

**683 MARCY AVENUE
BROOKLYN, NEW YORK**

Remedial Action Report

NYC VCP Project Number: 13CVCP116K

OER Project Number: 13EH-A243K

Prepared for:

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REMEDIAL ACTION REPORT

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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

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 683 Marcy Avenue, Brooklyn, NY, site number 13CVCP116K.
- 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 February 2013 and Stipulations in a letter dated April 30, 2013, 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 Ariel Czemerinski

Date 4/21/16



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 683 Marcy Avenue, Brooklyn, NY, site number 13CVCP116K.
- The OER-approved Remedial Action Work Plan dated February 2013 and Stipulations in a letter dated April 30, 2013, 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 Kevin Brussee

Date 4/21/2016

EXECUTIVE SUMMARY

683 Marcy Avenue Realty LLC has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 683 Marcy Avenue in Bedford-Stuyvesant 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 683 Marcy Avenue in the Bedford-Stuyvesant section of Brooklyn, New York, and is identified as Block 1785 and Lot 1 (formerly Lots 1, 3 and 5) on the New York City Tax Map. Figure 1 shows the Site location. The Site is 10,000-square feet and is bounded by Kosciusko Street to the north, multi-family residential buildings to the south and to the east, and Marcy Avenue to the west. A map of the site boundary is shown in Figure 2.

Prior to redevelopment, the Site was undeveloped, vacant and uncapped.

Summary of Redevelopment Plan

A new 8-story apartment building with a full cellar level has been constructed at the Site. Layout of the site redevelopment is presented in Figure 3. The current zoning designation for the Site is R7A with a C2-4 commercial overlay. R7A is a contextual district that allows residential and community facility buildings. The use is consistent with existing zoning for the property.

The new 8-story apartment building occupies the entire footprint of the lot, but the 4,129 ft² cellar is only constructed along the Marcy Avenue half of the Site. The cellar consists of several storage rooms, the electrical meter room, domestic water and sprinkler pump room, refuse room, telecommunications room, and accessory residential space for the first floor apartments. The first floor space immediately above the cellar consists of two apartments, the building's lobby,

bicycle storage room, and recreation area. The rear of the first floor consists of an at-grade parking garage that enters and exits from Kosciuszko Street. No cellar was constructed below the at-grade parking garage. The 2nd through 8th floors consist of residential units.

The top of the concrete cellar slab was installed a depth of approximately 10.5 feet below sidewalk level, which required excavation for the cellar to a depth of approximately 13 feet below grade. Additional excavation to a depth of approximately 2 feet was performed across the at-grade parking garage constructed in the rear of the building. A total of approximately 4,550.90 tons of non-hazardous historic fill material and soil was excavated for the new building.

Summary of Surrounding Properties

The area surrounding the Site is primarily a residential neighborhood. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 500 feet away from the Site. No hospitals, daycare facilities or schools are located within a 250 ft radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Kosciuszko Street	<u>Block 1780, Lots 1 and 78</u> (175 Kosciuszko Street) – Lot 1 is a small corner lot located on the northeast corner of Marcy Avenue and Kosciuszko Street. The lot is undeveloped and used for parking. Lot 78 is developed with a 2-story house and a small concrete capped side yard.
South – Adjacent properties	<u>Block 1785, Lots 72 to 77</u> (660, 661, 662, 663, 664 and 665 Lafayette Avenue) – Multiple 25ft by 100ft lots that front Lafayette Avenue. All five lots are developed with 3-story row houses.
East – Adjacent properties	<u>Block 1785, Lots 7501 and 7502</u> (174 and 176 Kosciuszko Street) – Both 20ft wide lots were recently re-developed with a single 4-story apartment building.
West – Opposite side of Marcy Avenue	<u>Block 1784, Lot 44</u> (152 Kosciuszko Street) – A 52,500 ft ² playground. The Banneker Playground consists of basketball courts, a hand ball court, swing sets, and jungle gyms.

Summary of Past Uses of Site and Environmental Findings

According to a review of NYC records, City Directory Listings and historic Sanborn maps, the Site was developed with a livery stable, upholstery shop and a retail store by at least 1888. By 1908, the upholstery shop had been converted to several retail stores and a portion of the livery stable converted to a carriage house. Between 1908 and 1932, the livery stable (former Lot 1)

was redeveloped with a garage. By 1962, an addition to the northern retail store had been constructed. By 1978, the retail shops had been demolished, except for the eastern addition to the northern retail store (along Kosciuszko Street). In 1988, the garage building was identified as a K of C Hall, but by 1991, the building was identified as an auto repair shop and the remaining portions of the former retail stores were demolished. The auto repair shop (former Lot 1) was demolished in September 2012.

Sanborn maps from 1932-1987 identified the presence of a gasoline storage tank (likely an underground tank) within the west-central portion of the former garage building (former Lot 1).

The AOCs identified for this Site include:

1. Historic fill layer is present at the Site from grade to a depth of approximately 7 feet; and
2. Area of underground storage tank depicted on 1932-1987 Sanborn maps.

Summary of the Work Performed under the Remedial Investigation

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed eight soil borings across the entire project Site, and collected 16 soil samples and one duplicate soil sample for chemical analysis from the soil borings to evaluate soil quality;
3. Installed three groundwater monitoring wells throughout the Site and collected four groundwater samples and one duplicate groundwater sample for chemical analysis to evaluate groundwater quality; and
4. Installed 4 soil vapor probes throughout the Site and collected four soil vapor samples for chemical analysis.

Summary of Environmental Findings

1. Elevation of the property is approximately 43 feet.
2. Depth to groundwater is approximately 45 feet at the Site.
3. Depth to bedrock is at the Site is greater than 100 feet.

4. The stratigraphy of the Site, from the surface down, consists of a layer of historic fill that appears to extend to depths as great as 7ft in portions of the Site. The historic fill layer is underlain by a layer of coarse sand with large stones.
5. Soil/fill samples collected during the RI showed no detectable concentrations of PCBs. No chlorinated VOCs were detected, as the only VOC detected was naphthalene in one shallow soil sample at a concentration (0.100 ppm) below its Unrestricted Use SCO. Nine SVOCs including benzo(a)anthracene (max 65 ppm), benzo(a)pyrene (max 44 ppm), benzo(b)fluoranthene (max of 64 ppm), benzo(k)fluoranthene (max 17 ppm), chrysene (max of 53 ppm), fluoranthene (max of 160 ppm), indeno(1,2,3-cd)pyrene (max of 20 ppm), phenanthrene (max of 190 ppm), and pyrene (max of 120 ppm) were detected above their respective Restricted Residential Use SCOs within four of the eight shallow soil samples. The SVOCs detected above Restricted Residential SCOs are all PAH compounds and their concentrations and distributions, with the exception of one shallow sample with 905 ppm total SVOCs which will be treated as a hotspot, indicate that they are associated with historic fill material observed during the sampling. The metals copper, lead, mercury, and/or zinc exceeded Unrestricted Use SCOs in six of the eight shallow soil samples. Of these metals, lead (maximum of 445 ppm) and mercury (maximum of 1.45 ppm) also exceeded Restricted Residential SCOs. Six of the eight deep soil samples showed nickel (maximum of 128 ppm) and/or copper (maximum of 90.8 ppm) above Unrestricted Use SCOs. Pesticides including 4,4,-DDE (maximum of 0.010 ppm), 4,4,-DDT (maximum of 0.038 ppm), and dieldrin (maximum of 0.009 ppm) were detected within the shallow soil samples at concentrations above Unrestricted Use SCOs, but well below Restricted Residential SCOs. No VOCs, SVOCs, PCBs, or pesticides were detected above Unrestricted Use SCOs within any of the deep soil samples collected at the Site. Overall, the findings were consistent with observations for historical fill sites in areas throughout NYC.
6. Groundwater samples collected during the RI showed no detectable concentrations of pesticides, PCBs or SVOCs. No chlorinated VOCs were detected within either groundwater sample, but low levels of petroleum VOCs were detected within both groundwater samples. The VOCs 1,2,4-trimethylbenzene (max 140 ppb), 1,3,5-trimethylbenzene (max 51 ppb), isopropylbenzene (max 15 ppb), n-propylbenzene (max

30 ppb), and sec-butylbenzene (max 6 ppb) were detected above Groundwater Quality Standards (GQSs) in the southwest corner of the Site in proximity to a gasoline storage tank shown on 1932-1987 Sandborn maps. Concentrations of VOCs in the northwest corner of the Site were lower, with only n-propylbenzene (10 ppb) exceeding its GQS. Neither groundwater sample contained a detectable concentration of benzene, toluene, ethylbenzene, or xylene (BTEX) which indicates an older gasoline spill/release. The metals iron, magnesium, manganese, and sodium were detected above their respective NYSDEC GQS in all three dissolved groundwater samples.

7. Soil vapor samples collected during the RI showed petroleum and chlorinated VOCs at low concentrations. Tetrachloroethylene (PCE) was identified in all four soil vapor samples at a maximum concentration of $7.86 \mu\text{g}/\text{m}^3$. Trichloroethylene (TCE) was reported within one of the four soil vapor samples at a concentration of $0.376 \mu\text{g}/\text{m}^3$. Carbon Tetrachloride was reported in two of the four soil vapor samples at a maximum concentration of $0.503 \mu\text{g}/\text{m}^3$. 1,1,1- TCA was not detected in soil vapor. The PCE and TCE concentrations are below the monitoring level ranges established within the State DOH soil vapor guidance matrix. Concentrations of petroleum-related VOCs were generally less than $10 \mu\text{g}/\text{m}^3$. Overall the highest reported concentrations were for acetone ($74.5 \mu\text{g}/\text{m}^3$) and ethanol ($55.2 \mu\text{g}/\text{m}^3$).

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 November 28, 2012. A Remedial Investigation (RI) was performed in December of 2012 and January of 2013 and a RI Report dated February 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 February 2013 was prepared and released

with a Fact Sheet on March 7, 2013, for a 30-day public comment period. The RAWP with a revised Stipulation List dated April 13, 2013, was approved by the New York City Office of Environmental Remediation (OER) on June 4, 2013. A pre-construction meeting was held on February 28, 2014 and remedial action began in March of 2014 and completed in May of 2015.

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 during soil disturbance activities;
3. Established Track 2 Restricted Residential Use Soil Cleanup Objectives (SCOs). Excavation and removal of soil/fill exceeding Residential SCOs and substantially achieved Track 2 SCOs for soil;
4. A total of 4,550.9 tons of soil and fill were removed during this remedial action. Excavated 1,600.92 tons of non-hazardous historic fill material from the top 2 feet across the Site and transported to Clean Earth of Carteret, and excavated 2,949.98 tons of fill material and native soil for the new building and transported to Clean Earth of Philadelphia. The street front half of the Site was excavated to a depth of approximately 13 feet for the new building's cellar level, and the rear of the Site was excavated to a depth of approximately 2 feet below grade for the parking area and building footings;
5. Removal of two 550-gallon gasoline underground storage tanks and closure of the associated NYSDEC Spill Number (1312247) in compliance with applicable local, State and Federal laws and regulations. NYSDEC Spill No. 1312247 was closed by the NYSDEC on April 21, 2016;
6. 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 this plan. Collected, sampled and analyzed samples representative of excavated media as required by disposal facilities. Appropriately segregated excavated media on Site;
7. Collected and analyzed end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
8. As part of development, installed a vapor barrier system beneath the building slab and

behind foundation walls. The vapor barrier consists of Raven Industries' VaporBlock Plus 20, a seven-layer co-extruded 20 mil vapor barrier made from polyethylene and EVOH resins. The vapor barrier extends throughout the entire area of the building and encapsulates the cellar. All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. The vapor barrier was installed by the foundation contractor, MRMD NY Corp.

