BROOME STREET PARKING LOT SITE

NEW YORK COUNTY

NEW YORK, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C231137

Prepared for:

GO Broome LLC

432 Park Avenue South, 2nd Floor

New York, New York 10016

Prepared by:

Langan Engineering, Environmental, Surveying,

Landscape Architecture and Geology, D.P.C.

300 Kimball Drive

Parsippany, New Jersey 07054

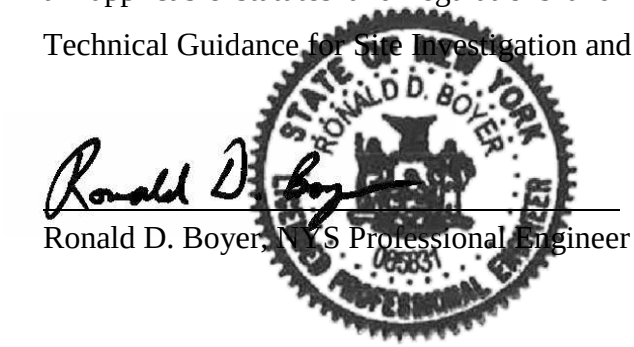
Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

DECEMBER 2021

CERTIFICATION STATEMENT

I, Ronald D. Boyer, certify that I am currently a Professional Engineer as defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



Ronald D. Boyer, NYS Professional Engineer

12/10/2021

DATE

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LIST OF ACRONYMS

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Greenhouse Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
P.E. or PE	Professional Engineer
PFAS	Per- and Polyfluoroalkyl Substances

PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: **Broome Street Parking Lot Site – Site No. C231137**

Institutional Controls:	The remedial party or site owner must complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3)	
	Allow for the use and development of the controlled property for restricted-residential, commercial or industrial use as defined in Part 375-1.8(g), although land use is subject to local zoning laws	
	Restricts the use of groundwater as a source of potable or process water, without the necessary water quality treatment as determined by the New York State Department of Health and/or the New York City Department of Health and Mental Hygiene	
	Requires compliance with this Department-approved Site Management Plan	
Engineering Controls:	1. Two Active Sub-Slab Depressurization Systems (SSDSs)	
Inspections:		Frequency
1. Active SSDSs		Annually or as required by the manufacturer
Monitoring:		
1. SSDS' Vacuum Monitoring Points		Annually
Maintenance:		
1. SSDSs		As required by manufacturer
Reporting:		
1. Periodic Review Report		Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Broome Street Parking Lot Site located in New York, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C231137, which is administered by New York State Department of Environmental Conservation (NYSDEC).

GO Broome LLC entered into a Brownfield Cleanup Agreement (BCA) on 2 January 2020 with the NYSDEC to remediate the Site. A figure showing the Site location and boundaries of this Site is provided in Figure 2. The boundaries of the Site are more fully described in the metes and bounds 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" at depths greater than 15 feet below grade surface, which will remain under the planned building. Institutional and Engineering Controls (ICs and 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 New York County, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with 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.

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 Environmental Conservation Law, 6 NYCRR Part 375 and the BCA (Index No. C231137-12-19; Site No. C231137) 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 New York State. A list of contacts for persons involved with the site is provided in Appendix B of this SMP.

This SMP was prepared by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan), on behalf of GO Broome LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated 3 May 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or 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:

1. 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law.

2. 7-day advance notice of any field activity associated with the remedial program.

3. 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan. 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.

4. 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.

5. Notice within 48 hours of any non-routine maintenance activities.

6. 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.

7. 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:

8. 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.

9. 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.

The table below includes contact information for the above notifications. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

NYSDEC Notification Contact Information*

Name	**Contact Information**
Meghan Medwid	Telephone: (518) 402-8610 Email: meghan.medwid@dec.ny.gov
Heide-Marie Dudek	Telephone: (518) 402-0193 Email: heidi.dudek@dec.ny.gov
Kelly Lewandowski	Telephone: (518) 402-0193 Email: kelly.lewandowski@dec.ny.gov
Arunesh Ghosh	Telephone: (518) 486-1443 Email: Arunesh.Ghosh@health.ny.gov

*Notifications 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 in the Lower East Side section of Manhattan, New York and is identified as Block 346 a portion of Lot 75 and a portion of Lot 37 on the New York City Tax Map. According to the New York City Tax Map dated 16 April 2021, former Lot 47 was merged with Lot 37 and former Lots 73 and 75 were merged into Lot 75. The Site is an approximately 24,958-square foot parcel located in an urban area and is bound to the north by Broome Street followed by a 14-story mixed-use building, to the east by Suffolk Street followed by a mixed-use property with a large asphalt-paved parking area, to the south by a five-story mixed-use building, and to the west by the under-construction Norfolk Building and the 14-story Hong Ning Housing for the Elderly building.

The boundaries of the Site are more fully described in Appendix A –Environmental Easement. A Site Location Map and Site Plan are included as Figures 1 and 2, respectively.

The owners of the Site at the time of issuance of this SMP are:

CPC One LLC (Owner of Lot 75)
150 Elizabeth Street
New York, New York

CPC Norfolk Senior Housing Development Fund Corporation (Owner of Lot 37)
150 Elizabeth Street
New York, New York

The operators of the Site at the time of issuance of this SMP are:
GO Broome LLC (Lot 75)
432 Park Avenue South, 2nd Floor
New York, New York

GO Norfolk LLC (Lot 37)

432 Park Avenue South, 2nd Floor

New York, New York

2.2 Physical Setting

2.2.1 Land Use

The Site is being remediated as part of a redevelopment project extending beyond the BCP Site boundary. The Site is zoned for commercial and residential use (C2-5/R9-1) and is currently under construction. The redevelopment project includes construction of a building (Suffolk Building) on Lot 75 and another building (Norfolk Building) on Lot 37 and a community facility. After remediation, the development will consist of a 34-story mixed-use commercial and residential building with a full cellar spanning approximately 95% of the entire site footprint. Approximately 5% of the Site in the northwestern corner (approximately 1,163 SF) will consist of a portion of the mid-rise mixed use 100% affordable senior housing building (Norfolk Building) being constructed adjacent to the Site on adjacent Lot 37. Lot 37 is being remediated under the oversight of NYCOER as Site No. 20TMP1374.

The following is a summary of the adjoining and surrounding properties:

Direction	Adjacent Properties		
	Block No.	Lot No.	Description
North	346	150	A 14-story mixed-use building (145 Clinton Street)
East	346	39	Suffolk Street followed by a vacant lot
	346	7501	Suffolk Street followed by one 15-story mixed-use residential/commercial building (145 Clinton Street)

Direction	Adjacent Properties		
	Block No.	Lot No.	Description
South	346	95	A five-story missed-use residential/commercial building (384 Grand Street)
West	346	1	A 14-story Hong Ning Housing for the Elderly building (50 Norfolk Street)
	346	Portion of 37	The under-construction Norfolk Building
	351	1	Norfolk Street followed by three 23-story mixed-use residential/commercial buildings (62 Essex Street)

2.2.2 Geology

According to the Boundary and Topographic Survey prepared by Langan dated 29 December 2017, last revised 14 May 2018, the Site slopes gently downward from the northeast (elevation el 31.5) to the southwest (elevation el 33.7). All elevations are North American Vertical Datum of 1988 (NAVD 88).

Based on the findings of the Remedial Investigation (RI) work completed by Langan, the Site, prior to remediation, was underlain by historic fill that ranges from approximately 11.5 feet thick in the central portion (LSB-10) to approximately 30 feet thick in the northeast portion (LSB-4), where the base of the fill was not encountered prior to the boring termination depth of 30 feet below grade. The base of the fill layer was also not encountered prior to the boring termination depth of 20 feet below grade in LSB-7, located in the southeast portion of the Site, LSB-19 and LSB-20 located in the northwestern portion of the Site, and in LSB-9 and LSB 28, completed in the north-central portion of the Site. The historic fill layer consists of light brown to brown and red brown sand with varying amounts of brick, gravel, concrete, wood, and silt. Native sand was encountered in all soil borings, with exception of soil borings LSB-7, LSB-19, LSB-20, LSB-9, and LSB-28

(completed to 20 feet below grade as noted above) and LSB-4 (completed to 30 feet below grade in the northeast portion of the Site).

According to the Preliminary Geotechnical Investigation completed by Langan in February 2019, subsurface conditions consist of miscellaneous fill underlain by a 9 to 25 foot thick upper sand unit, a 20 to 60 foot silt stratum, followed by a lower sand unit. Bedrock was not encountered in any of the geotechnical borings, which were advanced to depths that ranged from 77 to 102 feet below sidewalk grade.

A geologic cross section is shown in Figures 3A and 3B. Site specific boring logs are provided in Appendix C.

2.2.3 Hydrogeology

Monitoring wells installed during the 2020 RI revealed groundwater between 22.65 and 27.54 feet below Site grade, corresponding to elevations 5.35 – 8.93 NAVD88 in LMW-7 through LMW-12. Based on the groundwater elevations recorded during the 2020 RI, groundwater flows to the south.
A groundwater contour map is shown in Figure 4. Groundwater monitoring well construction logs are provided in Appendix C.

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.

2.3.1 Past Uses and Ownership

According to the Phase I ESA completed by Langan in November 2017, the Site was historically occupied by residential and mixed-use commercial/residential buildings between approximately 1894 and approximately 1983. The Site was reportedly vacant between approximately 1983 and 1990, at which time a portion of the Site was used for parking. Historical uses of concern included printing, a coppersmith and tinsmith, and two laundry services. The historical Site operations including printing, metalsmithing, and two laundry services were identified as a Recognized Environmental Condition (REC) due to the potential use of chemicals associated with these operations and the duration of the activities. Current and historical operations conducted at adjacent and nearby properties involving the use of ASTs, USTs, spills, and the generation and disposal of hazardous waste were also identified as having the potential to have impacted the environmental quality of the subsurface soil, groundwater and soil vapor conditions at the Site.

2.3.2 Previous Environmental Reports

The following environmental assessment and investigation reports have been prepared for the Site, which were provided in the RAWP.

- Phase I Environmental Site Assessment prepared by Langan, dated 27 November 2017;
- Remedial Investigation Report prepared by Langan, dated 7 May 2019;
- Draft Phase 1B Archaeology Workplan prepared by VHB Engineering, Surveying, Landscape Architecture, and Geology, P.C. (VHB), dated November 2019;
- Interim Remedial Measures Work Plan prepared by Langan, dated January 2020;
- Remedial Investigation Work Plan prepared by Langan, dated July 2020; and,
- Final Remedial Investigation Report prepared by Langan, dated August 2020.

Summaries of environmental findings of these reports are provided below:

November 2017 Phase I Environmental Site Assessment, prepared by Langan

A Phase I Environmental Site Assessment (ESA) dated November 2017 was prepared by Langan. This Phase I ESA identified the following recognized environmental condition (RECs) and business environmental risks (BERs) associated with the Site:

1. Historical Site operations including printing, metalsmithing, and laundry services were identified as a REC due to the potential use of chemicals associated with these operations and the duration of the activities.

2. The presence of historic urban fill and the deteriorated remains of former on-Site buildings in the subsurface was identified as a BER, as this material is typically characterized by elevated concentrations of PAHs and metals.

3. Potential impacts from current and historical operations conducted at adjacent and nearby properties was identified as a BER due to the potential for offsite migration of contaminants to impact sub-slab soil and/or groundwater below the subject site.

May 2019 Remedial Investigation Report, prepared by Langan

A Remedial Investigation Report (RIR) dated 17 May 2019 was prepared by Langan for GO Broome LLC. The RI was completed in January 2019 to investigate potential impacts to the soil and groundwater at the Site associated with the RECs or BERs as identified in the Phase I ESA. The scope of work included:

- Completion of a geophysical investigation;

- Completion of eight soil borings and collection of seventeen soil samples (two samples from each boring plus a one duplicate sample) to assess soil conditions;

- Installation and sampling of four monitoring wells in order to collect groundwater samples to assess current site groundwater conditions; and,

- Installation and sampling of seven soil vapor points in order to assess current site soil vapor conditions.

- Completion of eight additional soil borings in conjunction with the RI for the collection of composite soil samples in 5-foot intervals from 0 to 20 feet below ground surface in order to assess waste disposal options.

The results of the 2019 RI identified that the Site is underlain by a layer of historic fill up to at least 30 feet thick. Based on the results of the RI, the historic fill material is identified as being impacted with concentrations of PAHs above the Restricted-Residential Restricted Use Soil Cleanup Objectives (SCOs) and metals above both the Unrestricted Use and Restricted Use SCOs. Exceedances of SVOCs, metals, and pesticides were identified in the fill material that was present from 15- to 20-feet bgs on the northern portion of the site.

November 2019 Draft Phase 1B Archaeology Workplan, prepared by VHB

A Draft Phase 1B Archaeology Workplan dated November 2019 was prepared by VHB for GO Broome LLC. The Phase 1B Workplan was prepared in order to describe procedures for the investigation of the historical land use of the Site as previously identified in their January 2019 Phase 1A Archaeological Documentary Study. The Phase 1A concluded that portions of the Site have a moderate to high sensitivity for the presence of 19th Century archaeological features. As such, VHB prepared a Phase 1B Workplan to investigate the presence or absence of archaeological materials on Site. The findings of the Archaeological Investigation were documented in a Phase 1B/2 Archaeological Investigation Report prepared by VHB and submitted to the NYC Landmarks Preservation Commission (LPC) in November 2020. In a letter dated 7 December 2020, NYC LPC issued a conditional Notice of Satisfaction, allowing construction of the Site to begin. In a letter dated 21 December 2020, VHB provided NYC LPC with the curation plan for the archaeological collected from the Site. In a letter dated 21 January 2021, NYC LPC issued a final Notice of Satisfaction, indicating that the applicant has completed all of the required work as part of the agreement.

January 2020 Interim Remedial Measures Work Plan, prepared by Langan

An Interim Remedial Measures (IRM) Work Plan dated January 2020 was prepared by Langan for GO Broome LLC. The IRM Work Plan describes the procedures for conducting an archaeological investigation in support of the ULURP and CEQR process and geotechnical investigations at the Site. As part of the investigation activities soil borings and test pits will be installed at locations throughout the Site which will result in soil disturbance. No remedial activities were proposed as part of the IRM Work Plan; however, contingencies were provided to address unforeseen contamination that may be discovered during the soil disturbance activities, including removal of grossly and/or petroleum-impacted soil hotspots and closure of any underground storage tanks (USTs) encountered during soil disturbance activities, in advance of implementation of a RAWP for the redevelopment of the Site.

July 2020 Remedial Investigation Work Plan, prepared by Langan

A Remedial Investigation Work Plan (RIWP) dated 22 July 2020 was prepared by Langan for GO Broome LLC. The RIWP was prepared to investigate and characterize "the nature and extent of the contamination at and/or emanating from the brownfield site," per ECL Article 27, Title 14 (Brownfield Cleanup Program) and to supplement the investigation activities and results documented in the May 2019 Remedial Investigation (RI) Report.

The scope of work for the RI presented in the RIWP consisted of:

- A limited ground-penetrating radar (GPR) survey within the vicinity of soil boring locations to investigate the location of subsurface utilities;
- Advancement of ten soil borings (LSB-19 through LSB-28) and collection of 43 soil samples (including two duplicate samples);
- Collection of 12 surficial soil samples (including one duplicate sample) from 11 surficial soil sampling locations (LSS-1 through LSS-11)

- Installation of six permanent monitoring wells (LMW-7 through LMW-12) and collection of six groundwater samples (including one duplicate sample) from LMW-7 through LMW-10 and LMW-12;

- Survey and gauging of monitoring wells to evaluate groundwater elevation and flow direction; and,

- Installation of nine soil vapor sampling points (LSV-10 through LSV-18) and collection of ten soil vapor samples (including one duplicate sample) and one ambient sample.

November 2020 Remedial Investigation Report, prepared by Langan

A Remedial Investigation Report dated 10 November 2020 was prepared by Langan for GO Broome LLC to document the Remedial Investigation completed in accordance with the RIWP. The results of the 2020 RI identified that the Site is underlain by a layer of historic fill up to at least 30 feet thick followed by a layer of native sand with varying amounts of silt and gravel. Depth to groundwater ranges from about 22.65 to 27.54 (corresponding to between el 5.35 and el 8.93 NAVD88) feet below current Site grade. Based on the groundwater elevations recorded during the 2020 RI, groundwater flows to the south. Impacts indicative of contaminated historic fill are present on Site to depths of 22 feet bgs in some parts of the Site. Exceedances of the analytes associated with contaminated historic fill, including PAHs, pesticides, and metals, were detected within the surficial soil layer and within the contaminated historic fill layer. Groundwater sample analytical results did not identify the presence of pesticides, herbicides, or PCBs at concentrations above the SGVs in samples collected during the 2020 RI. The VOC acetone was detected in exceedance of the NYSDEC SGV in one groundwater sample. SVOCs and metals were detected in exceedance of NYSDEC SGVs, although the exceedances were likely attributed to naturally occurring background concentrations and elevated turbidity during sample collection. Soil vapor samples collected during the 2020 RI revealed TCE and PCE at concentrations above the respective monitoring and/or mitigation threshold in three samples in the northwestern and western areas of the Site. RI soil vapor sample analytical results also identified elevated concentrations of petroleum-related

VOCs including BTEX, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene throughout the Site footprint.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated December 2020 are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated 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 Remaining Contamination

2.5.1 Soil

Site-wide remedial excavation was performed to about 15 to 18 feet bgs to remove historic fill and contaminated materials within the Site boundary, with deeper localized excavation to about 24.5 feet bgs in certain locations. Documentation endpoint soil samples indicate that remaining contamination consists of pesticides and metals exceeding the Track 2 Restricted Residential Use Soil Cleanup Objectives (SCOs), which are listed in Table 1.

A summary of the analytical results for documentation soil samples is presented in Table 2 and are shown Figure 5. Analytical results revealed no exceedances of the NYSDEC Unrestricted Use SCOs, Restricted Residential RUSCOs, and Protection of Groundwater SCOs for VOCs, SVOCs, herbicides, or PCBs. The pesticides 44,4'-DDE (0.00359 mg/kg) and 4,4'-DDT (0.00376 mg/kg – 0.0173 mg/kg) were identified in exceedances on the Unrestricted Use SCOs. Metals including barium (373 mg/kg), lead (64 mg/kg – 253 mg/kg), mercury (0.185 mg/kg), nickel (31.4 mg/kg – 40.2 mg/kg), and zinc (119 mg/kg – 236 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs. The metal barium (450 mg/kg) was detected at a concentration exceeding the Unrestricted Use SCO and Restricted Residential RUSCO in one documentation soil sample (PE-6). The PFAS compounds perfluorooctanesulfonic acid (0.00177 mg/kg) and perfluorooctanoic acid (0.000696 mg/kg – 0.00296 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs.

2.5.2 Groundwater

Groundwater sample analytical results did not identify the presence of pesticides, herbicides, or PCBs at concentrations above the SGVs in samples collected during the 2020 RI or 2019 investigation. The VOC chloroform (7.5 micrograms per liter [µg/L]) was detected in one groundwater sample (LMW-8) collected in the eastern portion of the site during the 2020 RI. SVOCs including benzo(a)anthracene (0.15 µg/L), benzo(a)pyrene (0.16 µg/L), benzo(b)fluoranthene (0.19 µg/L), benzo(k)fluoranthene (0.06 J µg/L), chrysene (0.17 µg/L), and indeno(1,2,3-cd)pyrene (0.11 µg/L) were detected at

concentrations exceeding the SGVs in one groundwater sample (LMW-10) collected in the southeastern part of the site during the 2020 RI; however, these results are attributable to elevated turbidity during sample collection. Metals including iron (324 µg/L – 51,200 µg/L), total lead (266.6 µg/L), magnesium (87,900 µg/L – 156,000 µg/L), dissolved magnesium (72,400 µg/L – 116,000 µg/L), total manganese (371.8 µg/L – 7,272 µg/L), dissolved manganese (371.4 µg/L – 1,025 µg/L), total nickel (108 µg/L), total selenium (11.5 µg/L – 16.4 µg/L), dissolved selenium (17.3 µg/L), total sodium (40,100 µg/L – 312,000 µg/L), and dissolved sodium (38,200 µg/L – 235,000 µg/L) were detected in groundwater at concentrations exceeding the SGVs during the 2020 RI and 2019 investigation. Groundwater analytical results exceeding the SGVs for metals were detected throughout the Site and are attributed to naturally occurring background concentrations and elevated turbidity during sample collection. PFAS compounds were detected in all groundwater samples collected. Compounds detected in groundwater samples ranged from 0.309 nanograms per liter (ng/L) of perfluorononanoic acid in LMW-8 to 463 ng/L of perfluorooctanoic acid in LMW-9. The sources of PFAS contamination may be related to the two former laundry services on-Site, impacts caused to the Site from firefighting runoff from building materials when a fire occurred at the adjacent synagogue site, or an unidentified off-site source.

2.5.3 Soil Vapor

Soil vapor sample analytical results from previous environmental investigations (before remediation) identified elevated concentrations of petroleum-related VOCs including BTEX at cumulative concentrations that ranged from 21.32 microgram per cubic meter (µg/m3) at LSV-18 to 110.85 µg/m3 at LSV-1). BTEX compounds were detected in all soil vapor samples collected. Additional petroleum-related VOCs including 1,2,4-trimethylbenzene (4.45 µg/m3 – 24.6 µg/m3) and 1,3,5-trimethylbenzene (1.35 µg/m3 – 6.34 µg/m3) were also detected. The highest concentrations of petroleum related compounds were identified in LSV-12 located in the northern portion of the Site.

The VOCs cis-1,2-dichloroethene, 1,1-dichloroethene, 1,1,1-trichloroethane, carbon tetrachloride, methylene chloride, and vinyl chloride were not detected in any of the soil

vapor samples. According to the NYSDOH Soil Vapor Intrusion Matrix A, TCE concentrations (2.21 µg/m3 – 17.6 µg/m3) in soil vapor were identified above the monitoring and/or mitigation threshold of 6 µg/m3 in two soil vapor samples (LSV-11 and LSV-13). According to the NYSDOH Soil Vapor Intrusion Matrix B, PCE concentrations (6.22 µg/m3 – 164 µg/m3) in soil vapor were identified above the monitoring and/or mitigation threshold of 100 µg/m3 in two soil vapor samples (LSV-13 and LSV-14).

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the Site, Institutional Controls (ICs) and Engineering Controls (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 project manager.

This plan provides:

- A description of all IC/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 IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix D) 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 IC/ECs required by the site remedy, as determined by the NYSDEC project manager.

3.2 Institutional Controls

A series of ICs are required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the site to restricted-residential 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. These ICs are:

- Require the remedial party or site owner to complete and submit to the NYSDEC a periodic certification of IC/ECs in accordance with Part 375-1.9(h)(3);

- Allow for the use and development of the controlled property for restricted-residential use as defined in Part 375-1.8(g), although land use is subject to local zoning laws;
- Prohibits vegetable gardening and farming on the controlled property;
- Restrict the use of groundwater as a source of potable or process water, without the necessary water quality treatment as determined by the NYSDOH and/or the New York City Department of Health and Mental Hygiene (NYCDOHMH); and
- Require compliance with the NYSDEC-approved SMP.

3.3 Engineering Controls

3.3.1 Sub-Slab Depressurization Systems (SSDSs)

Active SSDSs were installed beneath both the Suffolk and Norfolk building's concrete slabs to mitigate potential soil vapor intrusion into the occupied buildings from any remaining sources on-site or migrating onto the site from off-site sources. The SSDSs were designed in accordance with New York City Mechanical Code MC 512 Sub-Slab Exhaust Systems, New York City Local Law 2009/071, USEPA document EPA/625/R-92/016 for the Sub-Slab Depressurization of Large Buildings and Schools, and the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. SSDS create depressurized (low vacuum) fields beneath the floor slabs by extracting sub-slab air with in-line fans mounted on the roof of each building which creates the vacuum within the system. The low vacuum fields create a negative pressure gradient and divert potentially-impacted vapors beneath each building to the atmosphere above the rooftop of the building, thereby reducing the potential for vapor intrusion.

The SSDSs each include a network of horizontal perforated piping set in the middle of a gas permeable gravel layer beneath the building slab and waterproofing/vapor barrier system. The horizontal piping consists of 4-inch-diameter, perforated, schedule 40 polyvinyl chloride (PVC) vapor collection piping. The gas permeable layer consists of a minimum 6-inch-thick layer of 3/4-inch recycled concrete aggregate (RCA) installed

beneath the slab. A continuous waterproofing/vapor barrier system was installed above the gas permeable layer. The combination GCP Applied Technologies and Stego-Wrap vapor barrier system consists of a PrePrufe 300R Plus 46-mil grade membrane installed below concrete foundation elements and along the exterior of the subsurface foundation walls to the first-floor grade and a Stego-Wrap 20-mil vapor barrier membrane installed below the concrete foundation slab.

Above-grade components of each of the SSDSs (including the riser pipes, in-line fans, and related accessories/monitoring devices) will be installed during each of the buildings superstructure construction. After each building is complete and before building occupancy, initial system start-up testing (SMP Section 4.3.1) will be performed to verify that all components are installed and that the system is operating within the design parameters provided in the RAWP.

Operation of the active SSDSs will not be discontinued without written approval by the NYSDEC and NYSDOH project managers. A proposal to discontinue the SSDSs may be submitted by the Volunteers (GO Broome LLC and GO Norfolk LLC or their successors) based on confirmatory data that justifies such request. The SSDSs will remain in-place and operational until permission to discontinue its use is granted in writing by the NYSDEC or NYSDOH project manager.

Procedures for operating and maintaining the SSDSs are documented in the Operation and Maintenance Plan (SMP Section 4.0). As-built drawings of the sub-slab components of each SSDS and supporting documents are included in Appendix F. The SSDS layouts are shown on Figure 6.

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 remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

3.3.2.1 Sub-Slab Depressurization Systems (SSDSs)

The SSDSs and required sealing layer vapor barrier/waterproofing membrane in the Suffolk building and Norfolk building are permanent controls, and the quality and integrity of these systems will be inspected at defined, regular intervals in perpetuity. The active SSDSs will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH project managers. If monitoring data indicates that the SSDSs may no longer be required, a proposal to discontinue the SSDSs will be submitted by the remedial party to the NYSDEC and NYSDOH project managers.

4.0 OPERATION AND MAINTENANCE PLAN

4.1 General

This Operation and Maintenance (O&M) Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the SSDSs. This O&M Plan:

- Includes procedures for each SSDS start-up and testing;
- Includes procedures for the monitoring of the performance of the SSDSs;
- Includes the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDSs;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDSs are operated and maintained.

Routine inspection and maintenance of each SSDS is the responsibility of the Volunteers, their successors and/or the property owner and/or building management.

4.1.1 Site – Wide Inspection

Site-wide inspections will be performed at a minimum of once per year. These periodic inspections must be conducted when the ground surface is visible (i.e. no snow cover). Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or duration of the inspections will require approval from the NYSDEC project manager. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix G – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including a health and safety inspection; and
- Confirm that documentation (HASP, CAMP, SMP, etc.) is available on-site; and
- Confirm that site records are up to date.

Inspections of all remedial components installed at the site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;

- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and
- If site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, verbal notice to the NYSDEC project manager must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as defined in 6 NYCCR Part 375. Written confirmation must be provided to the NYSDEC project manager within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.2 Remedial System (or other Engineering Control) Performance Criteria

The SSDS beneath the Suffolk Building will consist of two in-line fans connected to a sub-slab pipe network. The inline fans will be Obar model GBR76 UD or approved alternates. The inline fans will be operated in accordance with manufacturer's specifications and recommendations. The minimum required flow rate of the inline fan is as follows:

- 75 standard cubic feet per minute (scfm) at 15 inches of water vacuum.

The SSDS beneath the Norfolk Building will consist of one in-line fan connected to a sub-slab pipe network. The inline fan will be Obar model GBR76 SOE 16 or an approved alternate. The inline fan will be operated in accordance with manufacturer's specifications and recommendations. The minimum required flow rate of the inline fan is as follows:

- 30 scfm at 10 inches of water vacuum.

4.3 Operation and Maintenance of the SSDSs

The following sections provide a description of the O&M of the SSDSs which is based on the NYSDOH Guidance and USEPA guidance document EPA/625/R-92/016 concerning active depressurization of large buildings and schools (June 1994). Manufacturing cut-sheets and as-built drawings for the sub-slab portions of the system are provided in Appendix F.

4.3.1 System Start-Up and Testing

Prior to initial SSDS start-up, all accessible SSDS components for each SSDS will be inspected. The equipment will be started in accordance with the manufacturer's recommendations. System testing for the initial start-up will be performed as follows:

- While each system is operating, smoke tubes will be used to check for leaks through concrete cracks, floor joints, and at exposed above-grade piping connections associated with the lowest-level slab. Any leaks identified will be properly sealed.
- The blower-malfunction warning device will be tested.
- Airflow rates will be measured through the sample ports with a TSI VelociCalc meter to document that airflow within the system is consistent with design calculations.
- Vacuum pressure will be measured at the vacuum monitoring points and at the blower to document that vacuum conveyance is consistent with the design calculations.
- The building's heating, ventilation, and air conditioning (HVAC) system is operating under normal conditions.

Each system testing described above will be conducted during the initial system startup for each SSDS and if, in the course of each SSDS' lifetime, significant changes are made to the system and the system is restarted.

4.3.2 SSDS Monitoring and Inspections

Monitoring of the SSDSs will be performed annually to evaluate whether the systems are operating within design parameters. The monitoring of remedial systems must be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager. A visual inspection of the complete systems will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS components to be monitored include, but are not limited to, the components included in Table [5.3.2] below.

Table [4.3.2] – Remedial System Monitoring Requirements and Schedule

SSDS Component	Monitoring Parameter	Operating Range	Monitoring Schedule
Vacuum Monitoring Points	Vacuum Pressure	-0.015 inches of water column (minimum)	Quarterly, Annually*
Vacuum Gauges	Vacuum Pressure	-20 inches of water column (maximum)	Quarterly, Annually*
Exhaust Points	Motor Operation and Air Flow Direction	N/A	Quarterly, Annually*
Vent Riser	Flow	35 scfm (minimum)	Quarterly, Annually*
Vent Riser	Vacuum Pressure	-5 inches of water column (minimum)	Quarterly, Annually*
Remote Alarm System	Functionality & Integrity	N/A	Quarterly, Annually*
Exposed Riser Piping	Functionality, Integrity, and Labeling	N/A	Quarterly, Annually*
Vacuum Blowers	Functionality & Integrity	N/A	Quarterly, Annually*

*Components will be monitored quarterly for the first year of operation and annually thereafter.

A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix G - Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.3.3 Routine System Operation and Maintenance

The SSDSs and their in-line fans will operate continuously after the initial start-up in accordance with appropriate design specifications and parameters, the manufacturer's operation manual, and SMP requirements.

Routine equipment maintenance is the responsibility of the remedial party and/or building management. The blower assembly and its appurtenances shall be inspected at the interval specified in the manufacturer's operation manual. Routine equipment maintenance may include, but is not limited to, replacing the in-line fans or other parts, replacing vacuum pressure gauges, and testing the remote alarm system.

If any technical difficulties or non-optimal operating conditions are encountered with the SSDSs, the property owner and/or building management responsible for each building shall complete any necessary modifications or repairs to the system to bring the system into compliance with appropriate design specifications and parameters. The remedial party, NYSDEC and NYSDOH shall be notified of any significant modifications or repairs that are planned.

4.3.4 Non-Routine Operation and Maintenance

Non-routine maintenance may also be required during the SSDS' operation, including the following situations:

- The building's owner or occupants report that the warning device indicates the SSDS is not operating properly;

- The SSDS becomes damaged; or
- The building has undergone renovations that may reduce the effectiveness of the SSDS.

The NYSDEC will be informed within 24 hours upon discovery of SSDS failure. Repairs or adjustments will be made to the system as appropriate and as per manufacturer guidelines, within 15 days of the equipment failure, or whenever possible (i.e., pending availability of parts). If necessary, the system will be redesigned and restarted. Activities conducted during non-routine maintenance visits will vary.

4.3.5 System Performance Monitoring

Performance monitoring will be conducted by the Remedial Engineer (RE) or an individual under the supervision of the RE to document the effectiveness of the SSDS at the following milestones/intervals:

- At the commissioning event and start-up inspection
- Annually, concurrent with the annual site inspections
- After any severe weather or other emergency conditions (natural disasters and/or fires) that has or may have damaged the system (if necessary)
- After any significant repairs and/or modifications

Performance monitoring will include the similar procedures listed for the commissioning and startup inspection as stated in Section 5.3.1.

4.3.6 System Monitoring Devices and Alarms

The SSDSs each have a warning device to indicate that the system is not operating properly. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

5.0 PERIODIC ASSESSMENTS/EVALUATIONS

5.1 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 briefly summarizes the vulnerability of the site and ECs to severe storms/weather events and associated flooding.

According to the Effective National Flood Insurance Rate map for the City of New York published by FEMA (Community Panel No. 3604970203F, dated 5 September 2007), the site is not mapped within a flood zone; therefore, the potential for floods at the site is low.

Site erosion is not expected during severe weather or precipitation events because soil will be covered with vegetation and/or concrete pavers/asphalt. The building footprint protects the SSDSs from extreme wind conditions and stormwater watershed. ECs will be inspected after severe weather or other emergency conditions (natural disasters or fires) that are knows to have inflicted damage at the site or adjoining properties and repaired, as necessary.

The SSDSs receive electrical service from Consolidated Edison, Inc. (ConEd). A power loss and/or dips/surges in voltage during a severe weather event, including lightning strikes, may impact the SSDS equipment and operations. The SSDS control panel will shut down the system in the event of a dip or surge in voltage.

Overall, the site ECs are not expected to be vulnerable to the effects of global climate change, including severe weather and flooding events.

5.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered 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 section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

5.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at any time that the NYSDEC project manager feels appropriate, e.g., during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

5.2.2 Remedial Systems

Remedial systems will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate.

5.2.3 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site, use of consumables in relation to visiting the Site in order to conduct system checks and/or collect samples, and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

5.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study will be conducted any time that the NYSDEC project manager or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focus on overall site cleanup strategy, process optimization and management with the intent of identifying impediments to cleanup and improvements to

site operations to increase efficiency, cost effectiveness and remedial time frames. Green remediation technology and principals are to be considered when performing the RSO.

6.0 REPORTING REQUIREMENTS

6.1 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 media sampling data and 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 7.1 and summarized in the Periodic Review Report.

Table 6.1: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Periodic Review Report	Annually

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC project manager.

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);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
- Copies of all field forms completed (e.g., soil vapor sampling logs, chain-of-custody documentation);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- 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 contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- 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); and

- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data 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.

6.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the NYSDEC project manager beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, 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 Periodic Review Report 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 also be incorporated into the Periodic Review Report. 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.
- Identification of any wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
- A summary of any monitoring data and/or information generated during the reporting period, with comments and conclusions.
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific Remedial Action Work Plan (RAWP), ROD or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
  - 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 and Sampling Plan;

  - An evaluation of trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the RAWP, ROD or Decision Document; and
  - The overall performance and effectiveness of the remedy.

- A performance summary for all treatment systems at the site during the calendar year, including information such as:
  - The number of days the system operated for the reporting period;
  - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - A description of the resolution of performance problems;
  - Alarm conditions;
  - Trends in equipment failure;
  - Comments, conclusions, and recommendations based on data evaluation.

6.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State 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 institutional and engineering controls required by the remedial program was performed under my direction;*

- *The institutional control and/or engineering control employed at this site is 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;*

- *If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;*

- *Use of the site is compliant with the environmental easement;*

- *The engineering control systems 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; and*

- *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, Ronald D. Boyer, of Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C., am certifying as the Remedial Party's Designated Site Representative: *I have been authorized and designated by all site owners/remedial parties to sign this certification for the site."*

Every five years, the following certification will be added to the above list:

- *The assumptions made in the qualitative exposure assessment remain valid.*

The signed certification will be included in the Periodic Review Report.

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

6.3 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 institutional or engineering control or failure to conduct site management activities, a Corrective Measures Work Plan will be submitted to the NYSDEC project manager 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 the NYSDEC project manager.

6.4 Remedial Site Optimization Report

If an RSO is to be performed (see Section 5.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC project manager for approval. A general outline for the RSO report is provided in Appendix I. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager.

7.0 REFERENCES

1. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C., Phase I Environmental Site Assessment, dated 23 March 2018.
2. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C., Remedial Investigation Work Plan, dated 7 May 2019.
3. VHB Engineering, Surveying, Landscape Architecture, and Geology, P. C., Phase 1B Archaeology Work Plan, dated November 2019.
4. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C., Remedial Investigation Report, dated November 2020.
5. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C., Remedial Action Work Plan, dated November 2020.
6. New York State Department of Health, Final Guidance for the Evaluation of Soil Vapor Intrusion in the State of New York, dated October 2006.
7. New York State Department of Environmental Conservation, Division of Environmental Remediation, Draft Brownfield Cleanup Program Guide, dated May 2004.
8. New York State Department of Environmental Conservation, Division of Environmental Remediation, Technical and Administrative Guidance Memorandum No. 4031 Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Waste Sites, dated October 27, 1989.
9. New York State Department of Environmental Conservation, Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010; effective June 18, 2010.
10. New York State Department of Environmental Conservation, Part 375 of Title 6 of the New York Compilation of Codes, Rules, and Regulations, Effective December 14, 2006.
11. New York State Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) dated June 1998.
12. New York State Division of Water Technical and Operational Guidance Series (TOGS) 5.1.8 New York State Stormwater Management Design Manual, dated June 2008.

TABLES

Table 1
Site Management Plan
Track 2 - RUSCOs for Restricted-Residential Use

Broome Street Parking Lot
New York, New York
BCP Site No.: C231137
Langan Project No. 100646801

VOCs (mg/kg)	
1,1,1-Trichloroethane	100
1,1-Dichloroethane	26
1,1-Dichloroethene	100
1,2,4-Trimethylbenzene	52
1,2-Dichlorobenzene	100
1,2-Dichloroethane	3.1
1,3,5- Trimethylbenzene	52
1,3-Dichlorobenzene	49
1,4-Dichlorobenzene	13
1,4-Dioxane	13
Acetone	100
Benzene	4.8
Butylbenzene	100
Carbon tetrachloride	2.4
Chlorobenzene	100
Chloroform	49
cis-1,2-Dichloroethene	100
Ethylbenzene	41
Hexachlorobenzene	1.2
Methyl ethyl ketone	100
Methyl tert-butyl ether	100
Methylene chloride	100
n-Propylbenzene	100
sec-Butylbenzene	100
tert-Butylbenzene	100
Tetrachloroethene	19
Toluene	100
trans-1,2-Dichloroethene	100
Trichloroethene	21
Vinyl chloride	0.9
Xylene (mixed)	100
Metals (mg/kg)	
Arsenic	16
Barium	400
Beryllium	72
Cadmium	4.3
Chromium, hexavalent	110
Chromium, trivalent	180
Copper	270
Lead	400
Manganese	2000
Nickel	310
Selenium	180
Silver	180
Total Cyanide	27
Total Mercury	0.81
Zinc	10000

SVOCs (mg/kg)	
Acenaphthene	100
Acenapthylene	100
Anthracene	100
Benz(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(g,h,i)perylene	100
Benzo(k)fluoranthene	3.9
Chrysene	3.9
Dibenz(a,h)anthracene	0.33
Fluoranthene	100
Fluorene	100
Indeno(1,2,3-cd)pyrene	0.5
m-Cresol	100
Naphthalene	100
o-Cresol	100
p-Cresol	100
Pentachlorophenol	6.7
Phenanthrene	100
Phenol	100
Pyrene	100
PCBs/Pesticides (mg/kg)	
2,4,5-TP Acid (Silvex)	100
4,4'- DDD	13
4,4'-DDE	8.9
4,4'-DDT	7.9
Aldrin	0.097
alpha-BHC	0.48
beta-BHC	0.36
Chlordane (alpha)	4.2
delta-BHC	100
Dibenzofuran	59
Dieldrin	0.2
Endosulfan I	24
Endosulfan II	24
Endosulfan sulfate	24
Endrin	11
Heptachlor	2.1
Lindane	1.3
Polychlorinated biphenyls	1

Notes:
The Track 2 SCOs are the Part 375 Restricted Use Soil Cleanup Objectives (RUSCOs) for Restricted-Residential Use.
SVOC: semivolatile organic compound
VOC: volatile organic compound
PCB: polychlorinated biphenyl
mg/kg: milligram per kilogram

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	Location	092_PE-1	093_PE-2	094_PE-3	095_PE-4	096_PE-5	097_PE-6	098_PE-7	102_PE-28	104_PE-31	105_PE-33	106_PE-35	106_PE-35	107_PE-36	108_PE-37A	109_PE-37B
				Sample Name	092_PE-1_042021	093_PE-2_042021	094_PE-3_042021	095_PE-4_042021	096_PE-5_042021	097_PE-6_042021	098_PE-7_042021	102_PE-28_042121	104_PE-31_042121	105_PE-33_042121	106_PE-35_042121	110_DUP-1_042121	107_PE-36_042121	108_PE-37A_042121	109_PE-37B_042121
				Sample Date	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021
				Depth	18-18.5	17.5-18	17.5-18	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5
				Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
1,1,1-Trichloroethane	71-55-6	0.68	100	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	NS	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
1,1,2-Trichloroethane	79-00-5	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
1,1-Dichloroethane	75-34-3	0.27	26	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
1,1-Dichloroethene	75-35-4	0.33	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
1,1-Dichloropropene	563-58-6	NS	NS	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,2,3-Trichloropropane	96-18-4	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,2,4,5-Tetramethylbenzene	95-93-2	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,2,4-Trimethylbenzene	95-63-6	3.6	52	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,2-Dibromo-3-Chloropropane	96-12-8	NS	NS	mg/kg	<0.0035 U	<0.003 U	<0.0033 U	<0.0031 U	<0.0031 U	<0.0033 U	<0.0031 U	<0.0031 U	<0.0033 U	<0.0034 U	<0.0035 U	<0.0035 U	<0.0031 U	<0.003 U	<0.0029 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
1,2-Dichlorobenzene	95-50-1	1.1	100	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,2-Dichloroethane	107-06-2	0.02	3.1	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
1,2-Dichloropropane	78-87-5	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	8.4	52	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,3-Dichlorobenzene	541-73-1	2.4	49	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,3-Dichloropropane	142-28-9	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,4-Dichlorobenzene	106-46-7	1.8	13	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,4-Diethyl Benzene	105-05-5	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	mg/kg	<0.093 U	<0.081 U	<0.087 U	<0.082 U	<0.082 U	<0.088 U	<0.082 U	<0.082 U	<0.089 U	<0.09 U	<0.093 U	<0.093 U	<0.083 U	<0.079 U	<0.077 U
2,2-Dichloropropane	594-20-7	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
2-Chlorotoluene	95-49-8	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
2-Hexanone (MBK)	591-78-6	NS	NS	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
4-Chlorotoluene	106-43-4	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
4-Ethyltoluene	622-96-8	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Acetone	67-64-1	0.05	100	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	0.0078 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
Acrylonitrile	107-13-1	NS	NS	mg/kg	<0.0047 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0045 U	<0.0046 U	<0.0046 U	<0.0041 U	<0.004 U	<0.0039 U
Benzene	71-43-2	0.06	4.8	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Bromobenzene	108-86-1	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Bromochloromethane	74-97-5	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Bromodichloromethane	75-27-4	NS	NS	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Bromoform	75-25-2	NS	NS	mg/kg	<0.0047 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0045 U	<0.0046 U	<0.0046 U	<0.0041 U	<0.004 U	<0.0039 U
Bromomethane	74-83-9	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Carbon Disulfide	75-15-0	NS	NS	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
Carbon Tetrachloride	56-23-5	0.76	2.4	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Chlorobenzene	108-90-7	1.1	100	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Chloroethane	75-00-3	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Chloroform	67-66-3	0.37	49	mg/kg	<0.0018 U	<0.0015 U	<0.0016 U	<0.0015 U	<0.0015 U	<0.0016 U	<0.0015 U	<0.0015 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0016 U	<0.0015 U	<0.0014 U
Chloromethane	74-87-3	NS	NS	mg/kg	<0.0047 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0045 U	<0.0046 U	<0.0046 U	<0.0041 U	<0.004 U	<0.0039 U
Cis-1,2-Dichloroethene	156-59-2	0.25	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Cymene	99-87-6	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Dibromochloromethane	124-48-1	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Dibromomethane	74-95-3	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Dichlorodifluoromethane	75-71-8	NS	NS	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
Diethyl Ether (Ethyl Ether)	60-29-7	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Ethylbenzene	100-41-4	1	41	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	0.00032 J	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Hexachlorobutadiene	87-68-3	NS	NS	mg/kg	<0.0047 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0045 U	<0.0046 U	<0.0046 U	<0.0041 U	<0.004 U	<0.0039 U
Isopropylbenzene (Cumene)	98-82-8	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
M,P-Xylene	179601-23-1	NS	NS	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	0.0017 J	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.12	100	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	NS	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
Methylene Chloride	75-09-2	0.05	100	mg/kg	<0.0058 U	<0.0051 U	<0.0054 U	<0.0051 U	<0.0051 U	<0.0055 U	<0.0052 U	<0.0051 U	<0.0056 U	<0.0056 U	<0.0058 U	<0.0058 U	<0.0052 U	<0.0049 U	<0.0048 U
Naphthalene	91-20-3	12	100	mg/kg	<0.0047 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0045 U	<0.0046 U	<0.0046 U	<0.0041 U	<0.004 U	<0.0039 U
n-Butylbenzene	104-51-8	12	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
n-Propylbenzene	103-65-1	3.9	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	0.00036 J	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Sec-Butylbenzene	135-98-8	11	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Styrene	100-42-5	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
T-Butylbenzene	98-06-6	5.9	100	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Tert-Butyl Methyl Ether	1634-04-4	0.93	100	mg/kg	<0.0023 U	<0.002 U	<0.0022 U	<0.002 U	<0.002 U	<0.0022 U	<0.0021 U	<0.002 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0021 U	<0.002 U	<0.0019 U
Tetrachloroethene (PCE)	127-18-4	1.3	19	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Toluene	108-88-3	0.7	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	0.0066	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	0.0011	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Total 1,2-Dichloroethene (Cis and Trans)	540-59-0	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Total Xylenes	1330-20-7	0.26	100	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	0.0021 J	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Total, 1,3-Dichloropropene (Cis And Trans)	542-75-6	NS	NS	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Trans-1,2-Dichloroethene	156-60-5	0.19	100	mg/kg	<0.0018 U	<0.0015 U	<0.0016 U	<0.0015 U	<0.0015 U	<0.0016 U	<0.0015 U	<0.0015 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0016 U	<0.0015 U	<0.0014 U
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U
Trans-1,4-Dichloro-2-Butene	110-57-6	NS	NS	mg/kg	<0.0058 U	<0.0051 U	<0.0054 U	<0.0051 U	<0.0051 U	<0.0055 U	<0.0052 U	<0.0051 U	<0.0056 U	<0.0056 U	<0.0058 U	<0.0058 U	<0.0052 U	<0.0049 U	<0.0048 U
Trichloroethene (TCE)	79-01-6	0.47	21	mg/kg	<0.00058 U	<0.00051 U	<0.00054 U	<0.00051 U	<0.00051 U	<0.00055 U	<0.00052 U	<0.00051 U	<0.00056 U	<0.00056 U	<0.00058 U	<0.00058 U	<0.00052 U	<0.00049 U	<0.00048 U
Trichlorofluoromethane	75-69-4	NS	NS	mg/kg	<0.0047 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0041 U	<0.0041 U	<0.0044 U	<0.0045 U	<0.0046 U	<0.0046 U	<0.0041 U	<0.004 U	<0.0039 U
Vinyl Acetate	108-05-4	NS	NS	mg/kg	<0.012 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.01 U	<0.0099 U	<0.0097 U
Vinyl Chloride	75-01-4	0.02	0.9	mg/kg	<0.0012 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.001 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.001 U	<0.00099 U	<0.00097 U

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	Location	092_PE-1	093_PE-2	094_PE-3	095_PE-4	096_PE-5	097_PE-6	098_PE-7	102_PE-28	104_PE-31	105_PE-33	106_PE-35	106_PE-35	107_PE-36	108_PE-37A	109_PE-37B
				Sample Name	092_PE-1_042021	093_PE-2_042021	094_PE-3_042021	095_PE-4_042021	096_PE-5_042021	097_PE-6_042021	098_PE-7_042021	102_PE-28_042121	104_PE-31_042121	105_PE-33_042121	106_PE-35_042121	110_DUP-1_042121	107_PE-36_042121	108_PE-37A_042121	109_PE-37B_042121
				Sample Date	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021
				Depth	18-18.5	17.5-18	17.5-18	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5
				Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Semivolatile Organic Compounds																			
1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
1,2-Dichlorobenzene	95-50-1	1.1	100	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
1,3-Dichlorobenzene	541-73-1	2.4	49	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
1,4-Dichlorobenzene	106-46-7	1.8	13	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	mg/kg	<0.026 U	<0.027 U	<0.028 U	<0.027 U	<0.026 U	<0.026 U	<0.026 U	<0.028 U	<0.027 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	NA
2,4,5-Trichlorophenol	95-95-4	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U
2,4,6-Trichlorophenol	88-06-2	NS	NS	mg/kg	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.11 U	<0.11 U
2,4-Dichlorophenol	120-83-2	NS	NS	mg/kg	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U
2,4-Dimethylphenol	105-67-9	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2,4-Dinitrophenol	51-28-5	NS	NS	mg/kg	<0.83 U	<0.87 U	<0.91 U	<0.86 U	<0.84 U	<0.83 U	<0.83 U	<0.89 U	<0.86 U	<0.84 U	<0.83 U	<0.83 U	<0.82 U	<0.85 U	<0.86 U
2,4-Dinitrotoluene	121-14-2	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2,6-Dinitrotoluene	606-20-2	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2-Chloronaphthalene	91-58-7	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2-Chlorophenol	95-57-8	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2-Methylnaphthalene	91-57-6	NS	NS	mg/kg	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	0.16 J
2-Methylphenol (o-Cresol)	95-48-7	0.33	100	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2-Nitroaniline	88-74-4	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
2-Nitrophenol	88-75-5	NS	NS	mg/kg	<0.38 U	<0.39 U	<0.41 U	<0.39 U	<0.38 U	<0.37 U	<0.37 U	<0.4 U	<0.39 U	<0.38 U	<0.37 U	<0.37 U	<0.37 U	<0.38 U	<0.38 U
3 & 4 Methylphenol (m&p Cresol)	65794-96-9	0.33	100	mg/kg	<0.25 U	<0.26 U	<0.27 U	<0.26 U	<0.25 U	<0.25 U	<0.25 U	<0.27 U	<0.26 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.26 U
3,3'-Dichlorobenzidine	91-94-1	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
3-Nitroaniline	99-09-2	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
4,6-Dinitro-2-Methylphenol	534-52-1	NS	NS	mg/kg	<0.45 U	<0.47 U	<0.49 U	<0.47 U	<0.45 U	<0.45 U	<0.45 U	<0.48 U	<0.46 U	<0.45 U	<0.45 U	<0.45 U	<0.45 U	<0.46 U	<0.46 U
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
4-Chloro-3-Methylphenol	59-50-7	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
4-Chloroaniline	106-47-8	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
4-Nitroaniline	100-01-6	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
4-Nitrophenol	100-02-7	NS	NS	mg/kg	<0.24 U	<0.25 U	<0.26 U	<0.25 U	<0.24 U	<0.24 U	<0.24 U	<0.26 U	<0.25 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.25 U	<0.25 U
Acenaphthene	83-32-9	20	100	mg/kg	<0.14 U	<0.14 U	<0.15 U	<0.14 U	0.024 J	0.021 J	0.02 J	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	0.02 J	0.23
Acenaphthylene	208-96-8	100	100	mg/kg	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	0.085 J
Acetophenone	98-86-2	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Anthracene	120-12-7	100	100	mg/kg	<0.1 U	<0.11 U	<0.11 U	<0.11 U	0.037 J	0.05 J	0.051 J	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.046 J	0.4
Benzo(a)anthracene	56-55-3	1	1	mg/kg	<0.1 U	<0.11 U	<0.11 U	0.044 J	0.079 J	0.13	0.18	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	0.037 J	0.14	0.59
Benzo(a)pyrene	50-32-8	1	1	mg/kg	<0.14 U	<0.14 U	<0.15 U	<0.14 U	0.053 J	0.1 J	0.16	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	0.11 J	0.44
Benzo(b)fluoranthene	205-99-2	1	1	mg/kg	<0.1 U	<0.11 U	<0.11 U	0.05 J	0.054 J	0.14	0.2	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	0.034 J	0.15	0.58
Benzo(g,h,i)Perylene	191-24-2	100	100	mg/kg	<0.14 U	<0.14 U	<0.15 U	0.026 J	0.024 J	0.063 J	0.097 J	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	0.072 J	0.25
Benzo(k)fluoranthene	207-08-9	0.8	3.9	mg/kg	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	0.046 J	0.071 J	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.048 J	0.18
Benzoic Acid	65-85-0	NS	NS	mg/kg	<0.56 U	<0.59 U	<0.61 U	<0.58 U	<0.57 U	<0.56 U	<0.56 U	<0.6 U	<0.58 U	<0.57 U	<0.56 U	<0.56 U	<0.56 U	<0.57 U	<0.58 U
Benzyl Alcohol	100-51-6	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Benzyl Butyl Phthalate	85-68-7	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Biphenyl (Diphenyl)	92-52-4	NS	NS	mg/kg	<0.4 U	<0.41 U	<0.43 U	<0.41 U	<0.4 U	<0.39 U	<0.4 U	<0.42 U	<0.41 U	<0.4 U	<0.39 U	<0.39 U	<0.39 U	<0.4 U	0.042 J
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	mg/kg	<0.19 U	<0.2 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.18 U	<0.19 U	<0.19 U
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	NS	NS	mg/kg	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U
Bis(2-chloroisopropyl) ether	108-60-1	NS	NS	mg/kg	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U
Bis(2-ethylhexyl) phthalate	117-81-7	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Carbazole	86-74-8	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	0.022 J	0.022 J	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	0.022 J	0.17 J
Chrysene	218-01-9	1	3.9	mg/kg	<0.1 U	<0.11 U	<0.11 U	0.039 J	0.076 J	0.11	0.17	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	0.035 J	0.13	0.51
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	mg/kg	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.1 U	0.026 J	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.02 J	0.07 J
Dibenzofuran	132-64-9	7	59	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	0.19
Dibutyl phthalate	84-74-2	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Diethyl phthalate	84-66-2	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Dimethyl phthalate	131-11-3	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Dioctyl phthalate	117-84-0	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Fluoranthene	206-44-0	100	100	mg/kg	<0.1 U	<0.11 U	<0.11 U	0.07 J	0.12	0.25	0.34	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	0.066 J	0.28	1.2
Fluorene	86-73-7	30	100	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	0.022 J	0.024 J	0.018 J	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	0.02 J	0.25
Hexachlorobenzene	118-74-1	0.33	1.2	mg/kg	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.11 U	<0.11 U
Hexachlorobutadiene	87-68-3	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Hexachlorocyclopentadiene	77-47-4	NS	NS	mg/kg	<0.5 U	<0.52 U	<0.54 U	<0.51 U	<0.5 U	<0.49 U	<0.5 U	<0.53 U	<0.51 U	<0.5 U	<0.49 U	<0.5 U	<0.49 U	<0.51 U	<0.51 U
Hexachloroethane	67-72-1	NS	NS	mg/kg	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	mg/kg	<0.14 U	<0.14 U	<0.15 U	0.026 J	<0.14 U	0.064 J	0.1 J	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	0.079 J	0.27
Isophorone	78-59-1	NS	NS	mg/kg	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U
Naphthalene	91-20-3	12	100	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	0.022 J	0.026 J	0.023 J	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	0.28
Nitrobenzene	98-95-3	NS	NS	mg/kg	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U
n-Nitrosodi-N-Propylamine	621-64-7	NS	NS	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
n-Nitrosodiphenylamine	86-30-6	NS	NS	mg/kg	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Pentachlorophenol	87-86-5	0.8	6.7	mg/kg	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Phenanthrene	85-01-8	100	100	mg/kg	<0.1 U	<0.11 U	<0.11 U	0.038 J	0.2	0.22	0.22	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	0.049 J	0.22	1.5
Phenol	108-95-2	0.33	100	mg/kg	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.18 U
Pyrene	129-00-0	100	100	mg/kg	<0.1 U	<0.11 U	0.02 J	0.068 J	0.17	0.22	0.32	<0.11 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U	0.07 J	0.24	1

