2021-2022 PERIODIC REVIEW REPORT

for

44-30 PURVES STREET
Long Island City, New York
NYSDEC BCP Site No. C241162

Prepared For:

Gotham Organization, Inc.
432 Park Avenue South, 2nd Floor
New York, New York 10016

Prepared By:

Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology, D.P.C.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, New York 10001

October 27, 2022
170282502

LANGAN

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 General

This Periodic Review Report (PRR) was prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved October 21, 2015 Site Management Plan (SMP) and Section 6.3 of NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation. The certification period for this PRR is May 13, 2021 through May 13, 2022. A periodic review of all institutional and engineering controls (IC/ECs) and a site evaluation are required for fulfillment of the remedial action at 44-30 Purves Street (the site) under the Brownfield Cleanup Program (BCP), which is administered by the NYSDEC. The site was accepted into the BCP (Site No. C241162) and a Brownfield Cleanup Agreement (BCA), Index No. C241162-06-14, was executed on June 12, 2014. Site remediation was performed in accordance with the December 7, 2014 Remedial Action Work Plan (RAWP). NYSDEC issued a Certificate of Completion for the site on December 21, 2015.

1.2 Site Description

The site is located at 44-30 Purves Street in the Long Island City neighborhood of Queens, New York and is identified as Block 268, Lot 1 on the New York City Tax Map. The irregularly-shaped, 0.62-acre site is bound by Purves Street to the east, a 10-story residential building to the southeast (Lot 31), Thomson Avenue to the southwest, 44th Drive to the west, and a 27-story residential building to the north (Lot 4). A site location map is included as Figure 1.

The site is improved with a 35-story residential building with frontage along Purves Street, a two-story building with residences, residential amenity space and retail along Thomson Avenue and 44th Drive, and an open, partially-paved and partially-landscaped courtyard. A ventilated parking garage spans an area of about 11,000 square feet in the lowest level of the building along Thomson Avenue and 44th Drive.

1.3 Site Background and Environmental History

The site is within a historically industrial area of Long Island City, Queens and was used for manufacturing purposes as early as the 1940s, including a chemical laboratory, automobile repair, private garage, controller and fine chemicals manufacturing, and welding and repair services. Several environmental investigations and reports were completed between April 2006 and September 2014: April 2006 Phase I Environmental Site Assessment (ESA), November 2006 Phase II Environmental Site Investigation (ESI), December 2011 Phase I ESA, and September 2014 Remedial Investigation Report (RIR).

A summary of investigation findings for each report is provided in the 2014 RIR. The conclusions of the investigation reports are summarized as follows:

- Two underground storage tanks (USTs) are shown on the 1947 and 1950 Sanborn maps. Petroleum impacts identified in soil were attributed to the suspected USTs.
- A variable site-wide historic fill layer was present up to 11 feet thick and contained semivolatile organic compound (SVOC), pesticide, polychlorinated biphenyl (PCB), and metal concentrations that exceeded RURR SCOs[1].
- Tetrachloroethene (PCE) and trichloroethene (TCE) were detected in groundwater at concentrations exceeding NYSDEC SGVs[2].
- PCE and TCE were detected in soil vapor throughout the site.
- On-site PCE and TCE impacts to soil vapor and groundwater were attributed to an off-site source.

1.4 Summary of Remedial Action

A Track 4 remediation was implemented in accordance with the NYSDEC-approved November 7, 2014 RAWP between March 16 and October 30, 2015. A detailed account of the remedy is provided in the November 13, 2015 Final Engineering Report (FER), and is summarized as follows:

- Excavation and off-site disposal of hazardous lead-impacted historic fill, petroleum-impacted material, and contaminated nonhazardous historic fill material exceeding the Track 4 Site-Specific SCOs to depths of 4.5 to 7 feet below grade surface (bgs) throughout the site and to about 8 feet bgs for elevator pits and one UST excavation
- Decommissioning, closure, and removal of four USTs (including two previously unknown USTs) and collection and analysis of endpoint soil samples for each UST location
- Collection and analysis of documentation soil samples from the base of the excavation and the perimeter sidewalls, in accordance with NYSDEC DER-10
- Backfilling excavations to development grade with recycled concrete aggregate (RCA) and 3/4-inch virgin crushed stone

[1] RURR SCOs = Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (6 NYCRR) NYSDEC Part 375 Restricted Use Restricted-Residential (RURR) Soil Cleanup Objectives (SCOs).

[2] NYSDEC SGVs = NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGVs).

For contaminated soil remaining after remediation, the following controls were implemented:

Engineering Controls (ECs)

- Composite cover system, consisting of: (1) 10-inch-thick reinforced concrete building slabs above a vapor barrier/waterproofing membrane, (2) concrete pavement, and (3) two feet of clean stone above a demarcation barrier in landscaped areas
- Installation and operation of a sub-membrane depressurization (SMD) system, under portions of the site building that are not used as a mechanically-ventilated parking garage, to mitigate potential volatile organic compound (VOC) vapor intrusion into the building

Institutional Controls (ICs)

- Execution of an Environmental Easement
- Implement, maintain and monitor the ECs
- Prevent exposure to residual soil contaminants by controlling any disturbance below the composite cover through an SMP
- Limit the use and development of the site to restricted-residential, commercial and industrial uses only

With the exception of installation of the above-slab portions of the SMD system, remedial activities were completed as of October 30, 2015. Above-slab portions of the SMD system were completed during the balance of building construction. The building is complete and has a NYC-issued certificate of occupancy.

1.5 Effectiveness of the Remedial Program

The remedial program was designed to eliminate or mitigate environmental and human health exposure to adverse environmental conditions still present in soil, groundwater, and soil vapor. The ICs and ECs for the certification period meet the remedial objectives for the site.

1.6 Compliance

The SMD system was observed to be deficient during the annual inspection on February 16, 2021 for the 2021 to 2022 certification period. One of the two SMD system blowers was not operating as designed, and the defective blower was turned off to prevent damage. Langan notified Airtech, the blower manufacturer, of the blower observations during the annual inspection, and Airtech suspected that the deficiency was caused by a blockage in the SMD system piping.

Langan made multiple attempts to diagnose and address the blockage. Langan submitted a draft Corrective Measures Work Plan (CMWP) to NYSDEC and New York State Department of

Health (NYSDOH) on September 23, 2022, and corrective measures were implemented in September 2022.

The blower remained off from February 16, 2022 to September 13, 2022, when the blockage was removed, and the SMD system blower was restarted. Results of an indoor air sample collected following the restart indicate that the deficiency has not caused concentrations of TCE and PCE in indoor air to exceed NYSDOH Air Guideline Values for Indoor Air (NYSDOH AGV). Corrective measures and indoor air results are detailed in the October 19, 2022 Corrective Measures Work Plan and October 25, 2022 Indoor Air Results Memo, which are provided as Appendix A. All other ICs and ECs remain fully in place at the site for the certification period and continue to be effective.

1.7 Recommendations

No changes to the SMP are recommended at this time.

2.0 IC/EC PLAN COMPLIANCE REPORT

IC/ECs are required to protect human health and the environment because residual contaminated soil, groundwater, and soil vapor exists in the site subsurface. The IC/EC Plan included in the SMP describes the procedures for the implementation and management of the IC/ECs.

2.1 IC/EC Components

The following summarizes IC/ECs implemented at the site:

- Operation and maintenance of the SMD system, installed under portions of the site building that are not used as a mechanically-ventilated parking garage, to mitigate potential VOC vapor intrusion into the building. The parking garage is ventilated in accordance with the New York City Mechanical Code. The SMD layout plan is shown on Figure 2.
- Maintenance of a composite cover system to prevent human exposure to residual contaminated soils remaining under site structures. The location and components of the composite cover are shown on Figure 3.
- The site may be used for restricted-residential use as described in 6 NYCRR Part 375-1.8(g)(2)(iii), commercial use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial use as described in 6 NYCRR Part 375-1.8(g)(2)(iv).
- All ECs must be operated, maintained, and inspected as specified in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC.
- All future activities on the property that will disturb residual contaminated material must be conducted in accordance with the SMP.
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.
- Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to ensure compliance with the restrictions identified by the Environmental Easement (included as Appendix B).

- The site shall not be used for unrestricted or residential uses as defined in 6 NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

2.2 Goal Status and Corrective Measures

In accordance with the SMP, an annual site inspection was performed on February 16, 2022. The following deficiency was observed:

- The flow and vacuum readings at the Airtech 3BA1400 blower, connected to the southern SMD system loop, were oscillating at a range beyond what the blower was designed to handle. Based on observations and feedback from the blower manufacturer, there appeared to a blockage within the pipe run leading up to the blower.

The blower was turned off to prevent further damage. The other SMD system continued to operate, and the vapor barrier membrane and the 10-inch concrete foundation slab remained intact.

Subsequent site visits were conducted in April, July, and September of 2022 to further troubleshoot and repair the system:

- On April 27, the Airtech 3BA1400 filter was replaced; and
- On July 6, the Airtech 3BA1400 was disconnected and a video inspection of the SMD system riser piping from the rooftop blower down was performed.

The video inspection did not resolve the deficiency observed during the February 16, 2022 inspection. Due to the number of 90-degree bends within the SMD system riser piping and limited access to the riser piping at the ground floor, only a portion of the SMD system piping was observed; no blockages were detected during the video inspection.

In September of 2022, the following corrective actions were implemented:

- Installation of a sample port and bidirectional cleanout at the base of the riser pipe (near the ground floor slab) to access and remove obstructions;
- Reconnection of previously disassembled SMD system piping on the roof;
- Activation of the Airtech 3BA1400 blower, and collection of flow and vacuum readings;
- Collection of one indoor air sample in the area above the southern SMD system loop, inside one of the building staff offices, and one outdoor ambient air sample for quality assurance/quality control (QA/QC) purposes; and
- Completion of a NYSDOH Indoor Air Quality Questionnaire and Building Inventory during the sampling event.

Sample locations are shown in Appendix A. Samples were collected into laboratory-supplied, batch-certified, Summa® canisters over an 8-hour sampling period and transported via courier

under a chain-of-custody to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. The samples were analyzed for VOCs via United States Environmental Protection Agency (USEPA) Method TO-15.

Indoor air sample results were compared to the NYSDOH AGVs.

Indoor air analytical results are included in the Indoor Air Sample Results Memo. PCE and TCE were not detected above NYSDOH AGVs. The laboratory analytical data report for indoor and ambient air samples, and the Indoor Air Quality Questionnaire and Building Inventory are included as Appendix A.

2.3 Conclusions and Recommendations

The SMD system deficiency observed during the February 16, 2022 annual site-wide inspection has been resolved. The deficiency has not caused concentrations of TCE and PCE in indoor air to exceed NYSDOG AGVs. No changes to the SMP are recommended at this time.

3.0 MONITORING PLAN COMPLIANCE REPORT

3.1 Monitoring Plan Components

The components of the Monitoring Plan are as follows:

1. Annual inspection of the composite cover system;
2. Annual inspection of the SMD system and parking garage ventilation system; and
3. Annual site-wide inspection.

A comprehensive inspection was conducted on February 16, 2022 that included the three above-listed monitoring plan components. The SMD system was also inspected on September 30, 2022, following implementation of the October 14, 2022 Corrective Measures Work Plan. Site inspection photographs are provided in Appendix C. A summary of each inspection is presented in the following sections and the inspection forms detailing findings are provided in Appendices D, E, and F.

3.2 Summary of Monitoring Completed

3.2.1 Composite Cover System Inspection

The annual composite cover system was inspected on February 16, 2022, including a visual assessment for integrity of the site building slabs, pavers and stone in landscaped areas, and the sidewalk pavement along Purves Street. Damages and/or breaches to the composite cover system were not identified during the annual inspection events for the certification period. A composite cover system inspection form is included as Appendix D.

3.2.2 SMD System Inspection

Inspection of the SMD system was conducted on February 16, 2022. The SMD system was inspected to determine whether the system installation and function is satisfactory and consistent with the manufacturer's specifications and the design criteria. The flow and vacuum readings at the Airtech 3BA1400 blower, connected to the southern SMD system loop, were oscillating at a range beyond what the blower was designed to handle. Based on observations and feedback from the blower manufacturer, there appeared to a blockage within the pipe run leading up to the blower.

The blower was turned off to prevent further damage. The other SMD system continued to operate, and the vapor barrier membrane and the 10-inch concrete foundation slab remained intact.

Subsequent site visits were conducted in April, July, and September of 2022 to further troubleshoot and repair the system. Activities completed during these site visits are detailed in section 2.2.

An SMD system inspection was performed on September 30, 2022. Based on the inspection, the SMD system is operational and functioning within the design criteria

The SMD system inspection forms are included in Appendix E.

3.2.3 Annual Site-wide Inspection

The annual site-wide inspection was completed on February 16, 2022. This consisted of spot inspections of all ECs and verification of ICs. All IC/EC components inspected were in compliance with the SMP. Deviations or discrepancies were not observed. The completed site-wide inspection form is included as Appendix F.

3.3 Conclusions and Recommendations

The SMD system deficiency observed during the February 16, 2022 annual site-wide inspection has been resolved. No changes to the SMP are recommended at this time.

4.0 OPERATION & MAINTENANCE (O&M) PLAN COMPLIANCE REPORT

4.1 O&M Plan Purpose

The components of the O&M Plan are as follows:

- Continuous operation and maintenance, as necessary, of the SMD system

4.2 SMD O&M Activities

SMD system inspections for the 2021-2022 reporting period were performed on February 16, 2022, April 27, 2022, July 6, 2022, August 17, 2022, and September 30, 2022 following initial startup and testing, which was completed on March 6, 2018. Inspections consisted of documenting the accessible, above-grade components of the SMD system, recording flow readings, testing the system alarm, and documenting the vacuum gauge readings.

4.2.1 Evaluation of SMD System

The SMD system primary objective is to create a negative pressure under the floor slab and draw soil vapor to the two vacuum blowers located on the roof of the building, where the vapor is discharged to and diluted with the atmosphere. Based on the inspections, the SMD system is operational and functioning within the design criteria.

4.3 O&M Deficiencies

No deficiencies were identified during the February 16, 2022 site inspection. A paper copy of the O&M plan was not available to the site but plan was accessed electronically.

4.4 Conclusions and Recommendations

No changes to the SMP are recommended at this time.

5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

5.1 SMP Compliance

Each component of the SMP, including the IC/EC Plan, Monitoring Plan, and O&M Plan, was in compliance for the certification period.

5.2 Remedy Performance Evaluation

5.2.1 Composite Cover System

Conditions of the site building slabs and landscaped areas were inspected for quality and integrity. The site-wide composite cover system was observed to be intact and continues to protect public health and the environment.

5.2.2 SMD System

Despite a temporary shutoff of the blower connected to the southern SMD system loop, the SMD system is operating as designed and is mitigating the potential exposure to soil vapor contaminants.

5.2.3 IC Components

All ICs were maintained during the certification period, and the Environmental Easement on the site remains in place.

5.3 Future Submittals

Annual inspections of the SMD system and site-wide composite cover system will continue to be conducted as specified in the NYSDEC-approved SMP Reporting Plan. Forms and other information generated during regular monitoring events and inspections will be submitted at the time of the annual PRR.

6.0 CERTIFICATION OF IC/ECS

6.1 IC/EC Certification Form

The completed IC/EC Certification Form is provided as Appendix G.

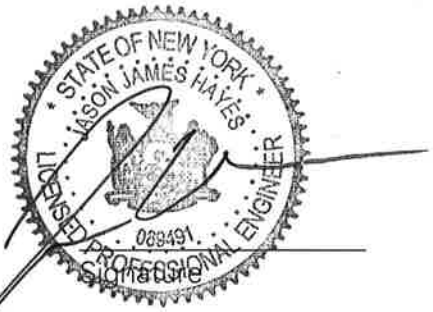
6.2 IC/EC Certification

I, Jason Hayes, P.E., of Langan, have been authorized and designated by the site owner to sign this certification for the site.

For each IC/EC identified for the site, I certify that to the best my knowledge all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the IC/ECs required by the remedial program was performed under my direction;
- The IC/ECs employed at this site are unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the site is compliant with the environmental easement;
- The 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 are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.



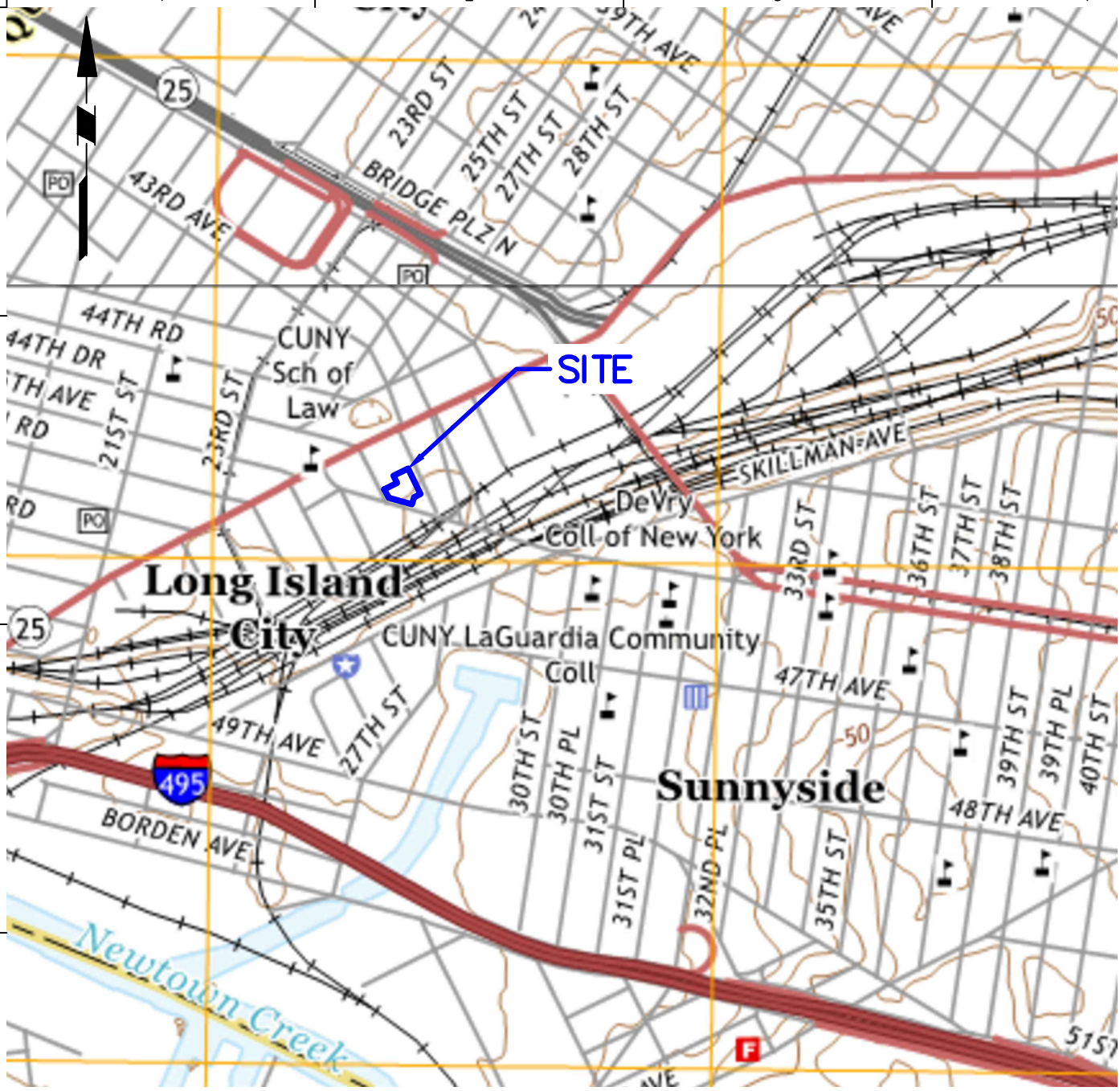
089491
New York State Professional Engineer #

10/27/2022
Date

Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

FIGURES



LEGEND:

SITE BOUNDARY

NOTES:

1. BASE MAP ADAPTED FROM UNITED STATES GEOLOGICAL SURVEY (USGS) 2016 7.5-MINUTE SERIES TOPOGRAPHIC MAP, CENTRAL PARK, NY-NJ AND BROOKLYN, NY.