9. As part of development, installed an engineered composite cover consisting of a 4 inch thick concrete basement slab underlain by a 20-mil vapor barrier installed over native soil, and a 4 inch thick concrete slab underlain by native soil for the at-grade parking garage. The contractor for the cover construction was MRMD NY Corp.;
10. 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 this plan. Collected, sampled and analyzed samples representative of excavated media as required by disposal facilities. Appropriately segregated excavated media on Site;
11. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;
12. Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations;
13. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations; and
14. Submitted a Sustainability Report;
15. Submitted a RAR that: certifies that the remedial requirements have been achieved; defines the Site boundaries; and describes the remedial activities including any changes from the RAWP.

REMEDIAL ACTION REPORT

1.0 SITE BACKGROUND

683 Marcy Avenue Realty LLC has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 683 Marcy Avenue in the Bedford-Stuyvesant section of Brooklyn, New York. The boundary of the property subject to this Remedial Action is shown in Figure 2 and includes, in its entirety, Brooklyn Block 1785 and Lot 1 (formerly Lots 1, 3, and 5). 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 683 Marcy Avenue in the Bedford-Stuyvesant section of Brooklyn, New York, and is identified as Block 1785 and Lots 1 (formerly Lots 1, 3 and 5) on the New York City Tax Map. Figure 1 shows the Site location. The Site is 10,000-square feet and is bounded by Kosciusko Street to the north, multi-family residential buildings to the south and to the east, and Marcy Avenue to the west. A map of the site boundary is shown in Figure 2.

Prior to redevelopment, the Site was undeveloped, vacant and uncapped.

1.2 Implemented Redevelopment Plan

A new 8-story apartment building with a full cellar level has been constructed at the Site. Layout of the site redevelopment is presented in Figure 3. The current zoning designation for the Site is R7A with a C2-4 commercial overlay. R7A is a contextual district that allows residential and community facility buildings. The use is consistent with existing zoning for the property.

The new 8-story apartment building occupies the entire footprint of the lot, but the 4,129 ft² cellar is only constructed along the Marcy Avenue half of the Site. The cellar consists of several storage rooms, the electrical meter room, domestic water and sprinkler pump room, refuse room, telecommunications room, and accessory residential space for the first floor apartments. The first

floor space immediately above the cellar consists of two apartments, the building’s lobby, bicycle storage room, and recreation area. The rear of the first floor consists of an at-grade parking garage that enters and exits from Kosciuszko Street. No cellar was constructed below the at-grade parking garage. The 2nd through 8th floors consist of residential units.

The top of the concrete cellar slab was installed a depth of approximately 10.5 feet below sidewalk level, which required excavation for the cellar to a depth of approximately 13 feet below grade. Additional excavation to a depth of approximately 2 feet was performed across the at-grade parking garage constructed in the rear of the building. A total of approximately 4,550.90 tons of non-hazardous historic fill material and soil was excavated for the new building.

1.3 Description of Surrounding Property

The area surrounding the Site is primarily a residential neighborhood. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 500 feet away from the Site. No hospitals, daycare facilities or schools are located within a 250 ft radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Kosciuszko Street	<u>Block 1780, Lots 1 and 78</u> (175 Kosciuszko Street) – Lot 1 is a small corner lot located on the northeast corner of Marcy Avenue and Kosciuszko Street. The lot is undeveloped and used for parking. Lot 78 is developed with a 2-story house and a small concrete capped side yard.
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East – Adjacent properties	<u>Block 1785, Lots 7501 and 7502</u> (174 and 176 Kosciuszko Street) – Both 20ft wide lots were recently re-developed with a single 4-story apartment building.
West – Opposite side of Marcy Avenue	<u>Block 1784, Lot 44</u> (152 Kosciuszko Street) – A 52,500 ft ² playground. The Banneker Playground consists of basketball courts, a hand ball court, swing sets, and jungle gyms.

1.4 Summary of Past Uses of Site and Environmental Findings

According to a review of NYC records, City Directory Listings and historic Sanborn maps, the Site was developed with a livery stable, upholstery shop and a retail store by at least 1888. By 1908, the upholstery shop had been converted to several retail stores and a portion of the livery

stable converted to a carriage house. Between 1908 and 1932, the livery stable (former Lot 1) was redeveloped with a garage. By 1962, an addition to the northern retail store had been constructed. By 1978, the retail shops had been demolished, except for the eastern addition to the northern retail store (along Kosciuszko Street). In 1988, the garage building was identified as a K of C Hall, but by 1991, the building was identified as an auto repair shop and the remaining portions of the former retail stores were demolished. The auto repair shop (former Lot 1) was demolished in September 2012.

Sanborn maps from 1932-1987 identified the presence of a gasoline storage tank (likely an underground tank) within the west-central portion of the former garage building (former Lot 1).

The AOCs identified for this Site include:

1. Historic fill layer is present at the Site from grade to a depth of approximately 7 feet; and
2. Area of underground storage tank depicted on 1932-1987 Sanborn maps.

1.5 Remedial Investigation

A remedial investigation was performed and the results are documented in a document called “*Remedial Investigation Report, 683 Marcy Avenue*”, dated February 2013 (Appendix A).

1.5.1 Summary of the Work Performed under the Remedial Investigation

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed eight soil borings across the entire project Site, and collected 16 soil samples and one duplicate soil sample for chemical analysis from the soil borings to evaluate soil quality;
3. Installed three groundwater monitoring wells throughout the Site and collected four groundwater samples and one duplicate groundwater sample for chemical analysis to evaluate groundwater quality; and
4. Installed 4 soil vapor probes throughout the Site and collected four soil vapor samples for chemical analysis.

1.5.2 Summary of Environmental Findings

1. Elevation of the property is approximately 43 feet.
2. Depth to groundwater is approximately 45 feet at the Site.
3. Depth to bedrock is at the Site is greater than 100 feet.
4. The stratigraphy of the Site, from the surface down, consists of a layer of historic fill that appears to extend to depths as great as 7ft in portions of the Site. The historic fill layer is underlain by a layer of coarse sand with large stones.
5. Soil/fill samples collected during the RI showed no detectable concentrations of PCBs. No chlorinated VOCs were detected, as the only VOC detected was naphthalene in one shallow soil sample at a concentration (0.100 ppm) below its Unrestricted Use SCO. Nine SVOCs including benzo(a)anthracene (max 65 ppm), benzo(a)pyrene (max 44 ppm), benzo(b)fluoranthene (max of 64 ppm), benzo(k)fluoranthene (max 17 ppm), chrysene (max of 53 ppm), fluoranthene (max of 160 ppm), indeno(1,2,3-cd)pyrene (max of 20 ppm), phenanthrene (max of 190 ppm), and pyrene (max of 120 ppm) were detected above their respective Restricted Residential Use SCOs within four of the eight shallow soil samples. The SVOCs detected above Restricted Residential SCOs are all PAH compounds and their concentrations and distributions, with the exception of one shallow sample with 905 ppm total SVOCs which will be treated as a hotspot, indicate that they are associated with historic fill material observed during the sampling. The metals copper, lead, mercury, and/or zinc exceeded Unrestricted Use SCOs in six of the eight shallow soil samples. Of these metals, lead (maximum of 445 ppm) and mercury (maximum of 1.45 ppm) also exceeded Restricted Residential SCOs. Six of the eight deep soil samples showed nickel (maximum of 128 ppm) and/or copper (maximum of 90.8 ppm) above Unrestricted Use SCOs. Pesticides including 4,4,-DDE (maximum of 0.010 ppm), 4,4,-DDT (maximum of 0.038 ppm), and dieldrin (maximum of 0.009 ppm) were detected within the shallow soil samples at concentrations above Unrestricted Use SCOs, but well below Restricted Residential SCOs. No VOCs, SVOCs, PCBs, or pesticides were detected above Unrestricted Use SCOs within any of the deep soil samples collected at the Site. Overall, the findings were consistent with observations for historical fill sites in areas throughout NYC.

6. Groundwater samples collected during the RI showed no detectable concentrations of pesticides, PCBs or SVOCs. No chlorinated VOCs were detected within either groundwater sample, but low levels of petroleum VOCs were detected within both groundwater samples. The VOCs 1,2,4-trimethylbenzene (max 140 ppb), 1,3,5-trimethylbenzene (max 51 ppb), isopropylbenzene (max 15 ppb), n-propylbenzene (max 30 ppb), and sec-butylbenzene (max 6 ppb) were detected above Groundwater Quality Standards (GQSs) in the southwest corner of the Site in proximity to a gasoline storage tank shown on 1932-1987 Sandborn maps. Concentrations of VOCs in the northwest corner of the Site were lower, with only n-propylbenzene (10 ppb) exceeding its GQS. Neither groundwater sample contained a detectable concentration of benzene, toluene, ethylbenzene, or xylene (BTEX) which indicates an older gasoline spill/release. The metals iron, magnesium, manganese, and sodium were detected above their respective NYSDEC GQS in all three dissolved groundwater samples.
7. Soil vapor samples collected during the RI showed petroleum and chlorinated VOCs at low concentrations. Tetrachloroethylene (PCE) was identified in all four soil vapor samples at a maximum concentration of 7.86 $\mu\text{g}/\text{m}^3$. Trichloroethylene (TCE) was reported within one of the four soil vapor samples at a concentration of 0.376 $\mu\text{g}/\text{m}^3$. Carbon Tetrachloride was reported in two of the four soil vapor samples at a maximum concentration of 0.503 $\mu\text{g}/\text{m}^3$. 1,1,1- TCA was not detected in soil vapor. The PCE and TCE concentrations are below the monitoring level ranges established within the State DOH soil vapor guidance matrix. Concentrations of petroleum-related VOCs were generally less than 10 $\mu\text{g}/\text{m}^3$. Overall the highest reported concentrations were for acetone (74.5 $\mu\text{g}/\text{m}^3$) and ethanol (55.2 $\mu\text{g}/\text{m}^3$).

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 November 28, 2012. A Remedial Investigation (RI) was performed in December of 2012 and January of 2013 and a RI Report dated February 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 February 2013 was prepared and released with a Fact Sheet on March 7, 2013, for a 30-day public comment period. The RAWP with a revised Stipulation List dated April 13, 2013, was approved by the New York City Office of Environmental Remediation (OER) on June 4, 2013. A pre-construction meeting was held on February 28, 2014, and remedial action began in March of 2014 and completed in May of 2015.