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	Location	092_PE-1	093_PE-2	094_PE-3	095_PE-4	096_PE-5	097_PE-6	098_PE-7	102_PE-28	104_PE-31	105_PE-33	106_PE-35	106_PE-35	107_PE-36	108_PE-37A	109_PE-37B
				Sample Name	092_PE-1_042021	093_PE-2_042021	094_PE-3_042021	095_PE-4_042021	096_PE-5_042021	097_PE-6_042021	098_PE-7_042021	102_PE-28_042121	104_PE-31_042121	105_PE-33_042121	106_PE-35_042121	110_DUP-1_042121	107_PE-36_042121	108_PE-37A_042121	109_PE-37B_042121
				Sample Date	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/20/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021	4/21/2021
				Depth	18-18.5	17.5-18	17.5-18	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5	18-18.5
				Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Pesticides																			
4,4'-DDD	72-54-8	0.0033	13	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	0.00173	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	0.00124 J
4,4'-DDE	72-55-9	**0.0033**	8.9	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	0.000453 J	0.000785 J	0.00122 J	**0.00359**	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	0.00167	0.00324
4,4'-DDT	50-29-3	**0.0033**	7.9	mg/kg	<0.00312 U	<0.00311 U	<0.00325 U	0.002 J	0.00186 J	0.00263 J	**0.00787**	<0.00324 U	<0.00316 U	<0.00306 U	<0.00303 U	<0.00309 U	<0.00309 U	**0.00444**	**0.0087**
Aldrin	309-00-2	0.005	0.097	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	<0.00165 U	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	<0.00166 U
Alpha BHC (Alpha Hexachlorocyclohexane)	319-84-6	0.02	0.48	mg/kg	<0.000694 U	<0.000692 U	<0.000722 U	<0.000708 U	<0.000679 U	<0.000664 U	<0.000688 U	<0.000721 U	<0.000702 U	<0.000679 U	<0.000674 U	<0.000686 U	<0.000686 U	<0.000694 U	<0.000692 U
Alpha Chlordane	5103-71-9	0.094	4.2	mg/kg	<0.00208 U	<0.00208 U	<0.00217 U	<0.00212 U	0.000961 J	<0.00199 U	<0.00206 U	<0.00216 U	<0.0021 U	<0.00204 U	<0.00202 U	<0.00206 U	<0.00206 U	<0.00208 U	<0.00208 U
Alpha Endosulfan	959-98-8	2.4	24	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	<0.00165 U	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	<0.00166 U
Beta Bhc (Beta Hexachlorocyclohexane)	319-85-7	0.036	0.36	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	<0.00165 U	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	<0.00166 U
Beta Endosulfan	33213-65-9	2.4	24	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	<0.00165 U	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	<0.00166 U
Chlordane (alpha and gamma)	57-74-9	NS	NS	mg/kg	<0.0139 U	<0.0138 U	<0.0144 U	<0.0142 U	<0.0136 U	<0.0133 U	<0.0138 U	<0.0144 U	<0.014 U	<0.0136 U	<0.0135 U	<0.0137 U	<0.0137 U	<0.0139 U	<0.0138 U
Delta Bhc (Delta Hexachlorocyclohexane)	319-86-8	0.04	100	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	<0.00165 U	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	<0.00166 U
Dieldrin	60-57-1	0.005	0.2	mg/kg	<0.00104 U	<0.00104 U	<0.00108 U	<0.00106 U	<0.00102 U	<0.000996 U	<0.00103 U	<0.00108 U	<0.00105 U	<0.00102 U	<0.00101 U	<0.00103 U	<0.00103 U	<0.00104 U	<0.00104 U
Endosulfan Sulfate	1031-07-8	2.4	24	mg/kg	<0.000694 U	<0.000692 U	<0.000722 U	<0.000708 U	<0.000679 U	<0.000664 U	<0.000688 U	<0.000721 U	<0.000702 U	<0.000679 U	<0.000674 U	<0.000686 U	<0.000686 U	<0.000694 U	<0.000692 U
Endrin	72-20-8	0.014	11	mg/kg	<0.000694 U	<0.000692 U	<0.000722 U	<0.000708 U	<0.000679 U	<0.000664 U	<0.000688 U	<0.000721 U	<0.000702 U	<0.000679 U	<0.000674 U	<0.000686 U	<0.000686 U	<0.000694 U	<0.000692 U
Endrin Aldehyde	7421-93-4	NS	NS	mg/kg	<0.00208 U	<0.00208 U	<0.00217 U	<0.00212 U	<0.00204 U	<0.00199 U	<0.00206 U	<0.00216 U	<0.0021 U	<0.00204 U	<0.00202 U	<0.00206 U	<0.00206 U	<0.00208 U	<0.00208 U
Endrin Ketone	53494-70-5	NS	NS	mg/kg	<0.00166 U	<0.00166 U	<0.00173 U	<0.0017 U	<0.00163 U	<0.00159 U	<0.00165 U	<0.00173 U	<0.00168 U	<0.00163 U	<0.00162 U	<0.00165 U	<0.00165 U	<0.00167 U	<0.00166 U
Gamma Bhc (Lindane)	58-89-9	0.1	1.3	mg/kg	<0.000694 U	<0.000692 U	<0.000722 U	<0.000708 U	<0.000679 U	<0.000664 U	<0.000688 U	<0.000721 U	<0.000702 U	<0.000679 U	<0.000674 U	<0.000686 U	<0.000686 U	<0.000694 U	<0.000692 U
Gamma Chlordane	5103-74-2	NS	NS	mg/kg	<0.00208 U	<0.00208 U	<0.00217 U	<0.00212 U	0.000567 J	<0.00199 U	<0.00206 U	<0.00216 U	<0.0021 U	<0.00204 U	<0.00202 U	<0.00206 U	<0.00206 U	<0.00208 U	<0.00208 U
Heptachlor	76-44-8	0.042	2.1	mg/kg	<0.000833 U	<0.00083 U	<0.000866 U	<0.00085 U	<0.000815 U	<0.000797 U	<0.000826 U	<0.000865 U	<0.000842 U	<0.000815 U	<0.000809 U	<0.000823 U	<0.000824 U	<0.000833 U	<0.00083 U
Heptachlor Epoxide	1024-57-3	NS	NS	mg/kg	<0.00312 U	<0.00311 U	<0.00325 U	<0.00319 U	<0.00306 U	<0.00299 U	<0.0031 U	<0.00324 U	<0.00316 U	<0.00306 U	<0.00303 U	<0.00309 U	<0.00309 U	<0.00312 U	<0.00311 U
Methoxychlor	72-43-5	NS	NS	mg/kg	<0.00312 U	<0.00311 U	<0.00325 U	<0.00319 U	<0.00306 U	<0.00299 U	<0.0031 U	<0.00324 U	<0.00316 U	<0.00306 U	<0.00303 U	<0.00309 U	<0.00309 U	<0.00312 U	<0.00311 U
Toxaphene	8001-35-2	NS	NS	mg/kg	<0.0312 U	<0.0311 U	<0.0325 U	<0.0319 U	<0.0306 U	<0.0299 U	<0.031 U	<0.0324 U	<0.0316 U	<0.0306 U	<0.0303 U	<0.0309 U	<0.0309 U	<0.0312 U	<0.0311 U
Herbicides																			
2,4,5-T (Trichlorophenoxyacetic Acid)	93-76-5	NS	NS	mg/kg	<0.173 U	<0.182 U	<0.186 U	<0.178 U	<0.173 U	<0.173 U	<0.172 U	<0.187 U	<0.174 U	<0.171 U	<0.171 U	<0.172 U	<0.172 U	<0.177 U	<0.175 U
2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	NS	NS	mg/kg	<0.173 U	<0.182 U	<0.186 U	<0.178 U	<0.173 U	<0.173 U	<0.172 U	<0.187 U	<0.174 U	<0.171 U	<0.171 U	<0.172 U	<0.172 U	<0.177 U	<0.175 U
Silvex (2,4,5-Tp)	93-72-1	3.8	100	mg/kg	<0.173 U	<0.182 U	<0.186 U	<0.178 U	<0.173 U	<0.173 U	<0.172 U	<0.187 U	<0.174 U	<0.171 U	<0.171 U	<0.172 U	<0.172 U	<0.177 U	<0.175 U
Polychlorinated Biphenyls																			
PCB-1016 (Aroclor 1016)	12674-11-2	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1221 (Aroclor 1221)	11104-28-2	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1232 (Aroclor 1232)	11141-16-5	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1242 (Aroclor 1242)	53469-21-9	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1248 (Aroclor 1248)	12672-29-6	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	0.0167 J	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	0.0095 J
PCB-1254 (Aroclor 1254)	11097-69-1	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1260 (Aroclor 1260)	11096-82-5	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1262 (Aroclor 1262)	37324-23-5	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
PCB-1268 (Aroclor 1268)	11100-14-4	NS	NS	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	<0.0347 U	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	<0.034 U
Total PCBs	1336-36-3	0.1	1	mg/kg	<0.0332 U	<0.0363 U	<0.0359 U	<0.0349 U	<0.0346 U	<0.0345 U	<0.033 U	<0.036 U	0.0167 J	<0.0334 U	<0.0344 U	<0.0346 U	<0.0333 U	<0.0348 U	0.0095 J
Metals																			
Aluminum	7429-90-5	NS	NS	mg/kg	2,710	3,660	3,400	2,770	1,600	2,010	2,280	4,430	4,220	2,000	2,640	2,650	2,340	2,690	2,180
Antimony	7440-36-0	NS	NS	mg/kg	0.329 J	0.414 J	0.497 J	0.666 J	0.498 J	0.928 J	0.715 J	<0.411 U	<0.43 U	<0.404 U	<0.409 U	<0.408 U	<0.408 U	0.458 J	<0.411 U
Arsenic	7440-38-2	13	16	mg/kg	0.979	1.48	1.54	1.8	1.16	1.7	2.37	0.317 J	0.297 J	0.228 J	0.497 J	0.378 J	0.494 J	1.1	0.935
Barium	7440-39-3	**350**	400	mg/kg	21	28.8	97.9	144	40.5	**450**	**373**	33.9	34.3	28	40.3	46.6	67.1	231	202
Beryllium	7440-41-7	7.2	72	mg/kg	0.099 J	0.186 J	0.214 J	0.154 J	0.079 J	0.122 J	0.148 J	0.3 J	0.248 J	0.173 J	0.196 J	0.193 J	0.183 J	0.196 J	0.154 J
Cadmium	7440-43-9	2.5	4.3	mg/kg	0.164 J	0.203 J	0.24 J	0.257 J	0.221 J	0.39 J	0.46 J	0.309 J	0.256 J	0.165 J	0.212 J	0.218 J	0.207 J	0.335 J	0.268 J
Calcium	7440-70-2	NS	NS	mg/kg	819	963	2,040	4,070	1,270	6,860	8,630	1,170	1,300	989	7,330	7,300	5,450	4,880	4,300
Chromium, Hexavalent	18540-29-9	1	110	mg/kg	<0.837 U	<0.882 U	<0.908 U	<0.865 U	<0.84 U	<0.838 U	0.514 J	<0.903 U	<0.859 U	<0.839 U	<0.844 U	<0.848 U	<0.847 U	<0.871 U	<0.858 U
Chromium, Total	7440-47-3	NS	NS	mg/kg	8.38	9.49	8.75	7.23	4.63	6.08	7.09	11.6	11.9	6.34	7.36	7.34	6.94	8.59	6.44
Chromium, Trivalent	16065-83-1	30	180	mg/kg	8.4	9.5	8.8	7.2	4.6	6.1	6.6 J	12	12	6.3	7.4	7.3	6.9	8.6	6.4
Cobalt	7440-48-4	NS	NS	mg/kg	2.73	4.55	6.83	3.32	2.42	2.93	3.46	6.18	6.11	4.38	4.79	4.76	4.87	4.51	3.62
Copper	7440-50-8	50	270	mg/kg	6.64	9.68	11.6	10.9	11.4	11.9	18.8	9.84	9.14	7.95	7.73	8.17	8.13	13.1	10.5
Cyanide	57-12-5	27	27	mg/kg	<1 UJ	<1.1 UJ	<1.1 UJ	<1 UJ	<1 UJ	<0.99 UJ	0.32 J	<1.1 UJ	<0.99 UJ	<1 UJ	<0.98 UJ	<1 UJ	<0.99 UJ	<1.1 UJ	0.26 J
Iron	7439-89-6	NS	NS	mg/kg	7,300	8,830	8,850	7,710	5,510	6,110	6,730	10,700	10,400	5,960	7,890	7,950	6,980	8,250	6,320
Lead	7439-92-1	**63**	400	mg/kg	3.24 J	5.94	32.4	49.2	19.4	**253**	**180**	4.13 J	4.62	2.98 J	2.97 J	4.24	13.6	**84.2**	**64**
Magnesium	7439-95-4	NS	NS	mg/kg	1,520	1,850	1,810	2,280	1,560	2,570	2,600	2,090	2,190	1,490	5,170	5,270	4,350	2,700	2,210
Manganese	7439-96-5	1600	2000	mg/kg	146	283	295	189	178	254	216	486	286	354	245	240	239	251	194
Mercury	7439-97-6	**0.18**	0.81	mg/kg	<0.072 U	<0.072 U	<0.076 U	<0.069 U	0.062 J	0.061 J	**0.185**	<0.071 U	<0.068 U	<0.066 U	<0.067 U	<0.066 U	<0.067 U	0.1	0.13
Nickel	7440-02-0	**30**	310	mg/kg	12.5	17.9	18.6	16.4	12.2	17.8	20.6	30	18.9	15.3	**31.9**	**32.6**	**31.4**	25.5	20.8
Potassium	7440-09-7	NS	NS	mg/kg	398	640	636	549	356	528	526	992	1,090	417	792	783	531	691	569
Selenium	7782-49-2	3.9	180	mg/kg	<1.64 U	<1.69 U	<1.71 U	<1.72 U	<1.58 U	<1.63 U	0.288 J	<1.76 U	<1.65 U	<1.58 U	<1.63 U	<1.68 U	<1.59 U	<1.64 U	<1.62 U
Silver	7440-22-4	2	180	mg/kg	<0.823 U	<0.845 U	<0.857 U	<0.858 U	<0.79 U	<0.814 U	<0.822 U	<0.882 U	<0.826 U	<0.788 U	<0.815 U	<0.84 U	<0.796 U	<0.818 U	<0.813 U
Sodium	7440-23-5	NS	NS	mg/kg	65.1 U	93.9 U	63.6 U	53 U	35.9 U	56.8 U	67 U	115 J	86.9 J	49.6 J	66.9 J	64.8 J	65.5 J	72.1 J	69.4 J
Thallium	7440-28-0	NS	NS	mg/kg	<1.64 U	<1.69 U	<1.71 U	<1.72 U	<1.58 U	<1.63 U	<1.64 U	0.326 J	<1.65 U	0.433 J	<1.63 U	<1.68 U	<1.59 U	<1.64 U	<1.62 U
Vanadium	7440-62-2	NS	NS	mg/kg	9.19	11.6	11.6	9.95	5.77	8.26	8.65	12.8	12.1	7.78	8.63	9.14	7.92	8.9	6.93
Zinc	7440-66-6	**109**	10000	mg/kg	16.7	18.8	48.4	93.4	66.4	**186**	**236**	21.7	20.8	13.8	14.7	15	30.8	**119**	95.2
General Chemistry																			
Total Solids	TSOLID	NS	NS	Percent	95.6	90.7	88.1	92.5	95.2	95.5	95.3	88.6	93.1	95.3	94.8	94.3	94.4	91.8	93.2
Perfluorooctanoic Acids																			
N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NS	NS	mg/kg	<0.000235 U	<0.000263 UJ	<0.000266 U	<0.00025 U	<0.000242 U	<0.000252 U	<0.000231 U	<0.000259 U	<0.000241 U	<0.00023 U	<0.000241 U	<0.000232 U	<0.000249 U	<0.000251 U	<0.000248 U
Perfluorobutanoic acid (PFBA)	375-22-4	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	0.00016 J
Perfluorodecanoic Acid (PFDA)	335-76-2	NS	NS	mg/kg	<0.000235 U	<0.000263 U	<0.000266 U	<0.00025 U	<0.000242 U	<0.000252 U	<0.000231 U	NA	<0.000241 U	<0.00023 U	<0.000241 U	<0.000232 U	<0.000249 U	<0.000251 U	<0.000248 U
Perfluorododecanoic Acid (PFDoA)	307-55-1	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluoroheptanoic acid (PFHpA)	375-85-9	NS	NS	mg/kg	<0.000235 U	<0.000263 U	<0.000266 U	<0.00025 U	<0.000242 U	<0.000252 U	<0.000231 U	0.000055 J	<0.000241 U	<0.00023 U	<0.000241 U	<0.000232 U	<0.000249 U	<0.000251 U	<0.000248 U
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NS	NS	mg/kg	<0.000235 U	<0.000263 U	<0.000266 U	<0.00025 U	<0.000242 U	<0.000252 U	<0.000231 U	<0.000259 U	<0.000241 U	<0.00023 U	<0.000241 U	<0.000232 U	<0.000249 U	<0.000251 U	<0.000248 U
Perfluorohexanoic Acid (PFHxA)	307-24-4	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	0.000069 J	0.000064 J	0.000053 J	0.000067 J	0.000064 J	0.000059 J	0.000063 J	0.000058 J
Perfluorononanoic Acid (PFNA)	375-95-1	NS	NS	mg/kg	<0.000235 U	<0.000263 U	<0.000266 U	<0.00025 U	<0.000242 U	<0.000252 U	<0.000231 U	<0.000259 U	<0.000241 U	<0.00023 U	<0.000241 U	<0.000232 U	<0.000249 U	<0.000251 U	<0.000248 U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	**0.00088**	0.044	mg/kg	<0.000235 U	0.000172 J	0.000207 J	0.000221 J	**0.00177**	0.000417	0.0004	<0.000259 U	<0.000241 U	<0.00023 U	0.00074	0.000741	0.00013 J	0.000153 J	0.000196 J
Perfluorooctanoic Acid (PFOA)	335-67-1	**0.00066**	0.033	mg/kg	0.000561	**0.000859**	**0.000913**	0.000468	0.000308	0.000317	0.000254	**0.000717**	0.000627	<0.00023 U	0.000062 J	0.000058 J	0.000092 J	0.000171 J	0.000188 J
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluorotetradecanoic Acid (PFTA)	376-06-7	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS)	39108-34-4	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS)	27619-97-2	NS	NS	mg/kg	<0.00047 U	<0.000526 U	<0.000533 U	<0.0005 U	<0.000485 U	<0.000505 U	<0.000461 U	<0.000519 U	<0.000482 U	<0.000459 U	<0.000482 U	<0.000463 U	<0.000498 U	<0.000502 U	<0.000496 U
Total PFOA and PFOS	TOTPFOAPFOS	NS	NS	mg/kg	0.000561	0.00103 J	0.00112 J	0.000689 J	0.00208	0.000734	0.000654	0.000717	0.000627	<0.00023 U	0.000802 J	0.000799 J	0.000222 J	0.000324 J	0.000384 J

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	114_PE-39	115_PE-40	117_PE-8	117_PE-8	119_PE-41	120_PE-34	121_PE-24	122_PE-25	123_PE-26	124_PE-27	125_PE-29	126_PE-38	128_PE-43	129_PE-44	130_PE-47	132_PE-9
				114_PE-39_060121	115_PE-40_060121	117_PE-8_060321	118_DUP-1_060321	119_PE-41_060321	120_PE-34_060321	121_PE-24_072221	122_PE-25_072221	123_PE-26_072221	124_PE-27_072221	125_PE-29_060321	126_PE-38_060321	128_PE-43_060821	129_PE-44_060821	130_PE-47_060821	132_PE-9_062821
				6/1/2021	6/1/2021	6/3/2021	6/3/2021	6/3/2021	6/3/2021	7/22/2021	7/22/2021	7/22/2021	7/22/2021	6/3/2021	6/3/2021	6/8/2021	6/8/2021	6/8/2021	6/28/2021
				24.5-25	24.5-25	18-18.5	18-18.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	17.5-18	17.5-18	17.5-18	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
1,1,1-Trichloroethane	71-55-6	0.68	100	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	NS	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
1,1,2-Trichloroethane	79-00-5	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
1,1-Dichloroethane	75-34-3	0.27	26	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
1,1-Dichloroethene	75-35-4	0.33	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
1,1-Dichloropropene	563-58-6	NS	NS	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,2,3-Trichloropropane	96-18-4	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,2,4,5-Tetramethylbenzene	95-93-2	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,2,4-Trimethylbenzene	95-63-6	3.6	52	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,2-Dibromo-3-Chloropropane	96-12-8	NS	NS	<0.0036 U	<0.0037 U	<0.0036 U	<0.0032 U	<0.0031 U	<0.003 U	<0.0036 U	<0.0035 U	<0.0032 U	<0.0038 U	<0.0027 U	<0.0033 U	<0.0041 U	<0.0034 U	<0.0034 U	<0.0032 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
1,2-Dichlorobenzene	95-50-1	1.1	100	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,2-Dichloroethane	107-06-2	0.02	3.1	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
1,2-Dichloropropane	78-87-5	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	8.4	52	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,3-Dichlorobenzene	541-73-1	2.4	49	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,3-Dichloropropane	142-28-9	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,4-Dichlorobenzene	106-46-7	1.8	13	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,4-Diethyl Benzene	105-05-5	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	<0.095 U	<0.096 U	<0.096 U	<0.084 U	<0.082 U	<0.081 U	<0.097 U	<0.093 U	<0.086 U	<0.1 U	<0.072 U	<0.089 U	<0.11 U	<0.091 U	<0.09 U	<0.086 U
2,2-Dichloropropane	594-20-7	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
2-Chlorotoluene	95-49-8	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
2-Hexanone (MBK)	591-78-6	NS	NS	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	<0.012 U	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
4-Chlorotoluene	106-43-4	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
4-Ethyltoluene	622-96-8	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Acetone	67-64-1	0.05	100	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	0.035	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
Acrylonitrile	107-13-1	NS	NS	<0.0048 U	<0.0049 U	<0.0048 U	<0.0042 U	<0.0041 U	<0.0041 U	<0.0048 U	<0.0047 U	<0.0043 U	<0.005 U	<0.0036 U	<0.0044 U	<0.0054 U	<0.0046 U	<0.0045 U	<0.0043 U
Benzene	71-43-2	0.06	4.8	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Bromobenzene	108-86-1	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Bromochloromethane	74-97-5	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Bromodichloromethane	75-27-4	NS	NS	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Bromoform	75-25-2	NS	NS	<0.0048 U	<0.0049 U	<0.0048 U	<0.0042 U	<0.0041 U	<0.0041 U	<0.0048 U	<0.0047 U	<0.0043 U	<0.005 U	<0.0036 U	<0.0044 U	<0.0054 U	<0.0046 U	<0.0045 U	<0.0043 U
Bromomethane	74-83-9	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Carbon Disulfide	75-15-0	NS	NS	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	<0.012 U	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
Carbon Tetrachloride	56-23-5	0.76	2.4	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Chlorobenzene	108-90-7	1.1	100	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Chloroethane	75-00-3	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Chloroform	67-66-3	0.37	49	<0.0018 U	<0.0018 U	<0.0018 U	<0.0016 U	<0.0015 U	<0.0015 U	0.001 U	0.00031 U	0.00027 J	0.00032 U	<0.0014 U	<0.0017 U	<0.002 U	<0.0017 U	<0.0017 U	<0.0016 U
Chloromethane	74-87-3	NS	NS	<0.0048 U	<0.0049 U	<0.0048 U	<0.0042 U	<0.0041 U	<0.0041 U	<0.0048 U	<0.0047 U	<0.0043 U	<0.005 U	<0.0036 U	<0.0044 U	<0.0054 U	<0.0046 U	<0.0045 U	<0.0043 U
Cis-1,2-Dichloroethene	156-59-2	0.25	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Cymene	99-87-6	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Dibromochloromethane	124-48-1	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Dibromomethane	74-95-3	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Dichlorodifluoromethane	75-71-8	NS	NS	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	<0.012 U	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
Diethyl Ether (Ethyl Ether)	60-29-7	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Ethylbenzene	100-41-4	1	41	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Hexachlorobutadiene	87-68-3	NS	NS	<0.0048 U	<0.0049 U	<0.0048 U	<0.0042 U	<0.0041 U	<0.0041 U	0.00053 J	0.00022 J	<0.0043 U	<0.005 U	<0.0036 U	<0.0044 U	<0.0054 U	<0.0046 U	<0.0045 U	<0.0043 U
Isopropylbenzene (Cumene)	98-82-8	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
M,P-Xylene	179601-23-1	NS	NS	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.12	100	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	<0.012 U	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	NS	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	<0.012 U	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
Methylene Chloride	75-09-2	0.05	100	<0.0059 U	<0.0061 U	<0.006 U	<0.0053 U	<0.0051 U	<0.0051 U	<0.006 U	<0.0058 U	<0.0054 U	<0.0062 U	<0.0045 U	<0.0056 U	<0.0068 U	<0.0057 U	<0.0056 U	<0.0054 U
Naphthalene	91-20-3	12	100	<0.0048 U	<0.0049 U	<0.0048 U	<0.0042 U	<0.0041 U	<0.0041 U	<0.0048 U	<0.0047 U	<0.0043 U	<0.005 U	<0.0036 U	<0.0044 U	0.0019 J	0.0012 J	0.00083 J	<0.0043 U
n-Butylbenzene	104-51-8	12	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
n-Propylbenzene	103-65-1	3.9	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Sec-Butylbenzene	135-98-8	11	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Styrene	100-42-5	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
T-Butylbenzene	98-06-6	5.9	100	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Tert-Butyl Methyl Ether	1634-04-4	0.93	100	<0.0024 U	<0.0024 U	<0.0024 U	<0.0021 U	<0.002 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0021 U	<0.0025 U	<0.0018 U	<0.0022 U	<0.0027 U	<0.0023 U	<0.0022 U	<0.0022 U
Tetrachloroethene (PCE)	127-18-4	1.3	19	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Toluene	108-88-3	0.7	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Total 1,2-Dichloroethene (Cis and Trans)	540-59-0	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Total Xylenes	1330-20-7	0.26	100	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Total, 1,3-Dichloropropene (Cis And Trans)	542-75-6	NS	NS	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Trans-1,2-Dichloroethene	156-60-5	0.19	100	<0.0018 U	<0.0018 U	<0.0018 U	<0.0016 U	<0.0015 U	<0.0015 U	<0.0018 U	<0.0018 U	<0.0016 U	<0.0019 U	<0.0014 U	<0.0017 U	<0.002 U	<0.0017 U	<0.0017 U	<0.0016 U
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U
Trans-1,4-Dichloro-2-Butene	110-57-6	NS	NS	<0.0059 U	<0.0061 U	<0.006 U	<0.0053 U	<0.0051 U	<0.0051 U	<0.006 U	<0.0058 U	<0.0054 U	<0.0062 U	<0.0045 U	<0.0056 U	<0.0068 U	<0.0057 U	<0.0056 U	<0.0054 U
Trichloroethene (TCE)	79-01-6	0.47	21	<0.00059 U	<0.00061 U	<0.0006 U	<0.00053 U	<0.00051 U	<0.00051 U	<0.0006 U	<0.00058 U	<0.00054 U	<0.00062 U	<0.00045 U	<0.00056 U	<0.00068 U	<0.00057 U	<0.00056 U	<0.00054 U
Trichlorofluoromethane	75-69-4	NS	NS	<0.0048 U	<0.0049 U	<0.0048 U	<0.0042 U	<0.0041 U	<0.0041 U	<0.0048 U	<0.0047 U	<0.0043 U	<0.005 U	<0.0036 U	<0.0044 U	<0.0054 U	<0.0046 U	<0.0045 U	<0.0043 U
Vinyl Acetate	108-05-4	NS	NS	<0.012 U	<0.012 U	<0.012 U	<0.01 U	<0.01 U	<0.01 U	<0.012 U	<0.012 U	<0.011 U	<0.012 U	<0.009 U	<0.011 U	<0.014 U	<0.011 U	<0.011 U	<0.011 U
Vinyl Chloride	75-01-4	0.02	0.9	<0.0012 U	<0.0012 U	<0.0012 U	<0.001 U	<0.001 U	<0.001 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.0012 U	<0.0009 U	<0.0011 U	<0.0014 U	<0.0011 U	<0.0011 U	<0.0011 U

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	114_PE-39	115_PE-40	117_PE-8	117_PE-8	119_PE-41	120_PE-34	121_PE-24	122_PE-25	123_PE-26	124_PE-27	125_PE-29	126_PE-38	128_PE-43	129_PE-44	130_PE-47	132_PE-9
				114_PE-39_060121	115_PE-40_060121	117_PE-8_060321	118_DUP-1_060321	119_PE-41_060321	120_PE-34_060321	121_PE-24_072221	122_PE-25_072221	123_PE-26_072221	124_PE-27_072221	125_PE-29_060321	126_PE-38_060321	128_PE-43_060821	129_PE-44_060821	130_PE-47_060821	132_PE-9_062821
				6/1/2021	6/1/2021	6/3/2021	6/3/2021	6/3/2021	6/3/2021	7/22/2021	7/22/2021	7/22/2021	7/22/2021	6/3/2021	6/3/2021	6/8/2021	6/8/2021	6/8/2021	6/28/2021
				24.5-25	24.5-25	18-18.5	18-18.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	17.5-18	17.5-18	17.5-18	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Semivolatile Organic Compounds																			
1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
1,2-Dichlorobenzene	95-50-1	1.1	100	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
1,3-Dichlorobenzene	541-73-1	2.4	49	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
1,4-Dichlorobenzene	106-46-7	1.8	13	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	<0.031 U	<0.032 U	<0.025 U	<0.026 U	<0.026 U	<0.026 U	<0.027 U	<0.028 U	<0.027 U	<0.028 U	<0.027 U	<0.025 U	<0.027 UJ	<0.026 UJ	<0.026 UJ	<0.026 U
2,4,5-Trichlorophenol	95-95-4	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2,4,6-Trichlorophenol	88-06-2	NS	NS	<0.12 U	<0.13 U	<0.1 U	<0.1 U	<0.11 U	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
2,4-Dichlorophenol	120-83-2	NS	NS	<0.18 U	<0.19 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.17 U	<0.16 U	<0.17 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U
2,4-Dimethylphenol	105-67-9	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2,4-Dinitrophenol	51-28-5	NS	NS	<0.98 U	<1 U	<0.81 U	<0.82 U	<0.85 U	<0.82 U	<0.87 U	<0.9 U	<0.87 U	<0.9 U	<0.86 U	<0.81 U	<0.86 U	<0.84 U	<0.85 U	<0.83 U
2,4-Dinitrotoluene	121-14-2	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2,6-Dinitrotoluene	606-20-2	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2-Chloronaphthalene	91-58-7	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2-Chlorophenol	95-57-8	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2-Methylnaphthalene	91-57-6	NS	NS	<0.24 U	<0.26 U	<0.2 U	<0.2 U	<0.21 U	<0.2 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.2 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U
2-Methylphenol (o-Cresol)	95-48-7	0.33	100	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2-Nitroaniline	88-74-4	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
2-Nitrophenol	88-75-5	NS	NS	<0.44 U	<0.47 U	<0.37 U	<0.37 U	<0.38 U	<0.37 U	<0.39 U	<0.4 U	<0.39 U	<0.41 U	<0.39 U	<0.36 U	<0.39 U	<0.38 U	<0.38 U	<0.37 U
3 & 4 Methylphenol (m&p Cresol)	65794-96-9	0.33	100	<0.29 U	<0.31 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.26 U	<0.27 U	<0.26 U	<0.27 U	<0.26 U	<0.24 U	<0.26 U	<0.25 U	<0.25 U	<0.25 U
3,3'-Dichlorobenzidine	91-94-1	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 UJ	<0.17 UJ	<0.18 UJ	<0.17 U
3-Nitroaniline	99-09-2	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
4,6-Dinitro-2-Methylphenol	534-52-1	NS	NS	<0.53 U	<0.56 U	<0.44 U	<0.44 U	<0.46 U	<0.44 U	<0.47 U	<0.49 U	<0.47 U	<0.49 U	<0.46 U	<0.44 U	<0.46 U	<0.45 U	<0.46 U	<0.45 U
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
4-Chloro-3-Methylphenol	59-50-7	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
4-Chloroaniline	106-47-8	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
4-Nitroaniline	100-01-6	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
4-Nitrophenol	100-02-7	NS	NS	<0.29 U	<0.3 U	<0.24 U	<0.24 U	<0.25 U	<0.24 U	<0.26 U	<0.26 U	<0.25 U	<0.26 U	<0.25 U	<0.24 U	<0.25 U	<0.24 U	<0.25 U	<0.24 U
Acenaphthene	83-32-9	20	100	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Acenaphthylene	208-96-8	100	100	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Acetophenone	98-86-2	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Anthracene	120-12-7	100	100	<0.12 U	<0.13 U	<0.1 U	<0.1 U	<0.11 U	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Benzo(a)anthracene	56-55-3	1	1	<0.12 U	<0.13 U	<0.1 U	0.027 J	0.028 J	0.035 J	0.039 J	<0.11 U	<0.11 U	0.041 J	0.03 J	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Benzo(a)pyrene	50-32-8	1	1	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Benzo(b)fluoranthene	205-99-2	1	1	<0.12 U	<0.13 U	<0.1 U	<0.1 U	<0.11 U	0.039 J	<0.11 U	<0.11 U	<0.11 U	0.038 J	0.031 J	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Benzo(g,h,i)Perylene	191-24-2	100	100	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	0.02 J	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Benzo(k)fluoranthene	207-08-9	0.8	3.9	<0.12 U	<0.13 U	<0.1 U	<0.1 U	<0.11 U	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Benzoic Acid	65-85-0	NS	NS	<0.66 U	<0.7 U	<0.55 U	<0.56 U	<0.57 U	<0.55 U	<0.59 U	<0.61 U	<0.59 U	<0.61 U	<0.58 U	<0.55 U	<0.58 U	<0.57 U	<0.57 U	<0.56 U
Benzyl Alcohol	100-51-6	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Benzyl Butyl Phthalate	85-68-7	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Biphenyl (Diphenyl)	92-52-4	NS	NS	<0.47 U	<0.49 U	<0.39 U	<0.39 U	<0.4 U	<0.39 U	<0.42 U	<0.43 U	<0.41 U	<0.43 U	<0.41 U	<0.38 U	<0.41 U	<0.4 U	<0.4 U	<0.39 U
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	<0.22 U	<0.23 U	<0.18 U	<0.18 U	<0.19 U	<0.18 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.19 U	<0.18 U	<0.19 U	<0.19 U	<0.19 U	<0.18 U
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	NS	NS	<0.18 U	<0.19 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.17 U	<0.16 U	<0.17 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U
Bis(2-chloroisopropyl) ether	108-60-1	NS	NS	<0.24 U	<0.26 U	<0.2 U	<0.2 U	<0.21 U	<0.2 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.2 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U
Bis(2-ethylhexyl) phthalate	117-81-7	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	0.1 J	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Carbazole	86-74-8	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Chrysene	218-01-9	1	3.9	<0.12 U	<0.13 U	<0.1 U	<0.1 U	0.023 J	0.033 J	0.033 J	<0.11 U	<0.11 U	0.034 J	0.028 J	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	<0.12 U	<0.13 U	<0.1 U	<0.1 U	<0.11 U	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Dibenzofuran	132-64-9	7	59	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Dibutyl phthalate	84-74-2	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Diethyl phthalate	84-66-2	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Dimethyl phthalate	131-11-3	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Dioctyl phthalate	117-84-0	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Fluoranthene	206-44-0	100	100	<0.12 U	<0.13 U	<0.1 U	0.042 J	0.048 J	0.063 J	0.062 J	<0.11 U	<0.11 U	0.07 J	0.046 J	<0.1 U	<0.11 U	<0.1 U	<0.1 U	0.027 J
Fluorene	86-73-7	30	100	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Hexachlorobenzene	118-74-1	0.33	1.2	<0.12 U	<0.13 U	<0.1 U	<0.1 U	<0.11 U	<0.1 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Hexachlorobutadiene	87-68-3	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Hexachlorocyclopentadiene	77-47-4	NS	NS	<0.58 U	<0.62 U	<0.48 U	<0.49 U	<0.5 U	<0.49 U	<0.52 U	<0.53 U	<0.52 U	<0.54 U	<0.51 U	<0.48 U	<0.51 U	<0.5 U	<0.5 U	<0.49 U
Hexachloroethane	67-72-1	NS	NS	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Isophorone	78-59-1	NS	NS	<0.18 U	<0.19 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.17 U	<0.16 U	<0.17 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U
Naphthalene	91-20-3	12	100	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	0.039 J	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Nitrobenzene	98-95-3	NS	NS	<0.18 U	<0.19 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.17 U	<0.16 U	<0.17 U	<0.16 U	<0.15 U	<0.16 U	<0.16 U	<0.16 U	<0.15 U
n-Nitrosodi-N-Propylamine	621-64-7	NS	NS	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
n-Nitrosodiphenylamine	86-30-6	NS	NS	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Pentachlorophenol	87-86-5	0.8	6.7	<0.16 U	<0.17 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.15 U	<0.14 U	<0.15 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
Phenanthrene	85-01-8	100	100	<0.12 U	<0.13 U	<0.1 U	0.028 J	0.025 J	0.045 J	0.067 J	<0.11 U	<0.11 U	0.055 J	0.032 J	<0.1 U	<0.11 U	<0.1 U	<0.1 U	<0.1 U
Phenol	108-95-2	0.33	100	<0.2 U	<0.22 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
Pyrene	129-00-0	100	100	<0.12 U	<0.13 U	<0.1 U	0.042 J	0.04 J	0.057 J	0.072 J	<0.11 U	<0.11 U	0.069 J	0.048 J	<0.1 U	<0.11 U	<0.1 U	<0.1 U	0.028 J

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	114_PE-39	115_PE-40	117_PE-8	117_PE-8	119_PE-41	120_PE-34	121_PE-24	122_PE-25	123_PE-26	124_PE-27	125_PE-29	126_PE-38	128_PE-43	129_PE-44	130_PE-47	132_PE-9
				114_PE-39_060121	115_PE-40_060121	117_PE-8_060321	118_DUP-1_060321	119_PE-41_060321	120_PE-34_060321	121_PE-24_072221	122_PE-25_072221	123_PE-26_072221	124_PE-27_072221	125_PE-29_060321	126_PE-38_060321	128_PE-43_060821	129_PE-44_060821	130_PE-47_060821	132_PE-9_062821
				6/1/2021	6/1/2021	6/3/2021	6/3/2021	6/3/2021	6/3/2021	7/22/2021	7/22/2021	7/22/2021	7/22/2021	6/3/2021	6/3/2021	6/8/2021	6/8/2021	6/8/2021	6/28/2021
				24.5-25	24.5-25	18-18.5	18-18.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	17.5-18	17.5-18	17.5-18	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Pesticides																			
4,4'-DDD	72-54-8	0.0033	13	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
4,4'-DDE	72-55-9	**0.0033**	8.9	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	0.000417 J	0.00067 J	0.000563 J	0.00194	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	0.000559 J
4,4'-DDT	50-29-3	**0.0033**	7.9	<0.00356 U	<0.0038 U	<0.00297 U	0.00197 J	**0.00376**	0.00133 J	0.00202 J	0.00329	0.00317 J	**0.0173**	<0.00314 U	<0.00299 U	<0.00311 U	<0.0031 U	<0.00318 U	0.00183 J
Aldrin	309-00-2	0.005	0.097	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
Alpha BHC (Alpha Hexachlorocyclohexane)	319-84-6	0.02	0.48	<0.000791 U	<0.000843 U	<0.00066 U	<0.000701 U	<0.000675 U	<0.000666 U	<0.000712 U	<0.00072 U	<0.000731 U	<0.000741 U	<0.000698 U	<0.000665 U	<0.000691 U	<0.000689 U	<0.000707 U	<0.000674 U
Alpha Chlordane	5103-71-9	0.094	4.2	<0.00237 U	<0.00253 U	<0.00198 U	<0.0021 U	<0.00202 U	<0.002 U	<0.00213 U	<0.00216 U	<0.00219 U	0.00121 J	<0.00209 U	<0.00199 U	<0.00207 U	<0.00207 U	<0.00212 U	<0.00202 U
Alpha Endosulfan	959-98-8	2.4	24	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
Beta Bhc (Beta Hexachlorocyclohexane)	319-85-7	0.036	0.36	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
Beta Endosulfan	33213-65-9	2.4	24	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
Chlordane (alpha and gamma)	57-74-9	NS	NS	<0.0158 U	<0.0169 U	<0.0132 U	<0.014 U	<0.0135 U	<0.0133 U	<0.0142 U	<0.0144 U	<0.0146 U	<0.0148 U	<0.014 U	<0.0133 U	<0.0138 U	<0.0138 U	<0.0141 U	<0.0135 U
Delta Bhc (Delta Hexachlorocyclohexane)	319-86-8	0.04	100	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
Dieldrin	60-57-1	0.005	0.2	<0.00119 U	<0.00126 U	<0.000991 U	<0.00105 U	<0.00101 U	<0.000999 U	<0.00107 U	<0.00108 U	<0.0011 U	<0.00111 U	<0.00105 U	<0.000997 U	<0.00104 U	<0.00103 U	<0.00106 U	<0.00101 U
Endosulfan Sulfate	1031-07-8	2.4	24	<0.000791 U	<0.000843 U	<0.00066 U	<0.000701 U	<0.000675 U	<0.000666 U	<0.000712 U	<0.00072 U	<0.000731 U	<0.000741 U	<0.000698 U	<0.000665 U	<0.000691 U	<0.000689 U	<0.000707 U	<0.000674 U
Endrin	72-20-8	0.014	11	<0.000791 U	<0.000843 U	<0.00066 U	<0.000701 U	<0.000675 U	<0.000666 U	<0.000712 U	<0.00072 U	<0.000731 U	<0.000741 U	<0.000698 U	<0.000665 U	<0.000691 U	<0.000689 U	<0.000707 U	<0.000674 U
Endrin Aldehyde	7421-93-4	NS	NS	<0.00237 U	<0.00253 U	<0.00198 U	<0.0021 U	<0.00202 U	<0.002 U	<0.00213 U	<0.00216 U	<0.00219 U	<0.00222 U	<0.00209 U	<0.00199 U	<0.00207 U	<0.00207 U	<0.00212 U	<0.00202 U
Endrin Ketone	53494-70-5	NS	NS	<0.0019 U	<0.00202 U	<0.00158 U	<0.00168 U	<0.00162 U	<0.0016 U	<0.00171 U	<0.00173 U	<0.00176 U	<0.00178 U	<0.00168 U	<0.0016 U	<0.00166 U	<0.00165 U	<0.0017 U	<0.00162 U
Gamma Bhc (Lindane)	58-89-9	0.1	1.3	<0.000791 U	<0.000843 U	<0.00066 U	<0.000701 U	<0.000675 U	<0.000666 U	<0.000712 U	<0.00072 U	<0.000731 U	<0.000741 U	<0.000698 U	<0.000665 U	<0.000691 U	<0.000689 U	<0.000707 U	<0.000674 U
Gamma Chlordane	5103-74-2	NS	NS	<0.00237 U	<0.00253 U	<0.00198 U	<0.0021 U	<0.00202 U	<0.002 U	<0.00213 U	<0.00216 U	<0.00219 U	0.001 J	<0.00209 U	<0.00199 U	<0.00207 U	<0.00207 U	<0.00212 U	<0.00202 U
Heptachlor	76-44-8	0.042	2.1	<0.000949 U	<0.00101 U	<0.000793 U	<0.000841 U	<0.00081 U	<0.000799 U	<0.000854 U	<0.000864 U	<0.000878 U	<0.000889 U	<0.000838 U	<0.000798 U	<0.000829 U	<0.000826 U	<0.000848 U	<0.000809 U
Heptachlor Epoxide	1024-57-3	NS	NS	<0.00356 U	<0.0038 U	<0.00297 U	<0.00315 U	<0.00304 U	<0.003 U	<0.0032 U	<0.00324 U	<0.00329 U	<0.00333 U	<0.00314 U	<0.00299 U	<0.00311 U	<0.0031 U	<0.00318 U	<0.00303 U
Methoxychlor	72-43-5	NS	NS	<0.00356 U	<0.0038 U	<0.00297 U	<0.00315 U	<0.00304 U	<0.003 U	<0.0032 U	<0.00324 U	<0.00329 U	<0.00333 U	<0.00314 U	<0.00299 U	<0.00311 U	<0.0031 U	<0.00318 U	<0.00303 U
Toxaphene	8001-35-2	NS	NS	<0.0356 U	<0.038 U	<0.0297 U	<0.0315 U	<0.0304 U	<0.03 U	<0.032 U	<0.0324 U	<0.0329 U	<0.0333 U	<0.0314 U	<0.0299 U	<0.0311 U	<0.031 U	<0.0318 U	<0.0303 U
Herbicides																			
2,4,5-T (Trichlorophenoxyacetic Acid)	93-76-5	NS	NS	<0.205 U	<0.214 U	<0.168 U	<0.175 U	<0.173 U	<0.17 U	<0.181 U	<0.187 U	<0.182 U	<0.188 U	<0.182 U	<0.171 U	<0.18 U	<0.176 U	<0.175 U	<0.172 U
2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	NS	NS	<0.205 U	<0.214 U	<0.168 U	<0.175 U	<0.173 U	<0.17 U	<0.181 U	<0.187 U	<0.182 U	<0.188 U	<0.182 U	<0.171 U	<0.18 U	<0.175 U	<0.175 U	<0.172 U
Silvex (2,4,5-Tp)	93-72-1	3.8	100	<0.205 U	<0.214 U	<0.168 U	<0.175 U	<0.173 U	<0.17 U	<0.181 U	<0.187 U	<0.182 U	<0.188 U	<0.182 U	<0.171 U	<0.18 U	<0.175 U	<0.175 U	<0.172 U
Polychlorinated Biphenyls																			
PCB-1016 (Aroclor 1016)	12674-11-2	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1221 (Aroclor 1221)	11104-28-2	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1232 (Aroclor 1232)	11141-16-5	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1242 (Aroclor 1242)	53469-21-9	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1248 (Aroclor 1248)	12672-29-6	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1254 (Aroclor 1254)	11097-69-1	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1260 (Aroclor 1260)	11096-82-5	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	0.0352	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1262 (Aroclor 1262)	37324-23-5	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
PCB-1268 (Aroclor 1268)	11100-14-4	NS	NS	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	<0.0333 U	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
Total PCBs	1336-36-3	0.1	1	<0.0401 U	<0.0418 U	<0.0339 U	<0.0339 U	<0.0335 U	<0.0333 U	<0.0351 U	<0.0364 U	<0.0353 U	<0.0371 U	<0.0349 U	0.0352	<0.0342 U	<0.0342 U	<0.0346 U	<0.0348 U
Metals																			
Aluminum	7429-90-5	NS	NS	3,030	3,200	3,590	2,980	2,350	2,380	2,570	2,220	3,680	4,570	3,310	1,930	1,920	2,220	2,070	2,970
Antimony	7440-36-0	NS	NS	<4.53 U	<5.04 U	<4.12 U	<4.2 U	<4.05 U	<4 U	<4.27 U	<4.32 U	<4.39 U	<4.44 U	<4.19 U	<4 U	<4.15 U	<4.13 U	<4.17 U	<4.05 U
Arsenic	7440-38-2	13	16	1.29	1.29	1.22	0.9	0.927	1.21	1.3	0.916	1.3	1.51	1.02	0.646 J	0.675 J	0.556 J	0.913	1.31
Barium	7440-39-3	**350**	400	38.5	48.3	35.6 J	102 J	122 J	40.8	33.9	27	38.6	30.9	49.8	23.4	22.8	21.1	26.8	32
Beryllium	7440-41-7	7.2	72	0.193 J	0.192 J	0.124 J	0.131 J	0.13 J	0.112 J	0.196 J	0.135 J	0.189 J	0.311 J	0.181 J	0.102 J	0.123 J	0.141 J	0.148 J	0.191 J
Cadmium	7440-43-9	2.5	4.3	0.184 J	0.222 J	<0.824 U	<0.818 U	<0.813 U	<0.801 U	<0.851 U	<0.898 U	<0.857 U	<0.888 U	<0.862 U	<0.788 U	0.107 J	0.124 J	0.115 J	0.127 J
Calcium	7440-70-2	NS	NS	1,660	1,800	1,650 J	5,160 J	2,700 J	3,740	1,460	5,650	3,300	1,060	2,380	2,670	1,110	768	1,130	1,900
Chromium, Hexavalent	18540-29-9	1	110	0.325 J	<1.04 U	<0.833 U	<0.849 U	<0.855 U	<0.84 U	<0.877 U	<0.914 U	<0.896 U	<0.909 U	<0.883 U	<0.828 U	<0.872 UJ	<0.853 UJ	<0.854 UJ	<0.841 U
Chromium, Total	7440-47-3	NS	NS	8.71	10.8	10.1	8.39	7.23	6	6.9	5.97	9.83	12.2	9.31	4.48	5.7	6.36	5.83	8.32
Chromium, Trivalent	16065-83-1	30	180	8.4 J	11	10	8.4	7.2	6	6.9	6	9.8	12	9.3	4.5	5.7	6.4	5.8	8.3
Cobalt	7440-48-4	NS	NS	4.55	4.83	6.69 J	3.81 J	3.73	3.29	4.1	2.97	4.79	7.03	4.96	2.42	2.91	3.39	3.26	3.93
Copper	7440-50-8	50	270	10.2	14.6	9.8	10.1	7.2	7.48	8.46	7.41	8.47	9.41	9.6	5.82	6.48	6.96	6.78	8.16
Cyanide	57-12-5	27	27	<1.2 UJ	<1.3 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1.1 UJ	<1.1 UJ	<1.1 UJ	<1 UJ	<1.1 UJ	<1 UJ	<1.1 UJ	<1 UJ
Iron	7439-89-6	NS	NS	8,730	10,700	9,080	7,160	6,800	6,340	6,600	5,980	8,320	10,500	7,850	4,860	4,900	5,660	5,960	7,260
Lead	7439-92-1	**63**	400	9.74	7.01	3.37 J	25 J	19.5	11.4	10.7	6.44	19.7	8.39	12.2	2.01 J	7.6 J	2.89 J	2.7 J	11.5
Magnesium	7439-95-4	NS	NS	2,110	2,140	2,750	3,350	2,470	2,750	1,980	2,770	2,870	1,990	2,180	2,390	1,470	1,500	1,830	2,200
Manganese	7439-96-5	1600	2000	278	389	388	245	219	210	395	199	239	390	336	229	152	227	195	221
Mercury	7439-97-6	**0.18**	0.81	<0.079 U	<0.082 U	<0.078 U	<0.088 U	<0.076 U	<0.078 U	<0.081 U	<0.089 U	<0.081 U	<0.093 U	<0.078 U	<0.082 U	<0.078 U	<0.067 U	<0.069 U	<0.067 U
Nickel	7440-02-0	**30**	310	21.2	20.9	**36.4 J**	20.8 J	21.8	16.7	23.2	13.8	24.2	23.4	20.9	13.6	13.9	14.3	12.4	17.9
Potassium	7440-09-7	NS	NS	710	739	1,040	658	652	517	472	425	690	775	673	339	412	438	553	647
Selenium	7782-49-2	3.9	180	<1.93 U	<2.02 U	<1.65 U	<1.64 U	<1.63 U	<1.6 U	<1.7 U	0.44 J	0.352 J	0.497 J	<1.72 U	<1.58 U	<1.65 U	<1.66 U	<1.64 U	<1.59 U
Silver	7440-22-4	2	180	<0.966 U	<1.01 U	<0.824 U	<0.818 U	<0.813 U	<0.801 U	<0.851 U	<0.898 U	<0.857 U	<0.888 U	<0.862 U	<0.788 U	<0.823 U	<0.83 U	<0.822 U	<0.797 U
Sodium	7440-23-5	NS	NS	93.6 J	91.4 J	102 U	72.7 U	75.6 U	61.3 U	56.3 J	54.6 J	77.4 J	55.8 J	81.2 U	65.4 U	54.9 J	56.6 J	66.1 J	112 J
Thallium	7440-28-0	NS	NS	<1.93 U	<2.02 U	<1.65 U	<1.64 U	<1.63 U	<1.6 U	<1.7 U	<1.8 U	<1.71 U	<1.78 U	<1.72 U	<1.58 U	<1.65 U	<1.66 U	<1.64 U	<1.59 U
Vanadium	7440-62-2	NS	NS	11.8	12.9	12.3	9.71	8.44	7.79	8.62	7.44	13	14.9	9.63	5.55	6.49	7.35	7.86	9.22
Zinc	7440-66-6	**109**	10000	22.8	21.6	26.8	44.5	31.3	26.3	20.3	14.9	25.7	24.4	34.3	9.28	16.4 J	13.1	12.3	18.9
General Chemistry																			
Total Solids	TSOLID	NS	NS	80	76.6	96	94.2	93.6	95.2	91.2	87.5	89.3	88	90.6	96.6	91.7	93.8	93.7	95.1
Perfluorooctanoic Acids																			
N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NS	NS	<0.000303 U	<0.0003 U	<0.000246 U	<0.00025 U	<0.00026 U	<0.000243 U	<0.000244 U	<0.000274 U	<0.000266 U	<0.000267 U	<0.00026 U	<0.000238 U	<0.000249 U	<0.000251 U	<0.000245 U	<0.000235 U
Perfluorobutanoic acid (PFBA)	375-22-4	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 UJ	<0.00049 U	<0.00047 U
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluorodecanoic Acid (PFDA)	335-76-2	NS	NS	<0.000303 U	<0.0003 U	<0.000246 U	<0.00025 U	<0.00026 U	<0.000243 U	<0.000244 U	<0.000274 U	<0.000266 U	<0.000267 U	<0.00026 U	<0.000238 U	<0.000249 U	<0.000251 U	<0.000245 U	<0.000235 U
Perfluorododecanoic Acid (PFDoA)	307-55-1	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluoroheptanoic acid (PFHpA)	375-85-9	NS	NS	<0.000303 U	<0.0003 U	<0.000246 U	<0.00025 U	<0.00026 U	<0.000243 U	<0.000244 U	<0.000274 U	<0.000266 U	<0.000267 U	<0.00026 U	<0.000238 U	<0.000249 U	<0.000251 UJ	0.000089 J	<0.000235 U
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NS	NS	<0.000303 U	<0.0003 U	<0.000246 U	<0.00025 U	<0.00026 U	<0.000243 U	<0.000244 U	<0.000274 U	<0.000266 U	<0.000267 U	<0.00026 U	<0.000238 U	<0.000249 U	<0.000251 U	<0.000245 U	<0.000235 U
Perfluorohexanoic Acid (PFHxA)	307-24-4	NS	NS	0.000121 J	0.000077 J	0.000055 J	0.000059 J	0.000056 J	0.000052 J	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	0.000057 J	0.000057 J	<0.000502 U	0.000056 J	0.000051 J
Perfluorononanoic Acid (PFNA)	375-95-1	NS	NS	<0.000303 U	<0.0003 U	<0.000246 U	<0.00025 U	<0.00026 U	<0.000243 U	<0.000244 U	<0.000274 U	<0.000266 U	<0.000267 U	<0.00026 U	<0.000238 U	<0.000249 U	<0.000251 U	<0.000245 U	<0.000235 U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	**0.00088**	0.044	<0.000303 U	<0.0003 U	<0.000246 U	<0.00025 U	0.000203 J	<0.000243 U	<0.000244 U	0.000441	<0.000266 U	0.000229 J	<0.00026 U	<0.000238 U	0.000182 J	<0.000251 U	<0.000245 U	0.000134 J
Perfluorooctanoic Acid (PFOA)	335-67-1	**0.00066**	0.033	0.000243 J	<0.0003 U	<0.000246 U	0.000261	0.000392	0.000201 J	0.000161 J	0.000641	0.000152 J	0.000241 J	0.000148 J	<0.000238 U	0.000279	0.000135 J	**0.00151**	**0.00108**
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluorotetradecanoic Acid (PFTA)	376-06-7	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS)	39108-34-4	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS)	27619-97-2	NS	NS	<0.000607 U	<0.0006 U	<0.000491 U	<0.000501 U	<0.00052 U	<0.000486 U	<0.000487 U	<0.000548 U	<0.000532 U	<0.000534 U	<0.000519 U	<0.000476 U	<0.000498 U	<0.000502 U	<0.00049 U	<0.00047 U
Total PFOA and PFOS	TOTPFOAPFOS	NS	NS	0.000243 J	<0.0003 U	<0.000246 U	0.000261	0.000595 J	0.000201 J	0.000161 J	0.00108	0.000152 J	0.00047 J	0.000148 J	<0.000238 U	0.000461 J	0.000135 J	0.00151	0.00121 J

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	133_PE-10	134_PE-11	135_PE-12	136_PE-13	137_PE-14	138_PE-15	139_PE-16	140_PE-17	141_PE-18	142_PE-19	143_PE-20	144_PE-21	145_PE-22	146_PE-23	147_PE-42	148_PE-45
				133_PE-10_062821	134_PE-11_062821	135_PE-12_062821	136_PE-13_062821	137_PE-14_062821	138_PE-15_062821	139_PE-16_062821	140_PE-17_062821	141_PE-18_062821	142_PE-19_062821	143_PE-20_062821	144_PE-21_062921	145_PE-22_062921	146_PE-23_062921	147_PE-42_062921	148_PE-45_062921
				6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021
				15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
1,1,1-Trichloroethane	71-55-6	0.68	100	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	NS	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
1,1,2-Trichloroethane	79-00-5	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
1,1-Dichloroethane	75-34-3	0.27	26	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
1,1-Dichloroethene	75-35-4	0.33	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
1,1-Dichloropropene	563-58-6	NS	NS	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,2,3-Trichloropropane	96-18-4	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,2,4,5-Tetramethylbenzene	95-93-2	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,2,4-Trimethylbenzene	95-63-6	3.6	52	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,2-Dibromo-3-Chloropropane	96-12-8	NS	NS	<0.0035 U	<0.0031 U	<0.0034 U	<0.0034 U	<0.0034 U	<0.0034 U	<0.0034 U	<0.0033 U	<0.0033 U	<0.0033 U	<0.0034 U	<0.0035 U	<0.0038 U	<0.0034 U	<0.0031 U	<0.0037 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
1,2-Dichlorobenzene	95-50-1	1.1	100	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,2-Dichloroethane	107-06-2	0.02	3.1	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
1,2-Dichloropropane	78-87-5	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	8.4	52	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,3-Dichlorobenzene	541-73-1	2.4	49	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,3-Dichloropropane	142-28-9	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,4-Dichlorobenzene	106-46-7	1.8	13	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,4-Diethyl Benzene	105-05-5	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	<0.093 U	<0.083 U	<0.089 U	<0.089 U	<0.09 U	<0.091 U	<0.09 U	<0.089 U	<0.089 U	<0.089 U	<0.091 U	<0.094 U	<0.1 U	<0.09 U	<0.083 U	<0.099 U
2,2-Dichloropropane	594-20-7	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
2-Chlorotoluene	95-49-8	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
2-Hexanone (MBK)	591-78-6	NS	NS	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U	<0.01 U	<0.012 U
4-Chlorotoluene	106-43-4	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
4-Ethyltoluene	622-96-8	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Acetone	67-64-1	0.05	100	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	0.013	<0.011 U	<0.011 U	0.01 J	<0.011 U	0.017	<0.012 U	<0.012 U	<0.011 U	<0.01 U	0.036
Acrylonitrile	107-13-1	NS	NS	<0.0047 U	<0.0041 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0047 U	<0.005 U	<0.0045 U	<0.0042 U	<0.005 U
Benzene	71-43-2	0.06	4.8	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Bromobenzene	108-86-1	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Bromochloromethane	74-97-5	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Bromodichloromethane	75-27-4	NS	NS	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Bromoform	75-25-2	NS	NS	<0.0047 U	<0.0041 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0047 U	<0.005 U	<0.0045 U	<0.0042 U	<0.005 U
Bromomethane	74-83-9	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Carbon Disulfide	75-15-0	NS	NS	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U	<0.01 U	<0.012 U
Carbon Tetrachloride	56-23-5	0.76	2.4	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Chlorobenzene	108-90-7	1.1	100	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Chloroethane	75-00-3	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Chloroform	67-66-3	0.37	49	<0.0018 U	<0.0016 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0018 U	<0.0019 U	<0.0017 U	<0.0016 U	<0.0019 U
Chloromethane	74-87-3	NS	NS	<0.0047 U	<0.0041 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0045 U	<0.0045 U	0.0025 J	<0.0045 U	<0.0046 U	<0.0047 U	<0.005 U	<0.0045 U	<0.0042 U	<0.005 U
Cis-1,2-Dichloroethene	156-59-2	0.25	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Cymene	99-87-6	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Dibromochloromethane	124-48-1	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Dibromomethane	74-95-3	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Dichlorodifluoromethane	75-71-8	NS	NS	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U	<0.01 U	<0.012 U
Diethyl Ether (Ethyl Ether)	60-29-7	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Ethylbenzene	100-41-4	1	41	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Hexachlorobutadiene	87-68-3	NS	NS	<0.0047 U	<0.0041 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0047 U	<0.005 U	<0.0045 U	<0.0042 U	<0.005 U
Isopropylbenzene (Cumene)	98-82-8	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
M,P-Xylene	179601-23-1	NS	NS	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.12	100	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.012 UJ	<0.012 U	<0.011 U	<0.01 U	<0.012 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	NS	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U	<0.01 U	<0.012 U
Methylene Chloride	75-09-2	0.05	100	<0.0058 U	<0.0052 U	<0.0056 U	<0.0056 U	<0.0056 U	<0.0057 U	<0.0056 U	<0.0056 U	<0.0056 U	<0.0056 U	<0.0057 U	<0.0058 U	<0.0063 U	<0.0056 U	<0.0052 U	<0.0062 U
Naphthalene	91-20-3	12	100	<0.0047 U	<0.0041 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0047 U	<0.005 U	<0.0045 U	<0.0042 U	<0.005 U
n-Butylbenzene	104-51-8	12	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
n-Propylbenzene	103-65-1	3.9	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Sec-Butylbenzene	135-98-8	11	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Styrene	100-42-5	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
T-Butylbenzene	98-06-6	5.9	100	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Tert-Butyl Methyl Ether	1634-04-4	0.93	100	<0.0023 U	<0.0021 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0022 U	<0.0023 U	<0.0023 U	<0.0025 U	<0.0022 U	<0.0021 U	<0.0025 U
Tetrachloroethene (PCE)	127-18-4	1.3	19	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	0.00047 J	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Toluene	108-88-3	0.7	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Total 1,2-Dichloroethene (Cis and Trans)	540-59-0	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Total Xylenes	1330-20-7	0.26	100	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Total, 1,3-Dichloropropene (Cis And Trans)	542-75-6	NS	NS	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Trans-1,2-Dichloroethene	156-60-5	0.19	100	<0.0018 U	<0.0016 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0018 U	<0.0019 U	<0.0017 U	<0.0016 U	<0.0019 U
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U
Trans-1,4-Dichloro-2-Butene	110-57-6	NS	NS	<0.0058 U	<0.0052 U	<0.0056 U	<0.0056 U	<0.0056 U	<0.0057 U	<0.0056 U	<0.0056 U	<0.0056 U	<0.0056 U	<0.0057 U	<0.0058 U	<0.0063 U	<0.0056 U	<0.0052 U	<0.0062 U
Trichloroethene (TCE)	79-01-6	0.47	21	<0.00058 U	<0.00052 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00056 U	<0.00057 U	<0.00058 U	<0.00063 U	<0.00056 U	<0.00052 U	<0.00062 U
Trichlorofluoromethane	75-69-4	NS	NS	<0.0047 U	<0.0041 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0045 U	<0.0046 U	<0.0047 U	<0.005 U	<0.0045 U	<0.0042 U	<0.005 U
Vinyl Acetate	108-05-4	NS	NS	<0.012 U	<0.01 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U	<0.01 U	<0.012 U
Vinyl Chloride	75-01-4	0.02	0.9	<0.0012 U	<0.001 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0011 U	<0.0012 U	<0.0012 U	<0.0011 U	<0.001 U	<0.0012 U