1000 0 500 1000

SCALE: 1 INCH = 1000 FEET

LANGAN

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

44-30 PURVES STREET

BLOCK No. 268 LOT No. 1

QUEENS NEW YORK

Figure Title

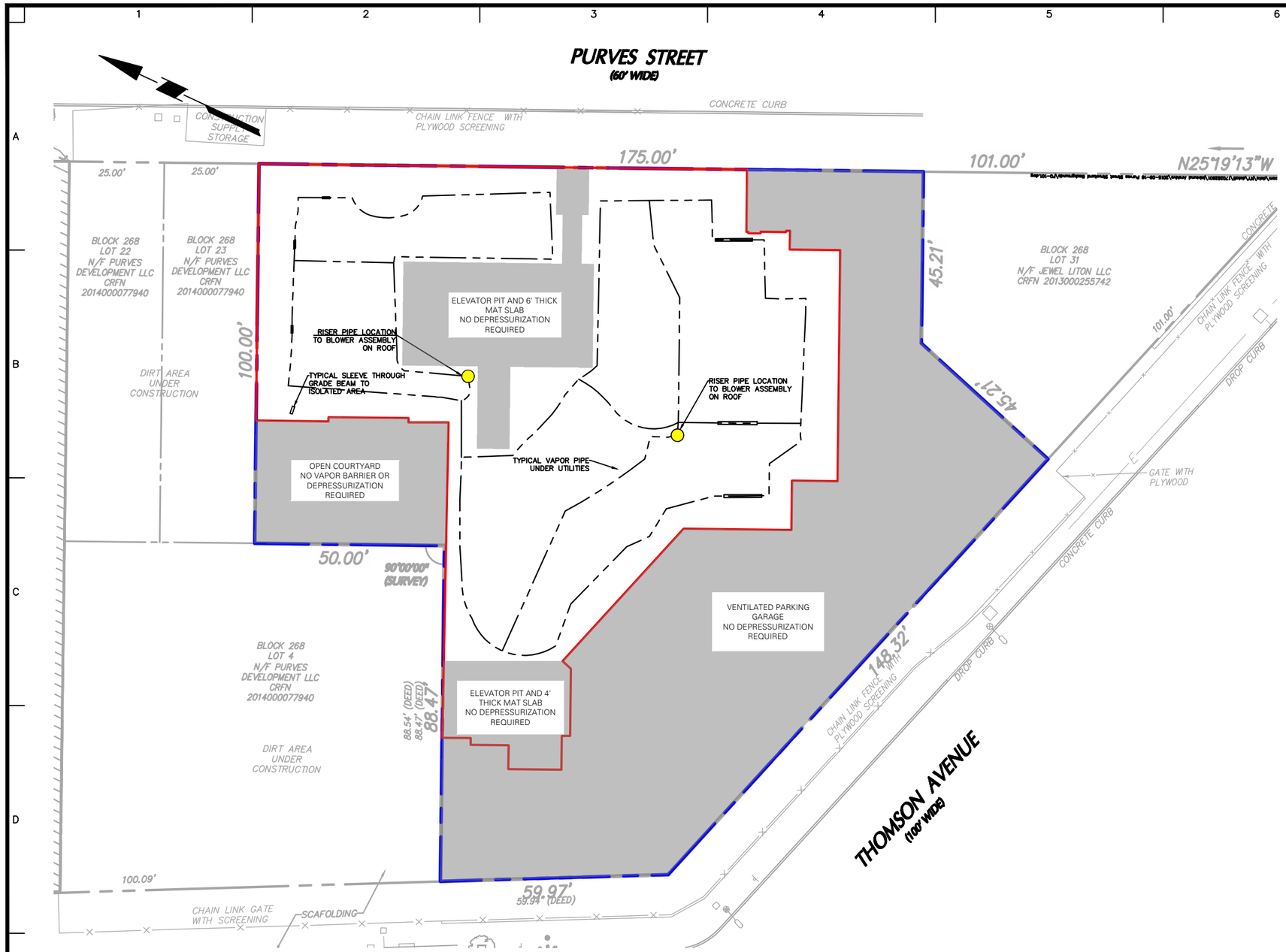
SITE LOCATION MAP

Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP

Figure No. 1

Sheet 1 of 4

Filename: \\langan.com\data\NY\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Annual Certifaction PRR\Figure 1 - Site Location Map.dwg Date: 10/12/2022 Time: 13:32 User: bkoontz Style Table: Langan.stb Layout: ANSIA-BP



GENERAL NOTES:

1. BASE MAPS TAKEN FROM FXFOWLE, "FOUNDATION PLAN BUILDING A, FO-101.00", DATED MAY 12, 2014, REVISED JULY 30, 2015, AND MAY 21, 2015 SURVEY BY LANGAN.
2. VAPOR BARRIER EXTENDS BELOW THE FOOTPRINT AND ALONG THE VERTICAL WALLS OF DEPRESSED FOUNDATION MAT AND SLABS, AS NOTED IN THE DRAWING. VAPOR BARRIER INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. VAPOR COLLECTION PIPE RUNS ARE APPROXIMATE. PIPE LOCATIONS ARE SHOWN IN AS-BUILT DRAWING INCLUDED IN APPENDIX Q.
4. RISER PIPE STUB LOCATION IS APPROXIMATE. RISER PIPE RUNS AND ROOF-TOP BLOWER AND EXHAUST POINT LOCATIONS ARE SHOWN IN AS-BUILT DRAWINGS.
5. THE DEEP ELEVATOR PIT AND SHEAR WALL PILE CAP ARE NOT DEPRESSURIZED BECAUSE IT IS A 6-FOOT THICK CONCRETE MAT AND WATERPROOFED IN ACCORDANCE WITH THE FOUNDATION DRAWINGS AND SPECIFICATIONS.
6. THE WATERPROOFING BENEATH THE SHEAR WALL PILE CAP, DEEP ELEVATOR PIT, AND ANY OTHER WATERPROOFED FOUNDATION ELEMENT, ARE MARRIED TO THE VAPOR BARRIER MEMBRANE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
7. SLEEVES THROUGH GRADE BEAMS WERE DESIGNED BY OTHERS.

LEGEND:

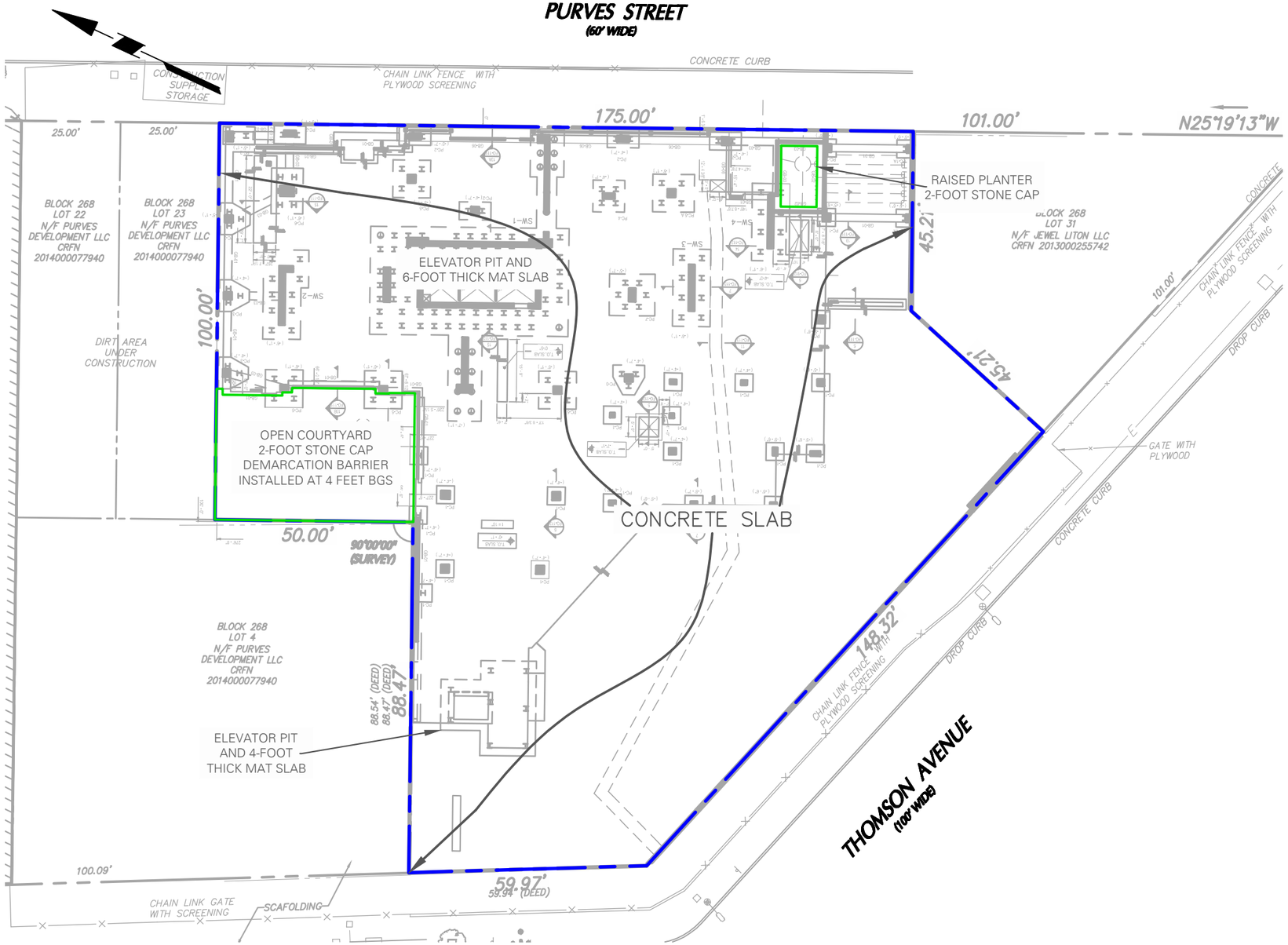
- PROPERTY BOUNDARY
- VAPOR BARRIER EXTENTS
- SMD VAPOR COLLECTION PIPING
- SLEEVE THROUGH GRADE BEAM FOR VAPOR COLLECTION PIPE
- APPROXIMATE RISER PIPE LOCATION

30 0 15 30
SCALE IN FEET

LANGAN
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	44-30 PURVES STREET BLOCK No. 268, LOT No. 1 QUEENS NEW YORK
Figure Title	SMD AND VAPOR BARRIER LAYOUT PLAN
Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP
Figure No.	2
Sheet	2 of 4

Filename: \\langan.com\data\NY\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Annual Certifaction PRR\Figure 2 - SMD and Vapor Barrier Plan.dwg Date: 10/12/2022 Time: 13:35 User: bkontz Style Table: Langan.stb Layout: ANSIB-BL



GENERAL NOTES:

1. BASE MAPS TAKEN FROM FXFOWLE, "FOUNDATION PLAN BUILDING A, FO-101.00", DATED MAY 12, 2014, REVISED JULY 30, 2015, AND MAY 21, 2015 SURVEY BY LANGAN.
2. THE STONE USED FOR THE 2-FOOT CAPS WAS IMPORTED FROM THE TILCON WEST NYACK QUARRY LOCATED IN WEST NYACK, NEW YORK. THE QUARRY IS A NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT)-APPROVED QUARRY, AND THE STONE MEETS THE REQUIREMENTS FOR NYSDOT #2 STONE. GRADATION ANALYSIS RESULTS SHOWED THAT THE STONE HAS LESS THAN 10% BY WEIGHT PASSING THROUGH A #80 SIEVE.
3. BGS = BELOW GRADE SURFACE

LEGEND:

PROPERTY BOUNDARY

LANDSCAPED AREA EXTENTS

30 0 15 30

SCALE IN FEET

LANGAN
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
44-30 PURVES STREET
BLOCK No. 268, LOT No. 1
QUEENS NEW YORK

Figure Title
COMPOSITE COVER SYSTEM PLAN

Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP

Figure No. 3

Sheet 3 of 4

Filename: \\langan.com\data\NY\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Annual Certifaction PRR\Figure 3 - Composite Cover System Plan.dwg Date: 10/12/2022 Time: 13:37 User: bkoontz Style Table: Langan.stb Layout: ANSIB-BL

APPENDIX A

ADDITIONAL ENVIRONMENTAL REPORTS

October 20, 2022

Mr. Manfred Magloire
Environmental Engineer, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

Re: Corrective Measures Work Plan
44-30 Purves Street
Long Island City, NY 11101
NYSDEC BCP Site No. C241162
Langan Project No.: 170282501

Dear Mr. Magloire,

Langan Engineering, Environmental, Survey, Landscape Architecture and Geology, D.P.C. (Langan) prepared this Corrective Measures Work Plan (CMWP) on behalf of Purves Street Owners, LLC (the Volunteer) for the property located at 44-30 Purves Street, Long Island City, New York (the site). This CMWP was prepared in accordance with the procedures set forth in the New York State Department of Environmental Conservation (NYSDEC)-approved October 21, 2015 Site Management Plan (SMP), prepared by Langan. This CMWP was prepared to document the operation deficiencies with the sub-membrane depressurization (SMD) system, troubleshooting conducted to date, and propose a plan and schedule for corrective actions.

SITE BACKGROUND

The site is located at 44-30 Purves Street in the Long Island City neighborhood of Queens, New York and is identified as Block 268, Lot 1 on the New York City Tax Map. The irregularly-shaped, 0.62-acre site is bound by Purves Street to the east, a 10-story residential building to the southeast (Lot 31), Thomson Avenue to the southwest, 44th Drive to the west, and a 27-story residential building to the north (Lot 4). A site location map is included as Figure 1.

The site is improved with a 35-story residential building with frontage along Purves Street, a two-story building with residences, residential amenity space and retail along Thomson Avenue and 44th Drive, and an open, partially-paved and partially-landscaped courtyard. A ventilated parking garage spans an area of about 11,000 square feet in the lowest level of the building along Thomson Avenue and 44th Drive.

The site is within a historically industrial area of Long Island City, Queens and was used for manufacturing purposes as early as the 1940s, including a chemical laboratory, automobile repair, private garage, controller and fine chemicals manufacturing, and welding and repair services. Several environmental investigations and reports were completed between April 2006 and September 2014: April 2006 Phase I Environmental Site Assessment (ESA), November 2006 Phase II Environmental Site Investigation (ESI), December 2011 Phase I ESA, and September 2014 Remedial Investigation Report (RIR). Previous investigations documented the presence of tetrachloroethene (PCE) and trichloroethene (TCE) in groundwater and soil vapor at the site. On-site PCE and TCE impacts to soil vapor and groundwater were attributed to an off-site source.

A Track 4 remediation was implemented in accordance with the NYSDEC-approved September 7, 2014 Remedial Action Work Plan (RAWP) between March 16 and October 30, 2015. A detailed account of the remedy is provided in the November 2015 Final Engineering Report (FER). The following controls have been implemented at the site:

Engineering Controls (ECs)

- Composite cover system, consisting of: (1) 10-inch-thick reinforced concrete building slabs above a vapor barrier/waterproofing membrane, (2) concrete pavement, and (3) two feet of clean stone above a demarcation barrier covered with top soil to support vegetative growth in landscaped areas.
- Installation and operation of a SMD system, under portions of the site building that are not used as a mechanically-ventilated parking garage, to mitigate potential volatile organic compound (VOC) vapor intrusion into the building - The SMD system consists of two connected sub-slap loops of perforated piping connected to two roof-mounted blowers.

Institutional Controls (ICs)

- Execution of an Environmental Easement
- Implement, maintain and monitor the ECs
- Prevent exposure to residual soil contaminants by controlling any disturbance below the composite cover through an SMP
- Limit the use and development of the site to restricted-residential, commercial and industrial uses only

With the exception of installation of the above-slab portions of the SMD system, remedial activities were completed as of October 30, 2015. Above-slab portions of the SMD system were completed during the balance of building construction. System startup was completed in March 2018.

SMD SYSTEM DEFICIENCIES AND TROUBLESHOOTING

In accordance with the SMP, an annual site inspection was performed on February 16, 2022. The following deficiency was observed:

- The flow and vacuum readings at the Airtech 3BA1400 blower, connected to the southern SMD system loop, was oscillating and operating at a range beyond what the blower is designed to handle. Based on observations and feedback from the blower manufacturer, there appeared to a blockage within the pipe run leading up to the blower.