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 during soil disturbance activities;
3. Established Track 2 Restricted Residential Use Soil Cleanup Objectives (SCOs). Excavation and removal of soil/fill exceeding Restricted Residential Use SCOs and substantially achieved Track 2 SCOs for soil;
4. A total of 4,550.9 tons of soil and fill were removed during this remedial action. Excavated 1,600.92 tons of non-hazardous historic fill material from the top 2 feet across the Site and transported to Clean Earth of Carteret, and excavated 2,949.98 tons of fill material and native soil for the new building and transported to Clean Earth of

- Philadelphia. The street front half of the Site was excavated to a depth of approximately 13 feet for the new building's cellar level, and the rear of the Site was excavated to a depth of approximately 2 feet below grade for the parking area and building footings;
5. Removal of two 550-gallon gasoline underground storage tanks and closure of the associated NYSDEC Spill Number (1312247) in compliance with applicable local, State and Federal laws and regulations. NYSDEC Spill No. 1312247 was closed by the NYSDEC on April 21, 2016;
 6. 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 this plan. Collected, sampled and analyzed samples representative of excavated media as required by disposal facilities. Appropriately segregated excavated media on Site;
 7. Collected and analyzed end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
 8. As part of development, installed a vapor barrier system beneath the building slab and behind foundation walls. The vapor barrier consists of Raven Industries' VaporBlock Plus 20, a seven-layer co-extruded 20 mil vapor barrier made from polyethylene and EVOH resins. The vapor barrier extends throughout the entire area of the building and encapsulates the cellar. All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. The vapor barrier was installed by the foundation contractor, MRMD NY Corp.
 9. As part of development, installed an engineered composite cover consisting of a 4 inch thick concrete basement slab underlain by a 20-mil vapor barrier installed over native soil, and a 4 inch thick concrete slab underlain by native soil for the at-grade parking garage. The contractor for the cover construction was MRMD NY Corp.;
 10. 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 this plan. Collected, sampled and analyzed samples representative of excavated media as required by disposal facilities. Appropriately segregated excavated media on Site;
 11. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;

12. Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations;
13. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations; and
14. Submitted a Sustainability Report;
15. Submitted a RAR that: certifies that the remedial requirements have been achieved; defines the Site boundaries; and describes the remedial activities including any changes from the RAWP.

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 E.

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:

- Track 2 Restricted Residential Use SCOs were marginally exceeded in one end-point sample for SVOC's. All historic fill at the Site has been removed, and soil at the final

excavation depth consisted of native soil. All metals, VOC's, pesticides, and PCB's, and all remaining SVOC's, achieved Track 2 Restricted Residential Use SCO's. A tabular summary of the end-point soil sample results is included on Table 2 (SVOCs) and Table 4 (metals), and Restricted Residential Use SCO and Unrestricted Use SCO exceedences are posted on Figure 5.

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

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 Sunny Chen, Kristen Discenza, 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 MRMD NY Corp., and the developer was Elevation Holdings, LLC.

4.2 Site Controls

Site Preparation

Plans for the new building (NYC DOB Job number NB-320469961) were approved on July 9, 2013. Waste characterization soil sampling was performed on November 8, 2013, prior to mobilization to obtain soil disposal approval and to minimize the need for on-Site soil stockpiles. On March 26, 2013, 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 was performed to a depth of approximately 13 feet below grade for the building's cellar level that was constructed in the front half of the Site and excavation to a depth of approximately 1 to 2 feet was performed across the rear portion of the Site for construction of a new concrete slab and footings for the parking garage constructed in the rear half of the Site.

On March 31, 2013, two 550-gallon gasoline underground storage tanks were removed from the rear portion of former Lot 1. One of the tanks appeared to be formerly abandoned in place with water. During removal, the petroleum contaminated water spilled from the tank onto soil. The NYSDEC Spills Hotline was contacted and NYDEC Spill No. 13-12247 was assigned. The wet

soil was scraped up and stockpiled for off-Site disposal. EBC field screened soil across the spill area after the wet soil was removed. No odor or elevated PID readings were reported. EBC also field screened soil from immediately below the two tanks after they were removed. No physical or olfactory evidence of a petroleum contamination was noted. EBC collected two soil samples for laboratory analysis of VOCs and SVOCs. No VOCs or SVOCs were detected above Unrestricted Use SCOs or Protection of Groundwater SCOs.

No other physical or olfactory evidence of a spill was observed during Site excavation.

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 covers were inspected by the EBC QEP.

Truck Inspection

A stabilized construction entrance constructed of a bed of crushed concrete entered and exited from Kosciuszko Street. The stabilized entrance was inspected on a daily basis during soil loading activities and reinforced as needed with additional concrete material to prevent the accumulation of ruts, mud or soil and to minimize the potential for impacted soil to be dispersed beyond the Site boundary. 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

During removal of two 550-gallon gasoline underground storage tanks, petroleum impacted water was spilled onto surface soil. The soil was scraped up and stockpiled on and under a tarp to eliminate odors.

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 F.

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

4.3 Materials Excavation and Removal

4.3.1 Waste Characterization Soil Sampling

Waste characterization soil sampling was performed on November 18, 2013, by excavating seven test pits across the Site. Five of the test pits were excavated to a depth of approximately 11 feet within the area that required excavation for the new building's cellar, and two test pits were excavated within the slab on grade area that would only require excavation to approximately 1 to 2 feet below grade. From three of the five test pits in the cellar area and the two test pits in the slab on grade area, EBC formed one 5-pt composite waste characterization soil sample representing the interval 0 to 2 feet below grade. From the five test pits excavated within the cellar area, EBC formed 5-pt composite waste characterization soil sample representing the intervals 2 to 6 feet below grade and 6 to 11 feet below grade. In addition, EBC collected grab samples from each interval for analysis of VOCs. The composite soil samples were submitted to a laboratory for analysis of SVOCs, metals, TCLP metals, pesticides, herbicides, PCBs and RCRA characteristics and paint filter.

The following information was provided to Clean Earth, Inc. to obtain soil disposal approval: Remedial Investigation Report (EBC, February 2013), laboratory analytical report for waste characterization soil samples (York Analytical Laboratories, Inc., November 20, 2013), test pit sampling plan, and profile form. A copy of the sampling plan and analytical laboratory report is attached in Appendix G. Based upon the laboratory results of the waste characterization soil

samples, Clean Earth of Carteret accepted historic fill material/soil from across the Site from the interval 0 to 2 feet below grade, and Clean Earth of Philadelphia accepted historic fill material/soil from the interval 2 to 11 feet below grade. A copy of both soil disposal acceptance letters issued by Clean Earth is attached in Appendix H.

4.3.2 Historic Fill and Native Soil Excavation

Excavation of the top 2 feet of historic fill material/soil across the Site began on March 26, 2013. A total of approximately 1,600.92 tons of historic fill material/soil was transported to Clean Earth of Carteret. Excavation of the historic fill material and native soil to a depth of approximately 13 feet was performed in the front of the Site for construction of the new building's cellar. A total of approximately 2,949.98 tons of historic fill material/soil was transported to Clean Earth of Philadelphia.

Figure 5 depicts the areas and depths of excavation performed at the Site and the approximate location of the two 550-gallon gasoline underground storage tanks that were removed.

After excavation of the Site was completed, EBC collected four endpoint soil samples. The approximate collection location of the endpoint soil samples is shown on Figure 5.

4.3.3 Tank and Petroleum Contaminated Soil Removal

On March 31, 2013, two 550-gallon gasoline underground storage tanks were encountered in the in the southeast corner of the Site (rear of former Lot 1). One of the tanks appeared to be formerly abandoned in place with water. The excavation contractor lifted the tank from the ground, spilling the petroleum impacted water onto surface soil. The NYSDEC Spills Hotline was contacted and NYSDEC Spill No. 13-12247 was assigned. The wet soil was scraped up and stockpiled for off-Site disposal. EBC field screened soil across the spill area after the wet soil was removed and no odor or elevated PID readings were reported. The stockpile was transported to Clean Earth of Carteret along with other soil excavated at the Site.

EBC also field screened soil from immediately below the two tanks after they were removed. No physical or olfactory evidence of a petroleum contamination was noted. EBC collected two soil samples for laboratory analysis of VOCs and SVOCs. No VOCs or SVOCs were detected above

Unrestricted Use SCOs or Protection of Groundwater SCOs. The approximate locations of the underground storage tanks are shown on Figure 5.

Both tanks were cut and cleaned by ABC Tank on March 31, 2014. A copy of the non-hazardous manifest for approximately 600 gallons of water/oil removed from the tanks is included in Appendix I. A copy of the NYFD Tank Removal Affidavit is attached in Appendix I. A NYSDEC PBS Application was submitted to the NYSDEC to register/deregister the two 550-gallon gasoline underground storage tanks. A copy of the NYSDEC PBS application is attached in Appendix I.

Closure of the NYSDEC Spill Number 13-12247 was completed independent of OER approved RAP and under NYSDEC authority. NYSDEC Spill No. 1312247 was closed by the NYSDEC on April 21, 2016

4.3.4 Spill End Point Sample Results

Following excavation of the two 550-gallon underground storage tanks and the petroleum impacted soil from the surface spill, EBC collected two endpoint soil samples (Tank Bottom EP1 and Tank Bottom EP24). The location of both spill endpoint soil samples is shown on Figure 5. Dedicated disposable sampling equipment was utilized to collect each endpoint sample, eliminating the need for field equipment (rinsate) blanks.

The two spill 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°C.

Tank Bottom EP1 and Tank Bottom EP2 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 (CP51 list); and
- Semi-volatile organic compounds by EPA Method 8270 (CP51 list).

A copy of the laboratory report for the two spill endpoint soil samples is attached in Appendix G. A tabular summary of the spill end-point soil sample results is included on Table 1 (VOCs) and Table 2 (SVOCs). No VOCs or SVOCs were detected above Unrestricted Use SCOs within either spill endpoint soil sample.

4.3.5 End Point Sample Results

Following excavation for the new building, EBC collected four endpoint soil samples (EP1 through EP4). The location of each of the endpoint soil samples is shown on Figure 5. 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°C.

Endpoint samples EP1 through EP4 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:

- Semi-volatile organic compounds by EPA Method 8270; and
- Target Analyte List metals by EPA Method 6010 and 7471.

A copy of each of the laboratory reports for the endpoint soil samples is attached in Appendix H. A tabular summary of the end-point soil sample results is included on Table 2 (SVOCs) and Table 4 (metals), and Restricted Residential Use SCO and Unrestricted Use SCO exceedences are posted on Figure 5. The laboratory results of the eight soil samples collected at slightly above the final excavation depth during the RI (10-12 feet below grade) are summarized on Tables 1 through 4. As shown on Tables 2, several SVOCs including benz(a)anthracene (2,000 ppb), benzo(a)pyrene (1,800 ppb), benzo(b)fluoranthene (1,800 ppb), chrysene (2,900 ppb), and indeno(1,2,3-cd)pyrene (510 ppb) were detected slightly above Track 2 Restricted Residential Use SCOs within 1 of the 4 endpoint soil samples (EP4), and the metals copper and/or nickel were detected at a concentrations slightly above Track 1 Unrestricted Use SCOs within several

of the Remedial Investigation soil samples. No VOCs, SVOCs, pesticides, or PCBs were detected above Track 1 Unrestricted Use SCOs within any of the eight soil samples collected during the RI (10-12 feet below grade) and no VOCs, pesticides, PCBs or metals were detected above Track 1 Unrestricted Use SCOs within any of the four endpoint soil samples collected at the Site following excavation for the new building.