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	133_PE-10	134_PE-11	135_PE-12	136_PE-13	137_PE-14	138_PE-15	139_PE-16	140_PE-17	141_PE-18	142_PE-19	143_PE-20	144_PE-21	145_PE-22	146_PE-23	147_PE-42	148_PE-45
				133_PE-10_062821	134_PE-11_062821	135_PE-12_062821	136_PE-13_062821	137_PE-14_062821	138_PE-15_062821	139_PE-16_062821	140_PE-17_062821	141_PE-18_062821	142_PE-19_062821	143_PE-20_062821	144_PE-21_062921	145_PE-22_062921	146_PE-23_062921	147_PE-42_062921	148_PE-45_062921
				6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021
				15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Semivolatile Organic Compounds																			
1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
1,2-Dichlorobenzene	95-50-1	1.1	100	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
1,3-Dichlorobenzene	541-73-1	2.4	49	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
1,4-Dichlorobenzene	106-46-7	1.8	13	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	<0.026 U	<0.026 U	<0.026 U	<0.025 U	<0.026 U	<0.026 U	<0.026 U	<0.025 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	<0.025 U	<0.026 U	<0.026 U	<0.025 U
2,4,5-Trichlorophenol	95-95-4	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2,4,6-Trichlorophenol	88-06-2	NS	NS	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U
2,4-Dichlorophenol	120-83-2	NS	NS	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U
2,4-Dimethylphenol	105-67-9	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2,4-Dinitrophenol	51-28-5	NS	NS	<0.83 U	<0.83 U	<0.82 U	<0.8 U	<0.85 U	<0.82 U	<0.82 U	<0.81 U	<0.82 U	<0.83 U	<0.82 U	<0.84 U	<0.8 U	<0.84 U	<0.82 U	<0.81 U
2,4-Dinitrotoluene	121-14-2	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2,6-Dinitrotoluene	606-20-2	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2-Chloronaphthalene	91-58-7	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2-Chlorophenol	95-57-8	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2-Methylnaphthalene	91-57-6	NS	NS	<0.21 U	<0.21 U	<0.2 U	<0.2 U	<0.21 U	<0.21 U	<0.2 U	<0.2 U	<0.2 U	<0.21 U	<0.21 U	<0.21 U	<0.2 U	<0.21 U	<0.2 U	<0.2 U
2-Methylphenol (o-Cresol)	95-48-7	0.33	100	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2-Nitroaniline	88-74-4	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
2-Nitrophenol	88-75-5	NS	NS	<0.37 U	<0.37 U	<0.37 U	<0.36 U	<0.38 U	<0.37 U	<0.37 U	<0.37 U	<0.37 U	<0.38 U	<0.37 U	<0.38 U	<0.36 U	<0.38 U	<0.37 U	<0.36 U
3 & 4 Methylphenol (m&p Cresol)	65794-96-9	0.33	100	<0.25 U	<0.25 U	<0.24 U	<0.24 U	<0.25 U	<0.25 U	<0.24 U	<0.24 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U	<0.24 U	<0.24 U
3,3'-Dichlorobenzidine	91-94-1	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
3-Nitroaniline	99-09-2	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
4,6-Dinitro-2-Methylphenol	534-52-1	NS	NS	<0.45 U	<0.45 U	<0.44 U	<0.43 U	<0.46 U	<0.45 U	<0.44 U	<0.44 U	<0.44 U	<0.45 U	<0.45 U	<0.45 U	<0.44 U	<0.46 U	<0.44 U	<0.44 U
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
4-Chloro-3-Methylphenol	59-50-7	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
4-Chloroaniline	106-47-8	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
4-Nitroaniline	100-01-6	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
4-Nitrophenol	100-02-7	NS	NS	<0.24 U	<0.24 U	<0.24 U	<0.23 U	<0.25 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.23 U	<0.24 U	<0.24 U	<0.24 U
Acenaphthene	83-32-9	20	100	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U
Acenaphthylene	208-96-8	100	100	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	0.027 J	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U
Acetophenone	98-86-2	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Anthracene	120-12-7	100	100	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.055 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U
Benzo(a)anthracene	56-55-3	1	1	<0.1 U	0.034 J	<0.1 U	<0.1 U	<0.1 U	0.022 J	0.1	0.21	0.09 J	0.079 J	<0.1 U	<0.1 U	<0.1 U	0.027 J	0.036 J	0.038 J
Benzo(a)pyrene	50-32-8	1	1	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	0.1 J	0.17	0.083 J	0.074 J	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U
Benzo(b)fluoranthene	205-99-2	1	1	<0.1 U	0.039 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.13	0.22	0.11	0.092 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.041 J	0.047 J
Benzo(g,h,i)Perylene	191-24-2	100	100	<0.14 U	0.024 J	<0.14 U	<0.13 U	<0.14 U	<0.14 U	0.076 J	0.12 J	0.059 J	0.06 J	<0.14 U	<0.14 U	<0.13 U	<0.14 U	0.022 J	0.024 J
Benzo(k)fluoranthene	207-08-9	0.8	3.9	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.043 J	0.072 J	0.032 J	0.037 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U
Benzoic Acid	65-85-0	NS	NS	<0.56 U	<0.56 U	<0.55 U	<0.54 U	<0.57 U	<0.56 U	<0.55 U	<0.55 U	<0.55 U	<0.56 U	<0.56 U	<0.56 U	<0.54 U	<0.57 U	<0.55 U	<0.55 U
Benzyl Alcohol	100-51-6	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Benzyl Butyl Phthalate	85-68-7	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Biphenyl (Diphenyl)	92-52-4	NS	NS	<0.39 U	<0.39 U	<0.39 U	<0.38 U	<0.4 U	<0.39 U	<0.39 U	<0.39 U	<0.39 U	<0.4 U	<0.39 U	<0.4 U	<0.38 U	<0.4 U	<0.39 U	<0.38 U
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	<0.19 U	<0.18 U	<0.18 U	<0.18 U	<0.19 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.18 U
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	NS	NS	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U
Bis(2-chloroisopropyl) ether	108-60-1	NS	NS	<0.21 U	<0.21 U	<0.2 U	<0.2 U	<0.21 U	<0.21 U	<0.2 U	<0.2 U	<0.2 U	<0.21 U	<0.21 U	<0.21 U	<0.2 U	<0.21 U	<0.2 U	<0.2 U
Bis(2-ethylhexyl) phthalate	117-81-7	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Carbazole	86-74-8	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Chrysene	218-01-9	1	3.9	<0.1 U	0.031 J	<0.1 U	<0.1 U	<0.1 U	0.021 J	0.11	0.2	0.084 J	0.076 J	<0.1 U	<0.1 U	<0.1 U	0.021 J	0.031 J	0.034 J
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	0.02 J	0.029 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U
Dibenzofuran	132-64-9	7	59	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Dibutyl phthalate	84-74-2	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Diethyl phthalate	84-66-2	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Dimethyl phthalate	131-11-3	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Dioctyl phthalate	117-84-0	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Fluoranthene	206-44-0	100	100	<0.1 U	0.052 J	<0.1 U	<0.1 U	<0.1 U	0.037 J	0.18	0.38	0.17	0.14	<0.1 U	<0.1 U	<0.1 U	0.043 J	0.059 J	0.069 J
Fluorene	86-73-7	30	100	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Hexachlorobenzene	118-74-1	0.33	1.2	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U
Hexachlorobutadiene	87-68-3	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Hexachlorocyclopentadiene	77-47-4	NS	NS	<0.49 U	<0.49 U	<0.49 U	<0.48 U	<0.5 U	<0.49 U	<0.49 U	<0.48 U	<0.49 U	<0.5 U	<0.49 U	<0.5 U	<0.48 U	<0.5 U	<0.49 U	<0.48 U
Hexachloroethane	67-72-1	NS	NS	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	<0.14 U	0.025 J	<0.14 U	<0.13 U	<0.14 U	<0.14 U	0.079 J	0.12 J	0.062 J	0.057 J	<0.14 U	<0.14 U	<0.13 U	<0.14 U	0.024 J	0.026 J
Isophorone	78-59-1	NS	NS	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U
Naphthalene	91-20-3	12	100	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Nitrobenzene	98-95-3	NS	NS	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U	<0.15 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.16 U	<0.15 U	<0.15 U
n-Nitrosodi-N-Propylamine	621-64-7	NS	NS	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
n-Nitrosodiphenylamine	86-30-6	NS	NS	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U
Pentachlorophenol	87-86-5	0.8	6.7	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.14 U
Phenanthrene	85-01-8	100	100	<0.1 U	0.028 J	<0.1 U	<0.1 U	<0.1 U	0.024 J	0.085 J	0.23	0.077 J	0.064 J	<0.1 U	<0.1 U	<0.1 U	0.029 J	0.027 J	0.075 J
Phenol	108-95-2	0.33	100	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
Pyrene	129-00-0	100	100	<0.1 U	0.052 J	<0.1 U	<0.1 U	<0.1 U	0.036 J	0.18	0.38	0.15	0.13	<0.1 U	<0.1 U	<0.1 U	0.04 J	0.052 J	0.065 J

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	133_PE-10	134_PE-11	135_PE-12	136_PE-13	137_PE-14	138_PE-15	139_PE-16	140_PE-17	141_PE-18	142_PE-19	143_PE-20	144_PE-21	145_PE-22	146_PE-23	147_PE-42	148_PE-45
				133_PE-10_062821	134_PE-11_062821	135_PE-12_062821	136_PE-13_062821	137_PE-14_062821	138_PE-15_062821	139_PE-16_062821	140_PE-17_062821	141_PE-18_062821	142_PE-19_062821	143_PE-20_062821	144_PE-21_062921	145_PE-22_062921	146_PE-23_062921	147_PE-42_062921	148_PE-45_062921
				6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/28/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021
				15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Pesticides																			
4,4'-DDD	72-54-8	0.0033	13	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	0.000589 J	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
4,4'-DDE	72-55-9	**0.0033**	8.9	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	0.00129 J	0.00112 J	0.00117 J	0.000452 J	<0.00167 U	<0.00164 U	<0.00157 U	0.000638 J	<0.00166 U	<0.00163 U
4,4'-DDT	50-29-3	**0.0033**	7.9	<0.00304 U	0.00324 J	<0.00298 U	<0.00304 U	<0.0031 U	0.00243 J	**0.0134**	**0.0099**	**0.00666**	0.00285 J	<0.00313 U	<0.00308 U	<0.00295 U	0.00305 J	<0.0031 U	<0.00306 U
Aldrin	309-00-2	0.005	0.097	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	<0.00162 U	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
Alpha BHC (Alpha Hexachlorocyclohexane)	319-84-6	0.02	0.48	<0.000676 U	<0.000695 U	<0.000663 U	<0.000674 U	<0.000689 U	<0.000668 U	<0.000683 U	<0.000668 U	<0.000676 U	<0.000689 U	<0.000695 U	<0.000684 U	<0.000656 U	<0.000682 U	<0.00069 U	<0.00068 U
Alpha Chlordane	5103-71-9	0.094	4.2	<0.00203 U	<0.00208 U	<0.00199 U	<0.00202 U	<0.00207 U	<0.002 U	<0.00205 U	<0.002 U	<0.00203 U	<0.00207 U	<0.00208 U	<0.00205 U	<0.00197 U	<0.00204 U	<0.00207 U	<0.00204 U
Alpha Endosulfan	959-98-8	2.4	24	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	<0.00162 U	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
Beta Bhc (Beta Hexachlorocyclohexane)	319-85-7	0.036	0.36	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	<0.00162 U	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
Beta Endosulfan	33213-65-9	2.4	24	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	<0.00162 U	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
Chlordane (alpha and gamma)	57-74-9	NS	NS	<0.0135 U	<0.0139 U	<0.0133 U	<0.0135 U	<0.0138 U	<0.0134 U	<0.0136 U	<0.0134 U	<0.0135 U	<0.0138 U	<0.0139 U	<0.0137 U	<0.0131 U	<0.0136 U	<0.0138 U	<0.0136 U
Delta Bhc (Delta Hexachlorocyclohexane)	319-86-8	0.04	100	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	<0.00162 U	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
Dieldrin	60-57-1	0.005	0.2	<0.00101 U	<0.00104 U	<0.000994 U	<0.00101 U	<0.00103 U	<0.001 U	0.000588 J	<0.001 U	<0.00101 U	<0.00103 U	<0.00104 U	<0.00103 U	<0.000984 U	<0.00102 U	<0.00103 U	<0.00102 U
Endosulfan Sulfate	1031-07-8	2.4	24	<0.000676 U	<0.000695 U	<0.000663 U	<0.000674 U	<0.000689 U	<0.000668 U	<0.000683 U	<0.000668 U	<0.000676 U	<0.000689 U	<0.000695 U	<0.000684 U	<0.000656 U	<0.000682 U	<0.00069 U	<0.00068 U
Endrin	72-20-8	0.014	11	<0.000676 U	<0.000695 U	<0.000663 U	<0.000674 U	<0.000689 U	<0.000668 U	<0.000683 U	<0.000668 U	<0.000676 U	<0.000689 U	<0.000695 U	<0.000684 U	<0.000656 U	<0.000682 U	<0.00069 U	<0.00068 U
Endrin Aldehyde	7421-93-4	NS	NS	<0.00203 U	<0.00208 U	<0.00199 U	<0.00202 U	<0.00207 U	<0.002 U	<0.00205 U	<0.002 U	<0.00203 U	<0.00207 U	<0.00208 U	<0.00205 U	<0.00197 U	<0.00204 U	<0.00207 U	<0.00204 U
Endrin Ketone	53494-70-5	NS	NS	<0.00162 U	<0.00167 U	<0.00159 U	<0.00162 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.0016 U	<0.00162 U	<0.00165 U	<0.00167 U	<0.00164 U	<0.00157 U	<0.00164 U	<0.00166 U	<0.00163 U
Gamma Bhc (Lindane)	58-89-9	0.1	1.3	<0.000676 U	<0.000695 U	<0.000663 U	<0.000674 U	<0.000689 U	<0.000668 U	<0.000683 U	<0.000668 U	<0.000676 U	<0.000689 U	<0.000695 U	<0.000684 U	<0.000656 U	<0.000682 U	<0.00069 U	<0.00068 U
Gamma Chlordane	5103-74-2	NS	NS	<0.00203 U	<0.00208 U	<0.00199 U	<0.00202 U	<0.00207 U	<0.002 U	0.000634 J	0.000591 J	0.000723 J	0.000813 J	<0.00208 U	<0.00205 U	<0.00197 U	<0.00204 U	<0.00207 U	<0.00204 U
Heptachlor	76-44-8	0.042	2.1	<0.000812 U	<0.000834 U	<0.000796 U	<0.000809 U	<0.000826 U	<0.000802 U	<0.000819 U	<0.000802 U	<0.000811 U	<0.000827 U	<0.000834 U	<0.000821 U	<0.000787 U	<0.000818 U	<0.000828 U	<0.000815 U
Heptachlor Epoxide	1024-57-3	NS	NS	<0.00304 U	<0.00313 U	<0.00298 U	<0.00304 U	<0.0031 U	<0.00301 U	<0.00307 U	<0.00301 U	<0.00304 U	<0.0031 U	<0.00313 U	<0.00308 U	<0.00295 U	<0.00307 U	<0.0031 U	<0.00306 U
Methoxychlor	72-43-5	NS	NS	<0.00304 U	<0.00313 U	<0.00298 U	<0.00304 U	<0.0031 U	<0.00301 U	<0.00307 U	<0.00301 U	<0.00304 U	<0.0031 U	<0.00313 U	<0.00308 U	<0.00295 U	<0.00307 U	<0.0031 U	<0.00306 U
Toxaphene	8001-35-2	NS	NS	<0.0304 U	<0.0313 U	<0.0298 U	<0.0304 U	<0.031 U	<0.0301 U	<0.0307 U	<0.0301 U	<0.0304 U	<0.031 U	<0.0313 U	<0.0308 U	<0.0295 U	<0.0307 U	<0.031 U	<0.0306 U
Herbicides																			
2,4,5-T (Trichlorophenoxyacetic Acid)	93-76-5	NS	NS	<0.175 U	<0.172 U	<0.171 U	<0.167 U	<0.176 U	<0.171 U	<0.168 U	<0.172 U	<0.172 U	<0.176 U	<0.172 U	<0.176 U	<0.167 U	<0.176 U	<0.169 U	<0.169 U
2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	NS	NS	<0.175 U	<0.172 U	<0.171 U	<0.167 U	<0.176 U	<0.171 U	<0.168 U	<0.172 U	<0.172 U	<0.176 U	<0.172 U	<0.176 U	<0.167 U	<0.176 U	<0.169 U	<0.169 U
Silvex (2,4,5-Tp)	93-72-1	3.8	100	<0.175 U	<0.172 U	<0.171 U	<0.167 U	<0.176 U	<0.171 U	<0.168 U	<0.172 U	<0.172 U	<0.176 U	<0.172 U	<0.176 U	<0.167 U	<0.176 U	<0.169 U	<0.169 U
Polychlorinated Biphenyls																			
PCB-1016 (Aroclor 1016)	12674-11-2	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1221 (Aroclor 1221)	11104-28-2	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1232 (Aroclor 1232)	11141-16-5	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1242 (Aroclor 1242)	53469-21-9	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1248 (Aroclor 1248)	12672-29-6	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1254 (Aroclor 1254)	11097-69-1	NS	NS	<0.0333 U	0.0178 J	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1260 (Aroclor 1260)	11096-82-5	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1262 (Aroclor 1262)	37324-23-5	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
PCB-1268 (Aroclor 1268)	11100-14-4	NS	NS	<0.0333 U	<0.0343 U	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
Total PCBs	1336-36-3	0.1	1	<0.0333 U	0.0178 J	<0.0335 U	<0.0332 U	<0.0353 U	<0.0329 U	<0.0333 U	<0.0333 U	<0.034 U	<0.0341 U	<0.0347 U	<0.0351 U	<0.0334 U	<0.0335 U	<0.0335 U	<0.0338 U
Metals																			
Aluminum	7429-90-5	NS	NS	2,640	3,230	2,780	2,750	3,310	3,160	2,300	3,190	3,250	3,290	2,330	3,560	2,150	3,170	3,020	2,630
Antimony	7440-36-0	NS	NS	<4.13 U	<3.98 U	<4.06 U	<4.05 U	<4.19 U	<4.08 U	<4.07 U	<3.98 U	<4.06 U	<4.14 U	<4.17 U	<4.11 U	<3.93 U	<4.08 U	<4.06 U	<3.98 U
Arsenic	7440-38-2	13	16	0.892	1.7	1.39	1.03	1.31	0.995	0.675 J	1.19	0.881	0.851	0.498 J	0.632 J	0.693 J	0.918	0.856	0.722 J
Barium	7440-39-3	**350**	400	27.5	31.6	34.6	15	44.6	27.3	21.8	51.1	37.8	35.5	25.3	28.5	120	36.7	51.9	33.6
Beryllium	7440-41-7	7.2	72	0.173 J	0.214 J	0.188 J	0.175 J	0.277 J	0.204 J	0.127 J	0.183 J	0.204 J	0.254 J	0.169 J	0.222 J	0.153 J	0.179 J	0.206 J	0.198 J
Cadmium	7440-43-9	2.5	4.3	0.107 J	0.127 J	0.122 J	0.096 J	0.126 J	0.114 J	0.095 J	0.143 J	0.13 J	0.139 J	0.088 J	0.14 J	0.089 J	0.138 J	0.111 J	0.103 J
Calcium	7440-70-2	NS	NS	3,720	2,490	1,770	678	1,660	896	1,440	2,630	2,250	2,280	1,850	1,640	6,760	3,310	3,220	6,300
Chromium, Hexavalent	18540-29-9	1	110	<0.846 U	<0.843 U	<0.838 U	<0.821 U	<0.855 U	<0.831 U	<0.832 U	<0.835 U	<0.832 U	<0.856 U	<0.848 U	<0.847 U	<0.821 U	<0.855 U	<0.838 U	<0.825 U
Chromium, Total	7440-47-3	NS	NS	7.11	9.52	7.48	6.22	8.05	13.2	6.36	9.89	9.03	10.7	7.02	9.85	6.29	9.07	7.79	7.02
Chromium, Trivalent	16065-83-1	30	180	7.1	9.5	7.5	6.2	8	13	6.4	9.9	9	11	7	9.8	6.3	9.1	7.8	7
Cobalt	7440-48-4	NS	NS	3.35	4.01	3.86	3.02	4.01	4.22	2.56	4.89	4.05	4.89	3.15	5.26	3.57	4.07	3.81	3.95
Copper	7440-50-8	50	270	5.9	8.24	7.44	5.67	7.79	8.08	5.82	10.9	8.73	8.7	6.05	7.74	6.72	8.13	7.63	5.47
Cyanide	57-12-5	27	27	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1.1 UJ	<0.99 UJ	<1 UJ	<0.99 UJ	<1 UJ	<1 UJ	<1 UJ
Iron	7439-89-6	NS	NS	6,460	7,430	7,690	5,820	8,100	7,270	5,470	7,510	8,040	8,590	5,980	8,920	5,940	7,480	7,450	6,840
Lead	7439-92-1	**63**	400	3.5 J	10.9	4.36	2.21 J	4.54	4.38	5.43	17.6	18.1	10.4	3.38 J	4.62	2.74 J	18.3	12	4.19
Magnesium	7439-95-4	NS	NS	2,680	2,450	2,100	1,530	2,480	2,210	1,740	4,300	2,270	2,610	2,370	2,320	4,260	2,440	2,760	4,440
Manganese	7439-96-5	1600	2000	193	232	262	215	258	202	162	181	230	309	98	251	205	200	215	195
Mercury	7439-97-6	**0.18**	0.81	<0.066 U	<0.067 U	<0.067 U	<0.065 U	<0.067 U	<0.065 U	<0.066 U	<0.066 U	<0.066 U	<0.067 U	<0.067 U	<0.067 U	<0.065 U	<0.067 U	<0.066 U	<0.065 U
Nickel	7440-02-0	**30**	310	13	22.4	16.4	19.4	17.3	**32.7**	16.6	**40.2**	19.7	29.7	16.9	**33.6**	23.3	22.3	20.4	25.2
Potassium	7440-09-7	NS	NS	720	632	585	494	937	621	431	788	759	727	582	888	489	660	678	631
Selenium	7782-49-2	3.9	180	<1.65 U	0.246 J	<1.63 U	0.239 J	<1.68 U	<1.63 U	0.262 J	<1.59 U	<1.63 U	0.376 J	<1.61 U	<1.64 U	<1.61 U	<1.62 U	<1.58 U	0.214 J
Silver	7440-22-4	2	180	<0.826 U	<0.792 U	<0.817 U	<0.795 U	<0.838 U	<0.816 U	<0.794 U	<0.797 U	<0.816 U	<0.818 U	<0.804 U	<0.821 U	<0.806 U	<0.812 U	<0.793 U	<0.793 U
Sodium	7440-23-5	NS	NS	103 J	258	122 J	57.6 J	125 J	122 J	79.4 J	128 J	145 J	92.6 J	68.1 J	108 J	99.6 J	108 J	118 J	112 J
Thallium	7440-28-0	NS	NS	<1.65 U	<1.58 U	<1.63 U	<1.59 U	<1.68 U	<1.63 U	<1.59 U	<1.59 U	<1.63 U	<1.64 U	<1.61 U	<1.64 U	<1.61 U	<1.62 U	<1.58 U	<1.59 U
Vanadium	7440-62-2	NS	NS	8.39	9.68	10.1	7.56	10.3	10.5	6.21	11	11.5	15.8	23	11.2	8.27	10.2	9.69	9.06
Zinc	7440-66-6	**109**	10000	13.6	20.8	14.1	10.9	18.3	14.6	13.6	30.2	21.3	20.5	11.9	17.4	10.7	26	17.8	12.8
General Chemistry																			
Total Solids	TSOLID	NS	NS	94.6	94.9	95.4	97.4	93.6	96.3	96.1	95.8	96.1	93.4	94.3	94.4	97.4	93.6	95.4	97
Perfluorooctanoic Acids																			
N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 UJ	<0.000498 UJ	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 UJ	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NS	NS	<0.000256 U	<0.000239 U	<0.000233 U	<0.000243 U	<0.000243 UJ	<0.000249 U	<0.00024 U	<0.000235 U	<0.000236 U	<0.000259 U	<0.000248 U	<0.00025 U	<0.000234 U	<0.000259 U	<0.000245 U	<0.000245 U
Perfluorobutanoic acid (PFBA)	375-22-4	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	0.000059 J	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	0.000878	0.00396	0.00357	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluorodecanoic Acid (PFDA)	335-76-2	NS	NS	<0.000256 U	<0.000239 U	<0.000233 U	<0.000243 U	<0.000243 UJ	<0.000249 U	<0.00024 U	<0.000235 U	<0.000236 U	<0.000259 U	<0.000248 U	<0.00025 U	<0.000234 U	<0.000259 U	<0.000245 U	<0.000245 U
Perfluorododecanoic Acid (PFDoA)	307-55-1	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 UJ	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluoroheptanoic acid (PFHpA)	375-85-9	NS	NS	<0.000256 U	<0.000239 U	<0.000233 U	<0.000243 U	0.000072 J	<0.000249 U	<0.00024 U	<0.000235 U	<0.000236 U	<0.000259 U	0.000096 J	<0.00025 U	0.000066 J	<0.000259 U	<0.000245 U	<0.000245 U
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NS	NS	<0.000256 U	<0.000239 U	0.000081 J	<0.000243 U	<0.000243 UJ	<0.000249 U	<0.00024 U	<0.000235 U	<0.000236 U	<0.000259 U	<0.000248 U	<0.00025 U	<0.000234 U	<0.000259 U	<0.000245 U	<0.000245 U
Perfluorohexanoic Acid (PFHxA)	307-24-4	NS	NS	0.000061 J	<0.000479 U	0.000058 J	<0.000485 U	0.000055 J	0.000056 J	0.00006 J	0.000069 J	0.000054 J	0.00008 J	0.000124 J	0.000068 J	0.000054 J	0.000073 J	0.000065 J	0.000063 J
Perfluorononanoic Acid (PFNA)	375-95-1	NS	NS	<0.000256 U	<0.000239 U	<0.000233 U	<0.000243 U	<0.000243 UJ	<0.000249 U	<0.00024 U	<0.000235 U	<0.000236 U	<0.000259 U	<0.000248 U	<0.00025 U	<0.000234 U	<0.000259 U	<0.000245 U	<0.000245 U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 UJ	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	**0.00088**	0.044	<0.000256 U	0.000217 J	0.000567 J	0.000128 J	0.000187 J	<0.000249 UJ	<0.00024 U	0.000158 J	<0.000236 U	0.000146 J	0.000247 J	0.000265	<0.000234 U	0.000139 J	<0.000245 U	<0.000245 U
Perfluorooctanoic Acid (PFOA)	335-67-1	**0.00066**	0.033	0.000411	0.000478	**0.00296**	0.000145 J	**0.00259 J**	0.000165 J	0.000325	0.00037	0.000204 J	0.000275	**0.000696**	0.000356	0.000295	0.000318	0.000224 J	0.000104 J
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 UJ	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	0.000058 J	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluorotetradecanoic Acid (PFTA)	376-06-7	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 UJ	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 UJ	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS)	39108-34-4	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS)	27619-97-2	NS	NS	<0.000513 U	<0.000479 U	<0.000466 U	<0.000485 U	<0.000487 U	<0.000498 U	<0.000481 U	<0.00047 U	<0.000472 U	<0.000517 U	<0.000496 U	<0.0005 U	<0.000469 U	<0.000517 U	<0.00049 U	<0.000491 U
Total PFOA and PFOS	TOTPFOAPFOS	NS	NS	0.000411	0.000695 J	0.00353	0.000273 J	0.00278 J	0.000165 J	0.000325	0.000528 J	0.000204 J	0.000421 J	0.000943 J	0.000621	0.000295	0.000457 J	0.000224 J	0.000104 J

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	149_PE-46	150_PE-48	151_PE-49	152_PE-50	153_PE-51	154_PE-52	155_PE-53	156_PE-54	157_PE-55	158_PE-56	158_PE-56	163_PE-30	164_PE-32
				149_PE-46_062921	150_PE-48_062921	151_PE-49_062921	152_PE-50_062921	153_PE-51_062921	154_PE-52_062921	155_PE-53_062921	156_PE-54_062921	157_PE-55_062921	158_PE-56_062921	160_DUP-2_062921	163_PE-30_072221	164_PE-32_072221
				6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	7/22/2021	7/22/2021
				15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
1,1,1-Trichloroethane	71-55-6	0.68	100	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	NS	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
1,1,2-Trichloroethane	79-00-5	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1-Dichloroethane	75-34-3	0.27	26	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1-Dichloroethene	75-35-4	0.33	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
1,1-Dichloropropene	563-58-6	NS	NS	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	<0.0026 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,2,3-Trichloropropane	96-18-4	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,2,4,5-Tetramethylbenzene	95-93-2	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,2,4-Trimethylbenzene	95-63-6	3.6	52	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,2-Dibromo-3-Chloropropane	96-12-8	NS	NS	<0.0031 U	<0.0032 U	<0.0031 U	<0.0037 U	<0.0039 U	<0.0035 U	<0.0031 U	<0.0037 U	<0.0034 U	<0.0039 U	<0.0034 U	<0.0032 U	<0.0037 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
1,2-Dichlorobenzene	95-50-1	1.1	100	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,2-Dichloroethane	107-06-2	0.02	3.1	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
1,2-Dichloropropane	78-87-5	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	8.4	52	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,3-Dichlorobenzene	541-73-1	2.4	49	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,3-Dichloropropane	142-28-9	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,4-Dichlorobenzene	106-46-7	1.8	13	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,4-Diethyl Benzene	105-05-5	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	<0.082 U	<0.085 U	<0.084 U	<0.099 U	<0.1 U	<0.094 U	<0.082 U	<0.098 U	<0.091 U	<0.1 U	<0.092 U	<0.085 U	<0.098 U
2,2-Dichloropropane	594-20-7	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
2-Chlorotoluene	95-49-8	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
2-Hexanone (MBK)	591-78-6	NS	NS	<0.01 U	<0.011 U	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
4-Chlorotoluene	106-43-4	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
4-Ethyltoluene	622-96-8	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Acetone	67-64-1	0.05	100	<0.01 U	0.0077 J	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
Acrylonitrile	107-13-1	NS	NS	<0.0041 U	<0.0043 U	<0.0042 U	<0.0049 U	<0.0052 U	<0.0047 U	<0.0041 U	<0.0049 U	<0.0045 U	<0.0052 U	<0.0046 U	<0.0043 U	<0.0049 U
Benzene	71-43-2	0.06	4.8	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Bromobenzene	108-86-1	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Bromochloromethane	74-97-5	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Bromodichloromethane	75-27-4	NS	NS	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Bromoform	75-25-2	NS	NS	<0.0041 U	<0.0043 U	<0.0042 U	<0.0049 U	<0.0052 U	<0.0047 U	<0.0041 U	<0.0049 U	<0.0045 U	<0.0052 U	<0.0046 U	<0.0043 U	<0.0049 U
Bromomethane	74-83-9	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Carbon Disulfide	75-15-0	NS	NS	<0.01 U	<0.011 U	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
Carbon Tetrachloride	56-23-5	0.76	2.4	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Chlorobenzene	108-90-7	1.1	100	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Chloroethane	75-00-3	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Chloroform	67-66-3	0.37	49	<0.0015 U	<0.0016 U	<0.0016 U	<0.0018 U	<0.0019 U	<0.0018 U	<0.0015 U	<0.0018 U	<0.0017 U	<0.0019 U	<0.0017 U	0.00026 U	0.00035 U
Chloromethane	74-87-3	NS	NS	<0.0041 U	<0.0043 U	<0.0042 U	<0.0049 U	<0.0052 U	<0.0047 U	<0.0041 U	<0.0049 U	<0.0045 U	<0.0052 U	<0.0046 U	<0.0043 U	<0.0049 U
Cis-1,2-Dichloroethene	156-59-2	0.25	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Cymene	99-87-6	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Dibromochloromethane	124-48-1	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Dibromomethane	74-95-3	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Dichlorodifluoromethane	75-71-8	NS	NS	<0.01 U	<0.011 U	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
Diethyl Ether (Ethyl Ether)	60-29-7	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Ethylbenzene	100-41-4	1	41	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Hexachlorobutadiene	87-68-3	NS	NS	<0.0041 U	<0.0043 U	<0.0042 U	<0.0049 U	<0.0052 U	<0.0047 U	<0.0041 U	<0.0049 U	<0.0045 U	<0.0052 U	<0.0046 U	<0.0043 U	<0.0049 U
Isopropylbenzene (Cumene)	98-82-8	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
M,P-Xylene	179601-23-1	NS	NS	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.12	100	<0.01 U	<0.011 U	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	NS	<0.01 U	<0.011 U	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
Methylene Chloride	75-09-2	0.05	100	<0.0051 U	<0.0053 U	<0.0052 U	<0.0062 U	<0.0065 U	<0.0059 U	<0.0051 U	<0.0061 U	<0.0057 U	<0.0065 U	<0.0057 U	<0.0053 U	<0.0061 U
Naphthalene	91-20-3	12	100	<0.0041 U	<0.0043 U	<0.0042 U	<0.0049 U	<0.0052 U	<0.0047 U	<0.0041 U	<0.0049 U	<0.0045 U	<0.0052 U	<0.0046 U	<0.0043 U	<0.0049 U
n-Butylbenzene	104-51-8	12	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
n-Propylbenzene	103-65-1	3.9	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Sec-Butylbenzene	135-98-8	11	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Styrene	100-42-5	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
T-Butylbenzene	98-06-6	5.9	100	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Tert-Butyl Methyl Ether	1634-04-4	0.93	100	<0.002 U	<0.0021 U	<0.0021 U	<0.0025 U	<0.0026 U	<0.0024 U	<0.002 U	<0.0024 U	<0.0023 U	<0.0026 U	<0.0023 U	<0.0021 U	<0.0024 U
Tetrachloroethene (PCE)	127-18-4	1.3	19	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Toluene	108-88-3	0.7	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Total 1,2-Dichloroethene (Cis and Trans)	540-59-0	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Total Xylenes	1330-20-7	0.26	100	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Total, 1,3-Dichloropropene (Cis And Trans)	542-75-6	NS	NS	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Trans-1,2-Dichloroethene	156-60-5	0.19	100	<0.0015 U	<0.0016 U	<0.0016 U	<0.0018 U	<0.0019 U	<0.0018 U	<0.0015 U	<0.0018 U	<0.0017 U	<0.0019 U	<0.0017 U	<0.0016 U	<0.0018 U
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U
Trans-1,4-Dichloro-2-Butene	110-57-6	NS	NS	<0.0051 U	<0.0053 U	<0.0052 U	<0.0062 U	<0.0065 U	<0.0059 U	<0.0051 U	<0.0061 U	<0.0057 U	<0.0065 U	<0.0057 U	<0.0053 U	<0.0061 U
Trichloroethene (TCE)	79-01-6	0.47	21	<0.00051 U	<0.00053 U	<0.00052 U	<0.00062 U	<0.00065 U	<0.00059 U	<0.00051 U	<0.00061 U	<0.00057 U	<0.00065 U	<0.00057 U	<0.00053 U	<0.00061 U
Trichlorofluoromethane	75-69-4	NS	NS	<0.0041 U	<0.0043 U	<0.0042 U	<0.0049 U	<0.0052 U	<0.0047 U	<0.0041 U	<0.0049 U	<0.0045 U	<0.0052 U	<0.0046 U	<0.0043 U	<0.0049 U
Vinyl Acetate	108-05-4	NS	NS	<0.01 U	<0.011 U	<0.01 U	<0.012 U	<0.013 U	<0.012 U	<0.01 U	<0.012 U	<0.011 U	<0.013 U	<0.011 U	<0.011 U	<0.012 U
Vinyl Chloride	75-01-4	0.02	0.9	<0.001 U	<0.0011 U	<0.001 U	<0.0012 U	<0.0013 U	<0.0012 U	<0.001 U	<0.0012 U	<0.0011 U	<0.0013 U	<0.0011 U	<0.0011 U	<0.0012 U

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	149_PE-46	150_PE-48	151_PE-49	152_PE-50	153_PE-51	154_PE-52	155_PE-53	156_PE-54	157_PE-55	158_PE-56	158_PE-56	163_PE-30	164_PE-32
				149_PE-46_062921	150_PE-48_062921	151_PE-49_062921	152_PE-50_062921	153_PE-51_062921	154_PE-52_062921	155_PE-53_062921	156_PE-54_062921	157_PE-55_062921	158_PE-56_062921	160_DUP-2_062921	163_PE-30_072221	164_PE-32_072221
				6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	7/22/2021	7/22/2021
				15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Semivolatile Organic Compounds																
1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
1,2-Dichlorobenzene	95-50-1	1.1	100	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
1,3-Dichlorobenzene	541-73-1	2.4	49	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
1,4-Dichlorobenzene	106-46-7	1.8	13	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
1,4-Dioxane (P-Dioxane)	123-91-1	0.1	13	<0.025 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	<0.026 U	<0.025 U	<0.026 U	<0.026 U	<0.025 U	<0.025 U
2,4,5-Trichlorophenol	95-95-4	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2,4,6-Trichlorophenol	88-06-2	NS	NS	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
2,4-Dichlorophenol	120-83-2	NS	NS	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U
2,4-Dimethylphenol	105-67-9	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2,4-Dinitrophenol	51-28-5	NS	NS	<0.81 U	<0.84 U	<0.83 U	<0.82 U	<0.82 U	<0.83 U	<0.84 U	<0.82 U	<0.8 U	<0.84 U	<0.85 U	<0.81 U	<0.79 U
2,4-Dinitrotoluene	121-14-2	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2,6-Dinitrotoluene	606-20-2	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2-Chloronaphthalene	91-58-7	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2-Chlorophenol	95-57-8	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2-Methylnaphthalene	91-57-6	NS	NS	<0.2 U	<0.21 U	<0.21 U	<0.2 U	<0.21 U	<0.21 U	<0.21 U	<0.2 U	<0.2 U	<0.21 U	<0.21 U	<0.2 U	<0.2 U
2-Methylphenol (o-Cresol)	95-48-7	0.33	100	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2-Nitroaniline	88-74-4	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
2-Nitrophenol	88-75-5	NS	NS	<0.36 U	<0.38 U	<0.37 U	<0.37 U	<0.37 U	<0.37 U	<0.38 U	<0.37 U	<0.36 U	<0.38 U	<0.38 U	<0.36 U	<0.36 U
3 & 4 Methylphenol (m&p Cresol)	65794-96-9	0.33	100	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.24 U	<0.24 U
3,3'-Dichlorobenzidine	91-94-1	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
3-Nitroaniline	99-09-2	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
4,6-Dinitro-2-Methylphenol	534-52-1	NS	NS	<0.44 U	<0.46 U	<0.45 U	<0.44 U	<0.45 U	<0.45 U	<0.45 U	<0.44 U	<0.44 U	<0.45 U	<0.46 U	<0.44 U	<0.43 U
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
4-Chloro-3-Methylphenol	59-50-7	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
4-Chloroaniline	106-47-8	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
4-Nitroaniline	100-01-6	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
4-Nitrophenol	100-02-7	NS	NS	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.23 U	<0.24 U	<0.25 U	<0.24 U	<0.23 U
Acenaphthene	83-32-9	20	100	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Acenaphthylene	208-96-8	100	100	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Acetophenone	98-86-2	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Anthracene	120-12-7	100	100	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Benzo(a)anthracene	56-55-3	1	1	0.039 J	<0.1 U	0.035 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Benzo(a)pyrene	50-32-8	1	1	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Benzo(b)fluoranthene	205-99-2	1	1	0.046 J	<0.1 U	0.04 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Benzo(g,h,i)Perylene	191-24-2	100	100	0.026 J	<0.14 U	0.026 J	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Benzo(k)fluoranthene	207-08-9	0.8	3.9	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Benzoic Acid	65-85-0	NS	NS	<0.54 U	<0.57 U	<0.56 U	<0.56 U	<0.56 U	<0.57 U	<0.57 U	<0.55 U	<0.54 U	<0.57 U	<0.57 U	<0.54 U	<0.54 U
Benzyl Alcohol	100-51-6	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Benzyl Butyl Phthalate	85-68-7	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Biphenyl (Diphenyl)	92-52-4	NS	NS	<0.38 U	<0.4 U	<0.4 U	<0.39 U	<0.39 U	<0.39 U	<0.4 U	<0.39 U	<0.38 U	<0.4 U	<0.4 U	<0.38 U	<0.38 U
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	<0.18 U	<0.19 U	<0.19 U	<0.18 U	<0.18 U	<0.19 U	<0.19 U	<0.18 U	<0.18 U	<0.19 U	<0.19 U	<0.18 U	<0.18 U
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	NS	NS	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U
Bis(2-chloroisopropyl) ether	108-60-1	NS	NS	<0.2 U	<0.21 U	<0.21 U	<0.2 U	<0.21 U	<0.21 U	<0.21 U	<0.2 U	<0.2 U	<0.21 U	<0.21 U	<0.2 U	<0.2 U
Bis(2-ethylhexyl) phthalate	117-81-7	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Carbazole	86-74-8	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Chrysene	218-01-9	1	3.9	0.035 J	<0.1 U	0.035 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Dibenzofuran	132-64-9	7	59	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Dibutyl phthalate	84-74-2	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Diethyl phthalate	84-66-2	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Dimethyl phthalate	131-11-3	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Dioctyl phthalate	117-84-0	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Fluoranthene	206-44-0	100	100	0.06 J	<0.1 U	0.056 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Fluorene	86-73-7	30	100	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Hexachlorobenzene	118-74-1	0.33	1.2	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Hexachlorobutadiene	87-68-3	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Hexachlorocyclopentadiene	77-47-4	NS	NS	<0.48 U	<0.5 U	<0.5 U	<0.49 U	<0.49 U	<0.49 U	<0.5 U	<0.49 U	<0.48 U	<0.5 U	<0.5 U	<0.48 U	<0.47 U
Hexachloroethane	67-72-1	NS	NS	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.028 J	<0.14 U	0.024 J	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Isophorone	78-59-1	NS	NS	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U
Naphthalene	91-20-3	12	100	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Nitrobenzene	98-95-3	NS	NS	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U	<0.16 U	<0.16 U	<0.15 U	<0.15 U
n-Nitrosodi-N-Propylamine	621-64-7	NS	NS	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
n-Nitrosodiphenylamine	86-30-6	NS	NS	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Pentachlorophenol	87-86-5	0.8	6.7	<0.13 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.13 U	<0.14 U	<0.14 U	<0.13 U	<0.13 U
Phenanthrene	85-01-8	100	100	0.031 J	<0.1 U	0.03 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U
Phenol	108-95-2	0.33	100	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
Pyrene	129-00-0	100	100	0.058 J	<0.1 U	0.056 J	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.099 U

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Analyte	CAS Number	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	149_PE-46	150_PE-48	151_PE-49	152_PE-50	153_PE-51	154_PE-52	155_PE-53	156_PE-54	157_PE-55	158_PE-56	158_PE-56	163_PE-30	164_PE-32
				149_PE-46_062921	150_PE-48_062921	151_PE-49_062921	152_PE-50_062921	153_PE-51_062921	154_PE-52_062921	155_PE-53_062921	156_PE-54_062921	157_PE-55_062921	158_PE-56_062921	160_DUP-2_062921	163_PE-30_072221	164_PE-32_072221
				6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	6/29/2021	7/22/2021	7/22/2021
				15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5	15-15.5
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Pesticides																
4,4'-DDD	72-54-8	0.0033	13	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
4,4'-DDE	72-55-9	**0.0033**	8.9	0.00165	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
4,4'-DDT	50-29-3	**0.0033**	7.9	**0.00502 J**	<0.00309 U	0.00131 J	<0.00307 U	<0.00312 U	<0.0031 U	<0.00307 U	<0.003 U	<0.00301 U	<0.0031 U	<0.00306 U	<0.00298 U	<0.00302 U
Aldrin	309-00-2	0.005	0.097	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
Alpha BHC (Alpha Hexachlorocyclohexane)	319-84-6	0.02	0.48	<0.000662 U	<0.000686 U	<0.000665 U	<0.000683 U	<0.000694 U	<0.000688 U	<0.000682 U	<0.000667 U	<0.000669 U	<0.00069 U	<0.000679 U	<0.000663 U	<0.000671 U
Alpha Chlordane	5103-71-9	0.094	4.2	<0.00199 U	<0.00206 U	<0.002 U	<0.00205 U	<0.00208 U	<0.00206 U	<0.00205 U	<0.002 U	<0.00201 U	<0.00207 U	<0.00204 U	<0.00199 U	<0.00201 U
Alpha Endosulfan	959-98-8	2.4	24	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
Beta Bhc (Beta Hexachlorocyclohexane)	319-85-7	0.036	0.36	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
Beta Endosulfan	33213-65-9	2.4	24	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
Chlordane (alpha and gamma)	57-74-9	NS	NS	<0.0132 U	<0.0137 U	<0.0133 U	<0.0136 U	<0.0139 U	<0.0138 U	<0.0136 U	<0.0133 U	<0.0134 U	<0.0138 U	<0.0136 U	<0.0132 U	<0.0134 U
Delta Bhc (Delta Hexachlorocyclohexane)	319-86-8	0.04	100	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
Dieldrin	60-57-1	0.005	0.2	<0.000994 U	<0.00103 U	<0.000998 U	<0.00102 U	<0.00104 U	<0.00103 U	<0.00102 U	<0.001 U	<0.001 U	<0.00103 U	<0.00102 U	<0.000994 U	<0.00101 U
Endosulfan Sulfate	1031-07-8	2.4	24	<0.000662 U	<0.000686 U	<0.000665 U	<0.000683 U	<0.000694 U	<0.000688 U	<0.000682 U	<0.000667 U	<0.000669 U	<0.00069 U	<0.000679 U	<0.000663 U	<0.000671 U
Endrin	72-20-8	0.014	11	<0.000662 U	<0.000686 U	<0.000665 U	<0.000683 U	<0.000694 U	<0.000688 U	<0.000682 U	<0.000667 U	<0.000669 U	<0.00069 U	<0.000679 U	<0.000663 U	<0.000671 U
Endrin Aldehyde	7421-93-4	NS	NS	<0.00199 U	<0.00206 U	<0.002 U	<0.00205 U	<0.00208 U	<0.00206 U	<0.00205 U	<0.002 U	<0.00201 U	<0.00207 U	<0.00204 U	<0.00199 U	<0.00201 U
Endrin Ketone	53494-70-5	NS	NS	<0.00159 U	<0.00165 U	<0.0016 U	<0.00164 U	<0.00166 U	<0.00165 U	<0.00164 U	<0.0016 U	<0.0016 U	<0.00166 U	<0.00163 U	<0.00159 U	<0.00161 U
Gamma Bhc (Lindane)	58-89-9	0.1	1.3	<0.000662 U	<0.000686 U	<0.000665 U	<0.000683 U	<0.000694 U	<0.000688 U	<0.000682 U	<0.000667 U	<0.000669 U	<0.00069 U	<0.000679 U	<0.000663 U	<0.000671 U
Gamma Chlordane	5103-74-2	NS	NS	0.000946 J	<0.00206 U	<0.002 U	<0.00205 U	<0.00208 U	<0.00206 U	<0.00205 U	<0.002 U	<0.00201 U	<0.00207 U	<0.00204 U	<0.00199 U	<0.00201 U
Heptachlor	76-44-8	0.042	2.1	<0.000795 U	<0.000823 U	<0.000798 U	<0.000819 U	<0.000832 U	<0.000826 U	<0.000819 U	<0.0008 U	<0.000803 U	<0.000828 U	<0.000815 U	<0.000795 U	<0.000805 U
Heptachlor Epoxide	1024-57-3	NS	NS	<0.00298 U	<0.00309 U	<0.00299 U	<0.00307 U	<0.00312 U	<0.0031 U	<0.00307 U	<0.003 U	<0.00301 U	<0.0031 U	<0.00306 U	<0.00298 U	<0.00302 U
Methoxychlor	72-43-5	NS	NS	<0.00298 U	<0.00309 U	<0.00299 U	<0.00307 U	<0.00312 U	<0.0031 U	<0.00307 U	<0.003 U	<0.00301 U	<0.0031 U	<0.00306 U	<0.00298 U	<0.00302 U
Toxaphene	8001-35-2	NS	NS	<0.0298 U	<0.0309 U	<0.0299 U	<0.0307 U	<0.0312 U	<0.031 U	<0.0307 U	<0.03 U	<0.0301 U	<0.031 U	<0.0306 U	<0.0298 U	<0.0302 U
Herbicides																
2,4,5-T (Trichlorophenoxyacetic Acid)	93-76-5	NS	NS	<0.172 U	<0.176 U	<0.173 U	<0.168 U	<0.171 U	<0.17 U	<0.174 U	<0.17 U	<0.17 U	<0.173 U	<0.172 U	<0.168 U	<0.168 U
2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	NS	NS	<0.172 U	<0.176 U	<0.173 U	<0.168 U	<0.171 U	<0.17 U	<0.174 U	<0.17 U	<0.17 U	<0.173 U	<0.172 U	<0.168 U	<0.168 U
Silvex (2,4,5-Tp)	93-72-1	3.8	100	<0.172 U	<0.176 U	<0.173 U	<0.168 U	<0.171 U	<0.17 U	<0.174 U	<0.17 U	<0.17 U	<0.173 U	<0.172 U	<0.168 U	<0.168 U
Polychlorinated Biphenyls																
PCB-1016 (Aroclor 1016)	12674-11-2	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1221 (Aroclor 1221)	11104-28-2	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1232 (Aroclor 1232)	11141-16-5	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1242 (Aroclor 1242)	53469-21-9	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1248 (Aroclor 1248)	12672-29-6	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1254 (Aroclor 1254)	11097-69-1	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1260 (Aroclor 1260)	11096-82-5	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1262 (Aroclor 1262)	37324-23-5	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
PCB-1268 (Aroclor 1268)	11100-14-4	NS	NS	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
Total PCBs	1336-36-3	0.1	1	<0.0328 U	<0.0348 U	<0.0348 U	<0.0346 U	<0.0334 U	<0.0332 U	<0.0346 U	<0.0331 U	<0.0338 U	<0.0349 U	<0.0337 U	<0.0329 U	<0.0326 U
Metals																
Aluminum	7429-90-5	NS	NS	3,280	2,860	2,800	1,960	2,260	2,290	2,890	2,580	1,880	2,370	2,420	4,720	1,820
Antimony	7440-36-0	NS	NS	<4.03 U	<4.03 UJ	<4.1 U	<3.89 U	<3.99 U	<4.07 U	<4.18 U	<4.03 U	<4.12 U	<4.09 U	<4.15 U	<3.96 U	<4 U
Arsenic	7440-38-2	13	16	0.797 J	1.06	0.738 J	0.91	1.04	0.83	1.14	1.02	0.783 J	1.02	0.738 J	5.22	0.672 J
Barium	7440-39-3	**350**	400	38.9	26.7	29.9	75.7	22.7	17.2	29.9	22.5	45	24.1	27.5	35	19.8
Beryllium	7440-41-7	7.2	72	0.217 J	0.177 J	0.164 J	0.148 J	0.168 J	0.171 J	0.209 J	0.185 J	0.14 J	0.163 J	0.174 J	0.174 J	0.104 J
Cadmium	7440-43-9	2.5	4.3	0.129 J	0.113 J	0.106 J	0.078 J	0.088 J	0.098 J	0.109 J	0.097 J	<0.824 U	0.09 J	0.091 J	<0.792 U	<0.8 U
Calcium	7440-70-2	NS	NS	2,130	2,450 J	1,700	8,540	9,150	1,710	1,290	1,000	5,070	1,600	1,090	1,560	4,300
Chromium, Hexavalent	18540-29-9	1	110	<0.832 U	<0.854 U	<0.844 U	<0.831 U	<0.839 U	<0.838 U	<0.851 U	<0.826 U	<0.826 U	<0.85 U	<0.855 U	<0.828 U	<0.819 U
Chromium, Total	7440-47-3	NS	NS	8.46	7.27	7.28	5.53	6.28	6.8	8.74	8.79	5.55	7.46	7.3	13.8	4.53
Chromium, Trivalent	16065-83-1	30	180	8.5	7.3	7.3	5.5	6.3	6.8	8.7	8.8	5.6	7.5	7.3	14	4.5
Cobalt	7440-48-4	NS	NS	3.85	3.46	3.74	2.95	3.46	3.66	4.72	4.82	3.08	3.72	3.76	4.33	2.16
Copper	7440-50-8	50	270	8.21	7.1	7.79	8.35	6.98	8.19	8.71	9.5	5.94	7.5	7.27	7.48	4.72
Cyanide	57-12-5	27	27	<0.99 UJ	<1 UJ	<1 UJ	<1 UJ	<0.99 UJ	<1 UJ	<1 UJ	<1 UJ	<0.98 UJ	<0.96 UJ	<1 UJ	<1 UJ	<0.954 UJ
Iron	7439-89-6	NS	NS	8,290	6,960	6,990	5,780	6,510	6,830	8,080	7,600	5,360	6,950	6,840	12,500	4,790
Lead	7439-92-1	**63**	400	15.1	3.92 J	7.09	2.75 J	2.79 J	3.26 J	3.56 J	3.19 J	3.06 J	3.23 J	2.8 J	6.28	2.13 J
Magnesium	7439-95-4	NS	NS	2,420	2,260	1,980	3,540	4,010	2,180	1,940	2,060	3,250	1,950	1,630	2,270	2,330
Manganese	7439-96-5	1600	2000	239	214	171	221	225	236	275	266	213	233	231	74.3	180
Mercury	7439-97-6	**0.18**	0.81	<0.065 U	<0.068 U	<0.066 U	<0.07 U	<0.068 U	<0.073 U	<0.071 U	<0.066 U	<0.069 U	<0.07 U	<0.068 U	<0.066 U	<0.067 U
Nickel	7440-02-0	**30**	310	19.2	13.7	14.4	11.5	12.4	14	19.8	28.1	17.2	14.7	17.9	23.5	10.2
Potassium	7440-09-7	NS	NS	699	592	705	415	361	466	670	541	418	512	549	1,130	339
Selenium	7782-49-2	3.9	180	<1.61 U	0.363 J	<1.64 U	<1.56 U	<1.6 U	<1.63 U	<1.67 U	<1.61 U	<1.65 U	<1.63 U	<1.66 U	<1.58 U	0.312 J
Silver	7440-22-4	2	180	<0.805 U	<0.807 U	<0.82 U	<0.778 U	<0.798 U	<0.814 U	<0.836 U	<0.806 U	<0.824 U	<0.817 U	<0.829 U	<0.792 U	<0.8 U
Sodium	7440-23-5	NS	NS	116 J	118 J	116 J	80.6 U	89.1 U	103 U	110 U	79.2 U	74 U	85.3 U	86.7 U	87.7 J	50.4 J
Thallium	7440-28-0	NS	NS	<1.61 U	<1.61 U	<1.64 U	<1.56 U	<1.6 U	<1.63 U	<1.67 U	<1.61 U	<1.65 U	<1.63 U	<1.66 U	<1.58 U	<1.6 U
Vanadium	7440-62-2	NS	NS	10.8	8.74	9.95	7.37	8.69	9.53	11	11.3	7.48	9.18	9.56	16.5	5.26
Zinc	7440-66-6	**109**	10000	22.1	15.6	15.7	10.5	13.6	14	15.6	13.7	10.8	13.2	13.4	22.8	8.59
General Chemistry																
Total Solids	TSOLID	NS	NS	96.1	93.7	94.8	96.3	95.3	95.4	94	96.8	96.8	94.1	93.6	96.6	97.7
Perfluorooctanoic Acids																
N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	NS	NS	<0.000252 U	<0.000239 U	<0.000235 U	<0.000237 U	<0.000247 U	<0.000238 U	<0.00025 U	<0.00024 U	<0.00024 U	<0.000242 U	<0.00024 U	<0.000228 U	<0.00023 U
Perfluorobutanoic acid (PFBA)	375-22-4	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluorodecanoic Acid (PFDA)	335-76-2	NS	NS	<0.000252 U	<0.000239 UJ	<0.000235 U	<0.000237 U	<0.000247 U	<0.000238 UJ	<0.00025 U	<0.00024 UJ	<0.00024 U	<0.000242 U	<0.00024 U	<0.000228 U	<0.00023 U
Perfluorododecanoic Acid (PFDoA)	307-55-1	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluoroheptanoic acid (PFHpA)	375-85-9	NS	NS	<0.000252 U	<0.000239 U	<0.000235 U	<0.000237 U	<0.000247 U	<0.000238 U	<0.00025 U	<0.00024 U	<0.00024 U	<0.000242 U	<0.00024 U	<0.000228 U	<0.00023 U
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NS	NS	<0.000252 U	<0.000239 U	<0.000235 U	<0.000237 U	<0.000247 U	<0.000238 U	<0.00025 U	<0.00024 U	<0.00024 U	<0.000242 U	<0.00024 U	<0.000228 U	<0.00023 U
Perfluorohexanoic Acid (PFHxA)	307-24-4	NS	NS	0.000061 J	<0.000478 U	0.000054 J	0.000058 J	0.000063 J	0.000285 J	<0.000501 U	0.000071 JF	0.000062 JF	0.000065 J	0.000058 J	<0.000457 U	<0.000461 U
Perfluorononanoic Acid (PFNA)	375-95-1	NS	NS	<0.000252 U	<0.000239 U	<0.000235 U	<0.000237 U	<0.000247 U	<0.000238 U	<0.00025 U	<0.00024 UJ	<0.00024 U	<0.000242 U	<0.00024 U	<0.000228 U	<0.00023 U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	**0.00088**	0.044	0.000135 J	<0.000239 UJ	0.000171 J	<0.000237 U	<0.000247 U	<0.000238 UJ	0.000174 J	<0.00024 UJ	0.000148 J	<0.000242 U	0.00016 J	<0.000228 U	<0.00023 U
Perfluorooctanoic Acid (PFOA)	335-67-1	**0.00066**	0.033	0.000213 J	0.000514	0.000522	0.000421	0.000426	**0.00175 J**	**0.000788**	0.000083 J	0.000292	0.000532	0.000637	0.000045 J	<0.00023 U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluorotetradecanoic Acid (PFTA)	376-06-7	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS)	39108-34-4	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS)	27619-97-2	NS	NS	<0.000505 U	<0.000478 U	<0.000471 U	<0.000474 U	<0.000495 U	<0.000476 U	<0.000501 U	<0.00048 U	<0.00048 U	<0.000483 U	<0.00048 U	<0.000457 U	<0.000461 U
Total PFOA and PFOS	TOTPFOAPFOS	NS	NS	0.000348 J	0.000514	0.000693 J	0.000421	0.000426	0.00175	0.000962 J	0.000083 J	0.00044 J	0.000532	0.000797 J	0.000045 J	<0.00023 U

Table 2
Final Engineering Report
Documentation Endpoint Sample Analytical Results

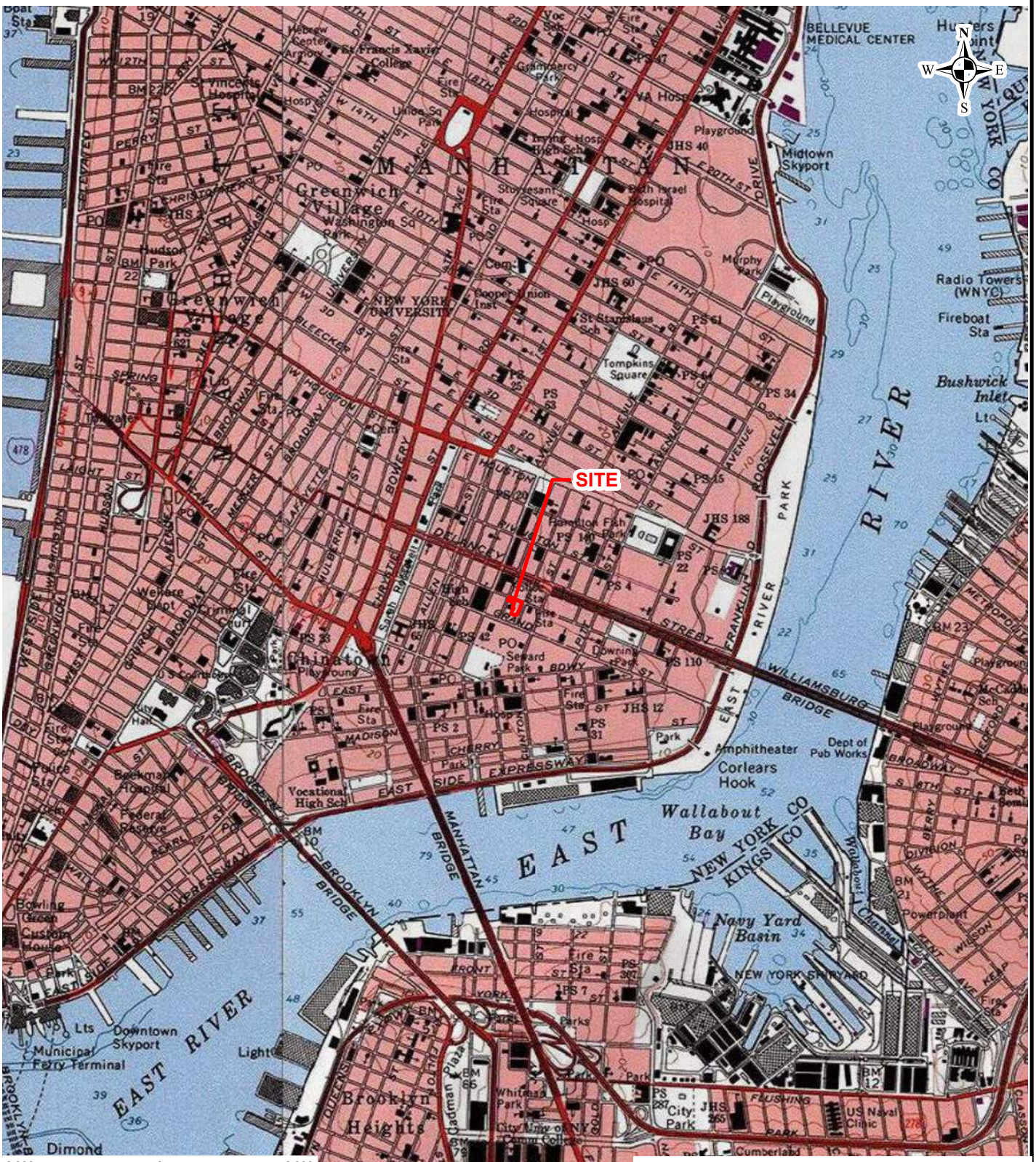
Broome Street Parking Lot
New York, NY
NYSDEC BCP Site No. C231137
Langan Project No. 100646801

Notes:
CAS - Chemical Abstract Service
NS - No standard
mg/kg = milligram per kilogram
NA - Not Analyzed
RL - Reporting Limit
<RL - Not detected
Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use and Restricted Use Restricted-Residential Soil Cleanup Objectives (SCO).

