ESA	Environmental Site Assessment
EWP	Excavation Work Plan
FER	Final Engineering Report
GPA	Gas Permeable Aggregate
HASP	Health and Safety Plan
HDFC	Housing Development Fund Corporation
HPD	Housing Preservation and Development
IC	Institutional Control
LBP	Lead Based Paint
MEK	Methyl ethyl ketone (a.k.a. 2-butanone)
mg/kg	Milligrams per kilogram
Msl	Mean sea level
NGDV	National Geodetic Vertical Datum of 1929
NYC	New York City
NYCRR	New York Code of Rules and Regulations
NYS	New York State

<b>Acronym</b>	<b>Definition</b>
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PAH	Polycyclic Aromatic Hydrocarbons
PBS	Petroleum Bulk Storage
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethylene
P.E.	Professional Engineer
PFAS	Per- and Polyfluoroalkyl substances
PGWSCO	Protection of Groundwater Soil Cleanup Objective
PID	Photoionization Detector
ppm	Parts per million
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIR	Remedial Investigation Report
RMR	Remedy Modification Request
RRSCO	Restricted Residential Soil Cleanup Objective
sf	Square feet
SMP	Site Management Plan
SOE	Support of Excavation
SRI	Supplemental Remedial Investigation
SRIR	Supplemental Remedial Investigation Report
SRIWP	Supplemental Remedial Investigation Work Plan
SSDS	Sub-Slab Depressurization System
SVE	Soil Vapor Extraction
SVOC	Semi-volatile Organic Compound
TCE	Trichloroethylene
TOGS	Technical and Operational Guidance Series
µg/L	Micrograms per liter
UST	Underground Storage Tank
UUSCO	Unrestricted Use Soil Cleanup Objective
VEC	Vapor Encroachment Condition

<b>Acronym</b>	<b>Definition</b>
VI	Vapor Intrusion
VIWP	Vapor Intrusion Work Plan
VOC	Volatile Organic Compound

## EXECUTIVE SUMMARY

Table 1 provides a brief summary of the controls implemented for the property, as well as the inspections, monitoring, maintenance, and reporting activities required by this Site Management Plan (SMP).

**Table 1**  
**Site Management Plan Summary**

<b>Site Identification</b>	Site No. C203078 Brook 156 740 Brook Avenue Bronx, New York
<b>Institutional Controls (ICs)</b>	1. The property may be used for restricted residential, commercial, and industrial uses only, as set forth in the Environmental Easement.
	2. All Engineering Controls (ECs) must be operated and maintained as specified in the SMP.
	3. All ECs must be inspected at a frequency and in a manner defined in the SMP.
	4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or the New York City Department of Health and Mental Hygiene (NYC DOHMH) to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
	5. Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.
	6. Data and information pertinent to Site Management of the property must be reported at the frequency and in a manner defined in the SMP.
	7. All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.
	8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.
	9. Operation, maintenance, inspection, and reporting of the mechanical or physical components of the remedy shall be performed as defined in the SMP.
	10. Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified in the Environmental Easement.
	11. In-ground vegetable gardens and farming on the Site are prohibited.

<b>Engineering Controls (ECs)</b>	Passive Sub-Slab Depressurization System (SSDS).
<b>Inspections</b>	<b>Frequency</b>
Passive SSDS Inspection	Annually.
<b>Reporting</b>	<b>Frequency</b>
Periodic Review Report	First PRR 18 months after receipt of the Certificate of Completion (COC). Annually thereafter.

Further descriptions of the above requirements are provided in detail in the latter sections of this SMP.

## 1.0 INTRODUCTION

### 1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for Brook 156 located at 740 Brook Avenue in the Bronx, New York (hereinafter referred to as the “Site”). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C203078, which is administered by NYS Department of Environmental Conservation (NYSDEC). A Site Location map is provided as Figure 1.

Brook 156 Housing Development Fund Corporation (HDFC) and the New York City (NYC) Department of Housing Preservation and Development (HPD) entered into a Brownfield Cleanup Agreement (BCA) on April 30, 2015 (index no. C203078-03-15) with the NYSDEC as Volunteers to remediate the Site. The BCA was amended on August 24, 2020 to transition the Site from Generation 2 to Generation 3 of the BCP. The BCA was amended again on August 4, 2021 to remove HPD and add Brook 156 Associates, L.P. to the BCA and to provide tangible property credit determination. Brook 156 HDFC and Brook 156 Associates, L.P. are collectively referred to as “the Volunteers”. Lastly, two subsequent BCA amendments were filed in December 2021, which documented the consolidation of the two historical tax lots into the current configuration (Tax Block 2360, Lot 1) and corrected the Site acreage. A figure showing the Site Plan and boundaries of the Site is provided as Figure 2. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement provided in Appendix A.

After completion of the remedial work, some contamination was left at this Site, which is hereafter referred to as “remaining contamination”. Institutional and Engineering Controls (ICs/ECs) have been incorporated into the Site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Bronx County Clerk, requires compliance with this SMP and all ICs/ECs placed on the Site.

This SMP was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor’s successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of ECL 6 New York Code of Rules and Regulations (NYCRR) Part 375 and the BCA for the Site, and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in NYS. A list of contacts for persons involved with the Site is provided in Appendix B of this SMP.

This SMP was prepared by AKRF Inc. (AKRF), on behalf of the Volunteers, in accordance with the requirements of the NYSDEC’s Division of Environmental Remediation (DER) – 10 (Technical Guidance for Site Investigation and Remediation), and the guidelines provided by the NYSDEC.

This SMP addresses the means for implementing the ICs/ECs that are required by the Environmental Easement for the Site.

## **1.2 Revisions**

Revisions to this plan will be proposed in writing to the NYSDEC's Project Manager. The NYSDEC can also make changes to the SMP or request revisions from the Remedial Party. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. In accordance with the Environmental Easement for the Site, the NYSDEC Project Manager will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

## **1.3 Notifications**

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA Index No. C203078-03-15, 6 NYCRR Part 375, and/or ECL.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity 15 feet below ground surface or greater, pursuant to the Excavation Work Plan (EWP). If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
- Notice within 48 hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Notice within 48 hours of any non-routine maintenance activities.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 2 includes contact information for the above notifications. The information will be updated as necessary. A full listing of Site-related contact information is provided in Appendix B.

**Table 2**  
**Key Regulatory Contacts\***

Agency	Name, Role	Contact Information
NYSDEC	Manfred Magloire, Project Manager	(718) 482-4078
NYSDEC	Jane O'Connell, Regional Chief	(718) 482-4599 (office)
NYSDEC	Kelly Lewandowski, Site Control	(518) 402-9569 (office)
NYSDOH	Stephanie Selmer, Project Manager	(518) 402-7864
*Note: Contacts are subject to change and will be updated as necessary.		



## 2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

### 2.1 Site Location and Description

The Site is located on a 0.1635-acre parcel in the County of Bronx, New York and is identified as Block 2360, Lot 1 on the NYC Tax Map. The Site is currently zoned R7-2 and historically comprised both Lot 1 and Lot 3. The historical Lot 1 comprised the eastern portion of the Site and consisted of an approximately 5,600-square foot (sf) rail bed and tunnel that lay approximately 19 feet below sidewalk grade, and a small portion at sidewalk grade along the eastern portion of the lot. The historical Lot 3 comprised the western portion of the Site and consisted of an approximately 1,700-sf, irregularly-shaped, concrete- and asphalt-paved lot. The Site is abutted to the north by East 157<sup>th</sup> Street followed by a parking lot, to the east by a parking lot followed by Hegney Place, to the south by East 156<sup>th</sup> Street followed by a residential and commercial building (Via Verde), and to the west by Brook Avenue, followed by a residential and commercial building. A figure showing the location of the Site is provided as Figure 1 with a more detailed view of the Site provided as Figure 2. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement included in Appendix A.

The owner of the Site at the time of issuance of this SMP is Brook 156 HDFC (contact information below).

Company	Individual Name	Title	Contact Number*
Brook 156 HDFC	Site Owner Entity Contact – Michael Wadman	Vice President	212-243-9090 (office)

### 2.2 Physical Setting

#### 2.2.1 Land Use

The Site was re-zoned from R7-2 to C6-2 to support the proposed redevelopment. The Site is currently being redeveloped into a new 9- to 10-story residential building comprising approximately 50,220 square feet. When completed, the proposed building will contain: a partial cellar encompassing portions of both lots that will contain mechanical and maintenance rooms, a bicycle room, and storage; the ground floor will contain a lobby, community facilities, a residential apartment, and a laundry room; and the floors above will contain 70 affordable housing units for seniors. Rooftop terraces will be located on the 9<sup>th</sup> and 10<sup>th</sup> floor roofs and landscaped entrances to the building will be set back from the Site boundaries along Hegney Place and Brook Avenue.

#### 2.2.2 Geology

Surface topography at the Site is generally level, except for the previous former rail bed that was approximately 19 feet below ground surface (bgs). The Site grade lies at an elevation of approximately 30 feet National Geodetic Vertical Datum (NGVD), an approximate of mean sea level (msl), with the former rail bed at an elevation of approximately 11 feet NGVD. During the Remedial Investigation (RI) and Supplemental Remedial Investigation (SRI), a total of 19 soil borings were advanced, 6 permanent groundwater monitoring wells established, and 7 temporary soil vapor points were installed at the Site. Soil observed in the borings during the RI and SRI consisted of up to 35 feet of historic fill (sand, silt, gravel, ash, wood, brick, asphalt, and concrete), underlain by

apparent native sand with gravel. Presumed bedrock was encountered at 6 feet bgs on historical Lot 1 and approximately 40 feet bgs beneath historical Lot 3.

### 2.2.3 Hydrogeology

During the RI, groundwater was encountered between an elevation range of 4.08 feet to 5.88 feet (NGVD) or approximately 22 to 24 feet bgs. During the SRI, groundwater was encountered between an elevations range of 4.11 feet to 4.21 feet (NVGD) or approximately 24 feet bgs. As detailed in previous environmental investigations, Site groundwater generally flows in a southerly direction.

## 2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References. Copies of all reports and documents referenced were placed in the Site document repositories.

*Phase I Environmental Site Assessment (ESA) Report, East 156<sup>th</sup> Street and Brook Avenue, Bronx, New York, AKRF, Inc., March 2013*

AKRF conducted a Phase I ESA and a Tier 1 Vapor Encroachment Screen at the Site in March 2013. The assessment revealed the following evidence of Recognized Environmental Conditions (RECs) and Vapor Encroachment Conditions (VECs):

- Lot 3 was developed with a gasoline station with a lubrication office and a used automotive sales lot in 1949. According to City Directory records, the gasoline filling station was called the Brook Service Station in 1949 and the J&L Service Station between 1956 through 1961. The gasoline station was vacated by 1969. During Site reconnaissance, a fill port and vent pipe, which may have been associated with a former underground storage tank (UST), were observed within the portion of the Site that was previously used as a gasoline filling station. No closure documents for any former USTs were provided and no Petroleum Bulk Storage (PBS) records were listed with the NYSDEC.
- Historic Sanborn Maps showed that Lot 1 was the Port Morris branch of the New York and Harlem Railroad. The report noted that railroads are commonly associated with elevated concentrations of metals, pesticides, polychlorinated biphenyls (PCBs), and petroleum products.
- The surrounding area was historically mixed-use and included: gasoline filling stations, a garage, and a paper box manufacturer south of the Site across East 156<sup>th</sup> Street; and a printer and “paints” west of the Site across Brook Avenue.
- A BCP site with reported elevated concentrations of tetrachloroethylene (PCE) in soil vapor and groundwater was located approximately 515 feet north of the Site.

The assessment also identified the following Environmental Concerns:

- Two unknown manholes were observed within the concrete-paved portions of Lot 3. The Site owner was unaware of the purpose or configuration of these features and there were no identifiable labels to indicate their use.
- The Site was vacant during the time of the Site visit. Although no painted surfaces or suspect asbestos-containing material (ACM) were observed, it was reported that the potential existed for building materials from former on-site structures and debris to be within the historical fill.

Based on the age of the former structures, it was noted that these materials could contain lead-based paint (LBP) and/or ACM.

*Sampling Protocol and Health and Safety Plan (HASP), Brook 156, Tax Block 2360, Lots 1 and 3, Bronx, New York, AKRF, Inc., April 2013*

AKRF prepared a Sampling Protocol and associated HASP for the Site in April 2013, which was approved by the New York City Department of Environmental Protection (NYCDEP) on August 13, 2013. The work plan proposed: a geophysical survey across accessible areas of the Site; sampling locations; the advancement of 9 soil borings with the collection and laboratory analysis of 2 soil samples from each boring; the installation of four 2-inch diameter groundwater monitoring wells with the collection and laboratory analysis of 4 groundwater samples; and the installation of 4 temporary soil vapor probes with the collection and laboratory analysis of 4 soil vapor samples. The HASP provided Site-specific health and safety measures during implementation of the investigation. The scope of the investigation was based on the previous reports and investigations for the Site.

*Remedial Investigation Report (RIR), Brook 156, Bronx, New York, AKRF, Inc., January 2015*

AKRF conducted an RI at the Site and prepared an RIR in January 2015. The RI included: a geophysical survey across accessible areas of the Site; a manhole investigation; the advancement of 13 soil borings to bedrock or refusal with the collection and analysis of 22 soil samples from the borings; the installation of 4 permanent groundwater monitoring wells with the collection and analysis of 4 groundwater samples; and the installation of 4 temporary soil vapor points with the collection and analysis of 4 soil vapor samples and 1 ambient air sample. Results of the sample analysis were as follows:

- The soil sample analyses detected 16 volatile organic compounds (VOCs) [1,2-dichloroethane, 2-butanone (MEK), acetone, benzene, carbon disulfide, cis-1,2-dichloroethene, cyclohexane, ethylbenzene, isopropylbenzene, m,p-xylene, methylcyclohexane, methylene chloride, o-xylene, PCE, toluene, and vinyl chloride] in 18 of the 22 soil samples analyzed. 1,2-Dichloroethane (1,2-DCA) was detected in soil sample SB-3 (8-12) at a concentration of 0.0523 milligrams per kilogram (mg/kg), above its unrestricted use soil cleanup objective (UUSCO) of 0.02 mg/kg, but below its restricted residential SCO (RRSCO) of 3.1 mg/kg. Acetone was detected in soil samples SB-7 (0-2) and its associated duplicate at estimated concentrations of 0.228 mg/kg and 0.092 mg/kg, respectively, above its UUSCO of 0.05 mg/kg. BTEX (benzene, toluene, ethylbenzene, and xylene) compounds were detected in soil sample SB-3 (8-12) at concentrations of 4.43 mg/kg, 26.9 mg/kg, 11.1 mg/kg, 55.1 mg/kg, and 18.1 mg/kg (from diluted analyses), respectively, above their respective UUSCOs of 0.06 mg/kg, 26.9 mg/kg, 11.1 mg/kg, 0.26 mg/kg, and 0.26 mg/kg, respectively. No VOCs were detected at concentrations exceeding their respective RRSCOs.
- Twenty-two semi-volatile organic compounds (SVOCs) [1,1'-biphenyl, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, carbazole, chrysene, dibenzo(a,h)anthracene, dibenzofuran, di-n-octyl phthalate, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene] were detected in 20 of the 22 soil samples analyzed. Seven polycyclic aromatic hydrocarbons (PAHs) [benzo(a)anthracene (maximum concentration of 2.11 mg/kg), benzo(a)pyrene (maximum concentration of 2.78 mg/kg), benzo(b)fluoranthene (maximum concentration of 4.08 mg/kg), benzo(k)fluoranthene (maximum concentration of 1.37 mg/kg), chrysene (maximum concentration of 2.21 mg/kg), dibenzo(a,h)anthracene (maximum concentration of 0.791 mg/kg), and indeno(1,2,3-cd)pyrene (maximum concentration of 2.86 mg/kg)] were detected in one or more soil samples at

concentrations above their respective UUSCOs. Additionally, 5 SVOCs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno[1,2,3-cd]pyrene, were detected in up to 4 soil samples at concentrations above their respective RRSCOs. Ten metals including arsenic (up to 14.4 mg/kg), barium (up to 655 mg/kg), cadmium (up to 4 mg/kg), chromium (up to 77.7 mg/kg), copper (up to 189 mg/kg), lead (up to 876 mg/kg), mercury (up to 1.1 mg/kg), nickel (up to 34.4 mg/kg), selenium (up to 4.1 mg/kg), and zinc (up to 2,210 mg/kg) exceeded their respective UUSCOs in 18 of the soil samples. Of these metals, barium in one sample, lead in four samples, and mercury in two samples exceeded their respective RRSCOs. Two PCB Aroclors were detected in 3 of the 27 soil samples analyzed. Aroclors 1254 and 1260 were detected at concentrations exceeding the 0.1 mg/kg UUSCO for total PCBs at 0.392 mg/kg in soil sample SB-5 (0-2). Up to 21 pesticides were detected in 15 soil samples analyzed. 4,4'-DDT was detected in soil samples SB-5 (0-2), SB-7 (4-6), SB-10 (0-1), and SB-11 (0-1) at concentrations exceeding its UUSCO.

- The results of the groundwater sample analyses indicated that 12 VOCs were detected in at least 1 of the groundwater samples. 1,2-DCA, benzene, ethylbenzene, m,p-xylene, o-xylene, and toluene were detected in groundwater sample MW-2 at concentrations of 122 micrograms per liter (µg/L), 212 µg/L, 33.6 µg/L, 153 µg/L, 81.3 µg/L, and 50.9 µg/L, respectively, above their respective ambient water quality standards and guidance values (AWQSGVs) of 0.6 µg/L, 1 µg/L, 5 µg/L, 5 µg/L, 5 µg/L, and 5 µg/L, respectively. One SVOC, naphthalene, was detected in groundwater sample MW-2 at a concentration of 13.2 µg/L, which is slightly above its AWQSGV of 10 µg/L. Thirteen metals were detected in the unfiltered groundwater samples (total metals analysis) and 12 metals were detected in the filtered samples (dissolved metals analysis). Six total metals (chromium, iron, magnesium, manganese, selenium, and sodium) and four dissolved metals (magnesium, manganese, selenium, and sodium) were detected in at least one of the groundwater samples above their respective AWQSGVs.
- The results of the soil vapor and ambient air sampling showed that 32 compounds were detected in the 4 soil vapor samples analyzed. VOCs associated with petroleum (including BTEX, 1,2,4- and 1,3,5-trimethylbenzene, cyclohexane, ethanol, heptane, hexane, 4-ethyltoluene, and 2,2,4-trimethylpentane) were detected at concentrations up to 3,340,000 micrograms per cubic meter (µg/m<sup>3</sup>). Chlorinated solvent-related VOCs [including acetone, chloroform, PCE, trichloroethylene (TCE), and MEK] were detected at concentrations up to 333 µg/m<sup>3</sup>. Of note, PCE was detected at a concentration of 69.2 µg/m<sup>3</sup> in soil vapor sample SV-1 and in soil vapor sample SV-2 at a concentration of 114 µg/m<sup>3</sup>.

Based on an evaluation of the data and information from the RI, it was determined that on-site soil was contaminated with petroleum-related VOCs, PAHs, PCBs, the pesticide DDT, and metals. Groundwater beneath the Site was contaminated with 1,2-DCA, petroleum-related VOCs, and naphthalene. Elevated concentrations of petroleum-related VOCs and the chlorinated VOC PCE were present in soil vapor at the Site. The elevated levels of petroleum-related VOCs, naphthalene, chlorinated solvents, and PCBs, elevated photoionization detector (PID) readings, petroleum staining, and odors were likely associated with former use of the Site as a gasoline station and lubrication. The greatest concentration of petroleum-related compounds was found downgradient of the suspect UST(s). The SVOCs and metals present in the soil appeared to be related to the historic use at the Site as a railroad and subsequent demolition of the former gasoline station building. The elevated levels of DDT indicated the prior usage of pesticides at the Site. Based on the elevated levels of petroleum-related VOCs in the soil and groundwater, a spill was reported to NYSDEC; Spill No. 1404448 was assigned to the Site.

BCP Application, Brook 156, Bronx, New York, AKRF, Inc., April 2015

AKRF prepared a BCP Application for the Site in January 2015, which discussed soil, groundwater, and soil vapor contamination associated with the Site's former uses. The Site was entered into the BCP in March 2015 (BCA Index No. C203078-03-15).

Citizen Participation Plan (CPP), Brook 156, 740 Brook Avenue, Bronx, New York, AKRF Inc., July 2015

AKRF prepared a CPP for the Site in May 2015, which provided details on major issues of public concern related to the Site and surrounding areas. The CPP provided this information to the public and encouraged citizen involvement in decisions being made about the Site regarding their health.

Supplemental Remedial Investigation Work Plan (SRIWP), 740 Brook Avenue, Bronx, New York, AKRF, Inc., February 2016

AKRF prepared an SRIWP, Quality Assurance Project Plan (QAPP), and associated HASP for the Site in February 2016. The work plan proposed the advancement of four soil borings with the collection and laboratory analysis of up to three soil samples from each boring, the installation of two permanent groundwater monitoring wells with the collection and analysis of two groundwater samples, and the installation of three temporary soil vapor points with the collection and analysis of three soil vapor samples and one ambient air sample. Up to four additional soil borings were tentatively planned, depending on field observations, to further delineate the horizontal and vertical contamination at the Site identified during the RI. The HASP provided Site-specific health and safety measures during implementation of the investigation. The SRIWP was approved by NYSDEC on February 5, 2016.

Supplemental Remedial Investigation Report (SRIR), 740 Brook Avenue, Bronx, New York, AKRF Inc., October 2017

AKRF conducted an SRI at the Site and prepared an SRIR in October 2017. The SRI included: the advancement of 6 soil borings with the collection and laboratory analysis of 11 soil samples, the installation of 2 permanent, flush-mounted 2-inch diameter groundwater monitoring wells with the collection and laboratory analysis of 2 groundwater samples, and the installation of 3 temporary soil vapor probes with the collection and laboratory analysis of 3 soil vapor and 1 ambient air samples. Results of the sample analysis were as follows:

- VOCs were detected in 7 of the 11 soil samples at concentrations below their respective UUSCOs and RRSCOs.
- SVOCs were detected in 6 of the 11 soil samples. Two SVOCs [benzo(k)fluoranthene and chrysene] were detected in up to two soil samples at concentrations above their respective UUSCOs. Five PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene] were detected in up to 3 soil samples at concentrations above their respective UUSCOs and RRSCOs, with a maximum estimated concentration of 2.84 mg/kg.
- Metals were detected in the 3 soil samples analyzed for metals. Copper was detected in soil sample SSB-5 (9-10') 20160902 at a concentration of 159 mg/kg, above its UUSCO of 50 mg/kg, but below its RRSCO of 270 mg/kg. Lead was detected in the same sample at a concentration of 81.8 mg/kg, above its UUSCO of 63, but below its RRSCO of 400 mg/kg. Zinc was detected in soil samples SSB-4 (26-27') 20160831 at a concentration of 111 mg/kg, slightly above its UUSCO of 109 mg/kg, but below its RRSCO of 10,000 mg/kg. Mercury was detected in each of the 3 soil samples at concentrations ranging between an estimated 1.3 mg/kg and 5 mg/kg, above its UUSCO of 0.18 mg/kg and RRSCO of 0.81 mg/kg. Mercury was also

detected in the blind duplicate soil sample SSB-X 20160901 at an estimated concentration of 0.67 mg/kg, above its UUSCO but below its RRSCO.

- VOCs, SVOCs, PCBs, and pesticides were not detected above laboratory reporting limits in the groundwater samples.
- Eight metals were detected in the unfiltered (total analysis) groundwater sample SMW-2 20160920 and 6 metals were detected in the filtered groundwater sample (dissolved metals analysis). Four metals (iron, magnesium, manganese, and sodium) were detected in the filtered and unfiltered analyses at concentrations above their respective AWQSGVs. The same metals were also detected in blind duplicate groundwater sample SMW-X 20160920 at similar concentrations above their respective AWQSGVs.
- Soil vapor sampling results indicated that VOCs associated with petroleum were detected at individual concentrations up to 515  $\mu\text{g}/\text{m}^3$  and chlorinated solvent-related VOCs were detected at individual concentrations up to 534  $\mu\text{g}/\text{m}^3$ . PCE was detected in soil vapor samples SSV-1 20160831 and SSV-2 20160831 at concentrations of 157  $\mu\text{g}/\text{m}^3$  and 97.6  $\mu\text{g}/\text{m}^3$ , respectively, above its New York State Department of Health (NYSDOH) Air Guidance Value (AGV) of 30  $\mu\text{g}/\text{m}^3$ . Note that AGVs are not currently used by NYSDEC/NYSDOH for comparison to soil vapor.

The SRI delineated the extent of petroleum contamination at the Site. The vertical extent of contamination was determined to be confined directly south of the suspect UST at two separate depth intervals: below the suspected invert of the tank bottom (11 to 15 feet below grade); and directly above the groundwater table (approximately 20 to 27 feet below grade), immediately downgradient of the tank on the southwestern portion of the Site to the groundwater table. In addition, the elevated concentrations of SVOCs and metals found in the soil appeared to be associated with historic fill at the Site and the elevated concentrations of PCE in soil vapor samples SSV-1 and SSV-2 appeared to be associated with the historic use as a gasoline station and lubricatorium.

Remedial Action Work Plan (RAWP), Brook 156, Bronx, NY, AKRF Inc., October 2018

AKRF prepared a RAWP in October 2018, which outlined the remedial activities and cleanup objectives for the Site. The RAWP proposed removal of the source of petroleum contamination, which would include: any USTs, fill ports, vent pipes, and other associated piping; excavation and off-site disposal of petroleum-contaminated soil/fill between grade and 12 feet below grade beneath and around the periphery of the suspect UST(s) on the southwestern portion of the Site (southern portion of Lot 3); from grade to 2 feet below grade across the northern portion of Lot 3; from grade to 12 feet on the southeastern portion of the Site; and from grade to 2 feet below grade on the northeastern portion of the Site in accordance with applicable federal, state, and local laws and regulations, as defined by 6 NYCRR Part 375-6.8. The remedy also included the installation of ICs/ECs including the installation of a composite cover system, a soil vapor extraction (SVE) system, a passive SSDS, and a contingent groundwater treatment program into the proposed building design as part of construction.

RAWP approval and the NYSDEC Decision Document (DD) were both issued in October 2018.

Baseline Groundwater and Emerging Contaminant Sampling, Brook 156, Bronx, NY, AKRF Inc., June 2019

AKRF prepared a letter report in June 2019, which outlined the results of the March 2019 and April 2019 groundwater sampling events at the Site. Groundwater samples were collected and analyzed for the VOCs, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS). While low-level

detections of VOCs were reported, no VOC exceedances of the Technical and Operational Guidance Series (TOGS) AWQSGVs were reported. Based on the results of the groundwater sampling, AKRF recommended the following:

- Groundwater treatment be excluded from the Site remedy;
- The on-Site groundwater monitoring network should be decommissioned in accordance with NYSDEC policy Commissioner's Policy (CP)-43;
- No additional groundwater monitoring or treatment of emerging contaminants; and
- Post-remedial groundwater monitoring is not required for the Site.