4.4 Materials Disposal

From March 26, 2013 to October 6, 2014, a total of approximately 1,600.92 tons of non-hazardous historic fill material/soil was excavated and transported on a non-hazardous manifest to Clean Earth of Carteret (CEC). CEC is located in Carteret, NJ. CEC is a Class B Recycling Center operating under permit No. CBG060003 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 L.

An additional 2,949.98 tons of non-hazardous historic fill material/soil was excavated across the Site to a depth of approximately 13 feet below grade for installation of the new building's cellar and loaded into 10-wheel dump trucks for transport to Clean Earth of Philadelphia. Clean Earth of Philadelphia (CEP) is located at 3201 South 61st Street, Philadelphia, Pennsylvania 19153. The CEP facility is a thermal desorption and physical treatment facility operating under PADEP Residual Waste Permit 301220. Copies of each of the non-hazardous manifests and associated scale tickets are included in Appendix K.

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

Table 6 - Disposal Quantities and Disposal Facilities

Destination	Type of Material	Quantity
Clean Earth of Philadelphia 3201 South 61 st Street, Philadelphia, PA 19153	Non-Hazardous Fill Material	2,949.98 tons
Clean Earth of Carteret 24 Middlesex Avenue, Carteret, NJ 07008	Non-Hazardous Fill Material	1,600.92 tons

4.5 Backfill Import

No backfill was imported to the Site.

5.0 ENGINEERING CONTROLS

A Track 2 Remedial Action was achieved and Engineering Controls are not required. However, as part of construction, several protective systems were installed. 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 building's 4-inch thick concrete cellar slab poured over a 20-mil vapor barrier installed on native soil, and a 4-inch thick concrete at-grade slab installed on native soil. The cellar architectural floor plan attached as Figure 6 depicts the design for each remedial cover type used on this Site. Figure 8 shows the location of each cover type built at the Site. Photographs of construction of the Composite Cover System are included in Appendix D. The composite cover system was installed by Reliable NYC Construction.

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. The vapor barrier below the building's cellar slab and behind foundation walls to grade consists of Raven Industries' VaporBlock Plus 20, which is a seven-layer co-extruded 20 mil vapor barrier made from polyethylene and EVOH resins. All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. Photos of the vapor barrier being installed are included in Appendix D and the approximate layout is shown on Figure 7. The vapor barrier was installed by the foundation contractor, MRMD NY Corp.

6.0 INSTITUTIONAL CONTROLS

A Track 2 Residential Remedial Action was achieved, therefore Institutional Controls are not required for this project.

7.0 SITE MANAGEMENT PLAN

A Track 2 Residential Remedial Action was achieved and Site Management is not required.

TABLES

TABLE 1
683 Marcy Avenue, Brooklyn, New York
Remedial Investigation and Endpoint Soil Sample 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															
			B1		B2		B3		B4		B5		B6		B7		B8	
			12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012	
			(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg	
Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
1,1,1,2-Tetrachloroethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,1,1-Trichloroethane	680	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,1,2,2-Tetrachloroethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,1,2-Trichloroethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,1-Dichloroethane	270	26,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,1-Dichloroethene	330	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,1-Dichloropropene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2,3-Trichlorobenzene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2,3-Trichloropropane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2,4-Trichlorobenzene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2,4-Trimethylbenzene	3,600	52,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2-Dibromo-3-chloropropane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2-Dichlorobenzene	1,100	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2-Dichloroethane	20	3,100	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,2-Dichloropropane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,3,5-Trimethylbenzene	8,400	52,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,3-Dichlorobenzene	2,400	4,900	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,3-Dichloropropane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
1,4-Dichlorobenzene	1,800	13,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
2,2-Dichloropropane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
2-Chlorotoluene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
2-Hexanone (Methyl Butyl Ketone)			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
2-Isopropyltoluene			ND	27	ND	27	ND	26	ND	26	ND	27	ND	27	ND	27	ND	26
4-Chlorotoluene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
4-Methyl-2-Pentanone			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Acetone	50	100,000	ND	27	ND	27	ND	26	ND	26	ND	27	ND	27	ND	27	ND	26
Acrylonitrile			ND	27	ND	27	ND	26	ND	26	ND	27	ND	27	ND	27	ND	26
Benzene	60	4,900	ND	11	ND	11	ND	10	ND	10	ND	11	ND	11	ND	11	ND	11
Bromobenzene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Bromochloromethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Bromodichloromethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Bromoform			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Bromomethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Carbon Disulfide			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Carbon tetrachloride	760	2,400	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Chlorobenzene	1,100	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Chloroethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Chloroform	370	49,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Chloromethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
cis-1,2-Dichloroethane	250	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
cis-1,3-Dichloropropene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Dibromochloromethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Dibromoethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Dibromomethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Dichlorodifluoromethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Ethylbenzene	1,000	41,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Hexachlorobutadiene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Isopropylbenzene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
m&p-Xylenes	260	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Methyl Ethyl Ketone (2-Butanone)	120	100,000	ND	27	ND	27	ND	26	ND	26	ND	27	ND	27	ND	27	ND	26
Methyl t-butyl ether (MTBE)	930	100,000	ND	11	ND	11	ND	10	ND	10	ND	11	ND	11	ND	11	ND	11
Methylene chloride	50	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Naphthalene	12,000	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
n-Butylbenzene	12,000	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
n-Propylbenzene	3,900	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
o-Xylene	260	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
p-Isopropyltoluene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
sec-Butylbenzene	11,000	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Styrene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
tert-Butylbenzene	5,900	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Tetrachloroethane	1,300	19,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Tetrahydrofuran (THF)			ND	11	ND	11	ND	10	ND	10	ND	11	ND	11	ND	11	ND	11
Toluene	700	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Total Xylenes			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
trans-1,2-Dichloroethane	190	100,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
trans-1,3-Dichloropropene			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
trans-1,4-dichloro-2-butene			ND	11	ND	11	ND	10	ND	10	ND	11	ND	11	ND	11	ND	11
Trichloroethane	470	21,000	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Trichlorofluoromethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Trichlorotrifluoroethane			ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Vinyl Chloride	20	900	ND	5.4	ND	5.3	ND	5.2	ND	5.2	ND	5.4	ND	5.3	ND	5.3	ND	5.3
Total BTEX Concentration			0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Total VOCs Concentration			0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	

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 RRSO Guidance Value

TABLE 2
683 Marcy Avenue, Brooklyn, New York
Remedial Investigation and Endpoint Soil Sample 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 Samples												Endpoint Soil Samples											
			B1		B2		B3		B4		B5		B6		B7		B8		EP1		EP2		EP3		EP4	
			12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		4/25/2014		5/5/2014		6/3/2014		5/2/2014	
			(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
1,2,4,5-Tetrachlorobenzene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
1,2,4-Trichlorobenzene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
1,2-Dichlorobenzene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
1,2-Diphenylhydrazine			ND	360	ND	350	ND	340	ND	340	ND	350	ND	350	ND	350	ND	350	< 240	240	< 250	250	< 240	240	< 500	500
1,3-Dichlorobenzene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
1,4-Dichlorobenzene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2,4,5-Trichlorophenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2,4,6-Trichlorophenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2,4-Dichlorophenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2,4-Dimethylphenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2,4-Dinitrophenol			ND	580	ND	560	ND	550	ND	540	ND	570	ND	550	ND	550	ND	550	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
2,4-Dinitrotoluene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2,6-Dinitrotoluene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2-Chloronaphthalene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2-Chlorophenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2-Methylnaphthalene			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2-Methylphenol (o-cresol)	330	100,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
2-Nitroaniline			ND	580	ND	560	ND	550	ND	540	ND	570	ND	550	ND	550	ND	550	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
2-Nitrophenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
3,4-Methylphenol (m&p-cresol)			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
3,3'-Dichlorobenzidine			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 680	680	< 700	700	< 700	700	< 1400	1,400
3-Nitroaniline			ND	580	ND	560	ND	550	ND	540	ND	570	ND	550	ND	550	ND	550	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
4,6-Dinitro-2-methylphenol			ND	1,000	ND	1,000	ND	1,000	ND	980	ND	1,000	ND	1,000	ND	1,000	ND	1,000	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
4-Bromophenyl phenyl ether			ND	360	ND	350	ND	340	ND	340	ND	350	ND	350	ND	350	ND	350	< 240	240	< 250	250	< 240	240	< 500	500
4-Chloro-3-methylphenol			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
4-Chloroaniline			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 680	680	< 700	700	< 700	700	< 1400	1,400
4-Chlorophenyl phenyl ether			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
4-Nitroaniline			ND	580	ND	560	ND	550	ND	540	ND	570	ND	550	ND	550	ND	550	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
4-Nitrophenol			ND	1,000	ND	1,000	ND	1,000	ND	980	ND	1,000	ND	1,000	ND	1,000	ND	1,000	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
Acenaphthene	20,000	100,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	390	500
Acenaphthylene	100,000	100,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Acetophenone			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Aniline			ND	1,000	ND	1,000	ND	1,000	ND	980	ND	1,000	ND	1,000	ND	1,000	ND	1,000	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
Anthracene	100,000	100,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	260	500
Benz(a)anthracene	1,000	1,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	130	240	2,000	500
Benzenzidine			ND	430	ND	420	ND	410	ND	410	ND	430	ND	420	ND	420	ND	420	< 680	680	< 700	700	< 700	700	< 1400	1,400
Benzo(a)pyrene	1,000	1,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	120	240	1,800	500
Benzo(b)fluoranthene	1,000	1,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	160	240	1,800	500
Benzo(ghi)perylene	100,000	100,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	720	500
Benzo(k)fluoranthene	800	1,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	580	500
Benzoic acid			ND	1,000	ND	1,000	ND	1,000	ND	980	ND	1,000	ND	1,000	ND	1,000	ND	1,000	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
Benzyl butyl phthalate			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Bis(2-chloroethoxy)methane			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Bis(2-chloroethoxy)ether			ND	360	ND	350	ND	340	ND	340	ND	350	ND	350	ND	350	ND	350	< 240	240	< 250	250	< 240	240	< 500	500
Bis(2-chloroisopropyl)ether			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Bis(2-ethylhexyl)phthalate			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Carbazole			ND	540	ND	530	ND	520	ND	510	ND	530	ND	520	ND	520	ND	520	< 1700	1,700	< 1800	1,800	< 1700	1,700	< 3600	3,600
Chrysene	1,000	1,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	120	240	2,900	500
Dibenz(a,h)anthracene	330	330	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	2,900	500
Dibenzofuran	7,000	59,000	ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Diethyl phthalate			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240	< 500	500
Dimethylphthalate			ND	250	ND	250	ND	240	ND	240	ND	250	ND	240	ND	240	ND	240	< 240	240	< 250	250	< 240	240		