Exceedance Summary:
10 - Result exceeds Unrestricted Use SCOs
10 - Result exceeds Restricted Use Restricted-Residential SCOs

Qualifiers:
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by

FIGURES



NOTES:
1.Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online © 2013 National Geographic Society, i-cubed.

LANGAN

300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com

Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International LLC
Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
GO BROOME DEVELOPMENT
BLOCK No. 346, LOT 75
MANHATTAN
NEW YORK COUNTY NEW YORK

Drawing Title
USGS SITE LOCATION MAP

Project No. 100646801	Figure 1
Date 9/2/2021	
Scale 1"=2,000'	
Drawn By ATR	
Last Revised 9/2/2021	

Legend

- Site Boundary
- Soil Boring Location
- Soil Boring/Monitoring Well Location
- Soil Vapor Sampling Location
- Surficial Soil Sample Location
- Historical Soil Boring Location
- Historical Soil Boring/Monitoring Well/Soil Vapor Sampling Location
- Historical Soil Boring/Soil Vapor Sampling Location
- Asphalt Paved Parking Area
- AOC-2: Historical Site Use of Concern
- Approximate Extents of Unpaved/ Landscaped Areas

LSS-8, LSV-10, LSB-19, LSB-17, LSB-18, WC-5, Former Manufacturing, Former Coppersmith, LSS-9, LSB-16, LSB-2/LMW-2/LSV-2, LSB-20, LSV-11, WC-4, Former Printer, Former Tinsmith, LSV-12, LSB-15, Former Printer, LSB-21/LMW-7, LSS-7, LSB-9/LSV-9, LSS-6, LSV-13, LSS-10, LSB-6/LMW-6/LSV-6, LSV-17, LSS-1, LSB-25, LSB-10, LSB-23/LMW-9, LSB-14, LSB-11, LSS-5, LSB-26/LMW-11, LSB-8/LSV-8, LSB-12, LSB-28, LSV-18, WC-1, WC-2, LSB-4/LMW-4/LSV-4, WC-3, LSS-4, LSS-2, Former Printer, Former Laundry, Former Printer, Former Chinese Laundry, LSB-7/LSV-7, LSB-5/LMW-5/LSV-5, LSV-14, LSB-24/LMW-10, LSB-13, LSB-27/LMW-12, LSS-3, LSS-11, LSV-16, LSV-15, LSB-22/LMW-8

BROOME STREET (49.77' WIDE)

GRAND STREET (100' WIDE)

SUFFOLK STREET (49.73' WIDE)

BLOCK 346 LOT 95 AREA=8,637 S.F.± 0.19827 ACRES ± ADDRESS: 384 GRAND STREET VESTING DEED: REEL 589 PAGE 1132 & REEL 616 PAGE 1570 & 1059 PAGE 1009

BLOCK 346 LOT 37 AREA=7,443 S.F.± 0.17087 ACRES ± ADDRESS: 60 NORFOLK STREET VESTING DEED: CRFN 2009000182855

NOTES:
1. Historical site operations shown based on the review of a Certified Sanborn Map Report dated 28 February 2017 and City Directory Abstract dated 6 March 2017 provided by Environmental Data Resources, Inc.
2. Site Boundary from "Topographic, Boundary, and Utility Survey" by Langan, last revised January 2, 2018.
3. AOC 1 consists of Historic Fill, which is present throughout the site.

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SCALE IN FEET

LANGAN
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com

Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International LLC
Collectively known as Langan

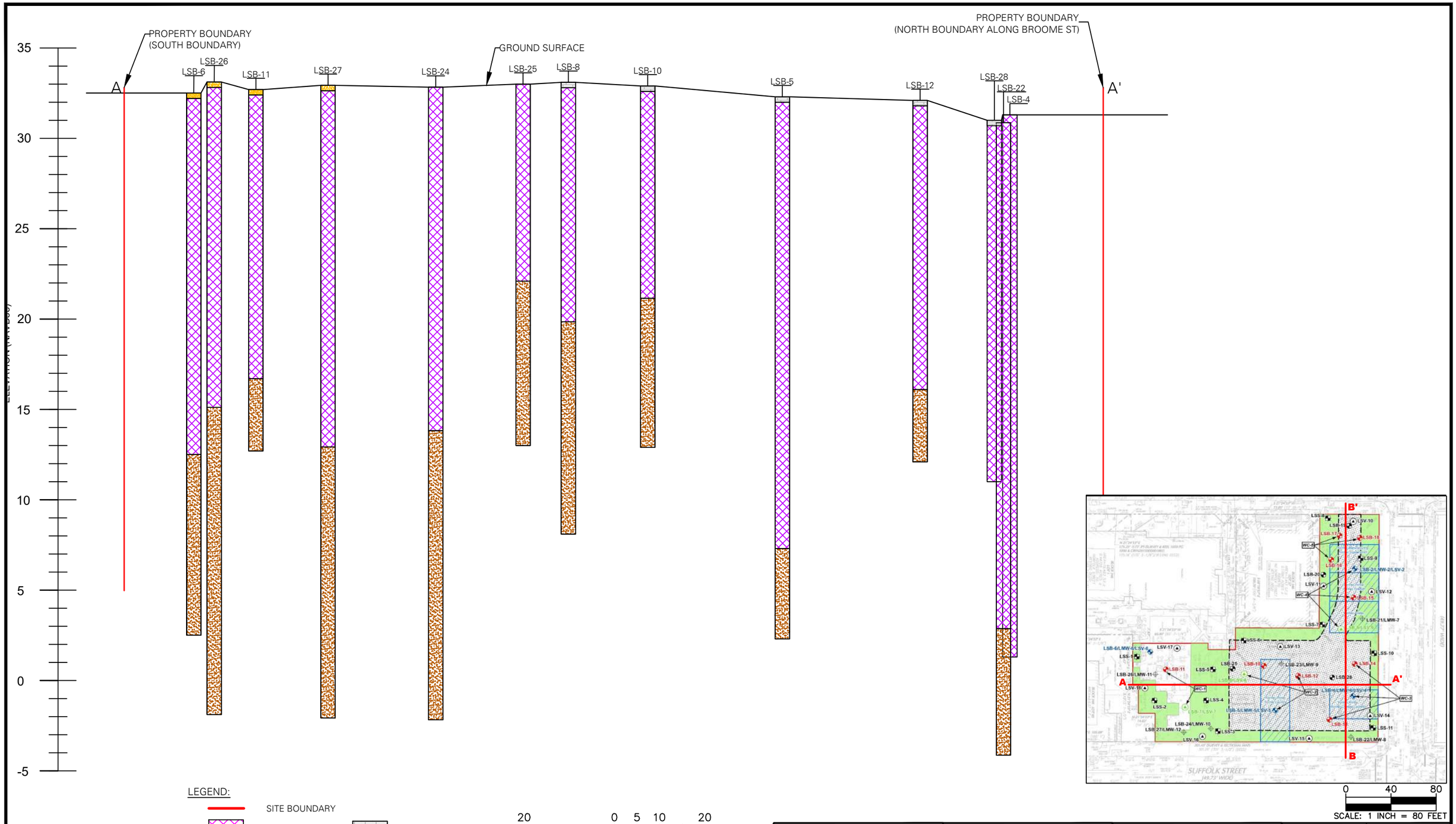
NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
GO BROOME DEVELOPMENT
BLOCK No. 346, PROPOSED LOT 75
MANHATTAN
NEW YORK COUNTY NEW YORK

Drawing Title
SITE PLAN

Project No.	Figure
100646801	2
Date: 9/2/2021	
Scale: 1 " = 30 '	
Drawn By: ATR	

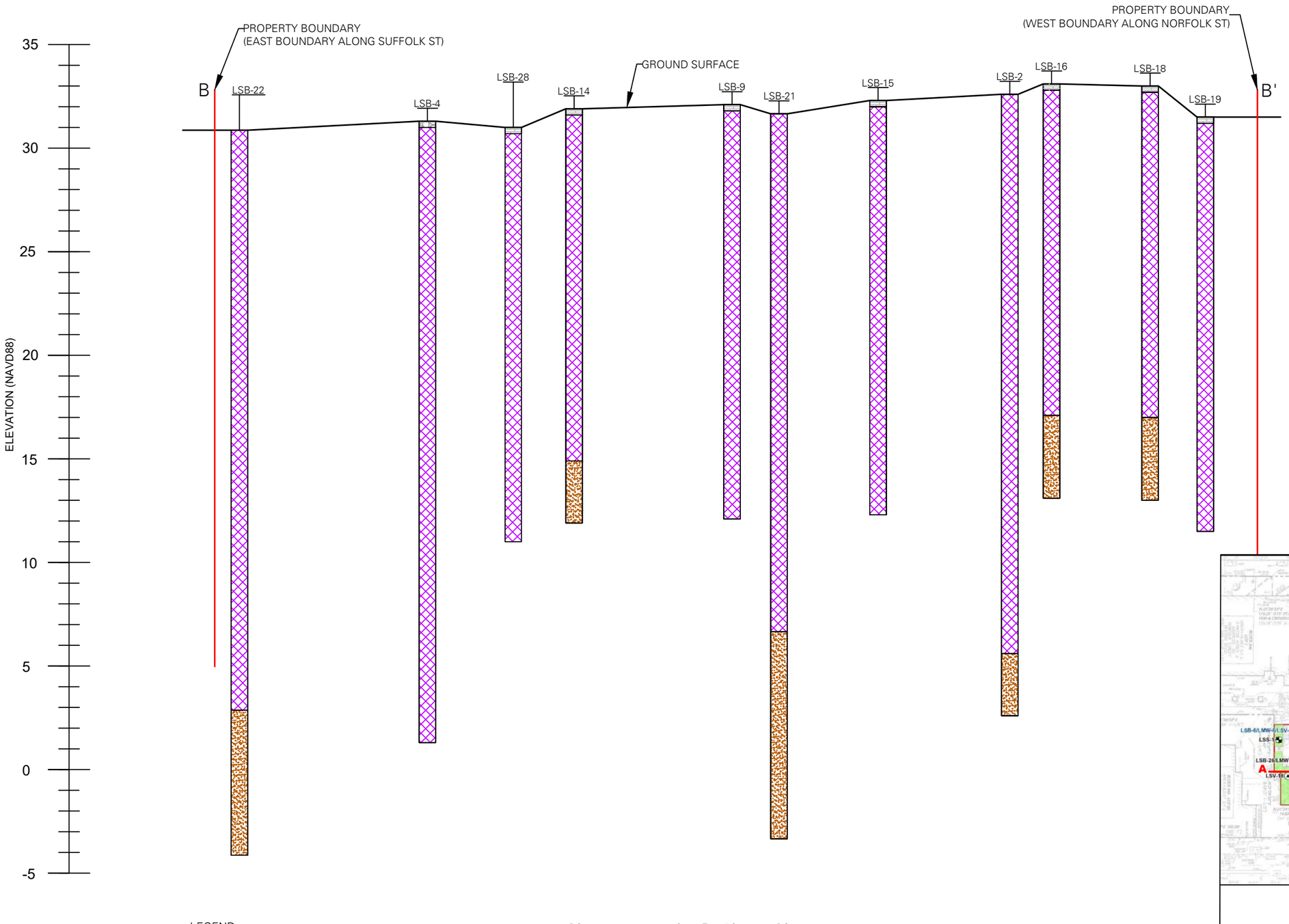
Path: \\langan.com\data\PAR\data8\100646801\ArcGIS\ArcMap_Documents\2021-09 BCP SMP\Figure 2 - Site Plan.mxd Date: 9/2/2021 User: ibaker Time: 11:24:51 AM



LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ Certificate of Authorization No.24GA27996400

Project	GO BROOME DEVELOPMENT BLOCK No. 346, LOT No. 75 MANHATTAN NEW YORK COUNTY NEW YORK
Drawing Title	SUBSURFACE PROFILE A-A'
Project No.	100646801
Date	7/10/2020
Drawn By	ATR
Drawing No.	3A

Filename: \\langan.com\data\PAR\data8\100646801\ArcGIS\ArcMap_Documents\2021-09 BCP SMP\100646801-NI201-0101.dwg Date: 9/15/2021 Time: 12:59 User: ibaker Style Table: Langan.stb Layout: A-A



LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
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Project
GO BROOME DEVELOPMENT
BLOCK No. 346, LOT No. 75
MANHATTAN
NEW YORK COUNTY NEW YORK

Drawing Title
SUBSURFACE PROFILE B-B'

Project No.	100646801
Date	7/10/2020
Drawn By	ATR
Drawing No.	3B

Filename: \\langan.com\data\PAR\data8\100646801\ArcGIS\ArcMap_Documents\2021-09 BCP SMP\100646801-NI201-0101.dwg Date: 9/15/2021 Time: 13:00 User: ibaker Style Table: Langan.stb Layout: B-B

Legend

- Site Boundary
- Groundwater Elevation Contour
- Groundwater Flow Direction
- Soil Boring/Monitoring Well Location and Groundwater Elevation
- (5.35') Groundwater Elevation

LSB-21/LMW-7 (7.91')

LSB-26/LMW-11 (8.93')

LSB-23/LMW-9 (7.9')

LSB-24/LMW-10 (5.35')

LSB-27/LMW-12 (5.35')

LSB-22/LMW-8 (7.94')

BROOME STREET (49.77' WIDE)

SUFFOLK STREET (49.73' WIDE)

NOTES:
1. Survey basemap from "Topographic, Boundary, and Utility Survey" by Langan, last revised January 2, 2018.
2. Elevation provided in NAVD88.

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SCALE IN FEET

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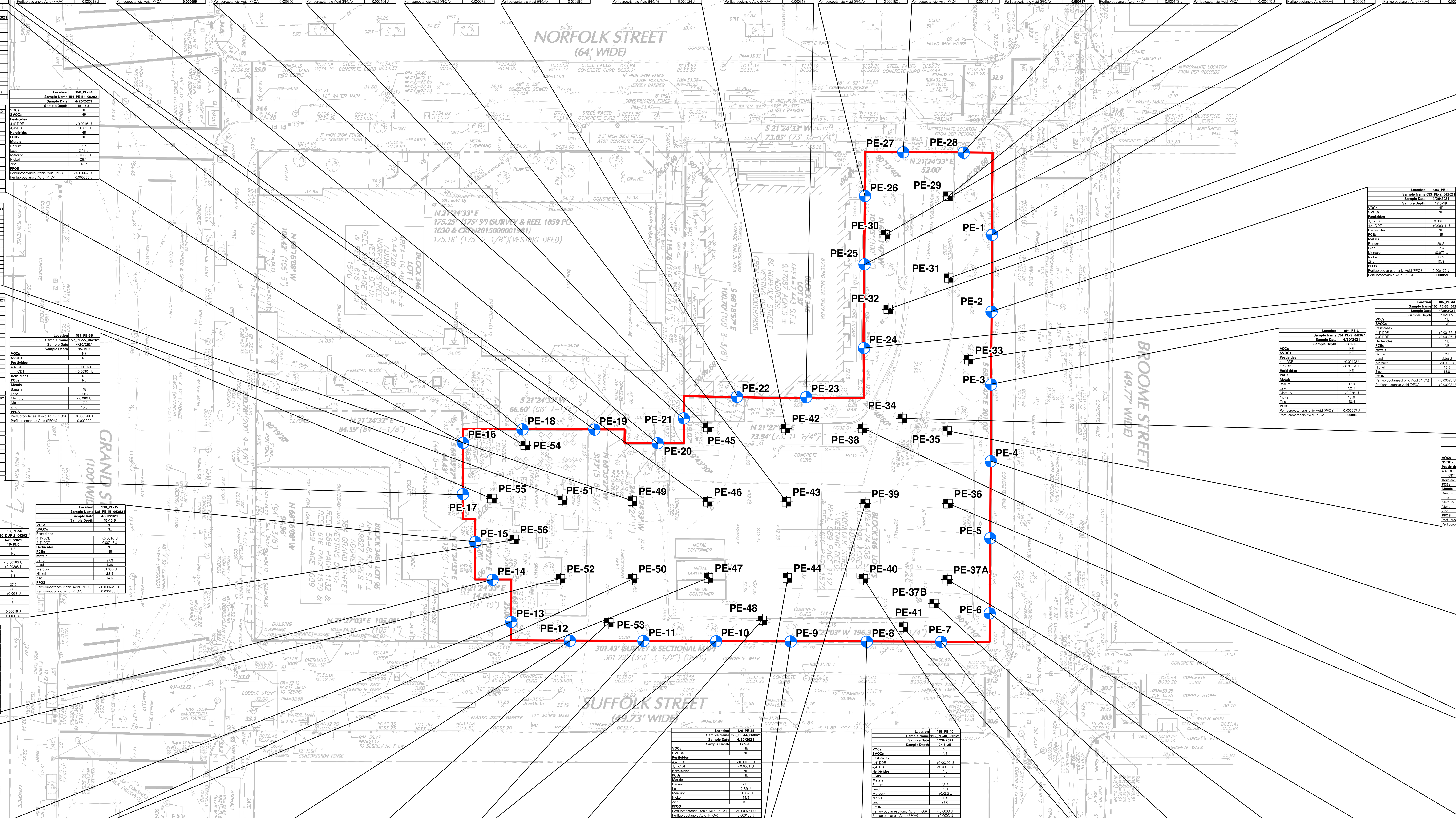
Project
GO BROOME DEVELOPMENT
BLOCK No. 346, LOT 75
MANHATTAN
NEW YORK COUNTY NEW YORK

Drawing Title
POTENTIOMETRIC SURFACE MAP

Project No.	Figure
100646801	4
Date: 9/15/2021	
Scale: 1 " = 30 '	
Drawn By: ATR	

Path: \\langan.com\data\PAR\data8\100646801\ArcGIS\ArcMap_Documents\2021-09 BCP SMP\Figure 4 - Potentiometric Surface Map.mxd Date: 9/15/2021 User: ibaker Time: 12:49:02 PM



Location	142_PE-19
Sample Name	142_PE-19_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000452 J
4,4'-DDT	0.00285 J
Herbicides	NE
PCBs	NE
Metals	
Barium	35.5
Lead	10.4
Mercury	<0.067 U
Nickel	29.7
Zinc	20.5
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000146 J
Perfluorooctanoic Acid (PFOA)	0.000275

Location	149_PE-46
Sample Name	149_PE-46_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00165
4,4'-DDT	**0.00502 J**
Herbicides	NE
PCBs	NE
Metals	
Barium	38.9
Lead	15.1
Mercury	<0.065 U
Nickel	19.2
Zinc	22.1
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000135 J
Perfluorooctanoic Acid (PFOA)	0.000213 J

Location	143_PE-20
Sample Name	143_PE-20_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00167 U
4,4'-DDT	<0.00313 U
Herbicides	NE
PCBs	NE
Metals	
Barium	25.3
Lead	3.38 J
Mercury	<0.067 U
Nickel	16.9
Zinc	11.9
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000247 J
Perfluorooctanoic Acid (PFOA)	**0.000696**

Location	144_PE-21
Sample Name	144_PE-21_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00164 U
4,4'-DDT	<0.00308 U
Herbicides	NE
PCBs	NE
Metals	
Barium	28.5
Lead	4.62
Mercury	<0.067 U
Nickel	**33.6**
Zinc	17.4
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000265
Perfluorooctanoic Acid (PFOA)	0.000356

Location	148_PE-45
Sample Name	148_PE-45_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00163 U
4,4'-DDT	<0.00306 U
Herbicides	NE
PCBs	NE
Metals	
Barium	33.6
Lead	4.19
Mercury	<0.065 U
Nickel	25.2
Zinc	12.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000245 U
Perfluorooctanoic Acid (PFOA)	0.000104 J

Location	128_PE-43
Sample Name	128_PE-43_060821
Sample Date	4/20/2021
Sample Depth	17.5-18
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00166 U
4,4'-DDT	<0.00311 U
Herbicides	NE
PCBs	NE
Metals	
Barium	22.8
Lead	7.6 J
Mercury	<0.073 U
Nickel	13.9
Zinc	16.4 J
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000182 J
Perfluorooctanoic Acid (PFOA)	0.000279

Location	145_PE-22
Sample Name	145_PE-22_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00157 U
4,4'-DDT	<0.00295 U
Herbicides	NE
PCBs	NE
Metals	
Barium	120
Lead	2.74 J
Mercury	<0.065 U
Nickel	23.3
Zinc	10.7
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000234 U
Perfluorooctanoic Acid (PFOA)	0.000295

Location	147_PE-42
Sample Name	147_PE-42_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00166 U
4,4'-DDT	<0.0031 U
Herbicides	NE
PCBs	NE
Metals	
Barium	51.9
Lead	12
Mercury	<0.066 U
Nickel	20.4
Zinc	17.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000245 U
Perfluorooctanoic Acid (PFOA)	0.000224 J

Location	146_PE-23
Sample Name	146_PE-23_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000638 J
4,4'-DDT	0.00305 J
Herbicides	NE
PCBs	NE
Metals	
Barium	36.7
Lead	18.3
Mercury	<0.067 U
Nickel	22.3
Zinc	26
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000139 J
Perfluorooctanoic Acid (PFOA)	0.000318

Location	123_PE-26
Sample Name	123_PE-26_072221
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000563 J
4,4'-DDT	0.00317 J
Herbicides	NE
PCBs	NE
Metals	
Barium	38.6
Lead	19.7
Mercury	<0.081 U
Nickel	24.2
Zinc	25.7
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000266 U
Perfluorooctanoic Acid (PFOA)	0.000152 J

Location	124_PE-27
Sample Name	124_PE-27_072221
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00194
4,4'-DDT	**0.0173**
Herbicides	NE
PCBs	NE
Metals	
Barium	30.9
Lead	8.39
Mercury	<0.093 U
Nickel	23.4
Zinc	24.4
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000229 J
Perfluorooctanoic Acid (PFOA)	0.000241 J

Location	102_PE-28
Sample Name	102_PE-28_042121
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00173 U
4,4'-DDT	<0.00324 U
Herbicides	NE
PCBs	NE
Metals	
Barium	33.9
Lead	4.13 J
Mercury	<0.071 U
Nickel	30
Zinc	21.7
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000259 U
Perfluorooctanoic Acid (PFOA)	**0.000717**

Location	125_PE-29
Sample Name	125_PE-29_060321
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00168 U
4,4'-DDT	<0.00314 U
Herbicides	NE
PCBs	NE
Metals	
Barium	49.8
Lead	12.2
Mercury	<0.078 U
Nickel	20.9
Zinc	34.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.00026 U
Perfluorooctanoic Acid (PFOA)	0.000148 J

Location	163_PE-30
Sample Name	163_PE-30_072221
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00159 U
4,4'-DDT	<0.00298 U
Herbicides	NE
PCBs	NE
Metals	
Barium	35
Lead	6.28
Mercury	<0.066 U
Nickel	23.5
Zinc	22.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000228 U
Perfluorooctanoic Acid (PFOA)	0.000045 J

Location	122_PE-25
Sample Name	122_PE-25_072221
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00067 J
4,4'-DDT	0.00329
Herbicides	NE
PCBs	NE
Metals	
Barium	27
Lead	6.44
Mercury	<0.089 U
Nickel	13.8
Zinc	14.9
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000441
Perfluorooctanoic Acid (PFOA)	0.000641

Location	092_PE-1
Sample Name	092_PE-1_042021
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00166 U
4,4'-DDT	<0.00312 U
Herbicides	NE
PCBs	NE
Metals	
Barium	21
Lead	3.24 J
Mercury	<0.072 U
Nickel	12.5
Zinc	16.7
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000235 U
Perfluorooctanoic Acid (PFOA)	0.000561

Location	141_PE-18
Sample Name	141_PE-18_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00117 J
4,4'-DDT	**0.00666**
Herbicides	NE
PCBs	NE
Metals	
Barium	37.8
Lead	18.1
Mercury	<0.066 U
Nickel	19.7
Zinc	21.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000236 U
Perfluorooctanoic Acid (PFOA)	0.000204 J

Location	156_PE-54
Sample Name	156_PE-54_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0016 U
4,4'-DDT	<0.003 U
Herbicides	NE
PCBs	NE
Metals	
Barium	22.5
Lead	3.19 J
Mercury	<0.066 U
Nickel	28.1
Zinc	13.7
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.00024 UJ
Perfluorooctanoic Acid (PFOA)	0.000083 J

Location	139_PE-16
Sample Name	139_PE-16_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00129 J
4,4'-DDT	**0.0134**
Herbicides	NE
PCBs	NE
Metals	
Barium	21.8
Lead	5.43
Mercury	<0.066 U
Nickel	16.6
Zinc	13.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.00024 U
Perfluorooctanoic Acid (PFOA)	0.000325

Location	151_PE-49
Sample Name	151_PE-49_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0016 U
4,4'-DDT	0.00131 J
Herbicides	NE
PCBs	NE
Metals	
Barium	29.9
Lead	7.09
Mercury	<0.066 U
Nickel	14.4
Zinc	15.7
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000171 J
Perfluorooctanoic Acid (PFOA)	0.000522

Location	153_PE-51
Sample Name	153_PE-51_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00166 U
4,4'-DDT	<0.00312 U
Herbicides	NE
PCBs	NE
Metals	
Barium	22.7
Lead	2.79 J
Mercury	<0.068 U
Nickel	12.4
Zinc	13.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000247 U
Perfluorooctanoic Acid (PFOA)	0.000426

Location	157_PE-55
Sample Name	157_PE-55_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0016 U
4,4'-DDT	<0.00301 U
Herbicides	NE
PCBs	NE
Metals	
Barium	45
Lead	3.06 J
Mercury	<0.069 U
Nickel	17.2
Zinc	10.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000148 J
Perfluorooctanoic Acid (PFOA)	0.000292

Location	140_PE-17
Sample Name	140_PE-17_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00112 J
4,4'-DDT	**0.0099**
Herbicides	NE
PCBs	NE
Metals	
Barium	51.1
Lead	17.6
Mercury	<0.066 U
Nickel	**40.2**
Zinc	30.2
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000158 J
Perfluorooctanoic Acid (PFOA)	0.00037

Location	138_PE-15
Sample Name	138_PE-15_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0016 U
4,4'-DDT	0.00243 J
Herbicides	NE
PCBs	NE
Metals	
Barium	27.3
Lead	4.38
Mercury	<0.065 U
Nickel	**32.7**
Zinc	14.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000249 UJ
Perfluorooctanoic Acid (PFOA)	0.000165 J

Location	158_PE-56	158_PE-56
Sample Name	158_PE-56_062921	160_DUP-2_062921
Sample Date	4/20/2021	6/29/2021
Sample Depth	15-15.5	15-15.5
VOCs	NE	NE
SVOCs	NE	NE
Pesticides		
4,4'-DDE	<0.00166 U	<0.00163 U
4,4'-DDT	<0.0031 U	<0.00306 U
Herbicides	NE	NE
PCBs	NE	NE
Metals		
Barium	24.1	27.5
Lead	3.23 J	2.8 J
Mercury	<0.07 U	<0.068 U
Nickel	14.7	17.9
Zinc	13.2	13.4
PFOS		
Perfluorooctanesulfonic Acid (PFOS)	<0.000242 U	0.00016 J
Perfluorooctanoic Acid (PFOA)	0.000532	0.000637

Sample Name	137_PE-14_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00165 U
4,4'-DDT	<0.0031 U
Herbicides	NE
PCBs	NE
Metals	
Barium	44.6
Lead	4.54
Mercury	<0.067 U
Nickel	17.3
Zinc	18.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000187 J
Perfluorooctanoic Acid (PFOA)	**0.00259 J**

Location	154_PE-52
Sample Name	154_PE-52_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00165 U
4,4'-DDT	<0.0031 U
Herbicides	NE
PCBs	NE
Metals	
Barium	17.2
Lead	3.26 J
Mercury	<0.073 U
Nickel	14
Zinc	14
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000238 UJ
Perfluorooctanoic Acid (PFOA)	**0.00175 J**

Location	104_PE-31
Sample Name	104_PE-31_042021
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00168 U
4,4'-DDT	<0.00316 U
Herbicides	NE
PCBs	NE
Metals	
Barium	34.3
Lead	4.62
Mercury	<0.068 U
Nickel	18.9
Zinc	20.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000241 U
Perfluorooctanoic Acid (PFOA)	0.000627

Location	164_PE-32
Sample Name	164_PE-32_072221
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00161 U
4,4'-DDT	<0.00302 U
Herbicides	NE
PCBs	NE
Metals	
Barium	19.8
Lead	2.13 J
Mercury	<0.067 U
Nickel	10.2
Zinc	8.59
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.00023 U
Perfluorooctanoic Acid (PFOA)	<0.00023 U

Location	093_PE-2
Sample Name	093_PE-2_042021
Sample Date	4/20/2021
Sample Depth	17.5-18
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00166 U
4,4'-DDT	<0.00311 U
Herbicides	NE
PCBs	NE
Metals	
Barium	28.8
Lead	5.94
Mercury	<0.072 U
Nickel	17.9
Zinc	18.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000172 J
Perfluorooctanoic Acid (PFOA)	**0.000859**

Location	121_PE-24
Sample Name	121_PE-24_072221
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000417 J
4,4'-DDT	0.00202 J
Herbicides	NE
PCBs	NE
Metals	
Barium	33.9
Lead	10.7
Mercury	<0.081 U
Nickel	23.2
Zinc	20.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000244 U
Perfluorooctanoic Acid (PFOA)	0.000161 J

Location	105_PE-33
Sample Name	105_PE-33_042121
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00163 U
4,4'-DDT	<0.00306 U
Herbicides	NE
PCBs	NE
Metals	
Barium	28
Lead	2.98 J
Mercury	<0.066 U
Nickel	15.3
Zinc	13.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.00023 U
Perfluorooctanoic Acid (PFOA)	<0.00023 U

Location	094_PE-3
Sample Name	094_PE-3_042021
Sample Date	4/20/2021
Sample Depth	17.5-18
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00173 U
4,4'-DDT	<0.00325 U
Herbicides	NE
PCBs	NE
Metals	
Barium	97.9
Lead	32.4
Mercury	<0.076 U
Nickel	18.6
Zinc	48.4
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000207 J
Perfluorooctanoic Acid (PFOA)	**0.000913**

Location	120_PE-34
Sample Name	120_PE-34_060321
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0016 U
4,4'-DDT	0.00133 J
Herbicides	NE
PCBs	NE
Metals	
Barium	40.8
Lead	11.4
Mercury	<0.076 U
Nickel	16.7
Zinc	26.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000243 U
Perfluorooctanoic Acid (PFOA)	0.000201 J

Location	106_PE-35	106_PE-35
Sample Name	106_PE-35_042121	110_DUP-1_042121
Sample Date	4/20/2021	4/21/2021
Sample Depth	18-18.5	18-18.5
VOCs	NE	NE
SVOCs	NE	NE
Pesticides		
4,4'-DDE	<0.00162 U	<0.00165 U
4,4'-DDT	<0.00303 U	<0.00309 U
Herbicides	NE	NE
PCBs	NE	NE
Metals		
Barium	40.3	46.6
Lead	2.97 J	4.24
Mercury	<0.067 U	<0.066 U
Nickel	**31.9**	**32.6**
Zinc	14.7	15
PFOS		
Perfluorooctanesulfonic Acid (PFOS)	0.00074	0.000741
Perfluorooctanoic Acid (PFOA)	0.000062 J	0.000058 J

Location	095_PE-4
Sample Name	095_PE-4_042021
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000453 J
4,4'-DDT	0.002 J
Herbicides	NE
PCBs	NE
Metals	
Barium	144
Lead	49.2
Mercury	<0.069 U
Nickel	16.4
Zinc	93.4
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000221 J
Perfluorooctanoic Acid (PFOA)	0.000468

Location	126_PE-38
Sample Name	126_PE-38_060321
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0016 U
4,4'-DDT	<0.00299 U
Herbicides	NE
PCBs	NE
Metals	
Barium	23.4
Lead	2.01 J
Mercury	<0.082 U
Nickel	13.6
Zinc	9.28
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000238 U
Perfluorooctanoic Acid (PFOA)	<0.000238 U

Location	107_PE-36
Sample Name	107_PE-36_042121
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00165 U
4,4'-DDT	<0.00309 U
Herbicides	NE
PCBs	NE
Metals	
Barium	67.1
Lead	13.6
Mercury	<0.067 U
Nickel	**31.4**
Zinc	30.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.00013 J
Perfluorooctanoic Acid (PFOA)	0.000092 J

Location	129_PE-44
Sample Name	129_PE-44_060821
Sample Date	4/20/2021
Sample Depth	17.5-18
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00165 U
4,4'-DDT	<0.0031 U
Herbicides	NE
PCBs	NE
Metals	
Barium	21.1
Lead	2.89 J
Mercury	<0.067 U
Nickel	14.3
Zinc	13.1
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000251 U
Perfluorooctanoic Acid (PFOA)	0.000135 J

Location	115_PE-40
Sample Name	115_PE-40_060121
Sample Date	4/20/2021
Sample Depth	24.5-25
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00202 U
4,4'-DDT	<0.0038 U
Herbicides	NE
PCBs	NE
Metals	
Barium	48.3
Lead	7.01
Mercury	<0.082 U
Nickel	20.9
Zinc	21.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.0003 U
Perfluorooctanoic Acid (PFOA)	<0.0003 U

Location	136_PE-13
Sample Name	136_PE-13_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00162 U
4,4'-DDT	<0.00304 U
Herbicides	NE
PCBs	NE
Metals	
Barium	15
Lead	2.21 J
Mercury	<0.065 U
Nickel	19.4
Zinc	10.9
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000128 J
Perfluorooctanoic Acid (PFOA)	0.000145 J

Location	152_PE-50
Sample Name	152_PE-50_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00164 U
4,4'-DDT	<0.00307 U
Herbicides	NE
PCBs	NE
Metals	
Barium	75.7
Lead	2.75 J
Mercury	<0.07 U
Nickel	11.5
Zinc	10.5
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000237 U
Perfluorooctanoic Acid (PFOA)	0.000421

Location	130_PE-47
Sample Name	130_PE-47_060821
Sample Date	4/20/2021
Sample Depth	17.5-18
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0017 U
4,4'-DDT	<0.00318 U
Herbicides	NE
PCBs	NE
Metals	
Barium	26.8
Lead	2.7 J
Mercury	<0.069 U
Nickel	12.4
Zinc	12.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000245 U
Perfluorooctanoic Acid (PFOA)	**0.00151**

Location	135_PE-12
Sample Name	135_PE-12_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00159 U
4,4'-DDT	<0.00298 U
Herbicides	NE
PCBs	NE
Metals	
Barium	34.6
Lead	4.36
Mercury	<0.067 U
Nickel	16.4
Zinc	14.1
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000567 J
Perfluorooctanoic Acid (PFOA)	**0.00296**

Location	155_PE-53
Sample Name	155_PE-53_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00164 U
4,4'-DDT	<0.00307 U
Herbicides	NE
PCBs	NE
Metals	
Barium	29.9
Lead	3.56 J
Mercury	<0.071 U
Nickel	19.8
Zinc	15.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000174 J
Perfluorooctanoic Acid (PFOA)	**0.000788**

Location	134_PE-11
Sample Name	134_PE-11_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00167 U
4,4'-DDT	0.00324 J
Herbicides	NE
PCBs	NE
Metals	
Barium	31.6
Lead	10.9
Mercury	<0.067 U
Nickel	22.4
Zinc	20.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000217 J
Perfluorooctanoic Acid (PFOA)	0.000478

Location	133_PE-10
Sample Name	133_PE-10_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00162 U
4,4'-DDT	<0.00304 U
Herbicides	NE
PCBs	NE
Metals	
Barium	27.5
Lead	3.5 J
Mercury	<0.066 U
Nickel	13
Zinc	13.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000256 U
Perfluorooctanoic Acid (PFOA)	0.000411

Location	150_PE-48
Sample Name	150_PE-48_062921
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00165 U
4,4'-DDT	<0.00309 U
Herbicides	NE
PCBs	NE
Metals	
Barium	26.7
Lead	3.92 J
Mercury	<0.068 U
Nickel	13.7
Zinc	15.6
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000239 UJ
Perfluorooctanoic Acid (PFOA)	0.000514

Location	132_PE-9
Sample Name	132_PE-9_062821
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000559 J
4,4'-DDT	0.00183 J
Herbicides	NE
PCBs	NE
Metals	
Barium	32
Lead	11.5
Mercury	<0.067 U
Nickel	17.9
Zinc	18.9
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000134 J
Perfluorooctanoic Acid (PFOA)	**0.00108**

Location	114_PE-39
Sample Name	114_PE-39_060121
Sample Date	4/20/2021
Sample Depth	24.5-25
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.0019 U
4,4'-DDT	<0.00356 U
Herbicides	NE
PCBs	NE
Metals	
Barium	38.5
Lead	9.74
Mercury	<0.079 U
Nickel	21.2
Zinc	22.8
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	<0.000303 U
Perfluorooctanoic Acid (PFOA)	0.000243 J

Location	117_PE-8	117_PE-8
Sample Name	117_PE-8_060321	118_DUP-1_060321
Sample Date	4/20/2021	6/3/2021
Sample Depth	18-18.5	18-18.5
VOCs	NE	NE
SVOCs	NE	NE
Pesticides		
4,4'-DDE	<0.00158 U	<0.00168 U
4,4'-DDT	<0.00297 U	0.00197 J
Herbicides	NE	NE
PCBs	NE	NE
Metals		
Barium	35.6 J	102 J
Lead	3.37 J	25 J
Mercury	<0.075 U	<0.068 U
Nickel	**36.4 J**	20.8 J
Zinc	26.8	44.5
PFOS		
Perfluorooctanesulfonic Acid (PFOS)	<0.000246 U	<0.00025 U
Perfluorooctanoic Acid (PFOA)	<0.000246 U	0.000261

Location	119_PE-41
Sample Name	119_PE-41_060321
Sample Date	4/20/2021
Sample Depth	15-15.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	<0.00162 U
4,4'-DDT	**0.00376**
Herbicides	NE
PCBs	NE
Metals	
Barium	122 J
Lead	19.5
Mercury	<0.075 U
Nickel	21.8
Zinc	31.3
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000203 J
Perfluorooctanoic Acid (PFOA)	0.000392

Location	098_PE-7
Sample Name	098_PE-7_042021
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	**0.00359**
4,4'-DDT	**0.00787**
Herbicides	NE
PCBs	NE
Metals	
Barium	**373**
Lead	**180**
Mercury	**0.185**
Nickel	20.6
Zinc	**236**
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.0004
Perfluorooctanoic Acid (PFOA)	0.000254

Location	109_PE-37B
Sample Name	109_PE-37B_042121
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00324
4,4'-DDT	**0.0087**
Herbicides	**NE**
PCBs	**NE**
Metals	
Barium	202
Lead	**64**
Mercury	0.13
Nickel	20.8
Zinc	95.2
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000196 J
Perfluorooctanoic Acid (PFOA)	0.000188 J

Location	097_PE-6
Sample Name	097_PE-6_042021
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00122 J
4,4'-DDT	0.00263 J
Herbicides	NE
PCBs	NE
Metals	
Barium	**450**
Lead	**253**
Mercury	0.061 J
Nickel	17.8
Zinc	**186**
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000417
Perfluorooctanoic Acid (PFOA)	0.000317

Location	108_PE-37A
Sample Name	108_PE-37A_042121
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.00167
4,4'-DDT	**0.00444**
Herbicides	**NE**
PCBs	**NE**
Metals	
Barium	231
Lead	**84.2**
Mercury	0.1
Nickel	25.5
Zinc	**119**
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	0.000153 J
Perfluorooctanoic Acid (PFOA)	0.000171 J

Location	096_PE-5
Sample Name	096_PE-5_042021
Sample Date	4/20/2021
Sample Depth	18-18.5
VOCs	NE
SVOCs	NE
Pesticides	
4,4'-DDE	0.000785 J
4,4'-DDT	0.00186 J
Herbicides	NE
PCBs	NE
Metals	
Barium	40.5
Lead	19.4
Mercury	0.062 J
Nickel	12.2
Zinc	66.4
PFOS	
Perfluorooctanesulfonic Acid (PFOS)	**0.00177**
Perfluorooctanoic Acid (PFOA)	0.000308

Analyte	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs
Pesticides		
4,4'-DDE	0.0033	8.9
4,4'-DDT	0.0033	7.9
Metals		
Barium	350	400
Lead	63	400
Mercury	0.18	0.81
Nickel	30	310
Zinc	109	10000
PFOS		
Perfluorooctanesulfonic Acid (PFOS)	0.00088	0.044
Perfluorooctanoic Acid (PFOA)	0.00066	0.033

Notes:
1. Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use and Restricted Use Restricted-Residential Soil Cleanup Objectives (SCO).
2. Analytical results are shown for only compounds detected above the NYSDEC Part 375 Unrestricted Use SCOs
3. mg/kg = milligrams per kilogram
4. NE = No exceedances

Qualifiers:
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:

10 - Result exceeds NYSDEC Part 375 Unrestricted Use SCOs
10 - Result exceeds NYSDEC Part 375 Restricted Use Restricted-Residential SCOs

0 20 40
SCALE IN FEET

NOTES:
1. Historical site operations shown based on the review of a Certified Sanborn Map Report dated 28 February 2017 and City Directory Abstract dated 6 March 2017 provided by Environmental Data Resources, Inc.
2. Site Boundary from "Topographic, Boundary, and Utility Survey" by Langan, last revised January 2, 2018.

LANGAN
300 Kimball Drive, Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NEW JERSEY NEW YORK VIRGINIA CALIFORNIA PENNSYLVANIA CONNECTICUT FLORIDA
ABU DHABI ATHENS DOHA DUBAI ISTANBUL
Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International LLC
Collectively known as Langan
NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

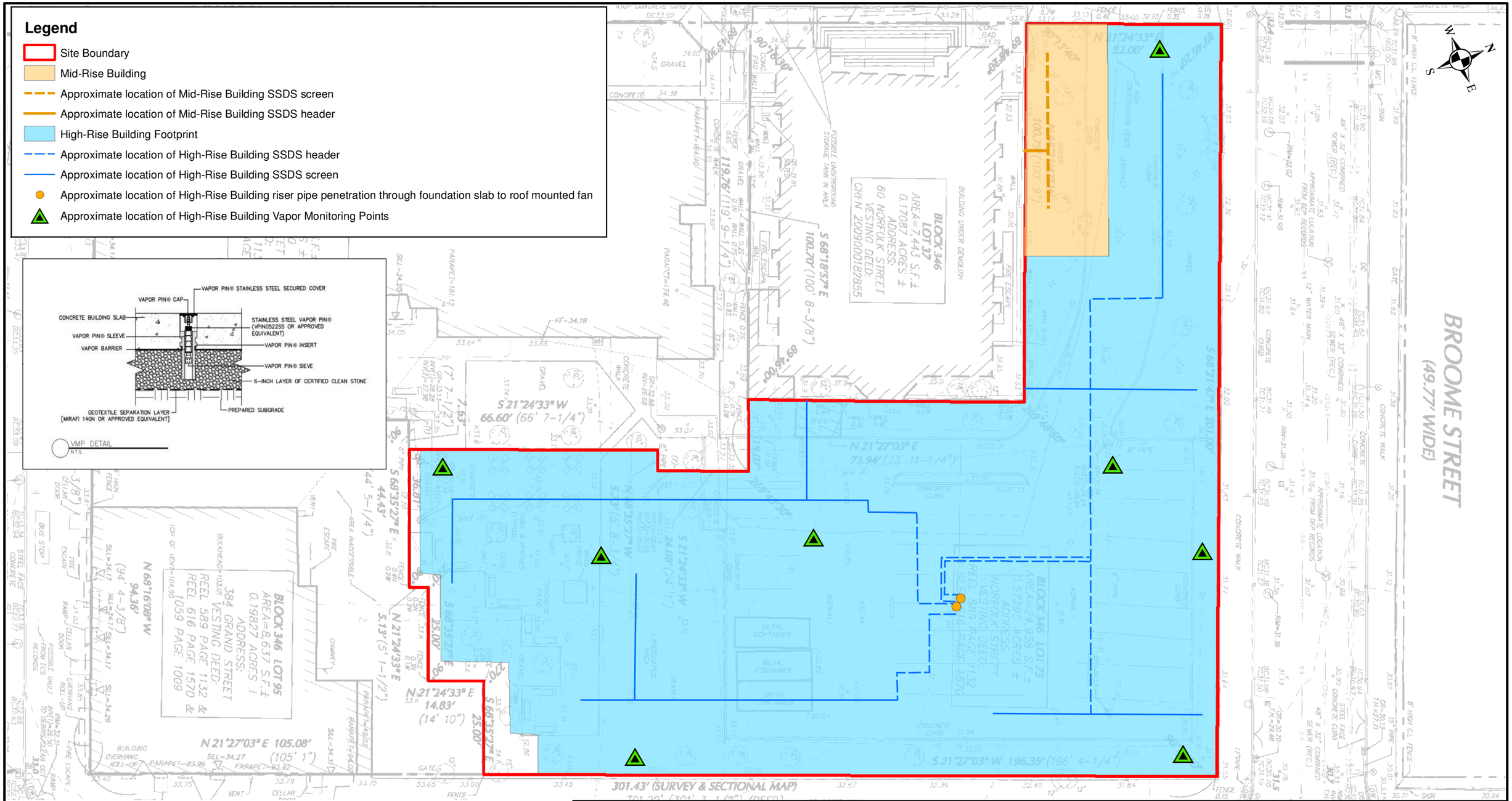
Project: GO BROOME DEVELOPMENT
BLOCK No. 346, LOT 75
MANHATTAN
NEW YORK COUNTY NEW YORK

Drawing Title: ENDPOINT CONFIRMATION SAMPLING PLAN

Project No. 100646801
Date 9/15/2021
Scale 1"=20'
Drawn By IHB
Submission Date
Figure 5

Legend

- Site Boundary
- Mid-Rise Building
- Approximate location of Mid-Rise Building SSDS screen
- Approximate location of Mid-Rise Building SSDS header
- High-Rise Building Footprint
- Approximate location of High-Rise Building SSDS header
- Approximate location of High-Rise Building SSDS screen
- Approximate location of High-Rise Building riser pipe penetration through foundation slab to roof mounted fan
- Approximate location of High-Rise Building Vapor Monitoring Points



NOTES:
1. Historical site operations shown based on the review of a Certified Sanborn Map Report dated 28 February 2017 and City Directory Abstract dated 6 March 2017 provided by Environmental Data Resources, Inc.
2. Site Boundary from "Topographic, Boundary, and Utility Survey" by Langan, last revised January 2, 2018.

30 0 30
SCALE IN FEET

LANGAN
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com

Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International LLC
Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
GO BROOME DEVELOPMENT
BLOCK No. 346, LOT 75
MANHATTAN
NEW YORK COUNTY NEW YORK

Drawing Title
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT

Project No.	100646801
Date	9/2/2021
Scale	1 " = 25 '
Drawn By	IHB

Figure 6

Path: \\langan.com\data\PAR\data8\100646801\ArcGIS\ArcMap_Documents\2021-09 BCP SMP\Figure 6 - Sub-Slab Depressurization System Layout.mxd Date: 9/15/2021 User: ibaker Time: 12:46:21 PM

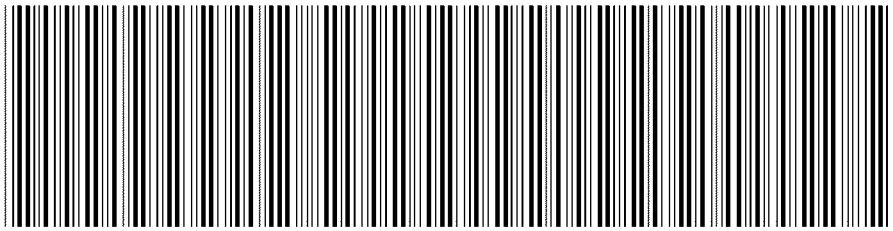
APPENDIX A

Environmental Easement

LANGAN

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.



2021112301041002001E6A03

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 11**

Document ID: 2021112301041002 Document Date: 11-16-2021 Preparation Date: 11-30-2021
Document Type: EASEMENT
Document Page Count: 10

PRESENTER:
FIRST AMERICAN TITLE INSURANCE COMPANY
666 THIRD AVENUE-5TH FLOOR
3020-1101225*ACCOMCQ
NEW YORK, NY 10017
212-850-0670
CQUARTARARO@FIRSTAM.COM

RETURN TO:
KNAUF SHAW LLP
1400 CROSSROADS BUILDING
2 STATE STREET
ROCHESTER, NY 14614

PROPERTY DATA

Borough	Block	Lot	Unit	Address
MANHATTAN	346	37	Partial Lot	60 NORFOLK STREET

Property Type: COMMERCIAL REAL ESTATE Easement

CROSS REFERENCE DATA

CRFN_____ *or* DocumentID_____ *or* _____ Year____ Reel____ Page_____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
CPC NORFOLK SENIOR HOUSING DEVELOPMENT FUND CORP.
150 ELIZABETH STREET
NEW YORK, NY 10012

GRANTEE/BUYER:
NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 BROADWAY, 14TH FLOOR
ALBANY, NY 12233-1500

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
TOTAL:	$	0.00
Recording Fee:	$	87.00
Affidavit Fee:	$	0.00

Filing Fee:	
$	0.00
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 12-08-2021 09:06
City Register File No.(CRFN):
2021000481969

City Register Official Signature

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

THIS INDENTURE made this 16th day of November, 2021, between Owner(s), CPC Norfolk Senior Housing Development Fund Corp., (the "Grantor Fee Owner") having an office at 150 Elizabeth Street, New York, New York 10012, and GO Norfolk LLC, (the "Grantor Beneficial Owner), having an office at 432 Park Avenue South, Second Floor, New York, New York 10016 (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 60 Norfolk Street in the City of New York, County of New York 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 346 Lot 37, being a portion of the property conveyed to Grantor by deed dated April 23, 2021 and recorded in the City Register of the City of New York as CRFN # 2021000167072. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.02674 +/- acres, and is hereinafter more fully described in the Land Title Survey dated October 6, 2021 prepared by Paul D. Fisher, L.L.S. of Langan Engineering, 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 April 23,

Record and Return:
Knauf Shaw LLP
1400 Crossroads Building
2 State Street
Rochester, New York 14614

2021 and recorded in City Register of the City of New York as CRFN # 2021000167073; 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: C231137-12-19, 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: C231137
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.

CPC Norfolk Senior Housing Development Fund Corp.:

By: _____

Print Name: Wayne Ho

Title: President & CEO Date: 11/3/21

Grantor's Acknowledgment

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

On the 3rd day of November, in the year 2021, before me, the undersigned, personally appeared Wayne Ho, 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.

_____
Notary Public - State of New York

LISA GERECITANO
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01GE6350245
Qualfied in Kings County
Commission Expires November 7, 2024

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

GO Norfolk LLC:

By: _____

Print Name: DAVID L. PICKET

Title: MEMBER Date: 11/2/21

Grantor's Acknowledgment

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

On the 2nd day of November, in the year 2021, before me, the undersigned, personally appeared David Picket, 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.

_____
Notary Public - State of New York

LISA GERECITANO
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01GE6350245
Qualfied in Kings County
Commission Expires November 7, 2024

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 16th day of November 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 01TH6414314
Commission Expires February 22, 2025

Dale L. Thiel
Notary Public, State of New
Qualified in Columbia C
No 01TH64143
Commission Expires Febru 2/22/2025

Accommodation recording only;
document not reviewed and
no insurance provided

First American Title Insurance Company
666 Third Avenue 5th fl
New York, N.Y. 10017
Phone: (212) 922-9700
Fax: (212) 922-0881

SCHEDULE "A" PROPERTY DESCRIPTION

DEC EASEMENT ON PART OF LOT 37

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LAYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) DISTANT 32.83 FEET SOUTHERLY FROM THE INTERSECTION FORMED BY SAID EASTERLY SIDE OF NORFOLK STREET WITH THE SOUTHERLY SIDE OF BROOME STREET (49.77' WIDE) AND RUNNING THENCE;

1. EASTERLY ALONG A LINE FORMING AN ANGEL OF 89 DEGREES 57 MINUTES 30 SECONDS ON ITS SOUTHERLY SIDE WITH THE PREVIOUS COURSE, A DISTANCE OF 60.48 FEET TO A POINT; THENCE

2. SOUTHERLY ALONG A LINE FORMING AN INTERIOR ANGEL OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.36 FEET TO A POINT; THENCE

3. WESTERLY ALONG A LINE FORMING AN INTERIOR ANGEL OF 89 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 60.46 FEET TO A POINT ON THE AFOREMENTIONED EASTERLY SIDE OF NORFOLK STREET; THENCE

4. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET FORMING AN INTERIOR ANGLE OF 90 DEGREES 13 MINUTES 40 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.17 FEET TO THE POINT OR PLACE OF BEGINNING.

ENCOMPASSING AN AREA OF 1,165 SQUARE FEET OR 0.02674 ACRES, MORE OR LESS.

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.

2021112301041001001E6A47

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 11**

Document ID: 2021112301041001 Document Date: 11-16-2021 Preparation Date: 11-30-2021
Document Type: EASEMENT
Document Page Count: 10

PRESENTER:
FIRST AMERICAN TITLE INSURANCE COMPANY
666 THIRD AVENUE-5TH FLOOR
3020-1101225*ACCOMCQ
NEW YORK, NY 10017
212-850-0670
CQUARTARARO@FIRSTAM.COM

RETURN TO:
KNAUF SHAW LLP
1400 CROSSROADS BUILDING
2 STATE STREET
ROCHESTER, NY 14614

PROPERTY DATA

Borough	Block	Lot	Unit	Address
MANHATTAN	346	75	Entire Lot	43-65 SUFFOLK STREET

Property Type: COMMERCIAL REAL ESTATE Easement

CROSS REFERENCE DATA

CRFN_____ *or* DocumentID_____ *or* _____ Year____ Reel____ Page_____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
CPC ONE LLC
150 ELIZABETH STREET
NEW YORK, NY 10012

GRANTEE/BUYER:
NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 BROADWAY, 14TH FLOOR
ALBANY, NY 12233-1500

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
TOTAL:	$	0.00
Recording Fee:	$	87.00
Affidavit Fee:	$	0.00

Filing Fee: $ 0.00
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 12-08-2021 09:05
City Register File No.(CRFN): **2021000481968**

City Register Official Signature

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

THIS INDENTURE made this 16th day of November, 2021, between Owner, CPC ONE LLC, having an office at 150 Elizabeth Street, New York, New York 10012 (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, is the owner of real property located at the address of 43-65 Suffolk Street in the City of New York, County of New York 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 346 Lot 75, being the same as that property conveyed to Grantor by deed dated December 23, 2020 and recorded in the City Register of the City of New York as CRFN # 2021000017041. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.54621 +/- acres, and is hereinafter more fully described in the Land Title Survey dated October 6, 2021 prepared by Paul D. Fisher, L.L.S. of Langan Engineering, 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, 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

Record and Return:
Knauf Shaw LLP
1400 Crossroads Building
2 State Street
Rochester, New York 14614

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C231137-12-19, 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: C231137
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.

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

CPC ONE LLC:

By: _____

Print Name: Wayne Hu

Title: President & CEO Date: 11/3/21

Grantor's Acknowledgment

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

On the 3rd day of November, in the year 2021, before me, the undersigned, personally appeared Wayne Hu, 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.

_____
Notary Public - State of New York

LISA GERECITANO
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01GE6350245
Qualified in Kings County
Commission Expires November 7, 2024

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 16th day of November 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

3020-1101225
First American Title Insurance Company
666 Third Avenue 5th fl
New York, N.Y. 10017
Phone: (212) 922-9700
Fax: (212) 922-0881

Accommodation recording only;
document not reviewed and
no insurance provided

SCHEDULE "A" PROPERTY DESCRIPTION

DEC EASEMENT ON PART OF LOT 75

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE INTERSECTION OF THE SOUTHERLY SIDE OF BROOME STREET (49.77' WIDE) AND THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) AND RUNNING THENCE;

1. EASTERLY ALONG SAID SOUTHERLY SIDE OF BROOME STREET, A DISTANCE OF 201.00 FEET TO THE WESTERLY SIDE OF SUFFOLK STREET (49.73' WIDE); THENCE

2. SOUTHERLY ALONG SAID WESTERLY SIDE OF SUFFOLK STREET, FORMING AND INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 196.35 FEET TO A POINT; THENCE

3. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 02 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE

4. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 14.83 FEET TO A POINT; THENCE

5. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE

6. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 5.13 FEET TO A POINT; THENCE

7. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 36.81 FEET TO A POINT; THENCE

8. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 66.60 FEET TO A POINT; THENCE

9. EASTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 5.73 FEET TO A POINT; THENCE

10. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 24.08 FEET TO A POINT; THENCE

11. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269 DEGREES 43 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.07 FEET TO A POINT; THENCE

12. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 14 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 73.94 FEET TO A POINT; THENCE

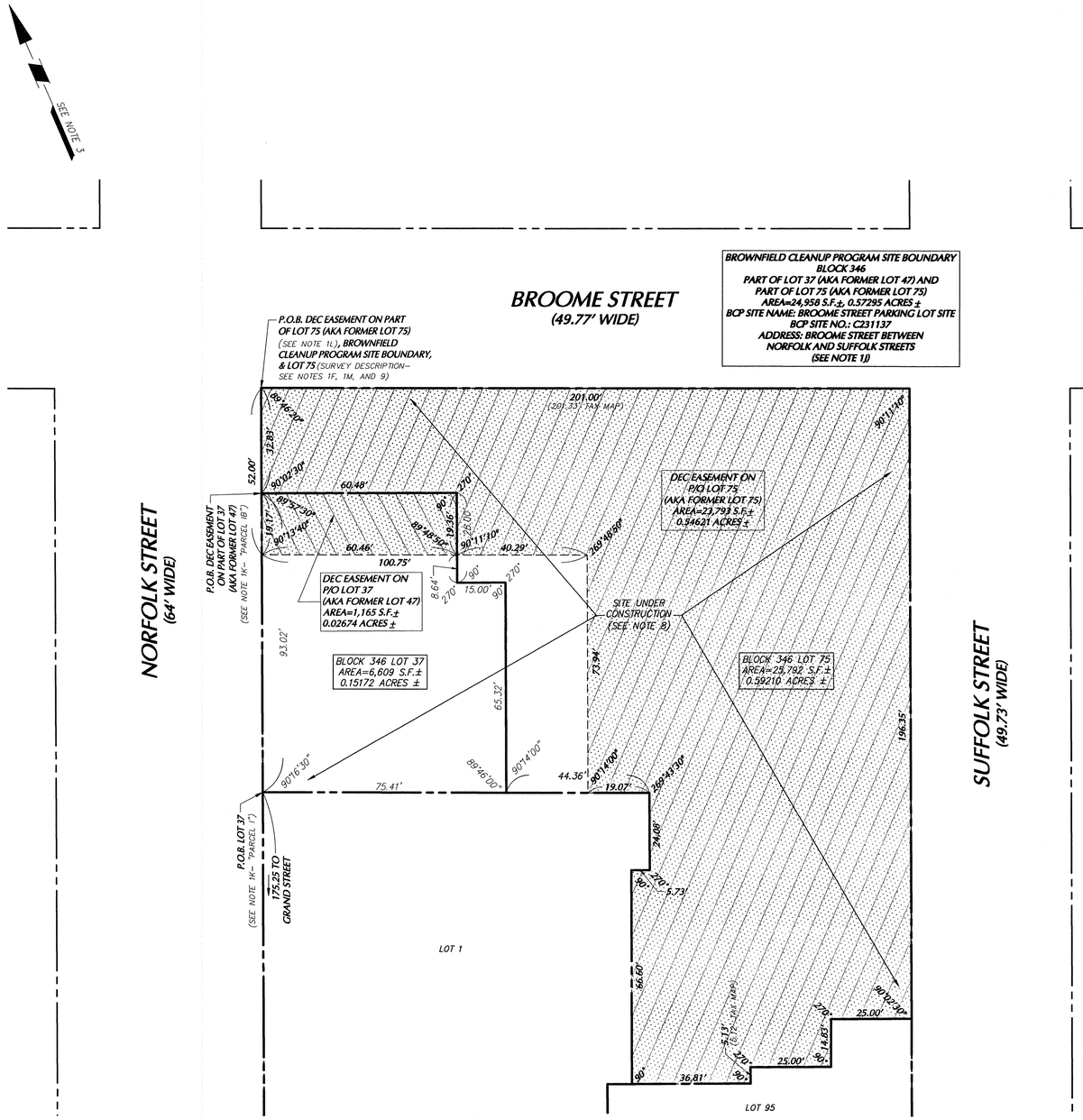
13. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 40.29 FEET TO A POINT; THENCE

14. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.36 FEET TO A POINT; THENCE

15. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 60.48 FEET TO THE AFOREMENTIONED EASTERLY SIDE OF NORFOLK STREET, THENCE

16. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET, FORMING AN INTERIOR ANGLE OF 90 DEGREES 02 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 32.83 FEET TO THE POINT OR PLACE OF BEGINNING.