*RAWP Remedy Modification Request (RMR), Brook 156, Bronx, NY, AKRF Inc., May 2020*

AKRF prepared a RAWP RMR in April of 2020 (multiple revisions were submitted prior to this date), which outlined an update to the proposed remedial activities and cleanup objectives for the Site. Due to a change in the proposed redevelopment design, remedial excavation at the Site would be extended to a depth of approximately 23 feet bgs across the entirety of the Site, with additional excavation on the southwestern portion of the Site down to the groundwater table (approximately 27 feet bgs) to remove the petroleum source area, which would increase the amount of material requiring disposal from the original 1,000 cubic yards in the DD to approximately 3,900 cubic yards and enable achievement of a Track 2 remedy. The RMR also requested, based on the results of the March and April 2019 baseline and emerging contaminant groundwater sampling (provided as an Appendix to the RMR), that supplemental groundwater remediation and/or monitoring would not be required.

Based on the results of the baseline groundwater sampling and the revised foundation design, AKRF recommended the following modifications to the remedy:

- As no VOCs were detected above the AWQSGVs and reported VOC detections should continue to decrease or be eliminated through natural attenuation, groundwater treatment (Element 5 of the DD) and post-remedial groundwater monitoring would no longer be necessary and should be excluded from the Site remedy.
- No additional groundwater monitoring or treatment for emerging contaminants.
- The on-site groundwater monitoring network should be decommissioned in accordance with NYSDEC policy CP-43.
- As the foundation design and support of excavation (SOE) have been redesigned to allow for the complete removal of the petroleum source area, the selected remedy should change from Track 4 to Track 2.
- With achievement of a Track 2 remedy, a composite cover system would not be needed.
- If the post-excavation endpoint sample results meet the RRSCOs and protection of groundwater soil cleanup objectives (PGWSCOs) (for select petroleum compounds), installation and operation of the SVE system (Element 6 of the DD) should no longer be required.

Any import of clean fill to replace excavated material utilized to bring the Site up to grade will be completed in accordance with the RAWP and DD.

NYSDEC approved the RAWP RMRs in a letter dated May 18, 2020, with the expectation that a second RMR would be submitted to document the results of the post excavation sampling to remove the SVE requirement from the remedy.

RAWP Second RMR, Brook 156, Bronx, NY, AKRF Inc., August 2021

AKRF prepared a RAWP Second RMR in August 2021, which formally documented the results of all post-excavation endpoint soil samples collected from within the source area in accordance with the NYSDEC direction. The endpoint soil samples were field-screened with a PID for evidence of grossly-contaminated soils. No evidence of grossly-contaminated soils were observed; a PID maximum concentration of 5.6 parts per million (ppm) was reported. The laboratory analytical results from the post-excavation endpoint soil sampling indicated that the soil met the remedial action objective (RAO) for soil and no exceedances of RRSCOS or PGWSCOs were reported.

Based on the soil endpoint sampling analytical results, AKRF, on behalf of the Volunteers, formally requested a modification to the remedy by removal of the SVE system (Element No. 6 of the DD).

NYSDEC approved the RAWP Second RMR in a letter dated December 2, 2021. The following items were also confirmed in the RAWP Second RMR NYSDEC approval letter:

- The on-site SSDS can be operated as a passive SSDS;
- Groundwater treatment was no longer required; and
- Post-remedial groundwater monitoring was no longer required.

## 2.4 Remedial Action Objectives

The RAOs for the Site as listed in the DD dated October 19, 2018 are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

## 2.5 Summary of Remedial Actions

The objectives for the remedial program were established through the remedy selection process stated in 6 NYCRR Part 375. Remedial actions were performed at the Site in accordance with the



NYSDEC-approved RAWP and DD and applicable federal, state, and local rules and regulations. Detailed descriptions of the completed remedial actions are included in the Final Engineering Report (FER). The following is a summary of the remedial actions conducted:

The following is a summary of the remedial actions performed at the Site:

#### **2.5.1 Soil Excavation and Off-Site Disposal**

On-site soils that exceeded the RRSCOs, as defined by 6 NYCRR Part 375-6.8, were excavated up to a minimum depth of 15 feet below grade and transported off-site for proper disposal at approved facilities, with the on-site petroleum source area excavated down to a maximum depth of 27 feet bgs (refer to Figure 3). A total of 7,151.27 tons of soil were excavated and disposed off-site. During all excavation and ground intrusive activities, AKRF conducted real-time air monitoring for particulates and VOCs, in accordance with a NYSDEC-approved Community Air Monitoring Plan (CAMP).

Post-excavation soil endpoint samples were collected across the Site in accordance with NYSDEC direction to evaluate performance of the remedy. Track 2 RRSCOs were met by achieving excavation to 15 feet Site wide plus additional excavation to 27 feet bgs in the source area. The endpoint sample analytical results are included in Tables 1 through 6. Endpoint sampling locations are shown on Figure 3.

#### **2.5.2 Rail Tunnel Granite Block Disposal**

As part of excavation activities, demolition and removal of the on-site former rail tunnel retaining wall was required. The retaining wall was composed of granite block, which was ultimately transported off-site at the Impact Reuse and Recovery Center (IRRC) in Lyndhurst, New Jersey. Approximately 2,300 cubic yards of granite block were transported to IRRC as part of this effort.

#### **2.5.3 UST Removal**

During soil excavation activities, sixteen 550-gallon gasoline USTs and one 300-gallon waste oil UST were encountered. The USTs were properly cleaned, removed, and disposed of off-site by Brookside Environmental, Inc. of Copiague, New York (a licensed tank remediation contractor). The USTs were registered in September 2018 and subsequently closed with the NYSDEC PBS Database under Facility ID 2-613236. The PBS registration is provided as Appendix C.

#### **2.5.4 Import**

##### **2.5.4.1 Stone/Gravel Import**

A total of 2,045.23 tons of stone/gravel were imported to establish the design grades at the Site prior to installation of the waterproofing membrane and concrete slab and to backfill remedial excavation areas. Import approvals are provided in Appendix D.

##### **2.5.4.2 Recycled Concrete Aggregate (RCA) Import**

Approximately 2,740 cubic yards (137 truckloads) of RCA were utilized at the Site for temporary backfill to support installation of the SOE, which was ultimately disposed of off-site prior to placement of the building slabs.

A supplemental volume of 1,160 cubic yards (58 truckloads) of RCA were utilized as structural fill between the lower mat slab and cellar slab.

### **2.5.5 Passive SSDS**

Installation of a vapor barrier/waterproofing membrane and a passive SSDS [constructed so that it could be activated if needed, based on the results of a post-remedial Vapor Intrusion (VI) Assessment (see Section 3.3.1)] was completed in December 2021 as a mitigation measure against potential soil vapors accumulating within the building. Refer to Figure 2 and Figure 4 for additional detail.

## **2.6 Remaining Contamination**

### **2.6.1 Soil**

Following completion of soil excavation and removal activities, endpoint soil sampling was conducted (total of 20 samples collected to date: EP-01 through EP-09 and EP-UST-01 through EP-UST-11). Results of the soil endpoint samples indicate that soil remaining at the Site meet the RRSCOS and PGWSCOs, with the exception of acetone [0.071 ppm at EP-06\_20210421, 0.068 ppm at EP-UST-06\_27\_20210421, and 0.17 ppm at EP-UST-08\_24\_20210421] and mercury (0.81 ppm at EP-07\_23\_20210507), both detected in soil below 15 feet below grade. Acetone is a common laboratory contaminant and neither a contaminant of concern nor documented source for the Site. Mercury is commonly encountered in historical fill and also is neither a contaminant of concern nor documented source for the Site. No soil contamination is remaining in place above 15 feet below grade. The endpoint sample analytical results are included in Tables 1 through 6. The endpoint sample locations and exceedances compared against the RRSCOS and PGWSCOs are shown on Figure 3.

### **2.6.2 Groundwater**

As outlined in the Baseline Groundwater and Emerging Contaminant Sampling letter dated June 2019 (see Tables 7-10) and the FER, groundwater concentrations at the Site are below the TOGS AWQSGVs. Groundwater use at the Site is subject to the ICs documented within the Environmental Easement.

### **2.6.3 Soil Vapor**

As outlined in the FER, source material at the Site has been removed. Any remaining VOCs in soil vapor will be mitigated by the vapor mitigation system, which consists of a vapor barrier and passive SSDS that has the capability to become an active system (refer to Section 3.3.1).

### **3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN**

#### **3.1 General**

Since remaining contamination exists at the Site, ICs/ECs are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the Site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all ICs/ECs on the Site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of ICs/ECs, such as the implementation of the EWP (Appendix E) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the ICs/ECs required by the Site remedy, as determined by the NYSDEC project manager.

#### **3.2 Institutional Controls**

A series of ICs is required by NYSDEC's October 2018 DD to: (1) implement, maintain and monitor ECs; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the site to restricted residential or commercial uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Figure 2. These ICs are:

- The Site may be used for restricted residential, commercial, or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the Site is prohibited without necessary water quality treatment as determined by the NYSDOH or the NYC DOHMH to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC;
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;

- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
- In-ground vegetable gardens and farming on the Site are prohibited.

### **3.3 Engineering Controls**

#### **3.3.1 SSDS**

A passive SSDS was installed beneath the new building foundation. The SSDS was installed as a passive system, but can be activated if directed by NYSDEC after receipt of the results of the VI assessment. The SSDS plan is shown on Figure 4. The SSDS consists of slotted PVC piping beneath the entire Site building footprint, which is connected via a network of aboveground piping to a riser and exhaust stack equipped with a wind turbine. The SSDS installed consists of:

1. Two slotted Schedule 40 4-inch diameter pipes (denoted as R-1A and R-1B), connected to a 6-inch diameter galvanized steel vertical riser pipe (VR-1).
2. Five monitoring points (denoted as VMP-1 through VMP-5).

During construction, non-woven geotextile fabric overlain by a minimum 6-inch layer of ¾-inch gas-permeable aggregate (GPA) stone bedding was installed under, around, and above all SSDS piping, below the entire building slab. The installation of GPA in the treatment areas is expected to promote favorable subsurface conditions for ventilation of vapors. The five vacuum monitoring points were installed around the perimeter of the Site and in the sidewalk adjacent to the former source area.

As outlined in the RAWP, a VI will be conducted during the first heating season after completion of the building envelope to determine the need for activation of the SSDS. A VI work plan (VIWP) will be submitted to NYSDEC and NYSDOH for review and approval prior to conducting the work. The results of the VI Assessment will be documented in a VI Report and will be used to determine whether vapor concentrations necessitate active operation of the SSDS to prevent contaminated vapors from entering the Site building. In the event active operation of the SSDS is required, an SMP modification will be completed.

If the system is activated, a suction fan or blower will be located in a secure enclosure in the cellar maintenance room. The operational capabilities of the suction fan will have a minimum rating of 160 cubic feet per minute (cfm) and will operate at a vacuum of approximately 8 inches H<sub>2</sub>O (subject to balancing). The vacuum capabilities of the proposed fan are intended to overcome frictional losses within the subsurface and aboveground piping and induce a minimum vacuum of 0.004 inches H<sub>2</sub>O at each of the vacuum monitoring points. The installation of a minimum 20-mil vapor barrier under the building slab, as previously discussed, is expected to assist the SSDS in generating a subsurface vacuum by creating an upper boundary that will prohibit sub-slab vapors from escaping the treatment area. The SMP will be revised in the event the SSDS is transitioned from passive to active.

Figure 2 presents the location and typical cross-sections of the subgrade SSDS components, with supplemental SSDS details provided on Figure 4. As-built drawings of the passive SSDS are provided in Appendix F.

### **3.3.2 Criteria for Completion of Remediation/Termination of Remedial Systems**

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the RAOs identified by the DD. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

#### *Passive SSDS*

The passive SSDS will not be decommissioned unless prior written approval is granted by the NYSDEC and the NYSDOH Project Managers, as they are anticipated to be permanent ECs. If future monitoring and/or sampling data indicates that the SSDS may no longer be required, a proposal to discontinue the SSDS will be submitted by the remedial party to the NYSDEC and NYSDOH Project Managers.

## 4.0 MONITORING PLAN

### 4.1 General

This Monitoring Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring Plan may only be revised with the approval of the NYSDEC Project Manager.

This Monitoring Plan describes the methods to be used for:

- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Inspection and maintenance requirements for the passive SSDS;

Reporting requirements are provided in Section 7.0 of this SMP.

### 4.2 SSDS Monitoring

Monitoring of the passive SSDS will be performed on a routine basis, as identified in the Remedial System Monitoring Requirements and Schedule included as Table 3. The monitoring of remedial systems must be conducted by a Qualified Environmental Professional (QEP) as defined in 6 NYCRR Part 375, a P.E. who is licensed and registered in NYS, or a qualified person who directly reports to a P.E. who is licensed and registered in NYS. Modification to the frequency or sampling requirements will require approval from the NYSDEC Project Manager. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS system components to be monitored include, but are not limited to, the components included in Table 3 below.

**Table 3**  
**Remedial System Monitoring Requirements and Schedule**

Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
General system piping	Visual - Intactness	N/A	Annually
Wind turbine	Visual - Intactness	N/A	Annually

## **5.0 OPERATION AND MAINTENANCE PLAN**

### **5.1 General**

The passive SSDS was installed as part of Site remediation, but does not include any mechanical equipment at this time that would require routine maintenance. As such, no operations and maintenance criteria are set forth within this SMP. All associated inspection requirements are included in Section 4.1.1 and in the associated log sheet included as Appendix G. Since no operations and maintenance criteria are established for the Site, the venting systems will be visually inspected annually, and the status of the above-grade components of the venting systems will be certified as part of the routine IC/EC certification process.

In the event that the passive SSDS is converted into an active system or additional ECs requiring an Operation and Maintenance Plan are installed at the Site, this SMP will be revised to update the operation and maintenance requirements as necessary.

## **6.0 PERIODIC ASSESSMENTS/EVALUATIONS**

### **6.1 Climate Change Vulnerability Assessment**

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the Site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a summary of vulnerability assessments that will be conducted for the Site during periodic assessments, and briefly summarizes the vulnerability of the Site and/or ECs to severe storms/weather events and associated flooding.

- Flood Plain: The Site is not located within a flood plain.
- Site Drainage and Storm Water Management: Stormwater at the Site and the surrounding area flows to the NYC combined sewer system.
- Erosion: As majority of the Site is covered with a building, erosion is not anticipated to be an issue of concern.
- High Wind: All permanent building components are secured against high winds. In the event that high winds are forecast for the Site, proper precautions will be taken to secure or shelter any Site components that are not protected against high winds.
- Electricity: Electricity to the buildings is supplied via newly installed underground vaults and conduits and is not expected to be affected by severe weather events.
- Spill/Contaminant Release: Storage of large amounts of fuel oil, or other chemicals at the Site is not expected. Nominal amounts of cleaning chemicals are likely to be stored throughout the Site but are not expected to be affected by severe weather conditions.

### **6.2 Green Remediation Evaluation**

NYSDEC's DER-31 Green Remediation requires consideration of green remediation concepts and techniques during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This SMP does not require any green remediation evaluations to be completed for the Site during Site management. Any updates or related Site improvements will be incorporated in the PRR.



## 7.0 REPORTING REQUIREMENTS

### 7.1 Site Management Reports

All Site management inspection, maintenance and monitoring events will be recorded on the appropriate Site management forms provided in Appendix G. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including system maintenance reports, generated for the Site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 4 and summarized in the PRR.

**Table 4**  
**Monitoring/Inspection Report Deliverables**

Task/Report	Reporting Frequency*
PRR (Inclusive of all monitoring and sampling events)	First PRR 18 months after receipt of COC. Subsequent PRRs annually, or as otherwise determined by NYSDEC
Note: * The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.	

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- If applicable, type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., chain-of-custody documentation, etc.);
- If applicable, sampling results in comparison to appropriate standards/criteria;
- If applicable, a figure illustrating sample type and sampling locations;
- If applicable, copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether conditions have changed since the last reporting event.

If data is collected, it will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link <http://www.dec.ny.gov/chemical/62440.html>.

### 7.2 Periodic Review Report

A PRR will be submitted to the NYSDEC project manager beginning 18 months after the COC is issued. After submittal of the initial PRR, the next PRR shall be submitted annually to the NYSDEC Project Manager or at another frequency as may be required by the NYSDEC Project Manager. In

the event that the Site is subdivided into separate parcels with different ownership, a single PRR will be prepared that addresses the Site described in Appendix A - Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will be incorporated into the PRR. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.
- Results of the required annual Site inspections and severe condition inspections, if applicable.
- All applicable Site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions (if applicable).
- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Site-specific RAWP and any approved amendments;
  - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - The overall performance and effectiveness of the remedy.

#### **7.2.1 Certification of Institutional and Engineering Controls**

Certification of ICs/ECs will be included in the PRR.

Following the last inspection of the reporting period, a P.E. licensed to practice in NYS will prepare, and include in the PRR, the following certification as per the requirements of NYSDEC DER-10:

*"For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:*

- *The inspection of the Site to confirm the effectiveness of the ICs/ECs controls required by the remedial program was performed under my direction;*
- *The ICs/ECs employed at this Site are unchanged from the date the control was put in place, or last approved by the Department;*
- *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*
- *Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;*
- *Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*
- *Use of the Site is compliant with the Environmental Easement;*
- *The ECs are performing as designed and are effective;*

*To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program and generally accepted engineering practices;*

- *The information presented in this report is accurate and complete;*

*I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] (and if the site consists of multiple properties): [I have been authorized and designated by all site owners/remedial parties to sign this certification] for the Site;*

*I certify that the New York State Education Department has granted a Certificate of Authorization to provide Professional Engineering services to the firm that prepared this Periodic Review Report; and*

*I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] for the Site.*

The signed certification will be included in the PRR.

The PRR will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager. The PRR may need to be submitted in hard-copy format, if requested by the NYSDEC project manager.

### **7.3 Corrective Measures Work Plan**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC/EC, a Corrective Measures Work Plan will be submitted to NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by NYSDEC.

## 8.0 REFERENCES

1. 6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.
2. NYSDEC DER-10 – “Technical Guidance for Site Investigation and Remediation”.
3. NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series 1.1.1. June 1998 (April 2000 addendum).
4. AKRF, Inc., *Phase I Environmental Site Assessment Report* - East 156<sup>th</sup> Street and Brook Avenue, Bronx, New York, March 2013.
5. AKRF, Inc., *Sampling Protocol and Health and Safety Plan* - Brook 156, Tax Block 2360, Lots 1 and 3, Bronx, New York, April 2013.
6. AKRF, Inc., *Remedial Investigation Report* - Brook 156, Bronx, New York, January 2015.
7. AKRF, Inc., *BCP Application* - Brook 156, Bronx, New York, April 2015.
8. AKRF, Inc., *Citizen Participation Plan* - Brook 156, 740 Brook Avenue, Bronx, New York, July 2015.
9. AKRF, Inc., *Supplemental Remedial Investigation Work Plan* - 740 Brook Avenue, Bronx, New York, February 2016.
10. AKRF, Inc., *Supplemental Remedial Investigation Report* - 740 Brook Avenue, Bronx, New York, October 2017.
11. AKRF, Inc., *Remedial Action Work Plan* - Brook 156, Bronx, NY, October 2018.
12. AKRF, Inc., *Baseline Groundwater and Emerging Contaminant Sampling* – Brook 156, Bronx, NY, June 2019.
13. AKRF, Inc., *Remedial Action Work Plan Remedy Modification Request* - Brook 156, Bronx, NY, May 2020.
14. AKRF, Inc., *Remedial Action Work Plan Remedy Second Modification Request*, Brook 156, Bronx, NY, August 2021.

## TABLES

Table 1  
Brook 156  
740 Brook Avenue, Bronx, NY  
Soil Endpoint Analytical Results  
Volatile Organic Compounds (VOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-01_20210226 460-228859-1 2/26/2021 1 mg/kg	EP-02_23_20210421 460-232623-2 4/21/2021 1 mg/kg	EP-03_23_20210421 460-232623-1 4/21/2021 1 mg/kg	EP-X01_23_20210421 460-232623-3 4/21/2021 1 mg/kg	EP-04_23_20210421 460-232623-4 4/21/2021 1 mg/kg
Compound	NYSDEC PGWSO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dichloropropane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
2-Hexanone	NS	NS	0.0059 U	0.006 U	0.0056 U	0.0053 U	0.0057 U
Acetone	0.05	100	0.0071 U	0.0072 U	0.013	0.031	0.0069 U
Benzene	0.06	4.8	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromochloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromodichloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromoform	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromomethane	NS	NS	0.0024 U	0.0024 U	0.0022 U	0.0021 U	0.0023 U
Carbon Disulfide	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chlorobenzene	1.1	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chloroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chloroform	0.37	49	0.0031	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Cyclohexane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Dibromochloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Dichlorodifluoromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Ethylbenzene	1	41	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
M,P-Xylenes	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Methyl Acetate	NS	NS	0.0059 U	0.006 U	0.0056 U	0.0053 U	0.0057 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0059 U	0.006 U	0.0056 U	0.0053 U	0.0057 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0059 U	0.006 U	0.0056 U	0.0053 U	0.0057 U
Methylcyclohexane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Methylene Chloride	0.05	100	0.0024 U	0.0024 U	0.0022 U	0.0021 U	0.0023 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Styrene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Toluene	0.7	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trichlorofluoromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Xylenes, Total	1.6	100	0.0024 U	0.0024 U	0.0022 U	0.0021 U	0.0023 U

Table 1  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Volatile Organic Compounds (VOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-05_23_20210421 460-232623-5 4/21/2021 1 mg/kg	EP-06_27_20210421 460-232623-6 4/21/2021 1 mg/kg	EP-07_23_20210507 460-233872-1 5/07/2021 1 mg/kg	EP-08_23_20210507 460-233872-2 5/07/2021 1 mg/kg	EP-X02_23_20210507 460-233872-3 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,1-Dichloroethane	0.27	26	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,1-Dichloroethene	0.33	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,2,3-Trichlorobenzene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,2-Dichloroethane	0.02	3.1	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
2-Hexanone	NS	NS	0.0055 U	0.0056 U	0.0062 U	0.0056 U	0.0063 U
Acetone	0.05	100	0.0066 U	0.071	0.0075 U	0.022	0.036
Benzene	0.06	4.8	0.0011 U	0.0003 J	0.0012 U	0.0011 U	0.0013 U
Bromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Bromodichloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Bromoform	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Bromomethane	NS	NS	0.0022 U	0.0023 U	0.0025 U	0.0022 U	0.0025 U
Carbon Disulfide	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Carbon Tetrachloride	0.76	2.4	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Chlorobenzene	1.1	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Chloroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Chloroform	0.37	49	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Chloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Cis-1,2-Dichloroethylene	0.25	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Cyclohexane	NS	NS	0.0011 U	0.0017	0.0012 U	0.0011 U	0.0013 U
Dibromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Ethylbenzene	1	41	0.0011 U	0.0016	0.0012 U	0.0011 U	0.0013 U
Isopropylbenzene (Cumene)	NS	NS	0.0011 U	0.0015	0.0012 U	0.0011 U	0.0013 U
M,P-Xylenes	NS	NS	0.0011 U	0.0035	0.0012 U	0.00023 BJ	0.00025 BJ
Methyl Acetate	NS	NS	0.0055 U	0.0056 U	0.0062 U	0.0056 U	0.0063 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0055 U	0.017	0.0062 U	0.0056 U	0.0048 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0055 U	0.0056 U	0.0062 U	0.0056 U	0.0063 U
Methylcyclohexane	NS	NS	0.0011 U	0.0052	0.0012 U	0.0011 U	0.0013 U
Methylene Chloride	0.05	100	0.0022 U	0.0023 U	0.0025 U	0.0022 U	0.0025 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0011 U	0.0026	0.0012 U	0.0011 U	0.0013 U
Styrene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Tert-Butyl Methyl Ether	0.93	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Tetrachloroethylene (PCE)	1.3	19	0.0011 U	0.0011 U	0.00065 BJ	0.00045 BJ	0.00064 BJ
Toluene	0.7	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0003 BJ
Trans-1,2-Dichloroethene	0.19	100	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Trichloroethylene (TCE)	0.47	21	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Vinyl Chloride	0.02	0.9	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U
Xylenes, Total	1.6	100	0.0022 U	0.0061	0.0025 U	0.0022 U	0.0025 U

Table 1  
Brook 156  
740 Brook Avenue, Bronx, NY  
Soil Endpoint Analytical Results  
Volatile Organic Compounds (VOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-09_23_20210507 460-233872-4 5/07/2021 1 mg/kg	EP-UST-01_24_20210421 460-232623-7 4/21/2021 1 mg/kg	EP-UST-02_24_20210421 460-232623-8 4/21/2021 1 mg/kg	EP-UST-03_24_20210421 460-232623-9 4/21/2021 1 mg/kg	EP-UST-04_24_20210422 460-232735-1 4/22/2021 1 mg/kg
Compound	NYSDEC PGWSO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.001 J
1,2-Dichloropropane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
2-Hexanone	NS	NS	0.006 U	0.0058 U	0.0054 U	0.0053 U	0.0054 U
Acetone	0.05	100	0.0088	0.007 U	0.0065 U	0.0063 U	0.033
Benzene	0.06	4.8	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.00059 J
Bromochloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromodichloromethane	NS	NS	0.0012 U	0.0003 J	0.0011 U	0.0011 U	0.0011 U
Bromoform	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromomethane	NS	NS	0.0024 U	0.0023 U	0.0022 U	0.0021 U	0.0022 U
Carbon Disulfide	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chlorobenzene	1.1	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chloroethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Chloroform	0.37	49	0.0012 U	0.0021	0.0011 U	0.0011 U	0.0011 U
Chloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Cyclohexane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Dibromochloromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Dichlorodifluoromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Ethylbenzene	1	41	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
M,P-Xylenes	NS	NS	0.00024 BJ	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Methyl Acetate	NS	NS	0.006 U	0.0058 U	0.0054 U	0.0053 U	0.0054 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.006 U	0.0058 U	0.0054 U	0.0053 U	0.0093
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.006 U	0.0058 U	0.0054 U	0.0053 U	0.0054 U
Methylcyclohexane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.001 J
Methylene Chloride	0.05	100	0.0024 U	0.0023 U	0.0022 U	0.0021 U	0.0022 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Styrene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	0.00046 BJ	0.0012 U	0.0011 U	0.0011 U	0.00038 J
Toluene	0.7	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Trichlorofluoromethane	NS	NS	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Xylenes, Total	1.6	100	0.0024 U	0.0023 U	0.0022 U	0.0021 U	0.0022 U