TABLE 3
683 Marcy Avenue, Brooklyn, New York
Remedial Investigation and Endpoint Soil Sample 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																	
			B1		B2		B3		B4		B5		B6		B7		B8			
			12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012			
			(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg			
Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
4,4' -DDD	3.3	2,600	ND	2.1	ND	2.1	ND	2	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1		
4,4' -DDE	3.3	1,800	ND	2.1	ND	2.1	ND	2	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1		
4,4' -DDT	3.3	1,700	ND	2.1	ND	2.1	ND	2	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1		
a-BHC	20	97	ND	3.4	ND	3.3	ND	3.3	ND	3.3	ND	3.4	ND	3.4	ND	3.4	ND	3.3		
Alachlor			ND	3.4	ND	3.3	ND	3.3	ND	3.3	ND	3.4	ND	3.4	ND	3.4	ND	3.3		
Aldrin	5	19	ND	1.1	ND	1	ND	1.1	ND	1										
b-BHC	36	72	ND	3.4	ND	3.3	ND	3.3	ND	3.3	ND	3.4	ND	3.4	ND	3.4	ND	3.3		
Chlordane			ND	11	ND	10	ND	11	ND	10										
d-BHC	40	100,000	ND	3.4	ND	3.3	ND	3.3	ND	3.3	ND	3.4	ND	3.4	ND	3.4	ND	3.3		
Dieldrin	5	39	ND	1.1	ND	1	ND	1.1	ND	1										
Endosulfan I	2,400	4,800	ND	3.4	ND	3.3	ND	3.3	ND	3.3	ND	3.4	ND	3.4	ND	3.4	ND	3.3		
Endosulfan II	2,400	4,800	ND	6.9	ND	6.6	ND	6.5	ND	6.6	ND	6.8	ND	6.8	ND	6.8	ND	6.7		
Endosulfan sulfate	2,400	4,800	ND	6.9	ND	6.6	ND	6.5	ND	6.6	ND	6.8	ND	6.8	ND	6.8	ND	6.7		
Endrin	14	2,200	ND	6.9	ND	6.6	ND	6.5	ND	6.6	ND	6.8	ND	6.8	ND	6.8	ND	6.7		
Endrin aldehyde			ND	6.9	ND	6.6	ND	6.5	ND	6.6	ND	6.8	ND	6.8	ND	6.8	ND	6.7		
Endrin ketone			ND	6.9	ND	6.6	ND	6.5	ND	6.6	ND	6.8	ND	6.8	ND	6.8	ND	6.7		
g-BHC	100	280	ND	1.1	ND	1	ND	1.1	ND	1										
Heptachlor	42	420	ND	2.1	ND	2.1	ND	2	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1		
Heptachlor epoxide			ND	3.4	ND	3.3	ND	3.3	ND	3.3	ND	3.4	ND	3.4	ND	3.4	ND	3.3		
Methoxychlor			ND	34	ND	33	ND	33	ND	33	ND	34	ND	34	ND	34	ND	33		
Toxaphene			ND	34	ND	33	ND	33	ND	33	ND	34	ND	34	ND	34	ND	33		
PCB-1016	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1221	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1232	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1242	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1248	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1254	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1260	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1262	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		
PCB-1268	100	1,000	ND	72	ND	69	ND	68	ND	69	ND	70	ND	70	ND	71	ND	70		

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
683 Marcy Avenue, Brooklyn, New York
Remedial Investigation and Endpoint Soil Sample Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Samples												Endpoint Soil Samples											
			B1		B2		B3		B4		B5		B6		B7		B8		EP1		EP2		EP3		EP4	
			12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		12/28/2012		4/25/2014		5/5/2014		6/3/2014		5/21/2014	
			(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		(10-12) µg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
Aluminum			4,720	56	9,160	53	10,500	52	13,500	51	10,200	50	9,050	56	9,170	50	7,330	51	4,990	33	4,810	33	7,230	37	7,380	33
Antimony			BRL	3.7	BRL	3.5	BRL	3.5	BRL	3.4	BRL	3.4	BRL	3.7	BRL	3.4	BRL	3.4	< 1.6	1.6	< 1.7	1.7	< 1.9	1.9	< 1.6	1.6
Arsenic	13	16	1.1	0.7	3	0.7	3.7	0.7	2.4	0.7	2.2	0.7	3.6	0.7	1.7	0.7	1.5	0.7	0.9	0.7	1.6	0.7	2.5	0.7	2.3	0.7
Barium	350	350	33	0.37	52.6	0.35	78	0.35	68	0.34	114	0.34	46	0.37	49.7	0.34	43.4	0.34	25.9	0.7	26.9	0.7	38.6	0.7	51.9	0.7
Beryllium	7.2	14	0.39	0.3	0.65	0.28	0.62	0.28	0.64	0.27	0.63	0.27	0.69	0.3	0.55	0.27	0.53	0.27	0.32	0.26	0.34	0.27	0.46	0.3	0.41	0.26
Cadmium	2.5	2.5	BRL	0.37	BRL	0.35	BRL	0.35	BRL	0.34	BRL	0.34	BRL	0.37	BRL	0.34	BRL	0.34	< 0.33	0.33	< 0.33	0.33	< 0.37	0.37	< 0.33	0.33
Calcium			10,600	5.6	3,440	5.3	3,530	5.2	5,300	5.1	3,670	5	2,890	5.6	2,210	5	1,760	5.1	1,320	3.3	1,480	3.3	1,310	37	1,770	3.3
Chromium			15.4	0.37	29	0.35	27.4	0.35	52.2	0.34	19.4	0.34	27.5	0.37	26.9	0.34	25.3	0.34	12.3	0.33	12.1	0.33	16.1	0.37	17.9	0.33
Cobalt			5.45	0.37	9.45	0.35	8.74	0.35	14.6	0.34	11.3	0.34	10.2	0.37	7.4	0.34	6.98	0.34	4.69	0.33	5.76	0.33	6.71	0.37	6.5	0.33
Copper	50	270	15	0.37	53	0.35	90.8	0.35	34.5	0.34	57.5	0.34	24.3	0.37	28.9	0.34	21.5	0.34	10.9	3.3	21.6	0.33	19.7	0.37	18.6	0.33
Iron			10,700	56	19,900	53	22,500	52	27,600	51	35,100	50	16,200	56	18,900	50	16,000	51	9,680	33	12,100	33	18,100	37	17,800	33
Lead	63	400	7.64	0.37	9.08	0.35	11.9	0.35	12.9	0.34	44.2	0.34	21.1	0.37	10.9	0.34	10	0.34	3.9	0.7	11.8	0.7	20.5	0.7	32.8	0.7
Magnesium			2,690	5.6	4,510	5.3	5,080	5.2	8,970	5.1	5,780	5.0	6,000	5.6	4,860	5.0	4,910	5.1	2,990	3.3	2,820	3.3	2,670	3.7	2,240	3.3
Manganese	1,600	2,000	352	3.7	474	3.5	373	3.5	445	3.4	697	3.4	326	3.7	343	3.4	466	3.4	313	3.3	280	3.3	421	3.7	458	3.3
Mercury	0.18	0.81	BRL	0.07	BRL	0.07	BRL	0.07	BRL	0.08	BRL	0.06	BRL	0.08	BRL	0.07	BRL	0.07	< 0.07	0.07	< 0.06	0.06	< 0.06	0.06	< 0.07	0.07
Nickel	30	140	23.4	0.37	38.9	0.35	35.5	0.35	128	0.34	29.1	0.34	53.3	0.37	29.7	0.34	30.5	0.34	26.8	0.33	27.1	0.33	25.5	0.37	16	0.33
Potassium			1,450	5.6	2,020	5.3	3,140	5.2	3,790	5.1	3,450	5.0	2,610	5.6	2,960	5	2,970	5.1	1,980	7	1,160	7	1,140	7	1,300	7
Selenium	3.9	36	BRL	1.5	BRL	1.4	BRL	1.4	BRL	1.4	BRL	1.3	BRL	1.5	BRL	1.3	BRL	1.3	< 1.3	1.3	< 1.3	1.3	< 1.5	1.5	< 1.3	1.3
Silver	2	36	BRL	0.37	BRL	0.35	BRL	0.35	BRL	0.34	BRL	0.34	BRL	0.37	BRL	0.34	BRL	0.34	< 0.33	0.33	< 0.33	0.33	< 0.37	0.37	< 0.33	0.33
Sodium			180	5.6	466	5.3	533	5.2	605	5.1	562	5	497	5.6	258	5	307	5.1	231	7	153	7	118	7	160	7
Thallium			BRL	0.6	BRL	0.6	BRL	0.6	BRL	0.5	BRL	0.5	BRL	0.6	BRL	0.5	BRL	0.5	< 1.3	1.3	< 1.3	1.3	< 1.5	1.5	< 1.3	1.3
Vanadium			21.4	0.37	35.2	0.35	35.9	0.35	46.3	0.34	94.8	0.34	32.8	0.37	41.9	0.34	28.5	0.34	19.4	0.3	20.5	0.3	25.7	0.4	27.3	0.3
Zinc	109	2,200	26.1	0.37	48.6	0.35	81.4	0.35	55.9	0.34	37.6	0.34	59	0.37	53.2	0.34	51.9	0.34	19.1	0.7	29.1	0.7	37.4	0.7	38.4	0.7

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
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			
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
Acenaphthylene	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
Benzo(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 5
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.

