56 BOX STREET

BROOKLYN, NEW YORK

Remedial Action Report

NYC VCP Project Number: 14CVCP188K

E-Designation Site Number: 14EHAZ052K

Prepared for:

56 Box Street LLC
199 Lee Avenue, Suite 777
Brooklyn, NY 11211

Prepared by:

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

1808 Middle Country Road

Ridge, NY 11961

Ariel Czemerinski, P.E.
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

JULY 2017

REMEDIAL ACTION REPORT
TABLE OF CONTENTS

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

FIGURES

TABLES

APPENDICES

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

LIST OF ACRONYMS

Acronym	Definition
CAMP	Community Air Monitoring Plan
DER-10	NYS DEC Division of Environmental Remediation Technical Guidance Manual 10
EC	Engineering Control
HASP	Health and Safety Plan
IC	Institutional Control
NYC VCP	New York City Voluntary Cleanup Program
NYC DEP	New York City Department of Environmental Protection
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
ORC	Oxygen Release Compound
PID	Photoionization Detector
QA/QC	Quality Assurance/Quality Control
QEP	Qualified Environmental Professional
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan
SCG	Standards, Criteria and Guidance
SCO	Soil Cleanup Objective
SMMP	Soil/Materials Management Plan
SMP	Site Management Plan
SVOCs	Semi-Volatile Organic Compounds
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

CERTIFICATION

I, Ariel Czemerinski, certify the following:

- I am currently a registered professional engineer licensed by the State of New York.
- I performed professional engineering services and had primary direct responsibility for implementation of the remedial program for the redevelopment project located at 56 Box Street, Brooklyn, NY, site number 14CVCP188K.
- I have reviewed this document, to which my signature and seal are affixed.
- Engineering Controls implemented during this remedial action were designed by me or a person under my direct supervision and achieve the goals established in the Remedial Action Work Plan for this site.
- The Engineering Controls constructed during this remedial action were professionally observed by me or by a person under my direct supervision and (1) are consistent with the Engineering Control design established in the Remedial action Work Plan; (2) are accurately reflected in the text and drawings for as-built design reported in this Remedial Action Report; and (3) will achieve the goal of the Remedial Action Work Plan to prevent soil vapor intrusion and provide protection of public health for the occupants of the building.
- The OER-approved Remedial Action Work Plan dated January 2014 and Stipulations in a letter dated September 8, 2014, were implemented and that all requirements in those documents have been substantively complied with. I certify that contaminated soil, fill, liquids or other material from the property were taken to facilities licensed to accept this material in full compliance with applicable laws and regulations.

Name: Ariel Czemerinski

PE License Number 076508

Signature

Date: 7/19/2017

I, Kevin Brussee, certify the following:

- I am a Qualified Environmental Professional.
- I had primary direct responsibility for implementation of the remedial program for the redevelopment project located at 56 Box Street, Brooklyn, NY, site number 14CVCP188K.
- The OER-approved Remedial Action Work Plan dated January 2014 and Stipulations in a letter dated September 8, 2014, were implemented and that all requirements in those documents have been substantively complied with. I certify that contaminated soil, fill, liquids or other material from the property were taken to facilities licensed to accept this material in full compliance with applicable laws and regulations.

QEP Name KEVIN BRUSSEE

QEP Signature

Date: 7/19/2017

EXECUTIVE SUMMARY

56 Box Street LLC has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 56 Box Street in the Greenpoint section of Brooklyn, New York. A Remedial Investigation (RI) was performed to compile and evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A remedial action was performed pursuant to an OER-approved RAWP in a manner that has rendered the Site protective of public health and the environment consistent with the proposed use of the property. This RAR describes the remedial action performed under the RAWP. The remedial action described in this document provides for the protection of public health and the environment, complies with applicable environmental standards, criteria and guidance and applicable laws and regulations.

Site Location and Background

The Site is located at 56 Box Street in the Greenpoint section of Brooklyn, New York, and is identified as Block 2483, Lot 17 on the New York City Tax Map. Lot 17 is a rectangular shaped lot consisting of 49.33 feet of street frontage along Box Street and a depth of 100 feet for a total area of 4,933 ft^2. The Site is located on the south side of Box Street between Manhattan Avenue and McGuinness Boulevard and is bordered by Box Street to the north, a 1-story industrial building to the west (52 Box Street – Lot 15), a 1-story industrial building to the east (60 Box Street – Lot 19), and two 3 and 4-story walk- ups (85-91 Clay Street – Lots 54 & 55) to the south.

Prior to redevelopment, the Site was developed with a 1-story brick and concrete commercial building. The building was occupied by Total Metal Resources, a shop that created decorative gratings, catwalks and staircase structures out of steel and other metals.

Summary of Redevelopment Plan

A new 6-story apartment building with a cellar and a rear concrete capped parking lot has been constructed at the Site. The current zoning designation for the Site is M1-2/R6A and has a special mixed use district label of MX-8. The use is consistent with existing zoning for the property.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

The new building covers approximately 60% of the Lot and includes a 1,560 square foot cellar utilized for storage, a trash compactor room, and meter rooms. Access to the cellar is provided by both elevator and stairs. The rear of the lot is capped with concrete and is used for parking. The first floor consists of two residential units, the residential lobby, and a covered driveway along the west side of the building that provides access to the rear open-air parking area. The second through sixth floors are residential apartments.

The new building's foundation consists of a 2 ft thick concrete mat slab across the first 69 feet of the lot. The 2 ft mat slab required excavation to a depth of approximately 9 feet for cellar, and sloped excavation to a depth of approximately 5 feet below grade along east and west sides of the cellar. Additional excavation to approximately 8 feet and sloped excavation against the rear property line was performed to allow for installation of a storm water retention tank in the rear parking area. A total of approximately 2,173.82 tons of soil was excavated and transported to Soil Safe Metro 12 in Carteret, NJ.

Summary of Surrounding Properties

The area surrounding the Site consists of a mix of residential and industrial properties. No hospitals, daycare facilities or schools are located within a 250-foot radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Box Street	Block 2479, Lots 12 (16-26 Ash Street) – Developed with 1-story industrial buildings.
South – Adjacent property	Block 2483, Lots 54 and 55 (85-91 Clay Street) – Developed with multi-story residential properties.
East – Adjacent property	Block 2483, Lot 19 (60 Box Street) – Developed with a 1-story industrial property.
West – Adjacent property	Block 2483, Lot 15 (52 Box Street) – Developed with a 1-story industrial property.

Summary of Past Uses of Site and Environmental Findings

EBC was able to establish the following site history based upon Sanborn maps dating back to 1887. From 1887 through 1916 the Site consisted of mixed commercial and residential properties. Between 1916 and 1942, the structures were demolished and a commercial building

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

was erected as an Iron Works facility. This facility remained in operation onsite from 1943 through 2013, operating as Total Metal Resource.

The AOCs identified for this Site include:

- Historic fill layer was present at the Site from grade to depths as great as 2 feet below grade;
- Presence of a little "E" restriction listed as HazMat;
- Historical utilization of the Site as a metal shop facility for approximately 70 years;
- Presence of floor drains throughout the building; and
- Presence of elevated VOC's in groundwater and soil vapor beneath the Site.

Summary of the Work Performed under the Remedial Investigation

EBC performed the following scope of work in September of 2013:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed five soil borings (B4 – B8) across the entire project Site, and collected eleven soil samples and one duplicate soil sample for chemical analysis from the soil borings to evaluate soil quality;
3. Collected three groundwater samples and one duplicate groundwater sample from existing monitoring wells MW4, MW6 and MW7 for chemical analysis to evaluate groundwater quality; and
4. Installed three sub-slab soil vapor implants across the Site and collected three samples for chemical analysis.

At the request of the NYSDEC, a supplemental soil vapor and groundwater investigation was performed in February/March of 2017. The supplemental investigation consisted of the following:

1. Installed soil boring (MW4R) in the rear parking lot and collected two soil samples for chemical analysis of VOCs via EPA Method 8260 from the soil boring to evaluate soil quality;

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

2. Installed one 1 inch diameter PVC monitoring well in the rear parking lot, and collected one groundwater sample from the monitoring well (MW4R) for chemical analysis of VOCs via EPA Method 8260 to evaluate groundwater quality;
3. Installed two soil vapor implants (SG8, SG9) within the Box Street sidewalk and collected two soil vapor samples for chemical analysis; and
4. Installed four soil vapor implants (SG4, SG5, SG6, and SG7) within the rear parking lot and collected three soil vapor samples for chemical analysis.

Summary of Environmental Findings

1. The elevation of the Site is approximately 18 feet.
2. Depth to groundwater ranges from 10.09 to 10.65 feet below sidewalk grade at the Site
3. Groundwater flow is generally southwest to northeast.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site consisted of approximately two feet of historic fill underlain with native brown silty sand.
6. Soil/fill sample results collected during the RI were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Use Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51. Soil/fill samples collected during the RI showed no detectable concentrations of PCBs or pesticides. Seven VOCs were detected at trace levels, with the exception of cis-1,2-Dichloroethene (ranging from 6 µg/Kg to 5,200 µg/Kg), which was detected above Unrestricted Use SCOs in one of the five shallow samples as well as in duplicate soil sample. Trace levels of several SVOC compounds were identified, but none exceeded Track 1 Unrestricted Use SCOs. Five metals were detected above Unrestricted Use SCOs including chromium (max. of 47.2 mg/Kg), lead (max. of 327 mg/Kg), mercury (max. of 0.35 mg/Kg), nickel (max. of 35.6 mg/Kg), and zinc (max. of 127 mg/Kg). No metals exceeded Restricted Residential SCOs. Overall, findings were consistent with observations for historical fill sites in areas throughout NYC.
7. Soil/fill sample results collected during the 2017 Supplemental Investigation were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Use Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and

CP51. The laboratory results of the two soil samples collected at 8 to 10ft and 10-12ft below grade from the rear courtyard showed no VOCs at concentrations greater than Unrestricted Use SCOs. However, eight VOCs were detected at trace concentrations below Unrestricted Use SCOs.

8. Groundwater sample results collected during the RI were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater samples collected during the RI showed no SVOCs, PCBs, or pesticides detected above Unrestricted Use SCOs. Five VOCs, including 1,1-dichloroethane (max. of 2,800 µg/L), 1,1-dichloroethene (2,100 µg/L), cis-1,2-dichloroethene (ranging from 11 ug/L to 51,000 µg/L), and vinyl chloride (ranging from 120 µg/L of 21,000 µg/L) were detected above their respective GQSs in all samples. Trichloroethene (80 µg/L) was detected above GQS in one sample. The dissolved concentration of the metals iron, magnesium, manganese, and sodium were detected above their respective GQS in one or more of the three samples.
9. The laboratory results of the groundwater sample collected during the 2017 Supplemental Investigation were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). The groundwater sample showed CVOCs above GQS, including 1,2-dichloroethane (220 µg/L), 1,2-dichloroethene (120 µg/L), cis-1,2-dichloroethene (240 µg/L), methylene chloride (73 µg/L), trans-1,2-dichloroethene (6.8 µg/L), trichloroethene (240 µg/L), and vinyl chloride (6.4 µg/L).
10. Soil vapor results collected during the RI were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Soil vapor samples collected during the RI showed moderate concentrations of petroleum compounds and high levels of chlorinated VOCs. Tetrachloroethene (PCE) was identified in two of the three soil gas samples at a maximum concentration of 2,780 µg/m^3. Trichloroethene (TCE) was identified in all three soil gas samples at concentrations ranging from 487 µg/m^3 to 312,000 µg/m^3. 1,1,1-trichloroethane (TCA) was detected in all three soil gas samples at concentrations ranging from 61 µg/m^3 to 45,700 µg/m^3. Carbon tetrachloride was detected in two of the three soil gas samples at trace concentrations. PCE, TCA and TCE were detected in soil vapor samples at concentrations above the monitoring level

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

ranges established within the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs). Concentrations of petroleum related VOCs (BTEX) ranged from non-detect in SG1 to 153.7 µg/m^3 in SG3.

11. Soil vapor results collected during the 2017 Supplemental Investigation were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Soil vapor samples collected during the RI showed moderate concentrations of petroleum compounds and high levels of chlorinated VOCs. PCE was identified in all five soil gas samples at concentrations ranging from 0.33 µg/m^3 to 9.35 µg/m^3. TCE was identified in three of the five soil gas samples at a maximum concentration of 671 µg/m^3. TCA was detected in one of the five soil gas samples (SG-7) at 16.9 µg/m^3. Carbon tetrachloride was detected in all five soil gas samples at trace concentrations. TCE was detected in three soil vapor samples at concentrations above the monitoring level ranges established within the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs).

Summary of the Remedial Action

The remedial action achieved protection of public health and the environment for the intended use of the property. The remedial action achieved all of the remedial action objectives established for the project and addressed applicable standards, criterion, and guidance; was effective in both the short-term and long-term and reduced mobility, toxicity and volume of contaminants; was cost effective and implementable; and used standards methods that are well established in the industry.

A summary of the milestones achieved in the Remedial Action is as follows: A Pre-Application Meeting was held on August 27, 2013. A Remedial Investigation (RI) was performed in July and September of 2013 and a RI Report dated September 2013 was prepared to evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A Site Contact List was established and a RAWP dated January 2014 was prepared and released with a Fact Sheet on October 22, 2013, for a 30-day public comment period. The RAWP with a Stipulation List dated September 8, 2014, was approved by the New York City Office of Environmental Remediation (OER) on February 6, 2014. Remedial action began in August of 2014 and completed in

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

September of 2014.

The remedial action consisted of the following tasks:

1. Prepared a Community Protection Statement and implemented a Citizen Participation Plan;
2. Performed a Community Air Monitoring Program for particulates and volatile organic carbon compounds;
3. Establish Track 4 Restricted Residential Use Soil Cleanup Objectives (SCOs).

Contaminant	Track 4 SCOs
Chromium	50 ppm
Lead	800 ppm
Mercury	1.5 ppm

4. Mobilized site security and equipment; completed utility mark outs; and marked and staked excavation areas.
5. Performed Waste Characterization Study prior to excavation activities. Two waste characterization soil samples were collected on May 8, 2014. Waste characterization samples were collected at a frequency dictated by disposal facility;
6. The following excavations were performed: excavation to a depth of approximately 9 feet for the new building's cellar, and sloped excavation to a depth of approximately 4 feet below grade along east and west sides of the cellar for construction of the at-grade portions of the building. Additional excavation was performed across the remainder of the rear parking area to approximately 8 feet for installation of a storm water retention tank and sloped excavation was performed against the rear property line;
7. A total of approximately 2,172.82 tons of non-hazardous soil/fill was transported to Soil Safe Metro 12 located at 300 Salt Meadow Road in Carteret, NJ 07008;
8. Transported and disposed off-Site of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and the RAWP. Appropriately segregated excavated media onsite;
9. Implemented of storm-water pollution prevention measures in compliance with applicable laws and regulations;
10. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;

11. Conducted materials management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials
12. Collected and analyzed five end-point soil samples (EP1 – EP5) to determine the performance of the remedy with respect to attainment of SCOs. Track 4 Site-Specific SCOs were achieved;
13. Residual materials are present beneath the composite cover system and will be subject to Site Management under this Remedial Action;
14. Imported 10 truck loads (approximately 400.07 tons) of 5/8 inch blue stone (ASTM 67) from New York Sand & Stone, LLC, for use as backfill above the mat slab and below the at-grade slab on the east side of the building, and behind the rear foundation wall and the rear courtyard. An estimated 40 cubic yards of 1" stone was imported for use as backfill below the cellar slab and below/around the SSDS piping installed below the cellar slab and at-grade slab on the west side of the building. The source and exact quantity of the 1" stone is unknown.
15. Installed and operating an active sub-slab depressurization system (SSDS), equipped with a blower, a manometer to measure system pressure, and an alarm. The SSDS consists of two loops. One loop was installed below the cellar slab, and loop was installed below the western slab-on grade portion of the building. Both loops are constructed of a continuous loop of perforated 4-inch HDPE smooth interior pipe fitted with a filter sock and installed within the 6 inch layer of 5/8" stone below the slab and waterproofing membrane. Solid PVC pipe connected to both loops connects to a 1,000 lb carbon unit (General Carbon Corp. TV-1000). A blower (Radonaway model No. RP265) fitted to the top of a 6 inch PVC riser pipe on the roof connects to the discharge of the 1,000 lb carbon unit. The blower is hardwired to an electric source. The exhaust from the blower is located a minimum of 10 feet from windows/ventilation inlets. The alarm and manometer are connected to the 6 inch PVC riser pipe and are located within a tamperproof plastic cabinet located against the rear wall of the first floor lobby. This active SSDS is a permanent engineering control and will be inspected by a QEP at a defined frequency under an OER-approved long-term Site Management Plan. The QEP will submit Inspection and Certification Reports on system function to OER. In addition, monthly

inspections will be performed by building superintendent staff of the operation of blowers, integrity of couplings and seals in the SSDS chase piping, manometer readings, and alarm function. QEP will establish a checklist for monthly inspections by building superintendent staff. These checklists will be maintained in a file onsite for inspection by OER and the QEP and will be reported in the QEP's periodic Inspection and Certification Report;

16. Installed a waterproofing membrane/vapor barrier system. Grace Preprufe® 300R was installed below the entire 2 ft thick mat slab and Bituthene® 4000 manufactured by GCP Applied Technologies was installed on each of the cellar walls to grade. However, the Bituthene® 4000 was damaged during building construction. Therefore, Grace Procor® 75 Spray Grade was applied to the exterior sides of the rear and left and right sides of the cellar walls to grade. Grace Preprufe® 300R is a 1.2 mm (0.046in) thick HDPE film with a pressure sensitive adhesive that bonds to the poured concrete. All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. Procor® 75 is a two component, synthetic rubber, cold vulcanized, fluid applied waterproofing membrane. It cures to form a resilient, monolithic, fully bonded elastomeric sheet. The waterproofing/vapor barrier system is a permanent Engineering Control. The membrane system was installed by the excavation contractor, YS Builders NY;
17. Constructed an engineered composite cover system to prevent human exposure to residual soil/fill remaining under the Site. The engineered composite cover system consists of the following:
    - Cellar Slab - 24-inch thick concrete mat slab underlain with Grace Preprufe 300R Plus waterproofing vapor barrier, underlain with a 6-inch layer of 5/8 inch crushed stone;
    - Concrete Capped Rear Parking Lot – 6-inch thick concrete slab underlain with 2 to 8 ft of 5/8 inch crushed stone;
    - Driveway and At-Grade Building Slabs – 6-inch thick concrete slab underlain with 2 to 6 ft of 5/8 inch crushed stone and then the 2ft thick concrete mat slab, Grace Preprufe 300R Plus waterproofing vapor barrier, and another 6-inch layer of 5/8 inch crushed stone.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

The composite cover system is a permanent engineering control and was installed by YS Builders NY;

18. Performed NYSDEC required supplemental investigation involving installation of one groundwater monitoring well and six soil vapor implants. Collected and analyzed one groundwater sample, two soil vapor samples in sidewalk and four soil vapor samples in rear parking area.
19. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
20. Submitted a Sustainability Report;
21. Submitted a RAR that: certifies that the remedial requirements have been achieved; defines the Site boundaries: describes all Engineering and Institutional Controls applicable to the Site; includes a Site Management Plan; and describes the remedial activities including any changes from the RAWP;
22. Submitted an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering (Capping, vapor barrier and active SSDS) and Institutional Controls and reporting at a specified frequency.
23. The property will continue to be flagged with an E-Designation by the NYC Building Department. Establishment of Engineering Controls and Institutional Controls; a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

REMEDIAL ACTION REPORT

1.0 SITE BACKGROUND

56 Box Street LLC has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 56 Box Street in the Greenpoint section of Brooklyn, New York. The boundary of the property subject to this Remedial Action is shown in Figure 2 and includes Brooklyn Block 2483, Lot 17. The Remedial Action was performed pursuant to the OER-approved RAWP in a manner that has rendered the property protective of public health and the environment consistent with its intended use. This RAR describes the remedial action performed under the RAWP. The remedial action described in this document provides for the protection of public health and the environment, complies with applicable environmental standards, criteria and guidance and applicable laws and regulations.

1.1 Site Location and Prior Usage

The Site is located at 56 Box Street in the Greenpoint section of Brooklyn, New York, and is currently identified as Block 2483, Lot 17 on the New York City Tax Map. Figure 1 shows the Site location. Lot 17 is a rectangular shaped lot consisting of 49.33 feet of street frontage on Box Street and a depth of approximately 100 feet for a total of approximately 4,933 ft^2. The Site is located on the south side of Box Street between Manhattan Avenue and McGuinness Boulevard and is bordered by Box Street to the north, a 1-story industrial building to the west (52 Box Street – Lot 15), a 1-story industrial building to the east (60 Box Street – Lot 19), and two 3 and 4-story walk- ups (85-91 Clay Street – Lots 54 & 55) to the south. A map of the site boundary is shown in Figure 2.

Prior to redevelopment, the Site was developed with a 1-story brick and concrete commercial building. The building was occupied by Total Metal Resources, a shop that created decorative gratings, catwalks and staircase structures out of steel and other metals.

1.2 Summary of Redevelopment Plan

A new 6-story apartment building with a cellar and a rear concrete capped parking lot has been constructed at the Site. The current zoning designation for the Site is M1-2/R6A and has a

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

special mixed use district label of MX-8. The use is consistent with existing zoning for the property.

The new building covers approximately 60% of the Lot and includes a 1,560 square foot cellar utilized for storage, a trash compactor room, and meter rooms. Access to the cellar is provided by both elevator and stairs. The rear of the lot is capped with concrete and is used for parking. The first floor consists of two residential units, the residential lobby, and a covered driveway along the west side of the building that provides access to the rear open-air parking area. The second through sixth floors are residential apartments.

The new building's foundation consists of a 2 ft thick concrete mat slab across the first 69 feet of the lot. The 2 ft mat slab required excavation to a depth of approximately 9 feet for cellar, and sloped excavation to a depth of approximately 5 feet below grade along east and west sides of the cellar. Additional excavation to approximately 8 feet and sloped excavation against the rear property line was performed to allow for installation of a storm water retention tank in the rear parking area. Layout of the redevelopment plans are presented on Figure 3.