Table 1  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Volatile Organic Compounds (VOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-UST-05_27_20210422 460-232735-2 4/22/2021 1 mg/kg	EP-UST-06_27_20210421 460-232623-13 4/21/2021 1 mg/kg	EP-UST-07_27_20210422 460-232735-3 4/22/2021 1 mg/kg	EP-UST-08_24_20210421 460-232623-11 4/21/2021 1 mg/kg	EP-FB_02_20210507 460-233872-5 5/07/2021 1 µg/L
Compound	NYSDEC PGWSO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,1-Dichloroethane	0.27	26	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,1-Dichloroethene	0.33	100	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,2,3-Trichlorobenzene	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,2-Dichloroethane	0.02	3.1	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
2-Hexanone	NS	NS	0.0057 U	0.0069 U	0.0062 U	0.0078 U	5 U
Acetone	0.05	100	0.0068 U	0.068	0.0074 U	0.17	5 U
Benzene	0.06	4.8	0.0011 U	0.03	0.0012 U	0.0012 J	1 U
Bromochloromethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Bromodichloromethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Bromoform	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Bromomethane	NS	NS	0.0023 U	0.0028 U	0.0025 U	0.0031 U	1 U
Carbon Disulfide	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0011 J	1 U
Carbon Tetrachloride	0.76	2.4	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Chlorobenzene	1.1	100	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Chloroethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Chloroform	0.37	49	0.0011 U	0.0014 U	0.0013	0.0016 U	1 U
Chloromethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Cyclohexane	NS	NS	0.00034 J	0.11	0.0012 U	0.01	1 U
Dibromochloromethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Ethylbenzene	1	41	0.0011 U	0.052	0.0012 U	0.0087	1 U
Isopropylbenzene (Cumene)	NS	NS	0.0011 U	0.0028	0.0012 U	0.0027	1 U
M,P-Xylenes	NS	NS	0.00044 J	0.16	0.0012 U	0.015	1 U
Methyl Acetate	NS	NS	0.0057 U	0.0069 U	0.0062 U	0.0078 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0057 U	0.021	0.0062 U	0.053	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0057 U	0.0069 U	0.0062 U	0.0078 U	5 U
Methylcyclohexane	NS	NS	0.00073 J	0.058	0.0012 U	0.022	1 U
Methylene Chloride	0.05	100	0.0023 U	0.0028 U	0.0025 U	0.0031 U	1 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.00022 J	0.056	0.0012 U	0.0063	1 U
Styrene	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Tert-Butyl Methyl Ether	0.93	100	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Tetrachloroethylene (PCE)	1.3	19	0.0011 U	0.0014 U	0.00042 J	0.0016 U	1 U
Toluene	0.7	100	0.0011 U	0.024 B	0.0012 U	0.0005 BJ	1 U
Trans-1,2-Dichloroethene	0.19	100	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Trichloroethylene (TCE)	0.47	21	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Vinyl Chloride	0.02	0.9	0.0011 U	0.0014 U	0.0012 U	0.0016 U	1 U
Xylenes, Total	1.6	100	0.0023 U	0.22	0.0025 U	0.022	2 U

Table 1  
Brook 156  
740 Brook Avenue, Bronx, NY  
Soil Endpoint Analytical Results  
Volatile Organic Compounds (VOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-FB-01_20210421 460-232623-14 4/21/2021 1 µg/L	EP-TB_02_20210507 460-233872-6 5/07/2021 1 µg/L	EP-TB-01_20210421 460-232623-15 4/21/2021 1 µg/L	TB_20210226 460-228859-2 3/18/2021 1 µg/L
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.27	26	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.33	100	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	1 U	1 U	1 U	1 U
2-Hexanone	NS	NS	5 U	5 U	5 U	5 U
Acetone	0.05	100	5 U	5 U	5 U	5 U
Benzene	0.06	4.8	1 U	1 U	1 U	1 U
Bromochloromethane	NS	NS	1 U	1 U	1 U	1 U
Bromodichloromethane	NS	NS	1 U	1 U	1 U	1 U
Bromoform	NS	NS	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	1 U	1 U	1 U	1 UT
Carbon Disulfide	NS	NS	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	1 U	1 U	1 U	1 U
Chlorobenzene	1.1	100	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	1 U	1 U	1 U	1 U
Chloroform	0.37	49	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	NS	1 U	1 U	1 U	1 U
Cyclohexane	NS	NS	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	1 U	1 U	1 U	1 U
Ethylbenzene	1	41	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	NS	NS	1 U	1 U	1 U	1 U
M,P-Xylenes	NS	NS	1 U	1 U	1 U	1 U
Methyl Acetate	NS	NS	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	5 U	5 U	5 U	5 U
Methylcyclohexane	NS	NS	1 U	1 U	1 U	1 U
Methylene Chloride	0.05	100	0.35 J	3.2	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	1 U	1 U	1 U	1 U
Styrene	NS	NS	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	1 U	1 U	1 U	1 U
Tetrachloroethylene (PCE)	1.3	19	1 U	1 U	1 U	1 U
Toluene	0.7	100	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	NS	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	0.47	21	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	1 U	1 U	1 U	1 U
Vinyl Chloride	0.02	0.9	1 U	1 U	1 U	1 U
Xylenes, Total	1.6	100	2 U	2 U	2 U	2 U

Table 2  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		EP-01_20210226	EP-02_23_20210421	EP-03_23_20210421	EP-X01_23_20210421	EP-04_23_20210421
	Laboratory Sample ID	Date Sampled	460-228859-1	460-232623-2	460-232623-1	460-232623-3	460-232623-4
NYSDEC PGWSC	NYSDEC RRSCO	Unit	2/26/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021
			1	1	1	1	1
mg/kg	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.12 U	0.039 U	0.038 U	0.037 U	0.039 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2,4,5-Trichlorophenol	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2,4,6-Trichlorophenol	NS	NS	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U
2,4-Dichlorophenol	NS	NS	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U
2,4-Dimethylphenol	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2,4-Dinitrophenol	NS	NS	0.32 U	0.31 U	0.31 U	0.3 U	0.31 U
2,4-Dinitrotoluene	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U	0.079 U
2,6-Dinitrotoluene	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U	0.079 U
2-Chloronaphthalene	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2-Chlorophenol	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2-Methylnaphthalene	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2-Methylphenol (O-Cresol)	0.33	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2-Nitroaniline	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
2-Nitrophenol	NS	NS	0.39 U	0.39 UT	0.38 UT	0.37 UT	0.39 UT
3,3'-Dichlorobenzidine	NS	NS	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U
3-Nitroaniline	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.32 U	0.31 U	0.31 U	0.3 U	0.31 U
4-Bromophenyl Phenyl Ether	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
4-Chloro-3-Methylphenol	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
4-Chloroaniline	NS	NS	0.39 U	0.39 UT	0.38 UT	0.37 UT	0.39 UT
4-Chlorophenyl Phenyl Ether	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
4-Methylphenol (P-Cresol)	0.33	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
4-Nitroaniline	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
4-Nitrophenol	NS	NS	0.8 U	0.79 U	0.77 U	0.76 U	0.79 U
Acenaphthene	98	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Acenaphthylene	107	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Acetophenone	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Anthracene	1,000	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Atrazine	NS	NS	0.16 U	0.16 UT	0.15 UT	0.15 UT	0.16 UT
Benzaldehyde	NS	NS	0.39 U	0.39 UT	0.38 UT	0.37 UT	0.39 UT
Benzo(a)Anthracene	1	1	0.019 J	0.054	0.038 U	0.037 U	0.039 U
Benzo(a)Pyrene	22	1	0.013 J	0.065	0.038 U	0.037 U	0.039 U
Benzo(b)Fluoranthene	1.7	1	0.02 J	0.097	0.038 U	0.037 U	0.039 U
Benzo(g,h,i)Perylene	1,000	100	0.39 U	0.041 J	0.38 U	0.37 U	0.39 U
Benzo(k)Fluoranthene	1.7	3.9	0.0083 J	0.036 J	0.038 U	0.037 U	0.039 U
Benzyl Butyl Phthalate	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Biphenyl (Diphenyl)	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.039 U	0.039 U	0.038 U	0.037 U	0.039 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Caprolactam	NS	NS	0.39 U	0.39 UT	0.38 UT	0.37 UT	0.39 UT
Carbazole	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Chrysene	1	3.9	0.012 J	0.05 J	0.38 U	0.37 U	0.39 U
Dibenz(a,h)Anthracene	1,000	0.33	0.039 U	0.039 U	0.038 U	0.037 U	0.039 U
Dibenzofuran	210	59	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Diethyl Phthalate	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Dimethyl Phthalate	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Di-N-Butyl Phthalate	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Di-N-Octylphthalate	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Fluoranthene	1,000	100	0.39 U	0.08 J	0.38 U	0.37 U	0.39 U
Fluorene	386	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Hexachlorobenzene	3.2	1.2	0.039 U	0.039 U	0.038 U	0.037 U	0.039 U
Hexachlorobutadiene	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U	0.079 U
Hexachlorocyclopentadiene	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Hexachloroethane	NS	NS	0.039 U	0.039 U	0.038 U	0.037 U	0.039 U
Indeno(1,2,3-c,d)Pyrene	8.2	0.5	0.039 U	0.044	0.038 U	0.037 U	0.039 U
Isophorone	NS	NS	0.16 U	0.16 U	0.15 U	0.15 U	0.16 U
Naphthalene	12	100	0.0097 J	0.017 J	0.38 U	0.37 U	0.39 U
Nitrobenzene	NS	NS	0.039 U	0.039 U	0.038 U	0.037 U	0.039 U
N-Nitrosodi-N-Propylamine	NS	NS	0.039 U	0.039 U	0.038 U	0.037 U	0.039 U
N-Nitrosodiphenylamine	NS	NS	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Pentachlorophenol	0.8	6.7	0.32 U	0.31 U	0.31 U	0.3 U	0.31 U
Phenanthrene	1,000	100	0.0097 J	0.036 J	0.38 U	0.37 U	0.39 U
Phenol	0.33	100	0.39 U	0.39 U	0.38 U	0.37 U	0.39 U
Pyrene	1,000	100	0.39 U	0.078 J	0.38 U	0.37 U	0.39 U

Table 2  
Brook 156  
740 Brook Avenue, Bronx, NY  
Soil Endpoint Analytical Results  
Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		EP-05_23_20210421	EP-06_27_20210421	EP-07_23_20210507	EP-08_23_20210507	EP-X02_23_20210507
	Laboratory Sample ID		460-232623-5	460-232623-6	460-233872-1	460-233872-2	460-233872-3
	Date Sampled		4/21/2021	4/21/2021	5/07/2021	5/07/2021	5/07/2021
	Dilution Factor		1	1	1	1	1
	Unit		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.036 U	0.039 U	0.038 U	0.039 U	0.039 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2,4,5-Trichlorophenol	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2,4,6-Trichlorophenol	NS	NS	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U
2,4-Dichlorophenol	NS	NS	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U
2,4-Dimethylphenol	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2,4-Dinitrophenol	NS	NS	0.29 U	0.32 U	0.31 U	0.31 U	0.31 U
2,4-Dinitrotoluene	NS	NS	0.074 U	0.08 U	0.077 U	0.078 U	0.079 U
2,6-Dinitrotoluene	NS	NS	0.074 U	0.08 U	0.077 U	0.078 U	0.079 U
2-Chloronaphthalene	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2-Chlorophenol	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2-Methylnaphthalene	NS	NS	0.36 U	0.39 U	0.035 J	0.021 J	0.018 J
2-Methylphenol (O-Cresol)	0.33	100	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2-Nitroaniline	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
2-Nitrophenol	NS	NS	0.36 UT	0.39 UT	0.38 U	0.39 U	0.39 U
3,3'-Dichlorobenzidine	NS	NS	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U
3-Nitroaniline	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.29 U	0.32 U	0.31 U	0.31 U	0.31 U
4-Bromophenyl Phenyl Ether	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
4-Chloro-3-Methylphenol	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
4-Chloroaniline	NS	NS	0.36 UT	0.39 UT	0.38 U	0.39 U	0.39 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
4-Methylphenol (P-Cresol)	0.33	100	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
4-Nitroaniline	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
4-Nitrophenol	NS	NS	0.74 U	0.8 U	0.77 U	0.78 U	0.79 U
Acenaphthene	98	100	0.36 U	0.39 U	0.056 J	0.025 J	0.018 J
Acenaphthylene	107	100	0.36 U	0.39 U	0.02 J	0.022 J	0.027 J
Acetophenone	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.087 J
Anthracene	1,000	100	0.36 U	0.39 U	0.088 J	0.068 J	0.051 J
Atrazine	NS	NS	0.15 UT	0.16 UT	0.15 U	0.16 U	0.16 U
Benzaldehyde	NS	NS	0.36 UT	0.39 UT	0.38 U	0.39 U	0.39 U
Benzo(a)Anthracene	1	1	0.036 U	0.039 U	0.23	0.18	0.15
Benzo(a)Pyrene	22	1	0.036 U	0.039 U	0.25	0.2	0.18
Benzo(b)Fluoranthene	1.7	1	0.036 U	0.039 U	0.31	0.25	0.25
Benzo(g,h,i)Perylene	1,000	100	0.36 U	0.39 U	0.13 J	0.11 J	0.1 J
Benzo(k)Fluoranthene	1.7	3.9	0.036 U	0.039 U	0.12	0.11	0.096
Benzyl Butyl Phthalate	NS	NS	0.36 U	0.39 U	0.38 U	0.042 J	0.39 U
Biphenyl (Diphenyl)	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036 U	0.039 U	0.038 U	0.039 U	0.039 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36 U	0.39 U	0.38 U	0.11 J	0.39 U
Caprolactam	NS	NS	0.36 UT	0.39 UT	0.38 U	0.39 U	0.39 U
Carbazole	NS	NS	0.36 U	0.39 U	0.036 J	0.031 J	0.018 J
Chrysene	1	3.9	0.36 U	0.39 U	0.25 J	0.19 J	0.17 J
Dibenz(a,h)Anthracene	1,000	0.33	0.036 U	0.039 U	0.047	0.045	0.034 J
Dibenzofuran	210	59	0.36 U	0.39 U	0.049 J	0.03 J	0.022 J
Diethyl Phthalate	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Dimethyl Phthalate	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Di-N-Butyl Phthalate	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Di-N-Octylphthalate	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Fluoranthene	1,000	100	0.36 U	0.39 U	0.47	0.31 J	0.28 J
Fluorene	386	100	0.36 U	0.39 U	0.049 J	0.03 J	0.024 J
Hexachlorobenzene	3.2	1.2	0.036 U	0.039 U	0.038 U	0.039 U	0.039 U
Hexachlorobutadiene	NS	NS	0.074 U	0.08 U	0.077 U	0.078 U	0.079 U
Hexachlorocyclopentadiene	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Hexachloroethane	NS	NS	0.036 U	0.039 U	0.038 U	0.039 U	0.039 U
Indeno(1,2,3-c,d)Pyrene	8.2	0.5	0.036 U	0.039 U	0.16	0.14	0.12
Isophorone	NS	NS	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U
Naphthalene	12	100	0.36 U	0.39 U	0.068 J	0.033 J	0.032 J
Nitrobenzene	NS	NS	0.036 U	0.039 U	0.038 U	0.039 U	0.039 U
N-Nitrosodi-N-Propylamine	NS	NS	0.036 U	0.039 U	0.038 U	0.039 U	0.039 U
N-Nitrosodiphenylamine	NS	NS	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Pentachlorophenol	0.8	6.7	0.29 U	0.32 U	0.31 U	0.31 U	0.31 U
Phenanthrene	1,000	100	0.36 U	0.39 U	0.45	0.26 J	0.19 J
Phenol	0.33	100	0.36 U	0.39 U	0.38 U	0.39 U	0.39 U
Pyrene	1,000	100	0.36 U	0.39 U	0.48	0.32 J	0.27 J

Table 2  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Semivolatile Organic Compounds (SVOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-09_23_20210507 460-233872-4 5/07/2021 1 mg/kg	EP-UST-01_24_20210421 460-232623-7 4/21/2021 1 mg/kg	EP-UST-02_24_20210421 460-232623-8 4/21/2021 1 mg/kg	EP-UST-03_24_20210421 460-232623-9 4/21/2021 1 mg/kg	EP-UST-04_24_20210422 460-232735-1 4/22/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.4 U	NR	NR	NR	NR
1,4-Dioxane (P-Dioxane)	0.1	13	0.04 U	NR	NR	NR	NR
2,3,4,6-Tetrachlorophenol	NS	NS	0.4 U	NR	NR	NR	NR
2,4,5-Trichlorophenol	NS	NS	0.4 U	NR	NR	NR	NR
2,4,6-Trichlorophenol	NS	NS	0.16 U	NR	NR	NR	NR
2,4-Dichlorophenol	NS	NS	0.16 U	NR	NR	NR	NR
2,4-Dimethylphenol	NS	NS	0.4 U	NR	NR	NR	NR
2,4-Dinitrophenol	NS	NS	0.32 U	NR	NR	NR	NR
2,4-Dinitrotoluene	NS	NS	0.081 U	NR	NR	NR	NR
2,6-Dinitrotoluene	NS	NS	0.081 U	NR	NR	NR	NR
2-Chloronaphthalene	NS	NS	0.4 U	NR	NR	NR	NR
2-Chlorophenol	NS	NS	0.4 U	NR	NR	NR	NR
2-Methylnaphthalene	NS	NS	0.021 J	NR	NR	NR	NR
2-Methylphenol (O-Cresol)	0.33	100	0.4 U	NR	NR	NR	NR
2-Nitroaniline	NS	NS	0.4 U	NR	NR	NR	NR
2-Nitrophenol	NS	NS	0.4 U	NR	NR	NR	NR
3,3'-Dichlorobenzidine	NS	NS	0.16 U	NR	NR	NR	NR
3-Nitroaniline	NS	NS	0.4 U	NR	NR	NR	NR
4,6-Dinitro-2-Methylphenol	NS	NS	0.32 U	NR	NR	NR	NR
4-Bromophenyl Phenyl Ether	NS	NS	0.4 U	NR	NR	NR	NR
4-Chloro-3-Methylphenol	NS	NS	0.4 U	NR	NR	NR	NR
4-Chloroaniline	NS	NS	0.4 U	NR	NR	NR	NR
4-Chlorophenyl Phenyl Ether	NS	NS	0.4 U	NR	NR	NR	NR
4-Methylphenol (P-Cresol)	0.33	100	0.4 U	NR	NR	NR	NR
4-Nitroaniline	NS	NS	0.4 U	NR	NR	NR	NR
4-Nitrophenol	NS	NS	0.81 U	NR	NR	NR	NR
Acenaphthene	98	100	0.015 J	0.37 U	0.39 U	0.4 U	0.42 U
Acenaphthylene	107	100	0.036 J	0.37 U	0.39 U	0.4 U	0.42 U
Acetophenone	NS	NS	0.4 U	NR	NR	NR	NR
Anthracene	1,000	100	0.043 J	0.37 U	0.39 U	0.4 U	0.42 U
Atrazine	NS	NS	0.16 U	NR	NR	NR	NR
Benzaldehyde	NS	NS	0.4 U	NR	NR	NR	NR
Benzo(a)Anthracene	1	1	0.15	0.053	0.015 J	0.04 U	0.045
Benzo(a)Pyrene	22	1	0.19	0.056	0.01 J	0.04 U	0.04 J
Benzo(b)Fluoranthene	1.7	1	0.26	0.072	0.015 J	0.04 U	0.049
Benzo(g,h,i)Perylene	1,000	100	0.11 J	0.03 J	0.39 U	0.4 U	0.42 U
Benzo(k)Fluoranthene	1.7	3.9	0.099	0.026 J	0.0081 J	0.04 U	0.019 J
Benzyl Butyl Phthalate	NS	NS	0.4 U	NR	NR	NR	NR
Biphenyl (Diphenyl)	NS	NS	0.4 U	NR	NR	NR	NR
Bis(2-Chloroethoxy) Methane	NS	NS	0.4 U	NR	NR	NR	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.04 U	NR	NR	NR	NR
Bis(2-Chloroisopropyl) Ether	NS	NS	0.4 U	NR	NR	NR	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.028 J	NR	NR	NR	NR
Caprolactam	NS	NS	0.4 U	NR	NR	NR	NR
Carbazole	NS	NS	0.016 J	NR	NR	NR	NR
Chrysene	1	3.9	0.16 J	0.05 J	0.39 U	0.4 U	0.04 J
Dibenz(a,h)Anthracene	1,000	0.33	0.031 J	0.037 U	0.039 U	0.04 U	0.042 U
Dibenzofuran	210	59	0.027 J	NR	NR	NR	NR
Diethyl Phthalate	NS	NS	0.4 U	NR	NR	NR	NR
Dimethyl Phthalate	NS	NS	0.4 U	NR	NR	NR	NR
Di-N-Butyl Phthalate	NS	NS	0.4 U	NR	NR	NR	NR
Di-N-Octylphthalate	NS	NS	0.4 U	NR	NR	NR	NR
Fluoranthene	1,000	100	0.21 J	0.1 J	0.017 J	0.4 U	0.084 J
Fluorene	386	100	0.02 J	0.37 U	0.39 U	0.4 U	0.42 U
Hexachlorobenzene	3.2	1.2	0.04 U	NR	NR	NR	NR
Hexachlorobutadiene	NS	NS	0.081 U	NR	NR	NR	NR
Hexachlorocyclopentadiene	NS	NS	0.4 U	NR	NR	NR	NR
Hexachloroethane	NS	NS	0.04 U	NR	NR	NR	NR
Indeno(1,2,3-c,d)Pyrene	8.2	0.5	0.13	0.035 J	0.039 U	0.04 U	0.029 J
Isophorone	NS	NS	0.16 U	NR	NR	NR	NR
Naphthalene	12	100	0.037 J	0.37 U	0.39 U	0.4 U	0.026 J
Nitrobenzene	NS	NS	0.04 U	NR	NR	NR	NR
N-Nitrosodi-N-Propylamine	NS	NS	0.04 U	NR	NR	NR	NR
N-Nitrosodiphenylamine	NS	NS	0.4 U	NR	NR	NR	NR
Pentachlorophenol	0.8	6.7	0.32 U	NR	NR	NR	NR
Phenanthrene	1,000	100	0.12 J	0.094 J	0.013 J	0.4 U	0.07 J
Phenol	0.33	100	0.4 U	NR	NR	NR	NR
Pyrene	1,000	100	0.22 J	0.098 J	0.39 U	0.4 U	0.067 J

Table 2  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		EP-UST-05_27_20210422	EP-UST-06_27_20210421	EP-UST-07_27_20210422	EP-UST-08_24_20210421
	Laboratory Sample ID		460-232735-2	460-232623-13	460-232735-3	460-232623-11
	Date Sampled		4/22/2021	4/21/2021	4/22/2021	4/21/2021
	Dilution Factor		1	1	1	1
	Unit		mg/kg	mg/kg	mg/kg	mg/kg
	NYSDEC PGWSCO	NYSDEC RRSO	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR	NR	NR	NR
1,4-Dioxane (P-Dioxane)	0.1	13	NR	NR	NR	NR
2,3,4,6-Tetrachlorophenol	NS	NS	NR	NR	NR	NR
2,4,5-Trichlorophenol	NS	NS	NR	NR	NR	NR
2,4,6-Trichlorophenol	NS	NS	NR	NR	NR	NR
2,4-Dichlorophenol	NS	NS	NR	NR	NR	NR
2,4-Dimethylphenol	NS	NS	NR	NR	NR	NR
2,4-Dinitrophenol	NS	NS	NR	NR	NR	NR
2,4-Dinitrotoluene	NS	NS	NR	NR	NR	NR
2,6-Dinitrotoluene	NS	NS	NR	NR	NR	NR
2-Chloronaphthalene	NS	NS	NR	NR	NR	NR
2-Chlorophenol	NS	NS	NR	NR	NR	NR
2-Methylnaphthalene	NS	NS	NR	NR	NR	NR
2-Methylphenol (O-Cresol)	0.33	100	NR	NR	NR	NR
2-Nitroaniline	NS	NS	NR	NR	NR	NR
2-Nitrophenol	NS	NS	NR	NR	NR	NR
3,3'-Dichlorobenzidine	NS	NS	NR	NR	NR	NR
3-Nitroaniline	NS	NS	NR	NR	NR	NR
4,6-Dinitro-2-Methylphenol	NS	NS	NR	NR	NR	NR
4-Bromophenyl Phenyl Ether	NS	NS	NR	NR	NR	NR
4-Chloro-3-Methylphenol	NS	NS	NR	NR	NR	NR
4-Chloroaniline	NS	NS	NR	NR	NR	NR
4-Chlorophenyl Phenyl Ether	NS	NS	NR	NR	NR	NR
4-Methylphenol (P-Cresol)	0.33	100	NR	NR	NR	NR
4-Nitroaniline	NS	NS	NR	NR	NR	NR
4-Nitrophenol	NS	NS	NR	NR	NR	NR
Acenaphthene	98	100	0.42 U	0.42 U	0.4 U	0.44 U
Acenaphthylene	107	100	0.42 U	0.42 U	0.4 U	0.44 U
Acetophenone	NS	NS	NR	NR	NR	NR
Anthracene	1,000	100	0.42 U	0.42 U	0.4 U	0.44 U
Atrazine	NS	NS	NR	NR	NR	NR
Benzaldehyde	NS	NS	NR	NR	NR	NR
Benzo(a)Anthracene	1	1	0.042 U	0.018 J	0.026 J	0.044 U
Benzo(a)Pyrene	22	1	0.042 U	0.013 J	0.021 J	0.044 U
Benzo(b)Fluoranthene	1.7	1	0.042 U	0.013 J	0.024 J	0.044 U
Benzo(g,h,i)Perylene	1,000	100	0.42 U	0.42 U	0.4 U	0.44 U
Benzo(k)Fluoranthene	1.7	3.9	0.042 U	0.042 U	0.04 U	0.044 U
Benzyl Butyl Phthalate	NS	NS	NR	NR	NR	NR
Biphenyl (Diphenyl)	NS	NS	NR	NR	NR	NR
Bis(2-Chloroethoxy) Methane	NS	NS	NR	NR	NR	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR	NR	NR	NR
Bis(2-Chloroisopropyl) Ether	NS	NS	NR	NR	NR	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR	NR	NR	NR
Caprolactam	NS	NS	NR	NR	NR	NR
Carbazole	NS	NS	NR	NR	NR	NR
Chrysene	1	3.9	0.42 U	0.42 U	0.018 J	0.44 U
Dibenz(a,h)Anthracene	1,000	0.33	0.042 U	0.042 U	0.04 U	0.044 U
Dibenzofuran	210	59	NR	NR	NR	NR
Diethyl Phthalate	NS	NS	NR	NR	NR	NR
Dimethyl Phthalate	NS	NS	NR	NR	NR	NR
Di-N-Butyl Phthalate	NS	NS	NR	NR	NR	NR
Di-N-Octylphthalate	NS	NS	NR	NR	NR	NR
Fluoranthene	1,000	100	0.42 U	0.019 J	0.033 J	0.44 U
Fluorene	386	100	0.42 U	0.42 U	0.4 U	0.44 U
Hexachlorobenzene	3.2	1.2	NR	NR	NR	NR
Hexachlorobutadiene	NS	NS	NR	NR	NR	NR
Hexachlorocyclopentadiene	NS	NS	NR	NR	NR	NR
Hexachloroethane	NS	NS	NR	NR	NR	NR
Indeno(1,2,3-c,d)Pyrene	8.2	0.5	0.042 U	0.042 U	0.015 J	0.044 U
Isophorone	NS	NS	NR	NR	NR	NR
Naphthalene	12	100	0.42 U	0.015 J	0.4 U	0.12 J
Nitrobenzene	NS	NS	NR	NR	NR	NR
N-Nitrosodi-N-Propylamine	NS	NS	NR	NR	NR	NR
N-Nitrosodiphenylamine	NS	NS	NR	NR	NR	NR
Pentachlorophenol	0.8	6.7	NR	NR	NR	NR
Phenanthrene	1,000	100	0.42 U	0.02 J	0.015 J	0.44 U
Phenol	0.33	100	NR	NR	NR	NR
Pyrene	1,000	100	0.42 U	0.02 J	0.028 J	0.44 U