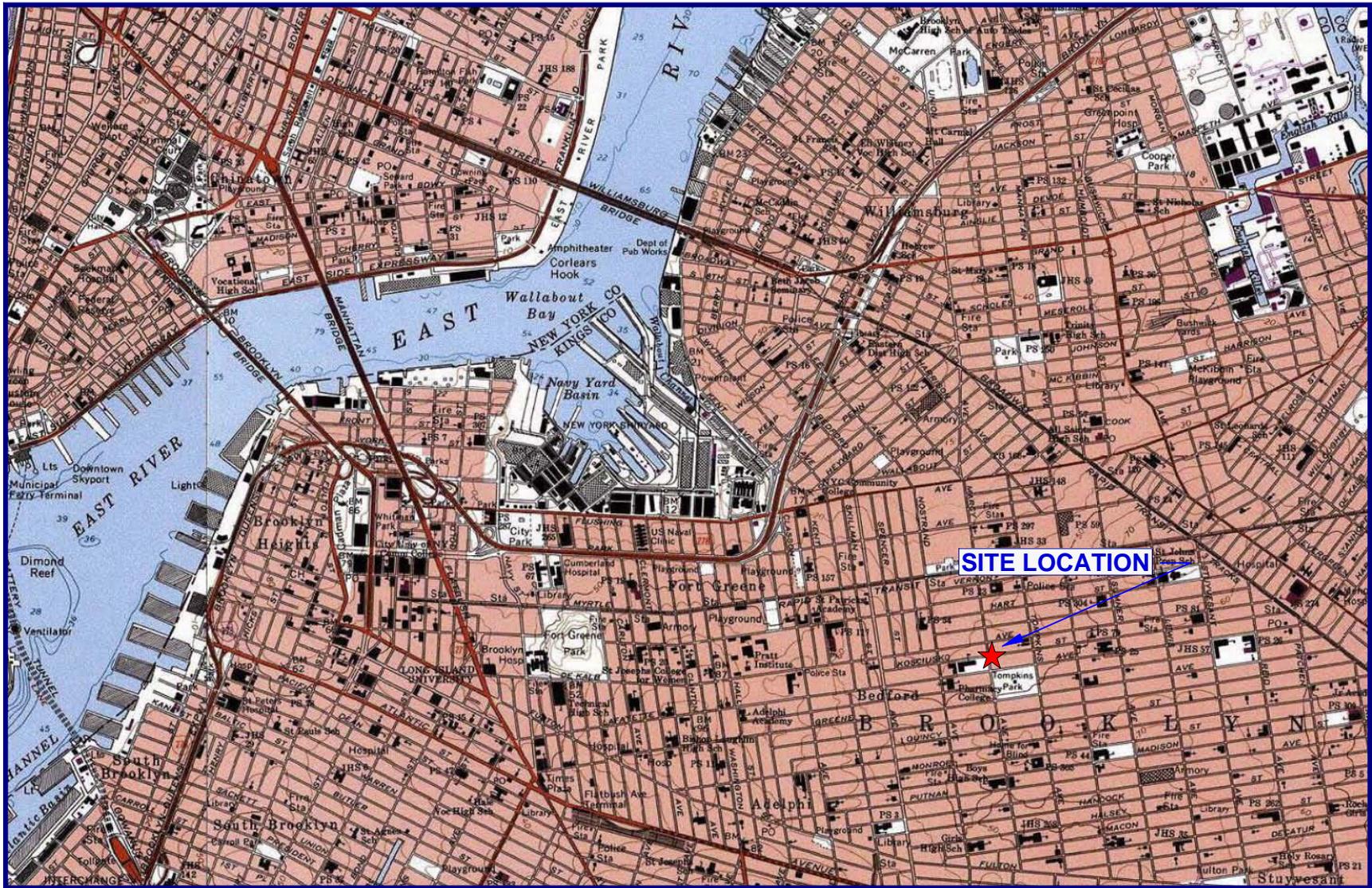
b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

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



40°43.000' N

40°42.000' N

40°41.000' N

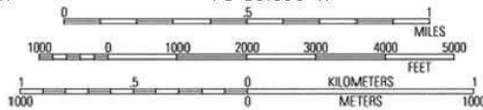
74°00.000' W

73°59.000' W

73°58.000' W

73°57.000' W

WGS84 73°56.000' W



MIN ↑ TN
13°
10/30/11

USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet



ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NY 11961

Phone 631.504.6000
Fax 631.924.2780

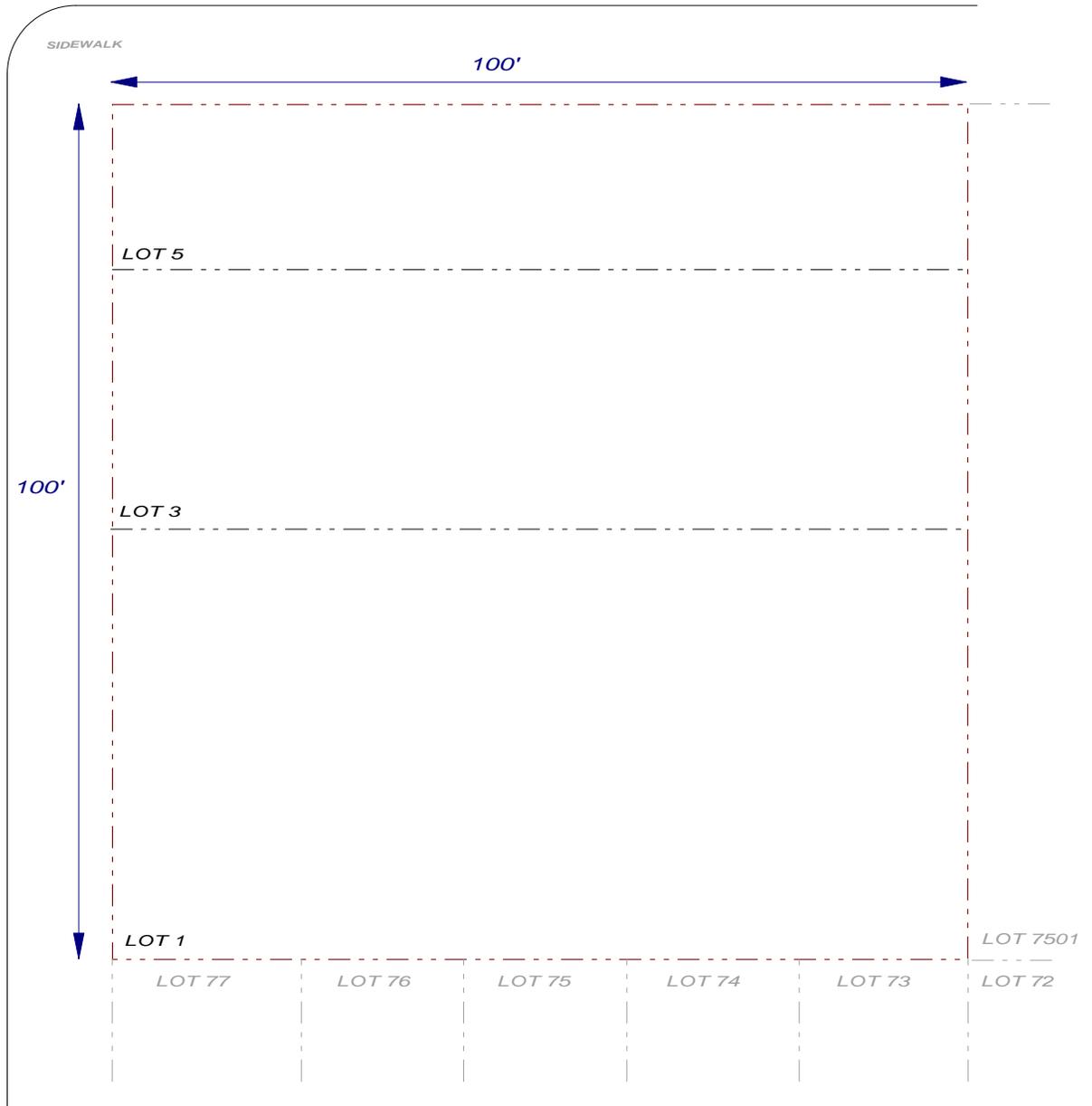
**683 MARCY AVENUE
BROOKLYN, NY**

FIGURE 1 SITE LOCATION MAP



KOSCIUSZKO STREET

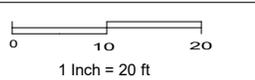
MARCY AVENUE



Key

- - - Site Boundary
- Dimensions

Scale



Phone 631.504.6000
Fax 631.924.2870

ENVIRONMENTAL BUSINESS CONSULTANTS

Figure No.
2

Site Name: REDEVELOPMENT PROJECT

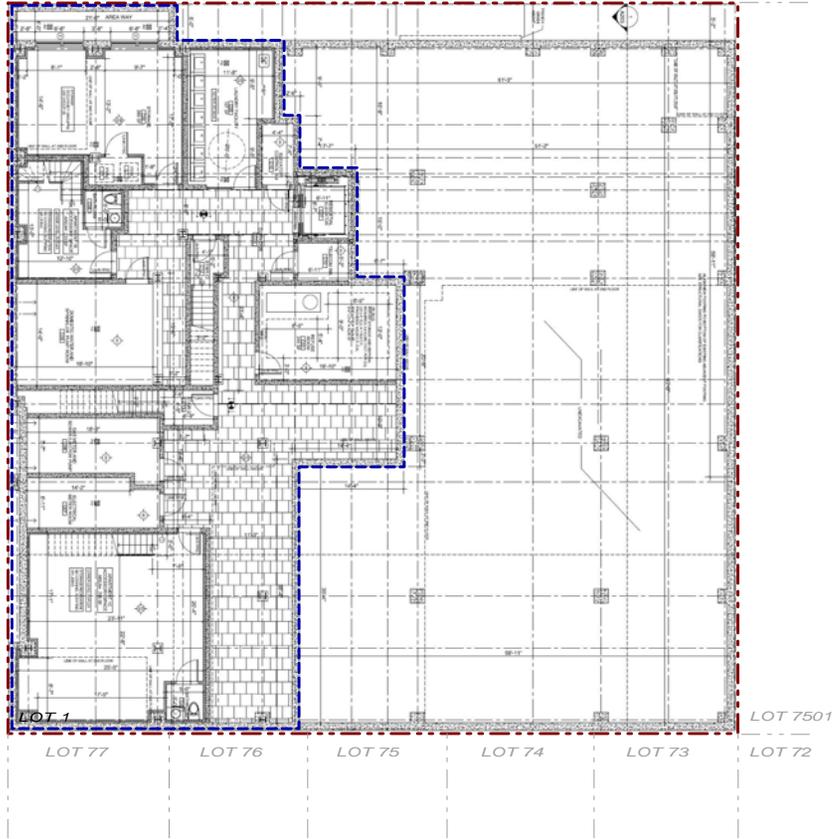
Site Address: 683 MARCY AVENUE, BROOKLYN, NY

Drawing Title: SITE PLAN

Cellar Floor Plan

KOSCIUSZKO STREET

SIDEWALK



- Key**
- - - Site Boundary
 - - - Basement Boundary

MARCY AVENUE

SIDEWALK

Elevation Plan



EBC
 ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
 Fax 631.924.2870

Figure No.
3

Site Name:	REDEVELOPMENT PROJECT
Site Address:	683 MARCY AVENUE, BROOKLYN, NY
Drawing Title:	REDEVELOPMENT PLAN