1.3 Description of Surrounding Property

The area surrounding the Site consists of a mix of residential and industrial properties. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 250 feet away from the Site. No hospitals, daycare facilities or schools are located within a 250-foot radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Box Street	Block 2479, Lots 12 (16-26 Ash Street) – Developed with 1-story industrial buildings.
South – Adjacent property	Block 2483, Lots 54 and 55 (85-91 Clay Street) – Developed with multi-story residential properties.
East – Adjacent property	Block 2483, Lot 19 (60 Box Street) – Developed with a single story industrial property.
West – Adjacent property	Block 2483, Lot 15 (52 Box Street) – Developed with a single story industrial property.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

1.4 Summary of Past Uses of Site and Environmental Findings

EBC was able to establish the following site history based upon Sanborn maps dating back to 1887. From 1887 through 1916 the Site consisted of mixed commercial and residential properties. Between 1916 and 1942, the structures were demolished and a commercial building was erected as an Iron Works facility. This facility remained in operation onsite from 1943 through 2013, operating as Total Metal Resource.

The AOCs identified for this Site include:

- Historic fill layer was present at the Site from grade to depths as great as 2 feet below grade;
- Presence of a little "E" restriction listed as HazMat;
- Historical utilization of the Site as a metal shop facility for approximately 70 years;
- Presence of floor drains throughout the building; and
- Presence of elevated VOC's in groundwater and soil vapor beneath the Site.

1.5 Remedial Investigation

A remedial investigation was performed and the results are documented in a document called "*Remedial Investigation Report*", dated September 2013 (Appendix A).

1.5.1 Summary of the Work Performed under the Remedial Investigation

EBC performed the following scope of work in September of 2013:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed five soil borings (B4 – B8) across the entire project Site, and collected eleven soil samples and one duplicate soil sample for chemical analysis from the soil borings to evaluate soil quality;
3. Collected three groundwater samples and one duplicate groundwater sample from existing monitoring wells MW4, MW6 and MW7 for chemical analysis to evaluate groundwater quality; and
4. Installed three sub-slab soil vapor implants across the Site and collected three samples for chemical analysis.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

At the request of the NYSDEC, a supplemental soil vapor and groundwater investigation was performed in February/March of 2017. The supplemental investigation consisted of the following:

1. Installed soil boring (MW4R) in the rear parking lot and collected two soil samples for chemical analysis of VOCs via EPA Method 8260 from the soil boring to evaluate soil quality;
2. Installed one 1 inch diameter PVC monitoring well in the rear parking lot, and collected one groundwater sample from the monitoring well (MW4R) for chemical analysis of VOCs via EPA Method 8260 to evaluate groundwater quality;
3. Installed two soil vapor implants (SG8, SG9) within the Box Street sidewalk and collected two soil vapor samples for chemical analysis; and
4. Installed four soil vapor implants (SG4, SG5, SG6, and SG7) within the rear parking lot and collected three soil vapor samples for chemical analysis.

1.5.2 Summary of Environmental Findings

1. The elevation of the Site is approximately 18 feet.
2. Depth to groundwater ranges from 10.09 to 10.65 feet below sidewalk grade at the Site
3. Groundwater flow is generally southwest to northeast.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site consisted of approximately two feet of historic fill underlain with native brown silty sand.
6. Soil/fill sample results collected during the RI were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Use Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51. Soil/fill samples collected during the RI showed no detectable concentrations of PCBs or pesticides. Seven VOCs were detected at trace levels, with the exception of cis-1,2-Dichloroethene (ranging from 6 µg/Kg to 5,200 µg/Kg), which was detected above Unrestricted Use SCOs in one of the five shallow samples as well as in duplicate soil sample. Trace levels of several SVOC compounds were identified, but none exceeded Track 1 Unrestricted Use SCOs. Five metals were detected above Unrestricted Use SCOs including chromium (max. of 47.2 mg/Kg), lead (max. of 327 mg/Kg), mercury

(max. of 0.35 mg/Kg), nickel (max. of 35.6 mg/Kg), and zinc (max. of 127 mg/Kg). No metals exceeded Restricted Residential SCOs. Overall, findings were consistent with observations for historical fill sites in areas throughout NYC.

7. Soil/fill sample results collected during the 2017 Supplemental Investigation were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Use Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51. The laboratory results of the two soil samples collected at 8 to 10ft and 10-12ft below grade from the rear courtyard showed no VOCs at concentrations greater than Unrestricted Use SCOs. However, eight VOCs were detected at trace concentrations below Unrestricted Use SCOs.
8. Groundwater sample results collected during the RI were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater samples collected during the RI showed no SVOCs, PCBs, or pesticides detected above Unrestricted Use SCOs. Five VOCs, including 1,1-dichloroethane (max. of 2,800 µg/L), 1,1-dichloroethene (2,100 µg/L), cis-1,2-dichloroethene (ranging from 11 µg/L to 51,000 µg/L), and vinyl chloride (ranging from 120 µg/L of 21,000 µg/L) were detected above their respective GQSs in all samples. Trichloroethene (80 µg/L) was detected above GQS in one sample. The dissolved concentration of the metals iron, magnesium, manganese, and sodium were detected above their respective GQS in one or more of the three samples.
9. The laboratory results of the groundwater sample collected during the 2017 Supplemental Investigation were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). The groundwater sample showed CVOCs above GQS, including 1,2-dichloroethane (220 µg/L), 1,2-dichloroethene (120 µg/L), cis-1,2-dichloroethene (240 µg/L), methylene chloride (73 µg/L), trans-1,2-dichloroethene (6.8 µg/L), trichloroethene (240 µg/L), and vinyl chloride (6.4 µg/L).
10. Soil vapor results collected during the RI were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Soil vapor samples collected during the RI showed moderate concentrations of petroleum

compounds and high levels of chlorinated VOCs. Tetrachloroethene (PCE) was identified in two of the three soil gas samples at a maximum concentration of 2,780 µg/m^3. Trichloroethene (TCE) was identified in all three soil gas samples at concentrations ranging from 487 µg/m^3 to 312,000 µg/m^3. 1,1,1-trichloroethane (TCA) was detected in all three soil gas samples at concentrations ranging from 61 µg/m^3 to 45,700 µg/m^3. Carbon tetrachloride was detected in two of the three soil gas samples at trace concentrations. PCE, TCA and TCE were detected in soil vapor samples at concentrations above the monitoring level ranges established within the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs). Concentrations of petroleum related VOCs (BTEX) ranged from non-detect in SG1 to 153.7 µg/m^3 in SG3.

11. Soil vapor results collected during the 2017 Supplemental Investigation were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Soil vapor samples collected during the RI showed moderate concentrations of petroleum compounds and high levels of chlorinated VOCs. PCE was identified in all five soil gas samples at concentrations ranging from 0.33 µg/m^3 to 9.35 µg/m^3. TCE was identified in three of the five soil gas samples at a maximum concentration of 671 µg/m^3. TCA was detected in one of the five soil gas samples (SG-7) at 16.9 µg/m^3. Carbon tetrachloride was detected in all five soil gas samples at trace concentrations. TCE was detected in three soil vapor samples at concentrations above the monitoring level ranges established within the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs).

For more detailed results, consult the RIR. Based on an evaluation of the data and information from the RIR (Appendix A) and the RAWP (Appendix B), disposal of significant amounts of hazardous waste was not suspected at this Site.

2.0 DESCRIPTION OF REMEDIAL ACTIONS

The remedial action was performed in accordance with an OER approved Remedial Action Work Plan (Appendix B) and achieved the remedial action objectives established for the project. The remedial action was evaluated in an alternatives analysis and was determined to be protective of human health and the environment, compliant with standards, criteria, and guidelines (SCGs), effective in the short-term, effective in the long-term, capable of attaining appropriate levels of reduction of toxicity, mobility, or volume of contaminated material, implementable, cost effective, acceptable to the community, consistent with land uses, and sustainable.

A summary of the milestones achieved in the Remedial Action is as follows: A Pre-Application Meeting was held on August 27, 2013. A Remedial Investigation (RI) was performed in July and September of 2013 and a RI Report dated September 2013 was prepared to evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A Site Contact List was established and a RAWP dated January 2014 was prepared and released with a Fact Sheet on October 22, 2013, for a 30-day public comment period. The RAWP with a Stipulation List dated September 8, 2014, was approved by the New York City Office of Environmental Remediation (OER) on February 6, 2014. Remedial action began in August of 2014 and completed in September of 2014.

The remedial action consisted of the following tasks:

1. Prepared a Community Protection Statement and implemented a Citizen Participation Plan;
2. Performed a Community Air Monitoring Program for particulates and volatile organic carbon compounds;
3. Establish Track 4 Restricted Residential Use Soil Cleanup Objectives (SCOs).

Contaminant	**Track 4 SCOs**
Chromium	50 ppm
Lead	800 ppm
Mercury	1.5 ppm

4. Mobilized site security and equipment; completed utility mark outs; and marked and staked excavation areas.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

5. Performed Waste Characterization Study prior to excavation activities. Two waste characterization soil samples were collected on May 8, 2014. Waste characterization samples were collected at a frequency dictated by disposal facility;
6. The following excavations were performed: excavation to a depth of approximately 9 feet for the new building's cellar, and sloped excavation to a depth of approximately 4 feet below grade along east and west sides of the cellar for construction of the at-grade portions of the building. Additional excavation was performed across the remainder of the rear parking area to approximately 8 feet for installation of a storm water retention tank and sloped excavation was performed against the rear property line;
7. A total of approximately 2,172.82 tons of non-hazardous soil/fill was transported to Soil Safe Metro 12 located at 300 Salt Meadow Road in Carteret, NJ 07008;
8. Transported and disposed off-Site of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and the RAWP. Appropriately segregated excavated media onsite;
9. Implemented of storm-water pollution prevention measures in compliance with applicable laws and regulations;
10. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;
11. Conducted materials management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials
12. Collected and analyzed five end-point soil samples (EP1 – EP5) to determine the performance of the remedy with respect to attainment of SCOs. Track 4 Site-Specific SCOs were achieved;
13. Residual materials are present beneath the composite cover system and will be subject to Site Management under this Remedial Action;
14. Imported 10 truck loads (approximately 400.07 tons) of 5/8 inch blue stone (ASTM 67) from New York Sand & Stone, LLC, for use as backfill above the mat slab and below the at-grade slab on the east side of the building, and behind the rear foundation wall and the rear courtyard. An estimated 40 cubic yards of 1" stone was imported for use as backfill below the cellar slab and below/around the SSDS piping installed below the cellar slab

and at-grade slab on the west side of the building. The source and exact quantity of the 1" stone is unknown.

15. Installed and operating an active sub-slab depressurization system (SSDS), equipped with a blower, a manometer to measure system pressure, and an alarm. The SSDS consists of two loops. One loop was installed below the cellar slab, and loop was installed below the western slab-on grade portion of the building. Both loops are constructed of a continuous loop of perforated 4-inch HDPE smooth interior pipe fitted with a filter sock and installed within the 6 inch layer of 5/8" stone below the slab and waterproofing membrane. Solid PVC pipe connected to both loops connects to a 1,000 lb carbon unit (General Carbon Corp. TV-1000). A blower (Radonaway model No. RP265) fitted to the top of a 6 inch PVC riser pipe on the roof connects to the discharge of the 1,000 lb carbon unit. The blower is hardwired to an electric source. The exhaust from the blower is located a minimum of 10 feet from windows/ventilation inlets. The alarm and manometer are connected to the 6 inch PVC riser pipe and are located within a tamperproof plastic cabinet located against the rear wall of the first floor lobby. This active SSDS is a permanent engineering control and will be inspected by a QEP at a defined frequency under an OER-approved long-term Site Management Plan. The QEP will submit Inspection and Certification Reports on system function to OER. In addition, monthly inspections will be performed by building superintendent staff of the operation of blowers, integrity of couplings and seals in the SSDS chase piping, manometer readings, and alarm function. QEP will establish a checklist for monthly inspections by building superintendent staff. These checklists will be maintained in a file onsite for inspection by OER and the QEP and will be reported in the QEP's periodic Inspection and Certification Report;
16. Installed a waterproofing membrane/vapor barrier system. Grace Preprufe® 300R was installed below the entire 2 ft thick mat slab and Bituthene® 4000 manufactured by GCP Applied Technologies was installed on each of the cellar walls to grade. However, the Bituthene® 4000 was damaged during building construction. Therefore, Grace Procor® 75 Spray Grade was applied to the exterior sides of the rear and left and right sides of the cellar walls to grade. Grace Preprufe® 300R is a 1.2 mm (0.046in) thick HDPE film with a pressure sensitive adhesive that bonds to the poured concrete. All vapor barrier seams,

penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. Procor® 75 is a two component, synthetic rubber, cold vulcanized, fluid applied waterproofing membrane. It cures to form a resilient, monolithic, fully bonded elastomeric sheet. The waterproofing/vapor barrier system is a permanent Engineering Control. The membrane system was installed by the excavation contractor, YS Builders NY;

17. Constructed an engineered composite cover system to prevent human exposure to residual soil/fill remaining under the Site. The engineered composite cover system consists of the following:
    - Cellar Slab - 24-inch thick concrete mat slab underlain with Grace Preprufe 300R Plus waterproofing vapor barrier, underlain with a 6-inch layer of 5/8 inch crushed stone;
    - Concrete Capped Rear Parking Lot – 6-inch thick concrete slab underlain with 2 to 8 ft of 5/8 inch crushed stone;
    - Driveway and At-Grade Building Slabs – 6-inch thick concrete slab underlain with 2 to 6 ft of 5/8 inch crushed stone and then the 2ft thick concrete mat slab, Grace Preprufe 300R Plus waterproofing vapor barrier, and another 6-inch layer of 5/8 inch crushed stone.

    The composite cover system is a permanent engineering control and was installed by YS Builders NY;
18. Performed NYSDEC required supplemental investigation involving installation of one groundwater monitoring well and six soil vapor implants. Collected and analyzed one groundwater sample, two soil vapor samples in sidewalk and four soil vapor samples in rear parking area;
19. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
20. Submitted a Sustainability Report;
21. Submitted a RAR that: certifies that the remedial requirements have been achieved; defines the Site boundaries: describes all Engineering and Institutional Controls

applicable to the Site; includes a Site Management Plan; and describes the remedial activities including any changes from the RAWP;

22. Submitted an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering (capping, vapor barrier and active SSDS) and Institutional Controls and reporting at a specified frequency.
23. The property will continue to be flagged with an E-Designation by the NYC Building Department. Establishment of Engineering Controls and Institutional Controls; a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

3.0 COMPLIANCE WITH REMEDIAL ACTION WORK PLAN

3.1 Construction Health & Safety Plan (CHASP)

The remedial construction activities performed under this program were in compliance with the Construction Health and Safety Plan and applicable laws and regulations. The Site Safety Coordinator was Kevin Waters - EBC.

3.2 Community Air Monitoring Plan (CAMP)

The Community Air Monitoring Plan provided for the collection and analysis of air samples during remedial construction activities to ensure proper protections were employed to protect workers and the neighboring community. Monitoring was performed in compliance with the Community Air Monitoring Plan in the approved RAWP. The results of Community Air monitoring are shown in Appendix D.

3.3 Soil/Materials Management Plan

The Soil/Materials Management Plan in the RAWP provided detailed plans for managing all soils/materials that were disturbed at the Site, including excavation, handling, storage, transport and disposal. It also included a series of controls to assure effective, nuisance free remedial activity in compliance with applicable laws and regulations. Remedial construction activities performed under this program were in full compliance with the SMMP in the approved RAWP.

3.4 Storm-Water Pollution Prevention

Storm water pollution prevention included physical methods and processes to control and/or divert surface water flows and to limit the potential for erosion and migration of Site soils, via wind or water. Remedial construction activities performed under this program were in full compliance with methods and processes defined in the RAWP for storm water prevention and applicable laws and regulations.

3.5 Deviations From the Remedial Action Work Plan

Deviations from the Remedial Action Work Plan are summarized below:

- The RAP and April 2014, Remedial Action Work Plan (RAWP) Stipulation List specified the installation of Raven Industries, Inc. VaporBlock Plus VBP20 vapor barrier.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

However, as part of building construction, Grace Preprufe 300R Plus waterproofing membrane was installed under the building foundation. Bituthene® 4000 manufactured by GCP Applied Technologies was installed on each of the cellar walls to grade, but the waterproofing membrane was damaged during building construction. Therefore, Grace Procor® 75 Spray Grade was applied to the exterior sides of the rear and left and right sides of the cellar walls to grade.

- In September of 2014, an estimated 40 cubic yards of 1" crushed stone was imported for use as backfill around the storm water retention tank, and to create a 6 inch layer of stone below the cellar slab and below/around the SSDS piping, and below the at-grade slab and below/around the SSDS piping. However, documentation noting the exact source, dates, and quantities could not be located. In addition, OER was not contacted to request approval of the gravel import. However, the 1" stone was inspected by EBC when it was installed and was found to contain no fines. Therefore, the material is suitable for use as backfill around the SSDS piping within the SSDS trench. Photos showing the gravel installation are included in Appendix C.

No other significant deviations from the Remedial Action Work Plan occurred during implementation of the Remedial Action Work Plan.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

4.0 REMEDIAL PROGRAM

4.1 Project Organization

The PE responsible for implementation of the remedial action for this project was Ariel Czmerinski P.E., AMC Engineering. On-Site air monitoring in accordance with the CHASP and CAMP, soil screening and soil sampling was performed by Evan Delitsky, Kristen DiScenza, Sunny Chen, Reuben Levinton, or Kevin Waters of EBC. The Qualified Environmental Professional which implemented the remedial action was Kevin Brussee, Project Manager-EBC.

The excavation and foundation contractor was YS Builders NY, and the developer was NY Developers.

4.2 Site Controls

Site Preparation

Plans for the building alteration (NYC DOB Job number A1-320842237) were approved on February 6, 2014. Waste characterization soil sampling was performed on May 8, 2014, prior to mobilization to obtain soil disposal approval and to minimize the need for on-Site soil stockpiles. On August 14, 2014, equipment was mobilized to the Site to begin excavation of on-Site soil.

Soil Screening

All intrusive soil excavation activities were overseen by an EBC qualified environmental professional (QEP). In addition to extensive sampling and chemical testing of soils on the Site, excavated soil was screened continuously using hand-held instruments, by sight, and by smell to ensure proper material handling and management, and community protection. Excavation at the Site consisted of the removal of the top 3 feet of soil/fill across the entire Site and excavation of soil/fill as necessary for the new building's cellar, foundation and storm water retention tank. No physical or olfactory evidence of a spill was observed during Site excavation. Historic fill material was excavated across the Site to a depth of approximately 2 feet below grade.

Stockpile Management

For the majority of the project, soil was excavated from the ground and live loaded into trucks to eliminate the need for stockpiling. However, any soil stockpiles that were generated and kept overnight were covered with 6-mil poly-sheeting to prevent dust and minimize odors. Stockpile

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

covers were inspected by the EBC QEP.

Truck Inspection

Trucks entering the Site to be loaded were parked on the former building slab or the concrete sidewalk. Before exiting the Site, trucks were examined for evidence of contaminated soil on the undercarriage, body, and wheels. If soil/debris was observed, it was removed utilizing brooms or shovels.

Site Security

An 8-ft high construction fence was constructed around the perimeter of the property. The fence was locked with a chain and padlock during non-working hours/days.

Nuisance Controls

No petroleum or other odors were detected during removal of the historic fill layer. On-site soil screening did not detect any excessive PID readings and no complaints were reported. Dust and odor was minimized by excavating and live-loading directly into trucks, and covering stockpiles with 6-mil poly sheeting overnight during off-work hours.

Reporting

Daily status reports were prepared and forwarded to the OER project manager for construction days in which soil disturbance activities were performed (soil excavation/loading). A copy of each of the daily status reports is included in Appendix E.

Digital photographs of the remedial action are included in Appendix C.

4.3 Materials Excavation and Removal

4.3.1 Waste Characterization Soil Sampling

Waste characterization soil sampling was performed on May 8, 2014, by excavating five test pits across the Site to approximately 10 feet below grade. From the six test pits, EBC formed one 5-point composite waste characterization soil sample representing the historic fill layer (approximately 0 to 2 feet below grade), and one 5-point composite soil samples representing the clean native soil layer that required excavation for the new buildings' cellar and foundation (2 to 10 feet below grade). In addition, EBC collected grab samples from each interval for analysis of

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

VOCs. The 5-point composite waste characterization soil samples were submitted to York Analytical Laboratories, Inc., for laboratory analysis of SVOCs, pesticides, herbicides, PCBs, paint filter, TCLP Metals, RCRA Characteristics, TAL metal, hexavalent chromium cyanide and EPH. No VOCs, SVOCs, pesticides, PCBs, herbicides or metals were detected above Restricted Residential SCOs.

In order to obtain soil disposal approval, the laboratory results of the waste characterization samples, as well as a profile form, test pit sampling plan and a formal letter describing the sampling process and material type, was forwarded Soil Safe, Inc. to obtain soil disposal approval. A copy of the formal soil disposal request letter with the waste characterization sampling plan and laboratory results is attached in Appendix G. Based upon the laboratory results of the waste characterization soil samples, Soil Safe Metro 12 accepted all soil/fill from the Site. A copy of the soil disposal acceptance letter issued by Soil Safe Metro 12 for the soil/fill is attached in Appendix H.

4.3.2 Historic Fill and Native Soil Excavation

The new building's foundation consists of a 2 ft thick concrete mat slab across the first 69 feet of the lot. The 2 ft mat slab required excavation to a depth of approximately 9 feet for cellar, and sloped excavation to a depth of approximately 5 feet below grade along east and west sides of the cellar. Additional excavation to approximately 8 feet and sloped excavation against the rear property line was performed to allow for installation of a storm water retention tank in the rear parking area. Excavation of the fill material and native soil was completed using a track mounted excavator. Excavation began on August 14, 2014, and was completed on August 27, 2014. Although all historic fill material was removed during excavation for the new building, some bricks/concrete remain below the gravel in the rear courtyard and below portions of the at-grade areas of the building because the brick walls of the building were broken and used as backfill. A total of approximately 2,172.82 tons of historic fill material/soil was transported to Soil Safe Metro 12 located in Carteret, New Jersey. Figure 5 depicts the areas and depths of excavation performed at the Site.

After excavation of the Site was completed, EBC collected five endpoint soil samples. The approximate collection location of the endpoint soil samples is shown on Figure 6.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

4.3.3 End Point Sample Results

Track 4 Site-Specific Soil Cleanup Objectives established for the Site were the following:

Contaminant	**Track 4 SCOs**
Chromium	50 ppm
Lead	800 ppm
Mercury	1.5 ppm

Following excavation for the new building, EBC collected five endpoint soil samples (EP1, EP2, EP3, EP4 and EP5). The location of each of the endpoint soil samples is shown on Figure 6. Dedicated disposable sampling equipment was utilized to collect each endpoint sample, eliminating the need for field equipment (rinsate) blanks.