The blower was turned off to prevent further damage. The other SMD system continues to operate, and the vapor barrier membrane and the 10-inch concrete foundation slab remain intact.

Subsequent site visits were conducted in April and July of 2022 to further troubleshoot the system:

- On April 27, the Airtech 3BA1400 filter was replaced; and
- On July 6, the Airtech 3BA1400 was disconnected and a video inspection of the SMD riser piping from the rooftop blower down was performed.

The video inspection did not resolve the deficiency observed during the February 16, 2022 inspection. Due to the number of 90-degree bends within the SMD riser piping and limited access to the riser piping at the ground floor, only a portion of the SMD piping was observed; no blockages were detected during the video inspection.

PROPOSED CORRECTIVE MEASURES

The proposed corrective measures include installation of a bidirectional cleanout at the base of the riser pipe (near the ground floor slab). The cleanout will be used as an access port to remove obstructions within the riser with a drain snake or other applicable tool. Once the blockage is removed, a new sample port will be installed on the riser and the previously disassembled piping on the roof will be reconnected. The blower will then be activated and its performance will be documented with flow and vacuum readings.

Following activation of the blower, one indoor air sample will be collected to document indoor air quality in the area above the southern SMD system loop. The ground floor is occupied by a residential lobby, building staff offices, storage rooms, and mechanical rooms. The proposed indoor air sample will be collected inside one of the building staff offices. An outdoor ambient air sample will also be collected for quality assurance/quality control (QA/QC). Proposed sample locations are shown on Figure 3.

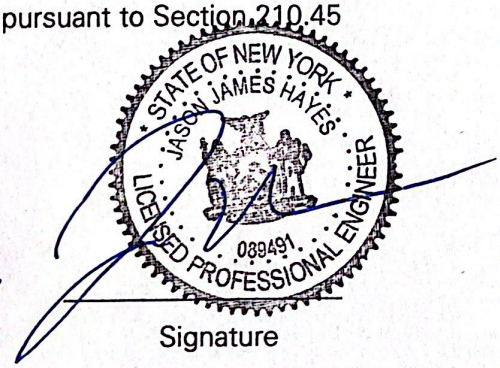
The samples will be collected into laboratory-supplied, batch-certified, Summa® canisters over an 8-hour sampling period. The samples will be labeled and transported via courier under a chain-of-custody to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. The samples will be analyzed for VOCs via United

States Environmental Protection Agency (USEPA) Method TO-15. A NYSDOH Indoor Air Quality Questionnaire and Building Inventory will be completed during the sampling event.

CERTIFICATIONS

I, Jason Hayes, certify that I am currently a New York State (NYS) registered professional engineer and that this Remedial Action Work 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).

I certify that all information and statements in this certification 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.



089491	10/20/2022	
NYS Professional Engineer #	Date	Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

SCHEDULE AND REPORTING

Access to the property will be coordinated with the Volunteer, and a mobilization to implement the corrective measures will be scheduled. Documentation of the corrective measures will be provided in the Periodic Review Report.

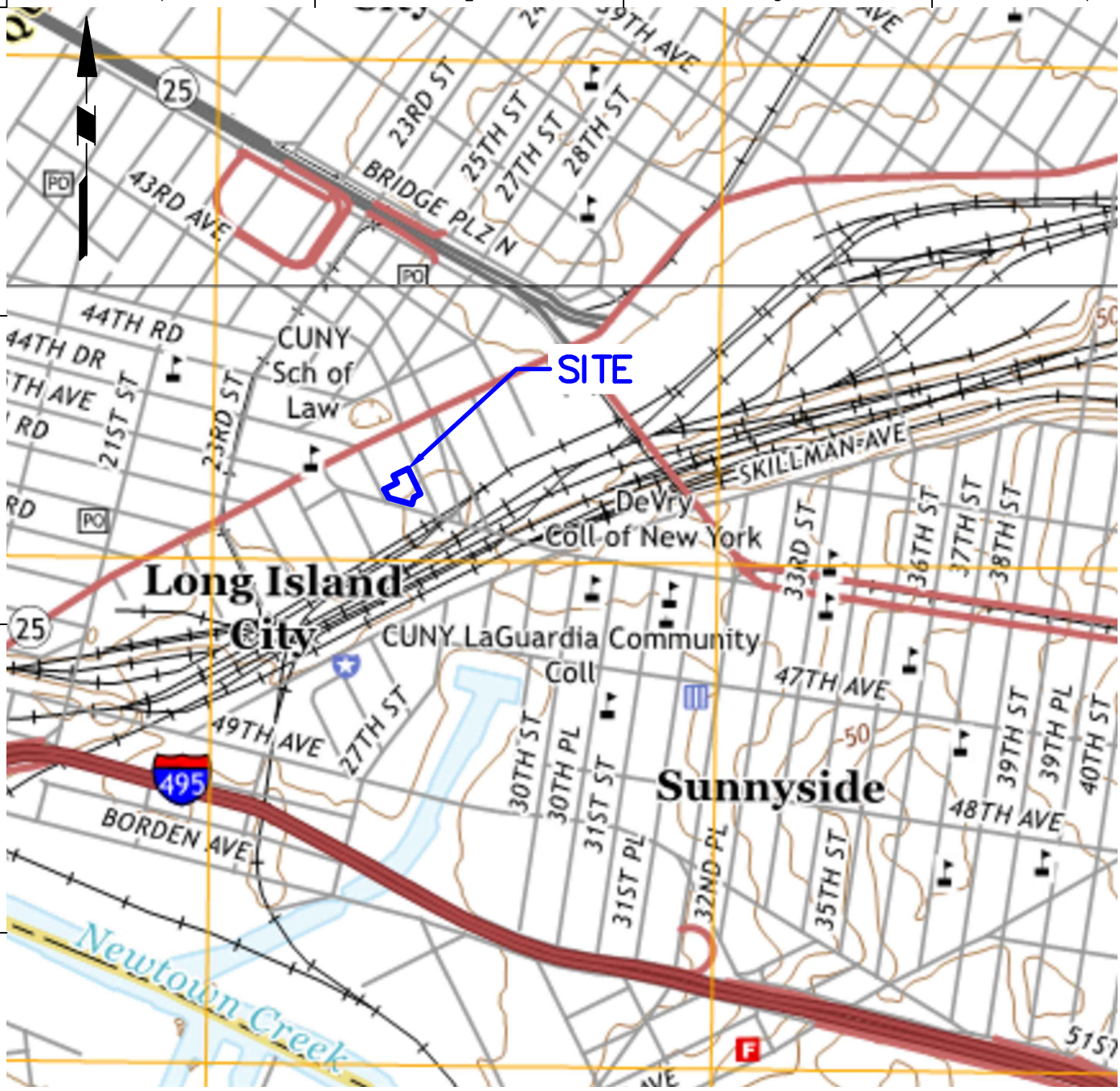
Sincerely,
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

Jason Hayes, PE, LEED AP
Principal/Vice President

Paul McMahon, PE
Senior Project Manager

Enclosure(s): Figure 1 – Site Location Map
Figure 2 – SMD and Vapor Barrier Plan
Figure 3 – Proposed Indoor Air Sample Location

FIGURES



LEGEND:

SITE BOUNDARY

NOTES:

1. BASE MAP ADAPTED FROM UNITED STATES GEOLOGICAL SURVEY (USGS) 2016 7.5-MINUTE SERIES TOPOGRAPHIC MAP, CENTRAL PARK, NY-NJ AND BROOKLYN, NY.

1000 0 500 1000

SCALE: 1 INCH = 1000 FEET

LANGAN

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

44-30 PURVES STREET

BLOCK No. 268 LOT No. 1

QUEENS NEW YORK

Figure Title

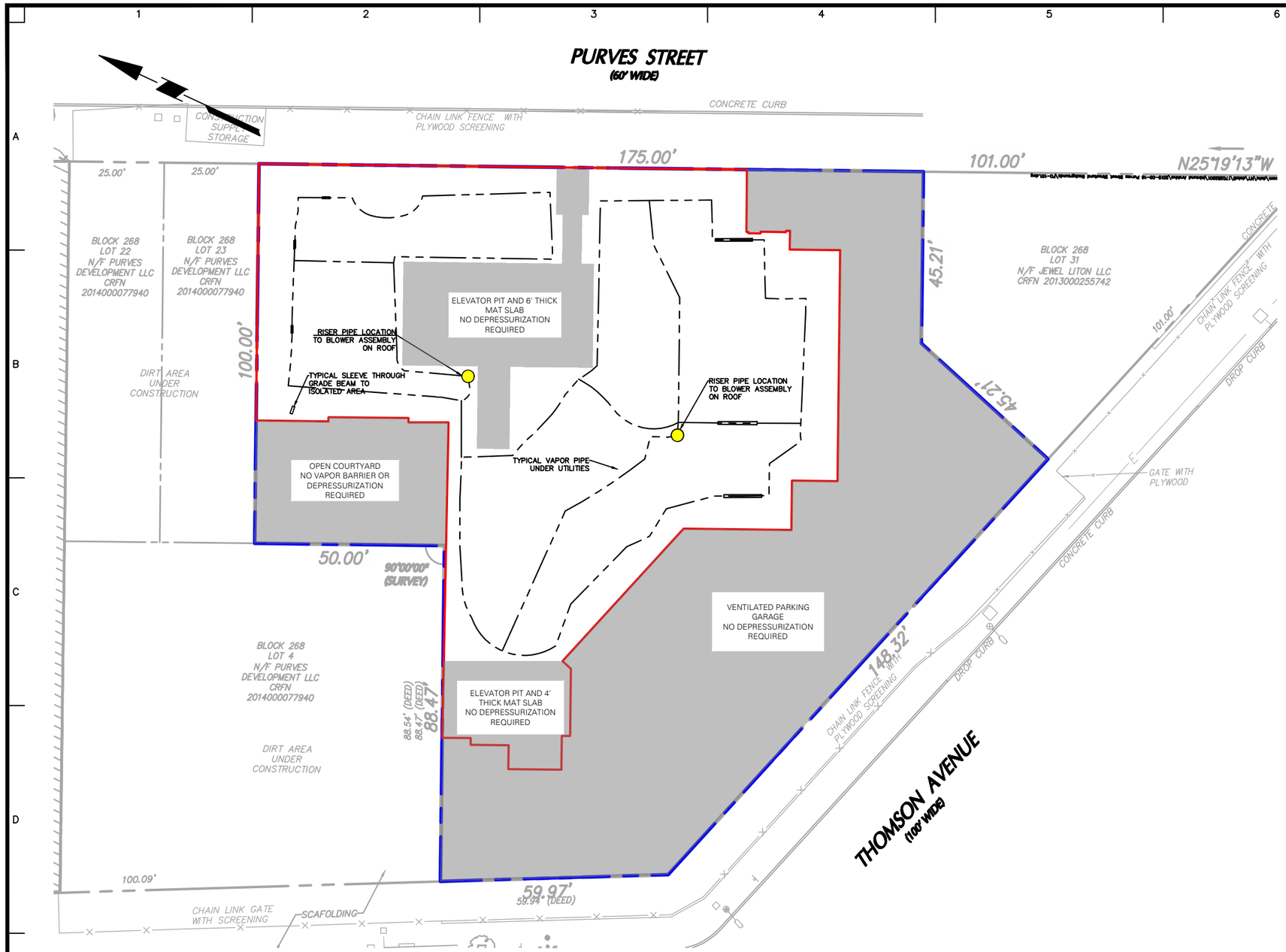
SITE LOCATION MAP

Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP

Figure No. 1

Sheet 1 of 2

Filename: \\langan.com\data\NYC\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Corrective Measures Report\Figure 1 - Site Location Map.dwg Date: 7/1/2022 Time: 16:38 User: bkoontz Style Table: Langan.stb Layout: ANSIA-BP



GENERAL NOTES:

1. BASE MAPS TAKEN FROM FXFOWLE, "FOUNDATION PLAN BUILDING A, FO-101.00", DATED MAY 12, 2014, REVISED JULY 30, 2015, AND MAY 21, 2015 SURVEY BY LANGAN.
2. VAPOR BARRIER EXTENDS BELOW THE FOOTPRINT AND ALONG THE VERTICAL WALLS OF DEPRESSED FOUNDATION MAT AND SLABS, AS NOTED IN THE DRAWING. VAPOR BARRIER INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. VAPOR COLLECTION PIPE RUNS ARE APPROXIMATE. PIPE LOCATIONS ARE SHOWN IN AS-BUILT DRAWING INCLUDED IN APPENDIX Q.
4. RISER PIPE STUB LOCATION IS APPROXIMATE. RISER PIPE RUNS AND ROOF-TOP BLOWER AND EXHAUST POINT LOCATIONS ARE SHOWN IN AS-BUILT DRAWINGS.
5. THE DEEP ELEVATOR PIT AND SHEAR WALL PILE CAP ARE NOT DEPRESSURIZED BECAUSE IT IS A 6-FOOT THICK CONCRETE MAT AND WATERPROOFED IN ACCORDANCE WITH THE FOUNDATION DRAWINGS AND SPECIFICATIONS.
6. THE WATERPROOFING BENEATH THE SHEAR WALL PILE CAP, DEEP ELEVATOR PIT, AND ANY OTHER WATERPROOFED FOUNDATION ELEMENT, ARE MARRIED TO THE VAPOR BARRIER MEMBRANE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
7. SLEEVES THROUGH GRADE BEAMS WERE DESIGNED BY OTHERS.

LEGEND:

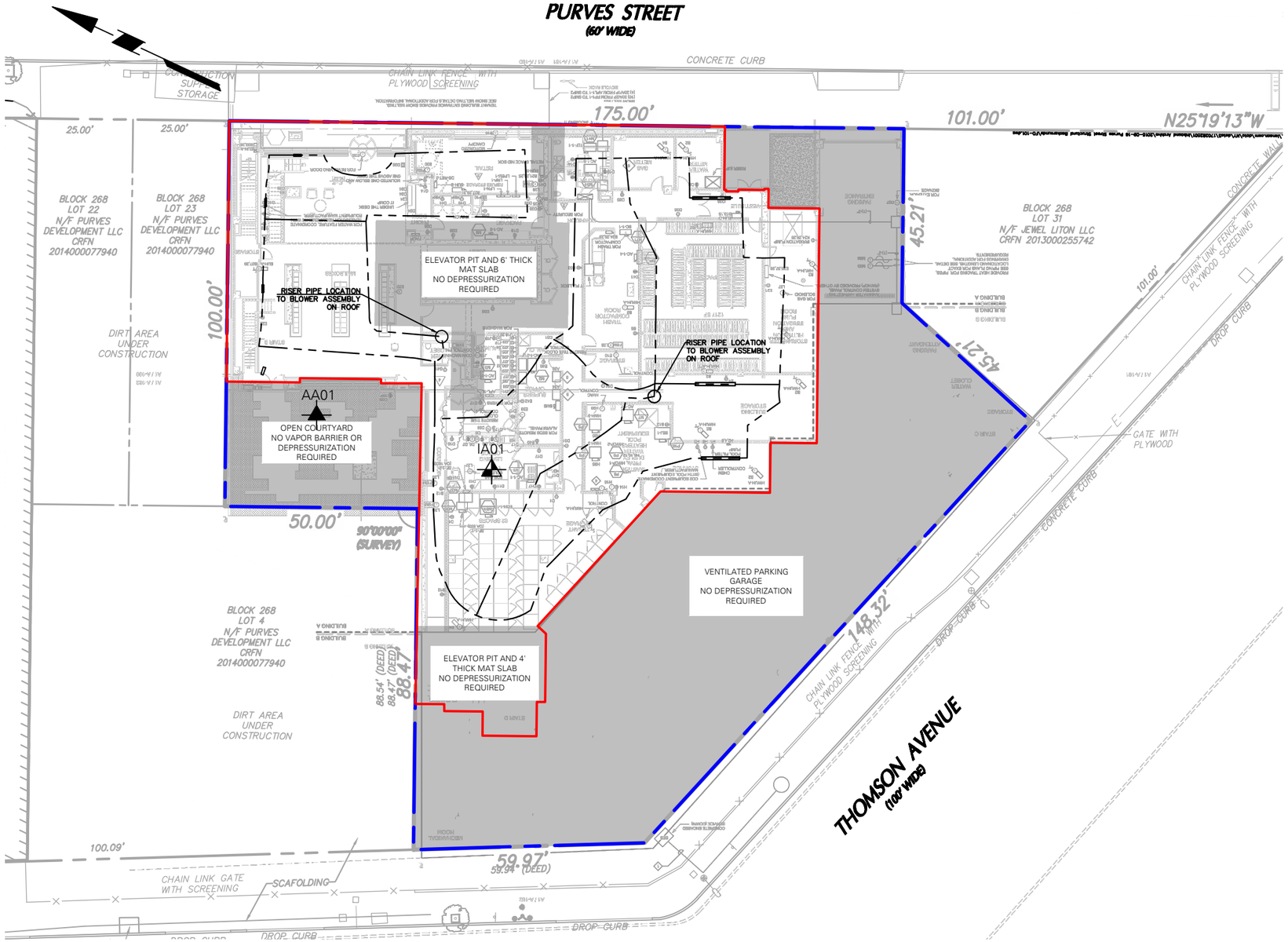
- PROPERTY BOUNDARY
- VAPOR BARRIER EXTENTS
- SMD VAPOR COLLECTION PIPING
- SLEEVE THROUGH GRADE BEAM FOR VAPOR COLLECTION PIPE
- APPROXIMATE RISER PIPE LOCATION

30 0 15 30
SCALE IN FEET

LANGAN
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	44-30 PURVES STREET BLOCK No. 268, LOT No. 1 QUEENS NEW YORK
Figure Title	SMD AND VAPOR BARRIER LAYOUT PLAN
Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP
Figure No.	2
Sheet	2 of 2

Filename: \\langan.com\data\NYC\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Corrective Measures Report\Figure 2 - SMD and Vapor Barrier Plan.dwg Date: 7/1/2022 Time: 16:39 User: bkontz Style Table: Langan.stb Layout: ANSIB-BL



GENERAL NOTES:

1. BASE MAPS TAKEN FROM FXFOWLE, "1ST FLOOR ELECTRICAL POWER PLAN - BUILDING A," DATED JUNE 6, 2017 AND MAY 21, 2015 SURVEY BY LANGAN.
2. VAPOR BARRIER EXTENDS BELOW THE FOOTPRINT AND ALONG THE VERTICAL WALLS OF DEPRESSED FOUNDATION MAT AND SLABS, AS NOTED IN THE DRAWING. VAPOR BARRIER INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. VAPOR COLLECTION PIPE RUNS ARE APPROXIMATE. PIPE LOCATIONS ARE SHOWN IN AS-BUILT DRAWING.
4. RISER PIPE STUB LOCATION IS APPROXIMATE. RISER PIPE RUNS AND ROOF-TOP BLOWER AND EXHAUST POINT LOCATIONS ARE SHOWN IN AS-BUILT DRAWINGS.
5. THE DEEP ELEVATOR PIT AND SHEAR WALL PILE CAP ARE NOT DEPRESSURIZED BECAUSE IT IS A 6-FOOT THICK CONCRETE MAT AND WATERPROOFED IN ACCORDANCE WITH THE FOUNDATION DRAWINGS AND SPECIFICATIONS.
6. THE WATERPROOFING BENEATH THE SHEAR WALL PILE CAP, DEEP ELEVATOR PIT, AND ANY OTHER WATERPROOFED FOUNDATION ELEMENT, ARE MARRIED TO THE VAPOR BARRIER MEMBRANE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
7. SLEEVES THROUGH GRADE BEAMS WERE DESIGNED BY OTHERS.