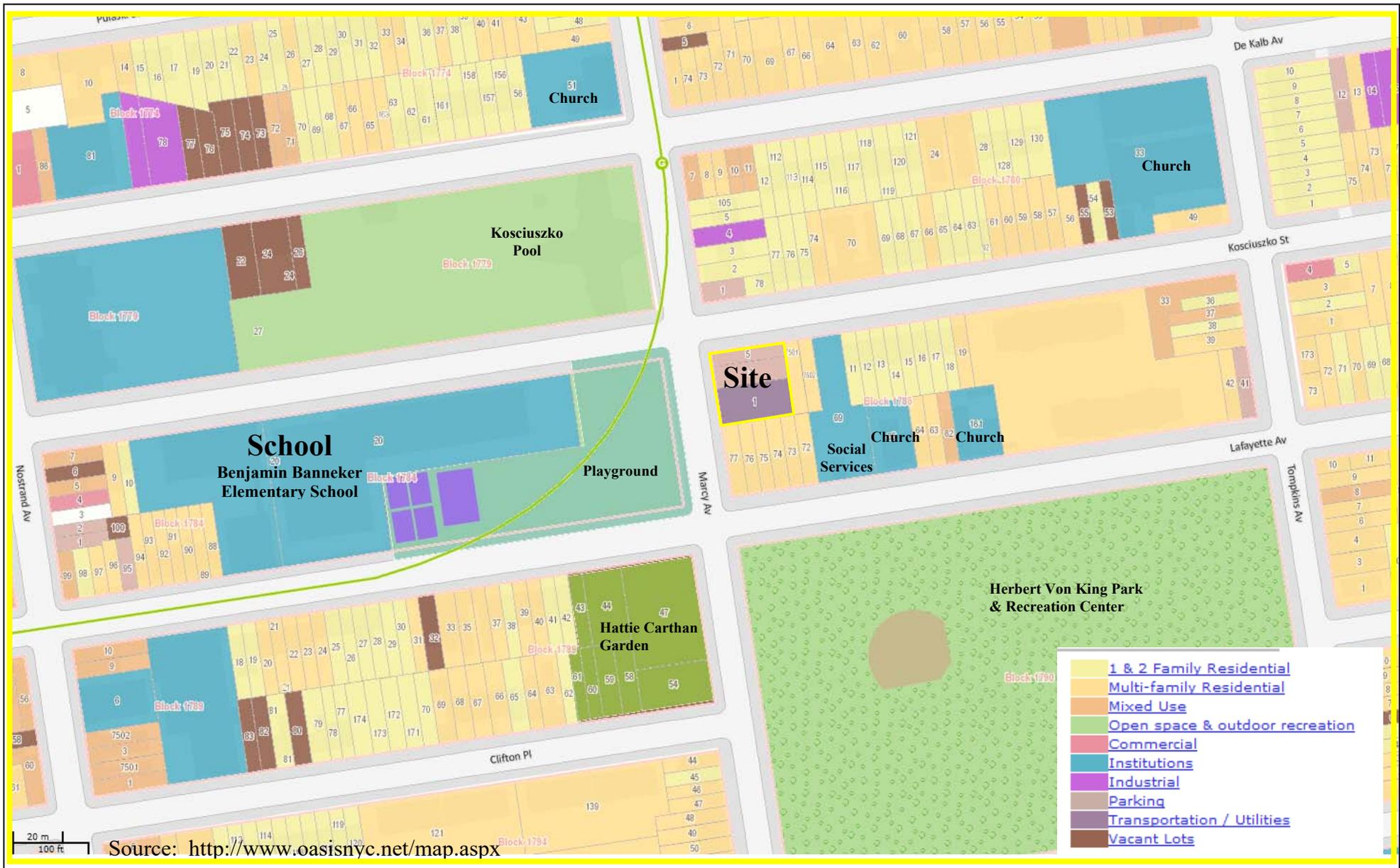


FIGURE 4
SURROUNDING LAND USE MAP

683 MARCY AVENUE
 BROOKLYN, NY 11216



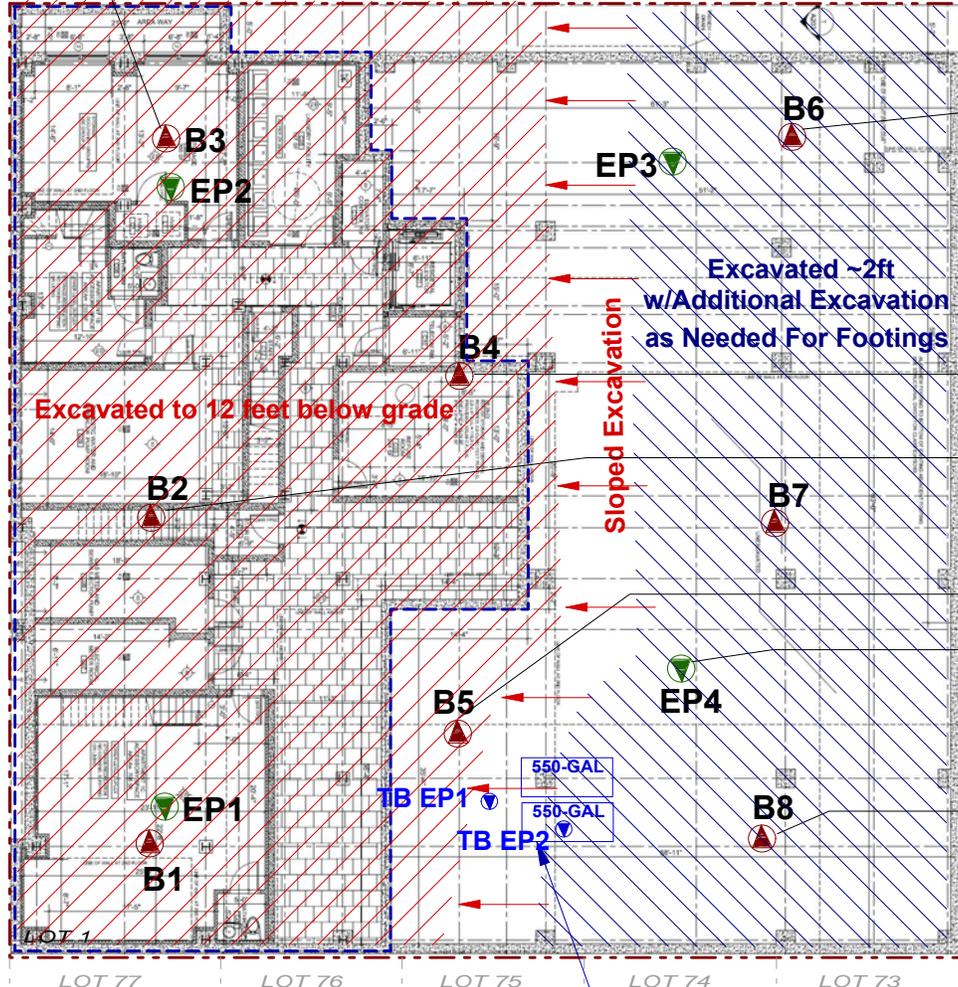
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 PHONE: (631) 504-6000 FAX: (631) 924-2870

KOSCIUSZKO STREET

SIDEWALK



B3 (10-12')	
Copper	90.8
Nickel	35.5



B6 (10-12')	
Nickel	53.3

B4 (10-12')	
Nickel	128

B2 (10-12')	
Nickel	38.9

B5 (10-12')	
Copper	57.5

EP4 (2' bg)	
Benzo(a)anthracene	2,000
Benzo(a)pyrene	1,800
Benzo(b)fluoranthene	1,800
Chrysene	2,900
Indeno(1,2,3-cd)pyrene	510

B8 (10-12')	
Nickel	30.5

MARCY AVENUE

SIDEWALK

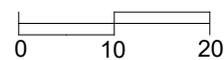
LOT 77 LOT 76 LOT 75 LOT 74 LOT 73 LOT 72

Two Gasoline USTs Removed 3/31/2014

Key

- - - Site Boundary
- - - Basement Boundary
- Endpoint Sampling Location
- RI Soil Boring Location
- Spill Endpoint Location

Scale



1 Inch = 20 ft

- Exceeds Unrestricted Use SCOs
- Exceeds Restricted Residential Use SCOs

REVISION No.	DATE	REMARKS
01	11/23/11	SCHEMATIC DESIGN
02	6/25/14	PLAN CHANGES / LAYOUT
03	10/2/14	ISSUE TO CONTRACTOR PLAN COORDINATION
04	01/16/15	ISSUE TO CONTRACTOR FIELD OFFICE

AS BUILT PLANS
4/5/2016

PROJECT DIRECTORY

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Brooklyn, NY 11216
Block: 1785 Lot: 1

NB DOB#-320469961

Title:
CELLAR FLOOR PLAN

FIGURE 6

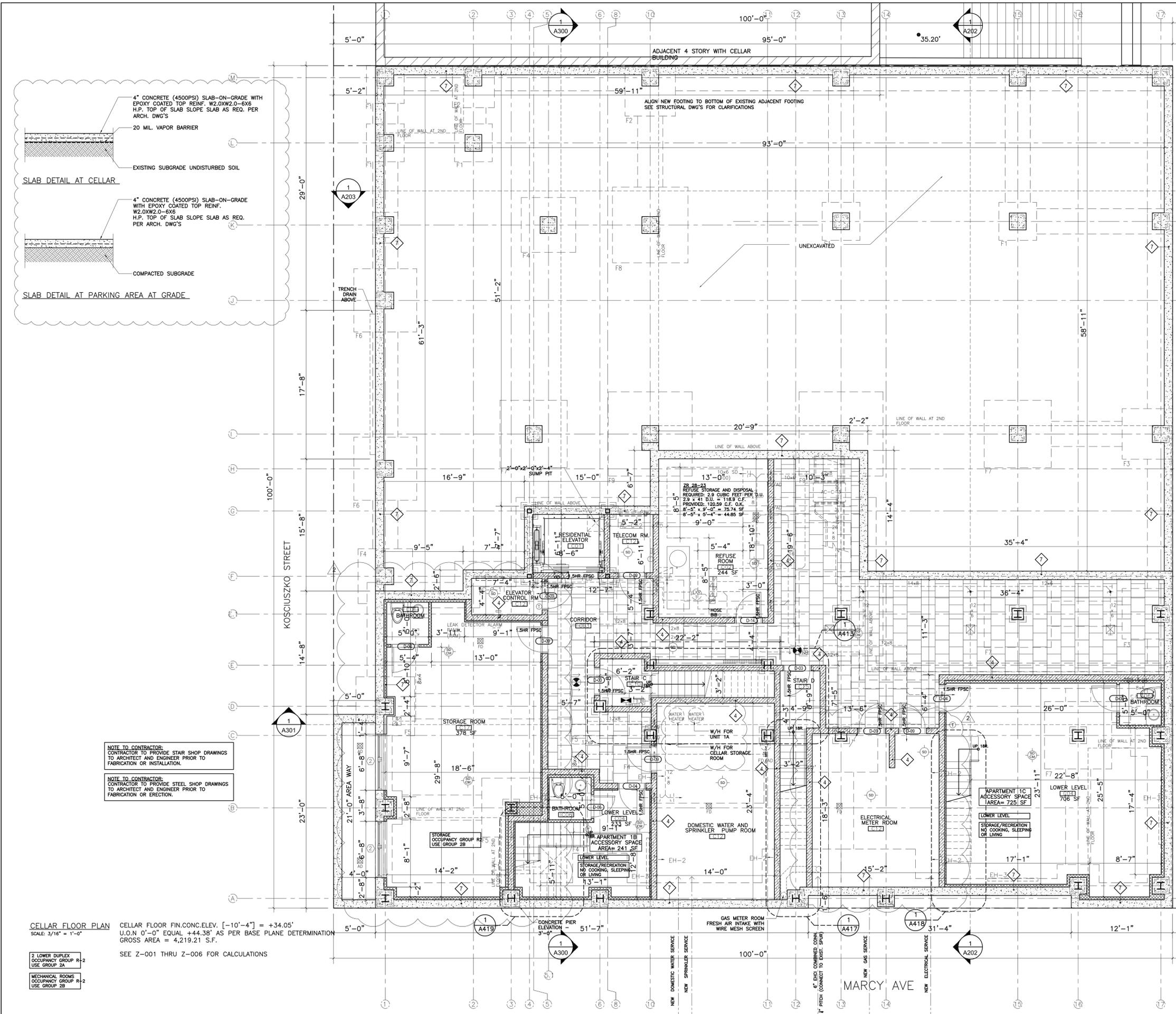
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Signature: _____ Scale: AS NOTED
Seal: _____