The endpoint soil samples were appropriately packaged, placed in a cooler and picked up by laboratory courier for transport to the analytical laboratory. The samples were containerized in laboratory provided glassware and shipped in plastic coolers preserved utilizing ice or “cold-paks” to maintain a temperature of 4^{o}C.

Endpoint samples EP1 through EP5 were submitted to Phoenix Environmental Laboratories, Inc. located at 587 East Middle Turnpike, in Manchester, CT 06040 (NYS ELAP Certification No. 11301) for laboratory analysis utilizing the following methodology:

- Volatile organic compounds by EPA Method 8260; and
- Target Analyte List metals by EPA Method 6010 and 7471.

A copy of the laboratory report for the endpoint soil samples is attached in Appendix F. A tabular summary of the end-point soil sample results is included on Table 1 (VOCs) and Table 4 (metals), and Unrestricted Use SCO exceedances are posted on Figure 6. The laboratory results of the three soil samples collected at the final excavation depth during the RI (8-10 feet below grade) are summarized on Tables 1 through 4. No SVOCs, pesticides or PCBs were detected above Restricted Residential Use SCOs within any of the soil samples collected during the Remedial Investigation and were therefore not included within the list of parameters required for the endpoint soil samples. As shown on Tables 1 and 4, all VOCs and metals were detected at concentrations below Track 4 Site-Specific SCOs.

4.4 Materials Disposal

From August to September of 2014, a total of approximately 2,172.82 tons of non-hazardous fill material/soil was excavated and transported on a non-hazardous manifest to the Soil Safe - Metro 12 facility located at 300 Salt Meadow Road in Carteret, New Jersey 07008. The Soil Safe – Metro12 facility is a Class B Recycling Center operating under permit No. CBG120001 issued by the New Jersey Department of Environmental Protection (NJDEP). Copies of each of the non-hazardous manifests and associated scale tickets are included in Appendix I. The trucking lot included in Appendix I summarizes the shipping date, trucking company name, truck number, license plate number, and tonnage for each truck load.

The volume/tonnage and destination of material removed and disposed off-Site is presented below:

Table 9 - Disposal Quantities and Disposal Facilities

Destination	Type of Material	Quantity
Soil Safe Metro 12 300 Salt Meadow Road, Carteret, NJ 07008	Non-Hazardous Fill Material	2,172.82 tons

Letters from EBC to disposal facility providing materials type, source and data, and acceptance letters from disposal facility stating it is approved to accept above materials are attached in Appendices G and H. Manifests are included in Appendix I. Waste characterization report is presented in Appendix G with the soil request letter.

4.5 Backfill Import

In September of 2014, an estimated 40 cubic yards of 1" crushed stone was imported for use as backfill around the storm water retention tank, and to create a 6 inch layer of stone below the cellar slab and below/around the SSDS piping, and below the at-grade slab and below/around the SSDS piping. However, documentation noting the exact source, dates, and quantities could not be located. In addition, OER was not contacted to request approval of the gravel import. However, the 1" stone was inspected by EBC when it was installed and was found to contain no fines. Therefore, the material is suitable for use as backfill around the SSDS piping within the SSDS trench. Photos showing the gravel installation are included in Appendix C.

A formal request was forwarded to OER via email on October 6, 2016, to import 5/8 inch crushed stone (ASTM #67) was imported from the New York Sand & Stone, LLC facility located at the Brooklyn Navy Yard Pier J. The email request included a representative sieve analysis report from New York Sand & Stone, LLC for the import 5/8 inch crushed stone (ASTM #67). A copy of the request and representative sieve analysis report is included in Appendix J.

On December 12, 2016 and December 13, 2016, a total of 10 truck loads (approximately 400.07 cubic yards) of 5/8 inch crushed stone was imported from the New York Sand & Stone, LLC facility located at the Brooklyn Navy Yard Pier J. The 5/8” stone was used to backfill the driveway area, and all of the rear parking area prior to capping both areas with a new concrete slab. A copy of each of the source scale tickets for each load of 5/8 inch crushed stone (ASTM #67) from New York Sand & Stone, LLC is attached in Appendix J.

No other backfill was imported to the Site. The volume/tonnage of backfill materials imported to the Site, and the facility name/address from which the backfill was obtained is presented below:

Table 10 – Backfill Quantities and Sources

Facility	Type of Material	Quantity
New York Sand & Stone, LLC Adirondack Drive, Selden, New York 11784	5/8” blue stone (ASTM #67)	400.07 tons

4.6 Demarcation

There are no landscaped areas at this Site, thus a demarcation barrier was not needed. The entire Site is capped with an engineered composite cover system consisting of

1. Cellar Slab - 24-inch thick concrete mat slab underlain with Grace Preprufe 300R Plus waterproofing vapor barrier, underlain with a 6-inch layer of 5/8 inch crushed stone;
2. Concrete Capped Rear Parking Lot – 6-inch thick concrete slab underlain with 2 to 8 ft of 5/8 inch crushed stone;
3. Driveway and At-Grade Building Slabs – 6-inch thick concrete slab underlain with 2 to 6 ft of 5/8 inch crushed stone and then the 2ft thick concrete mat slab, Grace Preprufe 300R Plus waterproofing vapor barrier, and another 6-inch layer of 5/8 inch crushed stone.

4.7 Supplemental Investigation

At the request of the NYSDEC, a supplemental soil vapor and groundwater investigation was performed in February/March of 2017. The supplemental investigation consisted of the following:

1. Installed soil boring (MW4R) in the rear parking lot and collected two soil samples for chemical analysis of VOCs via EPA Method 8260 from the soil boring to evaluate soil quality;
2. Installed one 1 inch diameter PVC monitoring well in the rear parking lot, and collected one groundwater sample from the monitoring well (MW4R) for chemical analysis of VOCs via EPA Method 8260 to evaluate groundwater quality;
3. Installed two soil vapor implants (SG8, SG9) within the Box Street sidewalk and collected two soil vapor samples for chemical analysis; and
4. Installed four soil vapor implants (SG4, SG5, SG6, and SG7) within the rear parking lot and collected three soil vapor samples for chemical analysis.

4.3.1 Soil Sampling

On February 28, 2017, soil boring MW4R was installed in the southwest corner of the lot to a final depth of 15 feet below existing grade using a five-foot steel macro-core sampler with acetate liners and Geoprobe direct-push equipment. Soil recovered from the soil boring was field screened for the presence of VOCs with a photo-ionization detector (PID) and visually inspected for evidence of contamination. No PID readings above background concentrations were obtained from any of the soil recovered from the soil boring. One soil sample was retained from the interval 8 to 10 feet below grade and one soil sample was retained from the interval 10 to 12 feet below grade. Depths above 8 feet were previously excavated and backfilled with 5/8” stone. Both soil samples were collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix for analysis of VOCs by EPA Method 8260.

A copy of the laboratory report is included in Appendix O. The laboratory results are summarized and compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Use Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51 on Table 5. No VOCs were detected within either soil sample at a concentration greater than Unrestricted Use SCOs. However, eight VOCs were detected at trace concentrations below

Unrestricted Use SCOs.

4.3.2 Groundwater Sampling

On February 28, 2017, one 1” PVC monitoring well was installed at the same location as soil boring MW4R. The monitoring well was installed at a depth of 20 feet below grade and consisted of 15 feet of well screen and 5 feet of riser pipe.

A groundwater sample was collected from the monitoring well on March 1, 2017. The groundwater sample was collected from the monitoring well utilizing dedicated polyethylene tubing and a peristaltic pump. The groundwater sample was collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix for analysis of VOCs by EPA Method 8260. A copy of the laboratory report is included in Appendix O. The laboratory results of the groundwater sample are summarized and compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS) on Table 6. The groundwater sample showed CVOCs above GQS, including 1,2-dichloroethane (220 µg/L), 1,2-dichloroethene (120 µg/L), cis-1,2-dichloroethene (240 µg/L), methylene chloride (73 µg/L), trans-1,2-dichloroethene (6.8 µg/L), trichloroethene (240 µg/L), and vinyl chloride (6.4 µg/L).

4.3.3 Soil Vapor Sampling

On February 28, 2017, six soil vapor implants (SG4 – SG9) were installed at a depth of approximately 7 to 8 feet below grade. Four of the soil vapor implants were installed in the rear parking area behind the new building, and two of the soil vapor implants (SG8 and SG9) were installed within tree boxes of the Box Street sidewalk. The soil vapor implants were installed using Geoprobe™ equipment and tooling. The vapor implants that were installed were the Geoprobe™ Model AT86 series, which are constructed of a 6-inch length of double woven stainless steel wire. Each implant was attached to ¼ inch polyethylene tubing which extended approximately 18 inches beyond that needed to reach the surface. The tubing was capped with a ¼ inch plastic end to prevent the infiltration of foreign particles into the tube. Coarse sand was placed around the vapor implant to a height of approximately 1 foot above the bottom of the implant. The remainder of the borehole was sealed with a bentonite slurry to the surface.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

Soil vapor sampling for the six implants installed on February 28, 2017, was conducted on March 1, 2017. Prior to sampling, each sampling location was tested to ensure a proper surface seal had been obtained. In accordance with NYSDOH guidance (NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005), a tracer gas (helium) was used as a quality assurance/quality control device to verify the integrity of the sampling point seal prior to collecting the samples. Prior to testing and collecting samples, the surface immediately surrounding the polyethylene tubing of the vapor implant was sealed using a 1 foot ft by 1 ft square sheet of 2 mil HDPE plastic firmly adhered to a wetted layer of granular bentonite. The seal was then tested by enriching the air space above the seal with a tracer gas (helium) while continuously monitoring air drawn from the implant with a helium detector (Dielectric Model MGD-2002, Multi-Gas Detector) for a minimum of 15 minutes. The tracer gas test procedure was employed at all seven soil vapor sampling locations. No surface seal leaks were observed at any of the locations.

Following verification that the surface seal was tight, one to three volumes (i.e., the volume of the sample probe and tube) of air was purged from the implant using a calibrated vacuum pump. Water was encountered with soil vapor implant SG5, and was therefore not sampled. After purging, a 6-liter Summa® canister, fitted with a 2-hour flow regulator, was attached to the surface tube of each of the four soil vapor implants. Prior to initiating sample collection, sample identification, canister number, date and start time were recorded on tags attached to each canister and in a bound field note book. Sampling then proceeded by fully opening the flow control valve on each canister in turn. Immediately after opening the flow control valve on a canister, the initial vacuum (inches of mercury) was recorded in the field book and on the sample tag. When the vacuum level in the canister was between 5 and 8 inches of mercury (approx 2 hours), the flow controller valve was closed, and the final vacuum recorded in the field notebook and on the sample tag.

A copy of the laboratory report is included in Appendix O. The soil vapor results are summarized and compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006 on Table 7. Soil vapor samples collected during the RI showed moderate concentrations of petroleum compounds and high levels of chlorinated VOCs. PCE was identified in all five soil gas samples at concentrations ranging from 0.33 µg/m^3 to 9.35 µg/m^3. TCE was identified in three of the five soil gas samples at a maximum concentration of 671 µg/m^3. TCA was detected in one of the five soil gas samples (SG-7) at 16.9 µg/m^3. Carbon tetrachloride was detected in all five soil gas samples at trace concentrations. TCE was detected in three soil vapor samples at concentrations above the monitoring level ranges established within the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs).

4.3.4 Summary

The laboratory results of the Supplemental Investigation were forwarded to the NYSDEC via email on March 24, 2017. Based on the results, the NYSDEC requested the OER Site Management Plan include periodic monitoring of monitoring well MW4R to document groundwater trends following remedial action.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

5.0 ENGINEERING CONTROLS

Engineering Controls were employed in the remedial action to address residual contamination remaining at the Site. The Site has four primary Engineering Control Systems. These are:

Composite Cover System

Exposure to residual soil/fill is prevented by an engineered Composite Cover System that has been built on the Site. The Composite Cover System consists of the following:

1. Cellar Slab - 24-inch thick concrete mat slab underlain with Grace Preprufe 300R Plus waterproofing vapor barrier, underlain with a 6-inch layer of 5/8 inch crushed stone;
2. Concrete Capped Rear Parking Lot – 6-inch thick concrete slab underlain with 2 to 8 ft of 5/8 inch crushed stone; and
3. Driveway and At-Grade Building Slabs – 6-inch thick concrete slab underlain with 2 to 6 ft of 5/8 inch crushed stone and then the 2ft thick concrete mat slab, Grace Preprufe 300R Plus waterproofing vapor barrier, and another 6-inch layer of 5/8 inch crushed stone.

Figure 7 shows the location of each cover type built at the Site. Photographs of construction of the Composite Cover System are included in Appendix C. The composite cover system was installed by YS Builders NY.

Vapor Barrier

As part of development, exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. Migration of soil vapor from potential off-site sources is mitigated with a combination of building slab and vapor barrier. Grace Preprufe® 300R was installed below the entire 2 ft thick mat slab and Bituthene® 4000 manufactured by GCP Applied Technologies was installed on each of the cellar walls to grade. However, the Bituthene® 4000 was damaged during building construction. Therefore, Grace Procor® 75 Spray Grade was applied to the exterior sides of the rear and left and right sides of the cellar walls to grade. Grace Preprufe® 300R is a 1.2 mm (0.046in) thick HDPE film with a pressure sensitive adhesive that bonds to the poured concrete. All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. Procor® 75 is a two component, synthetic rubber, cold vulcanized, fluid applied waterproofing membrane. It cures to

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

form a resilient, monolithic, fully bonded elastomeric sheet. Manufacturer specification sheets for Grace Preprufe® 300R and Procor® 75 are included in Appendix K. Photos of the waterproofing membrane/vapor barrier being installed are included in Appendix C and the approximate layout is shown on Figure 8. The waterproofing membrane/vapor barrier was installed by the foundation contractor, YS Builders NY.

Active Sub-Slab Depressurization System

Accumulation of soil vapor below and vapor intrusion into the cellar slab and slab on-grade portions of the building is mitigated with an active sub-slab depressurization system. The SSDS consists of two loops. One loop was installed below the cellar slab, and loop was installed below the western slab-on grade portion of the building. The two loops were installed in accordance with USEPA sub-slab depressurization design specifications which recommend a separate vent loop for every 4,000 sf of slab area. Both loops are constructed of a continuous loop of perforated 4-inch HDPE smooth interior pipe fitted with a filter sock and installed within the 6 inch layer of 5/8" stone below the slab and waterproofing membrane. Solid PVC pipe connected to both loops connects to a 1,000 lb carbon unit (General Carbon Corp. TV-1000). A blower (Radonaway model No. RP265) fitted to the top of a 6 inch PVC riser pipe on the roof connects to the discharge of the 1,000 lb carbon unit. The blower is hardwired to an electric source. The exhaust from the blower is located a minimum of 10 feet from windows/ventilation inlets.

The SSD system is connected to a Dwyer Magnehelic Manometer (Range of 0-5 inches of water) and a Radonaway Checkpoint IIa Radon System Alarm. The alarm and manometer are connected to the 6 inch PVC riser pipe and are located within a tamperproof plastic cabinet located against the rear wall of the first floor lobby. The exposed riser pipe installed against the rear façade and the riser pipe above the roof is labeled as SSDS piping.

Due to elevated concentrations of VOCs detected in soil gas during the Remedial Investigation, vapor phase carbon treatment has been designed into this system. A 1,000 lb vapor phase carbon adsorber, manufactured by General Carbon Corporation (model TV-1000) was installed below grade in the rear parking area.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

Following initial start up of the active SSDS, an initial vacuum gauge reading was recorded from the Magnahelic Manometer. The system is designed to establish a vacuum of 0.2 inches of water or higher.

The approximate layout of the active SSDS piping is shown on Figure 9. Photos are included in Appendix C that show installation of SSDS piping, alarm and manometer installed within the tamperproof plastic cabinet, and blower on the roof. Inspection details and inspection frequency are specified below in Section 7.0. The active SSDS was installed by YS Builders NY. Details of the SSDS system are shown on Figures 9 and 10.

Due to the type of building construction (2 ft thick concrete mat slab), sub-slab vacuum readings could not be obtained. On May 26, 2017, and June 5, 2017, EBC drilled ½" diameter holes through the cellar slab, but water was encountered within each hole. Due to the water within the holes drilled through the slab, digital manometer readings could not be collected. Following review of the foundation construction of the at-grade portions of the building, it was determined that sub-slab vacuum readings could not be collected either. The at-grade portions of the building consist of either a 4ft thick concrete footing that runs along the sides of the building, or a 6 inch concrete slab underlain by 2 to 5 feet of 5/8 inch crushed stone and an additional 2 ft thick concrete mat slab. Figure 12 depicts the locations in which EBC attempted to obtain sub-slab vacuum readings from below the cellar slab, and the type of foundation construction that prohibited collection of sub-slab vacuum readings from below the at-grade portions of the building.

Following system start-up, an inspection was performed to ensure the system was operating properly. The SSD system was started and checked for leaks and adequate pressure at the discharge stack. Power to the blower was then cut to verify that the warning alarm was functioning properly.

The SSDS components are to be inspected monthly by the building superintendent (see Section 7.0 Site Management Plan). A complete list of components to be checked is provided in the Inspection Checklist, presented in Appendix M. The manometer and alarm are installed within a tamperproof plastic cabinet against the rear wall of the first floor.

Monitoring Well MW4R

On February 28, 2017, one 1” PVC monitoring well (MW4R) was installed in southwest corner of the lot. The monitoring well was installed at a depth of 20 feet below grade and consisted of 15 feet of well screen and 5 feet of riser pipe. The monitoring well is finished with a flush mount steel cover. The location of the monitoring well is shown on Figure 1 included in Appendix O.

At the request of NYSDEC, the monitoring well MW4R be sampled annually to document groundwater trends following remedial action. This annual monitoring results will be included in annual inspection report to OER. Based on favorable results, a petition will be made to OER to discontinue groundwater monitoring.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

6.0 INSTITUTIONAL CONTROLS

A series of Institutional Controls are required under this Remedial Action to implement, maintain, inspect and certify Engineering Controls and prevent future exposure to residual contamination by controlling disturbances of the subsurface soil. Adherence to these Institutional Controls is required under this remedial action and will be implemented under the Site Management Plan included in this RAR. These Institutional Controls for the Site are:

(1) The property will continue to be registered with an E-Designation with the NYC Department of Buildings. Property owner and property owner's successors and assigns are required to comply with the approved SMP;

(2) Compliance with an OER-approved Site Management Plan including procedures for appropriate operation, maintenance, inspection, and certification of performance of EC's and IC's. The property owner and property owner's successors and assigns will inspect EC's and IC's and submit to OER a written certification that evaluates their performance in a manner and at a frequency to be determined by OER;

(3) Engineering Controls will not be discontinued without prior OER approval;

(4) OER has the right to enter the Site upon notice for the purpose of evaluating the performance of EC's and IC's;

(5) The Site will be used for restricted residential use and will not be used for a higher level of use without prior approval by OER.

(6) Vegetable gardens and farming in residual soil/fill on the Site are prohibited;

(7) Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited;

(8) All future activities on the Site that will disturb residual soil/fill must be conducted pursuant to the Soil/Materials Management provisions of the SMP, or otherwise approved by OER;

(9) The Site is intended to be used for restricted residential use and will not be used for a higher level of use without prior approval by OER.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

7.0 SITE MANAGEMENT PLAN

Site management is the last phase of the remedial process and begins after the approval of the Remedial Action Report (RAR) and issuance of the Notice of Completion (NOC) by OER. It is the responsibility of the property owner (56 Box Street LLC) to ensure that all Site management responsibilities are performed. The penalty for failure to implement the SMP includes revocation of the Notice of Completion and all associated certifications and liability protections. If the building is sold, the new owners will be notified of the SMP requirements.

Engineering Controls (ECs) and Institutional Controls (ICs) have been incorporated into this remediation to ensure that the Site remains protective of public health and the environment. EC's provide physical protective measures. ICs provide restrictions on Site usage and provide operation, maintenance, inspection and certification measures. This SMP includes all methods necessary ensure compliance with ECs and ICs required for the property.

The SMP provides a detailed description of procedures required to manage residual material at the Site following the completion of remedial construction in accordance with the NYC Voluntary Cleanup Agreement with OER. This includes: (1) operation and maintenance of Engineering Controls (2) periodic inspections of IC's and EC's and (3) certification of Engineering Controls and Institutional Controls.

ENGINEERING AND INSTITUTIONAL CONTROLS

Engineering Controls

Engineering Controls are employed in the remedial action to address residual materials remaining at the Site. The Site has a four Engineering Controls. These are:

- Active Sub-Slab Depressurization System with Vapor Phase Carbon Adsorber;
- Soil Vapor Barrier System;
- Composite Cover System; and
- Monitoring Well MW4R.

Operation and Maintenance of the Composite Cover System

The composite cover system consists of the following:

1. Cellar Slab - 24-inch thick concrete mat slab underlain with Grace Preprufe 300R Plus

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

waterproofing vapor barrier, underlain with a 6-inch layer of 5/8 inch crushed stone;

2. Concrete Capped Rear Parking Lot – 6-inch thick concrete slab underlain with 2 to 8 ft of 5/8 inch crushed stone;
3. Driveway and At-Grade Building Slabs – 6-inch thick concrete slab underlain with 2 to 6 ft of 5/8 inch crushed stone and then the 2ft thick concrete mat slab, Grace Preprufe 300R Plus waterproofing vapor barrier, and another 6-inch layer of 5/8 inch crushed stone.

The composite cover system is a permanent Engineering Control for the Site. The composite cover system does not require any special operation or maintenance in order to perform as designed in the RAWP. A Soil/Materials Management Plan is included in this Site Management Plan to outline the procedures to be followed in the event that the composite cover system and underlying residual soil/material must be disturbed after the remedial action is complete.

The system will be inspected and its performance certified at specified intervals defined in this SMP. Procedures for the inspection and maintenance of this cover are provided below.

Operation and Maintenance of Waterproofing Membrane/Vapor Barrier System

Chapter 5 describes the Vapor Barrier System utilized in this Remedial Action and provides as-built design details and the system location. The Vapor Barrier System is a permanent Engineering Control for the Site. The system will be inspected and its performance certified at specified intervals defined in this SMP.