ENCOMPASSING AN AREA OF 23,793 SQUARE FEET OR 0.54621 ACRES, MORE OR LESS.



LEGEND (NOT SHOWN TO SCALE)

P/O	PART OF		DEC EASEMENT ON P/O LOT 75 (AKA FORMER LOT 75)
P.O.B.	POINT OF BEGINNING		BROWNFIELD CLEANUP PROGRAM SITE BOUNDARY– P/O LOT 37 (AKA FORMER LOT 47) AND P/O LOT 75 (AKA FORMER LOT 75)
AKA	ALSO KNOWN AS		
	EASEMENT LINE		
	PROPERTY LINE		
	RIGHT-OF-WAY LINE		
	DEC EASEMENT ON P/O LOT 37 (AKA FORMER LOT 47)		

SURVEY DESCRIPTION
BROWNFIELD CLEANUP PROGRAM
SITE BOUNDARY
BLOCK 346 PART OF LOT 37 (AKA FORMER LOT 47) AND PART OF LOT 75 (AKA FORMER LOT 75)

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE INTERSECTION OF THE SOUTHERLY SIDE OF BROOME STREET (49.77' WIDE) AND THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) AND RUNNING THENCE;

1. EASTERLY ALONG SAID SOUTHERLY SIDE OF BROOME STREET, A DISTANCE OF 201.00 FEET TO THE WESTERLY SIDE OF SUFFOLK STREET (49.73' WIDE); THENCE
2. SOUTHERLY ALONG SAID WESTERLY SIDE OF SUFFOLK STREET, FORMING AND INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 196.35 FEET TO A POINT; THENCE
3. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 02 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE
4. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 14.83 FEET TO A POINT; THENCE
5. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE
6. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 5.13 FEET TO A POINT; THENCE
7. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 36.81 FEET TO A POINT; THENCE
8. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 66.60 FEET TO A POINT; THENCE
9. EASTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 5.73 FEET TO A POINT; THENCE
10. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 24.08 FEET TO A POINT; THENCE
11. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269 DEGREES 43 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.07 FEET TO A POINT; THENCE
12. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 14 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 73.94 FEET TO A POINT; THENCE
13. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 100.75 FEET TO A POINT ON SAID EASTERLY SIDE OF NORFOLK STREET; THENCE
14. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET, FORMING AN INTERIOR ANGLE OF 90 DEGREES 13 MINUTES 40 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 52.00 FEET TO THE POINT OR PLACE OF BEGINNING.

ENCOMPASSING AN AREA OF 24,958 SQUARE FEET OR 0.57295 ACRES, MORE OR LESS.

DEED DESCRIPTION
BLOCK 346 FORMER LOT 47
(PART OF CURRENT LOT 37) AND
DEC EASEMENT ON PART OF LOT 37
(SEE NOTE 1K- "PARCEL IB")

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) DISTANT 32.83 FEET SOUTHERLY FROM THE INTERSECTION FORMED BY SAID EASTERLY SIDE OF NORFOLK STREET WITH THE SOUTHERLY SIDE OF BROOME STREET (49.77' WIDE) AND RUNNING THENCE;

1. EASTERLY ALONG A LINE FORMING AN ANGLE OF 89 DEGREES 57 MINUTES 30 SECONDS ON ITS SOUTHERLY SIDE WITH THE PREVIOUS COURSE, A DISTANCE OF 60.48 FEET TO A POINT; THENCE
2. SOUTHERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.36 FEET TO A POINT; THENCE
3. WESTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 89 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 60.46 FEET TO A POINT ON THE AFOREMENTIONED EASTERLY SIDE OF NORFOLK STREET; THENCE
4. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET FORMING AN INTERIOR ANGLE OF 90 DEGREES 13 MINUTES 40 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.17 FEET TO THE POINT OR PLACE OF BEGINNING.

ENCOMPASSING AN AREA OF 1,165 SQUARE FEET OR 0.02674 ACRES, MORE OR LESS.

DEED DESCRIPTION
BLOCK 346 FORMER LOT 75
(PART OF CURRENT LOT 75) AND
DEC EASEMENT ON PART OF LOT 75
(SEE NOTE 1L)

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE INTERSECTION OF THE SOUTHERLY SIDE OF BROOME STREET (49.77' WIDE) AND THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) AND RUNNING THENCE;

1. EASTERLY ALONG SAID SOUTHERLY SIDE OF BROOME STREET, A DISTANCE OF 201.00 FEET TO THE WESTERLY SIDE OF SUFFOLK STREET (49.73' WIDE); THENCE
2. SOUTHERLY ALONG SAID WESTERLY SIDE OF SUFFOLK STREET, FORMING AND INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 196.35 FEET TO A POINT; THENCE
3. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 02 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE
4. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 14.83 FEET TO A POINT; THENCE
5. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE
6. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 5.13 FEET TO A POINT; THENCE
7. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 36.81 FEET TO A POINT; THENCE
8. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 66.60 FEET TO A POINT; THENCE
9. EASTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 5.73 FEET TO A POINT; THENCE
10. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 24.08 FEET TO A POINT; THENCE
11. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269 DEGREES 43 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.07 FEET TO A POINT; THENCE
12. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 14 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 73.94 FEET TO A POINT; THENCE
13. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 40.29 FEET TO A POINT; THENCE
14. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.36 FEET TO A POINT; THENCE
15. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 60.48 FEET TO THE AFOREMENTIONED EASTERLY SIDE OF NORFOLK STREET, THENCE
16. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET, FORMING AN INTERIOR ANGLE OF 90 DEGREES 02 MINUTES 30 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 32.83 FEET TO THE POINT OR PLACE OF BEGINNING.

ENCOMPASSING AN AREA OF 23,793 SQUARE FEET OR 0.54621 ACRES, MORE OR LESS.

DEED DESCRIPTION
BLOCK 346 LOT 37
(SEE NOTE 1K- "PARCEL I")

BEGINNING AT A POINT ON THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) DISTANT 175.25 FEET FROM INTERSECTION FORMED BY THE NORTHERLY SIDE OF GRAND STREET (100' WIDE) AND THE EASTERLY SIDE OF NORFOLK STREET AND RUNNING THENCE;

1. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET, A DISTANCE OF 93.02 FEET TO A POINT; THENCE
2. EASTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 89°57'30" WITH THE PREVIOUS COURSE, A DISTANCE OF 60.48 FEET TO A POINT; THENCE
3. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 28.00 FEET TO A POINT; THENCE
4. EASTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270° WITH THE PREVIOUS COURSE, A DISTANCE OF 15.00 FEET TO A POINT; THENCE
5. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 65.32 FEET TO A POINT; THENCE
6. WESTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 89°46'00" WITH THE PREVIOUS COURSE, A DISTANCE OF 75.41 FEET TO THE POINT OR PLACE OF BEGINNING.

SURVEY DESCRIPTION
BLOCK 346 LOT 75
(SEE NOTES 1F, 1M, AND 9)

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE INTERSECTION OF THE SOUTHERLY SIDE OF BROOME STREET (49.77' WIDE) AND THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE) AND RUNNING THENCE;

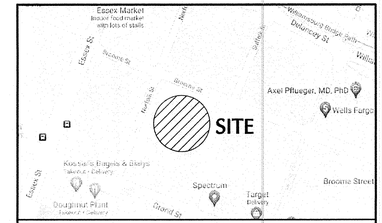
1. EASTERLY ALONG SAID SOUTHERLY SIDE OF BROOME STREET, A DISTANCE OF 201.00 FEET TO THE WESTERLY SIDE OF SUFFOLK STREET (49.73' WIDE); THENCE
2. SOUTHERLY ALONG SAID WESTERLY SIDE OF SUFFOLK STREET, FORMING AND INTERIOR ANGLE OF 90°11'10" WITH THE PREVIOUS COURSE, A DISTANCE OF 196.35 FEET TO A POINT; THENCE
3. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90°02'30" WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE
4. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270° WITH THE PREVIOUS COURSE, A DISTANCE OF 14.83 FEET TO A POINT; THENCE
5. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 25.00 FEET TO A POINT; THENCE
6. SOUTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270° WITH THE PREVIOUS COURSE, A DISTANCE OF 5.13 FEET TO A POINT; THENCE
7. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 36.81 FEET TO A POINT; THENCE
8. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 66.60 FEET TO A POINT; THENCE
9. EASTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 5.73 FEET TO A POINT; THENCE
10. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270° WITH THE PREVIOUS COURSE, A DISTANCE OF 24.08 FEET TO A POINT; THENCE
11. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 269°43'30" WITH THE PREVIOUS COURSE, A DISTANCE OF 44.36 FEET TO A POINT; THENCE
12. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90°14'00" WITH THE PREVIOUS COURSE, A DISTANCE OF 65.32 FEET TO A POINT; THENCE
13. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270° WITH THE PREVIOUS COURSE, A DISTANCE OF 15.00 FEET TO A POINT; THENCE
14. NORTHERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 90° WITH THE PREVIOUS COURSE, A DISTANCE OF 28.00 FEET TO A POINT; THENCE
15. WESTERLY ALONG A LINE, FORMING AN INTERIOR ANGLE OF 270° WITH THE PREVIOUS COURSE, A DISTANCE OF 60.48 FEET TO THE AFOREMENTIONED EASTERLY SIDE OF NORFOLK STREET, THENCE
16. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET, FORMING AN INTERIOR ANGLE OF 90°02'30" WITH THE PREVIOUS COURSE, A DISTANCE OF 32.83 FEET TO THE POINT OR PLACE OF BEGINNING.

DEED DESCRIPTION
BLOCK 346 FORMER LOT 73
(PART OF CURRENT LOT 75)
(SEE NOTE 1L)

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF MANHATTAN, CITY COUNTY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHERLY SIDE OF GRAND STREET (100' WIDE) WITH THE EASTERLY SIDE OF NORFOLK STREET (64' WIDE), THENCE RUNNING THE FOLLOWING TWO COURSES TO THE POINT OR PLACE OF BEGINNING;

A. NORTHERLY ALONG SAID EASTERLY SIDE OF NORFOLK STREET, A DISTANCE 175.25 FEET; THENCE
B. EASTERLY ALONG A LINE FORMING AN ANGLE OF 90 DEGREES 16 MINUTES 30 SECONDS ON ITS NORTHERLY SIDE WITH THE PREVIOUS COURSE, A DISTANCE OF 75.41 FEET TO A POINT; SAID POINT BEING THE POINT OR PLACE OF BEGINNING; THENCE
1. NORTHERLY ALONG A LINE FORMING AN ANGLE OF 90 DEGREES 14 MINUTES 00 SECONDS ON ITS EASTERLY SIDE WITH THE PREVIOUS COURSE, A DISTANCE OF 65.32 FEET TO A POINT; THENCE
2. WESTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 270 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 15.00 FEET TO A POINT; THENCE
3. NORTHERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 8.64 FEET TO A POINT; THENCE
4. EASTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 89 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 40.29 FEET TO A POINT; THENCE
5. SOUTHERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 73.94 FEET TO A POINT; THENCE
6. WESTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 269 DEGREES 48 MINUTES 50 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 40.29 FEET TO A POINT; THENCE
7. NORTHERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 90 DEGREES 11 MINUTES 10 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 19.36 FEET TO A POINT; THENCE
8. EASTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 89 DEGREES 46 MINUTES 00 SECONDS WITH THE PREVIOUS COURSE, A DISTANCE OF 25.29 FEET TO THE POINT OR PLACE OF BEGINNING.



PROJECT LOCATION MAP

SCALE: NOT TO SCALE

SOURCE: GOOGLE MAPS

NOTES

1. THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, AND THE FOLLOWING REFERENCES:
   A. BOROUGH OF MANHATTAN SECTIONAL MAP NOS. 13 AND 21.
   B. BOROUGH OF MANHATTAN ALTERATION MAP NO. 30236.
   C. CURRENT NYC TAX MAP FOR BLOCK 346 IN MANHATTAN, EFFECTIVE: 08/05/21 10:56:00.
   D. "SUBDIVISION SURVEY, MAP OF PROPERTY SITUATED IN MANHATTAN, NEW YORK COUNTY, NY, TAX SECT.: 2, TAX BLOCK: 346, TAX LOT(S): 1", BY EMPIRE STATE LAND SURVEYOR, P.C., REFERENCE NO. M346–1, SURVEYED: 03/21/12, LAST REVISED:: 03/24/14.
   E. "SUBDIVISION SURVEY, MAP OF PROPERTY SITUATED IN MANHATTAN, NEW YORK COUNTY, NY, TAX SECT.: 2, TAX BLOCK: 346, TAX LOT(S): 75", BY EMPIRE STATE LAND SURVEYOR, P.C., REFERENCE NO. M346–1, SURVEYED: 03/21/12, LAST REVISED:: 03/24/14.
   F. "FINAL SURVEY, 60 NORFOLK STREET", BY LANGAN, PROJECT NO. 100646801, DRAWING NO. FS–101, DATED 07/30/19, REVISED 09/12/21.
   G. "FINAL SURVEY, 60 NORFOLK STREET", BY LANGAN, PROJECT NO. 100646801, DRAWING NO. FS–102, DATED 10/25/19, LAST REVISED: 11/20/20.
   H. "ALTA/NSPS LAND TITLE SURVEY, SUFFOLK STREET", BY LANGAN, PROJECT NO. 100646801, DRAWING NO. VL101, DATED 11/23/20.
   I. "ALTA/NSPS LAND TITLE SURVEY, NORFOLK STREET", BY LANGAN, PROJECT NO. 100646801, DRAWING NO. VL102, DATED 03/31/21, LAST REVISED 04/22/21.
   J. "BROWNFIELD CLEANUP PROGRAM (BCP) APPLICATION TO AMEND BROWNFIELD CLEANUP AGREEMENT AND AMENDMENT", BCP SITE NAME: BROOME STREET PARKING LOT SITE, BCP SITE NO.: C231137, SIGNED AN DATED 11/25/20 BY MICHAEL J. RYAN, P.E., DIRECTOR, DIVISION OF ENVIRONMENTAL REMEDIATION.
   K. CRFN 20210001670172, RECORDED/FILED: 05/06/21 13:54 [DEED– "PARCEL I" IS THE DESCRIPTION FOR LOT 37, AND "PARCEL IB" IS THE DESCRIPTION FOR FORMER LOT 47] (PLOTTED)
   L. CRFN 20210000017041, RECORDED/FILED: 01/15/21 08:27 [DEED– FORMER LOTS 73 AND 75]
   M. "WRITTEN DESCRIPTION, BLOCK 346 PROPOSED LOT 75", BY LANGAN, PROJECT NO. 100646801, DATED 10/25/19 (PLOTTED)
2. THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE FOLLOWING FACTS AS REVEALED BY THE HEREON REFERENCED INFORMATION. THE INFORMATION SHOWN HEREON DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT.
3. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO APPROXIMATE NORTH (SEE NOTE 1A).
4. STREET NAMES AND R.O.W. WIDTHS AS PER MAPS REFERENCED IN NOTES 1A AND 1B. BLOCK AND LOT NUMBERS AS PER MAP REFERENCED IN NOTE 1C.
5. OFFSETS (IF SHOWN) ARE FOR SURVEY REFERENCES ONLY AND ARE NOT TO BE USED IN CONSTRUCTION OF ANY TYPE.
6. WETLANDS, ENVIRONMENTAL AND/OR HAZARDOUS MATERIALS LOCATION, IF ANY, NOT COVERED UNDER THIS CONTRACT.
7. UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND THE LOCATIONS WHERE DATA WAS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE THE SURVEYOR CANNOT AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.

   ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA MAY BE SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.

   UNLESS SPECIFICALLY NOTED HEREON THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.

   PRIOR TO ANY DESIGN OR CONSTRUCTION THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.

   UNLESS NOTED BELOW SUPPLEMENTAL DOCUMENTS WERE NOT USED TO COMPILE THE SUBSURFACE UTILITY INFORMATION SHOWN HEREON.
8. BLOCK 346 LOTS 37 AND 75 ARE CURRENTLY UNDER CONSTRUCTION.
9. A RECORD DEED FOR CURRENT CONFIGURATION OF LOT 75 WAS NOT FOUND BY SEARCHING THE AUTOMATED CITY REGISTER INFORMATION SYSTEM (https://a836-acris.nyc.gov/CP/), AS AVAILABLE THROUGH THE NEW YORK CITY DEPARTMENT OF FINANCE OFFICE OF THE CITY REGISTRAR. THE INFORMATION SHOWN HEREON DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. THE CURRENT LOT CONFIGURATION WAS PLOTTED PER THE DOCUMENTS CITED IN NOTES 1F AND 1M.
10. EASEMENTS AND/OR LIMITING PLANES IN ADDITION TO THE DEC EASEMENT ARE NOT SHOWN.
11. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
12. THIS PLAN NOT VALID UNLESS EMBOSSED OR BLUE INK STAMPED WITH THE SEAL OF THE PROFESSIONAL.

6.096 0 1.524 3.048 6.096
SCALE: 1 INCH = 6.096 METERS

20 0 5 10 20
SCALE: 1 INCH = 20 FEET

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 THIS 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 CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT derweb@dec.ny.gov.

Date	Description	No.
10/06/21	Revised & Reissued	1

REVISIONS

"I hereby state that this plan is based on a field survey made by me or under my immediate supervision in accordance with NYSPLS Code of Practice for Land Surveys, and to the best of my professional knowledge, information and belief, and in my professional opinion, it correctly represents the conditions found on the date of survey of the subject property".

SIGNATURE DATE SIGNED 10-7-2021

PROFESSIONAL LAND SURVEYOR NY Lic. No. 050784–1

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Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor
New York, NY 10001
T: 212.479.5400 F: 212.479.5444 www.langan.com

Project
BCP SITE NAME: BROOME STREET PARKING LOT SITE
BCP SITE NO.: C231137
ADDRESS: BROOME STREET BETWEEN NORFOLK AND SUFFOLK STREETS
BLOCK No. 346, LOT Nos. 37 & 75
BOROUGH OF MANHATTAN
CITY OF NEW YORK
NEW YORK COUNTY NEW YORK

Drawing Title
DEC EASEMENT SURVEY

Project No.	100646801
Date	04/28/2021
Scale	1"=20'
Drawn By	LB
Checked By	PDF

Drawing No. DEC101

Sheet 001 of 001

Filename: \\langan.com\data\PAR\data8\100646801\Survey Data - 100646801\Cartion\Existing\100646801-DEC Easement Survey.dwg Date: 10/11/2021 Time: 08:45 User: lbartiner Style Table: Langan.stb Layout: ARCH-BL

PROJECT NO. 100646801

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APPENDIX B

List of Site Contacts

APPENDIX B - LIST OF SITE CONTACTS

BROOME STREET PARKING LOT SITE, NEW YORK, NEW YORK
BROWNFIELD CLEANUP PROGRAM SITE NO. C231137

Key contacts for this project are as follows:

Site Owner and Remedial Party:

GO Broome LLC
Telephone: (212) 716-2502
E-mail: bkelly@gothamorg.com

Remedial Party's Consultant:

Langan Engineering Project Manager
Amanda Forsburg, CHMM
Telephone: (973) 560-4900
E-mail: aforsburg@langan.com

Langan Engineering Remedial Engineer
Ronald Boyer, P.E.
Telephone: (973) 560-4900
E-mail: rboyer@langan.com

Langan Engineering Health & Safety Officer
Tony Moffa
Telephone: (215) 756-2523
E-mail: tmoffa@langan.com

Langan Engineering Field Safety Officer
Ashley Sandve
Telephone: (973) 560-4900
E-mail: asandve@langan.com

Qualified Environmental Professional:

Langan Engineering Project Manager
Christopher McMahon, CHMM
Telephone: (973) 560-4900
E-mail: cmcmahon@langan.com

NYSDEC:

NYSDEC Region 2 HW Chief
Ms. Jane O'Connell
Telephone: (718) 482-4599
E-mail: jane.oconnell@dec.ny.gov

NYSDEC Project Manager
Ms. Meghan Medwid
Telephone: (518) 402-8610
E-mail: meghan.medwid@dec.ny.gov

NYSDEC Site Control
Ms. Kelly Lewandowski
Telephone: (518) 402-0193
E-mail: kelly.lewandowski@dec.ny.gov

NYSDOH:

NYSDOH Project Manager
Mr. Arunesh Ghosh
Telephone: (518) 486-1443
Email: Arunesh.Ghosh@health.ny.gov

Remedial Party's Attorney:

Knauf Shaw LLP
Ms. Linda Shaw, Esq
Telephone: (585) 546-8430
E-mail: lshaw@nyenvlaw.com

APPENDIX C

Boring and Well Logs

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Log of Boring **LSB-19** Sheet 1 of 1

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx. el 31.5-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/20/20 — Date Finished: 5/20/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 20 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push	Number of Samples: Disturbed 4 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Sharohn Dixon
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL		ASPHALT	0					0.0	Started Drilling on 5/20/2020.
		Red brown f-c SAND, trace fine gravel, trace brick [dry]	1					0.0	
								0.1	
			2					0.1	
				M-1	Macrocore	42		0.0	
			3					0.1	
								0.0	
			4					0.0	Sample 001/LSB-19A collected from 3-5' bgs at 10:00 AM.
								0.0	
			5					0.0	
								0.1	
			6					0.2	
								0.3	
			7	M-2	Macrocore	36		0.0	Sample 002/LSB-19B collected from 7-9' bgs at 10:10 AM.
								0.0	
			8					0.0	
								0.1	
			9					0.1	
								0.0	
		Brown f-c SAND, trace medium gravel, trace wood [dry]	10					0.0	Sample 003/LSB-19C collected from 10-12' bgs at 10:15 AM.
								0.3	
			11					0.3	
								0.0	
			12					0.0	
				M-3	Macrocore	42		0.0	
			13					0.0	
								0.0	
			14					0.0	
								0.0	
			15					0.0	
								0.4	
		Light brown to tan fine SAND, trace medium gravel [dry]	16					0.4	
								0.5	
			17					0.7	Sample 004/LSB-19D collected from 17-19' bgs at 10:20 AM.
				M-4	Macrocore	42		0.5	
			18					0.3	
								0.1	
			19					0.1	Bottom of boring at 20' bgs.
								0.1	
			20						

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Log of Boring **LSB-20** Sheet 1 of 1

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx. el 32-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 6/11/20 — Date Finished: 6/11/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 20 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push	Number of Samples: Disturbed 4 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: ShaRohn Dixon
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Esther Arthur
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

MATERIAL SYMBOL	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID and PID (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+32.0	Dark brown medium-fine SAND, some concrete, some brick (dry)	0.1	0					0.1	Started Drilling on 6/11/2020.
			0.1	1	M-1	Macrocore			0.1	
			0.1						0.1	
			0.1	2					0.1	
			0.1						0.1	
	+29.0	Dark brown fine-medium SAND, some silt, trace concrete, trace f-m gravel (moist)	0.1	3					0.1	Collected 077/LSB-20A from 3-5' bgs at 13:40 PM.
			0.1						0.1	
			0.1	4					0.1	
			0.1						0.1	
	+27.0	Light brown SAND, some silt (moist)	0.1	5					0.1	
			0.1						0.1	
			0.1	6	M-2	MACROCORE			0.1	
			0.1						0.1	
			0.1	7					0.1	Collected 078/LSB-20B from 7-9' bgs at 13:45 PM.
			0.1						0.1	
			0.1	8					0.1	
			0.1						0.1	
			0.1	9					0.1	
			0.1						0.1	
			0.1	10					0.1	
			0.1						0.1	
			0.1	11	M-3	Macrocore			0.1	
			0.1						0.1	
			0.1	12					0.1	
			0.1						0.1	
			0.1	13					0.1	Collected 079/LSB-20C from 13-15' bgs at 13:50 PM.
			0.1						0.1	
			0.1	14					0.1	
			0.1						0.1	
	+17.0	Light brown fine-coarse SAND, some f-m gravel (moist)	0.1	15					0.1	
			0.1						0.1	
			0.1	16					0.1	
			0.1						0.1	
			0.1	17	M-4	Macrocore			0.1	
			0.1						0.1	
			0.1	18					0.1	Collected 080/LSB-20D from 18-20' bgs at 13:55 PM.
			0.1						0.1	
			0.1	19					0.1	Bottom of boring at 20' bgs.
			0.1						0.1	
	+12.0			20						

\\LANGAN.COM\DATA\PAR\DATA8\100646801\ENGINEERING DATA\ENVIRONMENTAL\GINTLOGS\100646801_ENTERPRISE.GPJ ... 6/23/2020 2:49:08 PM ... Report: Log - LANGAN

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Log of Boring **LSB-21/LMW-7** Sheet 1 of 2

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: 31.66-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/20/20 — Date Finished: 5/20/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 35 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push, 6-inch Direct Push	Number of Samples: Disturbed 7 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First ▽ 29 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Sharohn Dixon
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+31.7	Dark brown f-m SAND, trace f gravel, trace brick [dry]	0	M-1	MACROCORE	36		0.0	Started Drilling on 5/20/2020.
			1					0.0	
								0.5	
			2					0.4	
								0.3	Collected 005/LSB-21A from 0-2' bgs at 11:00 AM. VOCs collected from 1-1.5' bgs.
			3					0.2	
								0.0	
			4					0.1	
								0.0	
	+26.7							0.0	
		Tannish brown f-c SAND, trace f-m gravel, trace brick [dry]	5	M-2	MACROCORE	42		0.1	Collected 006/LSB-21B from 5-7' bgs at 11:05 AM.
			6					0.7	
								0.6	
			7					0.6	
								0.3	
			8					0.3	
								0.5	
								0.4	
	+22.7		9					0.3	
		Tan fine SAND, trace silt [dry]						0.1	
	+21.7		10					0.1	
		Reddish brown f-m SAND, trace f-m gravel [dry]		M-3	MACROCORE	48		0.1	
	+20.7							0.0	
		Light tan to tan fine SAND, trace silt [dry]	11					0.1	
								0.1	Collected 007/LSB-21C from 12-14' bgs at 11:10 AM.
			12					0.2	
								0.1	
			13					0.0	
								0.0	
			14					0.0	
	+16.7							0.0	
		Light brown fine SAND, some silt (dry)	15	M-4	MACROCORE	60		0.0	
								0.0	
			16					0.0	Collected 008/LSB-21D from 16-18' bgs at 11:15 AM.
								0.1	
			17					0.0	
								0.0	
			18					0.0	
								0.0	
			19					0.0	
	+11.7		20						

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Log of Boring **LSB-21/LMW-7** Sheet 2 of 2

Project	Project No.
Broome Street Parking Lot Site	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	31.66-feet NAVD88

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+11.7	Dark brown f-c SAND, some brick, some silt, some f-c gravel (dry)	20	M-5	MACROCORE	24		0.0	Collected 009/LSB-21E from 20-22' bgs at 11:20 AM. Collected 010/DUP-1 from 20-22' bgs at 11:25 AM. VOCs collected from 20.5-21' bgs.
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
			25					0.0	
	+6.7							0.0	
NATIVE		Light brown to brown f-m SAND, trace silt (moist), water at 29' bgs.	26	M-6	MACROCORE	48		0.0	LMW-7 installed in LSB-21 with screen from 25-35' bgs.
			27					0.0	
			28					0.0	
		▽	29					0.1	
			30					0.0	
	+1.7							0.0	
		Light brown fine SAND, some silt (moist)	31	M-7	MACROCORE	48		0.1	
			32					0.0	
			33					0.0	
			34					0.0	
	-3.3		35					0.0	Bottom of boring at 35' bgs.
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-22/LMW-8** Sheet 1 of 2

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: 30.87-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/21/20 — Date Finished: 5/21/20
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 35 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push, 6-inch Direct Push	Number of Samples: Disturbed 7 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First ▽ 29 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Julio Golanzo
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+30.9	Brown f-c SAND, trace fine gravel, trace brick [dry]	0	M-1	Macrocore	36		0.0	Started Drilling on 5/21/2020.
			1					0.0	
			2					0.0	Collected 023/LSB-22A from 0-2' bgs at 10:15 AM. VOCs collected from 1-1.5' bgs.
			3					0.0	
			4					0.0	
			5	M-2	Macrocore	42		0.0	
			6					0.0	
			7					0.0	
	+22.9	Brown f-c SAND, trace f-m gravel [dry]	8					0.0	Collected 024/LSB-22B from 8-10' bgs at 10:20 AM.
			9					0.0	
			10	M-3	Macrocore	42		0.0	
			11					0.0	
			12					0.0	
	+17.9	Brown f-m SAND [dry]	13					0.1	Collected 025/LSB-22C from 13-15' bgs at 10:25 AM.
			14					0.1	
			15	M-4	Macrocore	60		0.0	
			16					0.1	
			17					0.0	Collected 026/LSB-22D from 17-19' bgs at 10:30 AM.
			18					0.1	
			19					0.1	
			20					0.0	

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Log of Boring **LSB-22/LMW-8** Sheet 2 of 2

Project	Project No.
Broome Street Parking Lot Site	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	30.87-feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+10.9		20	M-5	MACROCORE	24		0.1	Collected 027/LSB-22E from 20-22' bgs at 10:35 AM. VOCs collected from 21.5-22' bgs.
			21					0.1	
								0.1	
			22					0.1	
								0.0	
			23					0.0	
								0.0	
			24					0.0	
								0.0	
								0.0	
			25	M-6	MACROCORE	48		0.1	LMW-8 installed in LSB-22 with screen from 25-35' bgs.
								0.0	
			26					0.0	
								0.0	
			27					0.0	
								0.0	
								0.0	
	+2.9	Brown f-m SAND, trace silt [moist]	28					0.0	
								0.0	
		▽	29					0.1	
								0.0	
			30					0.0	
NATIVE				M-7	MACROCORE	60		0.1	
			31					0.0	
								0.0	
			32					0.0	
								0.0	
			33					0.0	
								0.1	
			34					0.0	
								0.0	
	-4.1		35						Bottom of boring at 35' bgs.
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-23/LMW-9** Sheet 1 of 2

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: 32.31-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/21/20 — Date Finished: 5/21/20
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 35 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push, 6-inch Direct Push	Number of Samples: Disturbed 7 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First ▽ 28.5 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Julio Golanzo
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	+32.3		0					0.0	Started Drilling on 5/21/2020.
FILL	+31.8	ASPHALT Grayish brown f-c SAND, trace f-c gravel [dry]	1					0.0	
			2	M-1	Macrocore	36		0.0	Collected 017/LSB-23A from 0-2' bgs at 8:00 AM. VOCs collected from 1.5-2' bgs.
			3					0.0	
			4					0.0	
	+26.3	Reddish brown f-m SAND, trace fine gravel [dry]	5					0.0	
			6					0.0	
			7	M-2	Macrocore	42		0.0	Collected 018/LSB-23B from 7-9' bgs at 8:10 AM.
			8					0.0	
			9					0.0	
			10					0.0	
			11					0.0	
			12	M-3	Macrocore	42		0.0	Collected 019/LSB-23C from 12-14' bgs at 8:20 AM.
			13					0.0	
			14					0.0	
NATIVE	+17.3	Reddish brown f-m SAND [dry]	15					0.0	
			16					0.0	
			17	M-4	Macrocore	48		0.0	
			18					0.0	
			19					0.0	
			20					0.0	

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Log of Boring **LSB-23/LMW-9** Sheet 2 of 2

Project	Project No.
Broome Street Parking Lot Site	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	32.31-feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
NATIVE	+12.3		20	M-5	MACROCORE	42		0.0	Collected 020/LSB-23D from 20-22' bgs at 8:30 AM. Collected 021/DUP-2 from 20-22' bgs at 8:40 AM. VOCs collected from 20.5-21' bgs.
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
			25	M-6	MACROCORE	48		0.0	LMW-9 installed in LSB-23 with screen from 25-35' bgs.
	+5.3	Light brown to brown f-m SAND [moist]	26					0.0	
			27					0.0	
			28					0.0	
			29					0.0	
			30	M-7	MACROCORE	60		0.0	
			31					0.0	
			32					0.0	
			33					0.0	
			34					0.0	
	-2.7		35					0.0	Bottom of boring at 35' bgs.
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

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Log of Boring **LSB-24/LMW-10** Sheet 1 of 2

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: 32.83-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/26/20 — Date Finished: 5/26/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 35 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push, 6-inch Direct Push	Number of Samples: Disturbed 7 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First ▽ 30 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Julio Golanzo
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+32.8	Dark brown f-c SAND, trace f-m gravel [dry]	0	M-1	Macrocore	42		0.0	Started Drilling on 5/26/2020.
	+31.8	Brown f-m SAND, trace brick, trace f-c gravel [dry]	1					0.0	Collected 046/LSB-24A from 0-2' bgs at 9:15 AM. VOCs collected from 0.5-1' bgs.
			2					0.0	
			3					0.0	
			4					0.0	
			5	M-2	Macrocore	42		0.0	
			6					0.0	
	+25.8	Brown f-m SAND [dry]	7					0.0	Collected 047/LSB-24B from 7-9' bgs at 9:20 AM.
			8					0.0	
			9					0.0	
			10	M-3	Macrocore	48		0.0	
			11					0.0	
			12					0.0	Collected 048/LSB-24C from 12-14' bgs at 9:25 AM.
			13					0.0	
			14					0.0	
			15	M-4	Macrocore	48		0.0	
			16					0.0	Collected 049/LSB-24D from 16-18' bgs at 9:30 AM.
			17					0.0	
			18					0.0	
NATIVE	+13.8	Brown fine SAND, trace silt [dry]	19					0.0	
			20						

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Log of Boring **LSB-24/LMW-10** Sheet 2 of 2

Project	Project No.
Broome Street Parking Lot Site	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	32.83-feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
NATIVE	+12.8		20	M-5	MACROCORE	24		0.0	Collected 050/LSB-24E from 20-22' bgs at 9:35 AM. VOCs collected from 20.5-21' bgs.
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
			25	M-6	MACROCORE	48		0.0	LMW-10 installed in LSB-24 with screen from 25-35' bgs.
			26					0.0	
			27					0.0	
	+4.8	Brown f-m SAND [moist]	28					0.0	
			29					0.0	
		▽	30					0.0	
			31	M-7	MACROCORE	48		0.0	
			32					0.0	
	-0.2	Brown fine SAND, trace silt [moist]	33					0.0	
			34					0.0	
	-2.2		35						Bottom of boring at 35' bgs.
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

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Log of Boring **LSB-25** Sheet 1 of 1

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx. el 33-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 6/11/20 — Date Finished: 6/11/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 15 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push	Number of Samples: Disturbed 3 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: ShaRohn Dixon
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Esther Arthur
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+33.0	Asphalt	0					0.0	Started Drilling on 6/11/2020. Hand auger used to preclear first 5' bgs.
	+32.3	Brown fine-medium SAND, some brick, trace silt, concrete fragments (moist)	1	M-1	Macrocore			0.0	Collected 086/LSB-25A from 1-3' bgs at 16:30 PM.
			2					0.0	
			3					0.0	
			4					0.0	
	+28.0	Light brown fine-medium SAND, some silt, trace gravel (moist)	5					0.0	
			6					0.0	
			7	M-2	Macrocore			0.0	Collected 087/LSB-25B from 7-9' bgs at 16:35 PM.
			8					0.0	
			9					0.0	
	+23.0	Brown medium-coarse SAND, some m-f gravel (moist)	10					0.0	
NATIVE	+22.1	Light brown medium-fine SAND, trace silt (moist)	11					0.0	
			12					0.0	
			13	M-3	Macrocore			0.0	Collected 088/LSB-25C from 13-15' bgs at 16:30 PM.
			14					0.0	Bottom of boring at 15' bgs.
	+18.0		15					0.0	
			16						
			17						
			18						
			19						
			20						

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Log of Boring **LSB-26/LMW-11** Sheet 1 of 2

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: 33.12-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/22/20 — Date Finished: 5/22/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 35 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push, 6-inch Direct Push	Number of Samples: Disturbed 7 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First ▽ 28.5 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Julio Golanzo
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL	+33.1		0					0.0	Started Drilling on 5/22/2020.
	+32.8	Concrete						0.0	
		Brown f-m SAND, trace f-m gravel [dry]	1					0.0	
			2					0.0	
				M-1	Macrocore	36		0.0	
			3					0.0	Collected 034/LSB-26A from 3-5' bgs at 11:50 AM.
								0.0	
			4					0.0	
								0.0	
			5					0.0	
								0.0	
			6					0.0	
								0.0	
			7	M-2	Macrocore	48		0.0	
								0.0	
	+25.1	Brown fine SAND, trace silt [dry]	8					0.0	Collected 035/LSB-26B from 8-10' bgs at 11:55 AM.
								0.0	
			9					0.0	
								0.0	
			10					0.0	
								0.0	
	+21.6	Grayish brown f-c SAND, trace fine gravel [dry]	11					0.0	
								0.0	
			12	M-3	Macrocore	46		0.0	
								0.0	
			13					0.0	Collected 036/LSB-26C from 13-15' bgs at 12:00 PM.
								0.0	
			14					0.0	
								0.0	
			15					0.0	
								0.0	
			16					0.0	
								0.0	
			17					0.0	
				M-4	MACROCORE	48		0.0	
			18					0.0	
NATIVE	+15.1	Brown fine SAND, trace silt [dry]						0.0	
			19					0.0	
								0.0	
			20					0.0	

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Log of Boring **LSB-26/LMW-11** Sheet 2 of 2

Project	Project No.
Broome Street Parking Lot Site	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	33.12-feet NAVD88

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
NATIVE	+13.1		20	M-5	MACROCORE	60		0.0	
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
			25					0.0	LMW-11 installed in LSB-26 with screen from 25-35' bgs.
	+7.1	Brown fine SAND [moist]	26	M-6	MACROCORE	60		0.0	
			27					0.0	
			28					0.0	
			29					0.0	
			30					0.0	
			31	M-7	MACROCORE	48		0.0	
			32					0.0	
	+0.1	Brown fine SAND, trace silt [moist]	33					0.0	
			34					0.0	
	-1.9		35					0.0	Bottom of boring at 35' bgs.
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

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Log of Boring **LSB-27/LMW-12** Sheet 1 of 2

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: 32.93-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/26/20 / Date Finished: 5/26/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 35 ft / Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push, 6-inch Direct Push	Number of Samples: Disturbed 7 / Undisturbed --- / Core ---
Casing Diameter (in): --- / Casing Depth (ft): ---	Water Level (ft.): First ▽ 29 / Completion ▼ --- / 24 HR. ▼ ---
Casing Hammer: --- / Weight (lbs): --- / Drop (in): ---	Drilling Foreman: Julio Golanzo
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- / Weight (lbs): --- / Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	+32.9								Started Drilling on 5/26/2020.
	+32.6	Concrete	0					0.0	
		Dark brown f-m SAND, some f-m gravel, trace brick [dry]	1					0.0	Collected 051/LSB-27A from 0-2' bgs at 11:15 AM. VOCs collected from 0.5-1' bgs.
			2	M-1	Macrocore	42		0.0	
			3					0.0	
			4					0.0	
			5					0.0	
			6	M-2	Macrocore	42		0.0	
	+25.9	Brown f-m SAND [dry]	7					0.0	Collected 052/LSB-27B from 7-9' bgs at 11:20 AM.
FILL			8					0.0	
			9					0.0	
			10	M-3	Macrocore	36		0.0	
			11					0.0	
			12					0.0	Collected 053/LSB-27C from 12-14' bgs at 11:25 AM.
			13					0.0	
			14					0.0	
	+17.9	Dark brown f-m SAND, some f-m gravel, trace brick [dry]	15					0.0	
	+16.9	Brown f-m SAND [dry]	16	M-4	Macrocore	48		0.0	
			17					0.0	
			18					0.0	
			19					0.0	
	+12.9		20					0.0	

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Log of Boring **LSB-27/LMW-12** Sheet 2 of 2

Project	Project No.
Broome Street Parking Lot Site	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	32.93-feet NAVD88

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
NATIVE	+12.9	Brown fine SAND, trace silt [dry]	20	M-5	MACROCORE	48		0.0	Collected 054/LSB-27D from 20-22' bgs at 11:30 AM. VOCs collected from 21-21.5' bgs.
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
	+7.9	Brown f-m SAND [moist]	25					0.0	LMW-12 installed in LSB-27 with screen from 25-35' bgs.
			26	M-6	MACROCORE	48		0.0	
			27					0.0	
			28					0.0	
			29					0.0	
			30					0.0	
	+1.9	Brown fine SAND, trace silt [moist]	31					0.0	
			32	M-7	MACROCORE	60		0.0	
			33					0.0	
			34					0.0	
	-2.1		35					0.0	Bottom of boring at 35' bgs.
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

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Log of Boring **LSB-28** Sheet 1 of 1

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx. el 31-feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 5/20/20 — Date Finished: 5/20/20
Drilling Equipment: Geoprobe 7822 DT	Completion Depth: 20 ft — Rock Depth: ---
Size and Type of Bit: 2-inch Direct Push	Number of Samples: Disturbed 4 — Undisturbed --- — Core ---
Casing Diameter (in): --- — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Sharohn Dixon
Sampler: 1.75" x 5' Long Acetate Lined Macrocore	Field Engineer: Molly Gutelius
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
FILL		Asphalt Reddish brown f-c SAND, some f-m gravel [dry]	0	M-1	Macrocore	36		0.0	Started Drilling on 5/20/2020.
			1					0.0	
			2					0.0	
			3					0.0	Collected 011/LSB-28A from 3-3.5' bgs at 13:30 PM.
			4					0.0	
		Brownish gray f-c SAND, trace fine gravel [dry]	5	M-2	Macrocore	42		0.0	
			6					0.0	
			7					0.0	Collected 012/LSB-28B from 7-9' bgs at 13:35 PM.
			8					0.0	
			9					0.0	
		Grayish tan f-c SAND, trace fine gravel [dry]	10	M-3	Macrocore	48		0.0	
			11					0.0	Collected 013/LSB-28C from 11-13' bgs at 13:40 PM.
			12					0.0	
			13					0.0	
			14					0.0	
		Brownish gray f-c SAND, trace fine gravel [dry]	15	M-4	Macrocore	48		0.0	
			16					0.0	
		Grayish tan f-c SAND, trace fine gravel [dry]	17					0.0	Collected 014/LSB-28D from 17-19' bgs at 13:45 PM.
			18					0.0	
			19					0.0	
			20					0.0	Bottom of boring at 20' bgs.

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WELL CONSTRUCTION SUMMARY

Well No. LMW-7

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation And Datum: 31.66 NAVD88
Drilling Agency: AARCO Environmental Services, Corp.	Date Started: 5/20/2020 / Date Finished: 5/20/2020
Drilling Equipment: Geoprobe 7822 DT	Driller: Sharohn Dixon
Size And Type of Bit: 6-inch Direct Push	Inspector: Molly Gutelius

Method of Installation

Direct Push of a 6" stainless steel casing to a depth of 35' bgs. 10-foot of Schedule-40, 0.020-inch slotted 2-inch diameter PVC screen was installed from 25-35' bgs. No. 00 Sand was backfilled to approximately 2-feet above the top of the screen. A 2-foot bentontine seal was installed above the sand, and the remainder of the borehole was backfilled with non-impacted soil cuttings, clean sand, and/or bentonite/grout. Manhole installed and secured with concrete.

Method of Well Development

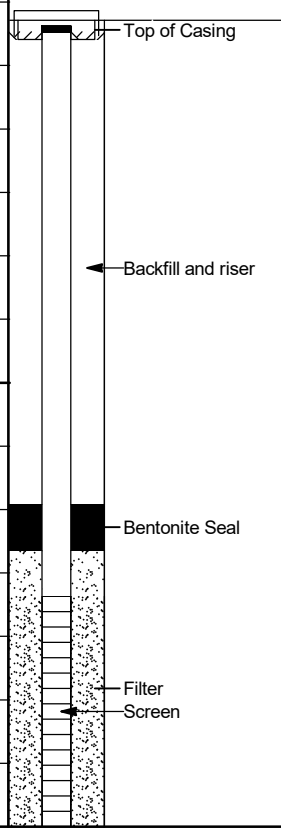
LMW-7 was developed using surge pumping techniques across the well screen in 2- to 3-foot increments. After surging, the well was purged via pumping until the water became clear, approximately 40-gallons were purged. Purged water was monitored using a water quality meter, and was developed until the turbidity readings measured to stabilize within 10% between consecutive readings at 45 nephelometric turbidity units (NTUs).

Type of Casing: — Diameter: —	Type of Backfill Material: Non-impacted soil cuttings, sand, and bentonite/grout
Type of Screen: Schedule-40 PVC — Diameter: 2-inch	Type of Seal Material: Bentonite
Borehole Diameter: 6-inch	Type of Filter Material: #00 Sand

	Elevation	Depth
Top of Casing	31.16'	0.5' bgs
Top of Seal	10.66'	21' bgs
Top of Filter	8.66'	23' bgs
Top of Screen	6.66'	25' bgs
Bottom of Filter		
Bottom of Well	-3.34'	35' bgs
Screen Length: 10.0'		Slot Size: 0.020

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
7.78'	23.38'	6/4/2020



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WELL CONSTRUCTION SUMMARY

Well No. LMW-8

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation And Datum: 30.87 NAVD88
Drilling Agency: AARCO Environmental Services, Corp.	Date Started: 5/21/2020 / Date Finished: 5/21/2020
Drilling Equipment: Geoprobe 6610 DT	Driller: Julio Golanzo
Size And Type of Bit: 6-inch Direct Push	Inspector: Molly Gutelius

Method of Installation

Direct Push of a 6" stainless steel casing to a depth of 35' bgs. 10-foot of Schedule-40, 0.020-inch slotted 2-inch diameter PVC screen was installed from 25-35' bgs. No. 00 Sand was backfilled to approximately 2-feet above the top of the screen. A 2-foot bentontine seal was installed above the sand, and the remainder of the borehole was backfilled with non-impacted soil cuttings, clean sand, and/or bentonite/grout. Manhole installed and secured with concrete.

Method of Well Development

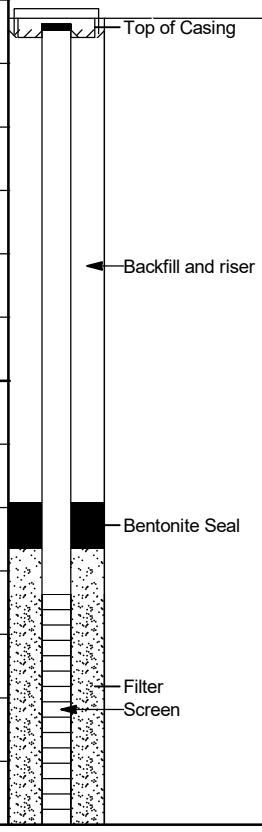
LMW-8 was developed using surge pumping techniques across the well screen in 2- to 3-foot increments. After surging, the well was purged via pumping until the water became clear, approximately 40-gallons were purged. Purged water was monitored using a water quality meter, and was developed until the turbidity readings measured to stabilize within 10% between consecutive readings at 45 nephelometric turbidity units (NTUs).

Type of Casing / Diameter:	Type of Backfill Material: Non-impacted soil cuttings, sand, and bentonite/grout
Type of Screen: Schedule-40 PVC / Diameter: 2-inch	Type of Seal Material: Bentonite
Borehole Diameter: 6-inch	Type of Filter Material: #00 Sand

	Elevation	Depth
Top of Casing	30.59'	0.28' bgs
Top of Seal	9.87'	21' bgs
Top of Filter	7.87'	23' bgs
Top of Screen	5.87'	25' bgs
Bottom of Filter		
Bottom of Well	-4.13'	35' bgs
Screen Length: 10.0'	Slot Size: 0.020	

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
7.94'	22.65'	6/4/2020



Soil / Rock Classification	Depth (ft)
FILL	0
	2
	4
	6
	8
	10
	12
	14
	16
	18
	20
	22
	24
	26
NATIVE	28
	30
	32
	34

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WELL CONSTRUCTION SUMMARY

Well No. LMW-9

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation And Datum: 32.31 NAVD88
Drilling Agency: AARCO Environmental Services, Corp.	Date Started: 5/21/2020 / Date Finished: 5/21/2020
Drilling Equipment: Geoprobe 6610 DT	Driller: Julio Golanzo
Size And Type of Bit: 6-inch Direct Push	Inspector: Molly Gutelius

Method of Installation

Direct Push of a 6" stainless steel casing to a depth of 35' bgs. 10-foot of Schedule-40, 0.020-inch slotted 2-inch diameter PVC screen was installed from 25-35' bgs. No. 00 Sand was backfilled to approximately 2-feet above the top of the screen. A 2-foot bentontine seal was installed above the sand, and the remainder of the borehole was backfilled with non-impacted soil cuttings, clean sand, and/or bentonite/grout. Manhole installed and secured with concrete.

Method of Well Development

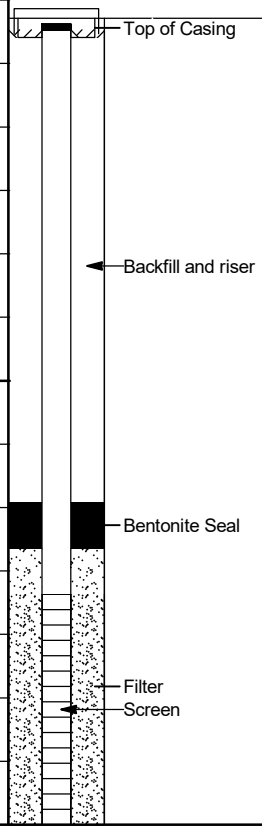
LMW-9 was developed using surge pumping techniques across the well screen in 2- to 3-foot increments. After surging, the well was purged via pumping until the water became clear, approximately 40-gallons purged. Purged water was monitored using a water quality meter, and was developed until the turbidity readings measured stabilized within 10% of 140 nephelometric turbidity units (NTUs). Turbidity did not get below 50 NTUs; as such, pH, conductivity, and temperature were recorded until all 3 stabilized within 10% between consecutive readings.

Type of Casing: — Diameter: —	Type of Backfill Material: Non-impacted soil cuttings, sand, and bentonite/grout
Type of Screen: Schedule-40 PVC — Diameter: 2-inch	Type of Seal Material: Bentonite
Borehole Diameter: 6-inch	Type of Filter Material: #00 Sand

	Elevation	Depth
Top of Casing	31.98'	0.33' bgs
Top of Seal	11.31'	21' bgs
Top of Filter	9.31'	23' bgs
Top of Screen	7.31'	25' bgs
Bottom of Filter		
Bottom of Well	-2.69'	35' bgs
Screen Length: 10.0'	Slot Size: 0.020	

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
7.90'	24.08'	6/4/2020



Soil / Rock Classification: FILL; NATIVE

Depth (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

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WELL CONSTRUCTION SUMMARY

Well No. LMW-10

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation And Datum: 32.83 NAVD88
Drilling Agency: AARCO Environmental Services, Corp.	Date Started: 5/26/2020 / Date Finished: 5/26/2020
Drilling Equipment: Geoprobe 7822 DT	Driller: Julio Golanzo
Size And Type of Bit: 6-inch Direct Push	Inspector: Molly Gutelius

Method of Installation

Direct Push of a 6" stainless steel casing to a depth of 35' bgs. 10-foot of Schedule-40, 0.020-inch slotted 2-inch diameter PVC screen was installed from 25-35' bgs. No. 00 Sand was backfilled to approximately 2-feet above the top of the screen. A 2-foot bentontine seal was installed above the sand, and the remainder of the borehole was backfilled with non-impacted soil cuttings, clean sand, and/or bentonite/grout. Manhole installed and secured with concrete.

Method of Well Development

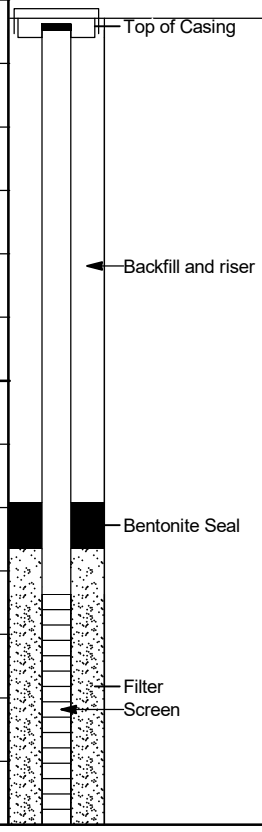
LMW-10 was developed using surge pumping techniques across the well screen in 2- to 3-foot increments. After surging, the well was purged via pumping until the water became clear, approximately 30-gallons were purged. Purged water was monitored using a water quality meter, and was developed until the turbidity readings measured to stabilize within 10% between consecutive readings at 45 nephelometric turbidity units (NTUs).

Type of Casing: — Diameter: —	Type of Backfill Material: Non-impacted soil cuttings, sand, and bentonite/grout
Type of Screen: Schedule-40 PVC — Diameter: 2-inch	Type of Seal Material: Bentonite
Borehole Diameter: 6-inch	Type of Filter Material: #00 Sand

	Elevation	Depth
Top of Casing	32.63'	0.2' bgs
Top of Seal	11.83'	21' bgs
Top of Filter	9.83'	23' bgs
Top of Screen	7.83'	25' bgs
Bottom of Filter	Elevation	Depth
Bottom of Well	-2.17'	35' bgs
Screen Length: 10.0'		Slot Size: 0.020

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
5.35'	27.28'	6/4/2020



Soil / Rock Classification

FILL

NATIVE

Depth (ft)

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34

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WELL CONSTRUCTION SUMMARY

Well No. LMW-11

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation And Datum: 33.12 NAVD88
Drilling Agency: AARCO Environmental Services, Corp.	Date Started: 5/22/2020 / Date Finished: 5/22/2020
Drilling Equipment: Geoprobe 7822 DT	Driller: Julio Golanzo
Size And Type of Bit: 6-inch Direct Push	Inspector: Molly Gutelius

Method of Installation

Direct Push of a 6" stainless steel casing to a depth of 35' bgs. 10-foot of Schedule-40, 0.020-inch slotted 2-inch diameter PVC screen was installed from 25-35' bgs. No. 00 Sand was backfilled to approximately 2-feet above the top of the screen. A 2-foot bentontine seal was installed above the sand, and the remainder of the borehole was backfilled with non-impacted soil cuttings, clean sand, and/or bentonite/grout. Manhole installed and secured with concrete.

Method of Well Development

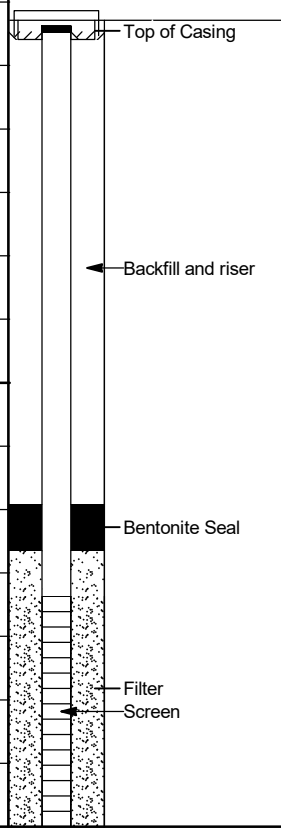
LMW-11 was developed using surge pumping techniques across the well screen in 2- to 3-foot increments. After surging, the well was purged via pumping until the water became clear, approximately 30-gallons were purged. Purged water was monitored using a water quality meter, and was developed until the turbidity readings measured to stabilize within 10% between consecutive readings at 45 nephelometric turbidity units (NTUs).

Type of Casing: — / Diameter: —	Type of Backfill Material: Non-impacted soil cuttings, sand, and bentonite/grout
Type of Screen: Schedule-40 PVC / Diameter: 2-inch	Type of Seal Material: Bentonite
Borehole Diameter: 6-inch	Type of Filter Material: #00 Sand

	Elevation	Depth
Top of Casing	32.71'	0.41' bgs
Top of Seal	12.12'	21' bgs
Top of Filter	10.12'	23' bgs
Top of Screen	8.12'	25' bgs
Bottom of Filter		
Bottom of Well	-1.88'	35' bgs
Screen Length	10.0'	Slot Size: 0.020

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
8.93'	23.78'	6/4/2020



Soil / Rock Classification: FILL; NATIVE

Depth (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

LANGAN

WELL CONSTRUCTION SUMMARY

Well No. LMW-12

Project: Broome Street Parking Lot Site	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation And Datum: 32.93 NAVD88
Drilling Agency: AARCO Environmental Services, Corp.	Date Started: 5/26/2020 / Date Finished: 5/26/2020
Drilling Equipment: Geoprobe 7822 DT	Driller: Julio Golanzo
Size And Type of Bit: 6-inch Direct Push	Inspector: Molly Gutelius

Method of Installation

Direct Push of a 6" stainless steel casing to a depth of 35' bgs. 10-foot of Schedule-40, 0.020-inch slotted 2-inch diameter PVC screen was installed from 25-35' bgs. No. 00 Sand was backfilled to approximately 2-feet above the top of the screen. A 2-foot bentontine seal was installed above the sand, and the remainder of the borehole was backfilled with non-impacted soil cuttings, clean sand, and/or bentonite/grout. Manhole installed and secured with concrete.

Method of Well Development

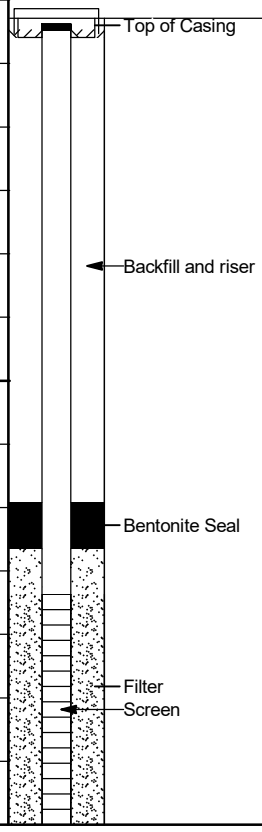
LMW-12 was developed using surge pumping techniques across the well screen in 2- to 3-foot increments. After surging, the well was purged via pumping until the water became clear, approximately 30-gallons were purged. Purged water was monitored using a water quality meter, and was developed until the turbidity readings measured to stabilize within 10% between consecutive readings at 45 nephelometric turbidity units (NTUs).

Type of Casing: — / Diameter: —	Type of Backfill Material: Non-impacted soil cuttings, sand, and bentonite/grout
Type of Screen: Schedule-40 PVC / Diameter: 2-inch	Type of Seal Material: Bentonite
Borehole Diameter: 6-inch	Type of Filter Material: #00 Sand

	Elevation	Depth
Top of Casing	32.83'	0.1' bgs
Top of Seal	11.93'	21' bgs
Top of Filter	9.93'	23' bgs
Top of Screen	7.93'	25' bgs
Bottom of Filter		
Bottom of Well	-2.07'	35' bgs
Screen Length: 10.0'	Slot Size: 0.020	

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
5.29'	27.54'	6/4/2020



Soil / Rock Classification: FILL; NATIVE

Depth (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

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Log of Boring **LSB-2/LMW-2/LSV-2** Sheet 1 of 2

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 32.5 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/29/19 / Date Finished: 1/29/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 30 ft / Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- / Undisturbed 6 / Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel / Casing Depth (ft): ---	Water Level (ft.): First ▽ 28 / Completion ▼ --- / 24 HR. ▼ ---
Casing Hammer: --- / Weight (lbs): --- / Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- / Weight (lbs): --- / Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
	+32.5		0					0.0
	+31.9	Dark brown m-c GRAVEL (dry)[ASPHALT]		M-1A				0.0
		Dark brown m-c SAND, some brick, some f-c gravel, trace concrete	1	M-1B				0.0
	+30.5							0.0
		Brownish orange m-c GRAVEL, [brick] (dry)	2		Macrocore	30		0.0
			3	M-1C				0.0
								0.0
			4					0.0
								0.0
	+27.5		5					0.0
		Orangish brown coarse SAND, some coarse gravel, [brick] (dry)		M-2A				0.0
	+26.4		6					0.0
		Light gray CLAY, some f-c sand, trace wood (moist)		M-2B				0.0
	+25.6							0.0
		Tannish brown f-c SAND, some brick, trace silt, trace fine gravel (dry)	7	M-2C	Macrocore	32		0.0
	+24.8							0.0
		Dark gray m-c SAND, some coarse gravel (dry)	8	M-2D				0.0
	+24.0							0.0
		Tannish brown fine SAND, trace silt (dry)	9	M-2E				0.0
Fill								0.0
	+22.5		10					0.0
		Orangish brown m-c SAND, some brick, some m-c gravel, trace silt (dry)		M-3A				0.0
	+21.5		11					0.0
		Tannish brown fine SAND, some silt (dry)						0.0
			12					0.0
					Macrocore	60		0.0
			13					0.0
								0.0
			14	M-3B				0.0
								0.0
	+17.5		15					0.0
		Orangish brown m-c SAND, some brick, some f-c gravel, trace concrete, trace silt (dry)						0.0
			16					0.0
				M-4A				0.0
	+15.7		17					0.0
		Brown SILT, trace fine sand (wet)			Macrocore	60		0.0
			18					0.0
				M-4B				0.0
	+13.4		19					0.0
		Tannish brown m-c SAND, trace silt (moist)						0.0
	+12.5		20	M-4C				0.0

Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/29/2019 8:15 AM

Sample LSB-2A taken 0.0-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 0830

Sample LSB-2B taken 18.0-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 0900.