Table 2  
Brook 156  
740 Brook Avenue, Bronx, NY  
Soil Endpoint Analytical Results  
Semivolatile Organic Compounds (SVOCs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-FB_02_20210507 460-233872-5 5/07/2021 1 µg/L	EP-FB-01_20210421 460-232623-14 4/21/2021 1 µg/L
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	10 U	10 U
1,4-Dioxane (P-Dioxane)	0.1	13	10 U	10 U
2,3,4,6-Tetrachlorophenol	NS	NS	10 U	10 U
2,4,5-Trichlorophenol	NS	NS	10 U	10 U
2,4,6-Trichlorophenol	NS	NS	10 U	10 U
2,4-Dichlorophenol	NS	NS	10 U	10 U
2,4-Dimethylphenol	NS	NS	10 U	10 U
2,4-Dinitrophenol	NS	NS	20 U	30 U
2,4-Dinitrotoluene	NS	NS	2 U	2 U
2,6-Dinitrotoluene	NS	NS	2 U	2 U
2-Chloronaphthalene	NS	NS	10 U	10 U
2-Chlorophenol	NS	NS	10 U	10 U
2-Methylnaphthalene	NS	NS	10 U	10 U
2-Methylphenol (O-Cresol)	0.33	100	10 U	10 U
2-Nitroaniline	NS	NS	10 U	20 UT
2-Nitrophenol	NS	NS	10 U	10 U
3,3'-Dichlorobenzidine	NS	NS	10 U	20 U
3-Nitroaniline	NS	NS	10 U	20 U
4,6-Dinitro-2-Methylphenol	NS	NS	20 U	30 U
4-Bromophenyl Phenyl Ether	NS	NS	10 U	10 U
4-Chloro-3-Methylphenol	NS	NS	10 U	10 U
4-Chloroaniline	NS	NS	10 U	1 U
4-Chlorophenyl Phenyl Ether	NS	NS	10 U	10 U
4-Methylphenol (P-Cresol)	0.33	100	10 U	10 U
4-Nitroaniline	NS	NS	10 U	20 UT
4-Nitrophenol	NS	NS	20 U	30 U
Acenaphthene	98	100	10 U	10 U
Acenaphthylene	107	100	10 U	10 U
Acetophenone	NS	NS	10 U	10 U
Anthracene	1,000	100	10 U	10 U
Atrazine	NS	NS	2 U	10 UT
Benzaldehyde	NS	NS	10 U	10 UT
Benzo(a)Anthracene	1	1	1 U	1 U
Benzo(a)Pyrene	22	1	1 U	1 U
Benzo(b)Fluoranthene	1.7	1	2 U	2 U
Benzo(g,h,i)Perylene	1,000	100	10 U	10 U
Benzo(k)Fluoranthene	1.7	3.9	1 U	1 U
Benzyl Butyl Phthalate	NS	NS	10 U	10 U
Biphenyl (Diphenyl)	NS	NS	10 U	10 U
Bis(2-Chloroethoxy) Methane	NS	NS	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	1 U	1 U
Bis(2-Chloroisopropyl) Ether	NS	NS	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	2 U	10 U
Caprolactam	NS	NS	10 U	10 U
Carbazole	NS	NS	10 U	10 U
Chrysene	1	3.9	2 U	10 U
Dibenz(a,h)Anthracene	1,000	0.33	1 U	1 U
Dibenzofuran	210	59	10 U	10 U
Diethyl Phthalate	NS	NS	10 U	10 U
Dimethyl Phthalate	NS	NS	10 U	10 U
Di-N-Butyl Phthalate	NS	NS	10 U	10 UT
Di-N-Octylphthalate	NS	NS	10 U	10 U
Fluoranthene	1,000	100	10 U	10 U
Fluorene	386	100	10 U	10 U
Hexachlorobenzene	3.2	1.2	1 U	1 U
Hexachlorobutadiene	NS	NS	1 U	2 U
Hexachlorocyclopentadiene	NS	NS	10 U	10 U
Hexachloroethane	NS	NS	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	8.2	0.5	2 U	2 U
Isophorone	NS	NS	10 U	10 U
Naphthalene	12	100	2 U	2 U
Nitrobenzene	NS	NS	1 U	1 U
N-Nitrosodi-N-Propylamine	NS	NS	1 U	1 U
N-Nitrosodiphenylamine	NS	NS	10 U	10 U
Pentachlorophenol	0.8	6.7	20 U	30 U
Phenanthrene	1,000	100	10 U	10 U
Phenol	0.33	100	10 U	10 U
Pyrene	1,000	100	10 U	10 U

Table 3  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-01_20210226 460-228859-1 2/26/2021 1 mg/kg	EP-02_23_20210421 460-232623-2 4/21/2021 1 mg/kg	EP-03_23_20210421 460-232623-1 4/21/2021 1 mg/kg	EP-X01_23_20210421 460-232623-3 4/21/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	12,500	15,300	10,400	11,000
Antimony	NS	NS	1.2 U	1 U	0.85 U	0.89 U
Arsenic	16	16	2.6	2.9	1.7	2
Barium	820	400	108	45.8	46.7	40
Beryllium	47	72	0.59	0.56	0.37	0.38
Cadmium	7.5	4.3	1.2 U	1 U	0.85 U	0.89 U
Calcium	NS	NS	11,600	1,820	1,270	1,280
Chromium, Hexavalent	19	110	2.4 U	2.4 U	2.3 U	2.3 U
Chromium, Total	NS	NS	21.5	26.8	20.1	22.7
Cobalt	NS	NS	10.7	9	6.4	7
Copper	1,720	270	39.7	20.8	13.3	15.4
Cyanide	40	27	0.29 U	0.28 U	0.28 U	0.26 U
Iron	NS	NS	18,800	22,200	16,100	17,400
Lead	450	400	106	30.5	7.9	7.5
Magnesium	NS	NS	9,020	4,420	3,300	3,660
Manganese	2,000	2,000	371	324	234	246
Mercury	0.73	0.81	0.34	0.033	0.014 J	0.013 J
Nickel	130	310	19.5	17.3	13.8	14.3
Potassium	NS	NS	3,060	872	1,040	898
Selenium	4	180	0.3 J	0.3 J	0.14 J	0.12 J
Silver	8.3	180	1.2 U	1 U	0.85 U	0.89 U
Sodium	NS	NS	265	197	175	169
Thallium	NS	NS	0.19 J	0.15 J	0.12 J	0.11 J
Vanadium	NS	NS	29.9	36	25.8	27
Zinc	2,480	10,000	71.7	60	35	34.6



Table 3  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-04_23_20210421 460-232623-4 4/21/2021 1 mg/kg	EP-05_23_20210421 460-232623-5 4/21/2021 1 mg/kg	EP-06_27_20210421 460-232623-6 4/21/2021 1 mg/kg	EP-07_23_20210507 460-233872-1 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	12,900	8,140	5,660	7,000
Antimony	NS	NS	0.93 U	0.14 J	0.93 U	0.39 J
Arsenic	16	16	2.2	1.8	0.77 J	2.2
Barium	820	400	59.8	29	145	83.3
Beryllium	47	72	0.53	0.28 J	0.21 J	0.3 J
Cadmium	7.5	4.3	0.93 U	0.81 U	0.11 J	0.18 J
Calcium	NS	NS	1,310	926	1,930	16,900
Chromium, Hexavalent	19	110	2.4 U	2.2 U	2.4 U	2.3 U
Chromium, Total	NS	NS	22.2	14.8	29.5	20.8
Cobalt	NS	NS	8.4	5.7	4.9	5.7
Copper	1,720	270	12.7	13.5	5.9	29
Cyanide	40	27	0.28 U	0.25 U	0.28 U	0.2 J
Iron	NS	NS	19,400	14,100	6,440	11,600
Lead	450	400	8.2	5.3	4.8	73.4
Magnesium	NS	NS	3,690	2,930	2,940	8,700
Manganese	2,000	2,000	359	277	80.6	196
Mercury	0.73	0.81	0.02	0.021	0.027	NR
Nickel	130	310	15.6	11.5	7.9	11.9
Potassium	NS	NS	840	800	441	1,530
Selenium	4	180	0.11 J	0.098 J	0.43 J	0.32 J
Silver	8.3	180	0.93 U	0.81 U	0.93 U	0.15 J
Sodium	NS	NS	232	115	164	295
Thallium	NS	NS	0.1 J	0.077 J	0.37 U	0.086 J
Vanadium	NS	NS	28.8	19.6	12.8	17.6
Zinc	2,480	10,000	48.3	27.7	35.6	82.7

Table 3  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-07_23_20210507 460-233872-1 5/07/2021 10 mg/kg	EP-08_23_20210507 460-233872-2 5/07/2021 1 mg/kg	EP-X02_23_20210507 460-233872-3 5/07/2021 1 mg/kg	EP-09_23_20210507 460-233872-4 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NR	8,980	10,900	5,960
Antimony	NS	NS	NR	0.16 J	1.1 U	0.19 J
Arsenic	16	16	NR	2	1.7	2.6
Barium	820	400	NR	124	143	93.5
Beryllium	47	72	NR	0.37 J	0.44 J	0.24 J
Cadmium	7.5	4.3	NR	0.24 J	0.3 J	0.22 J
Calcium	NS	NS	NR	11,100	7,040	11,100
Chromium, Hexavalent	19	110	NR	2.4 U	2.4 U	2.4 U
Chromium, Total	NS	NS	NR	26.9	41.2	23.5
Cobalt	NS	NS	NR	7.3	9.1	5.3
Copper	1,720	270	NR	20.7	15.1	14.7
Cyanide	40	27	NR	0.25 U	0.26 U	0.14 J
Iron	NS	NS	NR	13,900	13,600	10,400
Lead	450	400	NR	102	36	58.3
Magnesium	NS	NS	NR	6,180	5,510	4,230
Manganese	2,000	2,000	NR	203	182	249
Mercury	0.73	0.81	1.5	0.18	0.4	0.079
Nickel	130	310	NR	15	18.3	10.6
Potassium	NS	NS	NR	1,110	861	592
Selenium	4	180	NR	0.82 J	0.82 J	1 J
Silver	8.3	180	NR	1.1 U	1.1 U	1.2 U
Sodium	NS	NS	NR	244	199	322
Thallium	NS	NS	NR	0.094 J	0.092 J	0.47 U
Vanadium	NS	NS	NR	24.9	28.4	23
Zinc	2,480	10,000	NR	99	96.6	61.4

Table 3  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-FB_02_20210507 460-233872-5 5/07/2021 1 µg/L	EP-FB-01_20210421 460-232623-14 4/21/2021 1 µg/L
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q
Aluminum	NS	NS	40 U	40 U
Antimony	NS	NS	2 U	2 U
Arsenic	16	16	2 U	2 U
Barium	820	400	4 U	4 U
Beryllium	47	72	0.8 U	0.8 U
Cadmium	7.5	4.3	2 U	2 U
Calcium	NS	NS	500 U	500 U
Chromium, Hexavalent	19	110	10 U	10 U
Chromium, Total	NS	NS	4 U	4 U
Cobalt	NS	NS	4 U	4 U
Copper	1,720	270	4 U	4 U
Cyanide	40	27	10 U	10 U
Iron	NS	NS	120 U	120 U
Lead	450	400	1.2 U	1.2 U
Magnesium	NS	NS	200 U	200 U
Manganese	2,000	2,000	8 U	8 U
Mercury	0.73	0.81	0.2 U	0.2 U
Nickel	130	310	4 U	4 U
Potassium	NS	NS	200 U	200 U
Selenium	4	180	2.5 U	2.5 U
Silver	8.3	180	2 U	2 U
Sodium	NS	NS	500 U	500 U
Thallium	NS	NS	0.8 U	0.8 U
Vanadium	NS	NS	4 U	4 U
Zinc	2,480	10,000	16 U	16 U

Table 4  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Polychlorinated Biphenyls (PCBs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-01_20210226 460-228859-1 2/26/2021 1 mg/kg	EP-02_23_20210421 460-232623-2 4/21/2021 1 mg/kg	EP-03_23_20210421 460-232623-1 4/21/2021 1 mg/kg	EP-X01_23_20210421 460-232623-3 4/21/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1221 (Aroclor 1221)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1232 (Aroclor 1232)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1242 (Aroclor 1242)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1248 (Aroclor 1248)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1254 (Aroclor 1254)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1260 (Aroclor 1260)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1262 (Aroclor 1262)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
PCB-1268 (Aroclor 1268)	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U
Total PCBs	3.2	1	0.08 U	0.079 U	0.077 U	0.076 U

Table 4  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Polychlorinated Biphenyls (PCBs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-04_23_20210421 460-232623-4 4/21/2021 1 mg/kg	EP-05_23_20210421 460-232623-5 4/21/2021 1 mg/kg	EP-06_27_20210421 460-232623-6 4/21/2021 1 mg/kg	EP-07_23_20210507 460-233872-1 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1221 (Aroclor 1221)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1232 (Aroclor 1232)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1242 (Aroclor 1242)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1248 (Aroclor 1248)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1254 (Aroclor 1254)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1260 (Aroclor 1260)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1262 (Aroclor 1262)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
PCB-1268 (Aroclor 1268)	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U
Total PCBs	3.2	1	0.079 U	0.074 U	0.08 U	0.077 U

Table 4  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Polychlorinated Biphenyls (PCBs)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-08_23_20210507 460-233872-2 5/07/2021 1 mg/kg	EP-X02_23_20210507 460-233872-3 5/07/2021 1 mg/kg	EP-09_23_20210507 460-233872-4 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1221 (Aroclor 1221)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1232 (Aroclor 1232)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1242 (Aroclor 1242)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1248 (Aroclor 1248)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1254 (Aroclor 1254)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1260 (Aroclor 1260)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1262 (Aroclor 1262)	NS	NS	0.078 U	0.079 U	0.081 U
PCB-1268 (Aroclor 1268)	NS	NS	0.078 U	0.079 U	0.081 U
Total PCBs	3.2	1	0.078 U	0.079 U	0.081 U

Table 4  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Polychlorinated Biphenyls (PCBs)

<b>AKRF Sample ID</b> <b>Laboratory Sample ID</b> <b>Date Sampled</b> <b>Dilution Factor</b> <b>Unit</b>			EP-FB_02_20210507 460-233872-5 5/07/2021 1 µg/L	EP-FB-01_20210421 460-232623-14 4/21/2021 1 µg/L
<b>Compound</b>	<b>NYSDEC PGWSCO</b>	<b>NYSDEC RRSO</b>	<b>CONC Q</b>	<b>CONC Q</b>
PCB-1016 (Aroclor 1016)	NS	NS	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	NS	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	NS	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	NS	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	NS	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	NS	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	NS	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	NS	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	NS	0.4 U	0.4 U
Total PCBs	3.2	1	0.4 U	0.4 U

Table 5  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Pesticides

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-01_20210226 460-228859-1 2/26/2021 1 mg/kg	EP-02_23_20210421 460-232623-2 4/21/2021 1 mg/kg	EP-03_23_20210421 460-232623-1 4/21/2021 1 mg/kg	EP-X01_23_20210421 460-232623-3 4/21/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.19	0.097	0.008 U	0.0079 U	0.0077 U	0.0076 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Alpha Endosulfan	102	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.09	0.36	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Beta Endosulfan	102	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
Delta BHC (Delta Hexachlorocyclohexane)	0.25	100	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Dieldrin	0.1	0.2	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Endosulfan Sulfate	1,000	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
Endosulfans ABS	NS	24	0 U	0 U	0 U	0 U
Endrin	0.06	11	0.008 U	0.0079 U	0.0077 U	0.0076 U
Endrin Aldehyde	NS	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
Endrin Ketone	NS	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
Gamma Bhc (Lindane)	0.1	1.3	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Heptachlor	0.38	2.1	0.008 U	0.0079 U	0.0077 U	0.0076 U
Heptachlor Epoxide	NS	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
Methoxychlor	NS	NS	0.008 U	0.0079 U	0.0077 U	0.0076 U
P,P'-DDD	14	13	0.008 U	0.0079 U	0.0077 U	0.0076 U
P,P'-DDE	17	8.9	0.008 U	0.0079 U	0.0077 U	0.0076 U
P,P'-DDT	136	7.9	0.008 U	0.0079 U	0.0077 U	0.0076 U
Silvex (2,4,5-TP)	3.8	100	0.04 U	0.039 U	0.038 U	0.038 U
Toxaphene	NS	NS	0.08 U	0.079 U	0.077 U	0.076 U



Table 5  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Pesticides

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-04_23_20210421 460-232623-4 4/21/2021 1 mg/kg	EP-05_23_20210421 460-232623-5 4/21/2021 1 mg/kg	EP-06_27_20210421 460-232623-6 4/21/2021 1 mg/kg	EP-07_23_20210507 460-233872-1 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.19	0.097	0.0079 U	0.0074 U	0.008 U	0.0077 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0023 U	0.0022 U	0.0024 U	0.0023 U
Alpha Endosulfan	102	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.09	0.36	0.0023 U	0.0022 U	0.0024 U	0.0023 U
Beta Endosulfan	102	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
Delta BHC (Delta Hexachlorocyclohexane)	0.25	100	0.0023 U	0.0022 U	0.0024 U	0.0023 U
Dieldrin	0.1	0.2	0.0023 U	0.0022 U	0.0024 U	0.0023 U
Endosulfan Sulfate	1,000	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
Endosulfans ABS	NS	24	0 U	0 U	0 U	0 U
Endrin	0.06	11	0.0079 U	0.0074 U	0.008 U	0.0077 U
Endrin Aldehyde	NS	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
Endrin Ketone	NS	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
Gamma Bhc (Lindane)	0.1	1.3	0.0023 U	0.0022 U	0.0024 U	0.0023 U
Heptachlor	0.38	2.1	0.0079 U	0.0074 U	0.008 U	0.0077 U
Heptachlor Epoxide	NS	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
Methoxychlor	NS	NS	0.0079 U	0.0074 U	0.008 U	0.0077 U
P,P'-DDD	14	13	0.0079 U	0.0074 U	0.008 U	0.0077 U
P,P'-DDE	17	8.9	0.0079 U	0.0074 U	0.008 U	0.0077 U
P,P'-DDT	136	7.9	0.0079 U	0.0074 U	0.008 U	0.0077 U
Silvex (2,4,5-TP)	3.8	100	0.039 U	0.037 U	0.04 U	0.038 U
Toxaphene	NS	NS	0.079 U	0.074 U	0.08 U	0.077 U

Table 5  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Pesticides

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-08_23_20210507 460-233872-2 5/07/2021 1 mg/kg	EP-X02_23_20210507 460-233872-3 5/07/2021 1 mg/kg	EP-09_23_20210507 460-233872-4 5/07/2021 1 mg/kg
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q
Aldrin	0.19	0.097	0.0078 U	0.0079 U	0.0081 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0023 U	0.0024 U	0.0024 U
Alpha Endosulfan	102	NS	0.0078 U	0.0079 U	0.0081 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.09	0.36	0.0023 U	0.0024 U	0.0024 U
Beta Endosulfan	102	NS	0.0078 U	0.0079 U	0.0081 U
Delta BHC (Delta Hexachlorocyclohexane)	0.25	100	0.0023 U	0.0024 U	0.0024 U
Dieldrin	0.1	0.2	0.0023 U	0.0024 U	0.0024 U
Endosulfan Sulfate	1,000	NS	0.0078 U	0.0079 U	0.0081 U
Endosulfans ABS	NS	24	0 U	0 U	0 U
Endrin	0.06	11	0.0078 U	0.0079 U	0.0081 U
Endrin Aldehyde	NS	NS	0.0078 U	0.0079 U	0.0081 U
Endrin Ketone	NS	NS	0.0078 U	0.0079 U	0.0081 U
Gamma Bhc (Lindane)	0.1	1.3	0.0023 U	0.0024 U	0.0024 U
Heptachlor	0.38	2.1	0.0078 U	0.0079 U	0.0081 U
Heptachlor Epoxide	NS	NS	0.0078 U	0.0079 U	0.0081 U
Methoxychlor	NS	NS	0.0078 U	0.0079 U	0.0081 U
P,P'-DDD	14	13	0.0078 U	0.0079 U	0.0081 U
P,P'-DDE	17	8.9	0.0078 U	0.0079 U	0.0081 U
P,P'-DDT	136	7.9	0.0078 U	0.0079 U	0.0081 U
Silvex (2,4,5-TP)	3.8	100	0.039 U	0.039 U	0.041 U
Toxaphene	NS	NS	0.078 U	0.079 U	0.081 U

Table 5  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Pesticides

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-FB_02_20210507 460-233872-5 5/07/2021 1 µg/L	EP-FB-01_20210421 460-232623-14 4/21/2021 1 µg/L
Compound	NYSDEC PGWSCO	NYSDEC RRSCO	CONC Q	CONC Q
Aldrin	0.19	0.097	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02 U	0.02 U
Alpha Endosulfan	102	NS	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.09	0.36	0.02 U	0.02 U
Beta Endosulfan	102	NS	0.02 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.25	100	0.02 U	0.02 U
Dieldrin	0.1	0.2	0.02 U	0.02 U
Endosulfan Sulfate	1,000	NS	0.02 U	0.02 U
Endosulfans ABS	NS	24	0 U	0 U
Endrin	0.06	11	0.02 U	0.02 U
Endrin Aldehyde	NS	NS	0.02 U	0.02 U
Endrin Ketone	NS	NS	0.02 U	0.02 U
Gamma Bhc (Lindane)	0.1	1.3	0.02 U	0.02 U
Heptachlor	0.38	2.1	0.02 U	0.02 U
Heptachlor Epoxide	NS	NS	0.02 U	0.02 U
Methoxychlor	NS	NS	0.02 U	0.02 U
P,P'-DDD	14	13	0.02 U	0.02 U
P,P'-DDE	17	8.9	0.02 U	0.02 U
P,P'-DDT	136	7.9	0.02 U	0.02 U
Silvex (2,4,5-TP)	3.8	100	1.2 U	1.2 U
Toxaphene	NS	NS	0.5 U	0.5 U

Table 6  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Per- and Polyfluoroalkyl Substances (PFAS)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-01_20210226 460-228859-1 2/26/2021 1 µg/kg	EP-02_23_20210421 460-232539-1 4/21/2021 1 µg/kg	EP-03_23_20210421 460-232539-2 4/21/2021 1 µg/kg	EP-X01_23_20210421 460-232539-3 4/21/2021 1 µg/kg
Compound	NYSDEC PGWGV	NYSDEC RRGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	2.34 U	2.26 U	2.23 U	2.2 U
8:2 Fluorotelomer sulfonate	NS	NS	2.34 U	2.26 U	2.23 U	2.2 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.34 U	0.064 J	2.23 U	2.2 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.34 U	0.065 J	0.05 J	2.2 U
Perfluorobutanesulfonic acid	NS	NS	0.23 U	0.025 J	0.032 J	0.015 J
Perfluorobutanoic acid	NS	NS	0.29 J	0.56 U	0.56 U	0.55 U
Perfluorodecanesulfonic acid	NS	NS	0.23 U	0.025 J	0.22 U	0.22 U
Perfluorodecanoic acid	NS	NS	0.23 U	0.084 J	0.064 J	0.065 J
Perfluorododecanoic acid	NS	NS	0.23 U	0.024 J	0.22 U	0.22 U
Perfluoroheptanesulfonic acid	NS	NS	0.23 U	0.025 J	0.22 U	0.22 U
Perfluoroheptanoic acid	NS	NS	0.23 U	0.028 J	0.027 J	0.22 U
Perfluorohexanesulfonic acid	NS	NS	0.23 U	0.032 J	0.03 J	0.019 J
Perfluorohexanoic acid	NS	NS	0.23 U	0.035 J	0.034 J	0.028 J
Perfluorononanoic acid	NS	NS	0.23 U	0.038 J	0.042 J	0.045 J
Perfluorooctanesulfonic acid	3.7	44	0.096 J	1.66 B	0.92 B	0.9 B
Perfluorooctanoic acid	1.1	33	0.12 BJ	0.051 J	0.084 J	0.089 J
Perfluoropentanoic acid	NS	NS	0.23 U	0.056 J	0.22 U	0.22 U
Perfluorotetradecanoic acid	NS	NS	0.23 U	0.23 U	0.22 U	0.22 U
Perfluorotridecanoic acid	NS	NS	0.23 U	0.02 J	0.22 U	0.22 U
Perfluoroundecanoic acid	NS	NS	0.23 U	0.027 J	0.027 J	0.029 J
Perfluorooctanesulfonamide	NS	NS	0.23 U	0.037 J	0.22 U	0.22 U

Table 6  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Per- and Polyfluoroalkyl Substances (PFAS)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-04_23_20210421 460-232539-4 4/21/2021 1 µg/kg	EP-05_23_20210421 460-232539-5 4/21/2021 1 µg/kg	EP-06_27_20210421 460-232539-6 4/21/2021 1 µg/kg	EP-07_23_20210507 460-233934-1 5/07/2021 1 µg/kg
Compound	NYSDEC PGWGV	NYSDEC RRGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	2.44 U	2.17 U	2.27 U	2.39 U
8:2 Fluorotelomer sulfonate	NS	NS	2.44 U	2.17 U	2.27 U	2.39 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.44 U	2.17 U	2.27 U	2.39 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.44 U	2.17 U	2.27 U	0.12 J
Perfluorobutanesulfonic acid	NS	NS	0.014 J	0.011 J	0.23 U	0.014 J
Perfluorobutanoic acid	NS	NS	0.61 U	0.54 U	0.57 U	0.6 U
Perfluorodecanesulfonic acid	NS	NS	0.24 U	0.22 U	0.23 U	0.063 J
Perfluorodecanoic acid	NS	NS	0.099 J	0.054 J	0.23 U	0.073 JT
Perfluorododecanoic acid	NS	NS	0.24 U	0.22 U	0.23 U	0.066 J
Perfluoroheptanesulfonic acid	NS	NS	0.24 U	0.22 U	0.23 U	0.24 U
Perfluoroheptanoic acid	NS	NS	0.037 J	0.1 J	0.23 U	0.037 J
Perfluorohexanesulfonic acid	NS	NS	0.023 J	0.022 J	0.017 J	0.045 J
Perfluorohexanoic acid	NS	NS	0.062 J	0.1 J	0.23 U	0.051 J
Perfluorononanoic acid	NS	NS	0.071 J	0.2 J	0.23 U	0.028 J
Perfluorooctanesulfonic acid	3.7	44	1.37 B	2.39 B	0.19 BJ	1.86 B
Perfluorooctanoic acid	1.1	33	0.14 J	0.45	0.23 U	0.17 J
Perfluoropentanoic acid	NS	NS	0.11 J	0.17 J	0.23 U	0.06 J
Perfluorotetradecanoic acid	NS	NS	0.24 U	0.22 U	0.23 U	0.24 U
Perfluorotridecanoic acid	NS	NS	0.24 U	0.22 U	0.23 U	0.24 U
Perfluoroundecanoic acid	NS	NS	0.026 J	0.22 U	0.23 U	0.062 J
Perfluorooctanesulfonamide	NS	NS	0.24 U	0.22 U	0.23 U	0.24 U