The Vapor Barrier System does not require any special operation or maintenance activities. If the system is breached during future construction activities, the system will be rebuilt by reconstructing the vapor barrier layers and sealing the newly constructed materials with equivalent barrier materials in accordance with manufacturer specifications.

Operation and Maintenance of Active Sub-Slab Depressurization Systems

Chapter 5 describes the active sub-slab depressurization system utilized in this Remedial Action. The active sub-slab depressurization system will be inspected and its performance certified at specified intervals defined in this SMP. The active sub-slab depressurization system will be operated and maintained as prescribed below. SSD system components to be evaluated include, but are not limited to, the following:

- One Radonaway blower (Model No. RP265) installed on the roof;
- Exposed system piping against the rear facade;
- 1,000 lb vapor phase carbon adsorber (installed below rear parking lot);
- Radonaway Checkpoint IIa Radon System Alarm; and
- Dwyer Magnehelic Manometer (Range of 0-5 inches of water).

Alarm, Manometer, Blower and Exposed Piping Inspection

The manometer and alarm are installed within a tamperproof protective case located against the rear wall of the residential lobby. Following initial start up of the active SSDS, an initial vacuum gauge reading using a Magnahelic Manometer shall be recorded on the Inspection Checklist. The system is designed to establish a vacuum of 0.1 inches of water or higher. If the blower is found to be non-operational by the building superintendent during a monthly inspection, or if the blower is operating, but no vacuum reading is observed on the vacuum gauge, the blower must be replaced or repaired. The Owner's representative(s) shall immediately contact the appropriate parties from the contact list provided below. These emergency contact lists will be maintained by the building superintendent and in a package secured to the SSDS discharge pipe.

Carbon Adsorber Unit Inspection

The 1,000 lb vapor phase carbon adsorber will need to be replaced when it has reached its break through time, or when an elevated PID reading is detected after the RadonAway RP265 blower discharge. Operation of the system will be temporarily halted until situation is remediated by changing out the carbon. The procedure to change out the carbon can be found below:

1. Turn off the power to the blower;
2. Open the top cover for the 1,000 lb vapor phase carbon adsorber installed below rear parking lot.
3. Utilize a Guzzler to remove the carbon. This spent carbon is to be shipped back to the supplier for regeneration.
4. Add new carbon to fill the 1,000 lb vapor phase carbon adsorber unit.
5. Close the 1,000 lb vapor phase carbon adsorber unit.
6. Turn on power to RadonAway RP265 blower;

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

7. Utilize a ppbRAE 3000 Photo-Ionization Detector (PID) to measure volatile organic compounds at the discharge for the RadonAway RP265 blower located on the roof.

Semi-Annual Sampling of Post Carbon Adsorber

A post-carbon vapor sample will be collected every six months to determine the effectiveness of the 1,000 lb vapor phase carbon adsorber. The sub-slab depressurization system discharge on the roof will be field screened with a ppbRAE 3000 Photo-Ionization Detector (PID), and a discharge sample will be collected after the RadonAway RP265 blower within a 1 L tedlar bag using a vacuum or hand pump. The 1 L tedlar bag will be submitted for laboratory analysis of VOCs via Method TO-15. The results are to be summarized in an annual report to be included with the Inspection and Certification Letter Report. If breakthrough is observed, the carbon within the 1,000 lb vapor phase carbon adsorber will be replaced in accordance with the procedure outlined above.

A complete list of components to be checked is provided in the Inspection Checklist, presented in Appendix M.

Annual Sampling of Monitoring Well MW4R

On February 28, 2017, one 1” PVC monitoring well (MW4R) was installed in southwest corner of the lot. The monitoring well was installed at a depth of 20 feet below grade and consisted of 15 feet of well screen and 5 feet of riser pipe. The monitoring well is finished with a flush mount steel cover. The location of the monitoring well is shown on Figure 1 included in Appendix O.

The NYSDEC has requested monitoring well MW4R be sampled annually to document groundwater trends following remedial action. A representative groundwater sample is to be collected from the monitoring well with a peristaltic pump and dedicated tubing using low-flow sampling techniques. Annual well sampling is to be conducted in accordance with NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and Sampling Guidelines and Protocols, dated March 1991. The monitoring well is to be gauged with a water level meter to record a depth to groundwater reading (1/100 foot), and if necessary, an interface meter to determine the thickness of LNAPL or DNAPL. The well casing is to be surveyed by a trained QEP and/or NYS licensed surveyor to facilitate preparation of a groundwater contour map and determine the direction of groundwater flow. The results are to be summarized in an annual monitoring well sampling report to be included with the Inspection and Certification Letter Report.

Institutional Controls

A series of Institutional Controls are required under this Remedial Action to assure permanent protection of public health by elimination of exposure to residual materials. These IC's define the program to operate, maintain, inspect and certify the performance of Engineering Controls and Institutional Controls on this property. These Institutional Controls will be implemented in accordance with the Site Management Plan included in this RAR.

Institutional Controls for this property are:

(1) The property will continue to be registered with an E-Designation with the NYC Department of Buildings. Property owner and property owner's successors and assigns are required to comply with the approved SMP;

(2) Compliance with an OER-approved Site Management Plan including procedures for appropriate operation, maintenance, inspection, and certification of performance of EC's and IC's. The property owner and property owner's successors and assigns will inspect EC's and IC's and submit to OER a written certification that evaluates their performance in a manner and at a frequency to be determined by OER;

(3) Engineering Controls will not be discontinued without prior OER approval;

(4) OER has the right to enter the Site upon notice for the purpose of evaluating the performance of EC's and IC's.

INSPECTIONS

Engineering Controls and Institutional Controls will be inspected by a qualified environmental professional on an annual basis. Engineering Controls and Institutional Controls will be inspected by a qualified environmental professional in 2017 and every year thereafter. In addition to these inspections, a building superintendent will inspect the active SSDS on a monthly basis.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

The QEP inspections will evaluate the following:

- If Engineering Controls or Institutional Controls employed at the Site continue to perform as designed and continue to be protective of human health and the environment;
- If anything has occurred that impairs the ability of the Engineering Controls or Institutional Controls to protect public health and the environment;
- If changes are needed to the remedial systems or controls;
- If compliance with this SMP has been maintained;
- If site records are complete and up to date; and
- General Site conditions at the time of inspection.

In an addition, if an emergency occurs, such as a natural disaster, or if an unforeseen failure of any of the Engineering Controls occurs, an inspection of the Site will be performed within 30 days to evaluate the Engineering Controls and a letter report of findings will be submitted to OER.

Engineering Control Inspection

Inspection of Composite Cover System

The Site consists of a new 6-story apartment building with a partial cellar. Inspection of the composite cover will consist of a visual inspection of the concrete cellar slab, concrete slab for the parking garage driveway, the concrete slab for the at-grade portions of the building, and the concrete slab for the rear parking lot. The inspection will include all accessible locations including the site perimeter and all internal access points. The inspector will document any faulty or defective conditions observed during the inspection, broken or damaged concrete, or any failure in the integrity of the floor that would compromise the ability of the composite cover to perform as an engineering control. Cracks, holes, perforations or slab disturbances shall be recorded on the Inspection Checklist (Appendix M). Inspections by building superintendent will identify any obvious damage to the composite cover system.

Inspection of Vapor Barrier System

The vapor barrier system will be inspected by a qualified environmental professional to assure that it is functioning properly. The vapor barrier system is not visible and cannot be directly inspected. However, it can be inspected in concert with inspection of the building slab. If the inspector observes a failure in the slab that exposes the vapor barrier, then the underlying vapor barrier will be inspected for any damage, including tears or perforations, which would prevent the vapor barrier from completing its intended purpose. Cracks, holes, perforations or slab disturbances shall be recorded on the Inspection Checklist (Appendix M) and remediated as appropriate.

Active SSDS

Monthly inspections of the active SSDS are to be performed by the building superintendent and a record of each inspection is to be kept by completing the SSDS Inspection Checklist included in Appendix M. All completed monthly SSDS Inspection Checklists are to be kept on-Site for the annual inspection to be performed by the Qualified Environmental Professional. The building superintendent must check to make sure the audible/visual alarm has not been triggered, and that the vacuum gauge depicts a vacuum reading of approximately 0.1 inches of water or greater. The manometer and alarm are installed within a tamperproof protective case located against the rear wall of the residential lobby. In addition, the Radonaway RP265 blower located on the roof must be inspected to determine if the blower is operating by checking for air flow at the exhaust. If the blower is found to be non-operational by the building superintendent during a monthly inspection, or if the blower is operating, but no vacuum reading is observed on the vacuum gauge, the blower must be replaced or repaired. The Owner's representative(s) shall immediately contact the appropriate parties from the contact list provided on the monthly SSDS Inspection Checklist.

The completed monthly Inspection Checklists are to be maintained by the building superintendent and in a package secured to the SSDS discharge pipe. A complete list of components to be checked is provided in the Inspection Checklist, presented in Appendix M.

The components of the Active SSDS will also be inspected by a qualified environmental professional to assure that the Active SSDS is functioning properly. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

A visual inspection of the complete system will be conducted. SSD system components to be monitored include, but are not limited to, the following:

- One Radonaway blower (Model No. RP265) installed on the roof;
- Exposed system piping against the rear facade;
- 1,000 lb vapor phase carbon adsorber (installed below rear parking lot);
- Radonaway Checkpoint IIa Radon System Alarms; and
- Dwyer Magnehelic Manometers (Range of 0-5 inches of water).

Monitoring Well MW4R

Monitoring well MW4R is to be sampled annually during the annual inspection of the SSDS by the QEP. If any repairs are required, the details will be recorded on the Inspection Checklist (Appendix M) and remediated as appropriate.

Following NYSDEC determination that the monitoring well is no longer needed, monitoring well MW4R will be decommissioned in accordance with CP-43 – Groundwater Monitoring Well Decommissioning Policy (NYSDEC, November 3, 2009).

Site Use Prohibitions

Inspections to evaluate the status of site use prohibitions will include an evaluation of whether the Site has been used for a higher level of use other than the restricted residential use addressed by the Remedial Action.

INSPECTION AND CERTIFICATION LETTER REPORT

Results of inspections and monitoring well sampling performed during a reporting period and certification of performance of all Engineering Controls and Institutional Controls will be included in an Inspection and Certification Letter Report to be submitted by July 31, 2018 (for calendar year 2017) and July 31 of every year thereafter for the prior calendar year. Inspection and Certification Letter Reports will be submitted to OER in digital format. The letter report will include, at a minimum:

- Date of inspections;
- Personnel conducting inspections;
- Description of the inspection activities performed;

- Any observations, conclusions, or recommendations;
- Copy of any inspection forms;
- Certification of the performance of Engineering Controls and Institutional Controls, as discussed below; and
- Confirmation of regular periodic inspection of engineering controls by building superintendent.

The certification of the performance of EC's and IC's will establish:

- If Engineering Controls or Institutional Controls employed at the Site continue to be in place and perform as designed and continue to be protective of human health and the environment;
- If anything has occurred that impairs the ability of Engineering Controls or Institutional Controls to protect public health and the environment;
- If changes are needed to the remedial systems or controls;
- If compliance with this Site Management Plan has been maintained;
- If the Site has been used for a higher level of use other than the restricted residential use addressed by the Remedial Action;
- If site records are complete and up to date;
- If the Site continues to be registered as an E-Designated property by the NYC Department of Buildings;
- OER may enter the Site upon notice for the purpose of evaluating the performance of EC's & IC's.

NOTIFICATIONS

Notifications are to be submitted by the property owner to OER as described below:

- 60-day advance notice of any proposed changes in Site use to Unrestricted Use that is not contemplated is the Remedial Action.
- Notice within 30 days of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

SOIL/MATERIALS MANAGEMENT PLAN

Any future intrusive work that will disturb residual soil/fill beneath the property, including modifications or repairs to the existing composite cover system, will be performed in compliance with this Soil/Materials Management Plan (SMMP). Intrusive work will also be conducted in accordance with the procedures defined in the Community Air Monitoring Plan (CAMP) in this plan and a Construction Health and Safety Plan (HASP). The HASP is the responsibility of the property owner and should be in compliance with NYSDEC DER-10 Technical Guide and 29 CFR 1910 and 1926, and all other applicable Federal, State and City regulations. Intrusive construction work should be compliant with this SMMP and described in the next Inspection and Certification Letter Report.

Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed under the supervision of a Qualified Environmental Professional (QEP). Soil screening will be performed during any future intrusive work.

Stockpile Methods

Stockpiles will be used to isolate excavated soil and will be removed as soon as practicable. While stockpiles are in place, they will be inspected daily, and before and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by OER. Excavated soils will be stockpiled on, at minimum, double layers of 6-mil minimum sheeting, will be kept covered at all times with appropriately anchored plastic tarps, and will be routinely inspected. Broken or ripped tarps will be promptly replaced.

All stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations. Stockpiles of excavated soils and other materials shall be located at least of 50 feet from the property boundaries, where possible. Hay bales or equivalent will surround soil stockpiles except for areas where access by equipment is required. Silt fencing and hay bales will be used as needed near catch basins, surface waters, and other discharge points.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

Characterization of Excavated Materials

Soil/fill or other excavated media that is transported off-Site for disposal will be sampled in a manner required by the receiving facility, and in compliance with applicable laws and regulations. Excavated soil will only be reused on-site with prior approval by OER.

Materials Excavation, Load-Out and Departure

The PE/QEP overseeing the remedial action will:

- oversee intrusive work and the excavation and load-out of excavated material;
- ensure that there is a party responsible for the safe execution of invasive and other work performed under this management plan;
- ensure that Site maintenance activities and maintenance-related grading cuts will not interfere with, or otherwise impair or compromise the remedial measures established during the remediation construction phase;
- ensure that the presence of utilities and easements on the Site has been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;
- ensure that all loaded outbound trucks are inspected and cleaned if necessary before leaving the Site;
- ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during Site intrusive work.

Locations where vehicles exit the Site shall be inspected daily for evidence of soil tracking off premises. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

Off-Site Materials Transport

Loaded vehicles leaving the Site will comply with all applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with 6 NYCRR Part 364. If loads contain wet material capable of causing leakage from trucks, truck liners will be used. Queuing of trucks will be performed on-Site, when possible in order to minimize off Site disturbance.

Outbound truck transport routes are shown on Figure 11. This routing takes into account the following factors: (a) limiting transport through residential areas and past sensitive sites; (b) use of mapped truck routes; (c) minimizing off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. To the extent possible, all trucks loaded with Site materials will travel from the Site using these truck routes. Trucks will not stop or idle in the neighborhood after leaving the project Site.

Materials Disposal Off-Site

The following documentation will be established and reported by the PE/QEP for each disposal destination used in this project to document that the disposal of regulated material exported from the Site conforms with applicable laws and regulations: (1) a letter from the PE/QEP or Enrollee to each disposal facility describing the material to be disposed and requesting written acceptance of the material. This letter will state that material to be disposed is regulated material generated at an environmental remediation Site in Brooklyn, New York under a governmental remediation program. The letter will provide the project identity and the name and phone number of the PE/QEP or Enrollee. The letter will include as an attachment a summary of all chemical data for the material being transported; and (2) a letter from each disposal facility stating it is in receipt of the correspondence (1, above) and is approved to accept the material.

Documentation associated with disposal of all material will include records and approvals for receipt of the material. All impacted soil/fill or other waste excavated and removed from the Site will be managed as regulated material and will be disposed in accordance with applicable laws and regulations. Historic fill and contaminated soils taken off-Site will be handled as solid waste and will not be disposed at a Part 360-16 Registration Facility (also known as a Soil Recycling Facility).

Waste characterization will be performed for off-Site disposal in a manner required by the receiving facility and in conformance with its applicable permits. Waste characterization sampling and analytical methods, sampling frequency, analytical results and QA/QC will be retained and included in the following Inspection and Certification Report. A manifest system for off-Site transportation of exported materials will be employed. Hazardous wastes derived from

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

on-Site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

Materials Reuse On-Site

All of the soil excavated during any future repair or construction purposes will be placed in the same excavation it was derived from or will be disposed of off-site unless otherwise approved by OER beforehand.

Repair of Remedial Systems

After completion of invasive work, any damage of the engineering controls (composite cover system, vapor barrier, etc.) will be restored to the original condition established during initial construction.

Import of Backfill Soil from Off-Site Sources

In the event that soil importation is needed for the backfilling purposes, this Section presents the requirements for imported fill materials. All imported soils will meet OER-approved backfill and cover soil quality objectives for this Site. The backfill and cover soil quality objectives including NYSDEC Part 375 Track 2 Residential SCOs and groundwater protections standards. A process will be established to evaluate sources of backfill and cover soil to be imported to the Site, and will include an examination of source location, current and historical use(s), and any applicable documentation. Material from industrial sites, spill sites, environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

- Clean soil from construction projects at non-industrial sites in compliance with applicable laws and regulations;
- Clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations;
- Clean recycled concrete aggregate (RCA) from facilities permitted or registered by the regulations of NYS DEC; and

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

- Virgin quarried material or other materials with an approved Beneficial Use Determination (BUD) from NYSDEC for reuse as clean fill.

All materials received for import to the Site will be approved by a PE/QEP and will be in compliance with provisions in this SMP. The Inspection and Certification Report will report the source of the fill, evidence that an inspection was performed on the source, chemical sampling results, frequency of testing, and a Site map indicating the locations where backfill or soil cover was placed.

Source Screening and Testing

Inspection of imported fill material will include visual, olfactory, and PID screening for evidence of contamination. Materials imported to the Site will be subject to inspection, as follows:

- Trucks with imported fill material will be in compliance with applicable laws and regulations and will enter the Site at designated locations;
- The PE/QEP is responsible to ensure that every truck load of imported material is inspected for evidence of contamination; and
- Fill material will be free of solid waste including pavement materials, debris, stumps, roots, and other organic matter, as well as ashes, oil, perishables or foreign matter.

Composite samples of imported material from the identified clean soil sources will be taken at a minimum frequency of one sample for every 500 cubic yards of material. One composite sample will be collected form each source of virgin quarried material or other material with an NYSDEC approved BUD, unless otherwise approved by OER. Once it is determined that the fill material meets imported backfill or cover soil chemical requirements and is non-hazardous, and lacks petroleum contamination, the material will be loaded onto trucks for delivery to the Site.

Recycled concrete aggregate (RCA) may be imported from facilities permitted or registered by NYSDEC. A PE/QEP is responsible to ensure that the facility is compliant with 6NYCRR Part 360 registration and permitting requirements for the period of acquisition of RCA. RCA imported from compliant facilities will not require additional testing, unless required by NYSDEC under its terms for operation of the facility. RCA imported to the Site must be derived from recognizable and uncontaminated concrete. RCA will not be used as cover material.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

Fluids Management

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported, and disposed in accordance with applicable laws and regulations. Liquids discharged into the New York City sewer system will receive prior approval by New York City Department of Environmental Protection (NYC DEP). The NYC DEP regulates discharges to the New York City sewers under Title 15, Rules of the City of New York Chapter 19. If discharge to the City sewer system is not appropriate, the dewatering fluids will be managed by transportation and disposal at an off-Site treatment facility. Discharge of water generated during remedial construction to surface waters (i.e. a stream or river) is prohibited without a SPDES permit issued by NYSDEC.

Storm-water Pollution Prevention

Applicable laws and regulations pertaining to storm-water pollution prevention will be addressed during the remedial program. All existing storm water systems will be inspected to ensure proper operation.

Odor Control

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

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. OER will be notified of all odor complaint events. Implementation of all odor controls, including halt of work, will be the responsibility of the PE/QEPs.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

Dust Control

Dust management during invasive on-Site work will include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas and stockpiles.
- Use of properly anchored tarps to cover stockpiles.
- Exercise extra care during dry and high-wind periods.
- Use of gravel or recycled concrete aggregate on egress and other roadways to provide a clean and dust-free road surface.

If nuisance dust emissions are identified, work will be halted and the source of dusts will be identified and corrected. Work will not resume until all nuisance dust emissions have been abated. OER will be notified of all dust complaint events. Implementation of all dust controls, including halt of work, will be the responsibility of the PE/QEPs.

Noise

Noise control will be exercised during the remedial program. All remedial work will conform, at a minimum, to NYC noise control standards.

COMMUNITY AIR MONITORING PLAN

Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence. Exceedances of action levels observed during performance of the Community Air Monitoring Plan (CAMP) will be reported to the OER Project Manager and included in the Daily Report.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

All 15-minute readings must be recorded and be available for OER personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for OER personnel to review.

CONTINGENCY PLAN

Emergency Telephone Numbers

In the event of any emergency condition pertaining to this remedial system, or if the building slab is disturbed, removed or altered, the Owner's representative(s) should contact the appropriate parties from the contact list below. Prompt contact should also be made to Environmental Business Consultants. These emergency contact lists must be maintained in an easily accessible location at the Site.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center: 3 day notice required for utility markout	(800) 272-4480
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Contact Numbers

Environmental Business Consultants	(631) 504-6000
Office of Environmental Remediation	(212) 788-8841; 311

APPENDIX N

SUSTAINABILITY REPORT

This Remedial Action Work Plan provides for sustainable remediation and redevelopment through a variety of means that are defined in this Sustainability Report.

Recontamination Control. Recontamination after cleanup and redevelopment is completed undermines the value of work performed, may result in a property that is less protective of public health or the environment, and may necessitate additional cleanup work later that could impede future redevelopment. Recontamination can arise from future releases that occur within the property or by influx of existing contamination from off-Site.

As a part of construction, a waterproofing membrane/vapor barrier system was installed to eliminate the risk of future migration of soil vapor contamination from off-Site. In addition, the entire Site is capped with concrete or asphalt, which would prevent future on-Site spills from impacting sub-surface soil. The area of the Site that utilizes recontamination controls under this plan is 100% of the property, or 4,933 square feet.

Conversion to Clean Fuels. Use of clean fuel improves NYC's air quality by reducing harmful emissions. Natural gas is now utilized as the principal fuel in the new buildings.

Paperless Brownfield Cleanup Program. 56 Box Street LLC participated in OER's Paperless Brownfield Cleanup Program. Under this program, submission of electronic documents replaced submission of hard copies for the review of project documents, communications and milestone reports. A best estimate of the mass (pounds) of paper saved under this plan is 25 lbs.