Drawing number

A-100.01

Sheet number



REFUSE ROOM NOTES (ZONING)

THE STORAGE OF REFUSE SHALL OCCUR ENTIRELY WITHIN AN ENCLOSED AREA ON THE #ZONING LOT# AND APPROPRIATE LOCATIONS WITHIN THE #ZONING LOT# SHALL BE DELINEATED FOR THIS PURPOSE: AT LEAST ONE FOR #RESIDENTIAL USE# AND AT LEAST ONE FOR #COMMUNITY FACILITY# AND #COMMERCIAL USE#. #RESIDENTIAL# STORAGE AND REMOVAL LOCATIONS SHALL BE PROVIDED AT THE RATE OF 2.9 CUBIC FEET PER #DWELLING UNIT# OR 1.15 CUBIC FEET PER #ROOMING UNIT#. A REFUSE DISPOSAL ROOM OF NOT LESS THAN TWELVE SQUARE FEET WITH NO DIMENSION LESS THAN THREE FEET SHALL BE PROVIDED ON EACH #STORY# THAT HAS ENTRANCES TO #DWELLING UNITS# OR #ROOMING UNITS#. TWELVE SQUARE FEET OF SUCH REFUSE STORAGE ROOM SHALL BE EXCLUDED FROM THE DEFINITION OF #FLOOR AREA#.

1213.2 COMPACTOR: A REFUSE COMPACTING SYSTEM SHALL BE PROVIDED IN MULTIPLE DWELLINGS IN A GROUP 1-1 OR R-2 OCCUPANCY THAT ARE FOUR OR MORE STORES IN HEIGHT AND CONTAIN 12 OR MORE DWELLING UNITS, AND IN BUILDINGS OF ANY SIZE OCCUPIED AS A GROUP R-1 MULTIPLE DWELLING. SUCH SYSTEM SHALL BE LOCATED WITHIN A REFUSE STORAGE ROOM CONSTRUCTED IN ACCORDANCE WITH OR IN A REFUSE CHUTE TERMINATION ROOM CONSTRUCTED IN ACCORDANCE WITH THE FLOOR WITHIN SUCH ROOM SHALL BE CONSTRUCTED OF CONCRETE AND SHALL BE SLOPED TO A FLOOR DRAIN CONNECTED TO THE BUILDING SEWER. A HOSE CONNECTION SHALL BE PROVIDED WITHIN SUCH ROOM.

1213.3 REFUSE CHUTE: A MULTIPLE DWELLING THAT IS FIVE OR MORE STORES IN HEIGHT AND THAT CONTAINS MORE THAN 12 DWELLING UNITS SHALL BE PROVIDED WITH A REFUSE CHUTE, REFUSE CHUTE ACCESS ROOMS, AND REFUSE CHUTE TERMINATION ROOM CONSTRUCTED IN ACCORDANCE WITH

NOTE TO CONTRACTOR:
CONTRACTOR TO PROVIDE STAIR SHOP DRAWINGS TO ARCHITECT AND ENGINEER PRIOR TO FABRICATION OR INSTALLATION.

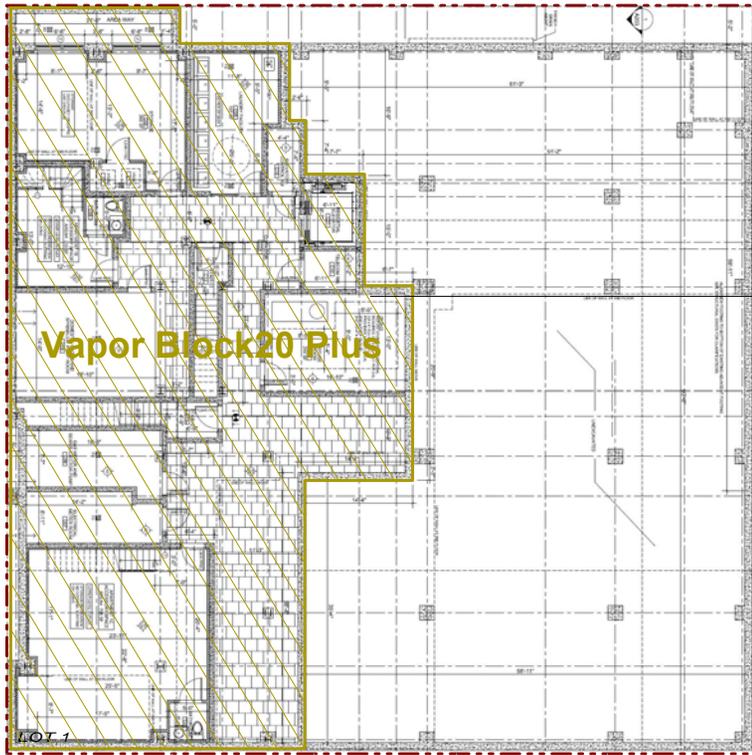
NOTE TO CONTRACTOR:
CONTRACTOR TO PROVIDE STEEL SHOP DRAWINGS TO ARCHITECT AND ENGINEER PRIOR TO FABRICATION OR ERECTION.

CELLAR FLOOR PLAN
SCALE: 3/16" = 1'-0"
CELLAR FLOOR FIN.CONC.ELEV. [-10'-4"] = +34.05'
U.O.N 0'-0" EQUAL +44.38' AS PER BASE PLANE DETERMINATION
GROSS AREA = 4,219.21 S.F.
SEE Z-001 THRU Z-006 FOR CALCULATIONS

- 2 LOWER DUPLEX
OCCUPANCY GROUP R-2
USE GROUP 2A
- MECHANICAL ROOMS
OCCUPANCY GROUP R-2
USE GROUP 2B

KOSCIUSZKO STREET

SIDEWALK



Vapor Block20 Plus

LOT 77 LOT 76 LOT 75 LOT 74 LOT 73

MARCY AVENUE

SIDEWALK



Key

- - - - - Site Boundary
- Vapor Block20 Plus
- ▨ Vapor Barrier



ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631.924.2870

Figure No. 7

Site Name: REDEVELOPMENT PROJECT

Site Address: 683 MARCY AVENUE, BROOKLYN, NY

Drawing Title: VAPOR BARRIER MAP

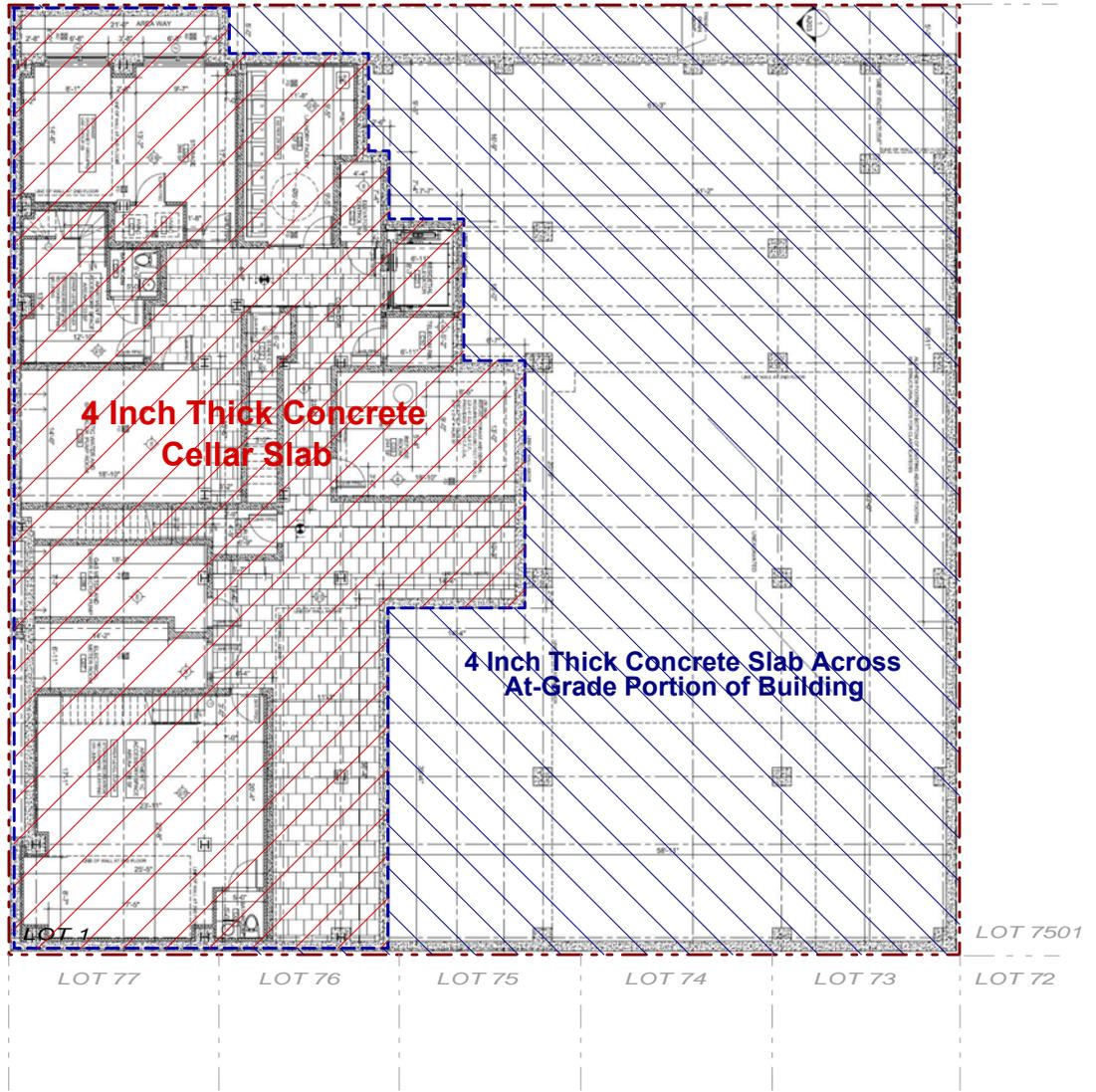
KOSCIUSZKO STREET

SIDEWALK



MARCY AVENUE

SIDEWALK



Key

- - - Site Boundary
- - - Basement Boundary

Scale

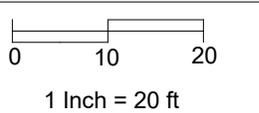


Figure No.
8

Site Name: **REDEVELOPMENT PROJECT**
 Site Address: **683 MARCY AVENUE, BROOKLYN, NY**
 Drawing Title: **COVER COMPOSITE DIAGRAM**