LEGEND:

- PROPERTY BOUNDARY
- VAPOR BARRIER EXTENTS
- SMD VAPOR COLLECTION PIPING
- SLEEVE THROUGH GRADE BEAM FOR VAPOR COLLECTION PIPE
- APPROXIMATE RISER PIPE LOCATION
- IA01 — PROPOSED INDOOR AIR SAMPLE LOCATION
- AA01 — PROPOSED OUTDOOR AMBIENT AIR SAMPLE LOCATION

30 0 15 30
SCALE IN FEET

LANGAN
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
44-30 PURVES STREET
BLOCK No. 268, LOT No. 1
QUEENS NEW YORK

Figure Title
PROPOSED INDOOR AIR SAMPLE LOCATION

Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP

Figure No. 3
Sheet 3 of 3

Filename: \\langan.com\data\NY\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Corrective Measures Report\Figure 3 - Proposed Indoor Air Sample Location.dwg Date: 10/10/2022 Time: 11:17 User: acaelwaerts Style Table: Langan.stb Layout: ANSIB-BL

LANGAN

Memorandum

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

To: Mr. Manfred Magloire (NYSDEC)

From: Jason Hayes, PE, LEED AP

Info: Cris-Sandra Maycock, Mandy Yau, Jane H O'Connell (NYSDEC)
Julia M Kenney, Scarlett E McLaughlin (NYSDOH)
Purves Street Owners, LLC

Date: October 25, 2022

Re: Indoor Air Sample Results
44-30 Purves Street
Long Island City, NY 11101
NYSDEC BCP Site No.: C241162
Langan Project No.: 170282501

PURPOSE

In accordance with the October 19, 2022 Corrective Measures Work Plan (CMWP), an indoor air sample was collected at 44-30 Purves Street (the site) to determine if the sub-membrane depressurization (SMD) system deficiency caused indoor air concentrations of tetrachloroethene (PCE) and trichloroethene (TCE) to exceed New York State Department of Health (NYSDOH) Air Guideline Values for Indoor Air (AGV). This technical memorandum provides a summary of the site background, system deficiency and associated corrective measures, and details the post-fix indoor air sampling procedures and results.

SITE BACKGROUND

The 0.62-acre site is improved with a 35-story residential building with frontage along Purves Street, a two-story building with residences, residential amenity space and retail along Thomson Avenue and 44th Drive, and an open, partially-paved and partially-landscaped courtyard. A ventilated parking garage spans an area of about 11,000 square feet in the lowest level of the building along Thomson Avenue and 44th Drive. A site location map is included as Figure 1.

The site is within a historically industrial area of Long Island City, Queens and was previously used for manufacturing purposes as early as the 1940s. Several environmental investigations were completed at the site that documented PCE and TCE in groundwater and soil vapor, which were attributed to an off-site source.

Installation of engineering and institutional controls (EC/IC), including a SMD system, was completed in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved September 7, 2014 Remedial Action Work Plan (RAWP) between March 16 and October 30, 2015. Inspections of the EC/ICs are performed annually in accordance with the

NYSDEC-approved October 21, 2015 Site Management Plan (SMP) and Section 6.3 of NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation. The SMD system design includes two interconnected underground perforated piping loops, which are routed via riser piping to two roof-mounted blowers. A site plan showing the SMD system is included as Figure 2.

SMD SYSTEM DEFICIENCIES

During the annual inspection for the 2021 to 2022 certification period, one of the two roof-mounted blowers was observed to be deficient. It was suspected that the deficiency was caused by a blockage in the SMD system riser piping. The deficient blower is connected to the southern underground piping loop. The blower was turned off to prevent permanent damage. The blower remained off from February 16, 2022 to September 13, 2022.

CORRECTIVE MEASURES

On September 13, the blockage was identified, removed, and the blower connected to the southern underground piping loop was activated. This blower returned to designed operation. Documentation of the corrective measures will be included in the 2022 Periodic Review Report.

AIR SAMPLE COLLECTION

On September 30, 2022, one indoor air sample was collected inside the building staff office above the southern SMD system loop. An outdoor ambient air sample was also collected for quality assurance/quality control (QA/QC) purposes. Sample locations are shown on Figure 3. Samples were collected into laboratory-supplied, batch-certified, Summa® canisters over an 8-hour sampling period and transported to via courier under a chain-of-custody to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. The samples were analyzed for volatile organic compounds (VOC) via United States Environmental Protection Agency (USEPA) Method TO-15. A NYSDOH Indoor Air Quality Questionnaire and Building Inventory was also completed during the sampling event, and is included as Attachment 1.

AIR SAMPLE RESULTS

TCE was not detected in the indoor or ambient air samples. PCE was detected at a concentration of 0.719 micrograms per cubic meter (µg/m^3) in the indoor air samples and at 0.387 µg/m^3 in the ambient air sample. Indoor air sample results were compared to the NYSDOH AGVs (PCE = 30 µg/m^3). PCE did not exceed the NYSDOH AGVs. Indoor air analytical results are summarized in Table 1. The laboratory analytical data report is included as Attachment 2.

CONCLUSIONS

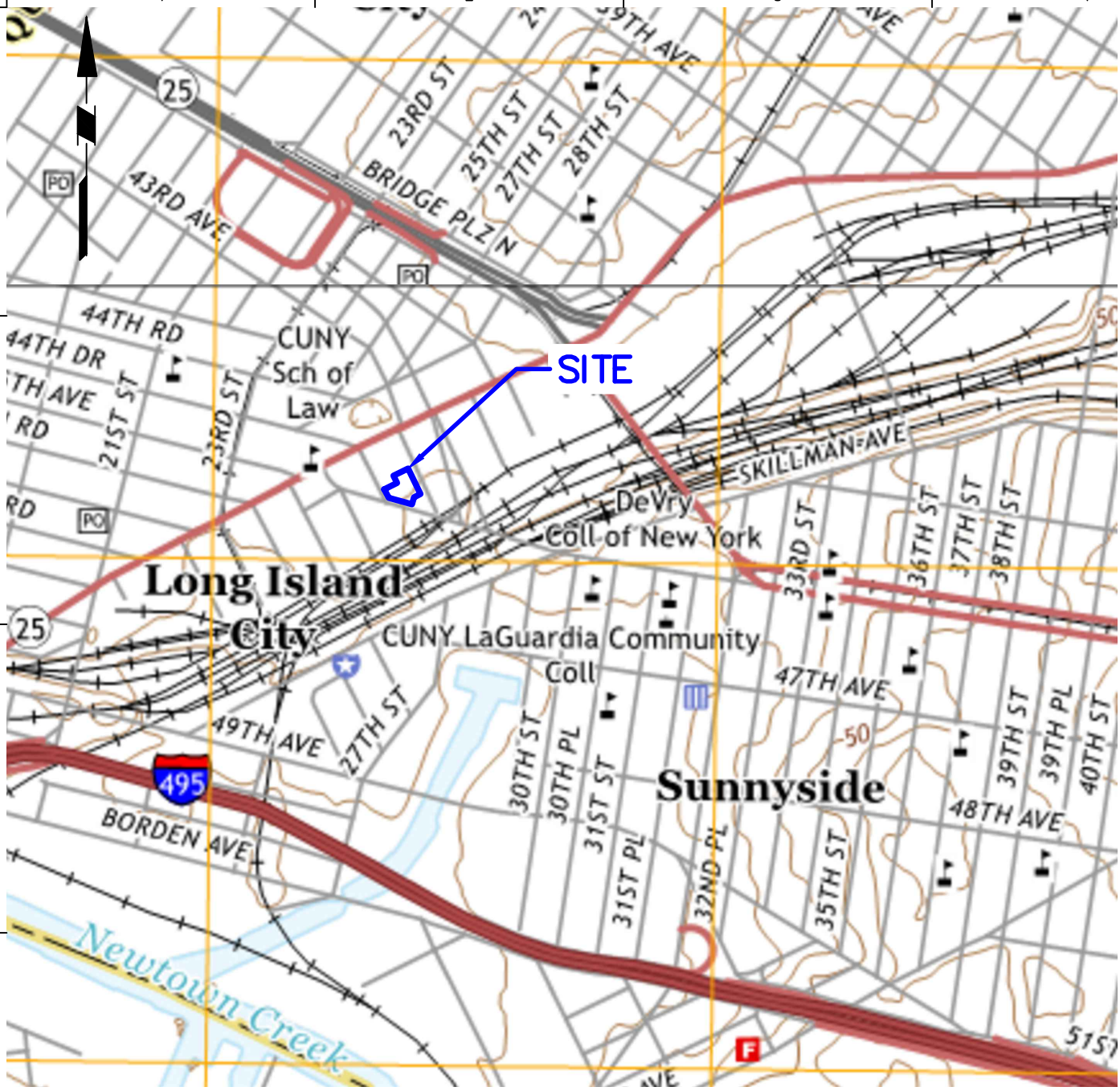
Results of an indoor air sample indicate that the temporary shutoff of the southern SMD system blower has not caused indoor air concentrations of TCE and PCE to exceed NYSDOH AGVs.

FIGURES

TABLES

ATTACHMENTS

FIGURES



LEGEND:

SITE BOUNDARY

NOTES:

1. BASE MAP ADAPTED FROM UNITED STATES GEOLOGICAL SURVEY (USGS) 2016 7.5-MINUTE SERIES TOPOGRAPHIC MAP, CENTRAL PARK, NY-NJ AND BROOKLYN, NY.

1000 0 500 1000

SCALE: 1 INCH = 1000 FEET

LANGAN

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

44-30 PURVES STREET

BLOCK No. 268 LOT No. 1

QUEENS NEW YORK

Figure Title

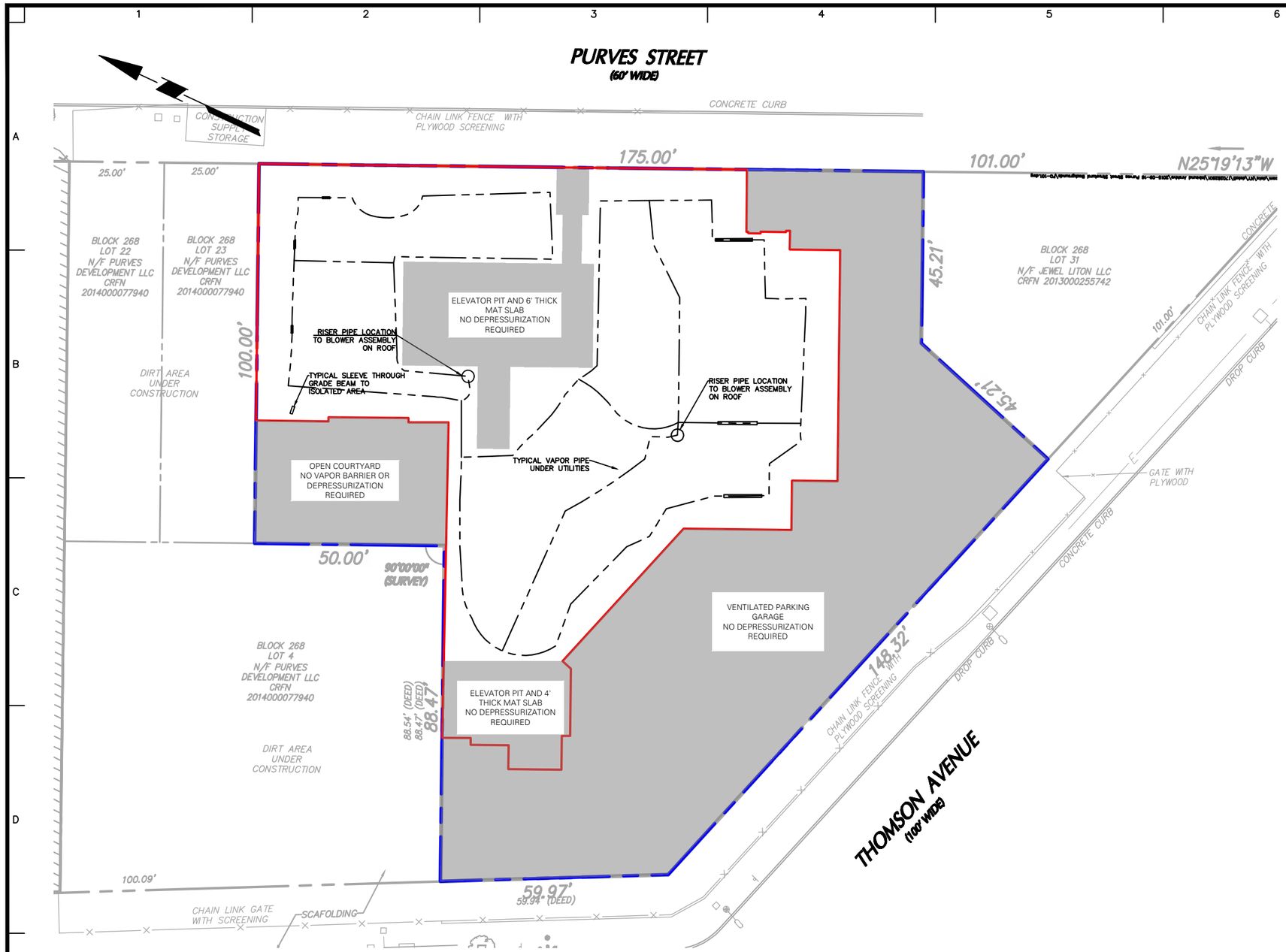
SITE LOCATION MAP

Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP

Figure No. 1

Sheet 1 of 2

Filename: \\langan.com\data\NYC\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Corrective Measures Report\Figure 1 - Site Location Map.dwg Date: 7/1/2022 Time: 16:38 User: bkoontz Style Table: Langan.stb Layout: ANSIA-BP



GENERAL NOTES:

1. BASE MAPS TAKEN FROM FXFOWLE, "FOUNDATION PLAN BUILDING A, FO-101.00", DATED MAY 12, 2014, REVISED JULY 30, 2015, AND MAY 21, 2015 SURVEY BY LANGAN.
2. VAPOR BARRIER EXTENDS BELOW THE FOOTPRINT AND ALONG THE VERTICAL WALLS OF DEPRESSED FOUNDATION MAT AND SLABS, AS NOTED IN THE DRAWING. VAPOR BARRIER INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. VAPOR COLLECTION PIPE RUNS ARE APPROXIMATE. PIPE LOCATIONS ARE SHOWN IN AS-BUILT DRAWING INCLUDED IN APPENDIX Q.
4. RISER PIPE STUB LOCATION IS APPROXIMATE. RISER PIPE RUNS AND ROOF-TOP BLOWER AND EXHAUST POINT LOCATIONS ARE SHOWN IN AS-BUILT DRAWINGS.
5. THE DEEP ELEVATOR PIT AND SHEAR WALL PILE CAP ARE NOT DEPRESSURIZED BECAUSE IT IS A 6-FOOT THICK CONCRETE MAT AND WATERPROOFED IN ACCORDANCE WITH THE FOUNDATION DRAWINGS AND SPECIFICATIONS.
6. THE WATERPROOFING BENEATH THE SHEAR WALL PILE CAP, DEEP ELEVATOR PIT, AND ANY OTHER WATERPROOFED FOUNDATION ELEMENT, ARE MARRIED TO THE VAPOR BARRIER MEMBRANE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
7. SLEEVES THROUGH GRADE BEAMS WERE DESIGNED BY OTHERS.