Low-Energy Project Management Program. 56 Box Street LLC participated in OER's low-energy project management program. Under this program, whenever possible, meetings were held using remote communication technologies, such as videoconferencing and teleconferencing to reduce energy consumption and traffic congestion associated with personal transportation. A gross estimate of the number of miles of personal transportation that was conserved in this process is 300 miles.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

Trees and Plantings. Trees and other plantings provide habitat and add to NYC's environmental quality in a wide variety of ways. Native plant species and native habitat provide optimal support to local fauna, promote local biodiversity, and require less maintenance. The number of trees planted as part of this redevelopment is 2.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

TABLES

TABLE 1
56 Box Street,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Results										Endpoint Soil Sample Results									
			B4		B5		B6		B7		B8		EP1		EP2		EP3		EP4		EP5	
			9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')		9/3/2014 (2 ft)		9/3/2014 (8 ft)		9/3/2014 (9 ft)		9/4/2014 (9 ft)		9/9/2014 (9 ft)	
			µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,1,1-Trichloroethane	680	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,1,2,2-Tetrachloroethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,1,2-Trichloroethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,1-Dichloroethane	270	26,000	**15**	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,1-Dichloroethene	330	100,000	**14**	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,1-Dichloropropene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2,3-Trichlorobenzene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2,3-Trichloropropane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2,4-Trichlorobenzene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2,4-Trimethylbenzene	3,600	52,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2-Dibromo-3-chloropropane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2-Dibromoethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2-Dichlorobenzene	1,100	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2-Dichloroethane	20	3,100	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,2-Dichloropropane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,3,5-Trimethylbenzene	8,400	52,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,3-Dichlorobenzene	2,400	4,900	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,3-Dichloropropane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
1,4-Dichlorobenzene	1,800	13,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
2,2-Dichloropropane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
2-Chlorotoluene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
2-Hexanone (Methyl Butyl Ketone)			ND	31	ND	30	ND	28	ND	32	ND	29	< 30	30	< 30	30	< 30	30	< 29	29	< 29	29
2-Isopropyltoluene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
4-Chlorotoluene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
4-Methyl-2-Pentanone			ND	31	ND	30	ND	28	ND	32	ND	29	< 30	30	< 30	30	< 30	30	< 29	29	< 29	29
Acetone	50	100,000	ND	31	ND	30	ND	28	ND	32	ND	29	**150**	30	< 30	30	**100**	30	< 29	29	< 50	50
Acrylonitrile			ND	12	ND	12	ND	11	ND	13	ND	12	< 12	12	< 12	12	< 12	12	< 11	11	< 11	11
Benzene	60	4,800	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Bromobenzene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Bromochloromethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Bromodichloromethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Bromoform			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Bromomethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Carbon Disulfide			**8.2**	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Carbon tetrachloride	760	2,400	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Chlorobenzene	1,100	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Chloroethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Chloroform	370	49,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Chloromethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
cis-1,2-Dichloroethene	250	100,000	**890**	6.2	ND	6	ND	5.6	**32**	6.3	ND	5.9	**120**	6.1	< 6.0	6	**10**	6	**11**	5.7	< 5.7	5.7
cis-1,3-Dichloropropene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Dibromochloromethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Dibromomethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Dichlorodifluoromethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Ethylbenzene	1,000	41,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Hexachlorobutadiene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Isopropylbenzene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
m&p-Xylenes	260	100,000	**7**	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Methyl Ethyl Ketone (2-Butanone)	120	100,000	ND	31	ND	30	ND	28	ND	32	ND	29	< 30	30	< 30	30	< 30	30	< 29	29	< 34	34
Methyl t-butyl ether (MTBE)	930	100,000	ND	12	ND	12	ND	11	ND	13	ND	12	< 12	12	< 12	12	< 12	12	< 11	11	< 11	11
Methylene chloride	50	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 50	50	**62**	6	**58**	6	< 29	29	**4.3**	5.7
Naphthalene	12,000	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
n-Butylbenzene	12,000	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
n-Propylbenzene	3,900	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
o-Xylene	260	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
p-Isopropyltoluene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
sec-Butylbenzene	11,000	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Styrene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
tert-Butylbenzene	5,900	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Tetrachloroethene	1,300	19,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Tetrahydrofuran (THF)			ND	12	ND	12	ND	11	ND	13	ND	12	< 12	12	< 12	12	< 12	12	< 11	11	< 11	11
Toluene	700	100,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Total Xylenes			**7**	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	-	-
trans-1,2-Dichloroethene	190	100,000	**8.2**	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
trans-1,3-Dichloropropene			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
trabs-1,4-dichloro-2-butene			ND	12	ND	12	ND	11	ND	13	ND	12	< 12	12	< 12	12	< 12	12	< 11	11	< 11	11
Trichloroethene	470	21,000	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Trichlorofluoromethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Trichlorotrifluoroethane			ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Vinyl Chloride	20	900	ND	6.2	ND	6	ND	5.6	ND	6.3	ND	5.9	< 6.1	6.1	< 6.0	6	< 6.0	6	< 5.7	5.7	< 5.7	5.7
Total BTEX Concentration			7		0		0		0.0		0.0		0		0		0		0		0	
Total VOCs Concentration			949.4		0		0		32		0.0		270		62		168		11		4.3	

Notes:

** - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives
ND - Not-detected
RL - Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value
Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 2
56 Box Street,
Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Results					
			B4		B5		B6	
			9/13/2013		9/13/2013		9/13/2013	
			(7-9')		(7-9')		(7-9')	
			µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene			ND	290	ND	280	ND	260
1,2,4-Trichlorobenzene			ND	290	ND	280	ND	260
1,2-Dichlorobenzene			ND	290	ND	280	ND	260
1,2-Diphenylhydrazine			ND	410	ND	400	ND	370
1,3-Dichlorobenzene			ND	290	ND	280	ND	260
1,4-Dichlorobenzene			ND	290	ND	280	ND	260
2,4,5-Trichlorophenol			ND	290	ND	280	ND	260
2,4,6-Trichlorophenol			ND	290	ND	280	ND	260
2,4-Dichlorophenol			ND	290	ND	280	ND	260
2,4-Dimethylphenol			ND	290	ND	280	ND	260
2,4-Dinitrophenol			ND	650	ND	630	ND	590
2,4-Dinitrotoluene			ND	290	ND	280	ND	260
2,6-Dinitrotoluene			ND	290	ND	280	ND	260
2-Chloronaphthalene			ND	290	ND	280	ND	260
2-Chlorophenol			ND	290	ND	280	ND	260
2-Methylnaphthalene			ND	290	ND	280	ND	260
2-Methylphenol (o-cresol)	330	100,000	ND	290	ND	280	ND	260
2-Nitroaniline			ND	650	ND	630	ND	590
2-Nitrophenol			ND	290	ND	280	ND	260
3&4-Methylphenol (m&p-cresol)			ND	410	ND	400	ND	370
3,3'-Dichlorobenzidine			ND	290	ND	280	ND	260
3-Nitroaniline			ND	650	ND	630	ND	590
4,6-Dinitro-2-methylphenol			ND	1,200	ND	1,100	ND	1,100
4-Bromophenyl phenyl ether			ND	410	ND	400	ND	370
4-Chloro-3-methylphenol			ND	290	ND	280	ND	260
4-Chloroaniline			ND	290	ND	280	ND	260
4-Chlorophenyl phenyl ether			ND	290	ND	280	ND	260
4-Nitroaniline			ND	650	ND	630	ND	590
4-Nitrophenol			ND	1,200	ND	1,100	ND	1,100
Acenaphthene	20,000	100,000	ND	290	ND	280	ND	260
Acenaphthylene	100,000	100,000	ND	290	ND	280	ND	260
Acetophenone			ND	290	ND	280	ND	260
Aniline			ND	1,200	ND	1,100	ND	1,100
Anthracene	100,000	100,000	ND	290	ND	280	ND	260
Benz(a)anthracene	1,000	1,000	ND	290	ND	280	ND	260
Benzidine			ND	490	ND	470	ND	440
Benzo(a)pyrene	1,000	1,000	ND	290	ND	280	ND	260
Benzo(b)fluoranthene	1,000	1,000	ND	290	ND	280	ND	260
Benzo(ghi)perylene	100,000	100,000	ND	290	ND	280	ND	260
Benzo(k)fluoranthene	800	3,900	ND	290	ND	280	ND	260
Benzoic acid			ND	1,200	ND	1,100	ND	1,100
Benzyl butyl phthalate			ND	290	ND	280	ND	260
Bis(2-chloroethoxy)methane			ND	290	ND	280	ND	260
Bis(2-chloroethyl)ether			ND	410	ND	400	ND	370
Bis(2-chloroisopropyl)ether			ND	290	ND	280	ND	260
Bis(2-ethylhexyl)phthalate			ND	290	**3,100**	280	ND	260
Carbazole			ND	610	ND	590	ND	550
Chrysene	1,000	3,900	ND	290	ND	280	ND	260
Dibenz(a,h)anthracene	330	330	ND	290	ND	280	ND	260
Dibenzofuran	7,000	59,000	ND	290	ND	280	ND	260
Diethyl phthalate			ND	290	ND	280	ND	260
Dimethylphthalate			ND	290	ND	280	ND	260
Di-n-butylphthalate			ND	290	ND	280	ND	260
Di-n-octylphthalate			ND	290	ND	280	ND	260
Fluoranthene	100,000	100,000	ND	290	**380**	280	ND	260
Fluorene	30,000	100,000	ND	290	ND	280	ND	260
Hexachlorobenzene			ND	290	ND	280	ND	260
Hexachlorobutadiene			ND	290	ND	280	ND	260
Hexachlorocyclopentadiene			ND	290	ND	280	ND	260
Hexachloroethane			ND	290	ND	280	ND	260
Indeno(1,2,3-cd)pyrene	500	500	ND	290	ND	280	ND	260
Isophorone			ND	290	ND	280	ND	260
Naphthalene	12,000	100,000	ND	290	ND	280	ND	260
Nitrobenzene			ND	290	ND	280	ND	260
N-Nitrosodimethylamine			ND	410	ND	400	ND	370
N-Nitrosodi-n-propylamine			ND	290	ND	280	ND	260
N-Nitrosodiphenylamine			ND	410	ND	400	ND	370
Pentachloronitrobenzene			ND	410	ND	400	ND	370
Pentachlorophenol	800	6,700	ND	410	ND	400	ND	370
Phenanthrene	100,000	100,000	ND	290	**440**	280	ND	260
Phenol	330	100,000	ND	290	ND	280	ND	260
Pyrene	100,000	100,000	ND	290	**350**	280	ND	260
Pyridine			ND	410	ND	400	ND	370

Notes:

** - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

ND - Not-detected

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 3
56 Box Street,
Brooklyn, New York
Soil Analytical Results
Pesticides PCBs

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Results					
			B4		B5		B6	
			9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')	
			µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL
4,4' -DDD	3.3	13,000	ND	2.4	ND	2.3	ND	2.2
4,4' -DDE	3.3	8,900	ND	2.4	ND	2.3	ND	2.2
4,4' -DDT	3.3	7,900	ND	2.4	ND	2.3	ND	2.2
a-BHC	20	480	ND	3.8	ND	3.7	ND	3.5
Alachlor			ND	3.8	ND	3.7	ND	3.5
Aldrin	5	97	ND	1.2	ND	1.2	ND	1.1
b-BHC	36	360	ND	3.8	ND	3.7	ND	3.5
Chlordane			ND	12	ND	12	ND	11
d-BHC	40	100,000	ND	3.8	ND	3.7	ND	3.5
Dieldrin	5	200	ND	1.2	ND	1.2	ND	1.1
Endosulfan I	2,400	24,000	ND	3.8	ND	3.7	ND	3.5
Endosulfan II	2,400	24,000	ND	7.7	ND	7.4	ND	7.1
Endosulfan sulfate	2,400	24,000	ND	7.7	ND	7.4	ND	7.1
Endrin	14	11,000	ND	7.7	ND	7.4	ND	7.1
Endrin aldehyde			ND	7.7	ND	7.4	ND	7.1
Endrin ketone			ND	7.7	ND	7.4	ND	7.1
g-BHC	100	280	ND	1.2	ND	1.2	ND	1.1
Heptachlor	42	420	ND	2.4	ND	2.3	ND	2.2
Heptachlor epoxide			ND	3.8	ND	3.7	ND	3.5
Methoxychlor			ND	38	ND	37	ND	35
Toxaphene			ND	38	ND	37	ND	35
PCB-1016	100	1,000	ND	80	ND	77	ND	74
PCB-1221	100	1,000	ND	80	ND	77	ND	74
PCB-1232	100	1,000	ND	80	ND	77	ND	74
PCB-1242	100	1,000	ND	80	ND	77	ND	74
PCB-1248	100	1,000	ND	80	ND	77	ND	74
PCB-1254	100	1,000	ND	80	ND	77	ND	74
PCB-1260	100	1,000	ND	80	ND	77	ND	74
PCB-1262	100	1,000	ND	80	ND	77	ND	74
PCB-1268	100	1,000	ND	80	ND	77	ND	74

Notes:

* Due to matrix interference from non target compounds in the sample an elevated RL was reported.

** - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

ND - Non-Detect

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 4
56 Box Street,
Brooklyn, New York
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Results										Endpoint Soil Sample Results									
			B4		B5		B6		B7		B8		EP1		EP2		EP3		EP4		EP5	
			9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')		9/13/2013 (7-9')		9/3/2014 (2 ft)		9/3/2014 (8 ft)		9/3/2014 (9 ft)		9/4/2014 (9 ft)		9/9/2014 (9 ft)	
			µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			**14,300**	54	**10,500**	57	**10,700**	57	**17,200**	60	**14,700**	54	-	-	-	-	-	-	-	-	-	-
Antimony			BRL	3.6	BRL	3.8	BRL	3.8	BRL	4	BRL	3.6	-	-	-	-	-	-	-	-	-	-
Arsenic	13	16	**3.3**	0.7	**3.5**	0.8	**2.8**	0.8	**4**	0.8	**3.2**	0.7	-	-	-	-	-	-	-	-	-	-
Barium	350	400	**103**	0.36	**73.8**	0.38	**34.3**	0.38	**264**	0.4	**117**	0.36	-	-	-	-	-	-	-	-	-	-
Beryllium	7.2	72	**0.67**	0.29	**0.51**	0.31	**0.78**	0.3	**0.85**	0.32	**0.66**	0.29	-	-	-	-	-	-	-	-	-	-
Cadmium	2.5	4.3	**0.79**	0.36	**0.78**	0.38	**0.67**	0.38	**0.93**	0.4	**1.54**	0.36	-	-	-	-	-	-	-	-	-	-
Calcium			**23,200**	54	**14,900**	57	**3,380**	57	**18,200**	60	**2,200**	54	-	-	-	-	-	-	-	-	-	-
Chromium	30	180	**30.5**	0.36	**32.3**	0.38	**25.2**	0.38	**40.5**	0.4	**47.2**	0.36	**47**	0.4	**19.7**	0.38	**34.1**	0.36	**31.6**	0.35	**21.2**	0.36
Cobalt			**11.4**	0.36	**8.28**	0.38	**4.73**	0.38	**18.2**	0.4	**8.19**	0.36	-	-	-	-	-	-	-	-	-	-
Copper	50	270	**30.1**	0.36	**24.6**	0.38	**14.9**	0.38	**33.6**	0.4	**20.9**	0.36	-	-	-	-	-	-	-	-	-	-
Iron			**29,100**	54	**29,200**	57	**27,000**	57	**33,100**	60	**66,000**	54	-	-	-	-	-	-	-	-	-	-
Lead	63	400	**9.56**	0.36	**14.7**	0.38	**10.2**	0.38	**10.7**	0.4	**11.5**	0.36	**9.7**	0.8	**29.9**	0.8	**55.9**	0.7	**26.2**	0.7	**24.1**	0.7
Magnesium			**12,300**	54	**4,290**	57	**2,250**	57	**13,200**	60	**3,430**	54	-	-	-	-	-	-	-	-	-	-
Manganese	1,600	2,000	**572**	3.6	**560**	3.8	**305**	3.8	**1510**	4	**916**	3.6	-	-	-	-	-	-	-	-	-	-
Mercury	0.18	0.81	BRL	0.07	BRL	0.08	BRL	0.06	BRL	0.07	BRL	0.08	< 0.09	0.09	< 0.08	0.08	< 0.08	0.08	< 0.07	0.07	**0.33**	0.08
Nickel	30	310	**27**	0.36	**18.9**	0.38	**9.02**	0.38	**33.9**	0.4	**15.4**	0.36	-	-	-	-	-	-	-	-	-	-
Potassium			**4,750**	54	**2,760**	57	**942**	57	**5,980**	60	**2,080**	54	-	-	-	-	-	-	-	-	-	-
Selenium	3.9	180	BRL	1.4	BRL	1.5	BRL	1.5	BRL	1.6	BRL	1.4	-	-	-	-	-	-	-	-	-	-
Silver	2	180	BRL	0.36	BRL	0.38	BRL	0.38	BRL	0.4	BRL	0.36	-	-	-	-	-	-	-	-	-	-
Sodium			**490**	5.4	**369**	5.7	**226**	5.7	**582**	6	**425**	5.4	-	-	-	-	-	-	-	-	-	-
Thallium			BRL	1.6	BRL	1.6	BRL	1.6	BRL	1.6	BRL	1.6	-	-	-	-	-	-	-	-	-	-
Vanadium			**38.3**	0.36	**36.8**	0.38	**37.7**	0.38	**49.2**	0.4	**99.9**	0.36	-	-	-	-	-	-	-	-	-	-
Zinc	109	10,000	**70.7**	0.36	**50.6**	0.38	**24.4**	0.38	**86.3**	0.4	**42.1**	0.36	-	-	-	-	-	-	-	-	-	-

Notes:

** - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

BRL - Below Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 5
56 Box Street, Brooklyn, New York
Supplemental Soil Sampling Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	MW4R (8-10') 2/28/2017 µg/Kg		MW4R (10-12') 2/28/2017 µg/Kg	
			Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			**0.55**	4.0	< 3.5	3.5
1,1,1-Trichloroethane	680	100,000	< 16	16	< 14	14
1,1,2,2-Tetrachloroethane			< 4.0	4.0	< 3.5	3.5
1,1,2-Trichloroethane			< 4.0	4.0	< 3.5	3.5
1,1-Dichloroethane	270	26,000	**4.2**	4.0	**9**	3.5
1,1-Dichloroethene	330	100,000	**4.6**	4.0	**6.4**	3.5
1,1-Dichloropropene			< 4.0	4.0	< 3.5	3.5
1,2,3-Trichlorobenzene			< 4.0	4.0	< 3.5	3.5
1,2,3-Trichloropropane			< 4.0	4.0	< 3.5	3.5
1,2,4-Trichlorobenzene			< 4.0	4.0	< 3.5	3.5
1,2,4-Trimethylbenzene	3,600	52,000	< 4.0	4.0	< 3.5	3.5
1,2-Dibromo-3-chloropropane			< 4.0	4.0	< 3.5	3.5
1,2-Dibromomethane			< 4.0	4.0	< 3.5	3.5
1,2-Dichlorobenzene	1,100	100,000	< 4.0	4.0	< 3.5	3.5
1,2-Dichloroethane	20	3,100	< 4.0	4.0	< 3.5	3.5
1,2-Dichloropropane			< 4.0	4.0	< 3.5	3.5
1,3,5-Trimethylbenzene	8,400	52,000	< 4.0	4.0	< 3.5	3.5
1,3-Dichlorobenzene	2,400	4,900	< 4.0	4.0	< 3.5	3.5
1,3-Dichloropropane			< 4.0	4.0	< 3.5	3.5
1,4-Dichlorobenzene	1,800	13,000	< 4.0	4.0	< 3.5	3.5
1,4-dioxane	100	13,000	< 59	59	< 52	52
2,2-Dichloropropane			< 4.0	4.0	< 3.5	3.5
2-Chlorotoluene			< 4.0	4.0	< 3.5	3.5
2-Hexanone (Methyl Butyl Ketone)			< 20	20	< 17	17
2-Isopropyltoluene			< 4.0	4.0	< 3.5	3.5
4-Chlorotoluene			< 4.0	4.0	< 3.5	3.5
4-Methyl-2-Pentanone			< 20	20	< 17	17
Acetone	50	100,000	**4**	20	**5.1**	17
Acrolein			< 16	16	< 14	14
Acrylonitrile			< 16	16	< 14	14
Benzene	60	4,800	< 4.0	4.0	< 3.5	3.5
Bromobenzene			< 4.0	4.0	< 3.5	3.5
Bromochloromethane			< 4.0	4.0	< 3.5	3.5
Bromodichloromethane			< 4.0	4.0	< 3.5	3.5
Bromoform			< 4.0	4.0	< 3.5	3.5
Bromomethane			< 4.0	4.0	< 3.5	3.5
Carbon Disulfide			< 4.0	4.0	< 3.5	3.5
Carbon tetrachloride	760	2,400	< 4.0	4.0	< 3.5	3.5
Chlorobenzene	1,100	100,000	< 4.0	4.0	< 3.5	3.5
Chloroethane			< 4.0	4.0	< 3.5	3.5
Chloroform	370	49,000	< 4.0	4.0	< 3.5	3.5
Chloromethane			< 4.0	4.0	< 3.5	3.5
cis-1,2-Dichloroethene	250	100,000	**21**	4.0	**19**	3.5
cis-1,3-Dichloropropene			< 4.0	4.0	< 3.5	3.5
Dibromochloromethane			< 4.0	4.0	< 3.5	3.5
Dibromomethane			< 4.0	4.0	< 3.5	3.5
Dichlorodifluoromethane			< 4.0	4.0	< 3.5	3.5
Ethylbenzene	1,000	41,000	< 4.0	4.0	< 3.5	3.5
Hexachlorobutadiene			< 4.0	4.0	< 3.5	3.5
Isopropylbenzene			< 4.0	4.0	< 3.5	3.5
m&p-Xylenes	260	100,000	< 4.0	4.0	< 3.5	3.5
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 24	24	< 21	21
Methyl t-butyl ether (MTBE)	930	100,000	< 7.9	7.9	< 6.9	6.9
Methylene chloride	50	100,000	< 4.0	4.0	**5.2**	3.5
Naphthalene			< 4.0	4.0	< 3.5	3.5
n-Butylbenzene	12,000	100,000	< 4.0	4.0	< 3.5	3.5
n-Propylbenzene	3,900	100,000	< 4.0	4.0	< 3.5	3.5
o-Xylene	260	100,000	< 4.0	4.0	< 3.5	3.5
p-Isopropyltoluene			< 4.0	4.0	< 3.5	3.5
sec-Butylbenzene	11,000	100,000	< 4.0	4.0	< 3.5	3.5
Styrene			< 4.0	4.0	< 3.5	3.5
tert-butyl alcohol			< 79	79	< 69	69
tert-Butylbenzene	5,900	100,000	< 4.0	4.0	< 3.5	3.5
Tetrachloroethene	1,300	19,000	< 4.0	4.0	< 3.5	3.5
Tetrahydrofuran (THF)			< 7.9	7.9	< 6.9	6.9
Toluene	700	100,000	< 4.0	4.0	< 3.5	3.5
trans-1,2-Dichloroethene	190	100,000	**0.63**	4.0	< 3.5	3.5
trans-1,3-Dichloropropene			< 4.0	4.0	< 3.5	3.5
trabs-1,4-dichloro-2-butene			< 7.9	7.9	< 6.9	6.9
Trichloroethene	470	21,000	**360**	270	**45**	3.5
Trichlorofluoromethane			< 4.0	4.0	< 3.5	3.5
Trichlorotrifluoroethane			< 4.0	4.0	< 3.5	3.5
Vinyl Chloride	20	900	< 4.0	4.0	< 3.5	3.5
Total BTEX Concentration			64.2		17.1	
Total VOCs Concentration			394.98		89.7	