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Log of Boring **LSB-2/LMW-2/LSV-2** Sheet 2 of 2

Project	Project No.
GO Broome Development	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	Approx el 32.5 -feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	+12.5		20					0.1	
Fill	+11.8	Brown fine SAND, some silt (dry)		M-5A				0.0	
		Orangish brown f-c SAND, some brick, some f-c gravel, trace wood, trace silt (dry)	21					0.0	
								0.0	
	+10.3		22	M-5B	Macrocore	60		0.0	
		Tannish brown fine SAND, some silt (dry)						0.0	
			23					0.0	
	+8.5			M-5C				0.0	
		Grayish tannish brown m-f SAND, trace silt (dry)	24					0.0	
	+7.5			M-5D				0.0	
		Reddish brown m-c SAND, some brick, some silt, trace fine gravel (dry)	25					0.0	
								0.0	
			26					0.0	
	+5.5			M-6A				0.0	
Native		Tannish brown f-m SAND, trace silt (wet)	27		Macrocore	60		0.0	
		▽						0.0	
			28					0.0	
								0.0	
			29	M-6B				0.0	
	+2.5							0.0	
			30						Bottom of boring at 1/29/2019 9:30 AM. Direct-push from 30' to 35' bgs for installation of 1-inch-diameter temporary monitoring well LMW-2. Screen Interval from 25' to 35' bgs. LSV-2 offset 2-feet and installed to 20' bgs
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-4/LMW-4/LSV-4** Sheet 1 of 2

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 31 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/28/19 — Date Finished: 1/28/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 30 ft — Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- — Undisturbed 6 — Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel — Casing Depth (ft): ---	Water Level (ft.): First ▽ 28 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
	+31.0		0	M-1A				0.0
	+30.7	Dark brown m-c GRAVEL, some coarse sand (dry)[ASPHALT]						0.0
		Grayish brown m-c SAND, some f-c gravel, trace concrete, trace brick, trace silt (dry)	1	M-1B				0.0
								0.0
	+28.8	Grayish brown m-c SAND, some brick, some f-c gravel, trace silt (dry)	2		Macrocore	30		0.0
				M-1C				0.0
	+27.5	Dark brown f-c SAND, some f-m gravel, some organics, trace silt (dry)	3					0.0
								0.0
			4	M-1D				0.0
	+26.0							0.0
		Orangish red c-m GRAVEL, some brick, some c-f sand, [brick] (dry)	5					0.0
								0.0
			6	M-2A				0.0
								0.0
			7		Macrocore	20		0.0
								0.0
			8					0.0
								0.0
			9	M-2B				0.0
Fill								0.0
	+21.0		10					0.0
		Light brown f-c SAND, some brick, some concrete, some f-c gravel, trace silt (dry)		M-3A				0.0
			11					0.0
								0.0
			12					0.0
	+18.5	Gray f-m SAND, some silt, some f-m gravel (moist)			Macrocore	24		0.0
			13	M-3B				0.0
								0.0
			14					0.0
								0.0
	+16.0		15					0.0
		Dark brown m-c SAND, some f-c gravel, trace brick, trace silt (dry)						0.0
				M-4A				0.0
			16					0.0
	+14.3							0.0
		Tannish brown f-m SAND, some brick, some f-m gravel, trace silt (dry)	17	M-4B				0.0
	+13.5				Macrocore	36		0.0
		Tannish brown f-m SAND, trace silt (dry)						0.0
			18					0.0
				M-4C				0.0
			19					0.0
	+11.0							0.0
			20					

Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/28/2019 11:15 AM.

Sample LSB-4A taken 0.0-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 1140

Sample LSB-4B taken 18.0-20.0' (VOC collected from 19.5'-20.0') (6-inch interval) at 1200.

LANGAN

Log of Boring **LSB-4/LMW-4/LSV-4** Sheet 2 of 2

Project	Project No.
GO Broome Development	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	Approx el 31 -feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
Fill	+11.0	Tannish brown f-m SAND, trace silt (dry)	20	M-5	Macrocore	48		0.0	
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
			25					0.0	
	+6.0	Tannish brown f-m SAND, trace silt (dry)						0.0	
	+5.3	Brown c-f SAND, some brick, some concrete, some f-c gravel, trace silt (moist)	26	M-6A	Macrocore	60		0.0	
			27	M-6B				0.0	
	+3.0	Light brown f-m SAND, some silt (wet)	28					0.0	
			29	M-6C				0.0	
	+1.0		30					0.0	Bottom of boring at 1/28/2019 1:39 PM. Direct-push from 30' to 35' bgs for installation of 1-inch-diameter temporary monitoring well LMW-4. Screen Interval from 25' to 35' bgs. LSV-4 offset 2-feet and installed to 20' bgs.
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-5/LMW-5/LSV-5** Sheet 1 of 2

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 32.4 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/28/19 — Date Finished: 1/28/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 30 ft — Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- — Undisturbed 6 — Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel — Casing Depth (ft): ---	Water Level (ft.): First ▽ 28 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
	+32.4		0					0.1
	+31.8	Dark brown m-c GRAVEL (dry)[ASPHALT]		M-1A				0.1
		Grayish brown m-c SAND, some brick, some fine gravel, trace silt (dry)	1					0.1
				M-1B				0.1
			2					0.1
	+29.6				Macrocore	27		0.1
		Grayish brown f-c SAND, some f-c gravel, trace brick, trace silt (dry)	3					0.1
				M-1C				0.1
			4					0.1
	+27.4							0.1
		Grayish brown f-c SAND, some f-c gravel, trace brick, trace silt (dry)	5	M-2A				0.1
	+26.7			M-2B				0.1
	+26.2	Brown f-c SAND, some fine gravel (dry)	6					0.1
		Dark brown f-m GRAVEL, some medium sand, trace silt (dry)						0.1
			7	M-2C	MACROCORE	28		0.1
	+24.7							0.1
	+24.4	Grayish brown f-c SAND, some brick, some coarse gravel, Concrete	8	M-2D				0.1
		Tannish orange coarse GRAVEL, some f-m sand, trace silt (dry)		M-2E				0.1
Fill			9					0.1
	+22.4							0.1
		Dark brown m-c SAND, some fine gravel, trace silt (dry)	10					0.0
								0.0
			11	M-3A				0.0
	+20.8							0.0
		Dark brown m-c SAND, some f-c gravel, trace brick, trace concrete, trace silt, tr asphalt (dry)	12		MACROCORE	48		0.0
								0.0
			13					0.0
				M-3B				0.0
			14					0.0
								0.0
	+17.4		15					0.0
		Tannish brown f-m SAND, trace silt (dry)		M-4A				0.0
	+16.8	Orangish brown f-m SAND, trace silt (dry)	16					0.0
				M-4B				0.0
	+15.7		17		MACROCORE	54		0.0
		Grayish brown m-c SAND, some f-c gravel, trace concrete, trace brick, trace silt (dry)						0.0
			18					0.0
								0.0
			19	M-4C				0.0
								0.0
	+12.4		20					

Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/28/2019 8:27 AM.

Sample LSB-5A taken 0.0-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 0845

Sample LSB-5B taken 18.0-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 0915.

LANGAN

Log of Boring **LSB-5/LMW-5/LSV-5** Sheet 2 of 2

Project	Project No.
GO Broome Development	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	Approx el 32.4 -feet NAVD88

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	+12.4	Tannish brown f-m SAND, trace silt (dry)	20					0.0	
			21					0.0	
			22	M-5A	MACROCORE	58		0.0	
Fill	+9.9			M-5B				0.0	
	+9.6	Brown f-m SAND, trace silt (dry)	23					0.0	
		Brown f-m SAND, some f-m gravel, trace brick, trace concrete, trace silt (dry)						0.0	
			24	M-5C				0.0	
	+7.4							0.0	
		Brown f-m SAND, trace silt	25					0.0	
			26					0.0	
								0.0	
Native			27	M-6A	MACROCORE	52		0.0	
	+4.8							0.0	
		Brown f-m SAND, trace silt ▽	28					0.0	
				M-6B				0.0	
			29					0.0	
	+2.4							0.0	
			30						Bottom of boring at 1/28/2019 1:38 PM. Direct-push from 30' to 35' bgs for installation of 1-inch-diameter temporary monitoring well LMW-5. Screen Interval from 25' to 35' bgs. LSV-5 offset 2-feet and installed to 20' bgs.
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-6/LMW-6/LSV-6** Sheet 1 of 2

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 32.5 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/29/19 — Date Finished: 1/29/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 30 ft — Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- — Undisturbed 6 — Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel — Casing Depth (ft): ---	Water Level (ft.): First ▽ 28 — Completion ▼ --- — 24 HR. ▼ ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
	+32.5	Light gray m-c GRAVEL, some fine sand (dry)[CONCRETE]	0	M-1A				0.0
	+31.5	Orange m-c GRAVEL, some medium sand, [brick] (dry)	1	M-1B				0.0
	+31.0	Orangish brown medium SAND, some brick, trace silt (dry)		M-1C				0.0
	+30.5	Orange f-c GRAVEL, some f-c sand, [dry] (dry)	2	M-1D				0.0
	+30.0	Brown f-m SAND, some brick, some fine gravel, trace silt (dry)		M-1E	Macrocore	36		0.0
	+29.5		3	M-1F				0.0
	+29.1	Light tan f-m SAND, some f-m gravel						0.0
		Brownish tan fine SAND, trace silt (dry)	4	M-1G				0.0
	+27.5							0.0
		Dark brown m-f SAND, some brick, some fine gravel, trace silt (dry)	5	M-2A				0.0
	+26.5							0.0
		Orangish tannish brown fine SAND, some silt (dry)	6					0.0
								0.0
			7	M-2B				0.0
					Macrocore	25		0.0
			8					0.0
								0.0
	+23.5							0.0
	+23.1	Orangish tannish brown fine SAND, some silt (wet)	9	M-2C				0.0
		Brown coarse SAND, trace fine gravel (moist)		M-2D				0.0
	+22.5		10					0.0
	+22.0	Brown coarse SAND, trace fine gravel (moist)		M-3A				0.0
		Brown m-c SAND (dry)	11					0.0
								0.0
			12					0.0
					Macrocore	60		0.0
			13	M-3B				0.0
								0.0
	+18.5							0.0
		Brown fine SAND, some silt (dry)	14	M-3C				0.0
	+17.5							0.0
		Brown f-m SAND, some brick, some f-c gravel, trace silt (dry)	15					0.0
								0.0
			16	M-4A				0.0
	+15.5							0.0
		Light brown coarse SAND, some fine gravel (dry)	17					0.0
					Macrocore	46		0.0
			18	M-4B				0.0
	+13.7							0.0
		Light brown medium SAND, some fine gravel, trace silt (dry)	19					0.0
	+12.5			M-4C				0.0
			20					

Fill

Remarks
(Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/29/2019 1:10 PM

Sample LSB-6A taken 0.0-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 1335

Sample LSB-6B taken 18.0-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 1400

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Log of Boring **LSB-6/LMW-6/LSV-6** Sheet 2 of 2

Project	Project No.
GO Broome Development	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	Approx el 32.5 -feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
Native	+12.5	Light brown fine SAND, trace silt (dry)	20					0.0	
			21	M-5A				0.0	
			22		Macrocore	34		0.0	
	+9.3	Light brown f-m SAND, trace silt (dry)	23					0.0	
			24	M-5B				0.0	
	+7.5	Brown f-m SAND, some f-c gravel, trace silt (dry)	25					0.0	
			26					0.0	
			27	M-6A	Macrocore	60		0.0	
	+4.5	▽ Brown fine SAND, some silt (moist)	28					0.0	
			29	M-6B				0.0	
	+2.5		30						Bottom of boring at 1/29/2019 2:17 PM. Direct-push from 30' to 35' bgs for installation of 1-inch-diameter temporary monitoring well LMW-6. Screen Interval from 25' to 35' bgs. LSV-6 offset 2-feet and installed to 20' bgs.
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-7/LSV-7** Sheet 1 of 1

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 33 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/30/19 — Date Finished: 1/30/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 20 ft — Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- — Undisturbed 4 — Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks
	+33.0	Light gray m-c GRAVEL, some fine sand (dry)[CONCRETE]	0	M-1A				0.1	Started Drilling at 1/30/2019 8:53 AM.
			1					0.1	
								0.1	
								0.1	
	+30.9	Dark brown f-c SAND, some brick, some f-m gravel, trace concrete, trace silt (dry)	2					0.2	Sample LSB-7A taken 0.0-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 1335
				M-1B	Macrocore	14		0.2	
			3					0.3	
								0.1	
			4					0.1	
								0.1	
	+28.0	Brown f-c SAND, some brick, trace concrete, trace wood, trace silt (dry)	5					0.2	
								0.2	
			6					2.3	
								0.2	
			7	M-2	Macrocore	22		0.2	
								0.2	
			8					0.2	
								0.2	
			9					0.2	
								0.2	
Fill	+23.0		10					0.1	
	+22.3	Dark brown f-c SAND, some brick, some fine gravel, trace concrete, trace silt (dry)		M-3A				0.1	
		Light brown f-m SAND, trace silt (dry)	11					0.1	
								0.1	
			12					0.1	
				M-3B	Macrocore	34		0.1	
			13					0.1	
								0.1	
			14					0.1	
								0.1	
	+18.0		15					0.1	
		Brown f-c SAND, some brick, trace concrete, trace silt (dry)						0.1	Sample LSB-7B taken 18.0-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 0920. SB-DUP-1 collected 18.0-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 0930
	+16.8		16	M-4A				0.1	
	+16.7	Brown coarse SAND, trace silt (moist)		M-4B				0.1	
	+16.0	Tannish brown medium SAND, trace silt (moist)	17	M-4C				0.1	
		Tannish brown fine SAND, some silt (dry)			Macrocore	48		0.1	
			18					0.1	
				M-4D				0.1	Bottom of boring at 1/30/2019 10:03 AM.
			19					0.1	LSV-7 offset 2-feet and installed to 20' bgs
	+13.0		20					0.1	

LANGAN

Log of Boring **LSB-8/LSV-8** Sheet 1 of 2

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 33.2 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/28/19 / Date Finished: 1/28/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 25 ft / Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- / Undisturbed 5 / Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel / Casing Depth (ft): ---	Water Level (ft.): First NA / Completion --- / 24 HR. ---
Casing Hammer: --- / Weight (lbs): --- / Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- / Weight (lbs): --- / Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
	+33.2	Dark brown m-c GRAVEL, some f-c sand (dry)[ASPHALT]	0	M-1A				0.0
			1					0.0
	+31.3	Brown f-c SAND, some f-m gravel (dry)	2	M-1B	Macrocore	21		0.0
			3					0.0
	+29.4							0.0
	+28.9	Reddish orange m-c GRAVEL, some m-c sand, Brick (dry)	4	M-1C				0.0
	+28.2	Grayish gray m-c GRAVEL (dry)		M-1D				0.0
		Light gray f-c GRAVEL, some fine sand, trace silt (dry)	5	M-2A				0.0
	+27.1	Tannish yellow m-c SAND, some f-c gravel (dry)	6					0.0
			7	M-2B	Macrocore	26		0.0
	+25.2	Reddish brown coarse SAND, some fine gravel, trace silt (dry)	8	M-2C				0.0
	+24.0	Brown coarse SAND, some fine gravel, trace silt (dry)	9	M-2D				0.0
Fill	+23.2	Brownish tan f-c SAND, some f-m gravel, trace silt (dry)	10	M-3A				0.0
	+22.4	Brown f-m SAND, trace silt (dry)	11					0.0
			12	M-3B	Macrocore	36		0.0
	+19.9		13					0.0
Native		Light brown f-m SAND, trace silt (dry)	14	M-3C				0.0
	+18.2	Dark brown m-c SAND, some f-c gravel, trace silt (dry)	15					0.0
	+17.0	Light tannish brown fine SAND (dry)	16	M-4A				0.0
			17					0.0
			18		Macrocore	48		0.0
				M-4B				0.0
	+13.2		19					0.0
			20					

Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/28/2019 7:26 AM.

Sample LSB-8A taken 0.0-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 0735

Sample LSB-8B taken 18.0'-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 0805.

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Log of Boring **LSB-8/LSV-8** Sheet 2 of 2

Project	Project No.
GO Broome Development	100646801
Location	**Elevation and Datum**
Broome Street, New York, NY	Approx el 33.2 -feet NAVD88

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
Native	+13.2	Brown f-c SAND, trace silt, trace f-m gravel (dry)	20					0.0	
			21	M-5A				0.1	
								0.1	
	+11.5	Tannish brown fine SAND, trace silt (dry)						0.1	
			22		Macrocore	46		0.0	
								0.0	
			23					0.0	
				M-5B				0.0	
			24					0.0	
								0.0	
	+8.2		25						Bottom of boring at 1/28/2019 8:30 AM. LSV-8 offset 2-feet and installed to 20' bgs
			26						
			27						
			28						
			29						
			30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

LANGAN

Log of Boring **LSB-9/LSV-9** Sheet 1 of 2

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 32 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/28/19 — Date Finished: 1/28/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 20 ft — Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- — Undisturbed 4 — Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
	+32.0							
Fill	+31.7	Dark brown m-c GRAVEL (dry)[ASPHALT]	0	M-1A				0.0
		Brown m-c SAND, some brick, some f-c gravel, trace concrete, trace silt (dry)	1	M-1B				0.0
	+29.8	Tan fine SAND, some silt, some f-c gravel (moist)	2		Macrocore	36		0.0
			3	M-1C				0.0
	+28.2	Gray f-c SAND, some f-c gravel (dry)	4	M-1D				0.0
	+27.0	Gray f-c SAND, some f-c gravel, trace silt (dry)	5					0.0
			6					0.0
			7	M-2A	Macrocore	28		0.0
			8					0.0
	+22.7	Tannish brown med. dense f-c SAND some f-m gravel tr silt [dry]	9	M2-B				0.0
	+22.0	Brown f-c SAND, some brick, some f-c gravel, trace silt (dry)	10	M-36A				0.0
	+20.3	Gray coarse GRAVEL, some fine sand (dry)	11					0.0
	+19.8	Brown f-c SAND, some f-c gravel, trace concrete, trace silt (dry)	12	M-36B	Macrocore	36		0.0
			13	M-36C				0.0
	+18.0	Gray m-f SAND, some coarse gravel (dry)	14	M-36D				0.0
	+17.0	Gray m-f SAND, some coarse gravel (dry)	15					0.0
			16	M-37A				0.0
	+15.4	Reddish gray f-m SAND, some f-c gravel, trace silt (dry)	17	M-37B	Macrocore	24		0.0
	+13.7	Brown fine SAND, trace silt (dry)	18					0.0
			19	M-37C				0.0
	+12.0		20					0.0

Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/28/2019 2:00 PM

Sample LSB-9A taken 0.0'-2.0' (VOC collected 1.5'-2.0') (6-inch interval) at 1430

LSB-9B taken 18.0'-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 1445.
Bottom of boring at 1/28/2019 2:48 PM.
LSV-9 offset 2-feet and installed to 20' bgs

LANGAN

Log of Boring **LSB-10** Sheet 1 of 1

Project: GO Broome Development	Project No.: 100646801
Location: Broome Street, New York, NY	Elevation and Datum: Approx el 32.5 -feet NAVD88
Drilling Company: AARCO Environmental Services, Corp.	Date Started: 1/28/19 — Date Finished: 1/28/19
Drilling Equipment: Geoprobe 6610 DT	Completion Depth: 20 ft — Rock Depth: ---
Size and Type of Bit: ---	Number of Samples: Disturbed --- — Undisturbed 4 — Core ---
Casing Diameter (in): 2-inch diameter by 5-foot long stainless steel — Casing Depth (ft): ---	Water Level (ft.): First NA — Completion --- — 24 HR. ---
Casing Hammer: --- — Weight (lbs): --- — Drop (in): ---	Drilling Foreman: Nick Turro
Sampler: 2.25-inch diameter by 5-foot long acetate lined macrocore	Field Engineer: Samuel Haines
Sampler Hammer: --- — Weight (lbs): --- — Drop (in): ---	

Material Symbol	Elev. (ft)	Sample Description	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)
Fill	+32.5	Dark brown m-c GRAVEL, some medium sand (dry)[ASPHALT]	0	M-1A				0.0
	+31.7	Tannish brown m-c SAND, some f-m gravel, trace brick, trace silt (dry)	1	M-1B				0.0
	+30.6	Tannish brown f-c SAND, some c-f gravel, trace concrete, trace brick, trace silt (dry)	2		Macrocore	36		0.0
			3	M-1C				0.0
			4					0.0
	+27.5	Light brown f-c SAND, some f-m gravel, trace silt (dry)	5	M-2A				0.0
	+26.5	Dark brown m-c SAND, some f-m gravel, brick, trace wood, silt [dry]	6					0.0
			7	M-2B				0.0
	+24.5	Orangish brown f-m SAND, trace silt [dry]	8		Macrocore	24		0.0
			9	M-2C				0.0
	+22.5	Light brown f-c SAND, some f-m gravel, trace brick, trace silt (dry)	10	M-3A				0.0
	+20.8		11					0.0
Native		Light tannish brown f-c SAND, trace silt (dry)	12					0.0
			13	M-3B	Macrocore	36		0.0
			14					0.0
	+17.5		15					0.0
		Light tannish brown f-c SAND, trace silt (dry)	16					0.0
			17					0.0
			18	M-4	Macrocore	48		0.0
			19					0.0
	+12.5		20					0.0

Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)

Started Drilling at 1/28/2019 10:54 AM.

Sample LSB-10A taken 0.0-2.0' (VOC collected from 1.5'-2.0') (6-inch interval) at 1100

Bottom of boring at 1/28/2019 1:39 PM.
LSB-10B taken 18.0-20.0' (VOC collected 19.5'-20.0') (6-inch interval) at 1115

APPENDIX D

Excavation Work Plan

APPENDIX D – EXCAVATION WORK PLAN (EWP)

D-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination or breach or alter the site's cover system, the site owner or their representative will notify the NYSDEC contacts listed in the table below. Table D-1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

Table [D-1]: Notifications*

NYSDEC Region 2 HW Chief	Jane O'Connell Telephone: (718) 482-4599 Email: jane.oconnell@dec.ny.gov
NYSDOH Project Manager	Arunesh Ghosh Telephone: (518) 486-1443 Email: BEEI@health.ny.gov
NYSDEC Project Manager	Meghan Medwid Telephone: (518) 402-8610 Email: meghan.medwid@dec.ny.gov
Project Manager	Amanda Forsburg Telephone: (973) 560-4900 Email: aforsburg@langan.com
Remedial Engineer	Ronald Boyer, P.E. Telephone: (973) 560-4900 Email: rboyer@langan.com
Owner Representative	GO Broome LLC Telephone: (212) 716-2502 Email: bkelly@gothamorg.com

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated, any modifications of truck routes, and any work that may impact an engineering control;

- A summary of environmental conditions anticipated to be encountered 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 appended to this SMP;

- Identification of disposal facilities for potential waste streams; and

- Identification of sources of any anticipated backfill, along with the required request to import form and all supporting documentation including, but not limited to, chemical testing results.

D-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g., photoionization detector [PID]) soil screening will be performed by an engineer, geologist, or scientist under the direct supervision of a PE or QEP during all remedial and development excavations into known or potentially contaminated material. Soil screening will be performed when 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 COC.

Excavated soil/fill will be segregated based on previous environmental data and screening results into two classes - material that requires off-site disposal and material intended to be reused on-site. Soil/fill proposed for reuse must be sampled accordance with NYSDEC Program Policy DER-10: Technical Guide for Site Investigation and Remediation (DER-10) Table 5.4(e) to determine if it

can be reused on-site (either as backfill or cover soil) and must be approved by the NYSDEC prior to reuse. Previously imported soil/fill may be reused without additional testing, provided it has not been comingled with soil/fill that has not been tested for reuse.

Further discussion of off-site disposal of materials and on-site reuse is provided in Sections C-6 and C-7 of this EWP.

D-3 SOIL STAGING METHODS

Stockpiles will be placed on and kept covered at all times with adequately anchored tarps or plastic sheeting. Stockpiles will be routinely inspected and damaged tarp covers or plastic sheeting 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 the NYSDEC.

D-4 MATERIALS EXCAVATION AND LOAD-OUT

A field engineer, scientist, or geologist under the supervision of the RE will monitor ground-intrusive work and the excavation and load-out of excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional and/or contractor. 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. A site utility stakeout will be completed for all utilities prior to any ground intrusive activities at 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 NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The qualified environmental professional 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 qualified environmental professional or field staff under their supervision will 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.

D-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 loaded with site materials will exit the vicinity of the site using only these approved truck routes. Trucks will be prohibited from stopping and idling in the neighborhood outside the site. To the extent possible, queuing of trucks will be performed on site in order to minimize off-site disturbance. Off-site queuing will be minimized.

Truck routes will take into account:

- Limiting transport through residential areas and past sensitive sites;
- Use of city mapped truck routes;
- Prohibiting off-site queuing of trucks entering the facility to the extent possible;
- Limiting total distance to major highways;
- Promoting safety in access to highways;
- Overall safety in transport; and
- Community input (where necessary).

D-6 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed off-site in a permitted facility in accordance with all local, State and Federal regulations. If disposal of material 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 project manager. Unregulated off-site management of materials from this site will not occur without formal NYSDEC project manager approval.

The following documentation will be obtained and reported by the QEP for each off-site disposal location used to fully demonstrate and document that the disposal of material derived from the site conforms to applicable laws:

1) A letter from the QEP or BCP Volunteer to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be disposed is contaminated material generated at an environmental remediation site in New York State. The letter will provide the project identity and the name and phone number of the QEP. The letter will include as an attachment a summary of chemical data for the material being transported (including site characterization data); and

2) A letter from each receiving facility stating it is in receipt of the correspondence (above) and is approved to accept the material.

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, (e.g., hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C&D debris recovery facility) Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include, but will not be limited to: 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 consistent with 6 NYCRR Parts 360, 361, 362, 363, 364 and 365. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 360-15 registered or permitted facility).

D-7 MATERIALS REUSE ON-SITE

The reuse of on-site materials must follow the procedures included in this EWP so that unacceptable material is not reused on-site. Grossly-contaminated soil, historic fill, or soil with petroleum staining or odor will not be reused on-site in any circumstance. Soil intended for reuse on-site will be sampled in accordance with DER-10 Table 5.4(e) and approved by the NYSDEC prior to reuse. Soil acceptable for reuse (i.e., below any demarcation layers or impervious surfaces, as backfill for subsurface utility lines, or as cover soil) must be of natural origin, non-hazardous and meet the lower of the 6 NYCRR Part 375-6.8(b) RURR SCOs and PGW SCOs.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the 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.

D-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed off-site at a permitted facility 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, and will be managed off-site, unless prior approval is obtained from NYSDEC.

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 SPDES permit.

D-9 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional, as defined in 6 NYCRR Part 375, and will be in compliance with provisions in this SMP prior to receipt at the site. Imported soil for backfill must meet the Restricted Residential RUSCOs or other acceptable fill material such as virgin, native stone from a quarry or RCA. Material from industrial Sites, spill Sites, other environmental remediation Sites, or other potentially contaminated Sites will not be imported to the Site. Solid waste will not be imported onto the Site.

A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

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

Backfill material will consist of clean fill (as described in the following paragraph) or other acceptable fill material such as virgin stone from a quarry or RCA. If RCA is imported to the Site, it will be from a NYSDEC-registered facility in compliance with 6 NYCRR Part 360 registration and permitting requirements for the period of acquisition of RCA. RCA imported from compliant facilities will not require chemical testing, unless required by the NYSDEC under the terms for operation of the facility. RCA imported to the Site must be derived from recognizable and uncontaminated concrete, with no more than 10% by weight passing through a No. 10 sieve. RCA is not acceptable for and will not be used as cover or drainage material or to fill areas beneath the groundwater table. Crushed virgin stone from a permitted mine or quarry may also be imported without chemical testing is sieve analysis shows no more than 10% by weight passing through a No. 10 sieve.

Imported soil (i.e., clean fill) will meet the Restricted Residential RUSCOs. Non-compliant soils will not be imported to the Site. Clean fill will be segregated at a source/facility that is free of environmental contaminants. Qualified environmental personnel will collect representative

samples at a frequency consistent with NYSDEC DER-10 Table 5.4(e)10 – Recommended Number of Soil Samples for Soil Imported To or Exported From a Site. The samples will be analyzed for Part 375 VOCs, SVOCs, pesticides/herbicides, PCBs, cyanide, metals including trivalent and hexavalent chromium and PFAS, and 1,4-dioxane by a NYSDOH ELAP-certified laboratory. Upon meeting these criteria, the certified-clean fill will be transported to the Site and segregated from impacted material, as necessary, on plastic sheeting until it is used as backfill.

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.

D-10 STORMWATER POLLUTION PREVENTION

Silt fencing or hay bales will be installed around the perimeter of the construction area, as required. Barriers and hay bale checks will be installed and inspected once a week and after every storm event; necessary repairs shall be made immediately. Results of inspections will be recorded in a logbook maintained at the site and available for inspection by the NYSDEC. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. 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 fence damaged due to weathering. 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.

D-11 EXCAVATION 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. The NYSDEC project manager will be promptly notified of the discovery.

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 a full list of analytes [TAL metals, TCL volatiles and semi-volatiles (including 1,4-dioxane), TCL pesticides and PCBs, and PFAS], unless the site history and previous sampling results provide sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC project manager for approval prior to sampling. Any tanks will be closed as per NYSDEC regulations and guidance.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone within two hours to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

D-12 COMMUNITY AIR MONITORING PLAN

Community air monitoring will be conducted in compliance with the NYSDOH Generic CAMP outlined below.

The CAMP will include real-time monitoring for VOCs and particulates at the downwind perimeter of each designated work area when ground-intrusive work is in progress. Continuous monitoring will be required for all ground-intrusive work. Ground-intrusive work includes, but is not limited to, soil/fill excavation and handling and utility trenching. Periodic monitoring for VOCs may be required during non-intrusive work such as the collection of soil samples. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location and taking a reading prior to leaving a sample location.

CAMP monitoring of total VOC levels will be conducted using PIDs, and monitoring for particulates will be conducted using particulate sensors equipped with filters that can detect airborne particulates less than 10 microns in diameter (PM10). Monitoring for particulates and odors will be conducted during ground-intrusive work by a field engineer, scientist, or geologist under the supervision of the RE. The work zone is defined as the general area in which machinery is operating in support of remediation. A portable PID will be used to monitor the work zone and for periodic monitoring of total VOC levels during work such as soil sampling. The Site perimeter will be visually monitored for fugitive dust emissions.

The following actions will be taken based on total VOC levels measured:

- If total VOC levels exceed 5 ppm above background for the 15-minute average at the perimeter, work will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 ppm above background, work will resume with continued monitoring.
- If total VOC levels at the downwind perimeter of the work zone persist at levels in excess of 5 ppm above background but less than 25 ppm, work will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work will resume provided that the total VOC level 200 feet downwind of the hot zone or half the distance to the nearest potential receptor or residential/ commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm above background for the 15-minute average.
- If the total VOC level is above 25 ppm at the perimeter of the hot zone, work will be shut down.

The following actions will be taken based on dust levels measured or visual dust observations:

- If the downwind particulate level is 100 µg/m³ greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression must be employed. Work may continue with dust suppression techniques provided that downwind PM10 levels do not exceed 150 µg/m³ above the background level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM10 levels are greater than 150 µg/m³ above the background level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM10 concentration to within 150 µg/m³ of the upwind level and in preventing visible dust migration.

Sustained concentrations of VOCs or PM10 will be reported to the NYSDEC and NYSDOH Project Managers and included in the daily report. In addition, a map showing the location of the downwind and upwind CAMP stations will be included in the daily report.

D-13 ODOR CONTROL PLAN

Work practices to minimize odors and vapors will be used during intrusive activities. Odor and organic vapor controls may include the application of foam suppressants or tarps over the odorous material or VOC source areas. Foam suppressants may include biodegradable foams applied over the odorous material for short-term control of the odor and VOCs.

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 remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

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: (a) direct load-out of soils to trucks for off-site disposal; (b) use of chemical odorants in spray or misting systems; and, (c) 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.

D-14 DUST CONTROL PLAN

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

- Dust suppression will be achieved using 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.
- Gravel will be used on 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.

D-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 E

Health and Safety Plan

LANGAN

HEALTH AND SAFETY PLAN

for

SUPPLEMENTAL REMEDIAL INVESTIGATION

BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK
NYSDEC BCP No. C231137

Prepared For:

GO Broome LLC
432 Park Avenue South, 2nd Floor
New York, New York 10016

Prepared By:

Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology D.P.C.
300 Kimball Drive
Parsippany, New Jersey 07054

September 2021
100646801

LANGAN

300 Kimball Drive Parsippany, NJ 07054 T: 973.560.4900 F: 973.560.4901 www.langan.com

New Jersey • New York • Connecticut • Massachusetts • Pennsylvania • Washington, DC • Ohio • Illinois • Florida • Texas • Arizona • Colorado • Washington • California
Athens • Calgary • Dubai • London • Panama

ENVIRONMENTAL HEALTH AND SAFETY PLAN

Client:	**GO Broome LLC**
Project:	**Site Management Plan**
Location:	**Broome Street Parking Lot Site, New York, New York**
Chemical Hazards:	**Volatile organic compounds (VOCs), Pesticides, Polycyclic aromatic hydrocarbons (PAHs), Metals**
Prepared By:	**LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING, LANDSCAPE ARCHITECTURE AND GEOLOGY, D.P.C.**
Version:	**1**
Date:	**September 2021**

Client Contact:	**Bryan Kelly**	**(212) 716-2502**
Langan Project Manager (PM):	**Amanda Forsburg**	**(973) 560-4900**
Langan Health & Safety Manager (HSM):	**Tony Moffa, CHMM**	**(215) 491-6545**
Langan Health and Safety Officer (HSO):	**Field Personnel**	
WorkCare:		**1-888-449-7787**
Langan Incident/Injury Hotline:		**1-800-952-6426 or (973) 560-4699**

LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING, LANDSCAPE ARCHITECTURE AND GEOLOGY, D.P.C., (LANGAN), AND LANGAN SUBCONTRACTORS, DO NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THIS SITE. DUE TO THE NATURE OF THIS SITE AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS WHICH MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY AT THIS SITE. THE HEALTH AND SAFETY GUIDELINES IN THIS PLAN WERE PREPARED SPECIFICALLY FOR THIS SITE AND SHOULD NOT BE USED ON ANY OTHER SITE WITHOUT PRIOR RESEARCH AND EVALUATION BY A TRAINED HEALTH AND SAFETY SPECIALIST. THIS HASP HAS BEEN PREPARED FOR LANGAN EMPLOYEES ONLY. ALL OTHER PARTIES WORKING ON THE SITE THAT HAVE THE POTENTIAL TO BE EXPOSED TO HAZARDOUS MATERIALS MUST DEVELOP AND IMPLEMENT THEIR OWN HASP FOR USE BY THEIR EMPLOYEES.

APPROVALS

By signature, the personnel identified below hereby acknowledge that they have reviewed this Health and Safely Plan (HASP) and agree to comply with the requirements contained therein as well as the applicable provisions of 29 CFR Parts 1910 and 1926. Furthermore, in reviewing and accepting this HASP, as currently written, the undersigned agree that to the best of their knowledge, this HASP adequately identifies the activities and hazards associated with work at this site and describes the appropriate and necessary precautions and protections for site workers required by the applicable OSHA statutes and regulations.

Amanda M. Forsburg

LANGAN Project Manager - PM (Amanda Forsburg, CHMM) — 10/7/2021 Date

LANGAN Health and Safety Manager (Tony Moffa, CHMM) — Date

LANGAN Health and Safety Officer – HSO — Date

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1.0 INTRODUCTION

1.1 Purpose and Policy

This Health and Safety Plan (HASP) has been developed to comply with the regulations under Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120(b)(4), Hazardous Waste Operations and Emergency Response. It addresses foreseeable activities associated with the site work to be conducted at the Broome Street Parking Lot Site located in New York, New York (see Figure 1). This HASP establishes personnel protection standards and mandatory safety practices and procedures. Additionally, it assigns responsibilities, establishes standard operating procedures, and provides for contingencies that may arise while operations are being conducted at known or suspected hazardous waste sites.

Langan personnel involved with inspection of site work activities which involve the displacement of soil and/or material during any future remedial measure activities shall comply with the requirements of this HASP. All Langan personnel engaged in onsite activities will read this document carefully and complete the Safety Briefing Form (Attachment A), a copy of which will be provided to Langan's Project files. Contractors and subcontractors conducting any future remedial measure activities which will disturb or displace soil and/or the sub-slab depressurization system (SSDS) at the site are required to develop and follow their own HASP based on the identified hazards. All sampling data and environmental reports pertaining to the site that are available to Langan will be provided upon request to the Langan PM. Contractors and subcontractors are responsible for their own workers Health and Safety and providing a safe working environment in accordance with all applicable federal, state and local requirements. Each Subcontractor will have a designated Site Health and Safety Manager who will be responsible for ensuring that the designated procedures are implemented in the field. Personnel who have any questions or concerns regarding implementation of this plan are encouraged to request clarification from the Langan PM. Field personnel must follow the designated health and safety procedures, be alert to the hazards associated with working close to vehicles and equipment, and use common sense and exercise reasonable caution at all times.

This HASP covers future remedial measure activities which have the potential to disturb and/or displace potentially contaminated soil and/or soil vapor, and/or the installed SSDS. These activities include, but are not limited to: site-wide inspection, SSDS inspection and maintenance, excavation, soil sampling, stockpiling, backfilling, and equipment decontamination.

This HASP was prepared in accordance with the following documents and/or guidelines:

- Occupational Safety and Health Administration (OSHA) regulations for hazardous site workers (29 CFR 1910.120 and 29 CFR 1926); and,
- NIOSH/OSHA/USCG/USEPA *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities.*

Langan's Health and Safety Program and Safe Operating Procedures support this site-specific HASP.

The level of protection and the procedures specified in this HASP represent the minimum health and safety requirements to be observed by Langan site personnel engaged in the referenced future remedial measure activities. Unknown conditions may exist, and known conditions may change. Should an employee find himself or herself in a potentially hazardous situation, the employee will immediately discontinue the hazardous procedure(s) and either personally effect appropriate preventative or corrective measures, or immediately notify the Health and Safety Officer or the Langan PM of the nature of the hazard. In the event of an immediately dangerous or life threatening situation, the employee always has "stop work" authority. Any necessary revision to the Health and Safety procedures will be recorded in the Field Procedure Change Authorization Form (Attachment B), and will require authorization from the Langan Health and Safety Manager and Langan PM.

The provisions of this HASP address worker health and safety within defined contaminant zones and assume that work will be completed within asphalt paved parking and walkway areas and landscaped areas. Additional provisions including modifications to excavation techniques to further limit potential exposure to sensitive populations will be required if work is to be conducted within occupied building areas or in occupied areas that may be impacted by the proposed work.

THE ULTIMATE RESPONSIBILITY FOR THE HEALTH AND SAFETY OF THE INDIVIDUAL EMPLOYEE RESTS WITH THE EMPLOYEE AND HIS OR HER COLLEAGUES. Each employee is responsible for exercising the utmost care and good judgment in protecting his or her own health and safety and that of fellow employees. Should any employee observe a potentially unsafe condition or situation, it is the responsibility of that employee to immediately bring the observed condition to the attention of the appropriate health and safety personnel as designated above and to follow-up the verbal notification by completing the Unsafe Conditions and Practices Form provided in Attachment C, a copy of which will be provided to the Langan Health and Safety Officer.

"Extenuating" circumstances such as budget or time constraints, equipment breakdown, changing or unexpected conditions, never justify unsafe work practices or procedures. In fact, the opposite is true. Under stressful circumstances all project personnel must be mindful of the potential to consciously or unconsciously compromise health and safety standards, and be especially safety conscious. **ALL SITE PERSONNEL ARE EXPECTED TO CONSIDER "SAFETY FIRST" AT ALL TIMES.**

1.2 Site Description

The Site is located in the Lower East Side section of Manhattan, New York and is identified as Block 346, Lot 75. The Site is an approximately 23,960-square foot parcel located in an urban area and is bound to the north by Broome Street followed by an at-grade parking facility, to the east by Suffolk Street followed by a mixed-use property with a large asphalt-paved parking area, to the south by a five-story mixed-use building, and to the west by the 14-story Hong Ning Housing for the Elderly building and the former Beth Hamedrash Hagodol Synagogue which was demolished in June 2020.

1.3 Scope of Work

The site work activities which will require the oversight by a Langan Engineer include the following scope and will include the completion of:

- Task 1: Site Wide Inspection;
- Task 2: SSDS Maintenance and Inspection;
- Task 3: Excavation observation and soil screening;
- Task 4: Stockpiling;
- Task 5: Collection of soil samples; and,
- Task 6: Excavation Backfill.

2.0 PROJECT TEAM ORGANIZATION AND RESPONSIBILITIES

This section specifies the Langan Project Organization.

2.1 Langan Project Manager

The Langan Project Manager (PM) is Amanda Forsburg. The PM responsibilities include:

- Prepares and organizes the background review of site conditions, the site HASP, and the field team;
- Obtains permission for site access and coordinates activities with appropriate officials;
- Briefs the field team on their specific assignments;
- Coordinates with the Health and Safety Officer (HSO) to ensure that health and safety requirements are met;
- Serves as the liaison with public officials;
- Ensuring that this HASP is developed and approved prior to on-site activities;
- Ensuring that all the tasks in the project are performed in a manner consistent with Langan's comprehensive Health and Safety Program for Hazardous Waste Operations and this HASP.

2.2 Health and Safety Manager (HSM)

The Langan Corporate Health and Safety Manager (HSM) is Tony Moffa. His responsibilities include:

- Serving as a resource in the development and implementation of HASPs;
- Assist in reviewing results of Jobsite Safety Inspections;
- Assisting site Health and Safety Officer (HSO) with development of the HASP, updating HASP as dictated by changing conditions, jobsite inspection results, etc.;
- Maintaining all records on personnel (medical evaluation results, training and certifications, accident investigation results, etc.).

2.3 Langan Health and Safety Officer (HSO)

The Langan Health and Safety Officer (HSO) is to be identified prior to the start of field work. The HSO responsibilities include:

- Participating in the development and implementation of this HASP;
- Conducting Jobsite Safety Inspections (Attachment G) and correcting any shortcomings in a timely manner;
- Helping to select proper Personal Protective Equipment (PPE) and periodically inspecting it;
- Ensuring that PPE is properly stored and maintained;
- Controlling entry into and exit from the contaminated areas or zones of the site;
- Confirming each team member's suitability for work based on a current physician's recommendation;
- Monitoring the work parties for signs of stress, such as heat stress, fatigue, and cold exposure;
- Monitoring site hazards and conditions;
- Knowing (and ensuring that all site personnel also know) emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire department, and police department;
- Resolves conflicting situations which may arise concerning safety requirements and working conditions.
- Conducting daily tailgate meetings to review applicable Hazard Analyses (Table 3) as well as check-in with site personnel.

3.0 HAZARDS ANALYSIS

This section presents an assessment of the general, chemical, physical, and biological hazards that may be encountered during the tasks specified under this HASP (Section 1.3). A detail on types of potential contaminants of concerns Langan anticipates to encounter at different locations during the intrusive investigation is listed in Tables 1 and 2 of this HASP.

3.1 General Hazard Assessment

A general hazard assessment was conducted for the required field work described in Section 1.3 and the following potential hazards have been identified:

- Inhalation of volatile organic compounds (VOCs) with high volatilization potential;
- Inhalation of semi-volatile organic compounds (SVOCs) with low volatilization potential;
- Skin and eye contact with contaminants;
- Ingestion of contaminants;
- Inhalation of dusts impacted with polycyclic aromatic hydrocarbons (PAHs) and metals;
- Physical hazards associated with the use of heavy equipment;
- Tripping hazards;
- Noise exposure;
- Heat stress (depending on weather conditions);
- Cold exposure (depending on weather conditions);
- Flammable hazards;
- Electrical hazards; and,
- Use of personal protective equipment.

These hazards are further described in the task-by-task hazard analysis in Table 3. Specific chemical, physical and biological hazards are discussed below.

Mitigation and controls will include as needed work procedures, work/rest regiment, dust control measures, personal protective equipment, and respiratory protection as appropriate.

3.2 Chemical Exposure Hazards

The following chemical hazard evaluation for the proposed site investigation activities is based on the historical use of the subject property and includes compounds commonly associated with historic urban fill and petroleum storage. The evaluation has been conducted to identify chemicals/materials that potentially may be present at the site, and to ensure that work activities, personnel protection, and emergency response are consistent with the specific contaminants that potentially could be encountered.

3.2.1 Specific Chemical Hazards Previously Detected at the Site

Potential contaminants that may be encountered while conducting site investigation activities include VOCs, SVOCs, and metals commonly associated with historic urban fill and petroleum impacted soils. Table 1 lists Contaminants of Concern and potentially affected media. Exposure limits for potential contaminants that might be encountered in the field are listed in Table 2.

3.2.2 Chemical Hazard Exposure Routes

Potential hazards and their exposure routes include:

- Inhalation of organic vapors due to the presence of volatile organic compounds in soil or groundwater and from diesel-powered equipment and minimal volatilization potential related to the presence of SVOCs in soil.
- Inhalation of dust impacted with SVOCs or metals associated with soil borings and soil sampling activity.
- Inadvertent ingestion of potentially toxic substances via hand to mouth contact or deliberate ingestion of materials inadvertently contaminated with potentially toxic materials.
- Dermal exposure and possible percutaneous (skin) absorption of certain lipophilic (readily absorbed through the skin) SVOCs.
- Skin and eye contact with contaminants at the site and decontamination activities.

Exposure limits and health effects of selected chemicals are in Table 2. The probability of exposure for each task is outlined in Table 3.

3.2.3 Control of Exposure to Chemical Hazards

To protect potentially exposed personnel the following procedures and protocols will be adopted and used as needed: work procedures will be adhered to, work zones will be established, dust control will be utilized, respirators (if required) and personal protective equipment will be worn, Dust monitoring will be conducted during times of disturbance of the impacted soil to assess the potential inhalation pathway of exposure and strict personnel decontamination procedures will be followed.

3.3 Physical Hazards

3.3.1 Temperature Extremes

Hot Temperatures

Heat stress is a significant potential hazard, which is greatly exacerbated with the use of PPE, in hot environments. The potential hazards of working in hot environments include dehydration, cramps, heat rash, heat exhaustion, and heat stroke. If onsite workers exhibit the signs of heat exhaustion or heat stroke, they should seek immediate medical attention.

Cold Temperatures

Workers may be exposed to the hazard of working in a cold environment. Potential hazards in cold environments include frostbite, trench foot or immersion foot, hypothermia, as well as slippery surfaces, brittle equipment, poor judgment, and unauthorized procedural changes. In order to prevent frostbite, hypothermia, trench foot and immersion foot, the workers are responsible for dressing warmly in layers with thick socks, gloves, and appropriate head and face gear. Upon the onset of discomfort due to the cold, onsite workers should take regular five to ten minute breaks to warm up inside nearby buildings and to drink warm fluids. Please note that the NYCDEP statute prohibits idling an engine for more than three minutes (one-minute if adjacent to a school). This statue includes the use of a vehicle for the purpose of warming up employees. As such, all contractors and employees shall identify a place to warm up in advance. If discomfort continues and the onsite workers start to exhibit the signs of frostbite, hypothermia, trench foot or immersion foot, they should seek immediate medical attention.

3.3.2 Noise and Air Resources

Noise is a potential hazard associated with the operation of heavy equipment, power tools, pumps and generators. Hearing protection is required and shall be used in designated areas of the site as indicated by the posted signs.

3.3.3 Hand and Power Tools

In order to complete the various tasks for the project, personnel will utilize hand and power tools. The use of hand and power tools can present a variety of hazards, including physical harm from being struck by flying objects, being cut or struck by the tool, fire, and electrocution. Hand and power tools will be inspected prior to use. Proper personal protective equipment shall be worn while utilizing hand and power tools. Ground Fault Circuit Interrupters (GFCIs) are required for all portable electric tools.

3.3.4 Slips, Trips, and Falls

Working in and around the site will pose slip, trip and fall hazards due to equipment, piping, slippery surfaces that may be oil covered, or from surfaces that are wet from rain or ice. Potential adverse health effects include falling to the ground and becoming injured or twisting an ankle. Good housekeeping at the site must be maintained at all times.

3.3.5 Fire and Explosion

Prior to starting all excavation work, a review of appropriate New York City maps will be conducted to identify potential hazards. The possibility of encountering fire and explosion hazards exists from under- ground utilities and gases. Therefore, all excavation equipment must be grounded.

3.3.6 Material Handling

Manual lifting of heavy objects may be required. Failure to follow proper lifting techniques can result in back injuries and strains. Back injuries are a serious concern as they are the most common workplace injury, often resulting in lost or restricted work time, and long treatment and recovery periods.

Whenever possible, heavy objects must be lifted and moved by mechanical devices rather than by manual effort. The mechanical devices will be appropriate for the lifting or moving task and will be operated only by trained and authorized personnel. Objects that require special handling or rigging will only be moved under the guidance of a person who has been specifically trained to move such objects, such as a Master Rigger or equivalent. Lifting devices, including equipment, slings, ropes, chains, and straps, will be inspected, certified, and labeled to confirm their weight capacities. Defective equipment will be taken out of service immediately and repaired or destroyed.

The lift and swing path of a crane/equipment will be watched and maintained clear of obstructions. Personnel will not pass under a raised load, nor will a suspended load be left unattended. Personnel will not be carried on lifting equipment, unless it is specifically designed to carry passengers.

All reciprocating, rotating, or other moving parts will be guarded at all times. Accessible fire extinguishers will be made available in all mechanical lifting devices. All material must be stored in tiers, racked, blocked, or otherwise secure to prevent sliding, falling, or collapse. All loads/material will be verified to be secure before transportation.

3.3.7 Confined Space/Excavation Hazards

Personnel entry into trenches or unshored (*e.g.,* lagging) excavations within the designated areas of concern will not be permitted. No other confined spaces are known to exist on Site. If entry into trenches or excavations is required, all work will stop until the HASP has been revised to address the new hazards.

3.3.8 Working Near Equipment

Personnel working in the immediate vicinity of heavy equipment (*e.g.*, excavators, loaders, etc.) may encounter physical hazards resulting from contact with equipment. Field personnel should be aware of the presence of these hazards at all times and take appropriate action to avoid them. Due to the limited ability to communicate when wearing respiratory protection, the risk is increased. Workers must be careful to communicate

with heavy equipment operators regarding their location, and should maintain a safe distance from operating equipment at all times. Prior to working around equipment, the site personnel will review appropriate hand signals with the operator.

Equipment will be equipped with back up alarms.

3.3.9 Drill Rig Operations

In order to complete soil borings and permanent well installation, a drilling rig will be used. Working with and near this equipment and associated power generators pose many potential hazards, including being struck by or against, or pinched/caught by moving parts. These hazards can result in serious physical harm. Other hazards include electrocution and explosion due to encountering overhead or underground utilities.

Drill rigs for hollow stem auger drilling and other machinery with exposed moving parts must be equipped with an operational emergency stop device. Drillers and other field personnel must be aware of the location of this device. This device must be tested prior to job initiation and periodically thereafter. The driller and helper shall not simultaneously handle augers unless there is a standby person to activate the emergency switch. Only equipment that has been approved by the manufacturer may be used in conjunction with site equipment and specifically to attach sections of drilling tools together. Pins that protrude excessively from augers shall not be allowed.

The driller must never leave the controls while the tools are rotating unless all personnel are kept clear of rotating equipment. A remote sampling device must be used to sample drill cuttings if the tools are rotating or if the tools are readily capable of rotating. Samplers must not reach into or near the rotating equipment. Drillers, helpers, and other field personnel must secure all loose clothing when in the vicinity of drilling operations. No person shall climb the drill mast while tools are rotating or without the use of ANSI-approved fall protection (approved belts, lanyards and a fall protection slide rail) or portable ladder that meets the requirement of the OSHA standard.

3.3.10 Electrical Safety

The use of hand and power tools can present a variety of hazards, including physical harm from being struck by flying objects, being cut or struck by the tool, fire, and electrocution. Ground Fault Circuit Interrupters (GFCIs) are required for all portable electric tools.

3.3.11 Utilities

Prior to the start of any intrusive work, the location of above-ground and underground utilities and other structures will be completed by the contractor/subcontractor responsible for completing investigation activities.

3.3.12 Vehicular Traffic

Portions of site activities (mobilization/demobilization) will be conducted in the asphalt paved parking and walkway areas so vehicular and pedestrian traffic will be present. Appropriate precautions to protect the on-site workers and civilians should be used including the use of cones and traffic vests as appropriate.

3.4 Biological Hazards

During the course of the project, there is a potential for workers to come into contact with biological hazards such as animals and insects. As the potential for exposure to blood borne pathogens during site investigation is anticipated to be low, a Blood Borne Pathogen Exposure Plan (BBPEP) is not required. A BBPEP will be prepared if site operation requires its implementation.

3.4.1 Animals

During site operations, animals such as dogs, cats, pigeons, mice, and rats may be encountered. Workers shall use discretion and avoid all contact with animals. Bites and scratches from dogs and cats can be painful and if the animal is rabid, the potential for contracting rabies exists. Contact with rat and mice droppings may lead to contracting hantavirus. Inhalation of dried pigeon droppings may lead to psittacosis. Cryptococcosis and histoplasmosis are also diseases associated with exposure to dried bird droppings but these are less likely to occur in this occupational setting.

3.4.2 Insects

Insects, including bees, wasps, hornets, mosquitoes, spiders, and ticks may be present at the site. Some individuals may have a severe allergic reaction to an insect bite or sting that can result in a life threatening condition. In addition, mosquito bites may lead to St. Louis encephalitis or West Nile encephalitis.

3.4.3 Wound Care

A source of occupational exposure may occur when an employee gives First Aid and or CPR to an individual who had infectious blood. The occupational exposure occurs when there is the possibility for an employee's eyes, mucous membranes, non-intact skin (i.e., cut and abraded skin) to come into contact with potentially infectious materials from another employee. If an accident were to occur where First Aid would need to be administered, the person administering the First Aid will presume that any wounds and materials used are contaminated with BBP and should wear the appropriate PPE to prevent contact with these materials. Additionally, should the use of First Aid materials and or clothing that was potentially contaminated with BBP be encountered these materials should be property containerized and transported to the nearest hospital for proper disposal.

3.5 Task Hazard Analysis

The tasks to be completed during the proposed site work activities, as summarized in Section 1.3, are listed in Table 3 with a Hazard Analysis for each task.

4.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

4.1 Levels of Protection

PPE must protect workers from the specific hazards they are likely to encounter on site. Selection of the appropriate PPE must take into consideration: (1) identification of the hazards or suspected hazards; (2) potential exposure routes; and, (3) the performance of the PPE construction (materials and seams) in providing a barrier to these hazards. Based on anticipated site conditions and the

proposed work activities to be performed at the site, Level D Protection will be used for work completed within the defined exclusion zone. This will include any work within the defined investigation areas. Level D Protection will be required for all personnel working outside the investigation area but engaged with sampling or monitoring activities. The upgrading/downgrading of these levels of protection will be based on continuous air monitoring results as described in Section 5.0. The decision to modify standard PPE will be made by the HSO after conferring with the Project Manager. The levels of protection are described below.

- **Level D Protection**

  a. Safety glasses w/ sideshields or chemical splash goggles
  b. Safety boots/shoes (toe-protected)
  c. Hard hat
  d. Long sleeve work shirt and work pants
  e. Nitrile gloves
  f. Hearing protection (as needed)
  g. Reflective traffic vest

- **Level D Protection (Modified)**

  a. Safety glasses w/ sideshields or chemical splash goggles
  b. Safety boots/shoes (toe-protected)
  c. Disposable chemical-resistant boot covers
  d. Coveralls Tyvek or equivalent to be worn when contact with contaminated soil or groundwater, or non-aqueous phase liquids is anticipated)
  e. Hard hat
  f. Long sleeve work shirt and work pants
  g. Nitrile gloves
  h. Hearing protection (as needed)
  i. Reflective traffic vest

- **Level C Protection**

  a. Full face-piece, air-purifying, cartridge*-equipped, NIOSH-approved respirator [*combo cartridge P100/OV/CL/HC/SD/CD/HS (escape)]
  b. Inner (latex) and outer (nitrile) chemical-resistant glove
  c. Chemical-resistant safety boots/shoes (toe-protected)
  d. Disposable chemical-resistant boot covers
  e. Hard hat

f. Long sleeve work shirt and work pants
g. Coveralls (Tyvek or equivalent, poly-coated Tyvek will be worn when contact, or anticipated contact with wet contaminated soils, ground water, and/or non-aqueous phase liquids (NAPL) is anticipated)
h. Hearing protection (as needed)
i. Reflective traffic vest

The action levels used in determining the necessary levels of respiratory protection and upgrading to Level C are summarized in Table 4. The written Respiratory Protection Program is maintained by the HSM in Langan's Doylestown, Pennsylvania office. The monitoring procedures and equipment are outlined in Section 5.0.

4.2 Respirator Fit-Test

All Langan employees and subcontractors performing site work who could be exposed to hazardous substances at the work site are in possession of a full face-piece, air-purifying respirator and have been successfully quantitative fit-tested within the past year. Quantitative fit-test records are maintained by the HSM.

4.3 Respirator Cartridge Change-Out Schedule

Respiratory protection is required to be worn when certain action levels (Table 2) are reached. A respirator cartridge change-out schedule has been developed in order to comply with 29 CFR 1910.134. The respirator cartridge change-out schedule for this project is as follows:

- Cartridges shall be removed and disposed of at the end of each shift, when cartridges become wet or wearer experiences breakthrough, whichever occurs first.
- If the humidity exceeds 85%, then cartridges shall be removed and disposed of after 4 hours of use.

Respirators shall not be stored at the end of the shift with contaminated cartridges left on. Cartridges shall not be worn on the second day, no matter how short the time period was the previous day they were used.

5.0 AIR QUALITY MONITORING AND ACTIONS LEVELS

5.1 Monitoring During Site Operations

Atmospheric air monitoring results are used to provide data to determine when exclusion zones need to be established and when certain levels of personal protective equipment are required. For all instruments there are Site-specific action level criteria which are used in making field health and safety determinations. Other data, such as the visible presence of contamination or the steady state nature of air contaminant concentration, are also used in making field health and safety decisions. Therefore, the Langan Health and Safety Officer may expand the exclusion zone beyond the extents of the sampling area or require a person to wear a respirator even though atmospheric air contaminant concentrations are below established HASP action levels.

During site work involving disturbance of impacted soil/fill material, real time air monitoring will be conducted to assess the potential for exposure to airborne contaminants of concern including VOCs, SVOCs, and metals. A photoionization detector (PID) will be used to monitor concentrations of VOCs at personnel breathing-zone height to assess the potential exposure to petroleum related VOCs related to use of machinery including backhoes, drill rigs, compressors etc. Dust monitoring will be completed with an aerosol monitor. Air monitoring will be the responsibility of the Langan Health and Safety Officer or designee. Air monitoring will be conducted during intrusive activities associated with the completion of soil borings and collection of soil and groundwater samples. All manufacturers' instructions for instrumentation and calibration will be available onsite.

Subcontractors' air monitoring plans must be equal or more stringent as the Langan plan.

An air monitoring calibration log is provided in Attachment D of this HASP.

5.1.1 Volatile Organic Compounds

Monitoring with a PID, such as a MiniRAE 3000 (10.6v) or equivalent will occur during investigation activities within the work zone and at the downwind perimeter of the work zone. Colormetric Indicator Tubes for benzene may be used as backup for the PID, if measurements remain above background monitor every 2 hours. The HSO will monitor the

employee breathing zone at least every 30 minutes, or whenever there is any indication that concentrations may have changed (odors, visible gases, appearance of drill cuttings, etc.) since the last measurement. If VOC levels are observed above 5 ppm for longer than 5 minutes or if the site PPE is upgraded to Level C, the HSO will begin monitoring the site perimeter at a location downwind of the work zone every 30 minutes in addition to the employee breathing zone. Instrument action levels for monitored gases are provided in Table 4.

5.1.2 Dust

During invasive procedures which have the potential for creating airborne dust, real time air monitoring with an aerosol monitor, such as a Thermo MEI person DataRAM-1000 (pDR-1000) will occur. The HSO will monitor the employee breathing zone at least every 30 minutes, or whenever there is any indication that concentrations may have changed (appearance of visible dust) since the last measurement. If dust levels are observed to be greater than 0.100 mg/m^3 or visible dust is observed for longer than 15 minutes or if the site PPE is upgraded to Level C, the HSO will begin monitoring the site perimeter at a location downwind of the AOC every 30 minutes in addition to the employee breathing zone. If dust is generated during investigation activities, dust suppression methods will be employed to minimize potential for exposure. Action levels for dust monitoring are provided in Table 4.