LEGEND:

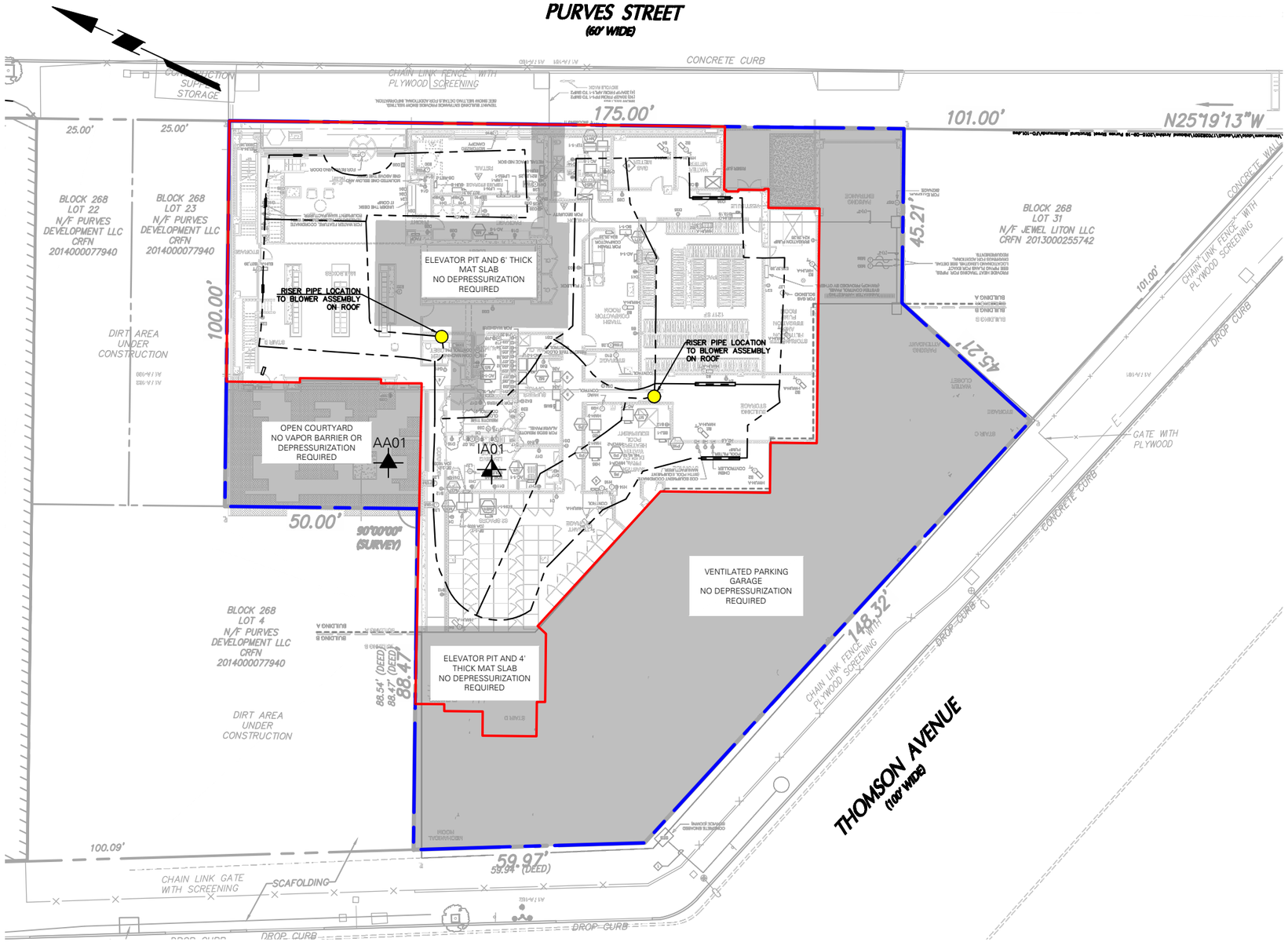
- PROPERTY BOUNDARY
- VAPOR BARRIER EXTENTS
- SMD VAPOR COLLECTION PIPING
- SLEEVE THROUGH GRADE BEAM FOR VAPOR COLLECTION PIPE
- APPROXIMATE RISER PIPE LOCATION

30 0 15 30
SCALE IN FEET

LANGAN
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	44-30 PURVES STREET BLOCK No. 268, LOT No. 1 QUEENS NEW YORK
Figure Title	SMD AND VAPOR BARRIER LAYOUT PLAN
Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP
Figure No.	2
Sheet	2 of 2

Filename: \\langan.com\data\NYC\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Corrective Measures Report\Figure 2 - SMD and Vapor Barrier Plan.dwg Date: 7/1/2022 Time: 16:39 User: bkontz Style Table: Langan.stb Layout: ANSIB-BL



GENERAL NOTES:

1. BASE MAPS TAKEN FROM FXFOWLE, "1ST FLOOR ELECTRICAL POWER PLAN - BUILDING A," DATED JUNE 6, 2017 AND MAY 21, 2015 SURVEY BY LANGAN.
2. VAPOR BARRIER EXTENDS BELOW THE FOOTPRINT AND ALONG THE VERTICAL WALLS OF DEPRESSED FOUNDATION MAT AND SLABS, AS NOTED IN THE DRAWING. VAPOR BARRIER INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. VAPOR COLLECTION PIPE RUNS ARE APPROXIMATE. PIPE LOCATIONS ARE SHOWN IN AS-BUILT DRAWING.
4. RISER PIPE STUB LOCATION IS APPROXIMATE. RISER PIPE RUNS AND ROOF-TOP BLOWER AND EXHAUST POINT LOCATIONS ARE SHOWN IN AS-BUILT DRAWINGS.
5. THE DEEP ELEVATOR PIT AND SHEAR WALL PILE CAP ARE NOT DEPRESSURIZED BECAUSE IT IS A 6-FOOT THICK CONCRETE MAT AND WATERPROOFED IN ACCORDANCE WITH THE FOUNDATION DRAWINGS AND SPECIFICATIONS.
6. THE WATERPROOFING BENEATH THE SHEAR WALL PILE CAP, DEEP ELEVATOR PIT, AND ANY OTHER WATERPROOFED FOUNDATION ELEMENT, ARE MARRIED TO THE VAPOR BARRIER MEMBRANE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
7. SLEEVES THROUGH GRADE BEAMS WERE DESIGNED BY OTHERS.

LEGEND:

- PROPERTY BOUNDARY
- VAPOR BARRIER EXTENTS
- SMD VAPOR COLLECTION PIPING
- SLEEVE THROUGH GRADE BEAM FOR VAPOR COLLECTION PIPE
- APPROXIMATE RISER PIPE LOCATION
- IA01 — APPROXIMATE INDOOR AIR SAMPLE LOCATION
- AA01 — APPROXIMATE OUTDOOR AMBIENT AIR SAMPLE LOCATION

30 0 15 30
SCALE IN FEET

LANGAN
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	44-30 PURVES STREET BLOCK No. 268, LOT No. 1 QUEENS NEW YORK
Figure Title	AIR SAMPLE LOCATION PLAN
Project No.	170282501
Date	04/27/2020
Drawn By	EMS
Checked By	VDP
Figure No.	3
Sheet	3 of 3

Filename: \\langan.com\data\NY\data5\170282501\Cadd Data - 170282501\SheetFiles\Environmental\Corrective Measures Report\Figure 3 - Air Sample Location Plan.dwg Date: 10/20/2022 Time: 10:58 User: bkoontz Style Table: Langan.stb Layout: ANSIB-BL

TABLES

Table 1
Indoor Air Sample Results Memorandum
Indoor Air and Ambient Air Sample Results

44-30 Purves Street
Long Island City, New York
NYSDEC BCP Site No.: C241162
Langan Project No.: 170282501

Analyte	CAS Number	NYSDOH AGVs	Location	AA01	IA01
			Sample Name	AA01_093022	IA01_093022
			Sample Date	09/30/2022	09/30/2022
			Sample Type	AA	IA
			Unit	Result	Result
Volatile Organic Compounds					
Tetrachloroethene (PCE)	127-18-4	30	ug/m3	0.387	0.719
Trichloroethene (TCE)	79-01-6	2	ug/m3	<0.107 U	<0.107 U

Notes:
AA - Ambient Air
IA - Indoor Air
CAS - Chemical Abstract Service
ug/m3 - microgram per cubic meter
RL - Reporting limit
<RL - Not detected
Indoor air sample analytical results are compared to the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) as set forth in the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and subsequent updates (2013, 2015, 2017).
Ambient air sample analytical results are shown for reference only.

Qualifiers:
U - The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

Exceedance Summary:
10 - Result exceeds NYSDOH AGVs

ATTACHMENT 1

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

OSR – 3

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name BRAD KOCUTZ Date/Time Prepared 9/30/22 13:30

Preparer's Affiliation LANGAN Phone No. 609-775-8109

Purpose of Investigation SMD INSPECTION, INDOOR AIR SAMPLES

1. OCCUPANT:

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N)

Last Name: ESPINOSA First Name: MIRIAM

Address: 44-30 PURVES STREET, QUEENS NY

County: QUEENS

Home Phone: N/A Office Phone: 718-706-1501

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School Commercial/Multi-use
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: HIGH RISE

If multiple units, how many? 272

If the property is commercial, type?

Business Type(s) N/A

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 38 Building age 5 YR

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

NONE OBSERVED

Airflow near source

NONE OBSERVED

Outdoor air infiltration

MODERATE AT BUILDING LOBBY ENTRANCE

Infiltration into air ducts

NONE OBSERVED

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: NA (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

NONE

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

N/A

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	N/A
1st Floor	LOBBY, MANAGEMENT OFFICE, GARAGE
2nd Floor	RESIDENTIAL
3rd Floor	RESIDENTIAL
4th Floor	RESIDENTIAL

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify CARS

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where?_____

f. Is there a workshop or hobby/craft area? Y / N Where & Type?_____

g. Is there smoking in the building? Y / N How frequently?_____

h. Have cleaning products been used recently? Y / N When & Type?_____

i. Have cosmetic products been used recently? Y / N When & Type?_____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? _____

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y (N) When & Type? _____

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? (Y) / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? CLEANING-SURFACE

If yes, are their clothes washed at work? (Y) / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) (Unknown)
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	(Public Water)	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	(Public Sewer)	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: NA

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

N/A

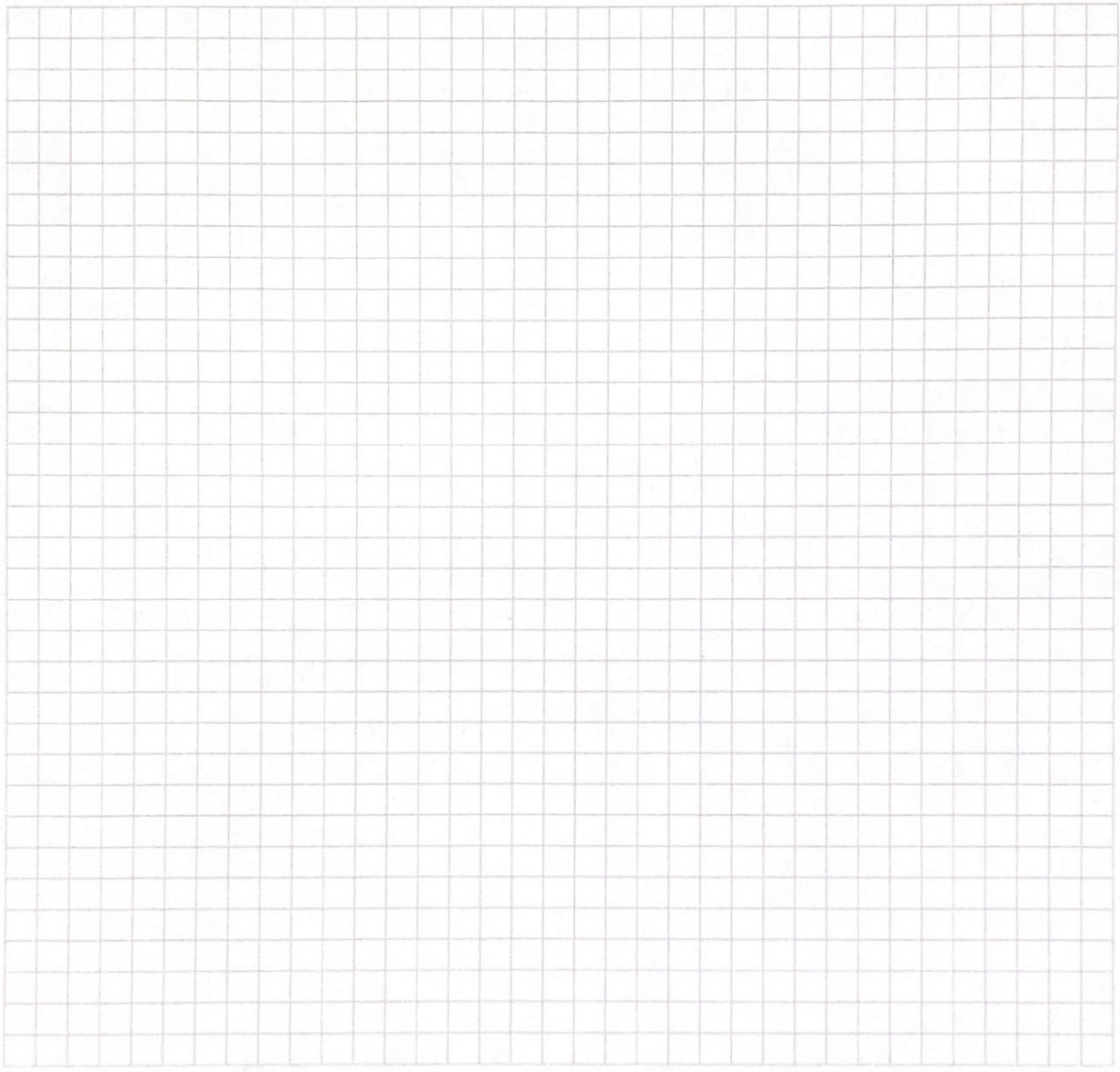
First Floor:

SEE
CMWP FIGURE 3

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: RKI GX-6000

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
MGMT Office	dish soap	18 FL oz	good	SEE PHOTO	0.0 ppm	Y
	hand soap	12.5 FL oz	good	See Photo	0.0 ppm	Y
	hand sanitizer	12 FL oz	good	See Photo	0.0 ppm	Y
	Shout	22	good			
	degreaser	18	good			
	Windex	22	poor			
	had soap refill	33	good			
	disinfectant wipes	1LB	good			
	wood polish	16	OK			
	steel polish	14oz	OK			
	linen refresh	7oz	bad			

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

ATTACHMENT 2

LABORATORY DATA REPORT

ANALYTICAL REPORT

Lab Number:	L2254221
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Vinicius De Paula
Phone:	(212) 479-5499
Project Name:	44-30 PURVES STREET
Project Number:	170282501
Report Date:	10/06/22

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 44-30 PURVES STREET
Project Number: 170282501

Lab Number: L2254221
Report Date: 10/06/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2254221-01	IA01_093022	AIR	LONG ISLAND CITY, NY	09/30/22 15:08	09/30/22
L2254221-02	AA01_093022	AIR	LONG ISLAND CITY, NY	09/30/22 15:11	09/30/22

Project Name:	44-30 PURVES STREET	**Lab Number:**	L2254221
Project Number:	170282501	**Report Date:**	10/06/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	44-30 PURVES STREET	**Lab Number:**	L2254221
Project Number:	170282501	**Report Date:**	10/06/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on September 30, 2022. The canister certification results are provided as an addendum.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Jennifer Jerome

Title: Technical Director/Representative Date: 10/06/22

AIR

Project Name: 44-30 PURVES STREET
Project Number: 170282501
Lab Number: L2254221
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254221-01
Client ID: IA01_093022
Sample Location: LONG ISLAND CITY, NY

Date Collected: 09/30/22 15:08
Date Received: 09/30/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/04/22 19:08
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.106	0.020	--	0.719	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	88		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140

Project Name: 44-30 PURVES STREET
Project Number: 170282501
Lab Number: L2254221
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254221-02
Client ID: AA01_093022
Sample Location: LONG ISLAND CITY, NY

Date Collected: 09/30/22 15:11
Date Received: 09/30/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/04/22 18:29
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.057	0.020	--	0.387	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	90		60-140

Project Name: 44-30 PURVES STREET
Project Number: 170282501
Lab Number: L2254221
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 10/04/22 17:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1695438-4								
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 44-30 PURVES STREET

Project Number: 170282501

Lab Number: L2254221

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1695438-3								
Trichloroethene	93		-		70-130	-		25
Tetrachloroethene	96		-		70-130	-		25

Project Name: 44-30 PURVES STREET

Lab Number: L2254221

Project Number: 170282501

Report Date: 10/06/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2254221-01	IA01_093022	0454	Flow 4	09/30/22	401364		-	-	-	Pass	10.0	11.2	11
L2254221-01	IA01_093022	2097	6.0L Can	09/30/22	401364	L2251698-03	Pass	-29.4	-5.3	-	-	-	-
L2254221-02	AA01_093022	01553	Flow 4	09/30/22	401364		-	-	-	Pass	10.0	10.3	3
L2254221-02	AA01_093022	1533	6.0L Can	09/30/22	401364	L2250272-04	Pass	-29.4	-11.8	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2250272
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/15/22 20:08
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2250272
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2250272
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2250272
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2250272
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	102		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	98		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2250272

Project Number: CANISTER QC BAT **Report Date:** 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/15/22 20:08
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2250272
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2250272

Project Number: CANISTER QC BAT **Report Date:** 10/06/22

Air Canister Certification Results

Lab ID: L2250272-04
Client ID: CAN 3619 SHELF 46
Sample Location:

Date Collected: 09/14/22 18:00
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	99		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2251698
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/21/22 20:24
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2251698
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2251698
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2251698
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2251698

Project Number: CANISTER QC BAT **Report Date:** 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2251698
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/21/22 20:24
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2251698
Report Date: 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2251698

Project Number: CANISTER QC BAT **Report Date:** 10/06/22

Air Canister Certification Results

Lab ID: L2251698-03
Client ID: CAN 2809 SHELF 40
Sample Location:

Date Collected: 09/20/22 18:00
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	99		60-140

Project Name: 44-30 PURVES STREET
Project Number: 170282501

Lab Number: L2254221
Report Date: 10/06/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2254221-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30)
L2254221-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	44-30 PURVES STREET	**Lab Number:**	L2254221
Project Number:	170282501	**Report Date:**	10/06/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	44-30 PURVES STREET	**Lab Number:**	L2254221
Project Number:	170282501	**Report Date:**	10/06/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	44-30 PURVES STREET	**Lab Number:**	L2254221
Project Number:	170282501	**Report Date:**	10/06/22

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 10/1/22

ALPHA Job #: L2254221

Client Information

Client: LANCAN, DPC

Address:

Phone:

Fax:

Email: BKONTZ@LANCAN.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 44-30 REEVES STREET

Project Location: LONG ISLAND CITY, NY

Project #: 170282501

Project Manager: VINICIUS DE PAULA

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX

☑ ADEx

Criteria Checker:

(Default based on Regulatory Criteria Indicated)

Other Formats:

☑ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: + VDEPAULA@LANCAN.COM

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH Subset Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	☐	Sample Comments (i.e. PID)
54221-01	IA01_093022	9/30/22	0905	1508	-28.22	-5.01	IA	BK	2.7L	2097	0454	X						Loose connection
-02	AA01_093022	9/30/22	0910	1511	-30.67	-12.88	AA	BK	2.7L	1533	01553	X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