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

BCG - Below Cellar Grade

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Table 6
56 Box Street
Brooklyn, New York
Supplemental Ground Water Analytical Results
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	GW2 1/17/2017 µg/L Results	RL
1,1,1,2-Tetrachlorothane	5	< 1.0	1.0
1,1,1-Trichloroethane	5	< 5.0	5.0
1,1,2,2-Tetrachloroethane	5	< 1.0	1.0
1,1,2-Trichloroethane	1	< 1.0	1.0
1,1-Dichloroethane	5	**220**	5.0
1,1-Dichloroethene	5	**120**	5.0
1,1-Dichloropropene		< 1.0	1.0
1,2,3-Trichlorobenzene		< 1.0	1.0
1,2,3-Trichloropropane	0.04	< 0.25	0.25
1,2,4-Trichlorobenzene		< 1.0	1.0
1,2,4-Trimethylbenzene	5	< 1.0	1.0
1,2-Dibromo-3-chloropropane	0.04	< 0.50	0.50
1,2-Dibromoethane		< 0.25	0.25
1,2-Dichlorobenzene	5	< 1.0	1.0
1,2-Dichloroethane	0.6	< 0.60	0.60
1,2-Dichloropropane	0.94	< 1.0	1.0
1,3,5-Trimethylbenzene	5	< 1.0	1.0
1,3-Dichlorobenzene		< 1.0	1.0
1,3-Dichloropropane	5	< 1.0	1.0
1,4-Dichlorobenzene	5	< 1.0	1.0
2,2-Dichloropropane	5	< 1.0	1.0
2-Chlorotoluene	5	< 1.0	1.0
2-Hexanone (Methyl Butyl Ketone)		< 2.5	2.5
2-Isopropyltoluene	5	< 1.0	1.0
4-Chlorotoluene	5	< 1.0	1.0
4-Methyl-2-Pentanone		< 2.5	2.5
Acetone		**20**	5.0
Acrolein		< 5.0	5.0
Acrylonitrile	5	< 5.0	5.0
Benzene	1	< 0.70	0.70
Bromobenzene	5	< 1.0	1.0
Bromochloromethane	5	< 1.0	1.0
Bromodichloromethane		< 1.0	1.0
Bromoform		< 5.0	5.0
Bromomethane	5	< 5.0	5.0
Carbon Disulfide	60	< 1.0	1.0
Carbon tetrachloride	5	< 1.0	1.0
Chlorobenzene	5	< 5.0	5.0
Chloroethane	5	**0.38**	5.0
Chloroform	7	< 5.0	5.0
Chloromethane	60	< 5.0	5.0
cis-1,2-Dichloroethene	5	**240**	5.0
cis-1,3-Dichloropropene		< 0.40	0.40
Dibromochloromethane		< 1.0	1.0
Dibromomethane	5	< 1.0	1.0
Dichlorodifluoromethane	5	< 1.0	1.0
Ethylbenzene	5	< 1.0	1.0
Hexachlorobutadiene	0.5	< 0.50	0.50
Isopropylbenzene	5	< 1.0	1.0
m&p-Xylenes	5	< 1.0	1.0
Methyl Ethyl Ketone (2-Butanone)		**7.4**	2.5
Methyl t-butyl ether (MTBE)	10	**0.47**	1.0
Methylene chloride	5	**73**	20
Naphthalene	10	< 1.0	1.0
n-Butylbenzene	5	< 1.0	1.0
n-Propylbenzene	5	< 1.0	1.0
o-Xylene	5	< 1.0	1.0
p-Isopropyltoluene		< 1.0	1.0
sec-Butylbenzene	5	< 1.0	1.0
Styrene	5	< 1.0	1.0
tert-Butylbenzene	5	< 1.0	1.0
Tetrachloroethene	5	< 1.0	1.0
Tetrahydrofuran (THF)		< 5.0	5.0
Toluene	5	**0.29**	1.0
trans-1,2-Dichloroethene	5	**6.8**	5.0
trans-1,3-Dichloropropene	0.4	< 0.40	0.40
trans-1,4-dichloro-2-butene	5	< 2.5	2.5
Trichloroethene	5	**240**	5.0
Trichlorofluoromethane	5	< 1.0	1.0
Trichlorotrifluoroethane		< 1.0	1.0
Vinyl Chloride	2	**6.3**	1.0

Notes:
RL- Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 7
56 Box Street,
Brooklyn, New York
2017 Supplemental Soil Vapor Sampling Results
Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value (μg/m^3) (a)	NYSDOH Soil Outdoor Background Levels (μg/m^3) (b)	SG-4 (μg/m3) 3/13/2017		SG-6 (μg/m3) 3/1/2017		SG-7 (μg/m3) 3/1/2017		SG-8 (μg/m3) 3/1/2017		SG-9 (μg/m3) 3/1/2017	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,1-Trichloroethane	100	<2.0 - 2.8	< 1.00	1.00	< 1.00	1.00	**16.9**	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2-Trichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethane		<1.0	< 1.00	1.00	**9.14**	1.00	**199**	5.99	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethene		<1.0	< 1.00	1.00	**24**	1.00	**19.8**	1.00	< 1.00	1.00	< 1.00	1.00
1,2,4-Trichlorobenzene		NA	< 1.00	1.00	**2.3**	1.00	**2.6**	1.00	**4.7**	1.00	**4.08**	1.00
1,2,4-Trimethylbenzene		<1.0	< 1.00	1.00	**21.4**	1.00	**21**	1.00	**26.4**	1.00	**22.8**	1.00
1,2-Dibromoethane		<1.5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorobenzene		<2.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloropropane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorotetrafluoroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3,5-Trimethylbenzene		<1.0	< 1.00	1.00	**7.62**	1.00	**7.32**	1.00	**9.43**	1.00	**8.01**	1.00
1,3-Butadiene		NA	< 1.00	1.00	< 1.00	1.00	**2.26**	1.00	< 1.00	1.00	< 1.00	1.00
1,3-Dichlorobenzene		<2.0	< 1.00	1.00	**29.6**	1.00	**33.8**	1.00	**71.5**	1.00	**63.1**	1.00
1,4-Dichlorobenzene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,4-Dioxane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
2-Hexanone			< 1.00	1.00	**1.11**	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Ethyltoluene		NA	< 1.00	1.00	**6.34**	1.00	**5.45**	1.00	**6.34**	1.00	**5.94**	1.00
4-Isopropyltoluene			< 1.00	1.00	**1.33**	1.00	**1.22**	1.00	**1.44**	1.00	**1.3**	1.00
4-Methyl-2-pentanone			< 1.00	1.00	< 1.00	1.00	**1.31**	1.00	**1.27**	1.00	**1.02**	1.00
Acetone		NA	**179**	2.00	**423**	5.01	**541**	6.01	**299**	5.01	**254**	5.01
Acrylonitrile			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Benzene		<1.6 - 4.7	< 1.00	1.00	< 1.00	1.00	**15**	1.00	**1.5**	1.00	**8.94**	1.00
Benzyl Chloride		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromodichloromethane		<5.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromoform		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromomethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Disulfide		NA	< 1.00	1.00	**1.13**	1.00	**8.09**	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Tetrachloride	5	<3.1	**0.54**	0.25	**0.36**	0.25	**0.6**	0.25	**0.25**	0.25	**0.45**	0.25
Chlorobenzene		<2.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroethane		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroform		<2.4	**1.62**	1.00	**8.15**	1.00	**3.07**	1.00	< 1.00	1.00	< 1.00	1.00
Chloromethane		<1.0 - 1.4	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
cis-1,2-Dichloroethene		<1.0	**1.57**	1.00	**126**	1.00	**2,120**	30.0	< 1.00	1.00	< 1.00	1.00
cis-1,3-Dichloropropene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Cyclohexane		NA	< 1.00	1.00	**1.06**	1.00	**2.05**	1.00	< 1.00	1.00	**1.64**	1.00
Dibromochloromethane		<5.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Dichlorodifluromethane		NA	**2.34**	1.00	**2.33**	1.00	**2.42**	1.00	**2.27**	1.00	**2.39**	1.00
Ethanol			**7.95**	1.00	**12.5**	1.00	**10.3**	1.00	**20.1**	1.00	**17.5**	1.00
Ethyl Acetate		NA	< 1.00	1.00	**5.08**	1.00	< 1.00	1.00	**6.34**	1.00	**5.37**	1.00
Ethylbenzene		<4.3	< 1.00	1.00	**14.8**	1.00	**27.4**	1.00	**16.4**	1.00	**13.6**	1.00
Heptane		NA	< 1.00	1.00	**1.59**	1.00	**7.09**	1.00	**2.33**	1.00	**7.58**	1.00
Hexachlorobutadiene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Hexane		<1.5	< 1.00	1.00	**2.22**	1.00	**4.97**	1.00	**1.82**	1.00	**8.95**	1.00
Isopropylalcohol		NA	**1.06**	1.00	**2.51**	1.00	**1.98**	1.00	**2.03**	1.00	< 1.00	1.00
Isopropylbenzene			< 1.00	1.00	**1.57**	1.00	**2.4**	1.00	**2.04**	1.00	**1.58**	1.00
Xylene (m&p)		<4.3	< 1.00	1.00	**72.9**	1.00	**104**	1.00	**77.7**	1.00	**62.1**	1.00
Methyl Ethyl Ketone			**30.4**	1.00	**53.6**	1.00	**111**	1.00	**27.1**	1.00	**26.4**	1.00
MTBE		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Methylene Chloride		<3.4	< 1.00	1.00	< 1.00	1.00	**4.65**	1.00	< 1.00	1.00	**3.68**	1.00
n-Butylbenzene			< 1.00	1.00	**2.17**	1.00	**2.11**	1.00	**2.93**	1.00	**2.4**	1.00
Xylene (o)		<4.3	< 1.00	1.00	**53.8**	1.00	**70.7**	1.00	**47.7**	1.00	**43.8**	1.00
Propylene		NA	**3.58**	1.00	**3.99**	1.00	**13.9**	1.00	**1.67**	1.00	**7.17**	1.00
sec-Butylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Styrene		<1.0	< 1.00	1.00	**1.47**	1.00	**1.42**	1.00	**6.77**	1.00	**22.7**	1.00
Tetrachloroethene	30		**0.33**	0.25	**5.59**	0.25	**9.35**	0.25	**3.02**	0.25	**3.21**	0.25
Tetrahydrofuran		NA	**98.2**	1.00	**70.7**	1.00	**363**	6.01	**42.1**	1.00	**33.3**	1.00
Toluene		1.0 - 6.1	**1.39**	1.00	**12.8**	1.00	**79.5**	1.00	**17.6**	1.00	**44.4**	1.00
trans-1,2-Dichloroethene		NA	< 1.00	1.00	**2.35**	1.00	**26**	1.00	< 1.00	1.00	< 1.00	1.00
trans-1,3-Dichloropropene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Trichloroethene	2	<1.7	**7.09**	0.25	**26.5**	0.25	**671**	1.50	< 0.25	0.25	< 0.25	0.25
Trichlorofluoromethane		NA	**1.33**	1.00	**1.82**	1.00	**1.43**	1.00	**1.58**	1.00	**1.4**	1.00
Trichlorotrifluoroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Vinyl Chloride		<1.0	< 0.25	0.25	**6.54**	0.25	**172**	1.50	< 0.25	0.25	< 0.25	0.25

Notes:
NA No guidance value or standard available
(a) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006. New York State Department of Health.
(b) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005, Summary of Background Levels for Selected Compounds (NYSDOH Database, Outdoor values)

TABLE 8
Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health: Residential	Restricted-Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water	Unrestricted Use
METALS								
Arsenic	7440-38 -2	16f	16f	16f	16f	13f	16f	13 [c]
Barium	7440-39 -3	350f	400	400	10,000 d	433	820	350 [c]
Beryllium	7440-41 -7	14	72	590	2,700	10	47	7.2
Cadmium	7440-43 -9	2.5f	4.3	9.3	60	4	7.5	2.5 [c]
Chromium, hexavalent h	18540-29-9	22	110	400	800	1e	19	1[b]
Chromium, trivalent h	16065-83-1	36	180	1,500	6,800	41	NS	30 [c]
Copper	7440-50 -8	270	270	270	10,000 d	50	1,720	50
Total Cyanide h		27	27	27	10,000 d	NS	40	27
Lead	7439-92 -1	400	400	1,000	3,900	63f	450	63 [c]
Manganese	7439-96 -5	2,000f	2,000f	10,000 d	10,000 d	1600f	2,000f	1600 [c]
Total Mercury		0.81j	0.81j	2.8j	5.7j	0.18f	0.73	0.18 [c]
Nickel	7440-02 -0	140	310	310	10,000 d	30	130	30
Selenium	7782-49 -2	36	180	1,500	6,800	3.9f	4f	3.9[c]
Silver	7440-22 -4	36	180	1,500	6,800	2	8.3	2
Zinc	7440-66 -6	2200	10,000 d	10,000 d	10,000 d	109f	2,480	109 [c]
PESTICIDES / PCBs								
2,4,5-TP Acid (Silvex)	93-72-1	58	100a	500b	1,000c	NS	3.8	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 e	17	0.0033 [b]
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 e	136	0.0033 [b]
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 e	14	0.0033 [b]
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19	0.005 [c]
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04g	0.02	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09	0.036
Chlordane (alpha)	5103-71 -9	0.91	4.2	24	47	1.3	2.9	0.094
delta-BHC	319-86-8	100a	100a	500b	1,000c	0.04g	0.25	0.04
Dibenzofuran	132-64-9	14	59	350	1,000c	NS	210	7
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1	0.005[c]
Endosulfan I	959-98-8	4.8i	24i	200i	920i	NS	102	2.4
Endosulfan II	33213-65-9	4.8i	24i	200i	920i	NS	102	2.4
Endosulfan sulfate	1031-07 -8	4.8i	24i	200i	920i	NS	1,000c	2.4
Endrin	72-20-8	2.2	11	89	410	0.014	0.06	0.014
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38	0.042
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1	0.1
Polychlorinated biphenyls	1336-36 -3	1	1	1	25	1	3.2	0.1
SEMI-VOLATILES								
Acenaphthene	83-32-9	100a	100a	500b	1,000c	20	98	20
Acenapthylene	208-96-8	100a	100a	500b	1,000c	NS	107	100 [a]
Anthracene	120-12-7	100a	100a	500b	1,000c	NS	1,000c	100 [a]
Benz(a)anthracene	56-55-3	1f	1f	5.6	11	NS	1f	1[c]
Benzo(a)pyrene	50-32-8	1f	1f	1f	1.1	2.6	22	1[c]
Benzo(b) fluoranthene	205-99-2	1f	1f	5.6	11	NS	1.7	1[c]
Benzo(g,h,i) perylene	191-24-2	100a	100a	500b	1,000c	NS	1,000c	100
Benzo(k) fluoranthene	207-08-9	1	3.9	56	110	NS	1.7	0.8 [c]
Chrysene	218-01-9	1f	3.9	56	110	NS	1f	1[c]
Dibenz(a,h) anthracene	53-70-3	0.33e	0.33e	0.56	1.1	NS	1,000c	0.33 [b]
Fluoranthene	206-44-0	100a	100a	500b	1,000c	NS	1,000c	100 [a]
Fluorene	86-73-7	100a	100a	500b	1,000c	30	386	30
Indeno(1,2,3-cd) pyrene	193-39-5	0.5f	0.5f	5.6	11	NS	8.2	0.5 [c]
m-Cresol	108-39-4	100a	100a	500b	1,000c	NS	0.33e	0.33 [b]
Naphthalene	91-20-3	100a	100a	500b	1,000c	NS	12	12
o-Cresol	95-48-7	100a	100a	500b	1,000c	NS	0.33e	0.33 [b]
p-Cresol	106-44-5	34	100a	500b	1,000c	NS	0.33e	0.33 [b]
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8e	0.8e	0.8[b]
Phenanthrene	85-01-8	100a	100a	500b	1,000c	NS	1,000c	100
Phenol	108-95-2	100a	100a	500b	1,000c	30	0.33e	0.33[b]
Pyrene	129-00-0	100a	100a	500b	1,000c	NS	1,000c	100

TABLE 8
Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water	Unrestricted Use
		Residential	Restricted-Residential	Commercial	Industrial			
VOLATILES								
1,1,1-Trichloroethane	71-55-6	100a	100a	500b	1,000c	NS	0.68	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27	0.27
1,1-Dichloroethene	75-35-4	100a	100a	500b	1,000c	NS	0.33	0.33
1,2-Dichlorobenzene	95-50-1	100a	100a	500b	1,000c	NS	1.1	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02f	0.02[c]
cis-1,2-Dichloroethene	156-59-2	59	100a	500b	1,000c	NS	0.25	0.25
trans-1,2-Dichloroethene	156-60-5	100a	100a	500b	1,000c	NS	0.19	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1e	0.1e	0.1 [b]
Acetone	67-64-1	100a	100b	500b	1,000c	2.2	0.05	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06	0.06
Butylbenzene	104-51-8	100a	100a	500b	1,000c	NS	12	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76	0.76
Chlorobenzene	108-90-7	100a	100a	500b	1,000c	40	1.1	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1	1
Hexachlorobenzene	118-74-1	0.33e	1.2	6	12	NS	3.2	0.33[b]
Methyl ethyl ketone	78-93-3	100a	100a	500b	1,000c	100a	0.12	0.12
Methyl tert-butyl ether	1634-04 -4	62	100a	500b	1,000c	NS	0.93	0.93
Methylene chloride	75-09-2	51	100a	500b	1,000c	12	0.05	0.05
n-Propylbenzene	103-65-1	100a	100a	500b	1,000c	NS	3.9	3.9
sec-Butylbenzene	135-98-8	100a	100a	500b	1,000c	NS	11	11
tert-Butylbenzene	98-06-6	100a	100a	500b	1,000c	NS	5.9	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3	1.3
Toluene	108-88-3	100a	100a	500b	1,000c	36	0.7	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6	3.6
1,3,5-Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02	0.02
Xylene (mixed)	1330-20 -7	100a	100a	500b	1,000c	0.26	1.6	0.26

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified. See Technical Support Document (TSD). Footnotes

a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

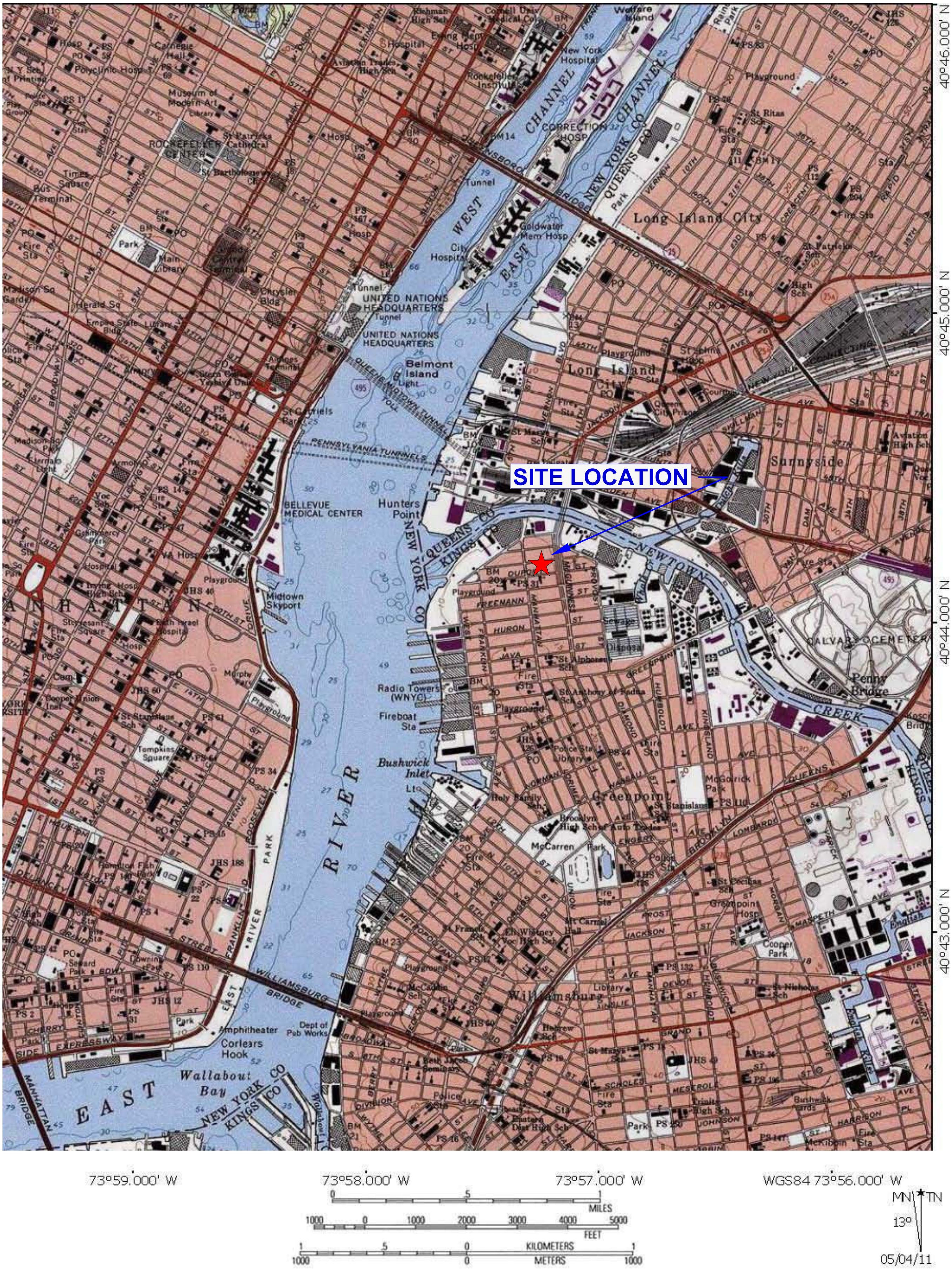
b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