Table 6  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Per- and Polyfluoroalkyl Substances (PFAS)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-08_23_20210507 460-233934-2 5/07/2021 1 µg/kg	EP-X02_23_20210507 460-233934-3 5/07/2021 1 µg/kg	EP-09_23_20210507 460-233934-4 5/07/2021 1 µg/kg
Compound	NYSDEC PGWGV	NYSDEC RRGV	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	2.39 U	2.37 U	2.64 U
8:2 Fluorotelomer sulfonate	NS	NS	2.39 U	2.37 U	2.64 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.39 U	2.37 U	2.64 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.39 U	2.37 U	2.64 U
Perfluorobutanesulfonic acid	NS	NS	0.018 J	0.029 J	0.26 U
Perfluorobutanoic acid	NS	NS	0.6 U	0.59 U	0.66 U
Perfluorodecanesulfonic acid	NS	NS	0.24 U	0.24 U	0.26 U
Perfluorodecanoic acid	NS	NS	0.034 JT	0.022 JT	0.11 JT
Perfluorododecanoic acid	NS	NS	0.24 U	0.24 U	0.26 U
Perfluoroheptanesulfonic acid	NS	NS	0.24 U	0.24 U	0.26 U
Perfluoroheptanoic acid	NS	NS	0.036 J	0.047 J	0.26 U
Perfluorohexanesulfonic acid	NS	NS	0.027 J	0.028 J	0.022 J
Perfluorohexanoic acid	NS	NS	0.043 J	0.053 J	0.26 U
Perfluorononanoic acid	NS	NS	0.029 J	0.033 J	0.07 J
Perfluorooctanesulfonic acid	3.7	44	0.65 B	0.8 B	1.17 B
Perfluorooctanoic acid	1.1	33	0.14 J	0.14 J	0.091 J
Perfluoropentanoic acid	NS	NS	0.057 J	0.07 J	0.26 U
Perfluorotetradecanoic acid	NS	NS	0.24 U	0.24 U	0.26 U
Perfluorotridecanoic acid	NS	NS	0.24 U	0.24 U	0.26 U
Perfluoroundecanoic acid	NS	NS	0.24 U	0.24 U	0.027 J
Perfluorooctanesulfonamide	NS	NS	0.24 U	0.24 U	0.26 U

Table 6  
 Brook 156  
 740 Brook Avenue, Bronx, NY  
 Soil Endpoint Analytical Results  
 Per- and Polyfluoroalkyl Substances (PFAS)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			EP-FB_02_20210507 460-233934-5 5/07/2021 1 ng/L	EP-FB-01_20210421 460-232539-7 4/21/2021 1 ng/L
Compound	NYSDEC PGWGV	NYSDEC RRGV	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	4.13 U	4.13 U
8:2 Fluorotelomer sulfonate	NS	NS	1.65 U	1.65 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	4.13 UT	4.13 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	4.13 U	4.13 U
Perfluorobutanesulfonic acid	NS	NS	1.65 U	1.65 U
Perfluorobutanoic acid	NS	NS	0.85 J	4.13 U
Perfluorodecanesulfonic acid	NS	NS	1.65 U	1.65 U
Perfluorodecanoic acid	NS	NS	1.65 U	1.65 U
Perfluorododecanoic acid	NS	NS	1.65 U	1.65 U
Perfluoroheptanesulfonic acid	NS	NS	1.65 U	1.65 U
Perfluoroheptanoic acid	NS	NS	1.65 U	1.65 U
Perfluorohexanesulfonic acid	NS	NS	1.65 U	1.65 U
Perfluorohexanoic acid	NS	NS	1.65 U	1.65 U
Perfluorononanoic acid	NS	NS	1.65 U	1.65 U
Perfluorooctanesulfonic acid	3.7	44	0.27 J	1.65 U
Perfluorooctanoic acid	1.1	33	1.65 U	1.65 U
Perfluoropentanoic acid	NS	NS	0.46 BJ	1.65 U
Perfluorotetradecanoic acid	NS	NS	1.65 U	1.65 U
Perfluorotridecanoic acid	NS	NS	1.65 U	1.65 U
Perfluoroundecanoic acid	NS	NS	1.65 U	1.65 U
Perfluorooctanesulfonamide	NS	NS	1.65 U	1.65 U

Tables 1-6  
Brook 156  
740 Brook Avenue, Bronx, NY  
Soil Endpoint Analytical Results  
Notes

## DEFINITIONS

**B** : The analyte was found in an associated blank, as well as in the sample.

**J** : The concentration given is an estimated value.

**NR** : Not reported.

**NS** : No standard.

**T** : Indicates that a quality control parameter has exceeded laboratory limits.

**U** : The analyte was not detected at the indicated concentration.

**mg/kg** : milligrams per kilogram

**µg/kg** : micrograms per kilogram

**µg/L** : micrograms per liter

**ng/L** : nanograms per liter

## STANDARDS

**Part 375 Soil Cleanup Objectives** : Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

Note: Endosulfans ABS represents the detected sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

**Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are highlighted in bold font.**  
**Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray shading.**

**NYSDEC Part 375 PFAS Guidance Values** : New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis and Assessment Of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDCE's Part 375 Remedial Programs Issued January 2021.

**Exceedances of NYSDEC Protection of Groundwater Guidance Values (PGWGVs) are highlighted in bold font.**  
**Exceedances of NYSDEC PFAS Restricted Residential Guidance Values (RRGVs) are highlighted in gray shading.**



**Table 7**  
**156 Brook**  
**Bronx, NY**

Pre-Remediation Baseline and Emerging Contaminants Groundwater Analytical Results  
Volatile Organic Compounds (VOCs)

Client ID	NYSDEC	MW-1-03222019	MW-02_20190415	MW-X_20190415
Lab Sample ID	Class GA	460-177883-1	460-179798-1	460-179798-2
Date Sampled	AWQSGV	03/22/2019	04/15/2019	04/15/2019
Analyte	µg/L			
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1.0 U	1.0 U *	1.0 U *
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U *	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U
1,4-Dioxane	NS	50 U	50 U	50 U
2-Butanone (MEK)	50	5.0 U	5.0 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	NS	5.0 U	5.0 U	5.0 U
Acetone	50	5.0 U	5.0 U	5.0 U
Benzene	1	1.0 U	1.0 U	1.0 U
Bromoform	50	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U
Carbon disulfide	60	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U
Chlorobromomethane	5	1.0 U	1.0 U	1.0 U
Chlorodibromomethane	50	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U
Chloromethane	5	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	2.8	1.0 U	1.0 U
cis-1,3-Dichloropropene	NS	1.0 U	1.0 U	1.0 U
Cyclohexane	NS	1.0 U	1.0 U	1.0 U
Dichlorobromomethane	50	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U *	1.0 U *
Ethylbenzene	5	1.0 U	1.0 U	1.0 U
Ethylene Dibromide	0.0006	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5	1.0 U	1.0 U	1.0 U
Methyl acetate	NS	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	10	1.0 U	1.0 U	1.0 U
Methylcyclohexane	NS	1.0 U	1.0 U *	1.0 U *
Methylene Chloride	5	1.0 U	1.0 U	1.0 U
m-Xylene & p-Xylene	5	1.0 U	1.0 U	1.0 U
o-Xylene	5	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	0.53 J	0.38 J	0.43 J
Toluene	5	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	NS	1.0 U	1.0 U	1.0 U
Trichloroethene	5	2.5	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	0.47 J	1.0 U	1.0 U
Total Conc	NS	6.3	0.38	0.43

**Table 8**  
**156 Brook**  
**Bronx, NY**

Pre-Remediation Baseline and Emerging Contaminants Groundwater Analytical Results  
*8270 Selective Ion Monitoring (SIM)*

Client ID	NYSDEC	MW-1-03222019	MW-02_20190415	MW-X_20190415	FB-03222019
Lab Sample ID	Class GA	200-47978-1	200-48373-1	200-48373-2	200-47978-2
Date Sampled	AWQSGV	03/22/2019	04/15/2019	04/15/2019	03/22/2019
Analyte	µg/L				1
1,4-Dioxane (8270 SIM)	NS	0.2 U	0.2 U	0.2 U	0.2 U

**Table 9**  
**156 Brook**

**Bronx, NY**

Pre-Remediation Baseline and Emerging Contaminants Groundwater Analytical Results  
*Per- and Polyfluoroalkyl Substances (PFAS) Compounds*

Client ID	MW-1-03222019	MW-02_20190415	MW-X_20190415	FB-03222019
Lab Sample ID	200-47978-1	200-48373-1	200-48373-2	200-47978-2
Date Sampled	03/22/2019	04/15/2019	04/15/2019	03/22/2019
Dilution	1	5	5	1
Analyte - ng/l				
6:2 FTS	17.4 U	83.2 U	82.4 U	16.4 U
8:2 FTS	17.4 U	83.2 U	82.4 U	16.4 U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	17.4 U	83.2 U	82.4 U	16.4 U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	17.4 U	83.2 U	82.4 U	16.4 U
Perfluorobutanesulfonic acid (PFBS)	9.97	20.3	39.8	1.64 U
Perfluorobutanoic acid (PFBA)	10.2	11.2	13.8	1.64 U
Perfluorodecanesulfonic acid (PFDS)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluorodecanoic acid (PFDA)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluorododecanoic acid (PFDoA)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluoroheptanesulfonic Acid (PFHpS)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluoroheptanoic acid (PFHpA)	9.64	15.1	22.0	1.64 U
Perfluorohexanesulfonic acid (PFHxS)	10.2	8.32 U	8.03 J	1.64 U
Perfluorohexanoic acid (PFHxA)	11.6	21.3	15.7	1.64 U
Perfluorononanoic acid (PFNA)	2.24	8.32 U	8.24 U	1.64 U
Perfluorooctanesulfonamide (FOSA)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluorooctanesulfonic acid (PFOS)	69.6 B	8.32 U	8.24 U	1.64 U
Perfluorooctanoic acid (PFOA)	25.4	42.9	40.0	1.64 U
Perfluoropentanoic acid (PFPeA)	14.1	13.7	13.8	1.64 U
Perfluorotetradecanoic acid (PFTeA)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluorotridecanoic acid (PFTriA)	1.74 U	8.32 U	8.24 U	1.64 U
Perfluoroundecanoic acid (PFUnA)	1.74 U	8.32 U	8.24 U	1.64 U

Table 10

156 Brook

Bronx, NY

Pre-Remediation Baseline and Emerging Contaminants Groundwater Analytical Results

VOC Field and Trip Blanks

Client ID	NYSDEC	FB-03222019	TB-03222019
Lab Sample ID	Class GA	460-177883-2	460-177883-3
Date Sampled	AWQSGV	03/22/2019	03/22/2019
Analyte	µg/L		
1,1,1-Trichloroethane	5	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U *	1.0 U *
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U
1,4-Dioxane	NS	50 U	50 U
2-Butanone (MEK)	50	5.0 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	NS	5.0 U	5.0 U
Acetone	50	11	5.0 U
Benzene	1	1.0 U	1.0 U
Bromoform	50	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U
Carbon disulfide	60	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U
Chlorobromomethane	5	1.0 U	1.0 U
Chlorodibromomethane	50	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U
Chloroform	7	0.82 J	0.60 J
Chloromethane	5	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U
cis-1,3-Dichloropropene	NS	1.0 U	1.0 U
Cyclohexane	NS	1.0 U	1.0 U
Dichlorobromomethane	50	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U
Ethylene Dibromide	0.0006	1.0 U	1.0 U
Isopropylbenzene	5	1.0 U	1.0 U
Methyl acetate	NS	5.0 U	5.0 U
Methyl tert-butyl ether	10	1.0 U	1.0 U
Methylcyclohexane	NS	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	3.8
m-Xylene & p-Xylene	5	1.0 U	1.0 U
o-Xylene	5	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U
trans-1,3-Dichloropropene	NS	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U
Total Conc	NS	11.82	4.4

**Table 1-4**  
**156 Brook**  
**Bronx, NY**

Pre-Remediation Baseline and Emerging Contaminants Groundwater Analytical Results  
*Notes*

**GENERAL**

**B** : The analyte was found in an associated blank, as well as in the sample.

**J** : The concentration given is an estimated value.

**NS** : No standard.

**U** : The analyte was not detected at the indicated concentration.

**\*** : LCS or LCSD is outside acceptable limits.

**GROUNDWATER**

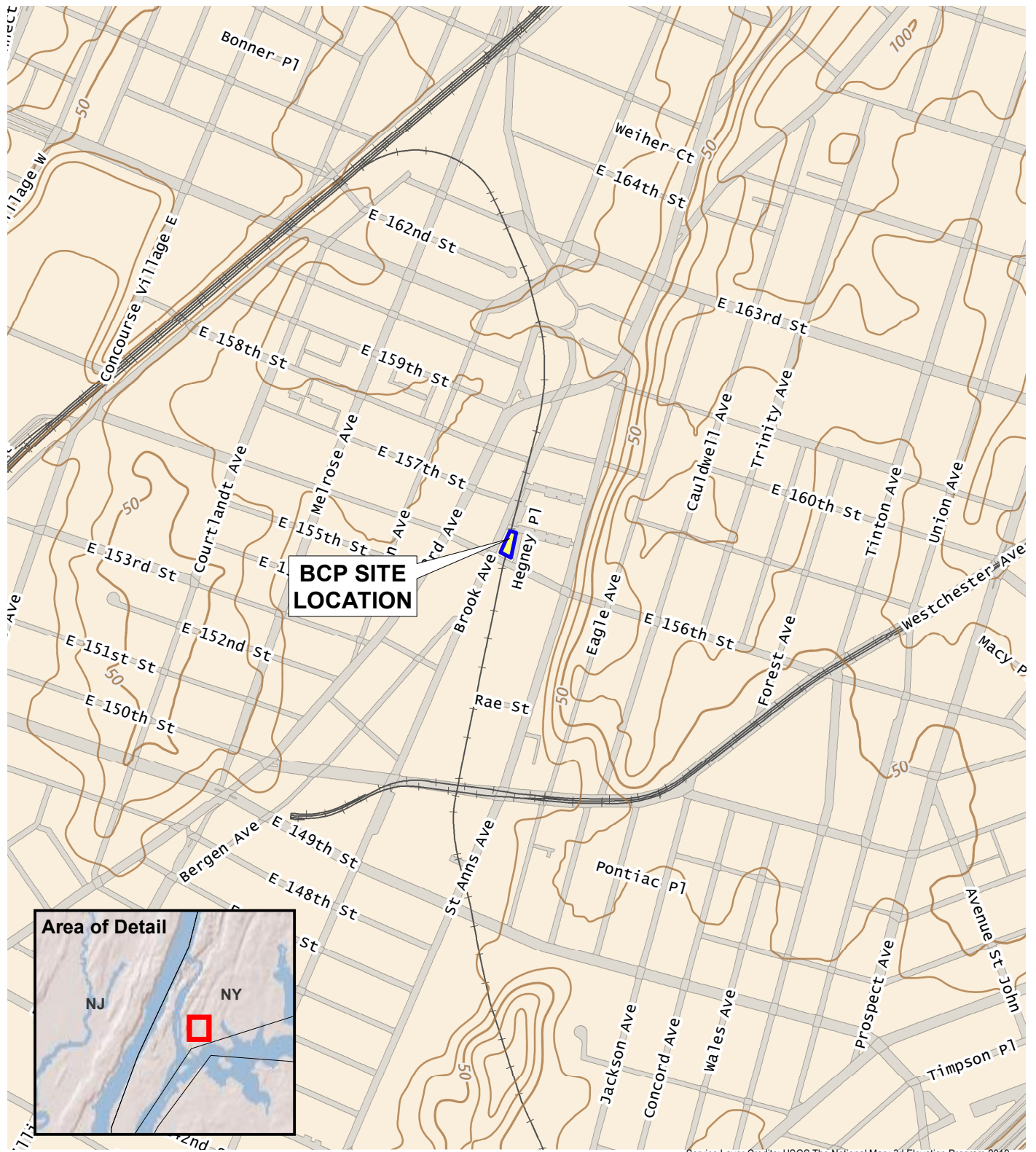
**NYSDEC** : New York State Department of Environmental Conservation Technical and Operational Guidance  
**Class GA** : Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values.  
**AWQSGV**

**µg/L** : micrograms per Liter

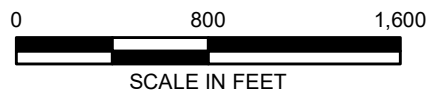
**ng/L** : nanograms per Liter

**Exceedances of NYSDEC Class GA AWQSGV are highlighted in bold font.**

## FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program 2019



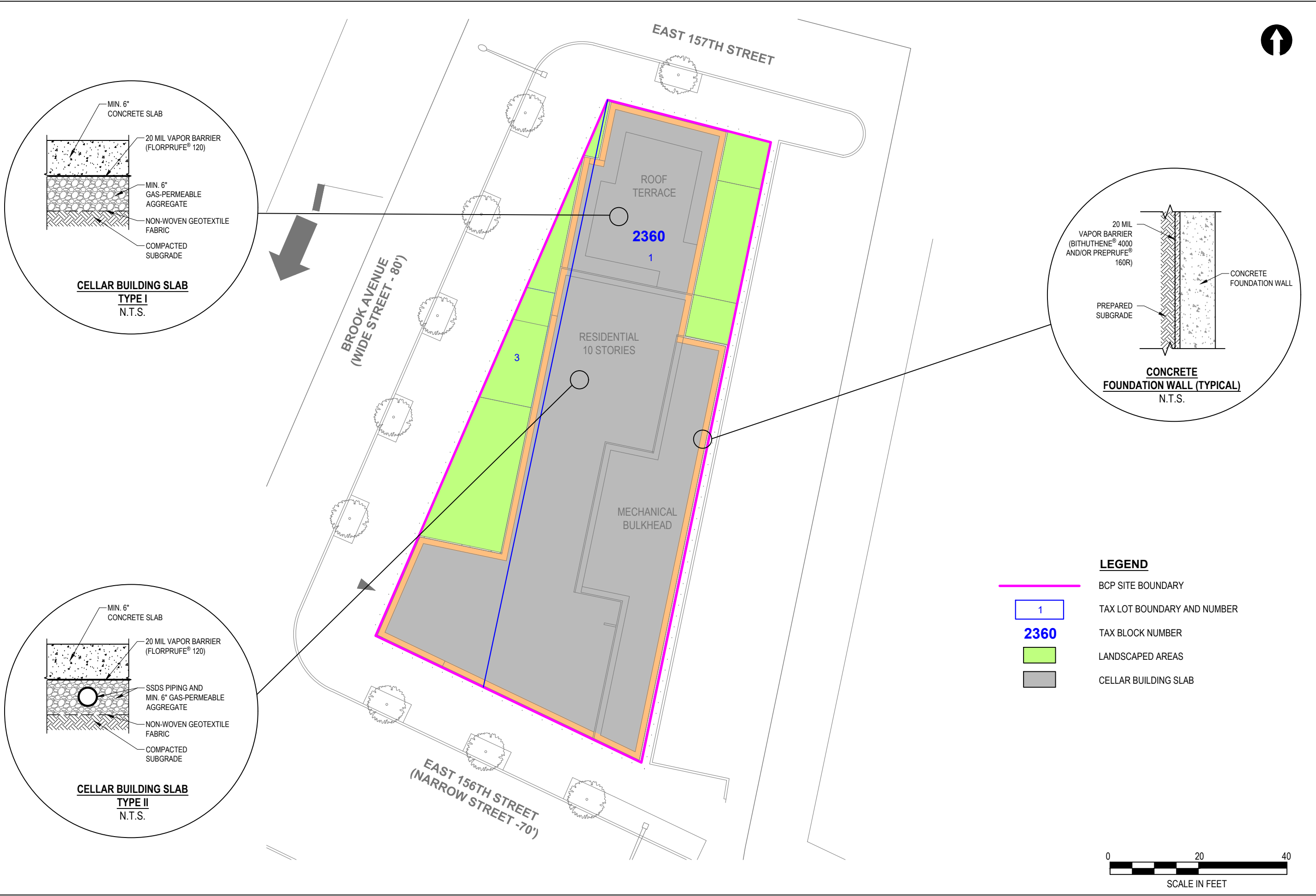
440 Park Avenue South, New York, NY 10016

**Brook 156**  
**740 Brook Avenue**  
 Bronx, New York


# **BROWNFIELD CLEANUP PROGRAM** **SITE LOCATION**

DATE	<b>7/28/2021</b>
PROJECT NO.	<b>11703</b>
FIGURE	<b>1</b>

©2021 AKRF, Inc. W:\Projects\11703 - BROOK 156\11703 - Brook 156\RAW\PCAD\2021\11703 Fig 2 Site Plan new.dwg last save: mveilleux 7/30/2021 1:54 PM



- LEGEND**
- BCP SITE BOUNDARY
  - TAX LOT BOUNDARY AND NUMBER
  - TAX BLOCK NUMBER
  - LANDSCAPED AREAS
  - CELLAR BUILDING SLAB



440 Park Avenue South, New York, NY 10016

**Brook 156**  
**740 Brook Avenue**  
Bronx, New York

**SITE PLAN**

DATE  
**7/30/2021**

PROJECT NO.  
**11703**

FIGURE  
**2**



Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-UST-11.15.20210806
Date Sampled	UUSCO	RRSCO	PGWSCO	8/6/2021
Sample Depth (approx. feet bg)				15
Semivolatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg
Benzo[a]anthracene	1	1	1	2.3
Benzo[a]pyrene	1	1	22	2.2
Benzo[b]fluoranthene	1	1	1.7	2.5
Chrysene	1	3.9	1	2.2
Indeno[1,2,3-cd]pyrene	0.5	0.5	8.2	1.2

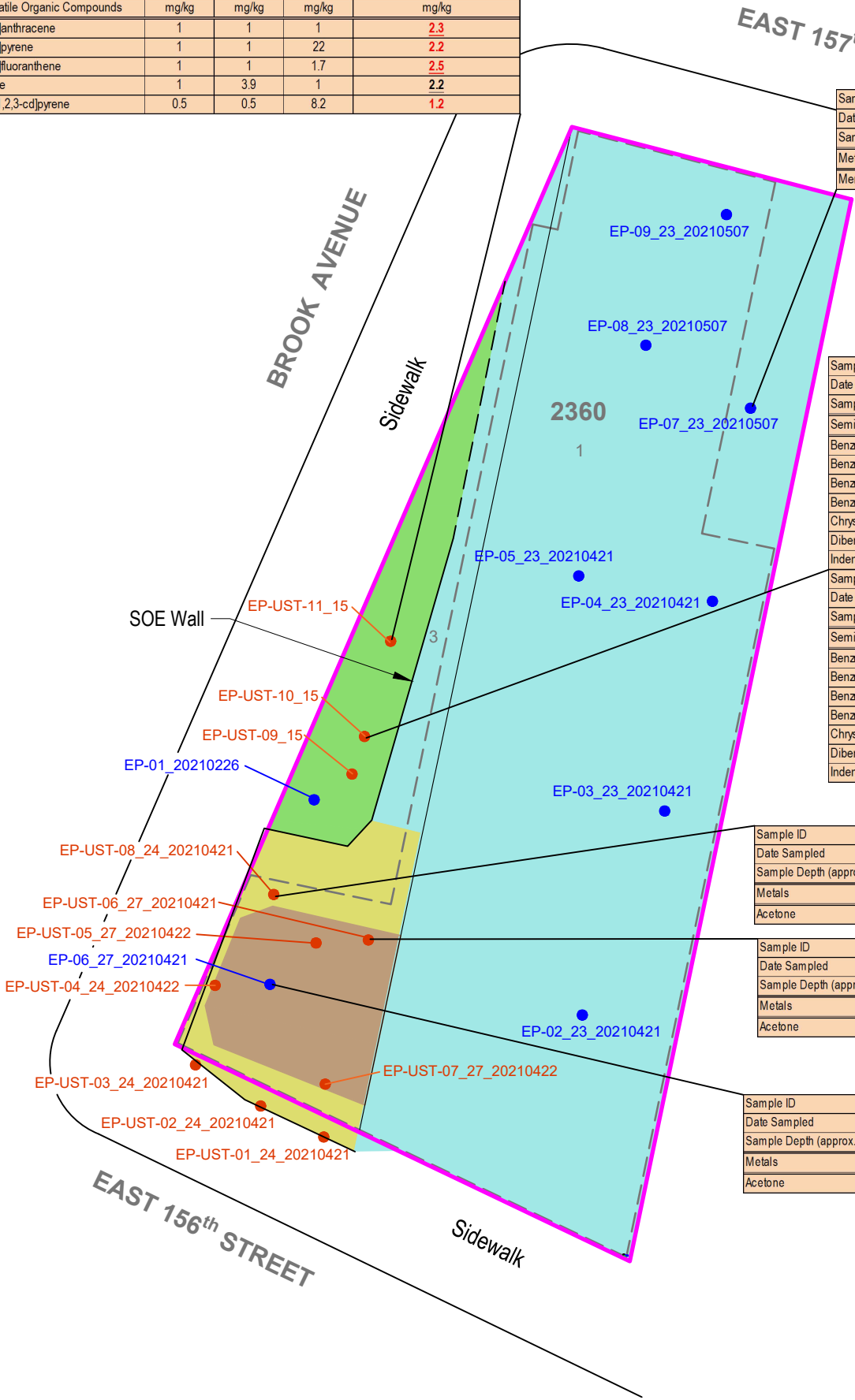
Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-07_23_20210507
Date Sampled	UUSCO	RRSCO	PGWSCO	5/7/2021
Sample Depth (approx. feet bg)				23
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Mercury	0.18	0.81	0.73	1.5

Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-UST-10_15_20210806
Date Sampled	UUSCO	RRSCO	PGWSCO	8/6/2021
Sample Depth (approx. feet bg)				15
Semi-volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg
Benz[a]anthracene	1	1	1	4.8 D
Benz[a]pyrene	1	1	22	5.2 D
Benz[b]fluoranthene	1	1	1.7	6.1 D
Benz[k]fluoranthene	0.8	3.9	1.7	5.5 J
Chrysene	1	3.9	1	4.6 D
Diben[ <i>a,h</i> ]anthracene	0.33	0.33	1000	1.4 J
Indeno[1,2,3- <i>cd</i> ]pyrene	0.5	0.5	8.2	6.2
Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-X-01_20210806
Date Sampled	UUSCO	RRSCO	PGWSCO	8/6/2021
Sample Depth (approx. feet bg)				15
Semi-volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg
Benz[a]anthracene	1	1	1	4.6
Benz[a]pyrene	1	1	22	5.5
Benz[b]fluoranthene	1	1	1.7	6.3
Benz[k]fluoranthene	0.8	3.9	1.7	2.5 J
Chrysene	1	3.9	1	4.7
Diben[ <i>a,h</i> ]anthracene	0.33	0.33	1000	0.64 J
Indeno[1,2,3- <i>cd</i> ]pyrene	0.5	0.5	8.2	3.1

Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-UST-08_24_20210421
Date Sampled	UUSCO	RRSCO	PGWSCO	4/21/2021
Sample Depth (approx. feet bg)				24
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Acetone	0.05	100	0.05	<b>0.17</b>

Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-UST-06_27_20210421
Date Sampled	UUSCO	RRSCO	PGWSCO	4/21/2021
Sample Depth (approx. feet bg)				27
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Acetone	0.05	100	0.05	<b>0.068</b>

Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-06_27_20210421
Date Sampled	UUSCO	RRSCO	PGWSCo	4/21/2021
Sample Depth (approx. feet bg)				27
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Acetone	0.05	100	0.05	<b>0.071</b>



## LEGEND

- |                    |  |
|--------------------|--|
|                    | APPROXIMATE BCP SITE BOUNDARY                  |
| 1                  | TAX LOT NUMBER                                 |
| 2360               | TAX BLOCK NUMBER                               |
| [ ] [ ]<br>[ ] [ ] | BUILDING FOOTPRINT                             |
| ●                  | FINAL ENDPOINT SAMPLE LOCATION (FULL LIST)     |
| ●                  | FINAL UST ENDPOINT SAMPLE LOCATION (VOCs/PAHs) |
| ■                  | REMEDIAL EXCAVATION COMPLETED TO 15 FEET BG    |
| ■                  | REMEDIAL EXCAVATION COMPLETED TO 23 FEET BG    |
| ■                  | REMEDIAL EXCAVATION COMPLETED TO 24 FEET BG    |
| ■                  | REMEDIAL EXCAVATION COMPLETED TO 27 FEET BG    |

BG = BELOW GRADE

NOTE:  
1. SOIL BORING LOCATIONS SURVEYED BY FEHRINGER SURVEYING.