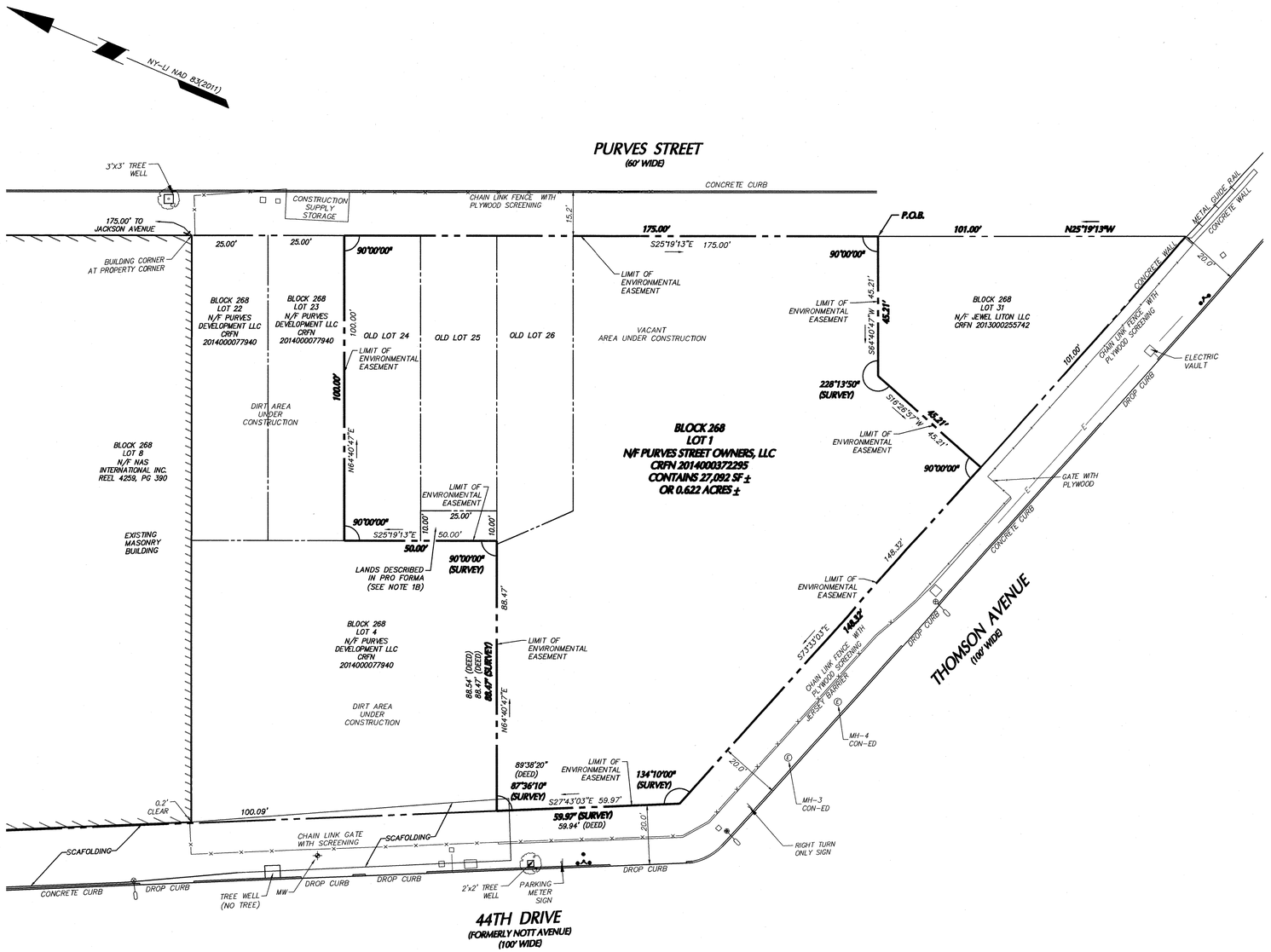
Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
BRAD KONTZ (LANCAN)	9/30/22 15:20	[illegible]	9/30/22 15:20
[illegible]	9/30/22 19:30	[illegible]	9/30/22 2145
[illegible]	9/30/22	[illegible]	9/30/22 2300
[illegible]	10/1/22 0140	[illegible]	10/1/22 01:40

APPENDIX B

ENVIRONMENTAL EASEMENT



NOTES

1. THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, AND THE FOLLOWING REFERENCES:

   A. TITLE POLICY:
   PREPARED BY: OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
   TITLE NUMBER: 901153
   EFFECTIVE DATE: 6/20/2013

   B. TITLE PRO FORMA:
   PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
   TITLE NUMBER: 905099
   EFFECTIVE DATE: 10/17/2014

   C. MAP ENTITLED "TOPOGRAPHIC & BOUNDARY SURVEY, BLOCK 268, LOT AS SHOWN, SECTION 2, COUNTY OF QUEENS" PREPARED BY APPLE SURVEYING AND DATED 04-11-2014.

   D. MAP ENTITLED "SURVEY OF PROPERTIES SITUATED IN: 44-18/38 PURVES STREET, BOROUGH OF QUEENS, COUNTY OF QUEENS, CITY OF NEW YORK, STATE OF NEW YORK, TOPO SURVEY, SIDEWALK AND STREET ELEVATIONS, BLOCK 268, LOT 1, 4, 22, 23, 24, 25, 26" PREPARED BY FEHRINGER SURVEYING, P.C. AND DATED NOVEMBER 6, 2013.

   E. MAP ENTITLED "LONG ISLAND CITY ATLAS MAPS, SHEET 14"

   F. SURVEY OF BLOCK 268, LOT 4 IN THE BOROUGH OF QUEENS, CITY OF NEW YORK, QUEENS COUNTY, NY PREPARED BY GERALD T. O'BUCKLEY, DATED MAY 7, 2013.

   G. MAP ENTITLED "TITLE SURVEY, TITLE NO. QUE 235739, BLOCK 268, LOT 1,24,25,26, SECTION 2, COUNTY OF QUEENS" PREPARED BY BIG APPLE LAND SURVEYORS, P.C. DATED JANUARY 04, 2005 AND LAST REVISED SEPTEMBER 30, 2005.

   H. SURVEY OF BLOCK 268, LOTS 1,22.23,24,25 & 26, SECTION 2, COUNTY OF QUEENS" PREPARED BY AAA GROUP LAND SURVEYORS SERVICES DATED JANUARY 17, 2008.

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 NYS-LI NAD83 (2011) AS ESTABLISHED USING GPS METHODS.

4. STREET NAMES AND R.O.W. WIDTHS, BLOCK AND LOT NUMBERS AS PER MAPS REFERENCED IN NOTES 1C, 1D & 1E.

5. PLANIMETRIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. DURING MAY 2015.

6. AS PER THE "NEW YORK CITY PRELIMINARY FIRM DATA COMMUNITY PANEL NUMBER 360497020G." PANEL NOT PRINTED THE ENTIRE THE SUBJECT PROPERTY LIES WITHIN ZONE X SHADED, AN AREA OF 0.2% ANNUAL CHANCE FLOOD HAZARD.

7. OFFSETS (IF SHOWN) ARE FOR SURVEY REFERENCES ONLY AND ARE NOT TO BE USED IN CONSTRUCTION OF ANY TYPE.

8. WETLANDS, ENVIRONMENTAL AND/OR HAZARDOUS MATERIALS LOCATION, IF ANY, NOT COVERED UNDER THIS CONTRACT.

9. 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

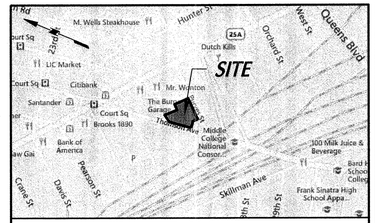
   UNLESS NOTED BELOW SUPPLEMENTAL DOCUMENTS WERE NOT USED TO COMPILE THE SUBSURFACE UTILITY INFORMATION SHOWN HEREON

10. THIS IS TO CERTIFY THAT THERE ARE NO STREAMS NOR NATURAL WATERCOURSES ON THE PROPERTY AS SHOWN ON THIS SURVEY.

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.

13. THE PROPERTY IS SUBJECT TO A DECLARATION OF COMMON SEWER AND SITE CONNECTION RECORDED IN CRFN 2015000011044.



PROJECT LOCATION MAP

SCALE: NO SCALE

SOURCE: BINGMAPS.COM

DEED DESCRIPTION OF BLOCK 268, LOT 1

BEGINNING at a point on the westerly side of Purves Street distant 101 feet northerly from the corner formed by the intersection of the westerly side of Purves Street with the northeasterly side of Thomson Avenue;

RUNNING THENCE northerly along the westerly side of Purves Street a distance of 175 feet to a point;

THENCE westerly and at right angles to the westerly side of Purves Street a distance of 100 feet to a point;

THENCE southerly and parallel with the westerly side of Purves Street a distance of 50 feet to a point;

THENCE westerly on a course forming an interior angle of 89 degrees 38 minutes 20 seconds with the easterly side of 44th Drive a distance of 88.54 feet (deed), 88.47 feet (survey) to a point on the easterly side of 44th Drive;

THENCE southerly along the easterly side of 44th Drive a distance of 59.94 feet to the corner formed by the intersection of the easterly side of 44th Drive with the northeasterly side of Thomson Avenue;

THENCE southeasterly along the northeasterly side of Thomson Avenue a distance of 148.32 feet to a point;

THENCE northeasterly and at right angles to the northeasterly side of Thomson Avenue a distance of 45.21 feet to a point;

THENCE easterly and at right angles to the westerly side of Purves Street a distance of 45.21 feet to the westerly side of Purves Street and the point or place of BEGINNING

Encompassing an area of 27,092 square feet or 0.622 acres.

WRITTEN DESCRIPTION FOR BLOCK 268, LOT 1 ENVIRONMENTAL EASEMENT

BEGINNING at a point on the westerly sideline of Purves Street, shown 60 feet wide on the Long Island City Atlases, where the same is intersected by the division line between lands hereindescribed and lands now or formerly of Jewel Liton LLC, described in CRFN 2013000255742, said point distant 101.00 feet measured northerly along said sideline from its intersection with the northeasterly sideline of Thomson Avenue, shown 100 feet wide on said Long Island City Atlases, and runs, thence:

1. Along lands of Jewel Liton LLC, South 64°40'47" West, a distance of 45.21 feet, to a point; thence
2. Continuing along lands of Jewel Liton LLC, South 16°26'57" West, a distance of 45.21 feet, to a point on the northeasterly sideline of Thomson Avenue; thence
3. Along the northeasterly sideline of Thomson Avenue, North 73°33'03" West, a distance of 148.32 feet, to its intersection with the easterly sideline of 44th Drive, formerly Nott Avenue, shown 100 feet wide on said Long Island City Atlases; thence
4. Along the easterly sideline of 44th Drive, North 27°43'03" West, a distance of 59.97 feet, to a point where the same is intersected by the division line between lands hereindescribed and lands now or formerly of Purves Development LLC, described in CRFN 2014000077940; thence
5. Along Purves Development LLC, North 64°40'47" East, a distance of 88.47 feet to a point; thence
6. Continuing along Purves Development LLC, North 25°19'13" West, a distance of 50.00 feet, to a point; thence
7. Continuing along Purves Development LLC, North 64°40'47" East, a distance of 100.00 feet, to a point in the westerly sideline of Purves Street; thence
8. Along the westerly sideline of Purves Street, South 25°19'13" East, a distance of 175.00 feet, to the Point of Beginning.

Encompassing an area of 27,092 square feet or 0.622 acre.

LEGEND (NOT SHOWN TO SCALE)

	HYDRANT	D	STORM DRAIN
	STREET LIGHT	S	SANITARY LINE
	AREA LIGHT	G	GAS LINE
	SIGNAL POLE	W	WATER LINE
	POLE	E	ELECTRIC LINE
	GUY WIRE	T	TELEPHONE LINE
(D)(S)(W)(T)(E)	MANHOLE (TYPE AS LABELED)		OVERHEAD WIRE
	WATER VALVE		GUIDE RAIL (TYPE AS NOTED)
	GAS VALVE		CHAIN LINK FENCE
	SHRUB		TREE LINE
	CATCH BASIN		EASEMENT LINE
x322.35	SPOT ELEVATION		PROPERTY LINE
	CLEAN OUT		RIGHT-OF-WAY LINE
	TREE	322	CONTOUR LINE
	SIGN	DYS	DOUBLE YELLOW STRIPE
	BOLLARD	SWS	SINGLE WHITE STRIPE
	TRAFFIC SIGNAL	RCP	REINFORCED CONCRETE PIPE
BWS	BROKEN WHITE STRIPE	EP	EDGE OF PAVEMENT
SYS	SINGLE YELLOW STRIPE	CMP	CORRUGATED METAL PIPE
CC	CONCRETE CURB	LSA	LANDSCAPED AREA
CONC	CONCRETE	DC	DROP CURB

0 20 40 Feet
0 6.096 12.192 Meters

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.
REVISIONS		

SIGNATURE PAUL O. FISHER DATE SIGNED
PROFESSIONAL LAND SURVEYOR NY Lic. No. 050784-1

LANGAN
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, NY 10001
T: 212.479.5400 F: 212.479.5444 www.langan.com
NEW JERSEY NEW YORK CONNECTICUT PENNSYLVANIA OHIO WASHINGTON, DC FLORIDA TEXAS NORTH DAKOTA CALIFORNIA ABU DHABI ATHENS DOHA DUBAI ISTANBUL PANAMA
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. S.A.
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan

Project
44-30 PURVES STREET
BLOCK No. 268, LOT No.1
BOROUGH OF QUEENS
CITY OF NEW YORK

QUEENS COUNTY STATE OF NEW YORK

Drawing Title
BOUNDARY SURVEY

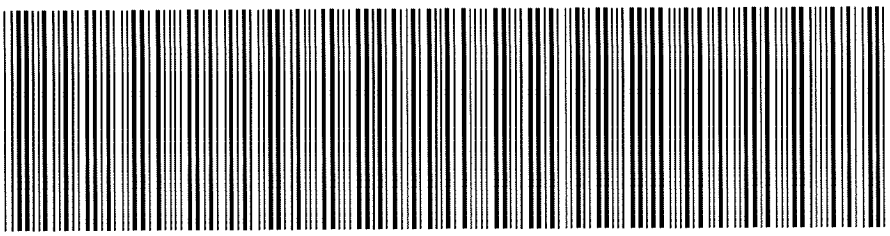
Project No. 170282501	Drawing No. VB-101
Date 21 MAY 2015	
Scale 1"=20'	
Drawn By BP / Checked By PDF	
Submission Date 21 MAY 2015	Sheet 1 of 1

SUBMISSION DATE: MAY 21, 2015
PROJECT NO. 170282501
LANGAN

Filename: U:\data5\170282501\Cadd Data - 170282501\SheetFiles\SURVEY\170282501-VB101-0101.dwg Date: 5/28/2015 Time: 16:47 User: gperlu Style Table: Langan.stb Layout: ARCHD-SL

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.



2015081800555001003E1EFD

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 10**

Document ID: 2015081800555001 Document Date: 07-31-2015 Preparation Date: 08-18-2015
Document Type: EASEMENT
Document Page Count: 9

PRESENTER:
ROYAL REGISTERED PROPERTY REPORTS INC
180853
500 5TH AVENUE
SUITE 1540
NEW YORK, NY 10110
212-376-0900

RETURN TO:
ROYAL REGISTERED PROPERTY REPORTS INC
180853
500 5TH AVENUE
SUITE 1540
NEW YORK, NY 10110
212-376-0900

PROPERTY DATA

Borough	Block	Lot	Unit	Address
QUEENS	268	1	Entire Lot	44-30 PURVES STREET

Property Type: NON-RESIDENTIAL VACANT LAND Easement

CROSS REFERENCE DATA

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

PARTIES

GRANTOR/SELLER:
PURVES STREET OWNERS LLC
52 VANDERBILT AVENUE
NEW YORK , NY 10017

GRANTEE/BUYER:
PEOPLE OF STATE OF NEW YORK BY
COMMISSIONER. DEPT
OF ENVIRONMENTAL CONSERVATION , 625
BROADWAY
ALBANY , NY 12233

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:	$	82.00
Affidavit Fee:	$	0.00

Filing Fee: $ 250.00
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 08-26-2015 12:11
City Register File No.(CRFN): **2015000296906**

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 31st day of July, 2015 between Owner(s) Purves Street Owners, LLC, having an office at 52 Vanderbilt Avenue, New York, New York 10017, County of New York, State of New York (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 44-30 Purves Street in the City of New York, County of Queens 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 268 Lot 1, being the same as that property conveyed to Grantor by deeds dated June 19, 2014 and October 17, 2014 and recorded in the City Register of the City of New York in CFRN #'s 2014000225213 and 2014000372295, respectively. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately .622 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 21, 2015 prepared by Paul D. Fisher, L.S., 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

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C241162-06-14 as amended by Amendment #1 dated January 22, 2015, 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 b 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: C241162
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.

Remainder of Page Intentionally Left Blank

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

Purves Street Owners, LLC:

By: _____

Print Name: David Brause

Title: Authorized Signatory Date: 7/1/15

Grantor's Acknowledgment

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

On the 1st day of July, in the year 2015, before me, the undersigned, personally appeared David Brause, 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.

Wendy Galarza
Notary Public - State of New York

WENDY GALARZA
NOTARY PUBLIC-STATE OF NEW YORK
No. 01GA6200632
Qualified In Bronx County
My Commission Expires February 09, 2017

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: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 31st day of July, in the year 2015, before me, the undersigned, personally appeared Robert W. Schick, 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

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT CERTAIN plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough and County of Queens, City and State of New York, bounded and described as follows:

BEGINNING at a point on the westerly sideline of Purves Street, shown 60 feet wide on the Long Island City Atlases, where the same is intersected by the division line between lands herein described and lands now or formerly of Jewel Liton LLC, described in CRFN 2013000255742, said point distant 101.00 feet measured northerly along said sideline from its intersection with the northeasterly sideline of Thomson Avenue, shown 100 feet wide on said Long Island City Atlases, and runs, thence:

1. Along lands of Jewel Liton LLC, South 64'40'47" West, a distance of 45.21 feet, to a point; thence
2. Continuing along lands of Jewel Liton LLC, South 16'26'57" West, a distance of 45.21 feet, to a point on the northeasterly sideline of Thomson Avenue; thence
3. Along the northeasterly sideline of Thomson Avenue, North 73·33'03" West, a distance of 148.32 feet, to its intersection with the easterly sideline of 44th Drive, formerly Nott Avenue, shown 100 feet wide on said Long Island City Atlases; thence
4. Along the easterly sideline of 44th Drive, North 27·43'03" West, a distance of 59.97 feet, to a point where the same is intersected by the division line between lands herein described and lands now or formerly of Purves Development LLC, described in CRFN 2014000077940; thence
5. Along Purves Development LLC, North 64'40'47" East, a distance of 88.47 feet to a point: thence
6. Continuing along Purves Development LLC, North 25'19'13" West, a distance of 50.00 feet, to a paint; thence
7. Continuing along Purves Development LLC, North 64"40'47" East, a distance of 100.00 feet, to a point in the westerly sideline of Purves Street; thence
8. Along the westerly sideline of Purves Street, South 25"19'13" East, a distance of 175.00 feet, to the Point of Beginning.
9. Encompassing an area of 27,092 square feet or 0.622 acres.