5.2 Monitoring Equipment Calibration and Maintenance

Instrument calibration shall be documented and included in a dedicated safety and health logbook or on separate calibration pages of the field book. All instruments shall be calibrated before and after each shift. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings may be taken to confirm individual instrument response.

All instruments shall be operated in accordance with the manufacturers' specifications. Manufacturers' literature, including an operations manual for each piece of monitoring equipment will be maintained on site by the HSO for reference.

5.3 Determination of Background Levels

Background (BKD) levels for VOCs and dust will be established prior to intrusive activities within the work zone. A notation of BKD levels will be referenced in the daily monitoring log. BKD levels are a function of prevailing conditions. BKD levels will be taken in an appropriate upwind location as determined by the Langan Health and Safety Officer.

Table 4 lists the instrument action levels.

6.0 COMMUNITY HEALTH AND SAFETY CONSIDERATIONS

Community air monitoring will be conducted in compliance with the NYSDOH Generic CAMP outlined below.

The CAMP will include real-time monitoring for VOCs and particulates at the downwind perimeter of each designated work area when ground-intrusive work is in progress. Continuous monitoring will be required for all ground-intrusive work. Ground-intrusive work includes, but is not limited to, soil/fill excavation and handling and utility trenching. Periodic monitoring for VOCs may be required during non-intrusive work such as the collection of soil samples. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location and taking a reading prior to leaving a sample location.

CAMP monitoring of total VOC levels will be conducted using PIDs, and monitoring for particulates will be conducted using particulate sensors equipped with filters that can detect airborne particulates less than 10 microns in diameter (PM10). Monitoring for particulates and odors will be conducted during ground-intrusive work by a field engineer, scientist, or geologist under the supervision of the RE. The work zone is defined as the general area in which machinery is operating in support of remediation. A portable PID will be used to monitor the work zone and for periodic monitoring of total VOC levels during work such as soil sampling. The site perimeter will be visually monitored for fugitive dust emissions.

The following actions will be taken based on total VOC levels measured:

- If total VOC levels exceed 5 ppm above background for the 15-minute average at the perimeter, work will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 ppm above background, work will resume with continued monitoring.

- If total VOC levels at the downwind perimeter of the work zone persist at levels in excess of 5 ppm above background but less than 25 ppm, work will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work will resume provided that the total VOC level 200 feet downwind of the hot zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm above background for the 15-minute average.
- If the total VOC level is above 25 ppm at the perimeter of the hot zone, work will be shut down.

The following actions will be taken based on dust levels measured or visual dust observations:

- If the downwind particulate level is 100 µg/m³ greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression must be employed. Work may continue with dust suppression techniques provided that downwind PM10 levels do not exceed 150 µg/m³ above the background level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM10 levels are greater than 150 µg/m³ above the background level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM10 concentration to within 150 µg/m³ of the upwind level and in preventing visible dust migration.

Sustained concentrations of VOCs or PM10 will be reported to the NYSDEC and NYSDOH Project Managers and included in the daily report. In addition, a map showing the location of the downwind and upwind CAMP stations will be included in the daily report.

7.0 WORK ZONES AND DECONTAMINATION

7.1 Site Control

Work zones are intended to control the potential spread of contamination throughout the site and to assure that only authorized individuals are permitted into potentially hazardous areas.

Any person working in an area where the potential for exposure to site contaminants exists will only be allowed access after providing the HSO with proper training and medical documentation.

Exclusion Zone (EZ) - All activities which may involve exposure to site contaminants, hazardous materials and/or conditions should be considered an EZ. Decontamination of field equipment will also be conducted in the Contaminant Reduction Zone (CRZ) which will be located on the perimeter of the EZ. The EZ and the CRZ will be clearly delineated by cones, tapes or other means. The Langan Health and Safety Officer may establish more than one EZ where different levels of protection may be employed or different hazards exist. The size of the EZ shall be determined by the Langan Health and Safety Officer allowing adequate space for the activity to be completed, field members and emergency equipment. For purposes of this HASP the exclusion zones are defined by a 10-foot buffer around each soil boring and permanent monitoring well location but may be expanded based on the results of air monitoring or any other field conditions identified by the HSO. All personnel working in the EZ must have 40 hours HAZWOPER training and be enrolled in a medical monitoring program prior to conducting any site activities.

7.2 Contamination Control

7.2.1 Personnel Decontamination Station

Personal hygiene, coupled with diligent decontamination, will significantly reduce the potential for exposure.

7.2.2 Minimization of Contact with Contaminants

During completion of all site activities, personnel should attempt to minimize the chance of contact with contaminated materials. This involves a conscientious effort to keep "clean" during site activities. All personnel should minimize kneeling, splash generation, and other physical contact with contamination as PPE is intended to minimize accidental contact. This may ultimately minimize the degree of decontamination required and the generation of waste materials from site operations.

Field procedures will be developed to control over spray and runoff and to ensure that unprotected personnel working nearby are not affected.

7.2.3 Personnel Decontamination Sequence

Decontamination will be performed by removing all PPE used in EZ and placing it in drums/trash cans at the CRZ. Baby wipes shall be available for wiping hands and face. Drums/trash cans will be labeled by the field crews in accordance with all local, state, and federal requirements. Management plans for contaminated PPE, tools and investigative-derived waste (i.e., soil cutting) are provided below.

7.2.4 Emergency Decontamination

If circumstances dictate that contaminated clothing cannot be readily removed, then remove gross contamination and wrap injured personnel with clean garments/blankets to avoid contaminating other personnel or transporting equipment.

If the injured person can be moved, he/she will be decontaminated by site personnel as described above before emergency responders handle the victim. If the person cannot be moved because of the extent of the injury (a back or neck injury), provisions shall be made to ensure that emergency response personnel will be able to respond to the victim without being exposed to potentially hazardous atmospheric conditions. If the potential for inhalation hazards exist, such as with open excavation, this area will be covered with polyethylene sheeting to eliminate any potential inhalation hazards. All emergency personnel are to be immediately informed of the injured person's condition, potential contaminants, and provided with all pertinent data.

7.2.5 Hand-Held Equipment Decontamination

Hand-held equipment includes all monitoring instruments as stated earlier, samples, hand tools, and notebooks. The hand-held equipment is dropped at the first decontamination station to be decontaminated by one of the decontamination team members. These items must be decontaminated or discarded as waste prior to removal from the CRZ.

To aid in decontamination, monitoring instruments can be sealed in plastic bags or wrapped in polyethylene. This will also protect the instruments against contaminants. The instruments will be wiped clean using wipes or

paper towels if contamination is visually evident. Sampling equipment, hand tools, etc. will be cleaned with non-phosphorous soap to remove any potentially contaminated soil, and rinsed with deionized water. All decontamination fluids will be containerized and stored on-site pending waste characterization sampling and appropriate off-site disposal.

7.2.6 Heavy Equipment Decontamination

All heavy equipment and vehicles arriving at the work site will be free from contamination from offsite sources. Any vehicles arriving to work that are suspected of being impacted will not be permitted on the work site. Potentially contaminated heavy equipment will not be permitted to leave the EZ unless it has been thoroughly decontaminated and visually inspected by the HSO or his designee.

7.3 Communications

The following communications equipment will be utilized as appropriate.

- Telephones - A cellular telephone will be located with the HSO for communication with the HSM and emergency support services/facilities.
- Hand Signals - Hand signals shall be used by field teams, along with the buddy system. The entire field team shall know them before operations commence and their use covered during site-specific training. Typical hand signals are the following:

Signal	Meaning
Hand gripping throat	Out of air, can't breathe
Grip on partner's wrist or placement of both hands around partner's waist	Leave area immediately, no debate
Hands on top of head	Need assistance
Thumbs up	Okay, I'm all right, I understand
Thumbs down	No, negative

8.0 MEDICAL SURVEILLANCE

All personnel who will be performing field work involving potential exposure to toxic and hazardous substances will be required to have passed an initial baseline medical examination, with annual follow-up medical exams thereafter, consistent with 29 CFR 1910.120(f). Medical evaluations will be performed by, or under the direction of, a physician board-certified in occupational medicine. Results of medical evaluations are maintained by the HSM.

9.0 EMERGENCY RESPONSE PLAN

This section establishes procedures and provides information for use during a project emergency. Emergencies happen unexpectedly and quickly, and require an immediate response; therefore, contingency planning and advanced training of staff is essential. Specific elements of emergency support procedures that are addressed in the following subsections include communications, local emergency support units, preparation for medical emergencies, first aid for injuries incurred on site, record keeping, and emergency site evacuation procedures. In case of emergency, in addition to 911 the Langan Incident/Injury Hotline (973-560-4699) should be called as soon as possible.

9.1 Responsibilities

9.1.1 Langan Health and Safety Officer (HSO)

The HSO is responsible for ensuring that all personnel are evacuated safely and that machinery and processes are shut down or stabilized in the event of a stop work order or evacuation. The HSO is responsible for ensuring the HSM are notified of all incidents, all injuries, near misses, fires, spills, releases or equipment damage. The HSO is required to immediately notify the HSM of any fatalities or catastrophes (three or more workers injured and hospitalized) so that the HSM can notify OSHA within the required time frame.

9.1.2 Emergency Coordinator

For this project the Emergency Coordinator is the HSO.

The Emergency Coordinator shall locate emergency phone numbers and identify hospital routes prior *to beginning* work on the sites. The

Emergency Coordinator shall make necessary arrangements to be prepared for any emergencies that could occur.

The Emergency Coordinator is responsible for implementing the Emergency Response/ Contingency Plan whenever conditions resulting from the Site Investigation warrant such action.

9.1.3 Site Personnel

Project site personnel are responsible for knowing the Emergency Response Plan and the procedures contained herein. Personnel are expected to notify the Emergency Coordinator of situations that could constitute a site emergency. Project site personnel, including all subcontractors will be trained in the Emergency Response Plan.

9.2 Communications

Once an emergency situation has been stabilized or as soon as practically possible, the HSO will contact the Langan Incident/Injury Hotline (973-560-4699) and Project Manager to identify any emergency situation.

9.3 Local Emergency Support Units

In order to be able to deal with any emergency that might occur during investigative activities at the site, Attachment E Emergency Notification Numbers, will be available in the field vehicles and provided to all personnel conducting work within the EZ.

Figure 2 is the hospital route map. Outside emergency number 911 and local ambulance should be relied on for response to medical emergencies and transport to emergency rooms. Due to traffic congestion that is prevalent in the New York metropolitan area, alternate hospital routes will need to be considered. The Emergency Coordinator will determine the appropriate route based on time of day and traffic patterns. Changes in the referenced primary facilities shall be documented with the HASP Field Change Authorization Request Form (Attachment B).

The Emergency Phone Numbers listed are preliminary. Upon mobilization, the HSO shall verify all numbers and document the changes in the Site Logbook. Any changes shall also be documented with the HASP Field Change Authorization Request Form.

Hospital route maps will be provided to all field personnel.

9.4 Pre-Emergency Planning

Langan will communicate directly with administrative personnel from the emergency room at the hospital in order to determine whether the hospital has the facilities and personnel needed to treat cases of trauma resulting from any of the contaminants expected to be found on the site. Instructions for finding the hospital will be posted conspicuously in the site office and in each site vehicle.

9.5 Emergency Medical Treatment

The procedures and rules in this HASP are designed to prevent employee injury. However, should an injury occur, no matter how slight, it will be reported to the HSO on site immediately. First-aid equipment will be available on site at the following locations:

First Aid Kit:	Vehicles
Emergency Eye Wash:	Vehicles

During the site safety briefing, project personnel will be informed of the location of the first aid station(s) that has been set up. Unless they are in immediate danger, severely injured persons will not be moved until paramedics can attend to them. Some injuries, such as severe cuts and lacerations or burns, may require immediate treatment. Any first aid instructions that can be obtained from doctors or paramedics, before an emergency-response squad arrives at the site or before the injured person can be transported to the hospital, will be followed closely.

Personnel with current first aid and CPR certification will be identified.

Only in non-emergency situations will an injured person be transported to the hospital by means other than an ambulance.

Nearest hospital: **New York-Presbyterian/Lower Manhattan Hospital**
170 William Street
New York, NY 10038
(212) 312-5070
(directions from site to hospital found on Figure 2)

9.6 Non-Emergency Medical Treatment

In case of injury to personnel, which is not a medical emergency the employee will contact WorkCare at (1-888-449-7787). WorkCare provides access 24 hours / 7 days a week to experienced occupational health nurses and physicians who confer with employees at the onset of a work-related injury or illness. WorkCare will provide over the phone injury treatment or direct employees to medical treatment by third party provider, if appropriate.

9.7 Emergency Site Evacuation Routes and Procedures

All project personnel will be instructed on proper emergency response procedures and locations of emergency telephone numbers during the initial site safety meeting. If an emergency occurs as a result of the site investigation activities, including but not limited to fire, explosion or significant release of toxic gas into the atmosphere, the Langan Project Manager will be verbally notified immediately. All heavy equipment will be shut down and all personnel will evacuate the work areas and assemble at the nearest intersection to be accounted for and to receive further instructions.

9.8 Fire Prevention and Protection

In the event of a fire or explosion, procedures will include immediately evacuating the site and notification of the Langan Project Manager of the investigation activities. Portable fire extinguishers will be provided at the work zone. The extinguishers located in the various locations should also be identified prior to the start of work. No personnel will fight a fire beyond the stage where it can be put out with a portable extinguisher (incipient stage).

9.8.1 Fire Prevention

Fires will be prevented by adhering to the following precautions:

- Good housekeeping and storage of materials.

- Storage of flammable liquids and gases away from oxidizers.
- Shutting off engines to refuel.
- Grounding and bonding metal containers during transfer of flammable liquids.
- Use of UL approved flammable storage cans.
- Fire extinguishers rated at least 10 pounds ABC located on all heavy equipment, in all trailers and near all hot work activities.

The person responsible for the control of fuel source hazards and the maintenance of fire prevention and/or control equipment is the HSO.

9.9 Significant Vapor Release

Based on the proposed tasks, the potential for a significant vapor event is low. However, if a release occurs, the following steps will be taken:

- Move all personnel to an upwind location. All non-essential personnel shall evacuate.
- Upgrade to Level C Respiratory Protection.
- Downwind perimeter locations shall be monitored for volatile organics..
- If the release poses a potential threat to human health or the environment in the community, the Emergency Coordinator shall notify the Langan Project Manager.
- Local emergency response coordinators will be notified.

9.10 Overt Chemical Exposure

The following are standard procedures to treat chemical exposures. Other, specific procedures detailed on the Material Safety Data Sheet (MSDS) will be followed, when necessary.

SKIN AND EYE: Use copious amounts of soap and water from eye-wash kits and portable hand wash stations.

CONTACT: Wash/rinse affected areas thoroughly, then provide appropriate medical attention. Skin shall also be rinsed for

15 minutes if contact with caustics, acids or hydrogen peroxide occurs. Affected items of clothing shall also be removed from contact with skin.

Providing wash water and soap will be the responsibility of each individual contractor or subcontractor on-site.

9.11 Decontamination During Medical Emergencies

If emergency life-saving first aid and/or medical treatment is required, normal decontamination procedures may need to be abbreviated or omitted. The HSO or designee will accompany contaminated victims to the medical facility to advise on matters involving decontamination when necessary. The outer garments can be removed if they do not cause delays, interfere with treatment or aggravate the problem. Respiratory equipment must always be removed. Protective clothing can be cut away. If the outer contaminated garments cannot be safely removed on site, a plastic barrier placed between the injured individual and clean surfaces should be used to help prevent contamination of the inside of ambulances and/or medical personnel. Outer garments may then be removed at the medical facility. No attempt will be made to wash or rinse the victim if his/her injuries are life threatening, unless it is known that the individual has been contaminated with an extremely toxic or corrosive material which could also cause severe injury or loss of life to emergency response personnel. For minor medical problems or injuries, the normal decontamination procedures will be followed.

9.12 Incident Reporting

Once first aid and/or emergency response needs have been met, the following parties are to be contacted:

- WorkCare (1-888-449-7787)
- Langan Incident/Injury Report Hotline (973-560-4699)
- Langan Project Manager, Amanda Forsburg (973-560-4900) or Steve Ciambruschini (973-560-4900)
- Langan Health and Safety Manager, Tony Moffa (215-491-6500)
- The employer of any injured worker who is not a Langan employee

For emergencies involving personal injury and/or exposure including near-misses, the HSO or designee will complete and submit an Accident/Incident Report Form (Attachment F) within 24 hours. If the employee involved is not a Langan employee, his employer shall receive a copy of the report.

9.13 Adverse Weather Conditions

In the event of adverse weather conditions, the HSO will determine if work will continue without potentially risking the safety of all field workers. Some of the items to be considered prior to determining if work should continue are:

- Potential for heat stress and heat-related injuries.
- Potential for cold stress and cold-related injuries.
- Treacherous weather-related working conditions (hail, rain, snow, ice, high winds).
- Limited visibility (fog).
- Potential for electrical storms.
- Earthquakes.
- Other major incidents.

Site activities will be limited to daylight hours, or when suitable artificial light is provided, and acceptable weather conditions prevail. The HSO will determine the need to cease field operations or observe daily weather reports and evacuate, if necessary, in case of severe inclement weather conditions.

9.14 Spill Control and Response

All small spills/environmental releases shall be contained as close to the source as possible. Whenever possible, the MSDS will be consulted to assist in determining proper waste characterization and the best means of containment and cleanup. For small spills, sorbent materials such as sand, sawdust or commercial sorbents should be placed directly on the substance to contain the spill and aid recovery. Any acid spills should be diluted or neutralized carefully prior to attempting recovery. Berms of earthen or sorbent materials can be used to contain the leading edge of the spills. All spill containment materials will be properly disposed. An exclusion zone of 50 to 100 feet around the spill area should be established depending on the size of the spill.

All contractor vehicles shall have spill kits on them with enough material to contain and absorb the worst-case spill from that vehicle. All vehicles and equipment shall be inspected prior to be admitted on site. Any vehicle or piece of equipment that develops a leak will be taken out of service and removed from the job site.

The following seven steps shall be taken by the Emergency Coordinator:

1. Determine the nature, identity and amounts of major spills.
2. Make sure all unnecessary persons are removed from the spill area.
3. Notify the HSO immediately.
4. Use proper PPE in consultation with the HSO.
5. If a flammable liquid, gas or vapor is involved, remove all ignition sources and use non-sparking and/or explosion-proof equipment to contain or clean up the spill (diesel-only vehicles, air-operated pumps, etc.)
6. If possible, try to stop the leak with appropriate material.
7. Remove all surrounding materials that can react or compound with the spill.

In addition to the spill control and response procedures described in this HASP, Langan personnel will coordinate with the designated project manager relative to spill response and control actions. Notification to the Project Manager must be immediate and, to the extent possible, include the following information:

- Time and location of the spill.
- Type and nature of the material spilled.
- Amount spilled.
- Whether the spill has affected or has a potential to affect a waterway or sewer.
- A brief description of affected areas/equipment.
- Whether the spill has been contained.
- Expected time of cleanup completion. If spill cleanup cannot be handled by Langan's on-site personnel alone, such fact must be conveyed to the Project Manager immediately.

Langan shall not make any notification of spills to outside agencies. The client will notify regulatory agencies as per their reporting procedures.

9.15 Emergency Equipment

The following minimum emergency equipment shall be kept and maintained on site:

- Industrial first aid kit.
- Fire extinguishers (one per site).
- Absorbent material.

9.16 Restoration and Salvage

After an emergency, prompt restoration of utilities, fire protection equipment, medical supplies and other equipment will reduce the possibility of further losses. Some of the items that may need to be addressed are:

- Refilling fire extinguishers.
- Refilling medical supplies.
- Recharging eyewashes and/or showers.
- Replenishing spill control supplies.

10.0 TRAINING

10.1 General Health and Safety Training

Completion of an initial 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training program (or its equivalent) as detailed in OSHA's 29 CFR 1910.120(e) is required for all employees who will perform work in areas where the potential for a toxic exposure exists. Annual 8-hour refresher training is also required to maintain competencies to ensure a safe work environment.

10.2 Site Specific Training

Prior to commencement of site activities, all field personnel assigned to the project will have completed training that will specifically address the activities, procedures, monitoring, and equipment used in the site operations. It will include a documented verbal review of the entire HASP and all the provisions within the HASP document. Should any new employees arrive on-site, they will also be given

a documented full HASP review – or one that address the appropriate tasks that remain at the time of the new employee's arrival.

10.3 Onsite Safety Briefings

Project personnel and visitors will participate in documented daily on-site health and safety briefings ("Tailgate Talks") led by the HSO to assist site personnel in safely conducting their work activities. The briefings will include information on operations to be conducted that shift, changes in work practices or changes in the site's environmental conditions, as well as periodic reinforcement of previously discussed topics. The briefings will also provide a forum to facilitate conformance with safety requirements and to identify performance deficiencies related to safety during daily activities or as a result of safety inspections. The meetings will also be an opportunity for the work crews to be updated on monitoring results. Prior to starting any new activity, a training session will be held for crew members involved in the activity. The Health and Safety Briefing Statement (Attachment A) can be used to facilitate this effort.

10.4 Hazard Communication

All material brought on-site will be in the appropriate containers and will be properly labeled. The SDS for contaminants typically associated with petroleum-impacted soil and historic fill are attached. Langan's written Hazard Communication program, in compliance with 29 CFR 1910.1200, is maintained by the HSM.

11.0 RECORDKEEPING

The following is a summary of required health and safety logs, reports and recordkeeping.

11.1 Field Change Authorization Request

A Field Procedures Change Authorization Request Form is to be completed for requesting a change to this HASP (Attachment B). Any changes to the work to be performed that is not included in the HASP will require an Addendum that is approved by the Langan Project Manager and Langan HSM to be prepared. Approved changes will be reviewed with all field personnel at a safety briefing.

11.2 Medical and Training Records

Copies or verification of training (40-hour, 8-hour, supervisor, site-specific training, documentation of three-day OJT, and respirator fit-test records) and medical clearance for Site work and respirator use will be maintained in the office and available upon request. Records for all subcontractor employees must also be available upon request. All employee medical records will be maintained by the HSM.

11.3 Onsite Log

A log of personnel on site each day will be kept by the Site Supervisor or designee.

11.4 Daily Safety Meetings ("Tailgate Talks")

Completed Safety Briefing forms will be maintained by the HSO.

11.5 Exposure Records

All personal monitoring results, laboratory reports, calculations and air sampling data sheets are part of an employee exposure record. These records will be maintained by the HSO during site work. At the end of the project they will be maintained according to 29 CFR 1910.1020.

11.6 Hazard Communication Program/MSDS

Material Safety Data Sheets (MSDS) have been obtained for applicable substances and are included in this HASP (Attachment H). Langan's written Hazard Communication program, in compliance with 29 CFR 1910.1200, is maintained by the HSM in Parsippany, New Jersey.

11.7 Documentation

Employees are required to contact WorkCare at (1-888-449-7787) to document incidents/injuries which are not medical emergencies. Immediately following an incident or near miss, unless emergency medical treatment is required, either the employee or a coworker must contact the Langan Incident/Injury Hotline at (973)560-4699 and the client representative to report the incident or near miss. A written report must be completed and submitted to the client representative within 24 hours of the incident. For emergencies involving personnel injury and/or

exposure, employee will complete and submit the Langan Incident/Injury Report to the Langan Corporate Health and Safety Manager as soon as possible following the incident. Accidents will be investigated in-depth to identify all causes and to recommend hazard control measures.

12.0 FIELD PERSONNEL REVIEW

This form serves as documentation that field personnel have been verbally given a full HASP review by Langan personnel, and understand the provisions of this EHS Plan. It is maintained on site by the HSO as a project record.

Each field team member shall sign this section after Site-specific training is completed and before being permitted to work onsite.

Name (Print and Sign)	***Company***	***Date***

TABLES

TABLE 1
SUSPECTED CONTAMINANTS OF CONCERN
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Contaminant Of Concern	Affected Media
VOLATILES	
Benzene	Soil / Groundwater / Soil Vapor
Toluene	Soil / Groundwater / Soil Vapor
Ethylethylene	Soil / Groundwater / Soil Vapor
Xylenes (m,p-Xylene, and o-Xylene)	Soil / Groundwater / Soil Vapor
Tetrachlorethylene	Soil / Groundwater / Soil Vapor
Trichloroethylene	Soil / Groundwater / Soil Vapor
Chlorinated VOCs	Soil / Groundwater / Soil Vapor
Total Volatiles	Soil / Groundwater / Soil Vapor
SEMI-VOLATILES	
Common Historic Fill Contaminants:	
Benzo(a)anthracene	Soil / Groundwater
Benzo(b)flouranthene	Soil / Groundwater
Benzo(k)flouranthene	Soil / Groundwater
Benzo(a)pyrene	Soil / Groundwater
Chrysene	Soil / Groundwater
Dibenzo(a,h)anthracene	Soil / Groundwater
Indeno (1,2,3-cd) pyrene	Soil / Groundwater
Flouranthene	Soil / Groundwater
Pyrene	Soil / Groundwater
Diesel Fuel / Fuel Oils	Soil / Groundwater
Hydraulic Oil	Soil / Groundwater
Miscellaneous TBD	Soil / Groundwater
METALS	
Lead	Soil / Groundwater
Arsenic	Soil / Groundwater
Chromium	Soil / Groundwater
Mercury	Soil / Groundwater
Copper	Soil / Groundwater
Nickel	Soil / Groundwater
PESTICIDES	
4,4'-DDD	Soil / Groundwater
4,4'-DDE	Soil / Groundwater
4,4'-DDT	Soil / Groundwater
Dieldrin	Soil / Groundwater

TABLE 2
SELECTED POTENTIAL CHEMICAL EXPOSURE LIMITS AND HEALTH EFFECTS
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Chemical	Permissible Exposure Limit	IDLH Limit	Exposure Routes	Exposure Symptoms
Benzene	1 ppm	50 ppm	Inhalation, Skin Absorption, Ingestion, skin and/or eye contact	Irritate eyes, skin, nose; respiratory system; giddiness; head, nausea, staggered gait; fatigue, anorexia, lassitude; dermatitis; bone marrow depression; [carcinogenic]
Toluene	200 ppm	500 ppm	Inhalation, Skin Absorption, Ingestion, skin and/or eye contact	Irritate eyes, nose; fatigue, weakness, confusion, euphoria, dizziness, headache; dilated pupils, lacrimation; nervousness, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage; mucous membrane; narcosis, coma
Ethylbenzene	100 ppm	800 ppm (10% LEL)	Inhalation, Ingestion, skin and/or eye contact	Irritate eyes, skin, mucous membrane ;headache, dermatitis; narcosis, coma
Xylenes	100 ppm	900 ppm	Inhalation, Skin Absorption, Ingestion, skin and/or eye contact	Irritate eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corn vacuolization; anorexia, nausea, vomit, abdominal pain; dermatitis
Tetrachloroethene	15 ppm	150 ppm	Inhalation, Skin Absorption, Ingestion, skin and/or eye contact	Nausea, vomiting, abdominal pain, tremor fingers, jaundice, hepatitis, liver tenderness, dermatitis, monocytosis, kidney damage [potential occupational carcinogen]

TABLE 2
SELECTED POTENTIAL CHEMICAL EXPOSURE LIMITS AND HEALTH EFFECTS
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Chemical	Permissible Exposure Limit	IDLH Limit	Exposure Routes	Exposure Symptoms
Trichloroethene	100 ppm	1,000 ppm	Inhalation, Skin Absorption, Ingestion, skin and/or eye contact	Irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]
Total Volatile Organics	15 ppm	150 ppm	Inhalation, Skin Absorption, Ingestion	Irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]
Benzo(a)anthracene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Benzo(b)fluoranthene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Benzo(k)fluoranthene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Benzo(a)pyrene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Chrysene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Dibenzo(a,h)anthracene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Flouranthene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Indeno (1,2,3-cd) pyrene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough

TABLE 2
SELECTED POTENTIAL CHEMICAL EXPOSURE LIMITS AND HEALTH EFFECTS
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Chemical	Permissible Exposure Limit	IDLH Limit	Exposure Routes	Exposure Symptoms
Pyrene	0.2 mg/mg^3	80 mg/m^3	Inhalation, Skin Absorption, Ingestion	Irritate eyes, skin, upper respiratory system, cough
Lead	0.05 mg/mg^3	100 mg/mg^3	Inhalation, Ingestion, Skin and/or Eye Contact	Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension
Arsenic	0.010 mg/m^3	5 mg/m^3	Inhalation, Ingestion, Skin Absorption, Skin and/or Eye Contact	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen]
Hexavalent Chromium	5 mg/m^3	250 mg/m^3	Inhalation, Ingestion, Skin and/or Eye Contact	Irritation eyes, skin; lung fibrosis (histologic)
Total Chromium	5 mg/m^3	250 mg/m^3	Inhalation, Ingestion, Skin and/or Eye Contact	Irritation eyes, skin; lung fibrosis (histologic)
Mercury	0.1 mg/m^3	10 mg/m^3	Inhalation, Ingestion, Skin Absorption, Skin and/or Eye Contact	Irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria

TABLE 2
SELECTED POTENTIAL CHEMICAL EXPOSURE LIMITS AND HEALTH EFFECTS
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Chemical	Permissible Exposure Limit	IDLH Limit	Exposure Routes	Exposure Symptoms
Copper	1 mg/m^3	100 mg/m^3	Inhalation, Ingestion, skin and/or eye contact	Irritation eyes, respiratory system; cough, dyspnea (breathing difficulty), wheezing; [potential occupational carcinogen]
Nickel	1 mg/m^3	10 mg/m^3	Inhalation, Skin Absorption, Ingestion, skin and/or eye contact	Irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria
4,4'-DDT	1 mg/m^3	500 mg/m^3	Inhalation, skin absorption, ingestion, skin and/or eye contact	irritation eyes, skin; paresthesia tongue, lips, face; tremor; anxiety, dizziness, confusion, malaise (vague feeling of discomfort), headache, lassitude (weakness, exhaustion); convulsions; paresis hands; vomiting; [potential occupational carcinogen]
Dieldrin	0.25 mg/m^3	50 mg/m^3	Inhalation, skin absorption, ingestion, skin and/or eye contact	Headache, dizziness; nausea, vomiting, malaise (vague feeling of discomfort), sweating; myoclonic limb jerks; clonic, tonic convulsions; coma; ; In Animals: liver, kidney damage [potential occupational carcinogen]

--- No exposure limits listed in the NIOSH Pocket Guide to Chemical Hazards dated November 2010.

TABLE 3
HAZARD ANALYSIS
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Task	Potential Risk	Description	Control Measure
2, 3, 4, 5, 6	Lifting equipment	Improper lifting/carrying of equipment and materials	Follow safe lifting and general material handling
1, 2, 3, 4, 5, 6	Noise	Loud sounds caused by the machines during drilling, or excavation	Wear proper PPE (hearing protection)
2, 3, 4, 6	Working near heavy machinery	Close proximity to drill rig and/or construction equipment	Be aware of surroundings, wear safety vest and hard hat
1, 2, 3, 4, 5, 6	Slips, trips, and falls	Any number of injuries from slips, trips, and falls in carrying out these tasks	Good housekeeping at site, constant awareness and focus on the task
1, 2, 3, 4, 5, 6	Inhalation of Dust	Breathing in visible dust from earthwork using drills or excavators	Wear proper PPE, monitor air for dust concentrations, use dust suppression techniques
2, 3, 4, 5, 6	Inhalation of Volatiles	Breathing in volatiles from earthwork using drills or excavators causing dust	Wear proper PPE, monitor air for volatile concentrations, use dust suppression techniques
3, 6	Utilities	Hitting utility lines during drilling and or excavating	Use proper mark out of underground utilities before beginning earthwork
2, 3, 4, 5	Skin contact with contaminated material	Material falls on skin; gets in eye	Wear proper PPE; follow safe work practices
2, 3, 4, 5	Ingestion of contaminated material	Material falls on skin; gets into mouth	Wear proper PPE; follow safe work practices
2, 3, 4, 5	Skin and eye contact with contaminated material	Material falls on skin; gets in eye	Wear proper PPE; follow safe work practices
1, 2, 3, 4, 5, 6	Heat Stress	Stress or exhaustion related to high temperatures	Hydrate and rest as needed
1, 2, 3, 4, 5, 6	Cold Stress	Stress or exhaustion related to low temperatures; hypothermia	Wear proper PPE; follow safe work practices
1, 2, 3, 4, 5, 6	Bites and stings	Bee stings, ticks, snake bites	Wear proper PPE, be watchful, follow safe work practices
1, 2, 3, 4, 5, 6	Lacerations and abrasions	Many opportunities working with hand tools	Inspect equipment being used for sharp edges, wear proper PPE; follow safe work practices

TABLE 4
INSTRUMENTATION ACTION LEVELS
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Instrument	Action Level	Level of Protection / Action Required
PID	Background to 5 ppm	Level D/No respirator; no further action required
	> 5 ppm for > 5 minutes	1. Temporarily discontinue all activities and evaluate potential causes of the excessive readings. If these levels persist and cannot be mitigated (i.e., by slowing drilling or excavation activities), contact HSO to review conditions and determine source and appropriate response action. 2. If PID readings remain above 5 ppm, temporarily discontinue work and upgrade to Level C protection. 3. If sustained PID readings fall below 1 ppm, downgrading to Level D protection may be permitted
	> 5 ppm but < 150 ppm for > 5 minutes	Level C/ 1. Discontinue all work; all workers shall move to an area upwind of the jobsite. 2. Evaluate potential causes of the excessive readings and allow work area to vent until VOC concentrations fall below 5 ppm. 3. Level C protection will continue to be used until PID readings fall below 1 ppm.
	> 30 ppm (steady state condition) within AOC zone	Stop Work / Suppress Emissions / Evacuate and re-evaluate.
	> 150 ppm	Evacuate the work area
Total Dust Aerosol Monitor	> 0.100 mg/m3 above BKD (steady state condition) at perimeter of AOC zone for 15-minutes or visible dust.	Stop Work / Implement dust control / Continue dust monitoring if dust levels are less than 150 mg/m3
	< 0.150 mg/m3 above BKD (following dust suppression measures)	Stop Work / implement dust control, continue work once levels are <150 mg/m3
	>5 mg/m3	Level C

Notes:

1. 1 ppm level based on OSHA Permissible Exposure Limit (PEL) for benzene.
2. 5 ppm level based on OSHA Short Term Exposure Limit (STEL) maximum exposure for vinyl chloride for any 15 minute period.
3. 150 ppm level based on NIOSH Immediately Dangerous to Life and Health (IDLH) for tetrachloroethylene

TABLE 5
PERSONAL PROTECTIVE EQUIPMENT
BROOME STREET PARKING LOT SITE
NEW YORK, NEW YORK

Respiratory Protection*:*

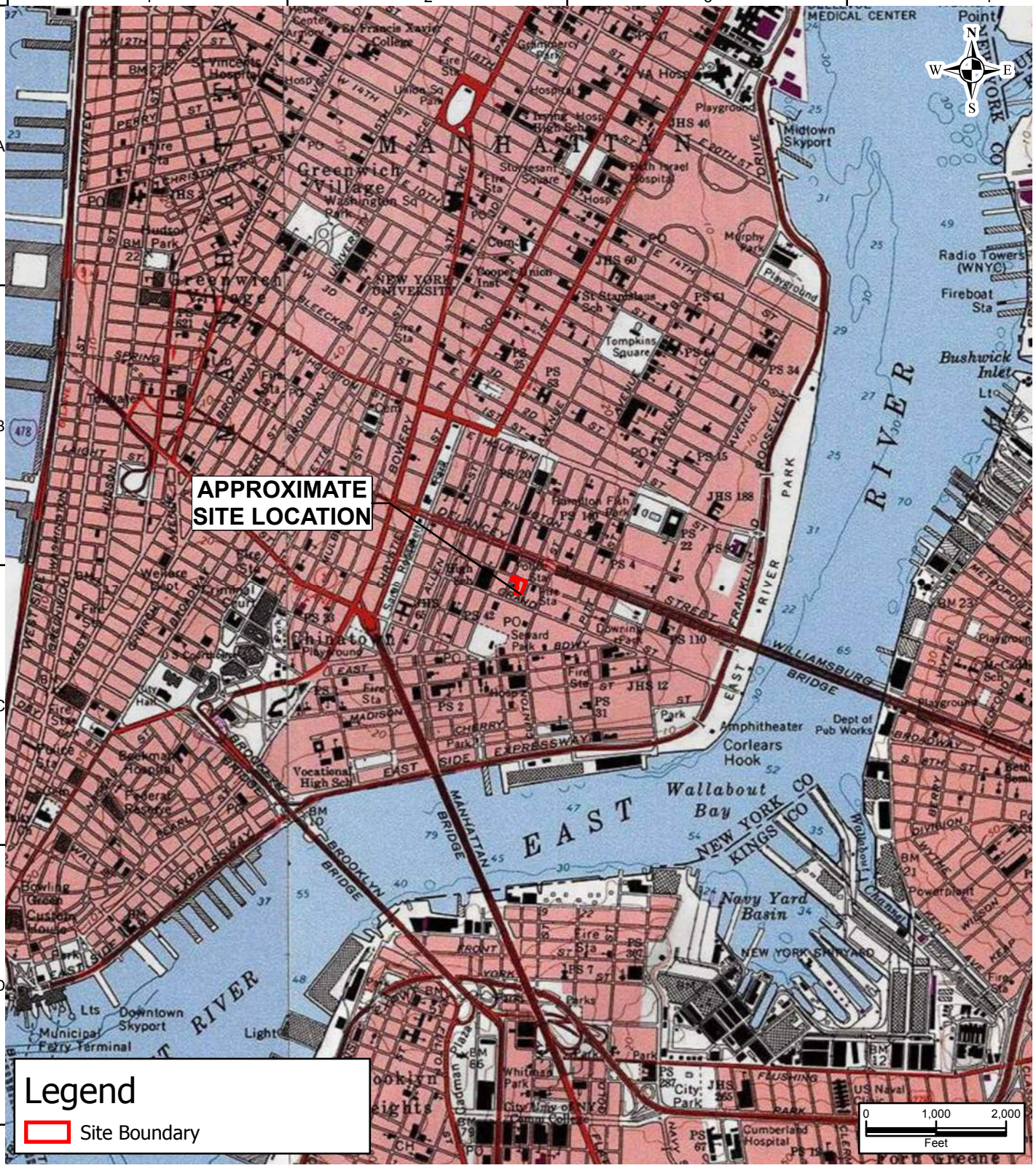
Level D:	No respirator required.
Level C:	Half-face, Air Purifying Respirator (APR) with combination HEPA (dusts, fumes, aerosols) and organic vapor cartridges. The respirator will be NIOSH-approved.
Level C - supplemental by task	Fullface, Air Purifying Respirator (APR) with combination HEPA (dusts, fumes, aerosols), acid gas, organic vapor cartridges. The respirator will be NIOSH-approved.

Personal Protective Clothing*:*

Level D:	Hard-hat, traffic vest (if working on or adjacent to the roadway), long sleeve work shirt & work pants of natural fibers, safety glasses or goggles, steel-toed boots, hearing protection (if needed), nitril inner gloves and leather outer gloves.
Level D - supplemental PPE by task	Tyvek disposal suit
Level C:	Chemically resistant outer boots and Chemical resistant Tyvek disposal suite.

\\LANGAN.COM\DATA\PAR\DATA8\100646801\ENGINEERING DATA\ENVIRONMENTAL\REPORTS_SUFFOLK STREET HIGH RISE\2021 - SMP\APPENDIX E - HASP\TABLES\HASP TABLE 5 - PPE.DOC

FIGURES



LANGAN
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com

Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International
Collectively known as Langan

Project
GO BROOME DEVELOPMENT

NEW YORK
COUNTY
NEW YORK NEW YORK

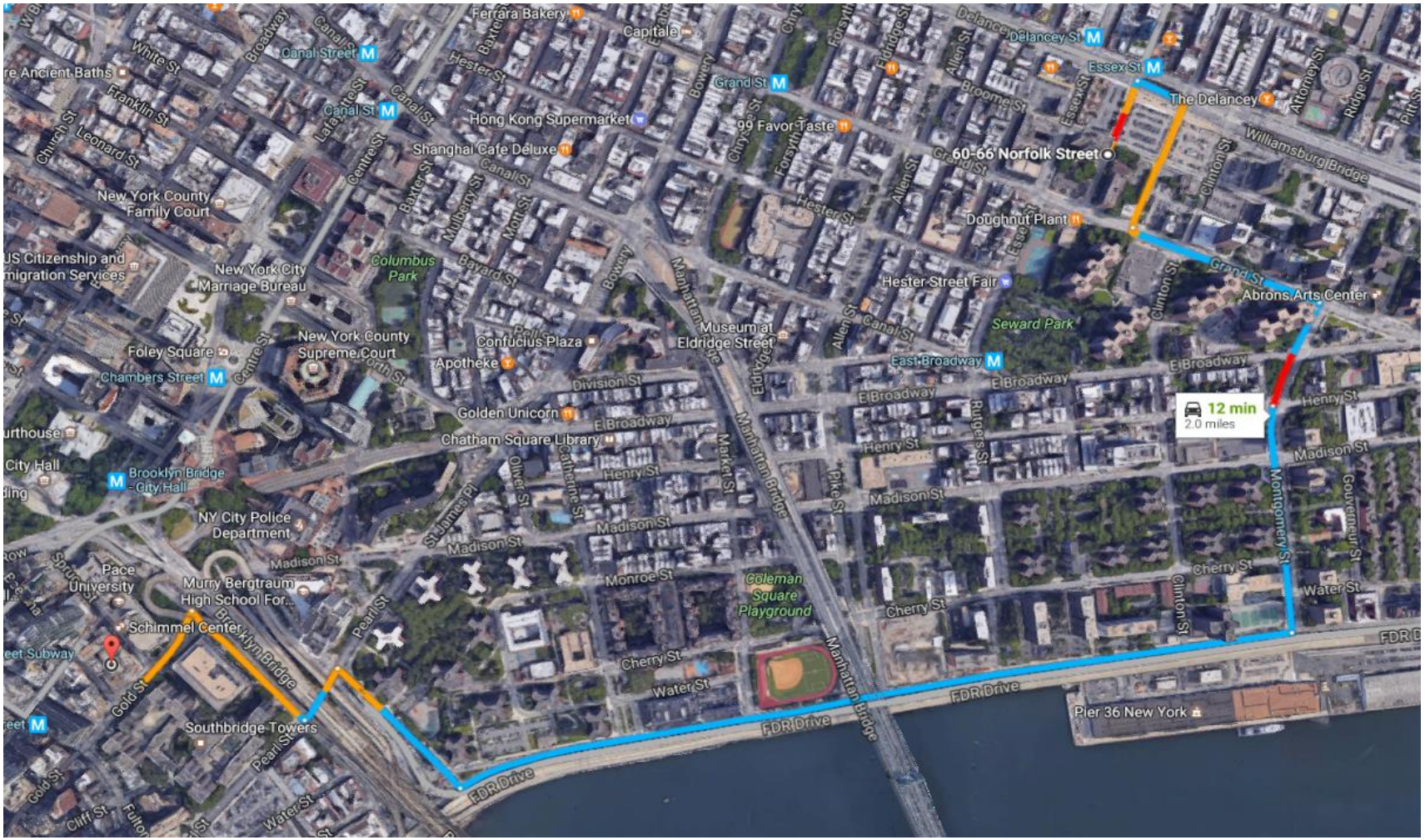
Drawing Title
SITE LOCATION

Project No.	100646801
Date	4/8/2020
Scale	1:2,000
Drawn By	Site Analyzer
Submission Date	04/08/2020

Figure
1

Sheet 1 of 1

Spatial Reference: NAD 1983 StatePlane New Jersey FIPS 2900 Feet



Emergency Route to New York-Presbyterian/Lower Manhattan Hospital (Phone # (212) 312-5070) :

2 Turn right at the 2nd cross street onto Delancey St.
3 Turn left at the second cross street onto Grand St.
4 Turn right right onto Pitt St./Samual Dickstein Plaza
5 Continue onto Montgomery St.
6 Turn right onto South St.
8 Turn left onto Pearl St.
9 Turn right onto Frankfurt St.
10 Turn left onto Gold St.
11 Emergency entrance will located on the right

MAP REFERENCE: Google Maps

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Project

GO Broome Development
EMERGENGY HOSPITAL ROUTE MAP

Manhattan **New York**

Project	DATE	SCALE	FIGURE NO.
100646801	**9/28/2021**	**NTS**	**2**

\\langan.com\data\PAR\data8\100646801\Engineering Data\Environmental\Reports_Suffolk Street High Rise\2021 - SMP\Appendix E - HASP\Figures\Figure 2 - Hospital Route/Figure 2 - Hospital Route

ATTACHMENT A

Health and Safety Briefing Statement

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ATTACHMENT A

HEALTH AND SAFETY BRIEFING STATEMENT

The following personnel were present at a pre-job safety briefing conducted at _____ (time) on _____ (date) at _____ (location), and have read this Health and Safety Plan for the above Site and are familiar with its provisions:

Name	Signature
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Fully charged ABC class fire extinguisher available on Site? _____
Fully stocked First Aid Kit available on Site? _____
All project personnel advised of location of nearest phone? _____
All project personnel advised of location of designated medical facility? _____

_____
Name of Field Team Leader or Site Safety Officer

_____
Signature Date

ATTACHMENT B

Field Procedures Change Authorization Form

LANGAN

ATTACHMENT B

FIELD PROCEDURES CHANGE AUTHORIZATION FORM

Section to be changed: _____

Duration of Authorization Requested Date: _____

_____ Today only

_____ Duration of Task

_____ Other_____

_____

_____

Description of Procedures Modification:

_____

_____

_____

Justification:

_____ _____

Person Requesting Change Verbal Authorization Received From:

_____ _____

Name Name Time

_____ _____

Title Title

_____

Signature

Approvals:

_____

_____

_____

ATTACHMENT C

Unsafe Conditions and Practices Form

LANGAN

ATTACHMENT C

UNSAFE CONDITIONS AND PRACTICES FORM

DESCRIPTION OF CIRCUMSTANCES REGARDING UNSAFE CONDITION OR PRACTICE:

_____

_____

_____

_____

_____

_____

_____

IS THIS CONDITION EXISTING OR POTENTIAL? _____

REPORTED TO: _____

REPORTED BY: _____

DATE REPORTED: _____

COMMENTS: _____

_____

_____

ATTACHMENT D

Calibration Log

ATTACHMENT D

PROJECT: _____

DATE: _____

CALIBRATION LOG

Time	Inst Type	Inst #	Media	Initial Reading	Span #	Calib Reading	Performed By:

ATTACHMENT E

Emergency Notification Numbers

ATTACHMENT E

EMERGENCY NOTIFICATION NUMBERS

The following list provides names and telephone numbers for emergency contact personnel.

ORGANIZATION	CONTACT		TELEPHONE
New York City Police			911
New York City Fire			911
New York-Presbyterian/Lower Manhattan Hospital			212-312-5070
WorkCare (Non-Emergency Medical Treatment)			1-888-449-7787
Langan Incident / Injury Hotline			973-560-4699
Langan Project Manager	Amanda Forsburg		973-560-4900
National Response Center			800-424-8802
Center for Disease Control			404-488-4100
CHEMTREC			800-424-9300
TSCA HOTLINE			202-554-1404
RCRA HOTLINE			800-424-9346
CDC		(DAY) (NIGHT)	404-452-4100 404-329-2888
BUREAU OF ALCOHOL, TOBACCO & FIREARMS			800-424-9555 202-566-7777
NATIONAL RESPONSE CENTER			800-424-8802
PESTICIDE INFORMATION SERVICE			800-424-9346
BUREAU OF EXPLOSIVES, A.A. RAILWAYS			202-835-9500
FEDERAL EXPRESS - HAZARDOUS MATERIAL INFO			901-922-1666

ATTACHMENT F

Accident / Incident Report Form

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ATTACHMENT F

INCIDENT REPORT

LANGAN EMPLOYEE EXPOSURE/INJURY INCIDENT REPORT
(Submit a Separate Report for Each Employee and/or Incident)

Date: _____

Employee's Name: _____ Employee No: _____

Sex: M _____ F _____ Age: _____

Region: _____ Location:_____

Project: _____ Project No: _____

Incident: _____

Type: Possible Exposure _____ Exposure _____ Physical Injury _____

Location: _____

Date of Incident: _____ Time of Incident: _____

Date of Report Incident: _____

Person(s) to Whom Incident was Reported: _____

Weather Conditions During Incident: Temperature _____ Humidity _____

Wind Speed and Direction: _____ Cloud Cover: _____

Clear: _____ Precipitation: _____

Materials Potentially Encountered: _____

Chemical (give name of description - liquid, solid, gas, vapor, fume, mist):

_____

_____

Radiological: _____

Other: _____

Nature of the Exposure/Injury: (State the nature of the exposure/injury in detail and list the parts of the body affected. Attach extra sheets if necessary).

_____

_____

_____

_____

_____

Did you receive medical care? Yes _____ No _____ If so, when _____

Where? On-Site _____ Off-Site _____

By Whom: Name of Paramedic: _____

Name of Physician: _____

Other: _____

If Off-Site, name facility (hospital, clinic, etc):_____

_____

Length of stay at the facility? _____

Was the Site Safety Officer contacted? Yes _____ No _____ When?_____

Was the Corporate Health and Safety Officer contacted? Yes _____ No _____

If so, who was the contact? _____

Did the exposure/injury result in permanent disability? Yes _____ No _____

If so, explain: _____

_____

_____

_____

Has the employee returned to work? Yes _____ No _____

List the names of other persons affected during this incident:

_____

_____

_____

_____

_____

_____

List the names of persons who witnessed the exposure/injury incident:

_____

_____

_____

_____

_____

_____

_____

Possible cause of the exposure/injury incident: _____

_____

_____

_____

_____

_____

What was the name and title of the field team leader or immediate supervisor at the site of the incident?

_____

Was the operation being conducted under an established Health and Safety Plan?

Yes _____ No _____ If yes, attach a copy. If no, explain

_____

_____

_____

_____

_____

_____

Describe protective equipment and clothing used by the employee:

_____

_____

_____

_____

_____

_____

Did any limitations in safety equipment or protective clothing contribute to or affect exposure? If so, explain:

_____

_____

_____

What was the employee doing when the exposure/injury occurred? (Describe briefly as Site Reconnaissance, Site Characterization, or Sampling, etc.):

_____

_____

_____

_____

Where exactly on site or off site did the exposure/injury occur?

_____

_____

_____

_____

_____

How did the exposure/injury occur? (Describe fully what factors led up to and/or contributed to the incident):

_____

_____

_____

_____

_____

Name of person(s) initiating report, job title, phone number:

_____

_____

_____

_____ _____

Employee Signature Date

_____ _____

Site Safety Officer Signature or Field Team Leader Signature Date

ATTACHMENT G

Jobsite Safety Inspection Checklist

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JOBSITE SAFETY INSPECTION CHECKLIST

Client: _____ Inspection Date: _____

Site: _____ Inspector: _____

Employees: _____

Notes:_____
_____
_____

Check one of the following: **A:** Acceptable **NA**: Not Applicable **D**: Deficiency

	A	NA	D	Remarks
GENERAL				
Appropriate PPE being worn by Langan employees and subcontractors?				
Air monitoring instruments calibrated daily and results recorded on the Daily Instrument Calibration check sheet?				
Air monitoring readings recorded on the air monitoring data sheet/field log book?				
Incident reporting procedures known?				
Site security an issue?				
Vehicle /pedestrian traffic issue?				
Adequate size/type fire extinguisher supplied?				
Evidence that drilling operator is responsible for the safety of his rig.				
First Aid kit available?				
PERSONAL PROTECTIVE EQUIPMENT				
Eye Protection?				
Head protection?				
Safety Shoes?				
Safety vests?				
Hand protection?				
Other?				
Deficiencies??				
HOUSEKEEPING				
Work area kept clean/tidy to minimize potential hazards?				
Waste being disposed of quickly and properly				
Adequate lighting for job?				
Portable water available?				
HAND TOOLS				
Are tools in good condition and properly used? (INSPECT)				
Are proper tools being used?				
Are tools safety stored when not in use?				
Have tools been inspected prior to use?				
Are employees familiar with using tools?				
Is additional PPE required for tools? Available?				
POWER TOOLS				
Are tools in good condition and properly used? (INSPECT)				
Are tools properly grounded?				
Safety guards in place and used correctly?				
Competent instruction / supervision?				
Cords include in inspection?				

HAZWOPER				
Employees have current 40-hr./8-hr./Supervisor HAZWOPER training?				
Project staff medically cleared to work in hazardous waste sites and fit-tested to wear respirators, if needed?				
Respiratory protection readily available?				
Subcontract workers have current 40-hr./8-hr./Spvsr. HAZWOPER training, as appropriate?				
Subcontract workers medically cleared to work on site, and fit-tested for respirator wear?				
Subcontract workers have respirators readily available?				
HEALTH & SAFETY PLAN				
HASP available on site for inspection?				
Health & Safety Compliance agreement (in HASP) appropriately signed by Langan employees and subcontractors?				
Hospital route map with directions posted on site?				
Emergency Notification List posted on site?				
Personnel trained in CPR/First Aid on site?				
MSDSs readily available, and all workers knowledgeable about the specific chemicals and compounds to which they may be exposed?				
Project site safe practices ("Standing Orders") posted?				
Health & Safety Incident Report forms available?				
Decontamination procedures being followed as outlined in HASP?				
UNDERGROUND UTILITY				
Mark outs of underground utilities done prior to initiating any subsurface activities?				
Underground utilities located and authorities contacted before digging?				
Visually observed mark-outs?				
Is subsurface work within three feet of underground utilities?				
- Is so, is or was soft dig techniques used?				
Drilling performed in areas free from underground utilities?				
EXCAVATION / TRENCH				
Are excavations/trenches over 5 feet deep sloped, shored or a trench box used?				
Operations supervised by a Competent Person?				
Is Competent Person preforming daily inspections of excavation/trench?				
Adequate barricades in place?				
Have underground utilities been identified?				
Ladders / means of egress in trench with 25-foot of every worker?				
Has PE designed or approved protective system?				
Excavated material and other objects placed more than 2 feet away from excavation edge?				
Public protected from exposure to open excavation?				
CONFINED / PERMIT-ENTRY CONFINED SPACE				
People entering the excavation regarding it as a permit-required confined space and following appropriate procedures?				
Confined space entry permit is completed and posted?				
All persons knowledgeable about the conditions and characteristics of the confined space?				
All persons engaged in confined space operations have been trained in safe entry and rescue (non-entry)?				
Full body harnesses, lifelines, and hoisting apparatus available for rescue needs?				
Attendant and/or supervisor certified in basic first aid and CPR?				
Confined space atmosphere checked before entry and continuously while the work is going on?				
Results of confined space atmosphere testing recorded?				
Evidence of coordination with off-site rescue services to perform entry rescue, if needed?				
ELECTRICAL SAFETY				
Equipment at least 10 feet from overhead power lines?				
Is equipment grounded?				
GFCI used and tested where required?				
Are extension cords rated for this work being used and are they properly maintained?				
Electrical dangers posted at site?				

FLAMMABLE LIQUIDS				
Are flammable liquids used at site?				
Are flammable liquids stored in appropriate containers?				
Are flammable liquids kept away from combustion sources?				
Do flammable liquid containers have warning labels?				
LADDERS				
Are ladders used at site?				
Were ladders inspected prior to use?				
Are ladders in good working condition?				
Are ladders secured to prevent slipping, sliding or falling?				
Do side rails extend three feet above top of landing area?				
Are top two steps of stepladders being used?				
Is extension on ladder facing out?				
Are ladders sufficient for task?				
Are ladders sufficient for task?				

Unsafe acts observed? _____

Additional remarks _____

Notes:_____

Distribution: Project Manager - Name: _____
Health & Safety Officer - Name: _____
Health & Safety Manager- Name: Anthony Moffa, CHMM

Q:\Other\HealthandSafety\GenericAppendixAJobsiteSafetyInspectionChecklist

ATTACHMENT H

Safety Data Sheets (SDS) Login Page

LANGAN

ATTACHMENT H

MATERIAL SAFETY DATA SHEETS

SAFETY DATA SHEETS

All Langan Field Personnel Completing This Work Plan Are To Have Real Time Accessibility To Material Safety Data Sheet (MSDs) or Safety Data Sheet (SDSs) Through Their Smart Phone.

The link is http://www.msds.com/
The login name is "drapehead"
The password is "2angan987"

If You Are Unable To Use the Smart Phone App, You Are To Bring Printed Copies of the MSDs/SDSs to the Site

ATTACHMENT I

Langan Guidelines

LANGAN

ATTACHMENT I

LANGAN GUIDELINES

GENERAL

- No smoking, eating, or drinking in this work zone.
- Upon leaving the work zone, personnel will thoroughly wash their hands and face.
- Minimize contact with contaminated materials through proper planning of work areas and decontamination areas, and by following proper procedures. Do not place equipment on the ground. Do not sit on contaminated materials.
- No open flames in the work zone.
- Only properly trained and equipped personnel are permitted to work in potentially contaminated areas.
- Always use the appropriate level of personal protective equipment (PPE).
- Maintain close contact with your buddy in the work zone
- Contaminated material will be contained in the Exclusion Zone (EZ).
- Report any unusual conditions.
- Work areas will be kept clear and uncluttered. Debris and other slip, trip, and fall hazards will be removed as frequently as possible.
- The number of personnel and equipment in the work zone will be kept to an essential minimum.
- Be alert to the symptoms of fatigue and heat/cold stress, and their effects on the normal caution and judgment of personnel.
- Conflicting situations which may arise concerning safety requirements and working conditions must be addressed and resolved quickly by the site HSO.

TOOLS AND HEAVY EQUIPMENT

- Do not, under any circumstances, enter or ride in or on any backhoe bucket, materials hoist, or any other device not specifically designed to carrying passengers.
- Loose-fitting clothing or loose long hair is prohibited around moving machinery.
- Ensure that heavy equipment operators and all other personnel in the work zone are using the same hand signals to communicate.
- Drilling/excavating within 10 feet in any direction of overhead power lines is prohibited.
- The locations of all underground utilities must be identified and marked out prior to initiating any subsurface activities.
- Check to insure that the equipment operator has lowered all blades and buckets to the ground before shutting off the vehicle.
- If the equipment has an emergency stop device, have the operator show all personnel its location and how to activate it.
- Help the operator ensure adequate clearances when the equipment must negotiate in tight quarters; serve as a signalman to direct backing as necessary.
- Ensure that all heavy equipment that is used in the Exclusion Zone is kept in that zone until the job is done, and that such equipment is completely decontaminated before moving it into the clean area of the work zone.
- Samplers must not reach into or get near rotating equipment such as the drill rig. If personnel must work near any tools that could rotate, the equipment operator must completely shut down the rig prior to initiating such work. It may be necessary to use a remote sampling device.