Sample ID	NYSDEC	NYSDEC	NYSDEC	EP-UST-08_24_20210421
Date Sampled	UUSCO	RRSCO	PGWSCo	4/2/2021
Sample Depth (approx. feet/bg)				24
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Acetone	0.05	100	0.05	<b>0.17</b>

Analyte/Compound

## Concentration

**Part 375**  
**Soil** : Soil Cleanup Objectives (SCOs) listed in New York State Department of Environmental  
**Cleanup** : Conservation (NYSDEC) Part 375 Regulations (6 NYCRR Part 375).  
**Objectives**

Exceedances of Unrestricted Use Soil Cleanup Objectives (UUSCOs) are indicated in bold font.  
Exceedances the Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are indicated in red.  
Exceedances of the Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are underlined.

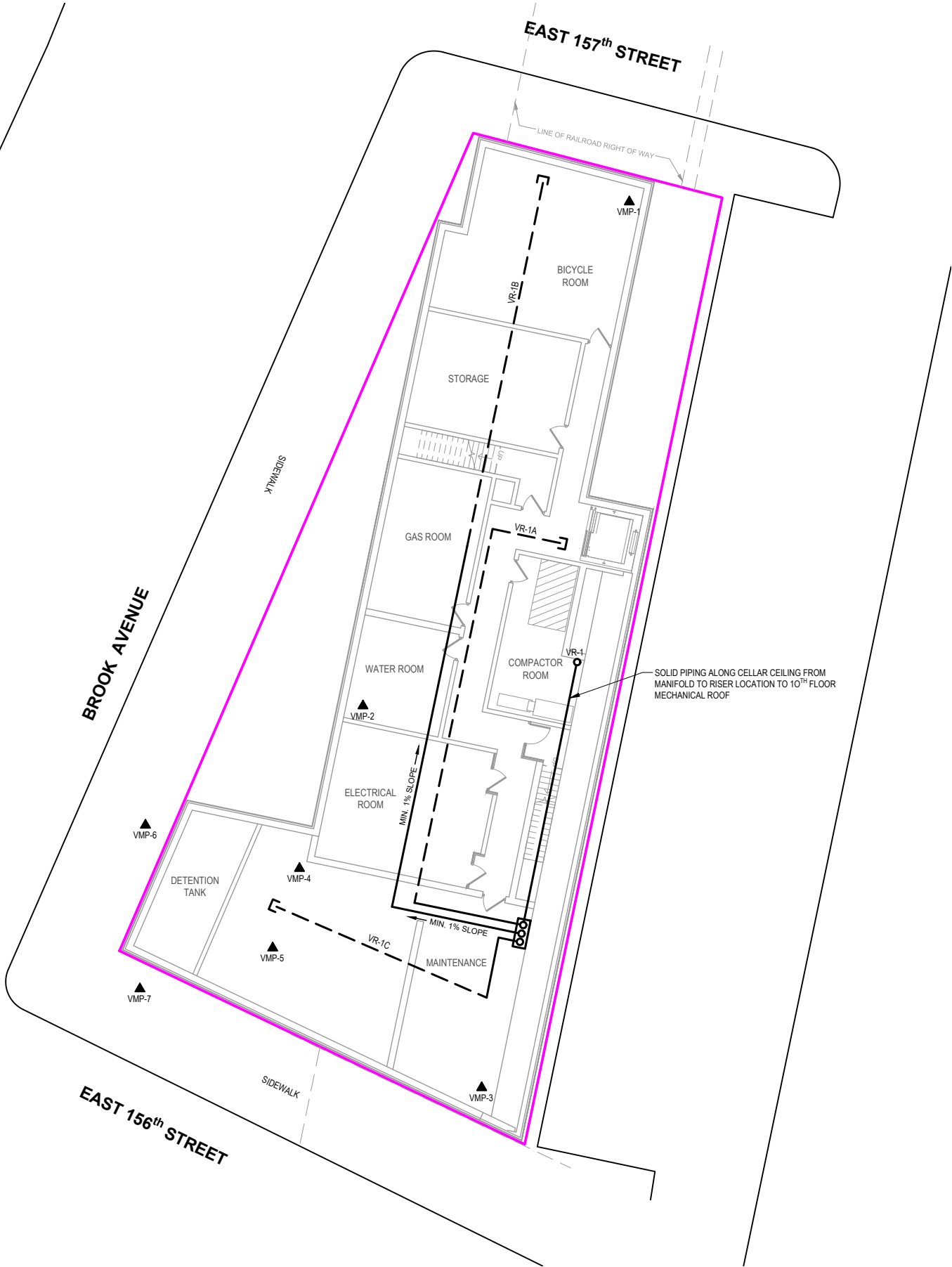
EP-X-01\_20210806 is a blind duplicate of EP-UST-10\_15\_20210806.

**mg/kg** : milligrams per kilogram = parts per million (ppm)  
**D** : Diluted Value  
**J** : Estimated Concentration

SOURCE: FEHRINGER SURVEYING, PC DATED 4/22/2021, UPDATED 8/6/2021.



©2021 AKRF, Inc. W:\Projects\11703 - BROOK 156\11703 - Brook 156\RAW\PCAD\2021\11703 Fig 4 SSDS Plan.dwg last save: mvelieux 7/30/2021 10:39 AM



**LEGEND**

- BCP SITE BOUNDARY
- SLOTTED 0.02" SCHEDULE 40 4" PVC PIPE BENEATH SLAB WITH ENDCAP
- SOLID SCHEDULE 40 4" PVC PIPE BENEATH SLAB
- MONITORING POINT LOCATION WITH ID
- VERTICAL RISER PENETRATION LOCATION WITH ID
- SLAB PENETRATION / MANIFOLD
- MINIMUM 1% SLOPE



Brook 156  
740 Brook Avenue  
Bronx, New York

SSDS PLAN



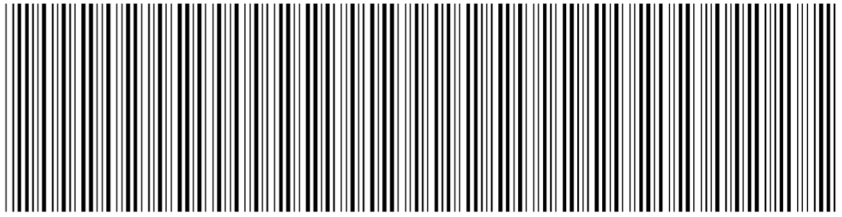
440 Park Avenue South, New York, NY 10016

DATE
7/30/2021
PROJECT NO.
11703
FIGURE
4

**APPENDIX A**  
**ENVIRONMENTAL EASEMENT**

**NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER**

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



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**RECORDING AND ENDORSEMENT COVER PAGE**

**PAGE 1 OF 12**

**Document ID: 2021082701414001**

Document Date: 08-03-2021

Preparation Date: 08-27-2021

Document Type: EASEMENT

Document Page Count: 10

**PRESENTER:**

CHICAGO TITLE INSURANCE COMPANY  
711 THIRD AVE, 8TH FLOOR  
CT21-80079-BX  
NEW YORK, NY 10017  
212-880-1453  
CTINYRECORDING@CTT.COM

**RETURN TO:**

CHICAGO TITLE INSURANCE COMPANY  
711 THIRD AVE, 8TH FLOOR  
NEW YORK, NY 10017

**PROPERTY DATA**

Borough	Block	Lot	Unit	Address
BRONX	2360	1	Entire Lot	N/A EAST 156 STREET

**Property Type:** NON-RESIDENTIAL VACANT LAND

Borough	Block	Lot	Unit	Address
BRONX	2360	3	Entire Lot	N/A EAST 156 STREET

**Property Type:** NON-RESIDENTIAL VACANT LAND

**CROSS REFERENCE DATA**

CRFN \_\_\_\_\_ or DocumentID \_\_\_\_\_ or \_\_\_\_\_ Year \_\_\_\_\_ Reel \_\_\_\_\_ Page \_\_\_\_\_ or File Number \_\_\_\_\_

**PARTIES**

**GRANTOR/SELLER:**

BROOK 156 ASSOCIATES, L.P.  
C/O: PHIPPS HOUSES, 902 BROADWAY, 13TH FLOOR  
NEW YORK, NY 10010

**GRANTEE/BUYER:**

DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION  
625 BROADWAY  
ALBANY, NY 12233

☒ Additional Parties Listed on Continuation Page

**FEES AND TAXES**

**Mortgage :**

Mortgage Amount:	\$	0.00
Taxable Mortgage Amount:	\$	0.00
Exemption:		
TAXES: County (Basic):	\$	0.00
City (Additional):	\$	0.00
Spec (Additional):	\$	0.00
TASF:	\$	0.00
MTA:	\$	0.00
NYCTA:	\$	0.00
Additional MRT:	\$	0.00
<b>TOTAL:</b>	<b>\$</b>	<b>0.00</b>
Recording Fee:	\$	90.00
Affidavit Fee:	\$	0.00

**Filing Fee:**

	\$	100.00
NYC Real Property Transfer Tax:	\$	0.00
NYS Real Estate Transfer Tax:	\$	0.00

**RECORDED OR FILED IN THE OFFICE  
OF THE CITY REGISTER OF THE**

**CITY OF NEW YORK**

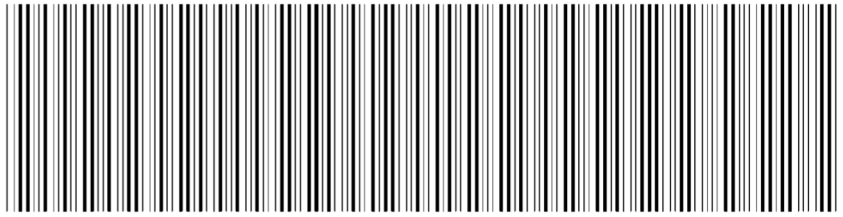
Recorded/Filed 09-07-2021 11:20  
City Register File No.(CRFN):  
**2021000352293**



*Annette M. Hill*

*City Register Official Signature*

NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER



2021082701414001001CC07F

**RECORDING AND ENDORSEMENT COVER PAGE (CONTINUATION)**

**PAGE 2 OF 12**

**Document ID: 2021082701414001**

Document Date: 08-03-2021

Preparation Date: 08-27-2021

Document Type: EASEMENT

**PARTIES**

**GRANTOR/SELLER:**

BROOK 156 HOUSING DEVELOPMENT FUND  
CORPORATION

C/O: PHIPPS HOUSES, 902 BROADWAY, 13TH FLOOR  
NEW YORK, NY 10010

A2-80079-BX

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36  
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made <sup>as of</sup> this 3<sup>rd</sup> day of April, 2021, between Owner(s), Brook 156 Housing Development Fund Corporation, (the "Grantor Fee Owner") having an office at 902 Broadway, 13th Floor, New York, New York 10010, and Brook 156 Associates, L.P., (the "Grantor Beneficial Owner"), having an office at 902 Broadway, 13th Floor, New York, New York 10010, (collectively, the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

**WHEREAS**, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

**WHEREAS**, Grantor Fee Owner, is the owner of real property located at the address of 740 Brook Avenue in the City of New York, County of Bronx and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 2360 Lot 1, being the same as that property conveyed to Grantor Fee Owner by deed dated September 13, 2011 and recorded in the City Register of the City of New York as CRFN # 2011000358359.

**WHEREAS**, Grantor Fee Owner, is the owner of real property located at the address of 740 Brook Avenue in the City of New York, County of Bronx and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 2360 Lot 3, being the same as that property conveyed to Grantor Fee Owner by deed dated October 1, 2020 and recorded in the City Register of the City of New York as CRFN # 2020000298852.

**WHEREAS**, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.1635 +/- acres, and is hereinafter more fully described in the Land Title Survey dated February 23, 2021 prepared by Saeid Jalilvand, L.L.S. of Montrose Surveying Co., LLP, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

**WHEREAS**, Grantor Beneficial Owner, is the owner of the beneficial interest in the Controlled Property being the same as a portion of that beneficial interest conveyed to Grantor Beneficial Owner by means of a Declaration of Interest and Nominee Agreement dated September 21, 2020 and recorded in City Register of the City of New York as CRFN # 2020000298853; and

**WHEREAS**, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C203078-03-15, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),  
Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial  
as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, New York 12233  
Phone: (518) 402-9553



D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

**This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.**

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

- (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the

State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Site Number: C203078

Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:

Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

**Remainder of Page Intentionally Left Blank**

IN WITNESS WHEREOF, Grantor Fee Owner has caused this instrument to be signed in its name.

Brook156 Housing Development Fund Corporation:

By: Michael Wadman

Print Name: Michael Wadman

Title: Vice President Date: 7/28/2021

**Grantor's Acknowledgment**

STATE OF NEW YORK )  
COUNTY OF New York ) ss:

On the 28 day of July, in the year 2021, before me, the undersigned, personally appeared Michael Wadman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Gill Benedek  
Notary Public - State of New York

Gill Benedek  
NOTARY PUBLIC, STATE OF NEW YORK  
Registration No. 02BE3622972  
Qualified in Kings County  
Commission Expires June 7, 2023

**IN WITNESS WHEREOF**, Grantor Beneficial Owner has caused this instrument to be signed in its name.

Brook 156 Associates, L.P.:

By: Michael Wadman

Print Name: Michael Wadman

Title: Vice President Date: 7/28/2021

**Grantor's Acknowledgment**

STATE OF NEW YORK )  
COUNTY OF New York ) ss:

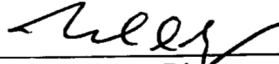
On the 28<sup>th</sup> day of July, in the year 2021, before me, the undersigned, personally appeared Michael Wadman personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Gill Benedek  
Notary Public - State of New York

Gill Benedek NOTARY PUBLIC, STATE OF NEW YORK Registration No. 02BE3622972 Qualified in Kings County Commission Expires June 7, 2023
--

**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK**, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

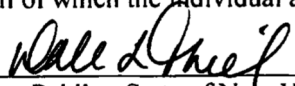
By:

  
Michael J. Ryan, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

STATE OF NEW YORK     )  
                                      ) ss:  
COUNTY OF ALBANY     )

On the 3<sup>rd</sup> day of August, in the year 2021 before me, the undersigned, personally appeared Michael J. Ryan personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public - State of New York

Dale L. Thiel  
Notary Public, State of New York  
Qualified in Columbia County  
No 01TH6414394  
Commission Expires February 2/22/2025

**SCHEDULE "A" PROPERTY DESCRIPTION**

**Perimeter and Environmental Easement Description**

All that certain plot, piece or parcel of land, situate, lying and being in the Borough and County of Bronx, City and State of New York, bounded and described as follows:

Beginning at a point formed by the intersection of the easterly side of Brook Avenue and the northerly side of East 156th Street;

Running thence along the easterly side of Brook Avenue in a northerly direction, 132.07 feet to a point;

Thence along a line set at an interior angle of 87° 23' 26" (per deed); 98 degrees 51' 40" (per survey) to the previous line, a distance of 38.13 feet to a point;

Thence along a line set at an interior angle of 92° 45' 12" to the previous line, a distance of 143.34 feet to the northerly side of East 156th Street;

Thence along the northerly side of 156th Street, 66.58 feet to the place or point of beginning.

Being approximately 0.164 acres more or less.



TITLE NO.

E. 156th STREET  
(MELROSE STREET)

ESTABLISHED 1876 \* SUCCESSOR TO:

B.G. MEINKHEIM C.S.\*C.U. POWELL C.E.,C.S.\*L.C.L. SMITH C.S.\*NATHAN CAMPBELL C.E.,C.S.\*A.U. WHITSON C.E.,C.S.\*  
WILLIAM L. SAVACOL C.E.,L.S.,C.S.\*A.U. WHITSON INC. C.E.,C.S.\*G. WEBER L.S.,C.S.\*C. STIDOLPH R.A.,L.S.\*WHITSON &  
POWELL INC. P.E.,L.S.,C.S.\*KELLER & POWELL P.E.,L.S.,C.S.\*LOUIS MONTROSE C.E.,L.S.,C.S.\*FRED J. POWELL P.E.,L.S.,C.S.\*

BROOK AVENUE

20 0 20 40 60  
GRAPHIC SCALE - FEET

SURVEY NO. 62510-40

62510-40.DWG  
62510-40.CRD  
62510-44.CRD

REV	DATE	DESCRIPTION	ck
—	09-24-18	ARCHITECTURAL SURVEY	
A	01-29-20	ARCHITECTURAL SURVEY UPDATED	
B	02-23-21	ARCHITECTURAL SURVEY UPDATED	
C	08-10-21	ARCHITECTURAL SURVEY UPDATED	
D	—	TAX LOTS MERGED AS OF 12-17-2021	

## LEGEND

ASPH.....ASPHALT	PR.....PEDESTRIAN RAMP
BK.....BRICK	RET.....RETAINING
BG.....BUMPER GUARD	RIM.....RIM ELEVATION SEWER MANHOLE
BSMT.....BASEMENT	SFCR...STEEL FACED CURB ROUND
CC.....CURB CUT	STY.....STORY
CCR.....CONCRETE CURB ROUND	TB.....TOP OF BANK ELEVATION
CD.....CELLAR DOOR	⊕.....TRAFFIC LIGHT
CLF.....CHAIN LINK FENCE	TEL.....TELEPHONE
CO.....CATCH BASIN CLEAN OUT	TP.....TREE PIT
CONC.....CONCRETE	Ⓣ.....TRAFFIC SIGN
CRF.....CHAIN ROPE FENCE	TW.....ELEVATION AT TOP OF WALL
CWA.....CELLAR WINDOW AREA	UP.....UTILITY POLE
DR.....DRAIN	VU.....VALVE UNKNOWN
EL.....ELEVATION	VLTV.....VAULT UNKNOWN
FAB.....FIRE ALARM BOX	VP.....VENT PIPE
FC.....FILL CAP	WV.....WATER VALVE
FL EL.....FLOOR ELEVATION	12"G.....GAS MAIN WITH SIZE
GP.....GUARD POLE	12"S.....SEWER MAIN WITH SIZE
GV.....GAS VALVE	12"W.....WATER MAIN WITH SIZE
IF.....IRON FENCE	■.....CATCH BASIN
INL.....CATCH BASIN INLET ELEVATION	Ⓜ.....ELECTRIC MANHOLE / VAULT
INV.....SEWER INVERT ELEVATION	Ⓢ.....FIRE MANHOLE
⚡.....LIGHT POLE	Ⓜ.....GAS MANHOLE
Ⓜ.....MONITORING WELL	Ⓢ.....SEWER MANHOLE
MB.....MAIL BOX	Ⓢ.....TELEPHONE MANHOLE
MHU.....UNKNOWN MANHOLE	Ⓢ.....WATER MANHOLE
OF.....OIL FILL	Ⓢ.....TRAFFIC VAULT
OHV.....OVERHEAD WIRES	Ⓢ.....HYDRANT
P.....POLE	Ⓢ.....SIAMESE
PAVT.....PAVEMENT	Ⓢ.....TREE WITH SIZE
PM.....PARKING METER	Ⓢ.....ESTABLISHED/LEGAL GRADE
PMULT.....POLE, MULTIPLE USAGE	(rim 26.28).....ELEVATIONS IN BOROUGH DATUM
CATV.....CABLE TV BOX	(inv. -2.1)
⬆.....TRAFFIC FLOW	

CITY OF NEW YORK

COUNTY: THE BRONX

TAX BLOCK 2360

SCALE: 1" = 20'

TAX LOT 1

STANDARD U.S.

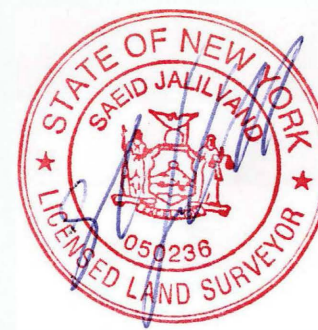
© ALL RIGHTS RESERVED 2018/2020/2021

DRAWN: J.R./F.S./O.A./A.M.O.

UNAUTHORIZED ALTERATION OR ADDITION  
TO THIS SURVEY IS A VIOLATION OF  
SECTION 7209 OF THE NEW YORK STATE  
EDUCATION LAW

ONLY COPIES FROM THE ORIGINAL OF  
THIS SURVEY MARKED WITH AN ORIGINAL  
OF THE LAND SURVEYOR'S INKED SEAL  
OR HIS EMBOSSED SEAL SHALL BE  
CONSIDERED TO BE VALID TRUE COPIES

CERTIFICATIONS INDICATED HEREON SHALL  
RUN ONLY TO THE PERSON FOR WHOM THE  
SURVEY IS PREPARED AND ON HIS BEHALF  
TO THE TITLE COMPANY. GOVERNMENTAL  
AGENCY AND LENDING INSTITUTION LISTED  
HEREON, AND TO THE ASSIGNEES OF THE  
LENDING INSTITUTION, CERTIFICATIONS  
ARE NOT TRANSFERABLE TO ADDITIONAL  
INSTITUTIONS OR SUBSEQUENT OWNERS



**MONTROSE**  
SURVEYING CO., LLP.  
CITY & LAND SURVEYORS

116 20 METROPOLITAN AVE • RICHMOND HILL, NY 11418-1090 • (718) 849-0600

## GENERAL NOTES:

- ELEVATIONS AND ESTABLISHED GRADES SHOWN HEREON REFER TO NAVD 1988 WHICH IS 1.508 FEET BELOW THE BRONX TOPOGRAPHICAL BUREAU DATUM.
- ESTABLISHED GRADES SHOWN HEREON REFER TO TOP OF CURB. IF ESTABLISHED GRADES VARY SUBSTANTIALLY WITH EXISTING ELEVATIONS CONSULT WITH THE HIGHWAY DEPARTMENT BEFORE DESIGNING IMPROVEMENTS.
- SIZES AND LOCATIONS OF WATER MAINS SHOWN HEREON AS SUPPLIED BY THE DEPARTMENT OF WATER SUPPLY, BOROUGH OF THE BRONX. LOCATIONS OF WATER SUPPLY MANHOLES, HYDRANTS AND WATER VALVES AS OBTAINED FROM FIELD MEASUREMENT.
- SIZES AND TYPES OF SEWERS SHOWN HEREON AS OBTAINED FROM THE BOROUGH OF THE BRONX SEWER DEPARTMENT RECORDS. SEWER MANHOLE RIM AND INVERT ELEVATIONS SHOWN HEREON OBTAINED BY FIELD MEASUREMENTS UNLESS INDICATED (\*) WHICH DENOTES INVERT INACCESSIBLE OR MANHOLE NOT FOUND IN FIELD. INFORMATION SHOWN IN THIS MANNER IS AS OBTAINED FROM THE BOROUGH OF THE BRONX SEWER DEPARTMENT RECORDS.
- ELECTRIC AND GAS INFORMATION SHOWN HEREON AS SUPPLIED BY THE CONSOLIDATED EDISON COMPANY OF NEW YORK.
- TELEPHONE INFORMATION SHOWN HEREON AS SUPPLIED BY THE EMPIRE CITY SUBWAY CO.
- FIRE ALARM INFORMATION SHOWN HEREON AS SUPPLIED BY THE NEW YORK CITY FIRE DEPARTMENT.
- CABLE TELEVISION INFORMATION SHOWN HEREON AS SUPPLIED BY THE TIME WARNER CABLE COMPANY OF NEW YORK.
- AERIAL CABLE TV SERVICES IN THIS AREA.
- LOCATIONS OF ALL UTILITIES AND SUBSTRUCTURES ARE APPROXIMATE ONLY. THE INFORMATION GIVEN ON THE SURVEY PERTAINING TO UTILITIES AND SUBSTRUCTURES IS NOT CERTIFIED AS TO ACCURACY OR COMPLETENESS. CONSULT WITH THE APPROPRIATE COMPANY OR AGENCY BEFORE DESIGNING IMPROVEMENTS.
- THE OWNER, CONTRACTOR AND/OR HIS AGENTS MUST NOTIFY THE APPROPRIATE UTILITY COMPANIES AND/OR AGENCIES AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION IN ACCORDANCE WITH INDUSTRIAL CODE RULE 753.
- NO EVIDENCE OF EXISTING STREAMS, CREEKS, DITCHES OR WATER COURSES ON/OR CROSSING PROPERTY SURVEYED.
- NOT ALL SUBSURFACE INFORMATION PLOTTED.

BRONX TOPO BUREAU DATUM 2.608

MEAN SEA LEVEL 0.00 (NAVD 1988)

MEAN SEA LEVEL 0.00 (NGVD1929)

NAVD 1988 DATUM IS 1.508 FEET BELOW  
THE BRONX TOPO BUREAU DATUMParcel Area=7,123 SQ. FT.  
or 0.163522 Acre

## FLOOD HAZARD NOTE

THE PARCEL SURVEYED IS COMPRISED OF AREAS DESIGNATED AS  
ZONE X (LESS THAN 0.2% CHANCE OF FLOODING)  
FEDERAL EMERGENCY MANAGEMENT AGENCY  
NATIONAL FLOOD INSURANCE PROGRAM  
FLOOD INSURANCE RATE MAP  
COMMUNITY PANEL NUMBER 360497 0083 F  
EFFECTIVE DATE SEPTEMBER 5, 2007





VICINITY MAP  
NOT TO SCALE

ENVIRONMENTAL EASEMENT DESCRIPTION

All that certain plot, piece or parcel of land, situate, lying and being in the Borough and County of Bronx, City and State of New York, bounded and described as follows:

Beginning at a point formed by the intersection of the easterly side of Brook Avenue and the northerly side of East 156th Street;

Running thence along the easterly side of Brook Avenue in a northerly direction, 132.07 feet to a point;

Thence along a line set at an interior angle of 98° 51' 40" to the previous line, a distance of 38.13 feet to a point;

Thence along a line set at an interior angle of 92° 45' 12" to the previous line, a distance of 143.34 feet to the northerly side of East 156th Street;

Thence along the northerly side of 156th Street, 66.58 feet to the place or point of beginning.

The above described Parcel has an Area of 7,123 SQ. FT. or 0.1635 Acre.