APPENDIX C

SITE INSPECTION PHOTOGRAPHS

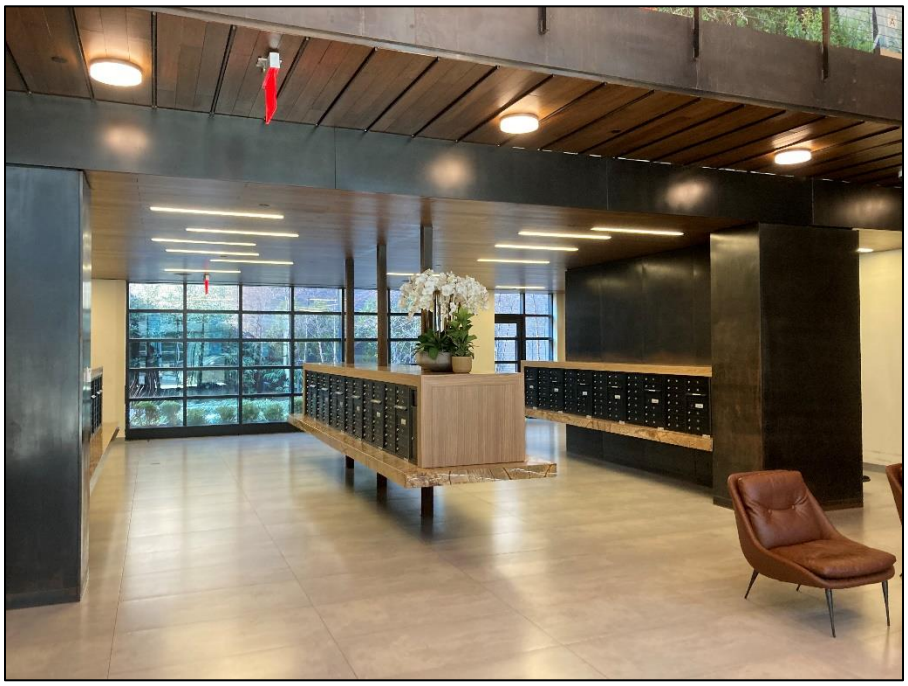


Photo 1, 02/16/2022: View of main lobby and composite cover (facing northwest).

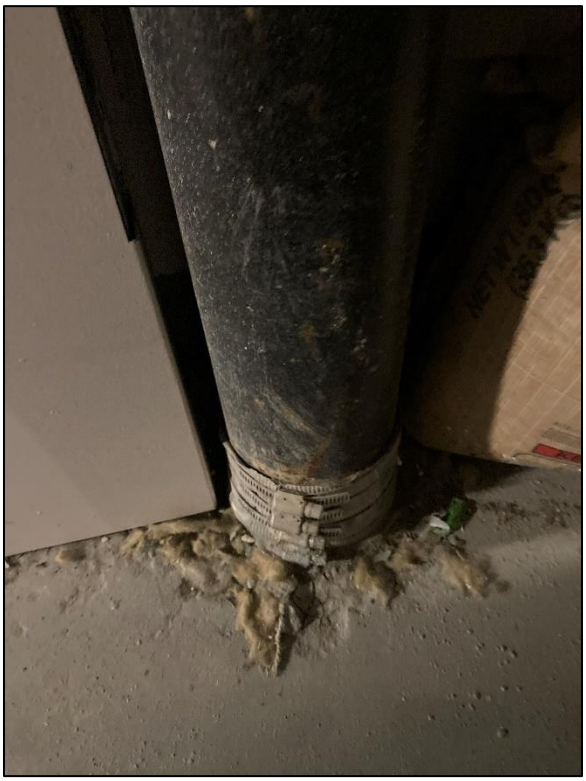


Photo 2, 02/16/2022: View of submembrane depressurization (SMD) system riser pipe penetration through the cellar slab (facing northwest).

Photo 3, 02/16/2022: View of blower units on roof (facing west).

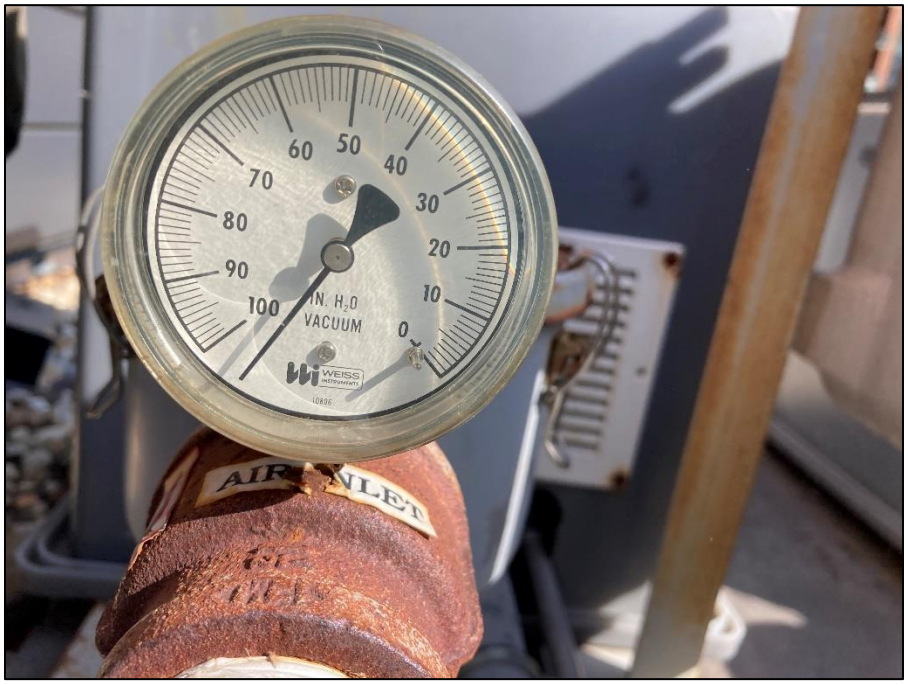


Photo 4, 02/16/2022: View of vacuum gauge connected to roof blower (facing east).

Photo 5, 02/16/2022: View of filter attached to north SMD blower.

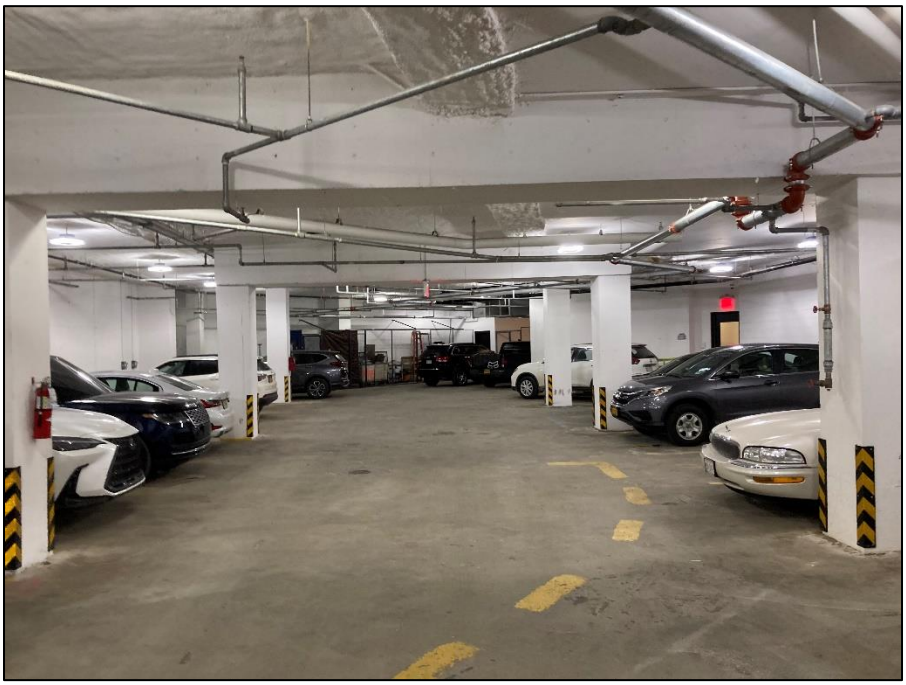


Photo 6, 02/16/2022: View of concrete building slab composite cover in ventilated parking garage (facing east).

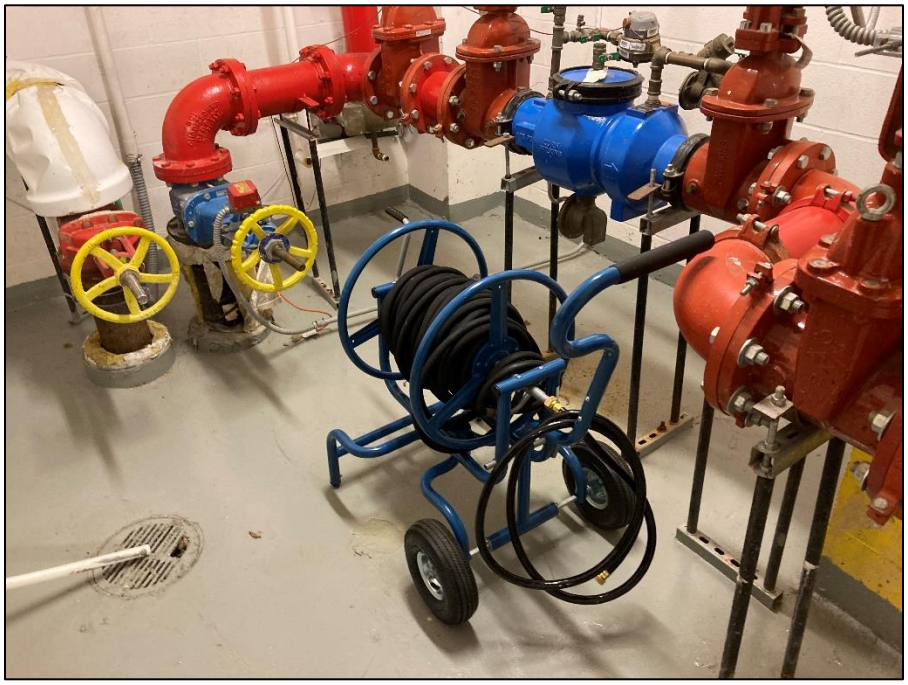


Photo 7, 02/16/2022: View of concrete building slab composite cover in gas meter room (facing east).

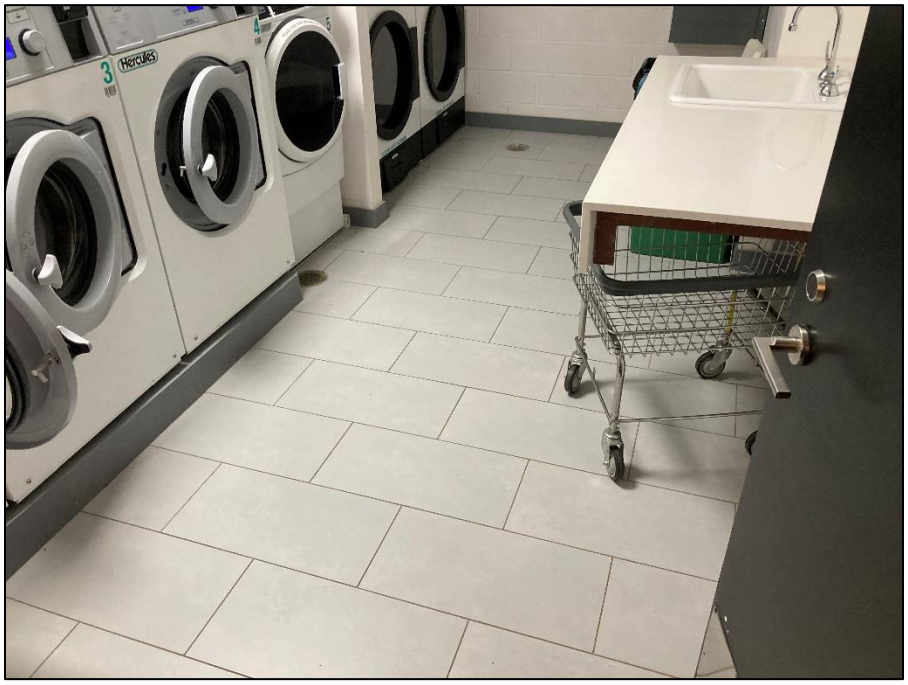


Photo 8, 02/16/2022: View of composite cover in laundry room (facing southeast).

Photo 9, 02/16/2022: View of composite cover in bicycle storage room (facing southwest).

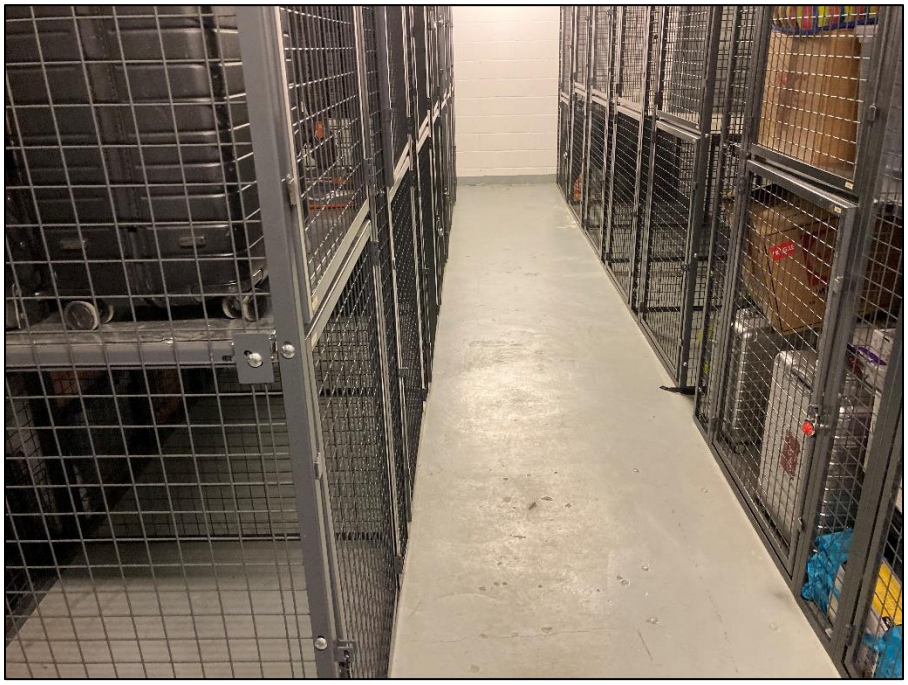


Photo 10, 02/16/2022: View of composite cover in resident storage room (facing west).

Photo 11, 02/16/2022: View of composite cover in compactor room.

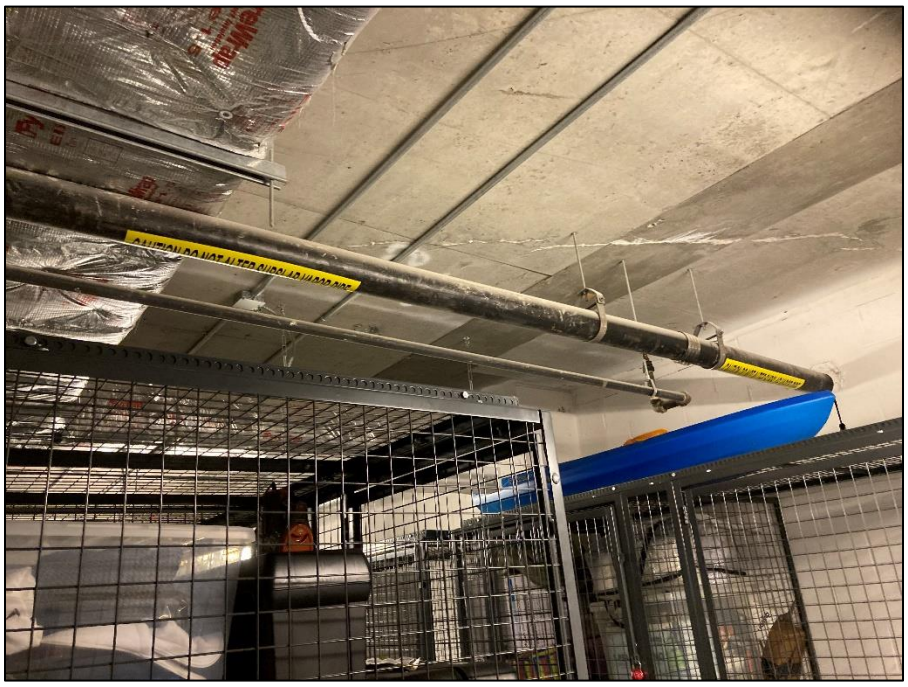


Photo 12, 02/16/2022: View of labeled SMD piping in storage room (facing northwest).

Photo 13, 02/16/2022: View of composite cover in pool storage room (facing west).

Photo 14, 02/16/2022: View of SMD riser behind maintenance hallway wall panel.

Photo 15, 02/16/2022: View of landscaping and composite cover in courtyard (facing west).