APPENDIX F

Sub-Slab Depressurization System
As-Built Drawings and Cut Sheets

LANGAN

Submittal #230000-6.0
230000 - HVAC

Monadnock Construction
155-3rd Street
Brooklyn, New York 11231
Phone: 718-875-8160
Fax: (718) 802-1109

Project: 5600 - Broome Street - Suffolk
55 Suffolk Street
New York, New York 10002

SSDS Fans Data Sheet

REVISION:	0	**SUBMITTAL MANAGER:**	Vivian Chiang **(Monadnock Construction Inc.)**
STATUS:	Open	**DATE CREATED:**	03/16/2021
ISSUE DATE:	03/16/2021	**SPEC SECTION:**	230000 - HVAC
RESPONSIBLE CONTRACTOR:	R&S United Services	**RECEIVED FROM:**	Megan Arango
RECEIVED DATE:		**SUBMIT BY:**	03/16/2021
FINAL DUE DATE:	03/30/2021	**LOCATION:**	
		COST CODE:	
		TYPE:	Product Information

APPROVERS: Amanda Forsburg **(Langan Engineering & Environmental Services)**, Ettinger Engineering **(Ettinger Engineering Associates)**, Chris Gleason **(Dattner Architects)**, Charles Liang **(Monadnock Construction Inc.)**, Haripriya Elumalai **(Monadnock Construction Inc.)**, Jeremy Kyrkostas **(Monadnock Construction Inc.)**

BALL IN COURT:
Amanda Forsburg **(Langan Engineering & Environmental Serv)**

DISTRIBUTION:
Nicholas Starzynski **(Langan Engineering & Environmental Servi)**, Jim Spence **(Monadnock Construction Inc.)**, Gera Nozdrin **(Ettinger Engineering Associates)**, Simeon Maleh **(Gotham Development)**, Charles Liang **(Monadnock Construction Inc.)**, Vincent Leahy **(Ettinger Engineering Associates)**, Jeremy Kyrkostas **(Monadnock Construction Inc.)**, Chris Gleason **(Dattner Architects)**, Rem Garavito **(Dattner Architects)**, Amanda Forsburg **(Langan Engineering & Environmental Servi)**, Ettinger Engineering **(Ettinger Engineering Associates)**, Haripriya Elumalai **(Monadnock Construction Inc.)**, Vivian Chiang **(Monadnock Construction Inc.)**

DESCRIPTION:

SUBMITTAL WORKFLOW

NAME	SENT DATE	DUE DATE	RETURNED DATE	RESPONSE	ATTACHMENTS	COMMENTS
General Information Attachments					230000_06.0_SSDS_Fans_Data_Sheet_210316.pdf	
Amanda Forsburg	03/16/2021	03/19/2021		Pending		
Ettinger Engineering		03/24/2021		Pending		
Chris Gleason		03/30/2021		Pending		
Charles Liang		03/30/2021		Pending		
Haripriya Elumalai		03/30/2021		Pending		
Jeremy Kyrkostas		03/30/2021		Pending		

BY **DATE** **COPIES TO**

R&S UNITED SERVICES Inc.
Mechanical Engineering

SUBMITTAL

Project: Suffolk Building

Prepared for: Monadnock
MEP Engineers: Ettinger
Architect: Dattner

Sub-slab Depressurization Fans

Spec Section: none issued

Date of Original Submission: 3/15/2021

Notes:

15 Ranick Drive West Amityville NY 11701
Ph. # (631) 841-1525, Fax # (631) 841-1529

KANE-DAVEY Associates, Inc.
326 West Main Street, Suite 101
Milford, CT 06460
PH: (203) 255-1354

March 15, 2021

Project: Broomer Street Development

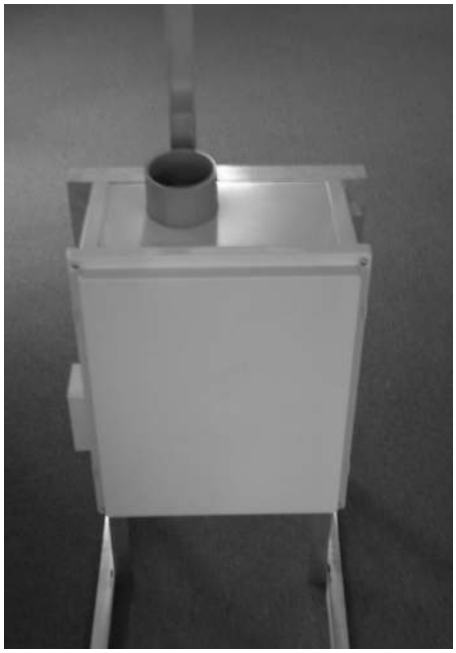
Equipment: Fan – OBAR model GBR 76 UD Radial Blower

Rev. 0

THE OBAR GBR76

COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR76 WITH ROOF MOUNT

PERFORMANCE

- ~~GBR76 SOE 16" WC @ 0 Max flow 155 CFM.~~
- GBR76 UD 40" WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty - 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight, so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof a~~nd wall mounts available~~ to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16"x 14"x 8" weighing only 18 lbs.
- 3" schedule 40 inlet and exhaust.
- Universal Drive model accepts voltage from 120-240V without alteration

OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND NJ 07435 800 949 6227

GBR76 SOE	0”	2”	4”	6”	8”	10”	12”	16”	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

GBR SOE performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4” WC

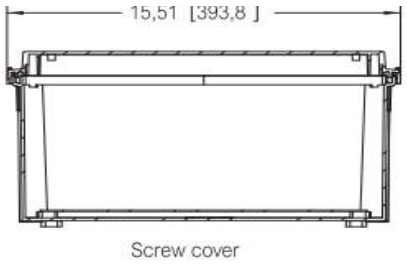
GBR76 UD	0”	10”	20”	30”	37”	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

Blower Specifications

Notes:

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 6 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation) (1 kHz to 10 kHz)
  0 to 10 VDC speed control.
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.
  SPEED CONNECTION: Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.
  Mating harnesses available upon request.

Enclosure Specifications



Screw cover

Ratings:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

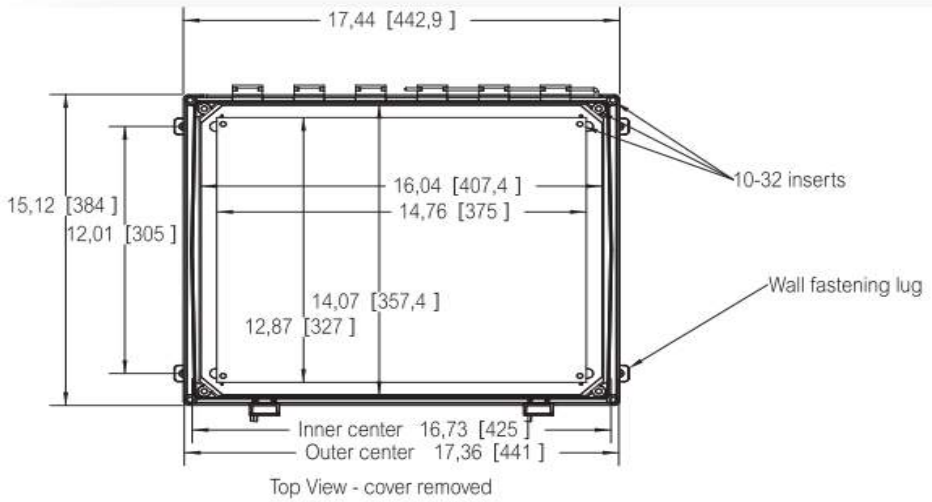
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

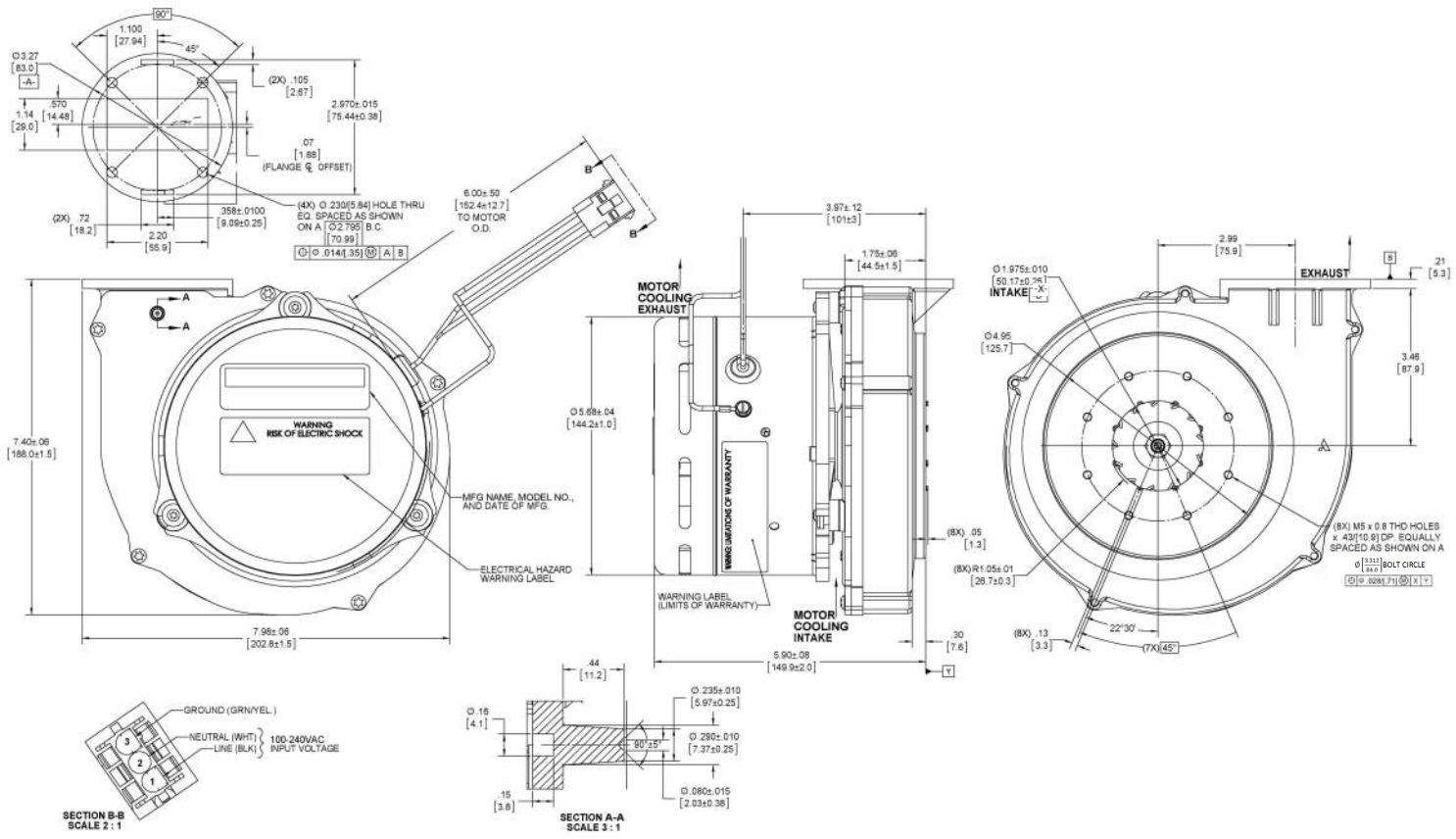
Certificates: Underwriters Laboratories



Top View - cover removed

Nautilair (TM) 7.6" (193mm) Variable Speed Blower

100-240 Volt AC Input, Single Phase



Part/ Model Number	
Specification	150145-51
Flange Type	Small
Speed Control	Mechanical

Notes:

- **Input Voltage Range:** 100-240 Volts AC RMS, 50/60 Hz, single phase.
- **input Current:** 10 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1800 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** Mechanical- A potentiometer is provided for speed control of the blower. The potentiometer can be preset for specific speed. Access for speed adjustment located inside motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under FIle E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower constuction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application. **Additional Design Features:** (1) PCB coated with silicone. (2) Both bearings utilizing light contact seals. (3) Stainless steel components in working air compartment; ie shaft, washer and nut for securing the impeller, and stainless bearing thrust washer.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstucted. Motor ventilation air to be free of oils and other foreign particles (i.e. breathing quality air). Blower to be mounted so ventilation air cannot be re-circulated.

POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 350767-1 mates with customer supplied AMP connector, (PN#350766-1) with female terminals. PN#350536-3 or equivalent on 16GA, 600V rated wire
GROUND LEAD: Amp pin terminal (350547-1) on green/yellow 18 GA. 105ºC, 600V rated wire.

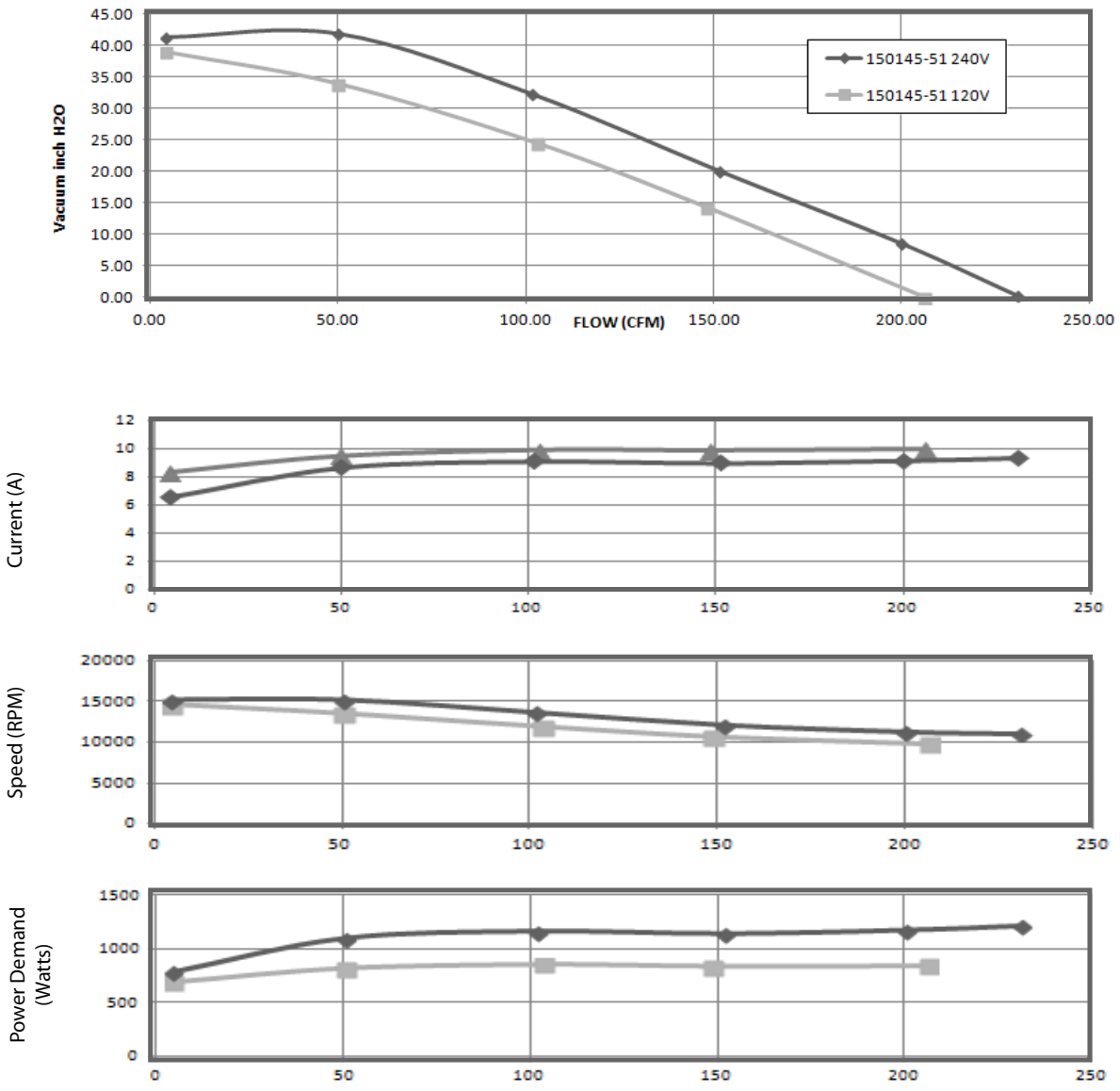
AMETEK DYNAMIC FLUID SOLUTIONS
100 E. Erie Street, Kent OH 44240
USA: +1 215-256-6601 - Europe: +49 7703 930 909 - Asia: +86 21 5763 1258
www.ametektip.com

Nautilair (TM) 7.6" (193mm) Variable Speed Blower

Nautilair

100-240 Volt AC Input, Single Phase, Standard Output

Typical Performance



Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft^3 (29.92" Hg, Sea Level, 68° F)
Vacuum performance available upon request.

AMETEK DYNAMIC FLUID SOLUTIONS
100 E. Erie Street, Kent OH 44240
USA: +1 215-256-6601 - Europe: +49 7703 930 909 - Asia: +86 21 5763 1258
www.ametektip.com

AMETEK®
PRECISION MOTION CONTROL

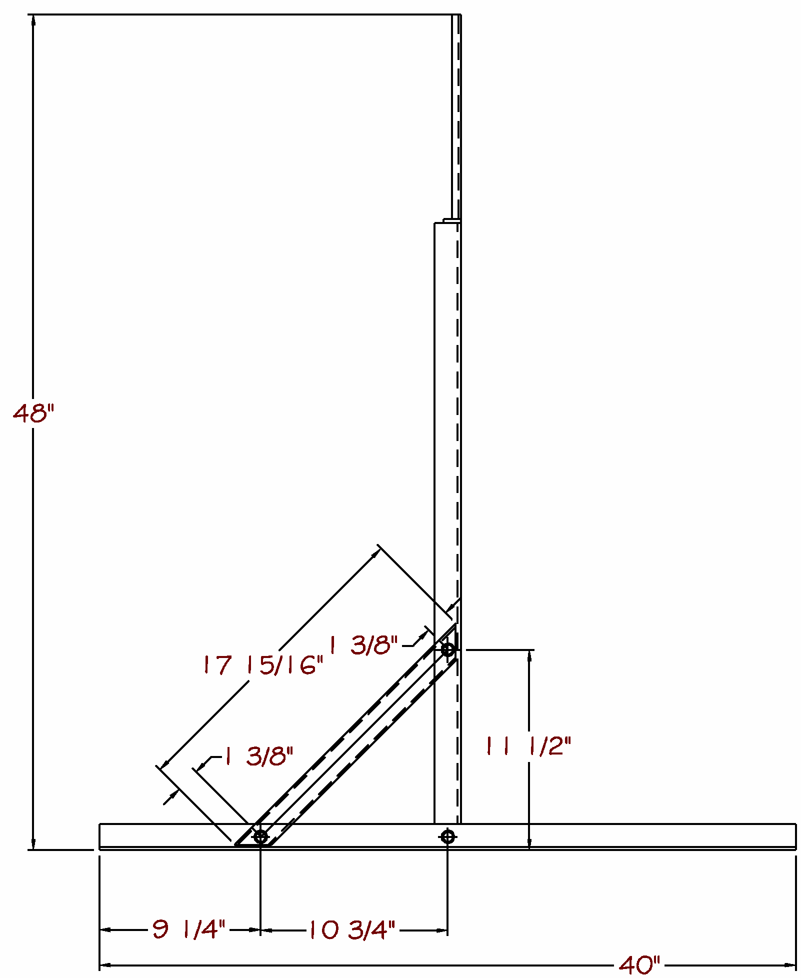
Cutlist:

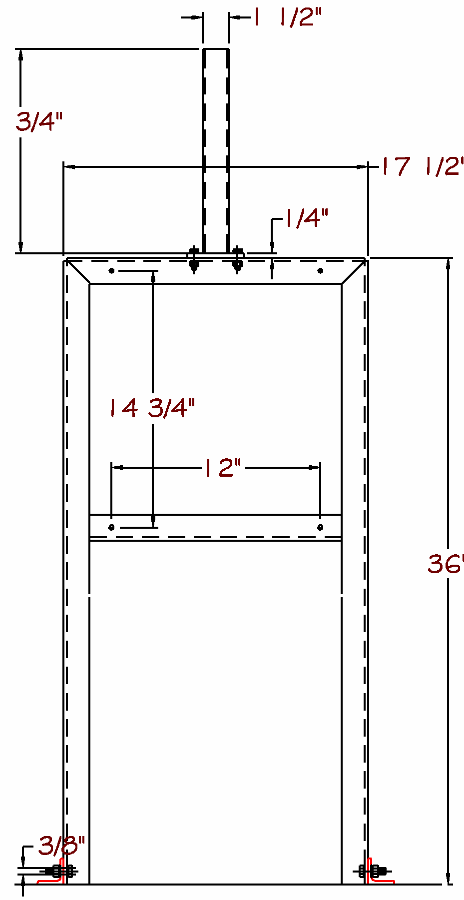
1 1/2"-3/16" Angle

2 pcs. - 40" long square ends
1 pc. - 17 1/8" 45 deg. P-F both ends
1 pc. - 17 1/8" coped both ends
2 pcs - 35 13/16" long 45deg. P-F one end
Note: Left and right on above

1 1/2" x 3/4" - 1/8 " channel

2 pcs. - 17 15/16" long 45 deg P-F both ends
1 pc. - 11 3/4" long Square ends





NOTES:

REV. 1

MATERIALS:
6061 Aluminum

FINISH:
Painted Finish

APPROVAL:

APPROV. FOR PRINTS:	REV.	DATE:	REQ'D:	BY:	DESCRIPTION:

Detail of:
Alum. Frame - Fan Box
Free Standing Unit

Project Name & Location:

Contractor:
OBAR Systems

Architect:

Architect's Drawing Reference:

AWS D1.1 Certified

File Name: Obar_Systems_2011.dwg
DRAWN by: Jim Stanlick
CHECKED:
UNLESS OTHERWISE SPECIFIED:
LINEAR TOLERANCES +/- 1/16
ANGULAR TOLERANCES +/- 1°

PRECISION WELDING
"Quality Metal Fabricators"
845 Berkshire Valley Road
Wharton, NJ 07885
(973) 214-1065
(973) 695-1308 eFax
www.precweld.com

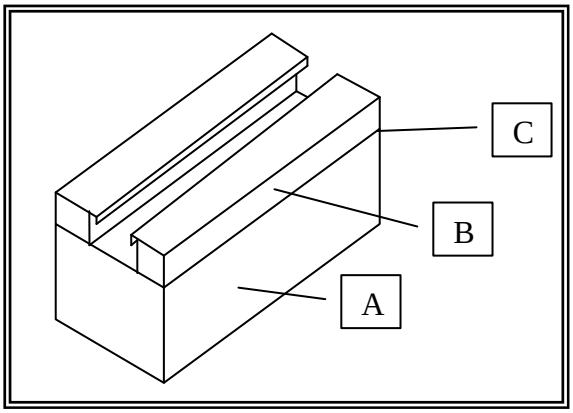
PIPE PIER® Elite Submittal Sheet

PIPE PIER® support blocks have been designed and engineered specifically for rooftop and raised floor applications. The PIPE PIER® Elite series is offered in the following dimensions:

- ☐ PP50ELH4 – 4”H x 4”W x 10-1/2”L with 50 lbs max load.
- ☐ PP50ELH6 – 6”H x 4”W x 10-1/2”L with 50 lbs max load.
- ☒ PP30ELH4 – 4”H x 4”W x 5”L with 30 lbs max load.

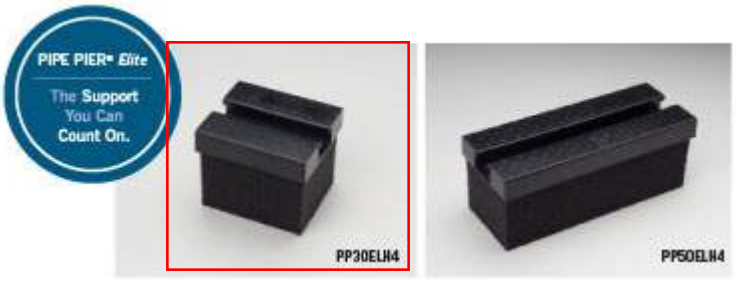
Components

A. Closed-cell, medium density, black expanded polypropylene foam
B. High density molded polyethylene cap with integrated strut design.
C. Hot melt adhesive-bonded HDP to foam block – American Chemical



Arplank 1.9# EPP foam offers excellent strength, resistance to creep under loadings up to 5.0psi, vibration & shock absorbency and water resistance characteristics. It has successfully passed MVSS 302 flammability testing and meets or exceeds the requirements for U.S. Federal Standard CID AA-59136 Type IV.

Physical Properties	Test Method	Direction	Value
Density	D3575, Suffix W, Method B	N/A	3.9 pcf
Compression Set	ASTM D 3575, Suffix B	Vertical	12%
Compression Creep @ 5.0 psi (1000 hr/72 F)	ASTM D 3575, Suffix BB	Vertical	<10%
Thermal Stability	ASTM D 3575, Suffix S	N/A	<1%
Water Absorption	ASTM D 3575, Suffix L	N/A	<1.0%



American Chemical is a sprayable heat & moisture-resistant hot melt adhesive. It has a 400 degree flash point and is applied by a nozzle applicator during the manufacturing process.

U.S. Patent No. 5855342, U.S. Patent No. 6305650, U.S. Patent No. 6679461, Other patents pending

PIPE PIER® Support Systems, P: 763.745.4223 F: 763.745.4222 **www.pipepier.com**

2969 Route 23 South
Newfoundland, New Jersey 07435
800-949-OBAR
www.obarsystems.com

Operation and Maintenance for GBR Compact Radial Blowers 76SOE, 76UD and 89HA

The GBR Series of compact radial blowers do not require any periodic maintenance or service under normal operation.

Information regarding built in protections that will automatically shut down blower operation:

1) **Thermal Overload Protection: Extreme temperatures due to climate or over-speed operation may cause the blower to shut down to protect internal components. This can happen when internal temperatures exceed 60 degrees Celsius (140 F). Allow the blower time to cool and preform a manual restart (see below). If possible, the blower should be tuned to a lower speed to reduce the running temperatures. Vents can also be installed in blower enclosure if necessary.**
2) **Voltage Protection: In the event of a voltage spike or drop, unit will shut down to protect internal components. The building's electric service should be checked to ensure it is within the blower's operating range. Additionally, a voltage conditioner can be installed to ensure clean, constant voltage to the unit. In this case, a manual restart must be performed (see below).**
3) **Optical/Obstruction Sensor: If blower experiences a shutdown event due to a power loss and ice is allowed to form on impellers, the optical sensor will prevent a restart. Before attempting a restart (see below) ensure the impeller is free.**
4) **NOTE: It is necessary for the blower enclosure to maintain a water-tight seal. If unit has been serviced or disassembled for any reason, ensure both intake and discharge couplings have been resealed using Teflon tape and a bead of clear, waterproof silicone is reapplied where the discharge coupling meets the enclosure. Moisture in the housing can cause blower failure or shutdown due to a fogged optical sensor.**

Manual Restart Procedure: Disconnect power supply to the blower for at least 30 seconds to allow internal components to reset. Check voltage to ensure it is within blower's operating range. Check all electrical components to ensure proper connection is being made. Reconnect power supply to the blower unit.

It is recommended that these units be monitored by a pressure switch alarm adjusted to indicate a system failure at a vacuum specified by the installer. Alarms and remote monitoring solutions are available from Obar Systems.

Monadnock Construction
155-3rd Street
Brooklyn, New York 11231
P: 718-875-8160
F: (718) 802-1109

Project: 5610 Broome Street - Norfolk
60 Norfolk Street
New York, New York 10002

Submittal #233416-3.0 - SSDS Data Sheet
233416 - Centrifugal HVAC Fans

Revision	0	**Submittal Manager**	Vivian Chiang (Monadnock Construction Inc.)
Status	Open	**Date Created**	Aug 19, 2021
Issue Date	Aug 19, 2021	**Spec Section**	233416 - Centrifugal HVAC Fans
Responsible Contractor	Target Mechanical Corp.	**Received From**	Jehny Guaman (Target Mechanical Corp.)
Received Date		**Submit By**	Aug 19, 2021
Final Due Date	Sep 2, 2021	**Lead Time**	
		Cost Code	
Location		**Type**	Product Information

Approvers Amanda Forsburg (Langan Engineering & Environmental Services, Inc.), Ettinger Engineering (Ettinger Engineering Associates), Mike Daniels (Dattner Architects), Rem Garavito (Dattner Architects), Chris Gleason (Dattner Architects), Charles Liang (Monadnock Construction Inc.), Haripriya Elumalai (Monadnock Construction Inc.), Jeremy Kyrkostas (Monadnock Construction Inc.)

Ball in Court Amanda Forsburg (Langan Engineering & Environmental Services, Inc.)

Distribution Christopher McMahon (Langan Engineering & Environmental Services, Inc.), Amanda Forsburg (Langan Engineering & Environmental Services, Inc.), Jim Spence (Monadnock Construction Inc.), Brian Song (Ettinger Engineering Associates), Gera Nozdrin (Ettinger Engineering Associates), Charles Liang (Monadnock Construction Inc.), Vincent Leahy (Ettinger Engineering Associates), Jeremy Kyrkostas (Monadnock Construction Inc.), Mircea Iosif (Ettinger Engineering Associates), Chris Gleason (Dattner Architects), Rem Garavito (Dattner Architects), Ed Ettinger (Ettinger Engineering Associates), Haripriya Elumalai (Monadnock Construction Inc.), Mohamed Elsayed (Monadnock Construction Inc.), Mike Daniels (Dattner Architects), Vivian Chiang (Monadnock Construction Inc.)

Description

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					233416_03.0_SSDS_Fan_Data_Sheet_210819.pdf
Amanda Forsburg	Aug 19, 2021	Aug 26, 2021		Pending	
Ettinger Engineering		Aug 26, 2021		Pending	
Mike Daniels		Sep 2, 2021		Pending	
Rem Garavito		Sep 2, 2021		Pending	
Chris Gleason		Sep 2, 2021		Pending	
Charles Liang		Sep 2, 2021		Pending	
Haripriya Elumalai		Sep 2, 2021		Pending	
Jeremy Kyrkostas		Sep 2, 2021		Pending	

Target Mechanical / Electrical
WBE Certified Contractor with NYC
P.O. Box 20834 NYC 10302
T : (718) 448-7058

Target

SUBMITTAL No. 43 Rev. 0

PROJECT: Broome Street - Norfolk
64 Norfolk Street, New York, NY 10002

DATE: 8/19/2021
RE: SSDS Fan

TO: Monadnock Construction, Inc.
155 – 3rd Street
Brooklyn, NY 11231

ATTN: Charles Liang

WE ARE SENDING YOU

- [x] **General Material Submittal**
- [ ] Copy of Letter
- [ ] Attached
- [ ] Prints
- [ ] Change Order

Under separate cover the following items:

- [ ] Plans
- [ ] Samples
- [ ] Via Email

COPIES	SPEC SECTION	DESCRIPTION
EMAIL	233416-03-00	SSDS fan

THESE ARE SUBMITTED:

- [x] **For Approval**
- [ ] For Record

REMARKS

COPY TO:

SIGNED BY: *Jehny Guaman*
Target
Jehny Guaman
Project Manager

THE OBAR GBR76

COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.

GBR76 WITH ROOF MOUNT

PERFORMANCE

- GBR76 SOE 16" WC @ 0 Max flow 155 CFM.
- GBR76 UD 40" WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty - 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight, so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16"x 14"x 8" weighing only 18 lbs.
- 3" schedule 40 inlet and exhaust.
- Universal Drive model accepts voltage from 120-240V without alteration

OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND NJ 07435 800 949 6227

GBR76 SOE	0"	2"	4"	6"	8"	10"	12"	16"	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

GBR SOE performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4" WC

GBR76 UD	0"	10"	20"	30"	37"	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

Blower Specifications

Notes:

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 6 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation) (1 kHz to 10 kHz)
  0 to 10 VDC speed control.
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.
  SPEED CONNECTION: Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.
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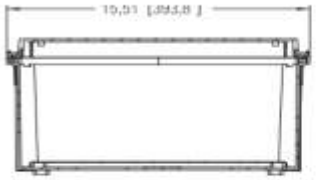


Ratings:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

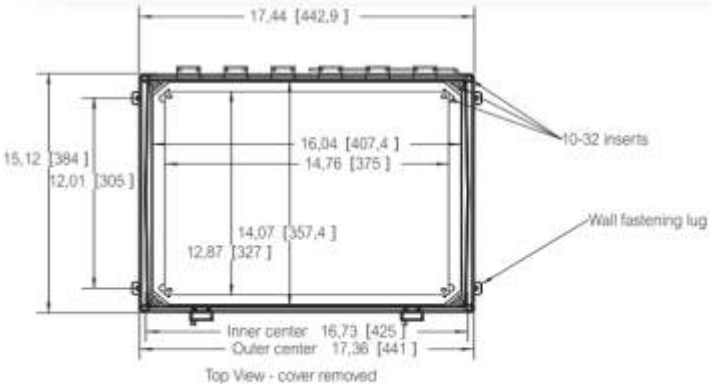
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



Top View - cover removed

OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND NJ 07435 800 949 6227

Distributed by Obar Systems

Installation & Warranty

Read these instructions completely and retain for future reference.

1. Warning! The use of this fan may affect combustion devices, always check for a backdraft on all combustion devices before and after installation.
2. Warning! This fan is not intended for use in hazardous environments where a motor spark could ignite combustible or flammable materials.
3. All wiring must be performed by a licensed electrical contractor in accordance with the National Electrical Code and all local and state codes governing the municipality in which it is installed.
4. The GBR series blowers are intended for use and installation by professionals familiar with installation and design of systems for the remediation of radon and volatile organic compounds. Unqualified or unlicensed individuals should not undertake the installation or service of this product.

INSTALLATION

The installation instructions provided are for guidance only, any installation should meet all state and local codes and guidelines.

1. Temperature restrictions: The GBR SOE/UD will run and start in a temperature range from -20 to 180 degrees F. The GBR HA will run at a temperature of -20 to 180 degrees F but may not start if the motor temperature is below 0 degrees F at time of startup.
2. Ground water restrictions: The blower should not be installed at a height above water table that is less than the vacuum setting for the blower, if the water table is unknown then the base of the slab should be used as a default. The GBR series is a high vacuum blower and will draw water into the assembly and damage the impeller and motor if not properly installed.
3. Speed control: The GBR series blowers have a built in speed control that can be used to field adjust the vacuum on your system. These should only be adjusted by an experienced installer familiar advanced systems design and installation. For information regarding on site adjustments please contact Obar Systems for further information.
4. Enclosure: It is not recommended that the enclosure be opened except for repairs and adjustments. Contact Obar Systems before removing the cover.
5. Mounting: The fan should be mounted in a vertical orientation with the discharge pointing

upward. The inlet and discharge should be attached with a PipeConx or similar flexible connector of the appropriate size. The connector should provide a gap of 1.5 inches between the inlet pipe and inlet fitting and discharge pipe and discharge fitting. This will allow for motor assembly replacement in future repairs. The GBR comes with wall fastening lugs that provide for a flush installation on a flat even surface. Optional roof and wall mounts are available and are designed to reduce installation times dramatically. Contact Obar Systems for additional information on mounting systems. The fan should be located in an area that provides easy access and does not obstruct the operations of the building to which it is attached.

6. Discharge: Make sure the discharge meets or exceeds National guidelines and local codes for the installation and venting of Radon and or VOCs (Volatile Organic Compounds). In the event that there is the possibility of debris entering the discharge of the fan, it is recommended that a guard be installed to protect the blower from damage.

Warranty

Subject to any applicable consumer protection legislation, Obar Systems warrants the GBR series fans for 12 months from the date of purchase.

Obar systems will repair or replace any fan which fails due to defects in materials and workmanship. A RMA must be obtained and proof of purchase is required to be serviced by this warranty.

This warranty is contingent upon the fan having been installed as per the installation requirements set forth by Obar Systems and in accordance with the requirements of federal and state authorities governing the installation systems designed for radon and volatile organic compounds.

Obar systems is not responsible for the installation, removal or delivery costs associated with this warranty.

Except as stated, the GBR series are provided without warranty of any kind, either expressed or implied, including without limitation, implied warranties of merchantability and fitness for a particular use.

Obar systems is in no way responsible for any direct or indirect damages relating to the performance of the GBR series fan. Any liability shall not exceed the purchase price of the unit. The sole remedy under this warranty shall be the repair or replacement of the unit

Contact Obar Systems to obtain a RMA (Return Material Authorization) number for any and all warranties. If return is required, the customer is responsible for all freight charges.

Obar Systems Inc.
2969 Route 23 South
Newfoundland NJ 07435
800 949 6227

Operation and Maintenance for GBR Compact Radial Blowers 76SOE, 76UD and 89HA

The GBR Series of compact radial blowers do not require any periodic maintenance or service under normal operation.

Information regarding built in protections that will automatically shut down blower operation:

1) Thermal Overload Protection: Extreme temperatures due to climate or over-speed operation may cause the blower to shut down to protect internal components. This can happen when internal temperatures exceed 60 degrees Celsius (140 F). Allow the blower time to cool and preform a manual restart (see below). If possible, the blower should be tuned to a lower speed to reduce the running temperatures. Vents can also be installed in blower enclosure if necessary.
2) Voltage Protection: In the event of a voltage spike or drop, unit will shut down to protect internal components. The building's electric service should be checked to ensure it is within the blower's operating range. Additionally, a voltage conditioner can be installed to ensure clean, constant voltage to the unit. In this case, a manual restart must be performed (see below).
3) Optical/Obstruction Sensor: If blower experiences a shutdown event due to a power loss and ice is allowed to form on impellers, the optical sensor will prevent a restart. Before attempting a restart (see below) ensure the impeller is free.
4) NOTE: It is necessary for the blower enclosure to maintain a water-tight seal. If unit has been serviced or disassembled for any reason, ensure both intake and discharge couplings have been resealed using Teflon tape and a bead of clear, waterproof silicone is reapplied where the discharge coupling meets the enclosure. Moisture in the housing can cause blower failure or shutdown due to a fogged optical sensor.

Manual Restart Procedure: Disconnect power supply to the blower for at least 30 seconds to allow internal components to reset. Check voltage to ensure it is within blower's operating range. Check all electrical components to ensure proper connection is being made. Reconnect power supply to the blower unit.

It is recommended that these units be monitored by a pressure switch alarm adjusted to indicate a system failure at a vacuum specified by the installer. Alarms and remote monitoring solutions are available from Obar Systems.

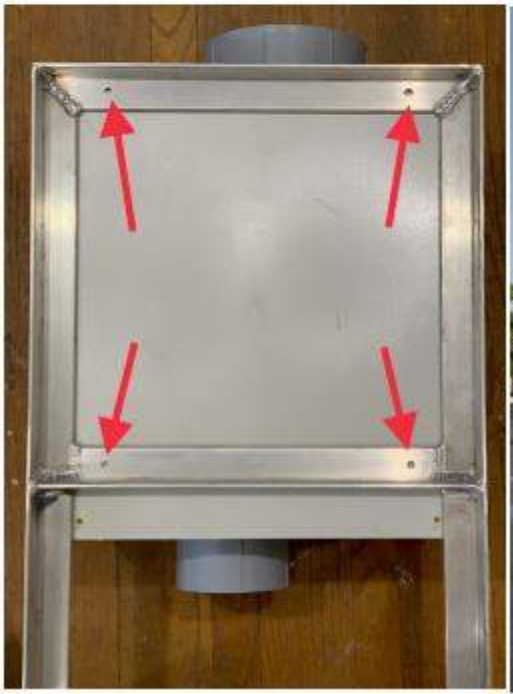
Mounting GBR76/89 using GBR Roof Mount

1. **Assemble roof mount using included brackets and hardware**

2. **Attach foam feet (optional) to main support beam using self-tapping screws (included with all feet orders)**

3. **Position discharge end of the blower enclosure at the top of vertical support mount**

4. **Use supplied mounting screws to attach back of blower to the flat side of the mount**



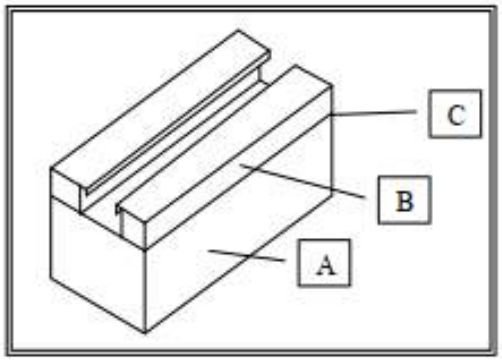
PIPE PIER® Elite Submittal Sheet

PIPE PIER® support blocks have been designed and engineered specifically for rooftop and raised floor applications. The PIPE PIER® Elite series is offered in the following dimensions:

- ☐ PP50ELH4 – 4"H x 4"W x 10-1/2"L with 50 lbs max load.
- ☐ PP50ELH6 – 6"H x 4"W x 10-1/2"L with 50 lbs max load.
- ☒ PP30ELH4 – 4"H x 4"W x 5"L with 30 lbs max load.

Components

A. Closed-cell, medium density, black expanded polypropylene foam
B. High density molded polyethylene cap with integrated strut design.
C. Hot melt adhesive-bonded HDP to foam block – American Chemical



Arplank 1.9# EPP foam offers excellent strength, resistance to creep under loadings up to 5.0psi, vibration & shock absorbency and water resistance characteristics. It has successfully passed MVSS 302 flammability testing and meets or exceeds the requirements for U.S. Federal Standard CID AA-59136 Type IV.

Physical Properties	Test Method	Direction	Value
Density	D3575, Suffix W, Method B	N/A	3.9 pcf
Compression Set	ASTM D 3575, Suffix B	Vertical	12%
Compression Creep @ 5.0 psi (1000 hr/72 F)	ASTM D 3575, Suffix BB	Vertical	<10%
Thermal Stability	ASTM D 3575, Suffix S	N/A	<1%
Water Absorption	ASTM D 3575, Suffix L	N/A	<1.0%

RECYCLE

American Chemical is a sprayable heat & moisture-resistant hot melt adhesive. It has a 400 degree flash point and is applied by a nozzle applicator during the manufacturing process.

U.S. Patent No. 5855342, U.S. Patent No. 6305650, U.S. Patent No. 6679461, Other patents pending

PIPE PIER® Support Systems, P: 763.745.4223 F: 763.745.4222 **www.pipepier.com**

OBAR INSTRUMENTS

EDG Environmental Data Gateway

Environmental System and Site Monitoring Sensor Platform

1,000 Foot Range with 10+ Year Battery Life

Superior Wireless Range
1,000 + ft. line of sight up to 10-12 walls*

Long Battery Life
10+ Years when Powered by 2 AA batteries*

Onboard Data Memory
Stores up to 512 readings per sensor.***

Future Proof
Over-the -air updates allow products to be updated remotely.

0VER 50 DIFFERENT SENSORS
Temp, CO, CO2, H2S, PM2.5, Pressure, 0-10V, 4-20ma

4 Different Wireless Gateways
Accept 100 Wireless Sensor Inputs.

Works with Obar Instrument Gauges
Multiple gauges to choose from or use any 0-10 volt sensor to collect data.

Low Cost Monthly Fees
Plans begin at $13.25 per month for up to 6 sensors

Scan Code to Download Obar APP

* Wireless range may vary according to environment
** Battery life determined by sensor reporting &other variables.
*** 10 minute heartbeats= 3.5 days/ 2 hour heartbeats = 42 days

OBAR SYSTEMS, INC.

2969 Route 23 South
Newfoundland NJ 07435
1 800 949 6227
973 697 0112

OBAR INSTRUMENTS

Scan QR to visit Obar Instruments catalog

EDG 4G LTE WIRELESS GATEWAY

Best in class security, connectivity, and reliability

Obar 4G LTE Cellular Gateways are based on a 4G LTE CAT-M1/NB1 wireless engine and integrates Obar's wireless access point network (WAN) for use with Obar Wireless Sensors. These gateways allow the sensors to operate on the world's leading cellular networks.

To meet the global demand for enterprise IoT deployment. The 4G LTE Gateway offers best-in-class security, connectivity, and reliability.Obar cellular gateways communicate with the Obar EDG (cloud or on-premise) monitoring software via cellular transmission, making them ideal for remote locations or where the internet is not available. The system aggregates sensor information and sends notifications via text, email, or call if user-defined conditions are met or exceeded.

Gateway features include:

Bank-level security: Encrypt-RF® (256-bit key exchange and AES-128 CBC)
Redundant power: AC main power with battery backup lasting up to 24 hours
Superior scalability: supports up to 100 Obar Wireless Sensors
Uninterrupted data collection: onboard memory stores up to 50,000 sensor messages (data stored during internet outages is sent when connectivity is restored)
Broad compatibility: 4G LTE CAT-M1/NB1 (deployed bands: 2, 3, 4, 5, 8, 12, 13, 20, 28)

Future-proof software: over-the-air software upgrades included

LTE-only module for global use: AT&T, T-Mobile USA, Telstra, Verizon

Unmatched wireless range: gateway communicates with battery-powered sensors 1,200 ft + away (non-line-of-site through 12+ walls)

Power adapter included.

OBAR SYSTEMS, INC.

Scan to to log in to Obar Instruments Portal

GBR 25 Mini Digital Differential Pressure Gauge With Alarm

System alarms and monitoring made simple and affordable.

Finally a product that has what you need and can be easily installed.
The GBR 25 is a compact stand alone system gauge with an audible and visual alarm that works for VOC and Radon systems operating at system pressures greater than 2" wc. Included is a second relay that can be used to trigger additional alarms.
Includes Power supply
Optional 4-20 MA or 0-10 outputs can be used to monitor system pressure.

Contact OBAR for a quote to build custom alarm panels for your needs.

Applications and features

- Scale 0-40 inches WC eliminates need for multiple gauges.
- Visual and audible alarm included and factory set at 1" WC The alarm set point can be changed in the field.
- Second adjustable relay for triggering additional alarms.
- Optional 4-20 MA or 0-10 output for data.
- Accuracy is up to ±1% FS, with large LCD display.
- Function keys: zero reset, units select, display update time, automatic sleep time, alarm, etc.

Specifications

Medium: Non-combustible, non-corrosive air, insensitive to moisture, dust, condensation and oil
Working Temp.: 20~70°C
Medium Temp.: 0~60°C
Temp. Compensation: 0~50°C
Working Pressure: overload 10xFS, burst 15xFS
Display: 5 bits LCD, with engineering unit & backlight
Output: 0-10V / 4-20mA (3 wires)
Output load: ≤500Ω (current), ≥2KΩ (voltage)
Relay Output: 2×SPST, 3A/30VDC, 3A/250VAC or 1xBuzzer
Accuracy: up to ±1.0%FS(±2.0%FS@25Pa range)
Long term stability: ±0.5%FS /Year
Thermal effect: <0.05%FS/°C (zero), <0.08%FS/°C(FS)
Power type 16~28VDC/AC
24V Power Supply included
Process Connection: 5mm ID tubing, two pairs (left/back)
Keys: 3 touch buttons
Protection: IP54
Approval: CE
Display update time: selectable for 0.5/1/5/10s (default 1s)

Installation Guide for GBR 25T and EDG 0-10 Sensor

The GBR 25T has all the features of the GBR 25 and has both 0-10V and 4-20ma output. Pair this gauge with the OBAR EDG 0-10v Wireless Sensor and EDG Gateway so you can view and save your system data and manage your text and email alerts.

Warning

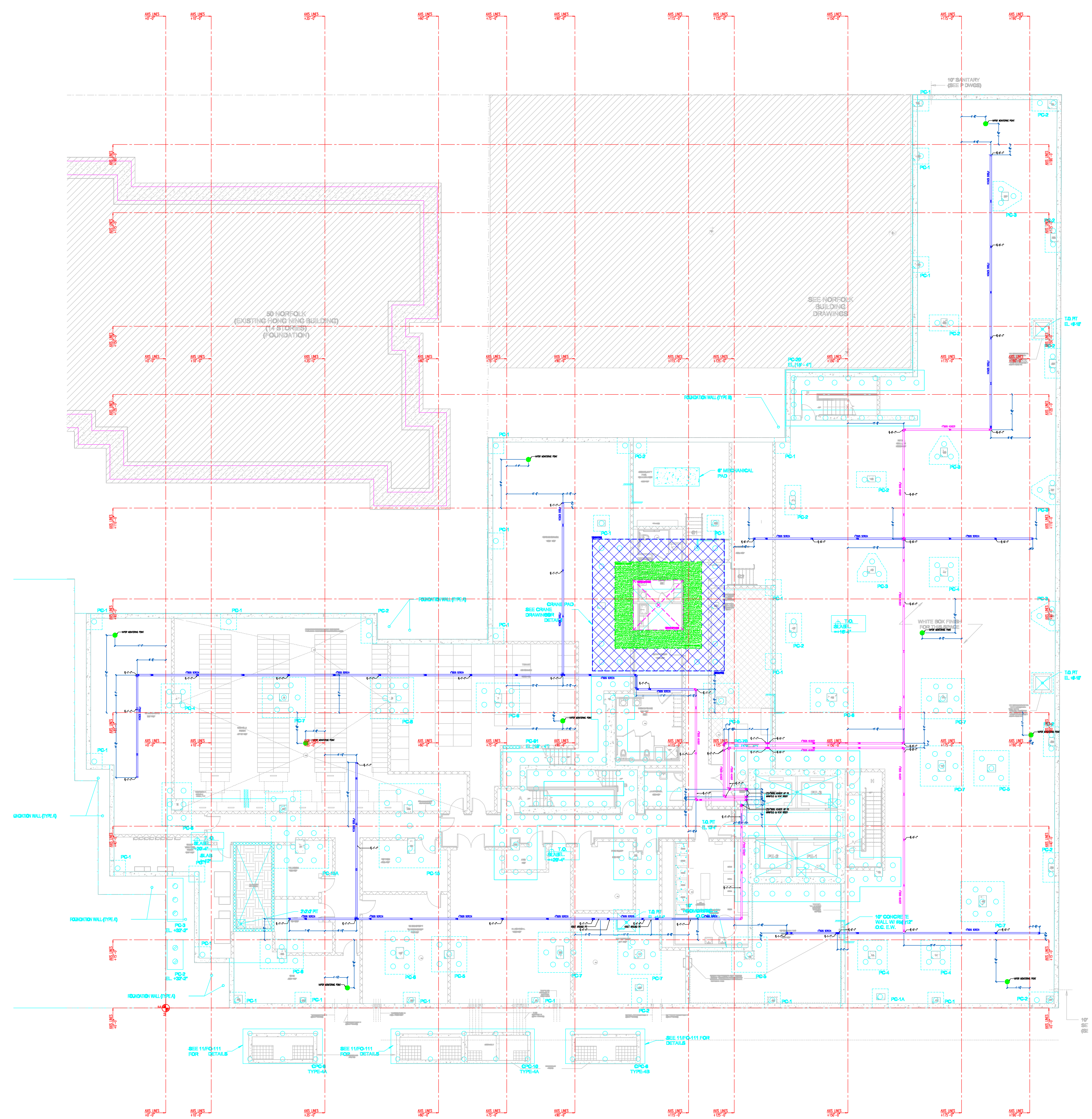
All wiring should be done with the Power OFF to the system gauge.
Make sure the EDG 0-10V sensor is wired to the correct polarity on the gauge terminals.
Failure to wire correctly will result in damage to the sensor.

1. Mount the GBR25 gauge.
2. Mount the EDG 0-10V Sensor. If you are installing multiple EDG Sensors they must be a minimum of 4' apart and 10' from the EDG Gateway
3. Make sure the power is off to the GBR 25 gauge.
4. Connect the 2 wires from the 0-10V sensor to the terminal block on the GBR25 Gauge making sure the polarity is correct.
5. Power up the GBR25 Gauge
6. Follow the directions for the EDG Sensor installation for activation of the sensor network.

Related Products

OBAR INSTRUMENTS
2969 Route 23 South
Newfoundland NJ 07435
1 800 949 6227
973 697 0112

ARCH./ENG. NOTES

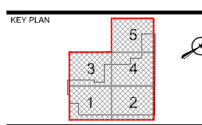


NOTES:

- ALL ELEVATIONS TAKEN FROM TOP OF CELLAR SLAB (+20'-4")

No.	Date	Revision	BY
0	3.12.21	SUBMITTED FOR APPROVAL	MPD
1	3.31.21	REVISED PER COMMENTS	MPD
2	4.1.21	REVISED AXIS GRID	MPD

KEY PLAN



CONTRACTOR

MPD

CONTRACTOR

NEW LEAF DEVELOPMENT

DRAWING TITLE

BROOME STREET-SUFFOLK

NEW YORK, NY

SUB-SLAB DEPRESSURIZATION
UNDERGROUND LEVEL
OVERALL PLAN

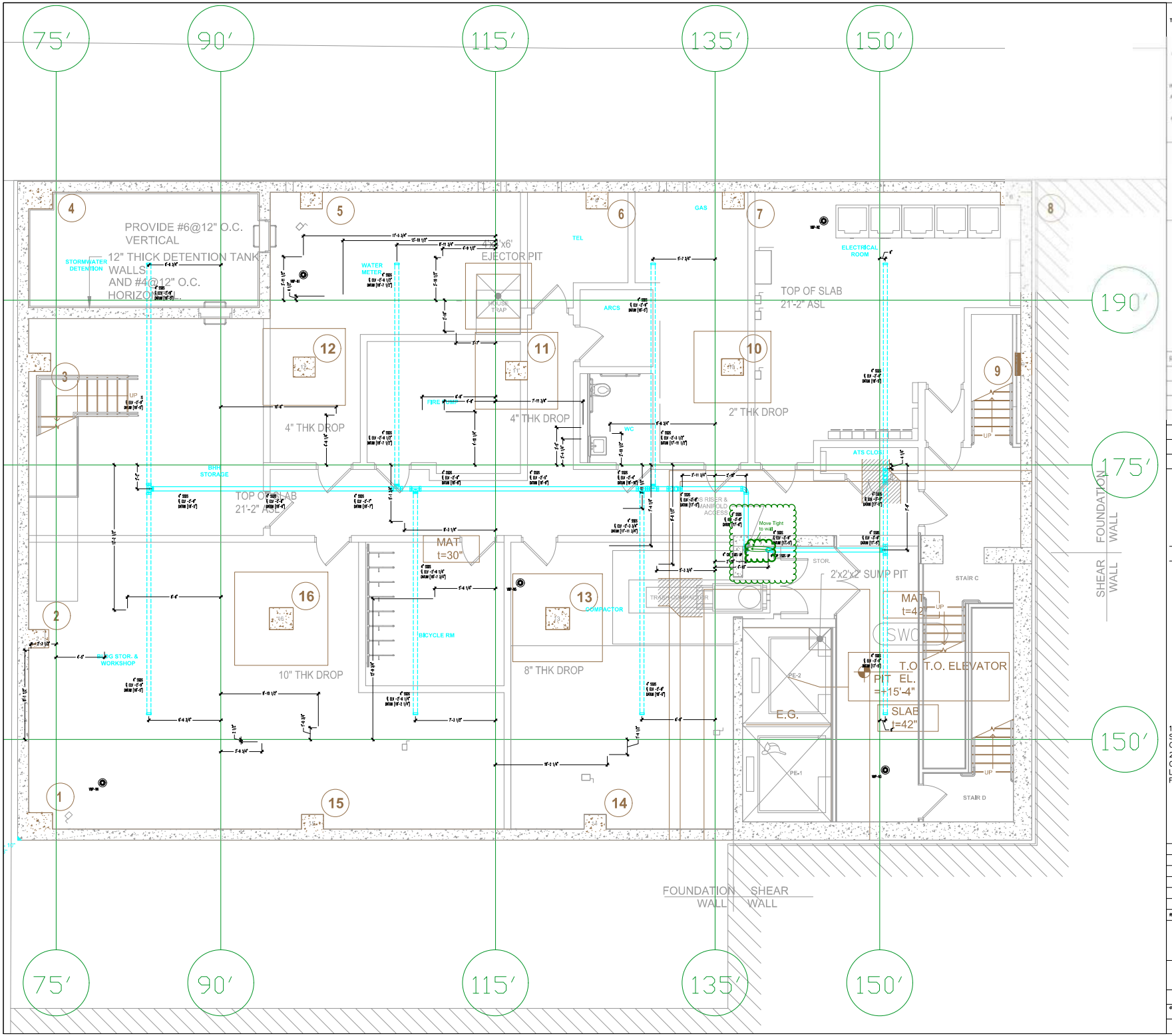
SCALE	DRAWN
1/8" = 1'-0"	MPD

PROJECT NO.

DRAWING NO.: PL-SSDS-OA

REVISION NO.: 2

CONTRACTOR'S SHOP DRAWING



NOTICE

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ANY WORK SHOWN ON THIS DRAWING WHICH IS BEYOND THE SCOPE OF THE ORIGINAL CONTRACT DRAWINGS IS SHOWN ONLY FOR THE PURPOSE OF EXPEDITING THE JOB AND DOES NOT IN ANY WAY CONSTITUTE AN ACCEPTANCE BY THIS CONTRACTOR OF THE REVISION SHOWN. CHANGE ORDERS MUST BE APPROVED BEFORE ANY WORK IS PERFORMED.

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NEW LEAF DEVELOPMENT

AS-BUILT DRAWINGS

REFERENCED DRAWINGS:	
ARCHITECTURAL	
ARCHITECTURAL	
STRUCTURAL	
STRUCTURAL	
PLUMBING	
PLUMBING	

NOTES TO ARCHITECT, ENGINEER, G.C.: (#)

---------- VAPOR MITIGATION SCREEN

———— VAPOR MITIGATION HEADER PIPE

INSTALLATION NOTES:

1. DO NOT PROCEED WITH CONSTRUCTION UNTIL SUBMITTED DRAWINGS ARE APPROVED AND COORDINATED.
2. INSTALL WATER HAMMER ARRESTORS AT ALL CLOTHES WASHING MACHINES, AND/OR ANY OTHER LOCATIONS USING SOLENOID OR SPRING-LOADED FAUCETS, AS PER CODE.

REV. #	REVISION DESCRIPTION	DATE	BY
1	COORDINATED. SUBMITTED FOR APPROVAL. NOT FOR CONSTRUCTION.	04/08/21	
0	SUBMITTED FOR APPROVAL. NOT FOR CONSTRUCTION.	03/30/21	

NEPTUNE MECHANICAL INC.
29-10 120TH STREET
FLUSHING, NY 11354

NORFOLK BUILDING
64 NORFOLK STREET
NEW YORK, NY 10002

CELLAR UNDERGROUND PIPING

DWG #: P-SSDS

REV #: 1

drawn by	scale	check by
CM	3/8"=1'-0"	
date	project no.	
03/30/21		

SHOP DRAWING

APPENDIX G

Site Management Forms

LANGAN

Sub-Slab Depressurization System (SSDS) Inspection Checklist

Site Name: Broome Street Parking Lot Site **BCP Site No.:** C231137 **Langan Project No.:** 100646801
Site Location: 55 Suffolk Street, New York, NY

Inspector Name: _____ **Insp. Date:** _____

Weather: _____ **Insp. Time:** _____

Reason for inspection (i.e., routine, maintenance, severe condition, etc.): _____

Check one of the following: **Y**: Yes, **N**: No, **NA**: Not Applicable		Normal Conditions	Y	N	NA	Remarks
Records						
1	Is the Site Management Plan readily available on-site?	Y				
2	Based on site records, when was the last inspection, maintenance, or repair event?	--	--	--	--	
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.	N				
Alarm System						
4	Do the alarm lights indicate that the system is operational?	Y				
General System						
5	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?	N				
6	If YES to number 5, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?	NA if N to 5/ Y if Y to 5				
7	If YES to number 5, is there documentation that all breaches in the floor slab have been sealed?	NA if N to 5/ Y if Y to 5				
8	Does all visible SSDS piping appear intact and undamaged?	Y				
9	Have any intake points been constructed at the roof near (less than 10 feet) the SSDS blower discharge point?	N				
SSDS In-Line Fan						
10	Is the SSDS in-line fan operational at the time of the inspection?	Y				
11	What is the VelociCalc Meter reading?	--	--	--	--	
12	Is the SSDS in-line fan expelling air at the discharge point?	Y				
13	Have dust and debris been removed from surface of in-line fan?	Y				

**** If the answer to any of the above questions indicate the SSDS is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional remarks: _____

Minimum Inspection Schedule: SSDS inspections will be conducted quarterly for the first certification year and annually thereafter. Additional inspections will also be conducted at times of maintenance, repair, or severe condition events. All inspection events will utilize this checklist.

APPENDIX H

Owner and Remedial Party Responsibilities

LANGAN

Responsibilities

The responsibilities for implementing the Site Management Plan ("SMP") for the Broome Street Parking Lot Site (the "site"), Brownfield Cleanup Program (BCP) Site No. C231137, are divided between the site owner(s) and a Remedial Party, as defined below. The owner is currently listed as:
CPC One LLC (the "owner")
150 Elizabeth Street
New York, New York

Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out, the term Remedial Party ("RP") refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation ("NYSDEC") is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP is:
GO Broome LLC
432 Park Avenue South, 2nd Floor
New York, New York

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.

Site Owner's Responsibilities:

1) The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.

2) In accordance with a periodic time frame determined by the NYSDEC, the owner shall periodically certify, in writing, that all Institutional Controls set forth in an Environmental Easement remain in place and continue to be complied with. The owner shall provide a written certification to the RP, upon the RP's request, in order to allow the RP to include the certification in the site's Periodic Review Report (PRR) certification to the NYSDEC.

3) In the event the site is delisted, the owner remains bound by the Environmental Easement and shall submit, upon request by the NYSDEC, a written certification that the Environmental Easement is still in place and has been complied with.

4) The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.

5) The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. If damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section 1.3 of this SMP.

6) If some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in Section 1.3 of this SMP and coordinate the performance of necessary corrective actions with the RP.

7) The owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site property. 6 NYCRR Part 375 contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 1.3 of this SMP. A change of use includes, but is not limited to, any activity that may increase direct human or environmental exposure (e.g., day care, school or park). A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html.

8) Until such time as the NYSDEC deems the sub-slab depressurization system (SSDS) unnecessary, the owner shall operate the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and the NYSDEC.

9) In accordance with the tenant notification law, within 15 days of receipt, the owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the site, whether produced by the NYSDEC, RP,

or owner, to the tenants on the property. The owner must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

Remedial Party Responsibilities

1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.

2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.

3) Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.

4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the owner(s).

5) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html.

6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section 1.3 Notifications of the SMP.

7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the site, as required in Section 4.0 Operation and Maintenance Plan of the SMP.

8) The RP is responsible for the proper monitoring and maintenance of any installed drinking water treatment system associated with the site, as required in Section 4.0 Operation and Maintenance Plan of the SMP.

9) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.

10) Any change in use, change in ownership, change in site classification (*e.g.*, delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the SMP and/or updated legal documents. The RP shall contact the NYSDEC project manager to discuss the need to update such documents.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

APPENDIX I

Remedial System Optimization Report
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LANGAN

REMEDIAL SYSTEM OPTIMIZATION REPORT

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