PARCEL DESCRIPTION

Parcel I: Block 2360 Former Lot 1

All that certain plot, piece or parcel of land, situate, lying and being in the Borough and County of Bronx, City and State of New York, bounded and described as follows:

Beginning at a point on the northerly side of East 156th Street distant 26.98 feet easterly from the corner formed by the intersection of the northerly side of East 156th Street with the easterly side of Brook Avenue;

Running thence Easterly along the northerly side of East 156th Street, 39.60 feet to a point;

Running thence Northerly along a line forming an angle of 76 degrees 15 minutes 48 seconds on the Northwest with the northerly side of East 156th Street, 143.34 feet to a point;

Running thence Westerly along a line forming an angle of 92 degrees 45 minutes 12 seconds on the Southwest with the last mentioned course, 38.13 feet to a point; and

Running thence Southerly along a line forming an angle of 87 degrees 24 minutes 26 seconds on the Southeast with the last mentioned course, 135.77 feet to the northerly side of East 156th Street, the point or place of beginning.

Parcel II: Block 2360 Former Lot 3

All that certain plot, piece or parcel of land, situate, lying and being in the Borough of Bronx, County of Bronx, City of New York and State of New York, bounded and described as follows:

Beginning at the corner formed by the intersection of the northerly side of one hundred Fifty-Sixth Street with the easterly side of Brook Avenue;

Running thence Easterly along the northerly side of one hundred Fifty-Sixth Street, twenty-six and ninety-five one hundredths feet, more or less, to the land of the Port Morris Branch, so called of the New York and Harlem River Railroad;

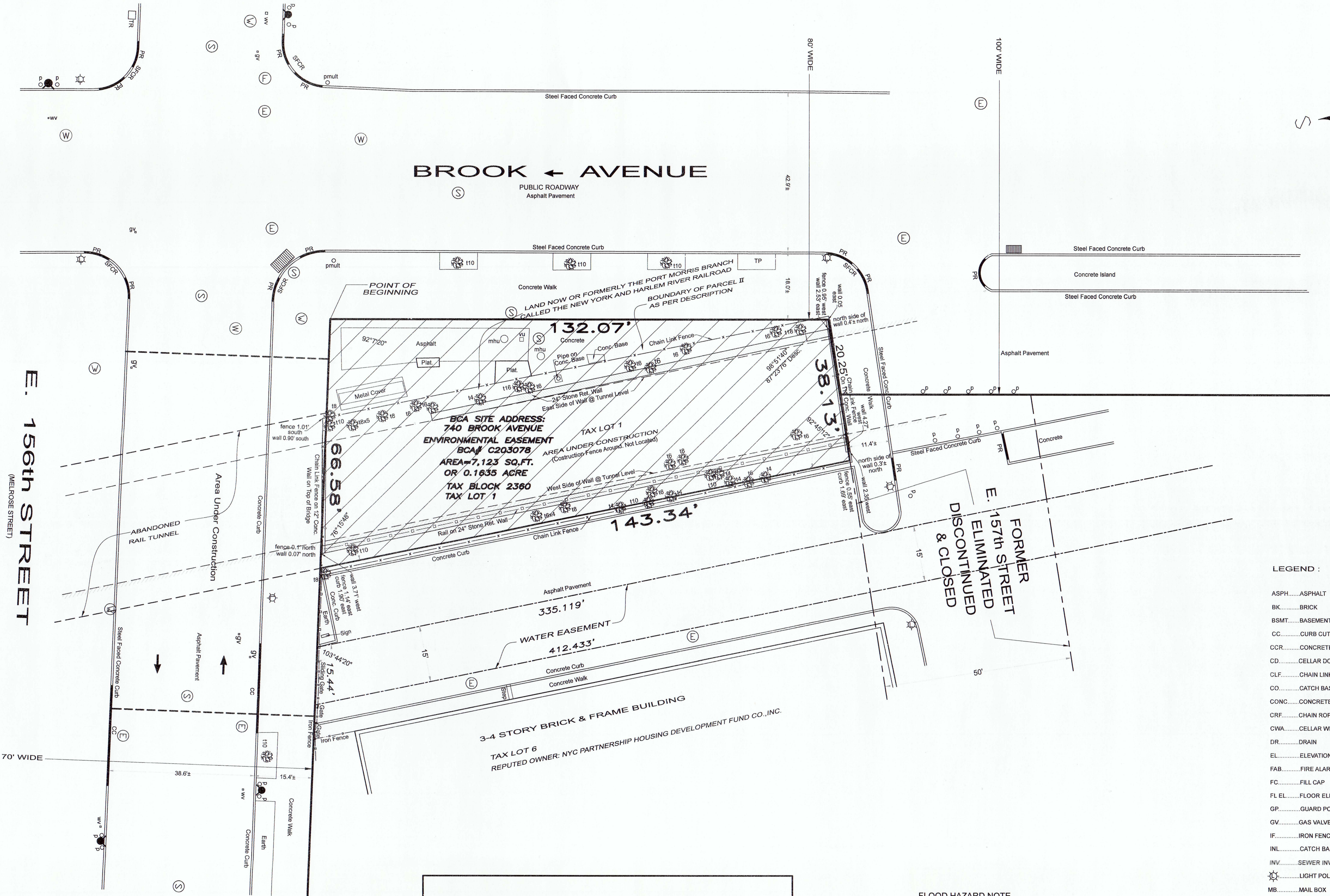
Running thence Northerly along the westerly side of said land of said Railroad, one hundred and twenty-three and fifty one hundredths feet to the easterly side of Brook Avenue at a point thereon distant, twelve and fifty-four one hundredths feet southerly from the corner formed by the intersection of the said easterly side of Brook Avenue with the southerly side of one hundred and Fifty-Seventh Street;

Thence Southerly along the easterly side of Brook Avenue, one hundred and nineteen and fifty-three one hundredths feet to the corner aforesaid, the point or place of beginning.

THE PROPERTY IS COVERED BY BCA SITE # C203078

ENVIRONMENTAL EASEMENT AREA ACCESS

THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT.

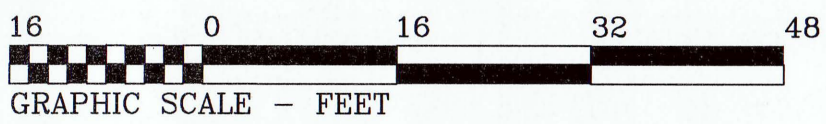


BROWNFIELD SITE &  
ENVIRONMENTAL EASEMENT AREA

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law.

THE ENGINEERING AND INSTITUTIONAL CONTROLS for the Easement are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@gw.dec.state.ny.us.

FLOOD HAZARD NOTE  
THE PARCEL SURVEYED IS COMPRISED OF AREAS DESIGNATED AS ZONE X (LESS THAN 0.2% CHANCE OF FLOODING)  
FEDERAL EMERGENCY MANAGEMENT AGENCY  
NATIONAL FLOOD INSURANCE PROGRAM  
FLOOD INSURANCE RATE MAP  
COMMUNITY PANEL NUMBER 365487 0083 F  
EFFECTIVE DATE SEPTEMBER 5, 2007



Parcel Area=7,123 SQ. FT.  
or 0.1635 Acre

LEGEND :

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| ASPH..... ASPHALT                    | PR..... PEDESTRIAN RAMP              |
| BK..... BRICK                        | RET..... RETAINING                   |
| BSMT..... BASEMENT                   | RIM..... RIM ELEVATION SEWER MANHOLE |
| CC..... CURB CUT                     | SFCR..... STEEL FACED CURB ROUND     |
| CCR..... CONCRETE CURB ROUND         | STY..... STORY                       |
| CD..... CELLAR DOOR                  | TB..... TOP OF BANK ELEVATION        |
| CLF..... CHAIN LINK FENCE            | φ..... TRAFFIC LIGHT                 |
| CO..... CATCH BASIN CLEAN OUT        | TEL..... TELEPHONE                   |
| CONC..... CONCRETE                   | TP..... TREE PIT                     |
| CRF..... CHAIN ROPE FENCE            | □..... TRAFFIC SIGN                  |
| CWA..... CELLAR WINDOW AREA          | TW..... ELEVATION AT TOP OF WALL     |
| DR..... DRAIN                        | UP..... UTILITY POLE                 |
| EL..... ELEVATION                    | VU..... VALVE UNKNOWN                |
| FAB..... FIRE ALARM BOX              | VLTV..... VAULT UNKNOWN              |
| FC..... FILL CAP                     | VP..... VENT PIPE                    |
| FL EL..... FLOOR ELEVATION           | WW..... WATER VALVE                  |
| GP..... GUARD POLE                   | 12"G..... GAS MAIN WITH SIZE         |
| GV..... GAS VALVE                    | 12"S..... SEWER MAIN WITH SIZE       |
| IF..... IRON FENCE                   | 12"W..... WATER MAIN WITH SIZE       |
| INL..... CATCH BASIN INLET ELEVATION | ..... CATCH BASIN                    |
| INV..... SEWER INVERT ELEVATION      | Ⓜ Ⓜ..... ELECTRIC MANHOLE / VAULT    |
| ☼..... LIGHT POLE                    | Ⓜ..... FIRE MANHOLE                  |
| MB..... MAIL BOX                     | Ⓜ..... GAS MANHOLE                   |
| MHU..... UNKNOWN MANHOLE             | Ⓜ..... SEWER MANHOLE                 |
| OF..... OIL FILL                     | Ⓜ..... TELEPHONE MANHOLE             |
| OHW..... OVERHEAD WIRES              | Ⓜ..... WATER MANHOLE                 |
| P..... POLE                          | Ⓜ..... TRAFFIC VAULT                 |
| PAVT..... PAVEMENT                   | Ⓜ..... HYDRANT                       |
| PM..... PARKING METER                | Ⓜ..... TREE WITH SIZE                |
| PMULT..... POLE, MULTIPLE USAGE      | 17.0..... ESTABLISHED/LEGAL GRADE    |
| SI..... SIAMSE                       | ..... TRAFFIC FLOW                   |
| F&T..... FIRE ALARM & TELEPHONE      |                                      |
| Ⓜ..... MONITORING WELL               |                                      |

DRAWN: GP/O.A.

ESTABLISHED 1876 \* SUCCESSOR TO:  
B.G. MENKHEIM C.S.\*C.U. POWELL C.E.\*C.M.C.L. SMITH C.S.\*NATHAN CAMPBELL C.E.\*C.S.\*A.U. WHITSON C.E.\*C.S.\*  
WILLIAM L. SAVACOL C.E.\*L.S.\*C.S.\*A.U. WHITSON INC. C.E.\*C.S.\*G. WEBER L.S.\*C.S.\*C. STODOLPH R.A.\*L.S.\*WHITSON &  
POWELL INC. P.E.\*L.S.\*C.S.\*KELLER & POWELL P.E.\*L.S.\*C.S.\*LOUIS MONTROSE C.E.\*L.S.\*C.S.\*FRED J. POWELL P.E.\*L.S.\*C.S.\*

REV	DATE	DESCRIPTION	ck
02-23-21		ENVIRONMENTAL EASEMENT SURVEY	
A		TAX LOTS MERGED AS OF 12-17-2021	

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 2509 OF THE NEW YORK STATE EDUCATION LAW  
ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAINTAINED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES  
CERTIFICATION REQUIRED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY. GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTS HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS

**MONTROSE**  
SURVEYING CO., LLP.  
CITY & LAND SURVEYORS  
116 20 METROPOLITAN AVE. • RICHMOND HILL NY 11418-1080 • (718) 849-0600  
SCALE: 1" = 16'



CITY OF NEW YORK  
COUNTY THE BRONX  
TAX BLOCK 2360  
TAX LOT 1  
SCALE: 1" = 16'



**APPENDIX B**  
**SITE CONTACT INFORMATION**

## APPENDIX B

### LIST OF SITE CONTACTS

Company	Individual Name	Title	Contact Number*
AKRF	Michelle Lapin	Remedial Engineer	646-388-9520 (office)
	Deborah Shapiro	Project Principal/QEP	646-388-9544 (office)
	Patrick McHugh	Project Manager	914-922-2387 (office) 907-378-8737 (cell)
NYSDEC	Kelly Lewandowski	Site Control	(518) 402-9569 (office)
NYSDEC	Manfred Magloire	Project Manager	(718) 482-4078 (office)
NYSDEC	Jane O'Connell	Regional Chief	(718) 482-4599 (office)
NYSDOH	Stephanie Selmer	Project Manager	(518) 402-7864 (office)
Brook 156 HDFC	Michael Wadman	Volunteer's Representative	212-243-9090 (office)
Medical, Fire, Police	N/A	N/A	911
One Call Center	N/A	N/A	(800) 272-4480 (3-day notice required for utility mark out)
Poison Control Center	N/A	N/A	(800) 222-1222
Pollution Toxic Chemical Oil Spills	N/A	N/A	(800) 424-8802
NYSDEC Spills Hotline	N/A	N/A	(800) 457-7362
*Note: Contact numbers subject to change and will be updated as necessary.			

**APPENDIX C**  
**PBS REGISTRATION**

# Petroleum Bulk Storage Application

Pursuant to the Environmental Conservation Law: Article 17, Title 10; and  
Regulations 6 NYCRR Part 613 and 6 NYCRR Subpart 374-2

Return Completed Form & Fees To:



**PBS Number:**

(Please Type or Print Clearly and Complete All Items for Sections A, B & C)

## Section A - Facility/Property Owner/Contact Information

Expiration Date:

<b>Transaction Type:</b> <u>1,3</u>  1) Initial/New Facility 2) Change of Ownership 3) Tank Installation, Closing, or Repair 4) Information Correction 5) Renewal	<table border="1"> <tr> <td rowspan="5" style="text-align: center; vertical-align: middle;">F A C I L I T Y</td> <td colspan="2">Facility Name: <b>Brook 156</b></td> <td colspan="2">Tax Map Info <b>Bronx</b></td> </tr> <tr> <td colspan="2">Facility Address (Physical Address, No P.O. Boxes):</td> <td colspan="2">Block: <b>2360</b></td> </tr> <tr> <td colspan="2">Facility Address (cont.)</td> <td colspan="2">Lot <b>3</b></td> </tr> <tr> <td>City: <b>Bronx</b></td> <td>State: <b>NY</b></td> <td colspan="2">ZIP Code: <b>10455</b></td> </tr> <tr> <td>County: <b>Bronx</b></td> <td>Township/City: <b>Bronx</b></td> <td colspan="2">Facility Phone Number: <b>(646) 388-8216</b></td> </tr> </table>	F A C I L I T Y	Facility Name: <b>Brook 156</b>		Tax Map Info <b>Bronx</b>		Facility Address (Physical Address, No P.O. Boxes):		Block: <b>2360</b>		Facility Address (cont.)		Lot <b>3</b>		City: <b>Bronx</b>	State: <b>NY</b>	ZIP Code: <b>10455</b>		County: <b>Bronx</b>	Township/City: <b>Bronx</b>	Facility Phone Number: <b>(646) 388-8216</b>		<table border="1"> <tr> <td colspan="2"> <b>TYPE OF PETROLEUM FACILITY</b> (Check only one)  <input type="checkbox"/> 01=Storage Terminal/Petrol. Distributor    <input type="checkbox"/> 02=Retail Gasoline Sales  <input type="checkbox"/> 03=Other Retail Sales    <input type="checkbox"/> 04=Manufacturing  <input type="checkbox"/> 05=Utility    <input type="checkbox"/> 06=Trucking/Transportation/Fleet  <input type="checkbox"/> 07=Apartment/Office Building    <input type="checkbox"/> 08=School  <input type="checkbox"/> 09=Farm    <input type="checkbox"/> 10=Private Residence  <input type="checkbox"/> 11=Airline/Air Taxi/Airport    <input type="checkbox"/> 12=Chemical Distributor  <input type="checkbox"/> 13=Municipality    <input type="checkbox"/> 15=Railroad  <input type="checkbox"/> 25=Auto Service/Repair (No Gasoline Sales)    <input type="checkbox"/> 28=Cemetery/Memorial  <input type="checkbox"/> 26=Religious (Church, Synagogue, Mosque, Temple, etc.)  <input type="checkbox"/> 27=Hospital/Nursing Home/Health Care    <input type="checkbox"/> 52=Marina  <input type="checkbox"/> 53=Nuclear Power Plant  <input checked="" type="checkbox"/> 99=Other (Specify): <b>Construction Site</b> </td> </tr> <tr> <td colspan="2">Emergency Contact Name: <b>Michael Wadman</b></td> </tr> <tr> <td colspan="2">Emergency Telephone Number: <b>(646) 388-8216</b></td> </tr> </table>	<b>TYPE OF PETROLEUM FACILITY</b> (Check only one) <input type="checkbox"/> 01=Storage Terminal/Petrol. Distributor <input type="checkbox"/> 02=Retail Gasoline Sales <input type="checkbox"/> 03=Other Retail Sales <input type="checkbox"/> 04=Manufacturing <input type="checkbox"/> 05=Utility <input type="checkbox"/> 06=Trucking/Transportation/Fleet <input type="checkbox"/> 07=Apartment/Office Building <input type="checkbox"/> 08=School <input type="checkbox"/> 09=Farm <input type="checkbox"/> 10=Private Residence <input type="checkbox"/> 11=Airline/Air Taxi/Airport <input type="checkbox"/> 12=Chemical Distributor <input type="checkbox"/> 13=Municipality <input type="checkbox"/> 15=Railroad <input type="checkbox"/> 25=Auto Service/Repair (No Gasoline Sales) <input type="checkbox"/> 28=Cemetery/Memorial <input type="checkbox"/> 26=Religious (Church, Synagogue, Mosque, Temple, etc.) <input type="checkbox"/> 27=Hospital/Nursing Home/Health Care <input type="checkbox"/> 52=Marina <input type="checkbox"/> 53=Nuclear Power Plant <input checked="" type="checkbox"/> 99=Other (Specify): <b>Construction Site</b>		Emergency Contact Name: <b>Michael Wadman</b>		Emergency Telephone Number: <b>(646) 388-8216</b>			
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Emergency Telephone Number: <b>(646) 388-8216</b>																															
<b>NOTE:</b>  <b>Fill in Property Owner information here....&gt;&gt;&gt;</b>  <b>Indicate Tank Owner in Section C.</b>	<table border="1"> <tr> <td rowspan="5" style="text-align: center; vertical-align: middle;">O W N E R</td> <td colspan="4">Facility (Property) Owner (from Deed): <b>Brook 156 HDFC</b></td> </tr> <tr> <td colspan="4">Facility Owner Address (Street and/or P.O. Box): <b>902 Broadway, 13th Floor</b></td> </tr> <tr> <td>City: <b>New York</b></td> <td>State: <b>NY</b></td> <td colspan="2">ZIP Code: <b>10010</b></td> </tr> <tr> <td colspan="4">Owner Telephone Number: <b>(646) 388-8216</b></td> </tr> <tr> <td colspan="4">           Type of Owner (check only one):            1 <input type="checkbox"/> Private Resident    4 <input type="checkbox"/> Federal Government            2 <input type="checkbox"/> State Government    5 <input checked="" type="checkbox"/> Corporate/Commercial/Other         </td> </tr> </table>	O W N E R	Facility (Property) Owner (from Deed): <b>Brook 156 HDFC</b>				Facility Owner Address (Street and/or P.O. Box): <b>902 Broadway, 13th Floor</b>				City: <b>New York</b>	State: <b>NY</b>	ZIP Code: <b>10010</b>		Owner Telephone Number: <b>(646) 388-8216</b>				Type of Owner (check only one): 1 <input type="checkbox"/> Private Resident    4 <input type="checkbox"/> Federal Government 2 <input type="checkbox"/> State Government    5 <input checked="" type="checkbox"/> Corporate/Commercial/Other				<table border="1"> <tr> <td colspan="2">           I hereby certify, under penalty of law, that all of the information provided on this form is true and correct. False statements made herein may be punishable as a criminal offense and/or a civil violation in accordance with applicable state and federal law.         </td> </tr> <tr> <td>Name of Owner or Authorized Representative: <b>Michael Wadman</b></td> <td>Amount Enclosed: <b>\$ 500.00</b></td> </tr> <tr> <td colspan="2">Title:</td> </tr> <tr> <td>Signature:</td> <td>Date:</td> </tr> </table>	I hereby certify, under penalty of law, that all of the information provided on this form is true and correct. False statements made herein may be punishable as a criminal offense and/or a civil violation in accordance with applicable state and federal law.		Name of Owner or Authorized Representative: <b>Michael Wadman</b>	Amount Enclosed: <b>\$ 500.00</b>	Title:		Signature:	Date:
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Title:																															
Signature:	Date:																														
Official Use Only Date Received: ____/____/____ Date Processed: ____/____/____ Amount Received: \$_____ Reviewed By: _____ Rev. 6/26/2019	<table border="1"> <tr> <td rowspan="6" style="text-align: center; vertical-align: middle;">C O R R E S P O N D E N C E</td> <td colspan="2">(Please keep this information up to date.)</td> </tr> <tr> <td colspan="2">Facility Contact Person Name: <b>Michael Wadman</b></td> </tr> <tr> <td colspan="2">Contact Person Company Name: <b>Michael Wadman</b></td> </tr> <tr> <td colspan="2">Address: <b>902 Broadway, 13th Floor</b></td> </tr> <tr> <td colspan="2">Address (cont.):</td> </tr> <tr> <td colspan="2">City/State/ZIP Code: <b>New York, NY 10010</b></td> </tr> <tr> <td colspan="2">Tel. Number: <b>(646) 388-8216</b></td> </tr> <tr> <td colspan="2">eMail Address: <b>mwadman@phippsny.com</b></td> </tr> </table>	C O R R E S P O N D E N C E	(Please keep this information up to date.)		Facility Contact Person Name: <b>Michael Wadman</b>		Contact Person Company Name: <b>Michael Wadman</b>		Address: <b>902 Broadway, 13th Floor</b>		Address (cont.):		City/State/ZIP Code: <b>New York, NY 10010</b>		Tel. Number: <b>(646) 388-8216</b>		eMail Address: <b>mwadman@phippsny.com</b>														
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eMail Address: <b>mwadman@phippsny.com</b>																															

**PBS Number:**

**Section B - Tank Information**

Page 2 of 3

**(Please use the key located on the last page to complete each item/column)**

**Registration Expiration Date:**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Action	Tank Number	Tank Location	Status	Installation, out-of-service, or Permanent ClosureDate (mm/dd/yyyy) <b>Application will be returned if blank</b>	Capacity (Gallons)	Product Stored (If Gasoline w/ethanol or Biodiesel, list % additive)	Tank Type	Tank Internal Protection	Tank External Protection	Tank Secondary Containment	Tank Leak Detection	Tank Overfill Prevention	Tank Spill Prevention	Pumping/Dispensing Method	Piping Location	Piping Type	Piping External Protection	Piping Secondary Containment	Piping Leak Detection	Under Dispenser Containment (UDC) (Check box if present)
1/3	1	5	3	02/03/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	2	5	3	02/03/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	3	5	3	02/03/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	4	5	3	02/04/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	5	5	3	02/04/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	6	5	3	02/04/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	7	5	3	02/05/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	8	5	3	02/05/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	9	5	3	02/05/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	10	5	3	02/05/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	11	5	3	02/08/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	12	5	3	02/08/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	13	5	3	02/08/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	14	5	3	02/08/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	15	5	3	02/09/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	16	5	3	02/09/2021	550	0009	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
1/3	17	5	3	03/15/2021	300	0022	01	00	00	00	00	00	00	00	00	00	00	00	00	<input type="checkbox"/>
																				<input type="checkbox"/>
																				<input type="checkbox"/>
																				<input type="checkbox"/>
																				<input type="checkbox"/>
																				<input type="checkbox"/>

**Note: If you need to add tanks to your registration, write them in using blank lines above. Attach additional sheets as needed.**

**Blank Section B is available at [http://www.dec.ny.gov/docs/remediation\\_hudson\\_pdf/pbsrenewal.pdf](http://www.dec.ny.gov/docs/remediation_hudson_pdf/pbsrenewal.pdf)**

PBS Number:

# Petroleum Bulk Storage Application

## Section C - Tank Ownership Information (for PBS tanks listed in Section B

<div>Tank Owner Information</div> <div><input checked="" type="checkbox"/> Check box if same as Facility (Property) Owner. If tank owner is different from property owner, fill out information below:</div>		
Tank Owner Name (Company/Individual):		
Contact Person:		
Tank Owner Address:		
City:	State:	ZIP:
Contact Person Telephone Number:	Contact Person email:	
<div>Specific Tanks Owned</div> <div><input checked="" type="checkbox"/> Check box if this owner owns all tanks at this facility. If not, list tanks owned by this owner below:</div>		
Tank Number:		
Name of Class B (Daily On-Site) Operator:	Authorization No:	
Name of Class A (Primary) Operator:	Authorization No:	

<div>Tank Owner Information</div> <div><input checked="" type="checkbox"/> Check box if same as Facility (Property) Owner. If tank owner is different from property owner, fill out information below:</div>		
Tank Owner Name (Company/Individual):		
Contact Person:		
Tank Owner Address:		
City:	State:	ZIP:
Contact Person Telephone Number:	Contact Person email:	
<div>Specific Tanks Owned</div> <div><input checked="" type="checkbox"/> Check box if this owner owns all tanks at this facility. If not, list tanks owned by this owner below:</div>		
Tank Number:		
Name of Class B (Daily On-Site) Operator:	Authorization No:	
Name of Class A (Primary) Operator:	Authorization No:	

# PETROLEUM BULK STORAGE APPLICATION - SECTION B - TANK INFORMATION - CODE KEYS

## Action (1)

1. Initial Listing
2. Add Tank
3. Close/Remove Tank
4. Information Correction
5. Repair/Reline Tank

## Tank Location (3)

1. Aboveground-contact w/soil
2. Aboveground-contact w/impervious barrier
3. Aboveground on saddles, legs, stilts, rack or cradle
4. Partially buried tank (tank with 10% or more below ground)
5. Underground including vaulted with no access for inspection
6. Aboveground in Subterranean Vault w/access for inspections

## Status (4)

1. In-service
2. Out-of-service
3. Closed-Removed
4. Closed- In Place
5. Tank converted to Non-Regulated use

## Products Stored (7)

### Heating Oils: On-Site Consumption

0001. #2 Fuel Oil  
0002. #4 Fuel Oil  
0259. #5 Fuel Oil  
0003. #6 Fuel Oil  
0012. Kerosene  
0591. Clarified Oil  
2711. Biodiesel (Heating)  
2642. Used Oil (Heating)

### Heating Oils: Resale/Redistribution

2718. #2 Fuel Oil  
2719. #4 Fuel Oil  
2720. #5 Fuel Oil  
2721. #6 Fuel Oil  
2722. Kerosene  
2723. Clarified Oil

## Motor Fuels

0009. Gasoline  
2712. Gasoline/Ethanol

0008. Diesel  
2710. Biodiesel  
0011. Jet Fuel  
1044. Jet Fuel (Biofuel)  
2641. Aviation Gasoline

## Emergency Generator Fuels

0001. #2 Fuel Oil  
2730. Biodiesel (E-Gen)  
2731. Diesel (E-Gen)

## Lubricating/Cutting Oils

0013. Lube Oil  
0015. Motor Oil  
1045. Gear/Spindle Oil  
0010. Hydraulic Oil  
0007. Cutting Oil  
0021. Transmission Fluid  
1836. Turbine Oil  
0308. Petroleum Grease

## Oils Used as Building Materials

2626. Asphaltic Emulsions  
0748. Form Oil

## Petroleum Spirits

0014. White/Mineral Spirits  
1731. Naptha

## Mineral/Insulating Oils

0020. Insulating Oil (e.g., Transformer, Cable Oil)  
2630. Mineral Oil

## Waste/Used/Other Oils

- 0022 Waste/Used Oil  
9999. Other-Please list:\*

## Crude Oil

0006. Crude Oil  
0701. Crude Oil Fractions

## Tank Type (8)

01. Steel/Carbon Steel/Iron  
02. Galvanized Steel Alloy  
03. Stainless Steel Alloy  
04. Fiberglass Coated Steel  
05. Steel Tank in Concrete  
06. Fiberglass Reinforced Plastic (FRP)  
07. Plastic  
08. Equivalent Technology

09. Concrete  
10. Urethane Clad Steel  
99. Other-Please list:\*

## Internal Protection (9)

00. None  
01. Epoxy Liner  
02. Rubber Liner  
03. Fiberglass Liner (FRP)  
04. Glass Liner  
99. Other-Please list:\*

## External Protection (10/18)

00. None  
01. Painted/Asphalt Coating  
02. Original Sacrificial Anode  
03. Original Impressed Current  
04. Fiberglass  
05. Jacketed  
06. Wrapped (Piping)  
07. Retrofitted Sacrificial Anode  
08. Retrofitted Impressed Current  
09. Urethane  
99. Other-Please list:\*

## Tank Secondary Containment (11)

00. None  
01. Diking (AST Only)  
02. Vault (w/access)  
03. Vault (w/o access)  
04. Double-Walled (UST Only)  
05. Synthetic Liner  
06. Remote Impounding Area  
07. Excavation Liner  
09. Modified Double-Walled (AST Only)  
10. Impervious Underlayment (AST Only)\*\*  
11. Double Bottom (AST Only)\*\*  
12. Double-Walled (AST Only)  
99. Other - Please list\*

## Tank Leak Detection (12)

00. None  
01. Interstitial Electronic Monitoring  
02. Interstitial Manual Monitoring  
03. Vapor Well  
04. Groundwater Well  
05. In-Tank System (Auto Tank

06. Impervious Barrier/Concrete Pad (AST Only)  
07. Statistical Inventory Reconciliation (SIR)  
08. Weep holes in vaults with no access for inspection  
99. Other-Please list: \*

## Overfill Protection (13)

00. None  
01. Float Vent Valve  
02. High Level Alarm  
03. Automatic Shut-Off  
04. Product Level Gauge (AST Only)  
05. Vent Whistle  
99. Other-Please list:\*

## Spill Prevention (14)

00. None  
01. Catch Basin  
99. Other-Please list:\*

## Pumping/Dispensing Method (15)

00. None  
01. Presurized Dispenser  
02. Suction Dispenser  
03. Gravity  
04. On-Site Heating System (Suction)  
05. On-Site Heating System (Supply/Return)  
06. Tank-Mounted Dispenser  
07. Loading Rack/Transfer Pump

## Piping Location (16)

00. No Piping  
01. Aboveground  
02. Underground/On-ground  
03. Aboveground/Underground Combination

## Piping Type (17)

00. None  
01. Steel/Carbon Steel/Iron  
02. Galvanized Steel  
03. Stainless Steel Alloy  
04. Fiberglass Coated Steel  
05. Steel Encased in Concrete

06. Fiberglass Reinforced Plastic (FRP)  
07. Plastic  
08. Equivalent Technology  
09. Concrete  
10. Copper  
11. Flexible Piping  
99. Other-Please list:\*

## Piping Secondary Containment (19)

00. None  
01. Diking (Aboveground Only)  
02. Vault (w/access)  
04. Double-Walled (Underground Only )  
06. Remote Impounding Area  
07. Trench Liner  
12. Double-Walled (Aboveground Only)  
99. Other-Please list: \*

## Pipe Leak Detection (20)

00. None  
01. Interstitial Electronic Monitoring  
02. Interstitial Manual Monitoring  
03. Vapor Well  
04. Groundwater Well  
07. Pressurized Piping Leak Detector  
09. Exempt Suction Piping  
10. Statistical Inventory Reconciliation (SIR)  
99. Other-Please list:\*

## Under Dispenser Containment (UDC) (21)

Check Box if Present

.....