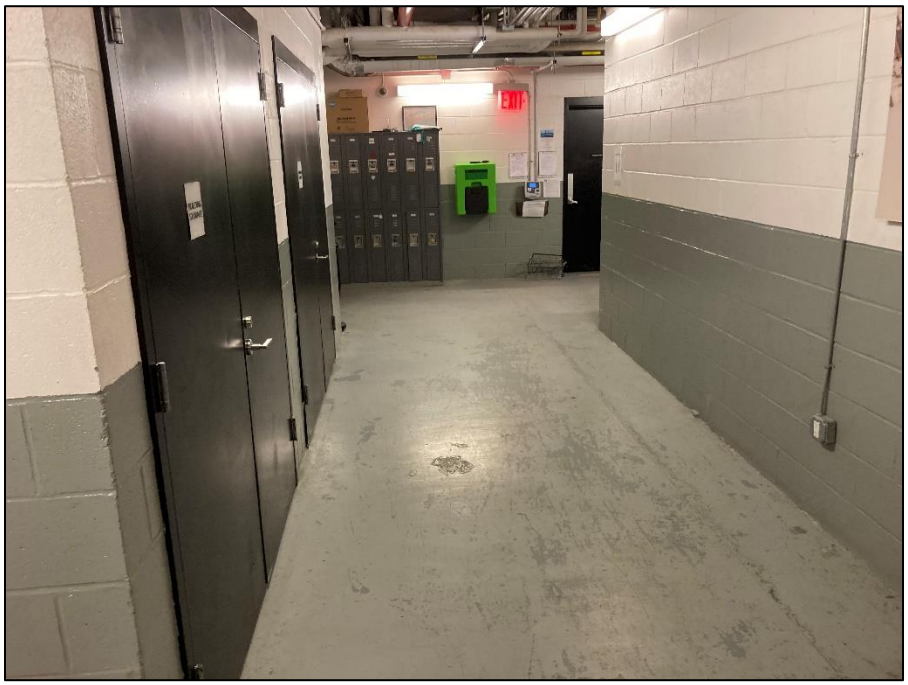


Photo 16, 02/16/2022: View of composite cover in maintenance hallway (facing south).

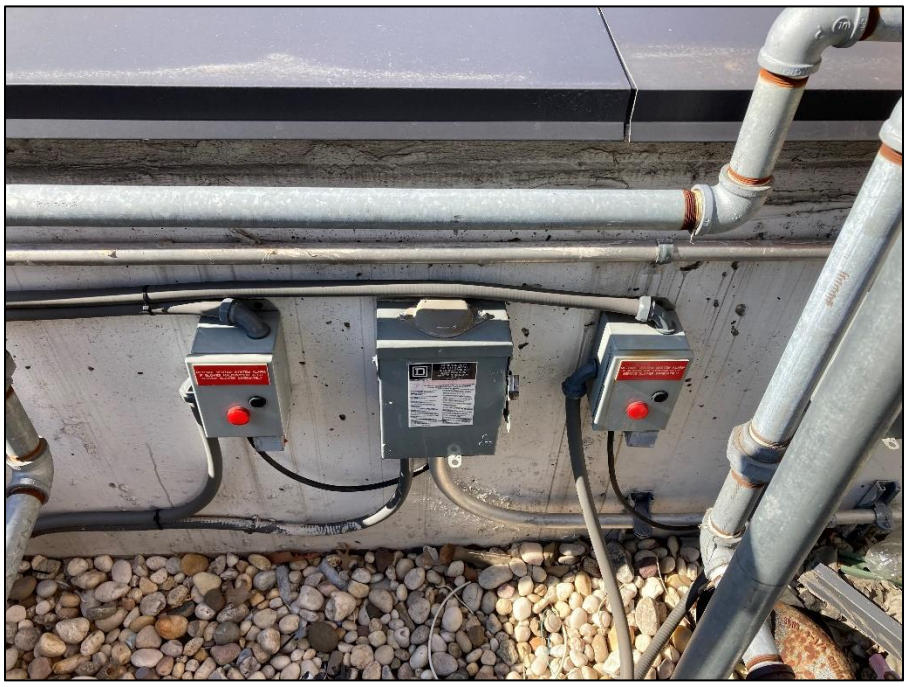


Photo 17, 02/16/2022: View of SMD system breaker and alarm panels (facing west).

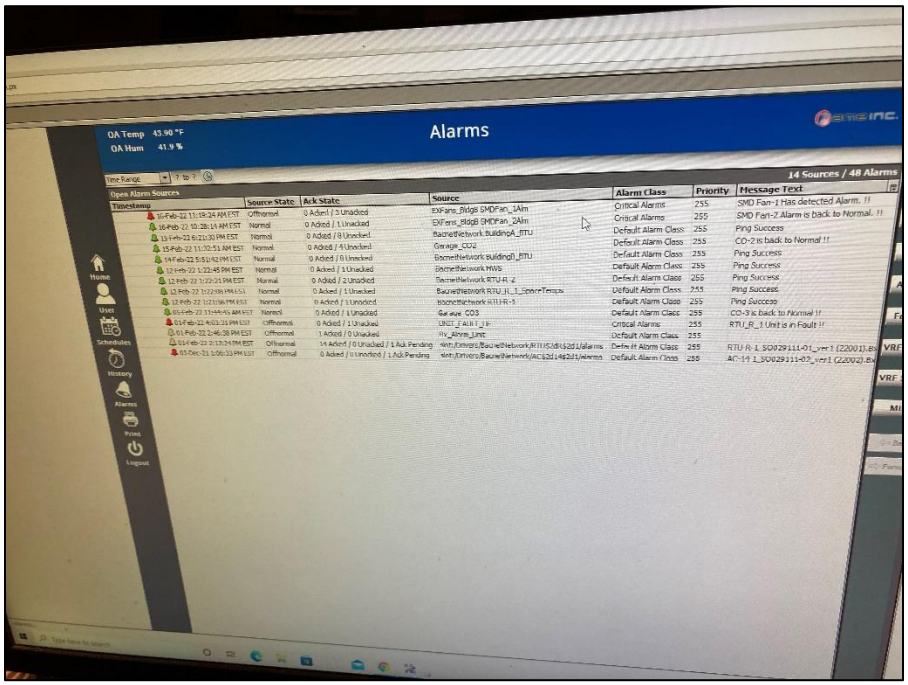


Photo 18, 02/16/2022: View of building maintenance system software showing SMD system alarm notification during testing.

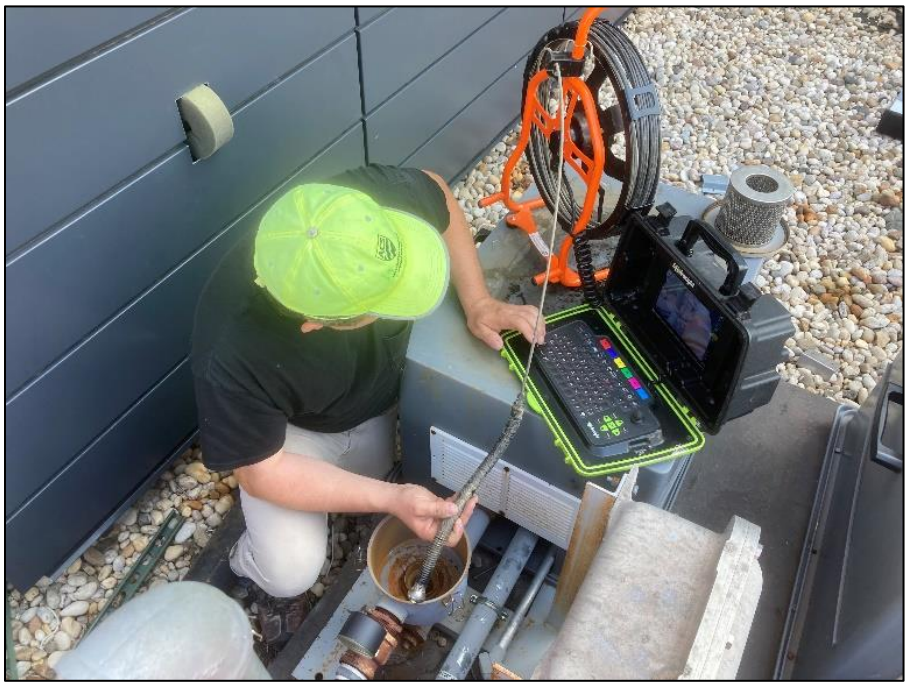


Photo 19, 07/06/2022: View of SMD piping video inspection.

Photo 20, 07/06/2022: View of the disconnected SMD riser piping roof penetration connecting to the deficient blower.

Photo 21, 09/30/2022: View of the SMD riser piping slab penetration with cleanout and sample port installed.

Photo 22, 09/30/2022: View of reconnected SMD piping on the roof.

Photo 23, 09/30/2022: View of flow readings collected at the reconnected blower.

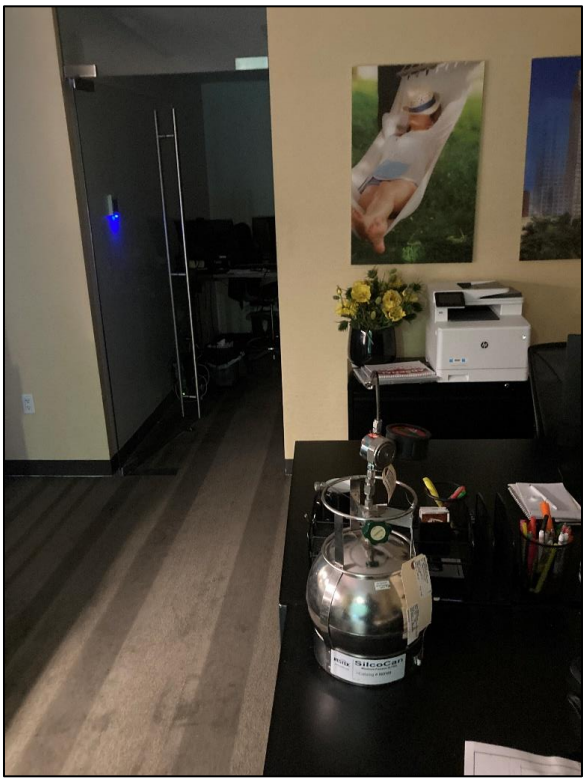


Photo 24, 09/30/2022: View of the indoor air sample location within the management office above the southern SMD loop.

APPENDIX D

COMPOSITE COVER SYSTEM INSPECTION FORM

COMPOSITE COVER SYSTEM INSPECTION CHECKLIST

Site Name: 44-30 Purves Street Location: Long Island City, NY Project Number: 170282502

Inspector Name: Luke McCartney Date: 5/4/2021 Weather Conditions: Clear, 50's

Reason for Inspection (i.e., routine, severe condition, etc.): Annual Inspection

Check one of the following:
(Y: Yes N: No N/A: Not Applicable)

		Y	N	N/A	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	✓	N/A	Building is complete and occupied.
	Impermeable Cap					
2	Are there any indications of a breach in the capping system at the time of this inspection?		✓		N	
3	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 capping system, on-site at the time of this inspection?		✓		N	
4	If YES to number 3, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?			✓	N/A	

** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

*

Additional remarks:

Minimum Inspection Schedule:

- Site-wide inspections will be conducted annually, per certification year, at a minimum.
- Additional inspections will also be conducted at times of severe weather condition events.
- All inspection events will use this checklist.

LANGAN

APPENDIX E

SMD SYSTEM INSPECTION FORM

SMD SYSTEM INSPECTION CHECKLIST

Site Name: 44-30 Purves Street Location: Long Island City, NY Project Number: 170282502

Inspector Name: Brad Koontz Date: 2/16/2022 Weather Conditions: Partly Cloudy, 40s F

Reason for Inspection (i.e., routine, severe condition, etc.): Annual Inspection

Check one of the following:
(Y: Yes N: No N/A: Not Applicable)

		Y	N	N/A	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on-site?	✓			Y	Records available in Langan digital archives.
2	Based on site records, when was the last inspection, maintenance, or repair event?			✓	N/A	5/4/2021
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?			✓	N/A	
7	If YES to number 5, is there documentation that all breaches in the floor slab have been sealed?			✓	N/A	
8	Does all visible SSD piping appear intact and undamaged?	✓			Y	
9	Have any intake points been constructed at the roof near (less than 10 feet) the SMD blower discharge point?		✓		N	
	SSD Blower Unit					
10	Is the SSD blower operational at the time of the inspection?	✓			Y	
11	What is the VelociCalc Meter reading?	✓			Y	South Blower: 71.81 cfm North Blower: 17.21 cfm
12	Is the SSD blower expelling air at the discharge point?	✓			Y	

*****If the answer to any of the above questions indicates the SMD system 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:

PID Reading at South Blower: 0.0 ppm, Vacuum Gauge at South Blower: 57.5" H2O

PID Reading at North Blower: 0.0 ppm, Vacuum Gauge at North Blower: 95" H2O

North blower (1400) was exceeding 100 IWC and triggering relief valve. Suspected clog in subgrade piping. Blower turned OFF until further notice

Minimum Inspection Schedule:

- SMD system inspections will be conducted quarterly for the first certification year at a minimum.
- Additional inspections will also be conducted at times of maintenance, repair, or severe condition events.
- The minimum schedule will be revised, as necessary, following the first certification year.
- All inspection events will use this checklist.

LANGAN

SMD SYSTEM INSPECTION CHECKLIST

Site Name: 44-30 Purves Street Location: Long Island City, NY Project Number: 170282502

Inspector Name: Brad Koontz Date: 9/30/2022 Weather Conditions: Partly Cloudy, 40s F

Reason for Inspection (i.e., routine, severe condition, etc.): Annual Inspection

Check one of the following:
(Y: Yes N: No N/A: Not Applicable)

		Y	N	N/A	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on-site?	✓			Y	Records available in Langan digital archives.
2	Based on site records, when was the last inspection, maintenance, or repair event?			✓	N/A	2/16/2022
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	Moisture accumulation drained from riser pipe. South blower roof piping reconnected. Blower turned on.
	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?			✓	N/A	
7	If YES to number 5, is there documentation that all breaches in the floor slab have been sealed?			✓	N/A	
8	Does all visible SSD piping appear intact and undamaged?	✓			Y	
9	Have any intake points been constructed at the roof near (less than 10 feet) the SMD blower discharge point?		✓		N	
	SSD Blower Unit					
10	Is the SSD blower operational at the time of the inspection?	✓			Y	
11	What is the VelociCalc Meter reading?	✓			Y	South Blower: 119 CFM North Blower: 131 CFM
12	Is the SSD blower expelling air at the discharge point?	✓			Y	

*****If the answer to any of the above questions indicates the SMD system 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:
PID Reading at South Blower: 0.0 ppm, Vacuum Gauge at South Blower: 50 " H2O
PID Reading at North Blower: 0.0 ppm, Vacuum Gauge at North Blower: 34 " H2O

Minimum Inspection Schedule:

- SMD system inspections will be conducted quarterly for the first certification year at a minimum.
- Additional inspections will also be conducted at times of maintenance, repair, or severe condition events.
- The minimum schedule will be revised, as necessary, following the first certification year.
- All inspection events will use this checklist.

LANGAN

APPENDIX F

ANNUAL SITE-WIDE INSPECTION FORM

SITE INSPECTION CHECKLIST

Site Name: 44-30 Purves Street Location: Long Island City, NY Project Number: 170282502

Inspector Name: Luke McCartney Date: 5/4/2021 Weather Conditions: Clear, 50s

Reason for Inspection (i.e., routine, severe condition, etc.): Annual Inspection

Check one of the following:
(Y: Yes N: No N/A: Not Applicable)

		Y	N	N/A	Normal Situation	Remarks
	General					
1	What are the current site conditions?			✓	N/A	Building is complete and occupied.
2	Are all applicable site records (e.g., documentation of construction activity, SMD system maintenance and repair, most current easement, etc.) complete and up to date?	✓			Y	
	Environmental Easement					
3	Has site use (restricted residential) remained the same?	✓			Y	
4	Does it appear that all environmental easement restrictions have been followed?	✓			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		✓		Y	Capping system intact at the time of the inspection. No active construction.
6	Are there any cracks in the building slabs?		✓		Y	
7	Are there any cracks in the building walls?		✓		Y	
8	Is there any construction activity, or indication of any constructior activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?		✓		Y	
9	If YES to number 7, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?			✓	Y	

**

* **If the answer to any of the above questions indicate non-compliance with any IC/ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional remarks:

Minimum Inspection Schedule:

- Site-wide inspections will be conducted annually, per certification year, at a minimum.
- Additional inspections will also be conducted at times of severe weather condition events.
- All inspection events will use this checklist.

LANGAN

APPENDIX G

INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

3/29/2022

David Brause
Member
Purves Street Owners LLC
52 Vanderbilt Avenue
c/o Brause Realty Inc.
New York, NY 10017
DAB@BrauseRealty.com

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: 44-30 Purves Street
Site No.: C241162
Site Address: 44-30 Purves Street
Long Island City, NY 11101

Dear David Brause:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **June 12, 2022**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Manfred Magloire, the Project Manager, at 718-482-4078 or manfred.magloire@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures

ec: w/ enclosures
Manfred Magloire, Project Manager
Jane O'Connell, Hazardous Waste Remediation Supervisor, Region 2

Langan Engineering - Jason Hayes - jahayes@langan.com

The following parcel owner did not receive an ec:
Purves Street Owners LLC - Parcel Owner

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7**):**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. C241162

Site Name 44-30 Purves Street

Site Address: 44-30 Purves Street Zip Code: 11101
City/Town: Long Island City
County: Queens
Site Acreage: 0.622

Reporting Period: May 13, 2021 to May 13, 2022

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☑	☐
7. Are all ICs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C241162 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
268-1	Purves Street Owners LLC	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan O&M Plan Soil Management Plan IC/EC Plan

Intuitional controls mandate operation, maintenance, monitoring and reporting measures for all Engineering controls. They provide restriction on site usage and prevent future exposure to remaining contamination by controlling subsurface disturbances.

The site 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). All engineering Controls (ECs) must be operated and maintained as specified in the site management plan(SMP). All ECs must be inspected at a frequency and in a manner defined in the SMP. 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 first notify and obtain written approval to do so from the Department. Groundwater and other environmental or public health monitoring must be performed as defined in the SMP. 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. All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP. Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restriction identified by this environmental easement.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
268-1	Vapor Mitigation Cover System

Engineering controls include a composite cover system to prevent future exposure to the residual contamination remaining in place and a submembrane depressurization system to mitigate soil vapor intrusion.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) 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 is accurate and compete.

YES	NO
☑	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) 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;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO. C241162

Box 6

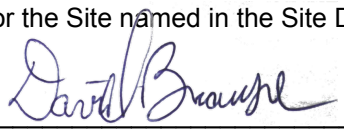
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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 David Brause (print name) at 52 Vanderbilt Avenue, NY, NY 10017 (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

10/27/22
Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 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 JASON HAYES (print name) at 360 W 31ST ST, 8TH FL, NEW YORK, NY (print business address)

am certifying as a Professional Engineer for the OWNER (Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification — Stamp (Required for PE)

10/27/2022
Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.