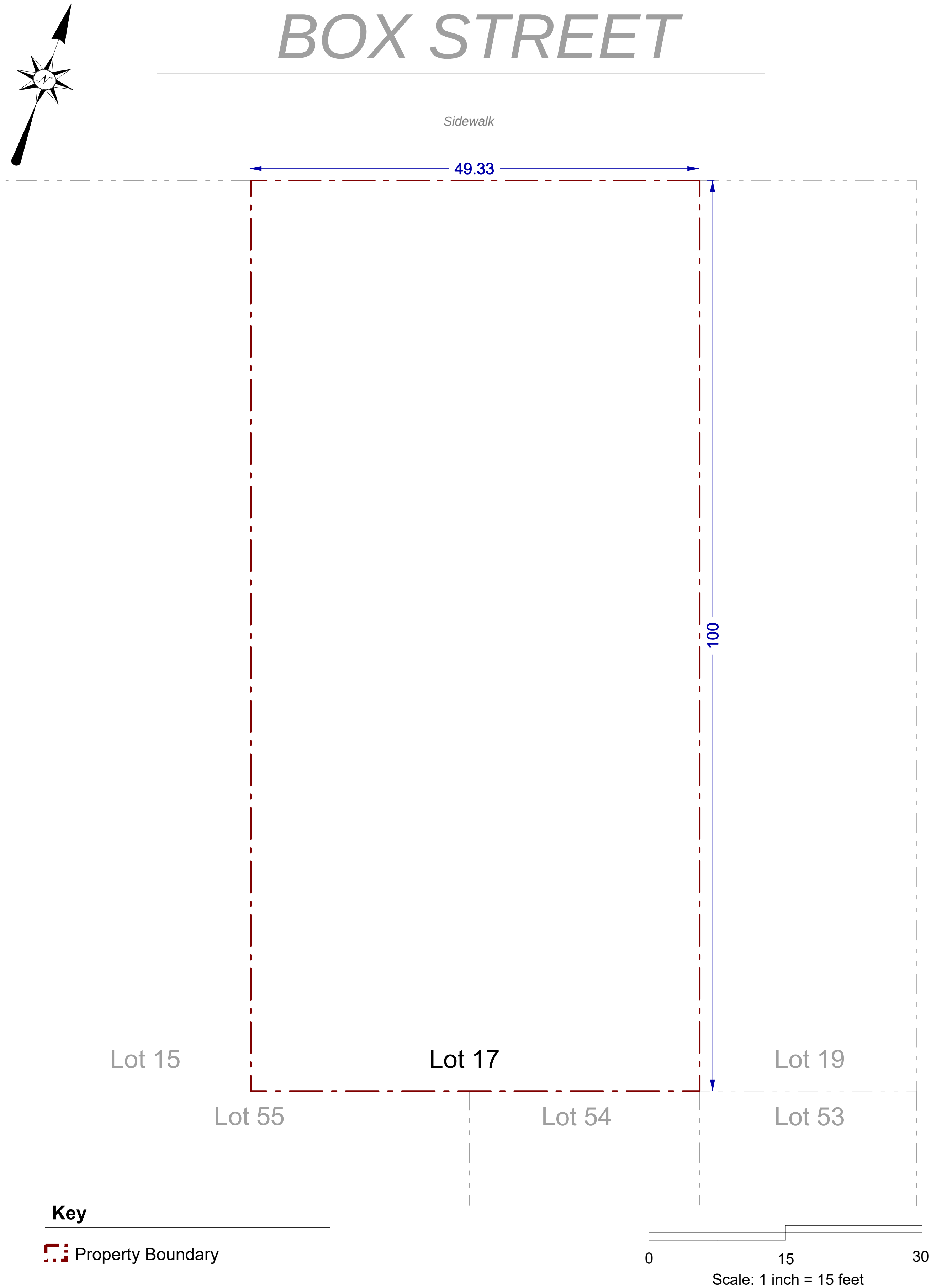
FIGURES



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631.924.2870

Figure No. 1

Site Name:	TOTAL METAL RESOURCE - METAL SHOP
Site Address:	56 BOX STREET, BROOKLYN, NY
Drawing Title:	SITE LOCATION MAP

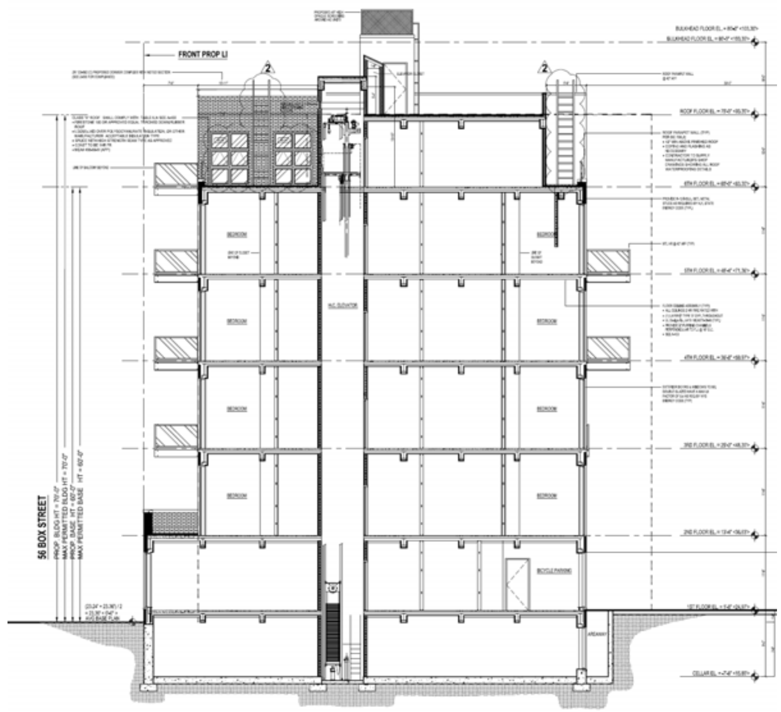


ENVIRONMENTAL BUSINESS CONSULTANTS

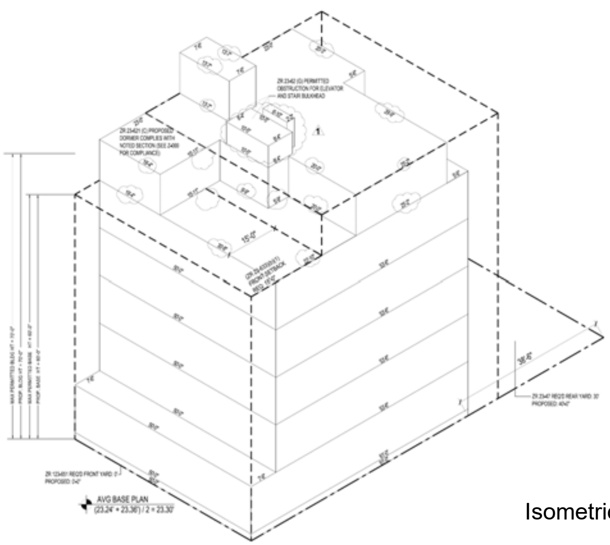
Phone 631.504.6000
Fax 631. 924 .2870

Figure No.
2

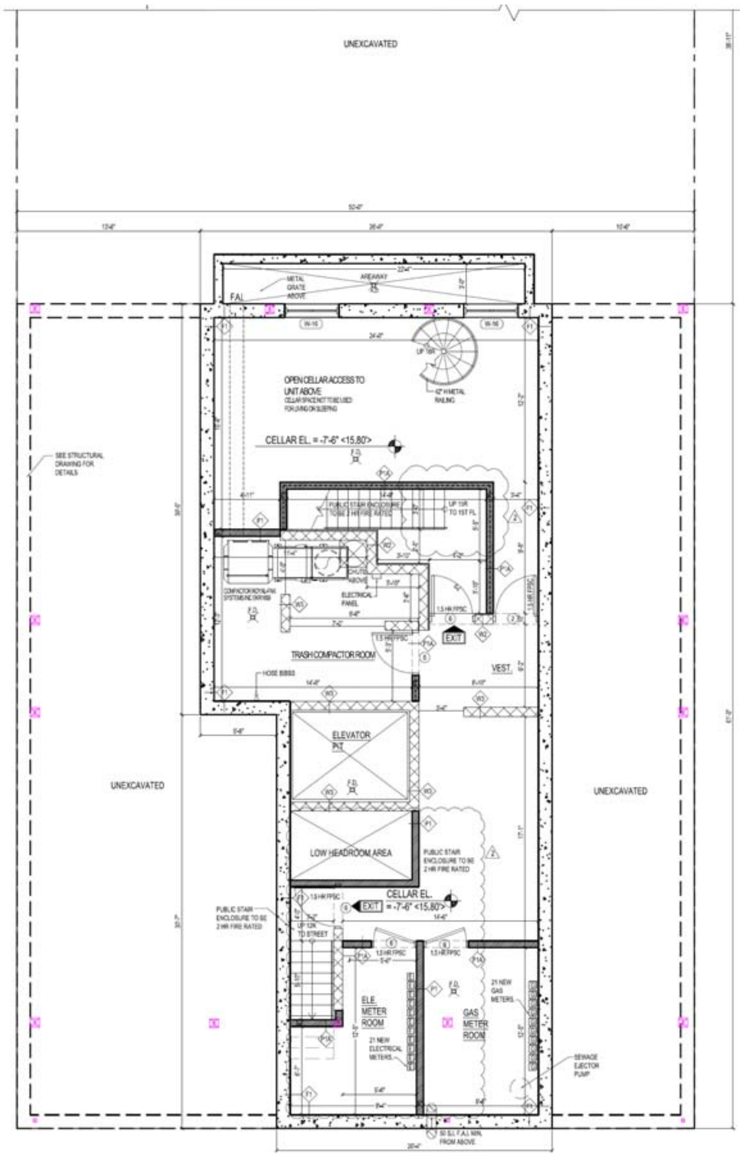
Site Name:	TOTAL METAL RESOURCE - METAL SHOP
Site Address:	56 BOX STREET, BROOKLYN, NY
Drawing Title:	SITE BOUNDARY MAP



Proposed Longitudinal Section



Isometric Building



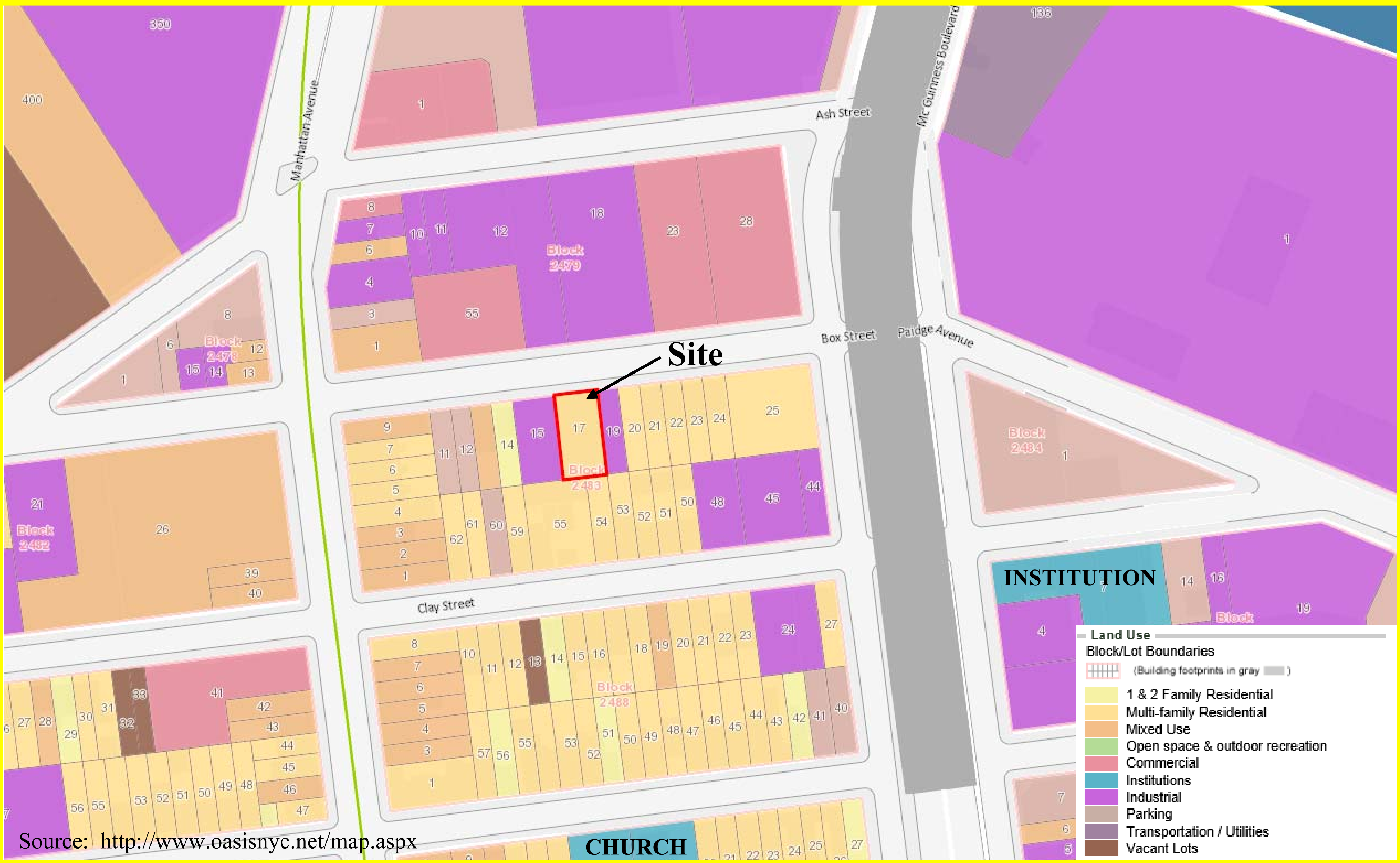
Cellar Footprint

EBC
Environmental Business Consultants

Phone 631.504.6000
Fax 631. 924 .2870

Figure 3

Site Name: Total Metal Resource - Metal Shop
Site Address: 56 Box Street, Brooklyn, NY
Drawing Title: Redevelopment Plans



Source: http://www.oasisnyc.net/map.aspx

FIGURE 4
SURROUNDING LAND USE MAP

56 BOX STREET, BROOKLYN NY

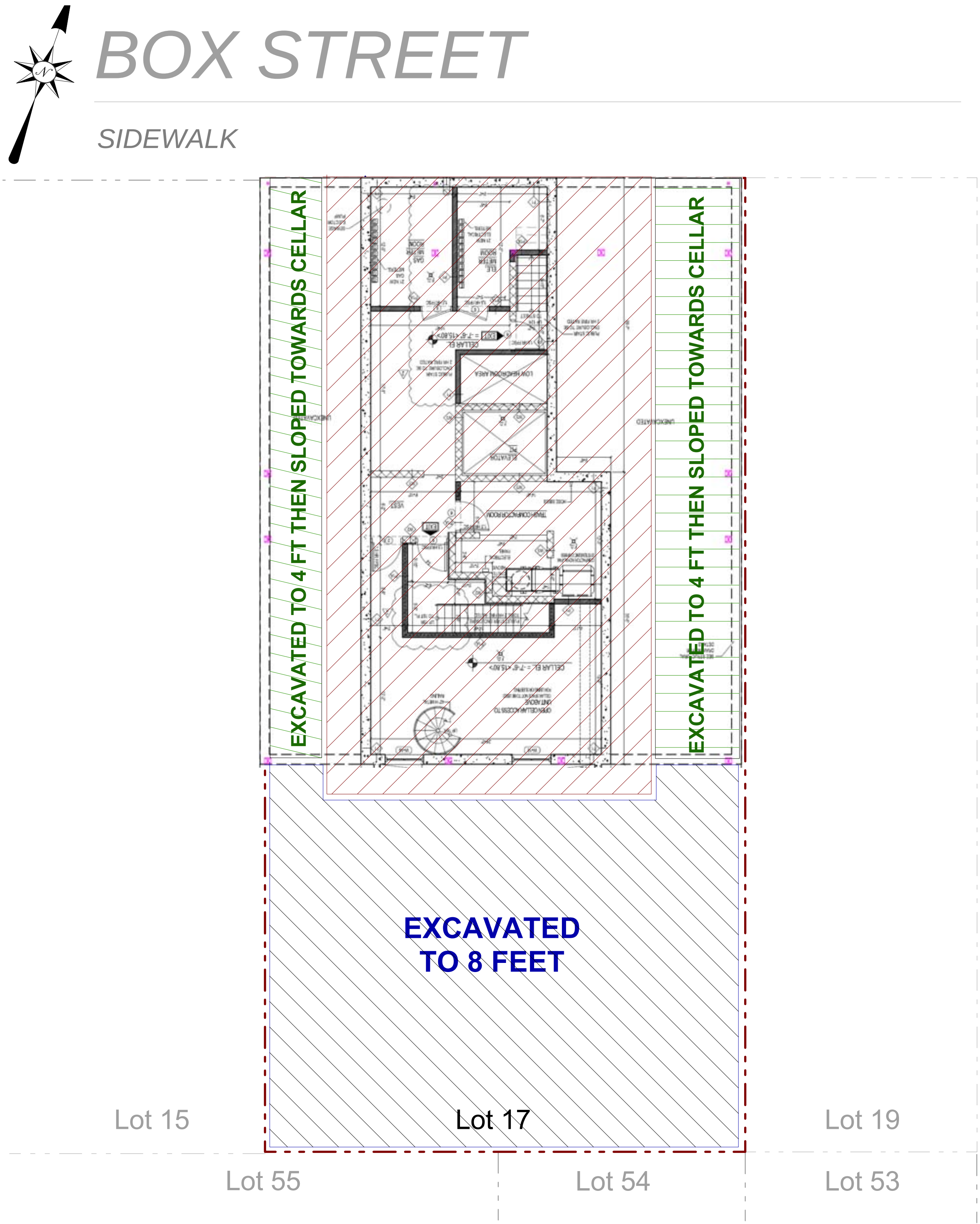
REMEDIAL ACTION REPORT

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

1808 Middle Country Road, Ridge, New York 11961

Phone: (631) 504-6000 Fax: (631) 924-2870



KEY:

Property Boundary

SCALE:

0 15 30

Scale: 1 inch = 15 feet

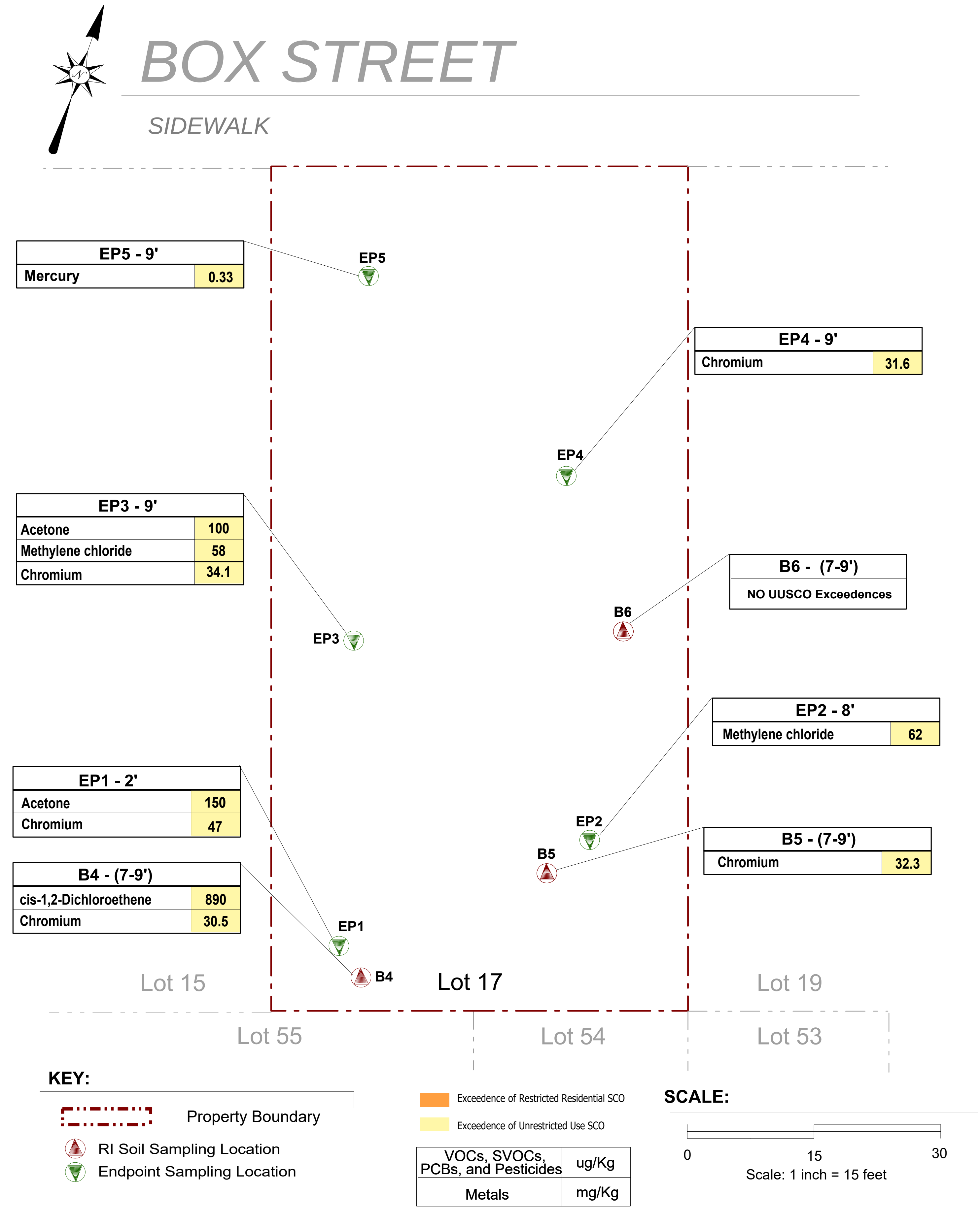
EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