\* If other, please list on a separate sheet including tank number,

\*\* Each of these codes must be combined with code 01 or 06 to meet compliance requirements.



**APPENDIX D**  
**IMPORT APPROVALS**

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation, Region 2

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4995

[www.dec.ny.gov](http://www.dec.ny.gov)

January 27, 2021

Mr. Patrick McHugh  
AKRF, Inc.  
34 South Broadway, Suite 401  
White Plains, NY 10601

Re: Proposed recycled concrete aggregate  
Brook 156  
Site ID No.: C203078, Bronx, Bronx County

Dear Mr. McHugh:

The Department has reviewed the request dated January 25, 2021 to import 2,000 cubic yards of 1/4-inch recycled concrete aggregate (RCA) from the NYSDOT Sunset Park Facility at 8-29th Street, Brooklyn, NY. Based on the information provided, the request is hereby approved.

The proposed 1/4-inch RCA meets the requirements for material other than soil (gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10.

If you have any questions or comments, please contact me at 718-482-4078 or [manfred.magloire@dec.ny.gov](mailto:manfred.magloire@dec.ny.gov).

Sincerely,



Manfred Magloire  
Project Manager

cc: Jane. O'Connell, Sondra Martinkat, Mandy Yau – NYSDEC  
Deborah Shapiro – AKRF



Department of  
Environmental  
Conservation

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2  
47-40 21st Street, Long Island City, NY 11101  
P: (718) 482-4995  
[www.dec.ny.gov](http://www.dec.ny.gov)

February 11, 2020

Mr. Patrick McHugh  
AKRF, Inc.  
34 South Broadway, Suite 401  
White Plains, NY 10601

Re: Proposed recycled concrete aggregate  
Brook 156  
Site ID No.: C203078, Bronx, Bronx County

Dear Mr. McHugh:

The Department has reviewed the request dated February 9, 2021 to import an additional 3,000 cubic yards of 1/4-inch recycled concrete aggregate (RCA) from the NYSDOT Sunset Park Facility at 8-29<sup>th</sup> Street, Brooklyn, NY. Based on the information provided, the request is hereby approved.

The proposed 1/4-inch RCA meets the requirements for material other than soil (gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10.

If you have any questions or comments, please contact me at 718-482-4078 or [manfred.magloire@dec.ny.gov](mailto:manfred.magloire@dec.ny.gov).

Sincerely,



Manfred Magloire  
Project Manager

cc: Jane. O'Connell, Mandy Yau – NYSDEC  
Deborah Shapiro – AKRF



Department of  
Environmental  
Conservation

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation, Region 2

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4995

[www.dec.ny.gov](http://www.dec.ny.gov)

March 22, 2021

Mr. Patrick McHugh  
AKRF, Inc.  
34 South Broadway, Suite 401  
White Plains, NY 10601

Re: Proposed Gravel  
Brook 156  
Site ID No.: C203078, Bronx, Bronx County

Dear Mr. McHugh:

The Department has reviewed the request dated March 17, 2021 to import 1,000 cubic yards of 1-inch gravel material (ASTM #5) from Stavola Construction Materials, Inc.'s Bound Brook quarry located in Bridgewater, NJ. Based on the information provided, the request is hereby approved.

The proposed gravel material meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

If you have any questions regarding this letter, please contact me at 718-482-4078 or [manfred.magloire@dec.ny.gov](mailto:manfred.magloire@dec.ny.gov).

Sincerely,



Manfred Magloire  
Project Manager

ec: Jane O'Connell, Mandy Yau – NYSDEC  
Deborah Shapiro – AKRF



Department of  
Environmental  
Conservation

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation, Region 2

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4995

[www.dec.ny.gov](http://www.dec.ny.gov)

March 22, 2021

Mr. Patrick McHugh  
AKRF, Inc.  
34 South Broadway, Suite 401  
White Plains, NY 10601

Re: Proposed Gravel  
Brook 156  
Site ID No.: C203078, Bronx, Bronx County

Dear Mr. McHugh:

The Department has reviewed the request dated March 17, 2021 to import 3,000 cubic yards of 3/4-inch gravel material from the Impact Recovery and Reuse Center (IRRC) located in Lyndhurst, NJ. Based on the information provided, the request is hereby approved.

The proposed gravel material meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Testing in accordance with DER-10 and the Remedial Design Work Plan and approval by the Department is required for any additional material imported from this source.

If you have any questions regarding this letter, please contact me at 718-482-4078 or [manfred.magloire@dec.ny.gov](mailto:manfred.magloire@dec.ny.gov).

Sincerely,



Manfred Magloire  
Project Manager

ec: Jane O'Connell, Mandy Yau – NYSDEC  
Deborah Shapiro – AKRF



Department of  
Environmental  
Conservation

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation, Region 2

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4995

[www.dec.ny.gov](http://www.dec.ny.gov)

March 22, 2021

Mr. Patrick McHugh  
AKRF, Inc.  
34 South Broadway, Suite 401  
White Plains, NY 10601

Re: Proposed Gravel  
Brook 156  
Site ID No.: C203078, Bronx, Bronx County

Dear Mr. McHugh:

The Department has reviewed the request dated March 17, 2021 to import 3,000 cubic yards of 3/4-inch gravel material (ASTM #57) from Stavola Construction Materials, Inc.'s Oldwick Rock quarry located in Lebanon, NJ. Based on the information provided, the request is hereby approved.

The proposed gravel material meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

If you have any questions regarding this letter, please contact me at 718-482-4078 or [manfred.magloire@dec.ny.gov](mailto:manfred.magloire@dec.ny.gov).

Sincerely,



Manfred Magloire  
Project Manager

ec: Jane O'Connell, Mandy Yau – NYSDEC  
Deborah Shapiro – AKRF



Department of  
Environmental  
Conservation

**APPENDIX E**  
**EXCAVATION WORK PLAN**

## **EXCAVATION WORK PLAN (EWP)**

### **1.1 Notification**

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify NYSDEC. Currently, this notification will be made to:

Jane O'Connell (jane.oconnell@dec.ny.gov)  
Regional Remediation Engineer  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
47-40 21<sup>st</sup> Street  
Long Island City, NY 11101-5401

Manfred Magloire (manfred.magloire@dec.ny.gov)  
NYSDEC Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
47-40 21<sup>st</sup> Street  
Long Island City, NY 11101-5401

Stephanie Selmer (stephanie.selmer@health.ny.gov)  
NYSDOH Project Manager  
Empire State Plaza  
Corning Tower Room 1787  
Albany, New York 12237

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the building footprint or 15 feet below grade, estimated volumes of contaminated soil to be excavated and any work that may impact an Engineering Control (EC);
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix E of this document;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.



## **1.2 Soil Screening Methods**

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the Certificate of Completion (CoC).

Soil will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

## **1.3 Stockpile Methods**

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

## **1.4 Materials Excavation and Load Out**

A qualified environmental professional (QEP) or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the Site and its contractors are solely responsible for safe execution of all invasive and other work performed under this EWP.

The presence of utilities and easements on the Site will be investigated by the QEP. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site if deemed appropriate by NYSDEC. The QEP will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The QEP be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

## **1.5 Materials Transport Off-Site**

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes are described as follows:

- For Trucks Heading North: Head southwest 0.9 mile on Brook Avenue and turn right onto East 135<sup>th</sup> Street to merge onto the Major Deegan Expressway (Interstate 87) North.
- For Trucks Heading South: Head southwest 1.0 mile on Brook Avenue and turn left onto East 134<sup>th</sup> Street to merge onto Interstate 278 South.

This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; (f) overall safety in transport; and (g) community input.

All trucks loaded with Site materials will exit the vicinity of the Site using these truck routes; however, the truck route is subject to change depending on available truck routes at the time of the work (pending road closures, etc.), and trucking company input related to the allowable truck routes.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site. Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site to the extent practicable to minimize off-site disturbance. Off-site queuing will be prohibited.

## **1.6 Materials Disposal Off-Site**

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6 NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated off-site disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e., hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, Construction and Demolition (C&D) debris recycling facility, etc. Actual disposal quantities and associated documentation will be reported to NYSDEC in the Periodic Review Report (PRR). This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Track 1 Unrestricted Soil Cleanup Objectives (SCOs) is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

### **1.7 Materials Reuse On-Site**

Chemical criteria for on-site reuse of material will meet the NYSDEC Part 375 Restricted Residential Use SCOs (RRSCOs) for the approved use of the Site consistent with the Environmental Easement. The QEP will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-site.

### **1.8 Fluids Management**

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site but will be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream or river) will be performed under a State Pollutant Discharge Elimination System (SPDES) permit.

### **1.9 Backfill from Off-Site Sources**

All materials proposed for import onto the Site will be approved by the QEP and will be in compliance with provisions in this SMP prior to receipt at the Site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards to be used at the Site are listed in Table 1 (included in Section 1.0 of this SMP). Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

### **1.10 Stormwater Pollution Prevention**

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

#### **1.11 Contingency Plan**

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment, and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals, TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 7.0 of the SMP.

#### **1.12 Community Air Monitoring Plan**

During any excavation activity initiated under the SMP, air monitoring will be conducted in accordance with the Community Air Monitoring Plan (CAMP) included as Appendix E of this SMP. Work zone monitoring will be performed for the health and safety of workers during interior intrusive work activities in accordance with action levels and guidance outlined in the Site-specific HASP. In summary, CAMP calls for real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when intrusive activities are in progress at the Site. Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas. Continuous monitoring is required for all ground intrusive activities to the extent practicable (e.g., air monitoring may not be conducted during precipitation events).

VOC and particulate monitoring equipment will consist of a photoionization detector (PID) capable of detecting the VOCs found in the excavated soil and real-time aerosol or particulate monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM<sub>10</sub>). VOC monitoring equipment will be calibrated, and the particulate monitoring equipment zeroed, on a daily basis and documented in a dedicated field logbook. Both VOC and particulate monitoring equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the prescribed action levels.

If VOC monitoring results in the ambient air concentration of total organic vapors in excess of 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases below 5 ppm over background, work activities can resume with measures taken to reduce vapors and continue monitoring. If total organic vapor levels persist at levels in excess of 5 ppm over background, work activities will be halted, the source of vapors identified, corrective actions taken

to abate emissions, and monitoring continued. If the organic vapor level is repeatedly over 25 ppm above background, activities will be shut down and the ECs and the Site work plan re-evaluated.

If particulate monitoring results in a 15-minute average concentration measurement that is between 100 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and  $150 \mu\text{g}/\text{m}^3$  above the background level, additional dust suppression techniques will be implemented to reduce the generation of fugitive dust and corrective action taken to protect Site personnel and reduce the potential for contaminant migration. Should dust suppression measures being utilized not lower particulates to an acceptable level (e.g., below  $150 \mu\text{g}/\text{m}^3$  above the background level, and no visible dust from the work area), work will be suspended until appropriate corrective measures are implemented to remedy the situation.

Details regarding work zone and community air monitoring are outlined in the HASP attached as Appendix E. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and New York State Department of Health (NYSDOH) Project Managers.

### **1.13 Odor Control Plan**

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include (a) through (f), as outlined in the following paragraph. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's QEP, and any measures that are implemented will be discussed in the PRR.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

### **1.14 Dust Control Plan**

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the following items:

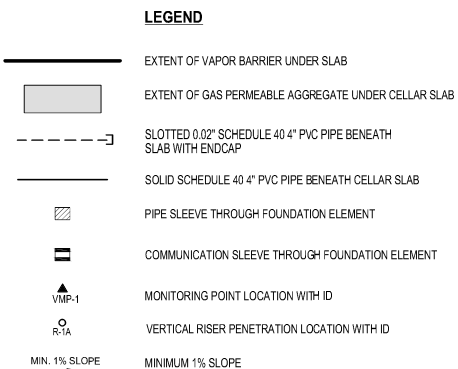
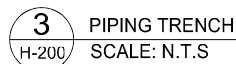
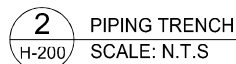
- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on unpaved roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

### **1.15 Other Nuisances**

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

**APPENDIX F**  
**PASSIVE SSDS AS-BUILT**

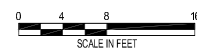


1. THIS PLAN SHALL NOT TO BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCE PURPOSES EXCEPT FOR THE SUB-SLAB DEPRESSURIZATION SYSTEM.
2. SOLID HORIZONTAL PIPING IS SLOPED A MINIMUM OF 1% UNIFORMLY TOWARDS THE SUB-SLAB DEPRESSURIZATION SYSTEM SLOTTED PIPING.
3. BASEMAP FROM DATTNER ARCHITECTS D.P.C. "FOUNDATION PLAN", FO-100, DATED 12-27-2018.
4. GAS PERMEABLE AGGREGATE HAS NOMINAL SIZE OF 1 INCH TO 1/2 INCH AND CONFORMS TO ASTM C33 STANDARD SPECIFICATION FOR CONCRETE AGGREGATE SIZE #5 AS PER THE TABLE BELOW:

SIEVE SIZE	PERCENT FINER BY WEIGHT
1.5 inch	100
1 inch	90 to 100
3/4 inch	20 to 55
1/2 inch	0 to 10
3/8 inch	0 to 5

MONITORING POINT LOCATIONS	
ID	ROOM
WMP-1	BICYCLE ROOM
WMP-2	GAS ROOM
WMP-3	MAINTENANCE ROOM
WMP-4	DETENTION TANK AREA
WMP-5	STORAGE ROOM

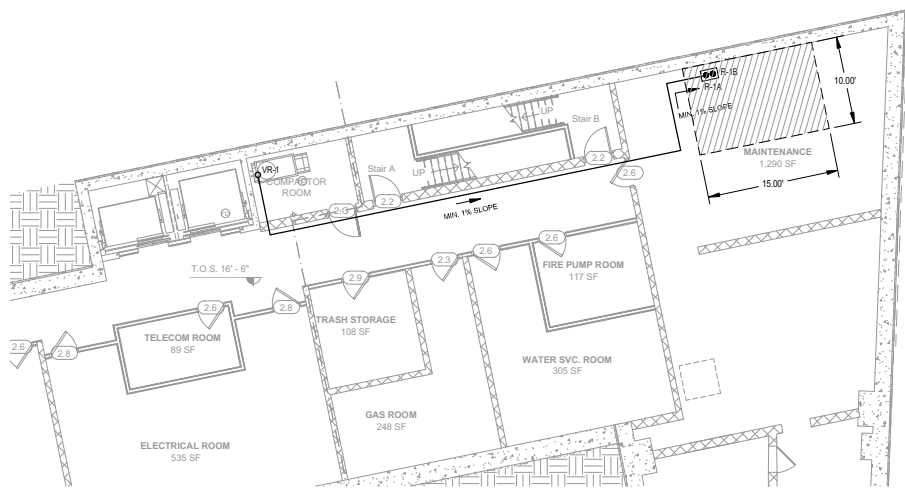
**1** SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT  
H-200



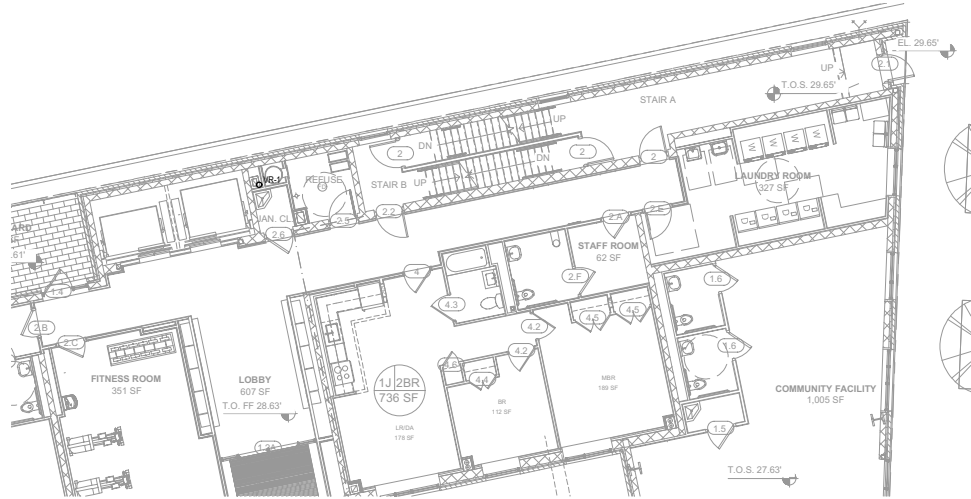
NOTE: PIPE SPACING NOT TO SCALE



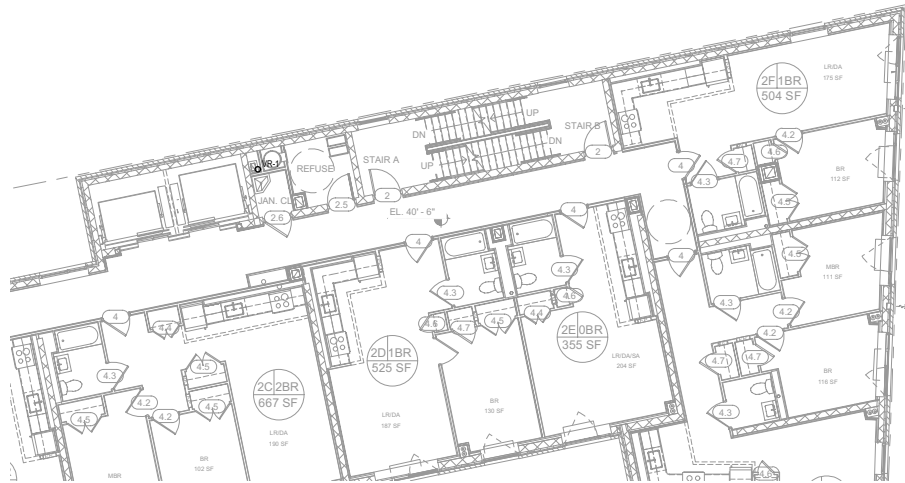




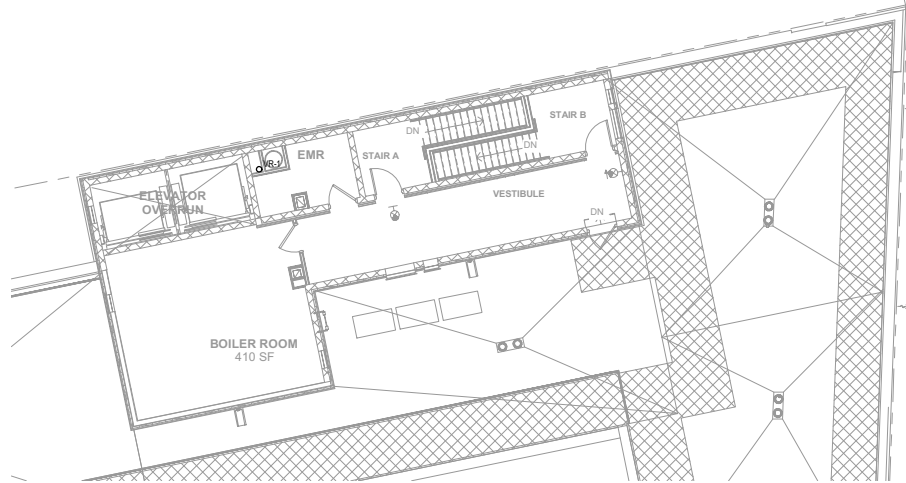
1 CELLAR  
H201  
SCALE IN FEET



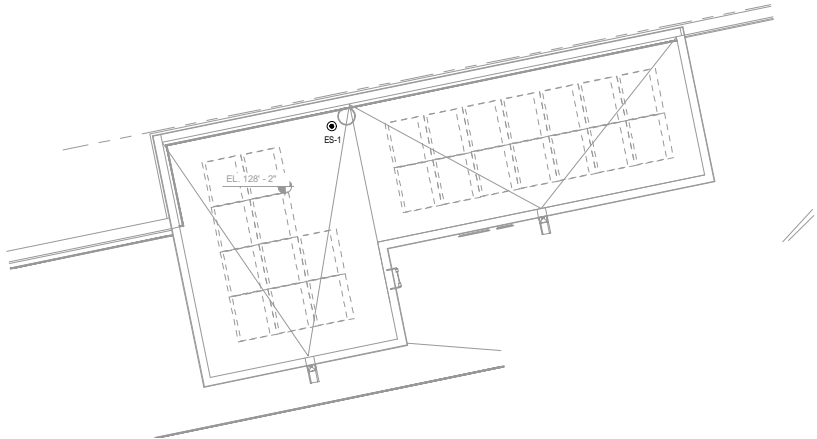
1 FIRST FLOOR  
H201  
SCALE IN FEET



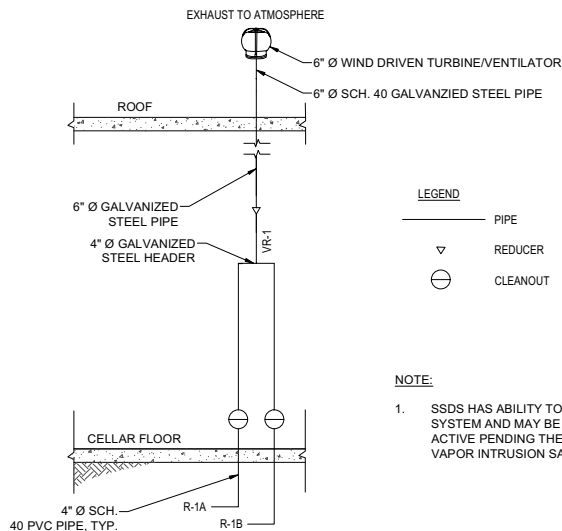
2 SECOND - NINTH FLOOR  
H201  
SCALE IN FEET



5 10TH FLOOR MECHANICAL ROOF  
H201  
SCALE IN FEET



6 BULKHEAD  
H201  
SCALE IN FEET



7 PIPING AND INSTRUMENTATION DIAGRAM  
H-201  
Not to Scale

- LEGEND**
- 6" Ø GALVANIZED STEEL PIPE
  - VERTICAL RISER PENETRATION LOCATION WITH ID
  - VERTICAL RISER OFFSET
  - SLAB PENETRATION / MANIFOLD
  - EXHAUST STACK
  - MINIMUM 1% SLOPE
  - SPACE REQUIREMENT FOR SSDS/SVE PIPING/EQUIPMENT
- LEGEND**
- PIPE
  - REDUCER
  - CLEANOUT
- NOTE:**
- SSDS HAS ABILITY TO BECOME AN ACTIVE SYSTEM AND MAY BE TRANSITIONED TO ACTIVE PENDING THE RESULTS OF THE VAPOR INTRUSION SAMPLING.



440 Park Avenue South, New York, NY 10016

Brook 156  
Bronx, New York  
SSDS RISER AS-BUILT

DATE  
12/21/2021  
PROJECT NO.  
11703  
SHEET  
H-201

**APPENDIX G**  
**SITE MANAGEMENT INSPECTION FORMS**

**SITE-WIDE INSPECTION FORM**  
**BROOK 156**  
**740 BROOK AVENUE, BRONX, NEW YORK**

**Inspector:**

**Date:**

**1. Site Use Restrictions**

No on-site vegetable gardens?

No groundwater withdrawal for potable/non-potable use?

Restricted-residential use maintained?

**2. Passive Sub-Slab Depressurization System (SSDS)**

Note the date that the passive SSDS inspection was performed:

Are the visible piping and appurtenances in good condition? (Y/N)

Does the wind turbine on the exhaust stack move freely? (Y/N)

Repairs made as noted during inspection?

**3. Comments**