Figure No. 5

Site Name: REDEVELOPMENT PLAN

Site Address: 56 BOX STREET, BROOKLYN, NY

Drawing Title: EXCAVATION DIAGRAM

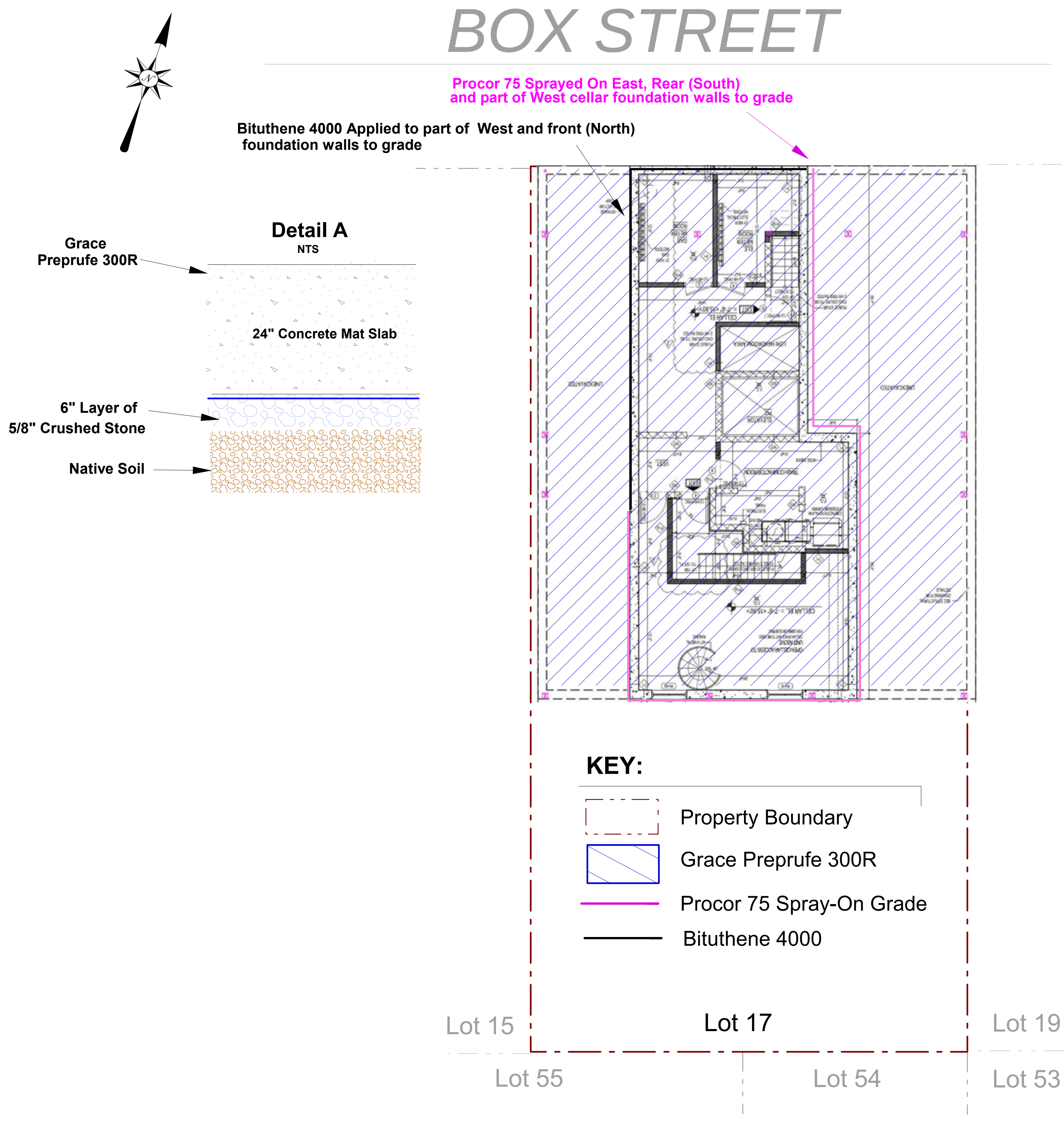


EBC
ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631. 924 .2870

Figure No. **7**

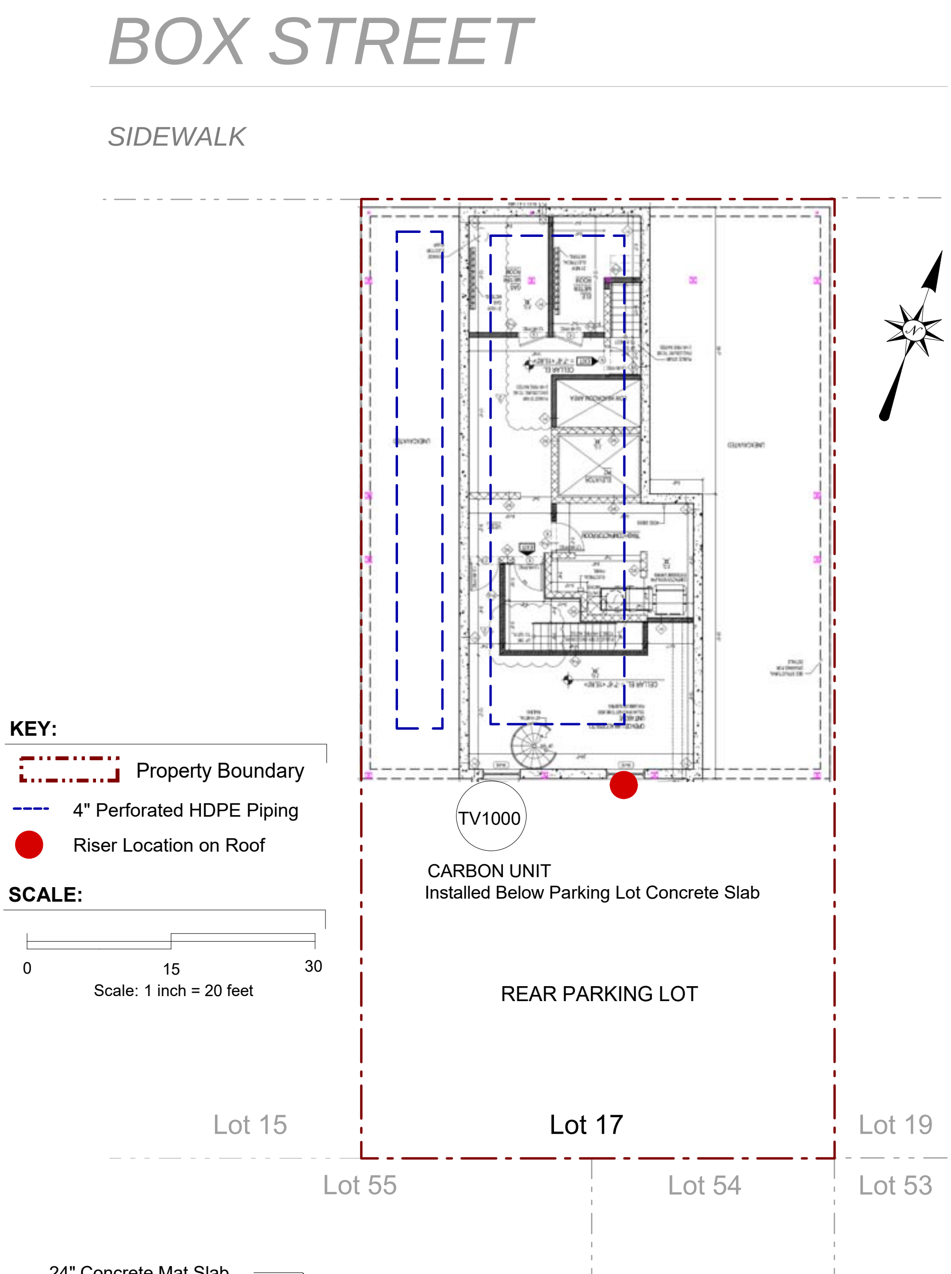
Site Name:	REDEVELOPMENT PROJECT
Site Address:	56 BOX STREET, BROOKLYN, NY
Drawing Title:	END POINT SAMPLING MAP

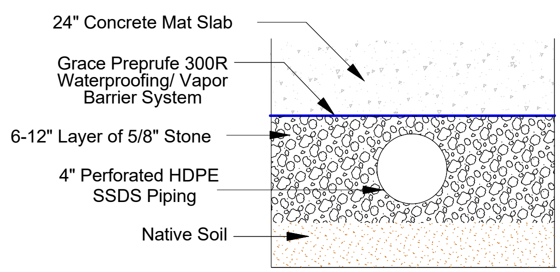


AMC Engineering
1836 42nd Street
Astoria, NY 11105

Figure No.
8

Site Name:	Total Metal Resource - Metal Shop
Site Address:	56 Box Street, Brooklyn, NY
Drawing Title:	Waterproofing Membrane Layout





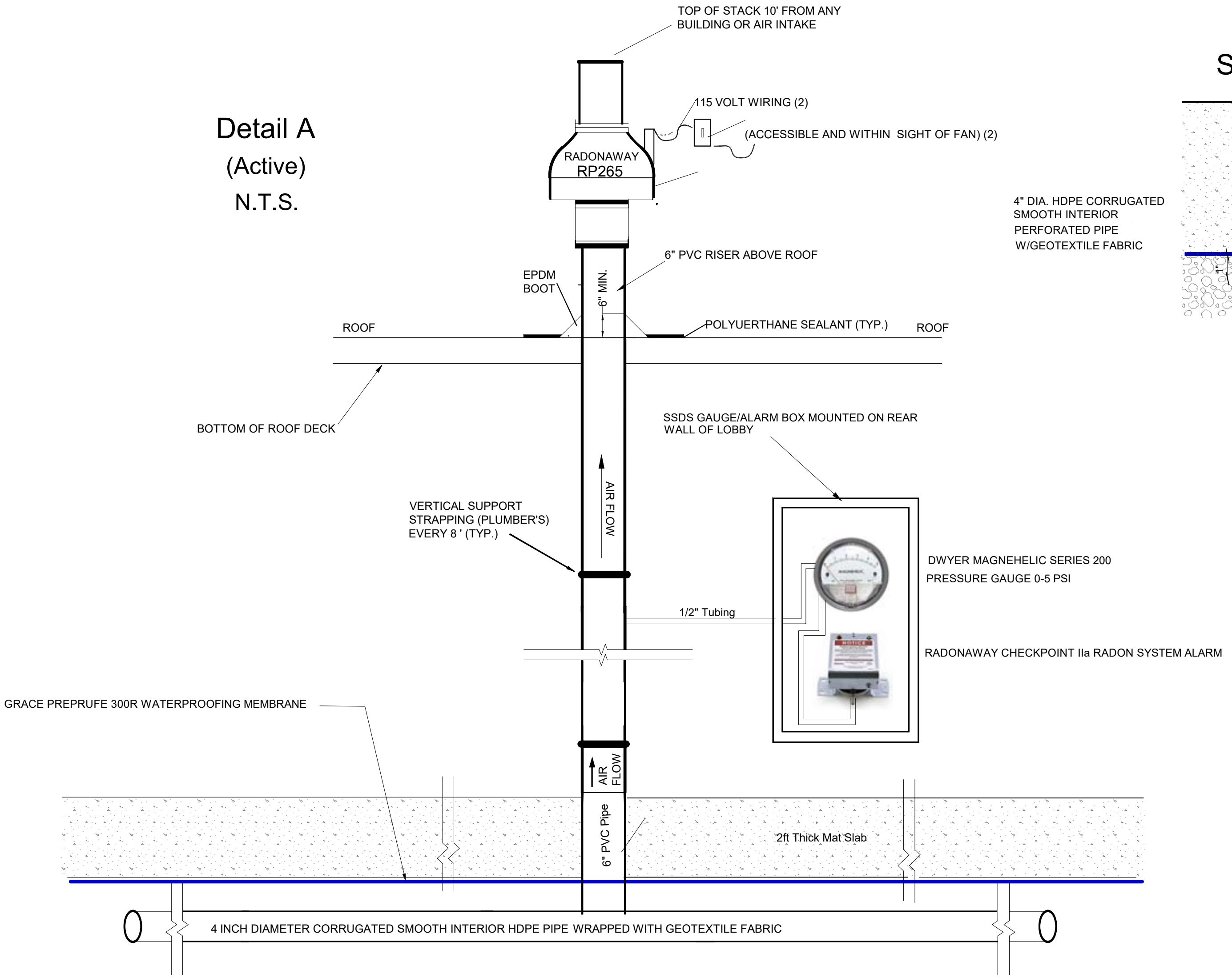
Detail A

AMC Engineering
1836 42nd Street
Astoria, NY 11105

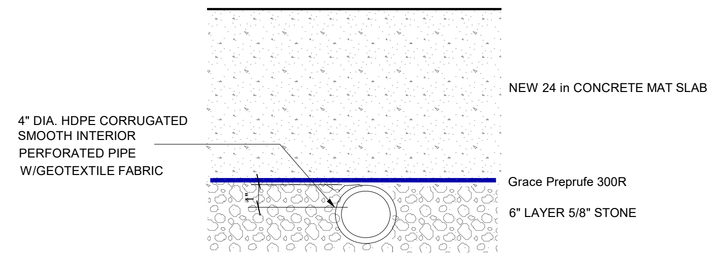
Figure No.
9

Site Name: REDEVELOPMENT PROJECT
Site Address: 56 BOX STREET, BROOKLYN, NY
Drawing Title: SSDS LAYOUT

Detail A
(Active)
N.T.S.



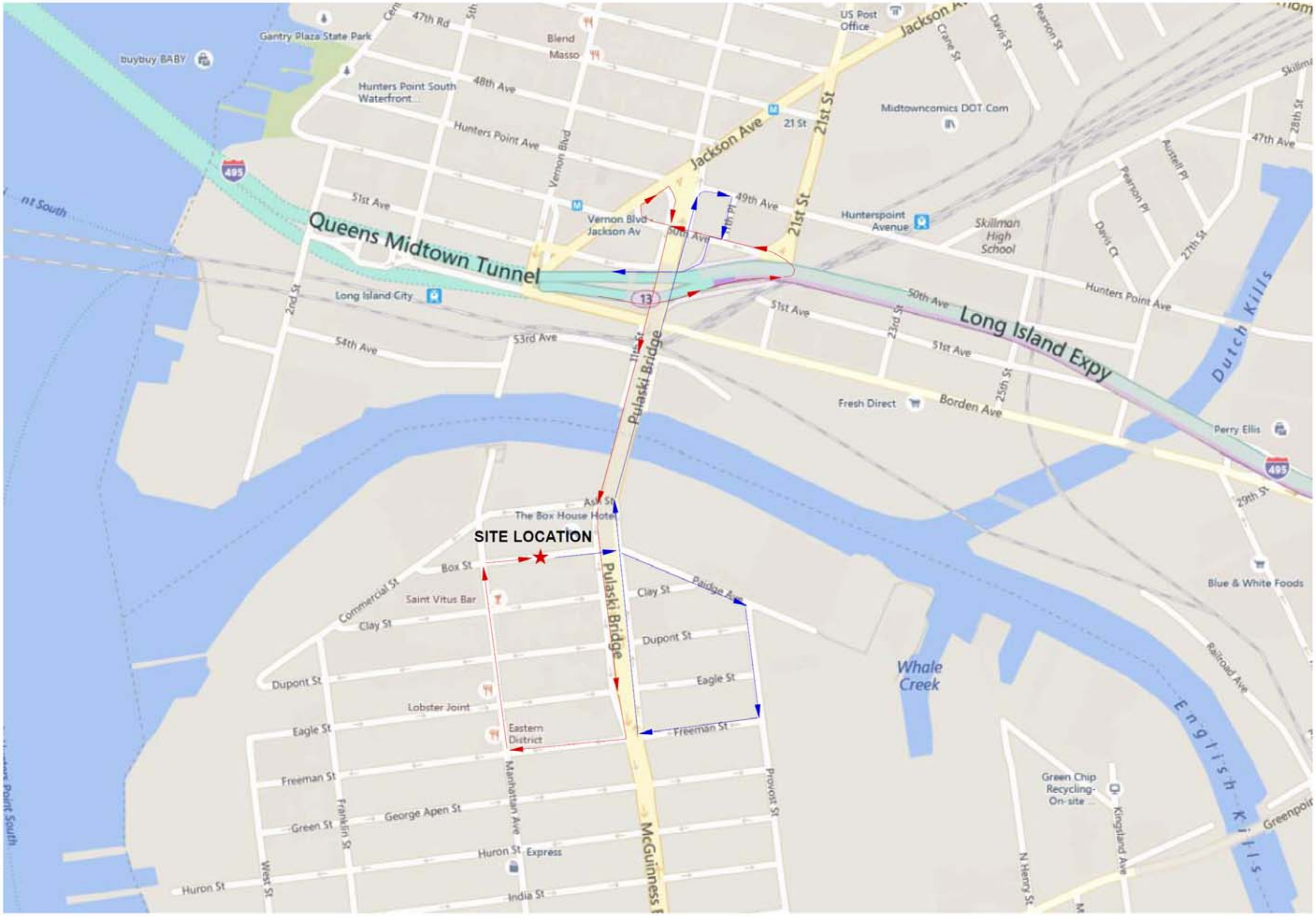
SLAB DETAIL



AMC Engineering
1836 42nd Street
Astoria, NY 11105

Figure No.
10

Site Name: REDEVELOPMENT PROJECT
Site Address: 56 BOX STREET, BROOKLYN, NY
Drawing Title: ACTIVE SSDS DETAILS

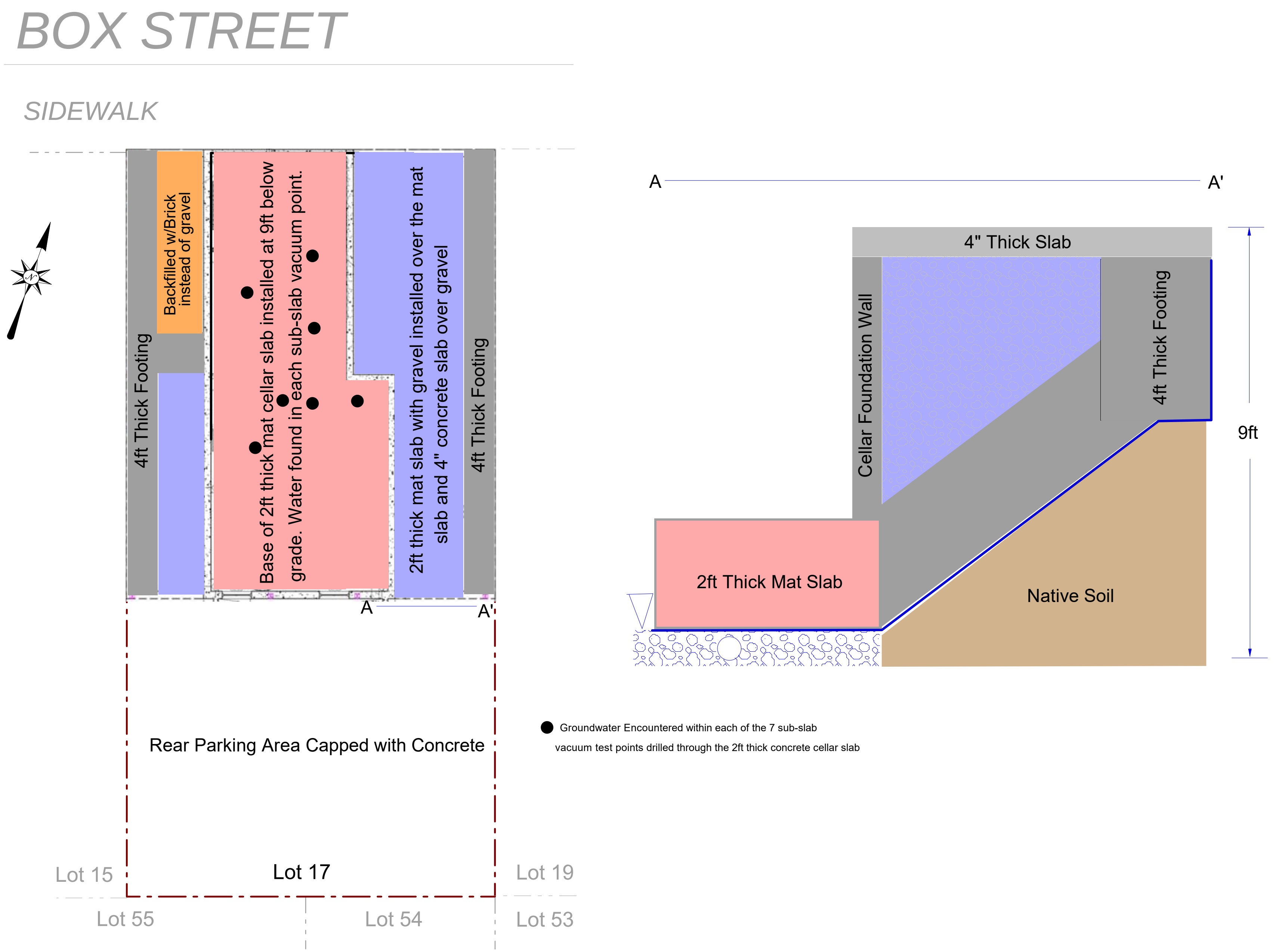


Key:

Truck Route From Site

Truck Route To Site

EBC — Environmental Business Consultants	Phone 631.504.6000 Fax 631.924.2870	Figure 11	Site Name: Total Metal Resource - Metal Shop Site Address: 56 Box Street, Brooklyn, NY Drawing Title: Truck Route



● Groundwater Encountered within each of the 7 sub-slab vacuum test points drilled through the 2ft thick concrete cellar slab

EBC ENVIRONMENTAL BUSINESS CONSULTANTS	Phone 631.504.6000 Fax 631. 924 .2870	Figure No. 12	Site Name: REDEVELOPMENT PROJECT Site Address: 56 BOX STREET, BROOKLYN, NY Drawing Title: SUB-SLAB VACUUM TESTING DIAGRAM