WASHINGTON PLAZA

BRONX, NEW YORK

Remedial Action Report

NYC OER Number: 10EHAZ232X

NYC E-Designation Number: E-115

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JUNE 2016

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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, Thomas S. Seguljic, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the Washington Plaza Site 10EHAZ232X .

I Nicholas Pressly am a qualified Environmental Professional. I had primary direct responsibility for implementation remedial program for the Washington Plaza Site 10EHAZ232X.

I certify that the OER-approved Remedial Action Work Plan dated April 2, 2007 together with the work proposed in the June 13, 2007 correspondence was 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.

Thomas S. Seguljic
Name

75180
PE License Number

Signature

2/22/17
Date

PE Stamp

Nicholas Pressly
QEP Name

QEP Signature

2/21/17
Date

EXECUTIVE SUMMARY

Site Location and Prior Usage

The site is located within a mixed-use commercial and industrial area in the Morrisania neighborhood of the Bronx. The site comprises an area of 100,440 square feet (sf) and is bounded to the West by Brook Avenue, to the East by Washington Avenue, to the south by East 163rd Street and to the North by 164th Street. The property was vacant land with the exception of a single story masonry building that was formerly an auto repair business containing a five 550 gallon gasoline USTs and one 550 gallon waste oil UST. The site location was depicted on Figure 1.

Summary of Redevelopment Plan

Site zoning provides for UG 6, Occupancy Groups C & E. In accordance with the zoning regulations, proposed site plans for the property provided for approximately 30,000 sf of retail space, which is a Food Bazaar Supermarket. The remaining lot area was developed as paved parking (60,000 sf) and a small area with a vegetative cover (10,000 sf).

Summary of Past Uses of Site

The Phase I Environmental Site Assessment (ESA) report dated February 1, 2001 was submitted to the New York City Department of Environmental Protection (NYC DEP). The report revealed that prior on-site or nearby land uses included gasoline filling stations, wood working shops, a former hay and grain business, automobile related uses, commercial use, and various residential dwellings. Potential historic chemical use as well as current and former USTs presented a potential environmental concern for the property.

Summary of Environmental Findings

A final Remedial Investigation Report was prepared by Pressly and submitted to the NYS DEC and the NYS DOH on April 5, 2006. The results indicated the following:

- Levels of VOCs in groundwater beneath the site exceeding NYS Groundwater Quality Standards.

- Based on the direction of groundwater flow and off-site groundwater quality data, the levels of VOCs detected in groundwater were attributed to poor background groundwater quality in the area.

- Levels of voes in soil gas were detected above NYS DOH Soil Vapor Intrusion Guidance Values.

- SVOCs and inorganic compounds in soil exceeding the NYS TAGM 4046 cleanup objectives.

Summary of the Remedial Action

The New York State Departments of Health (NYSDOH) and Environmental Conservation (NYSDEC) completed review of the Final Remedial Action Work Plan (RAWP), dated April 2, 2007 which together with the work proposed in the June 13, 2007 correspondence by Pressly Associates, LLC for the referenced site substantially addressed the requirements of the Brownfield Cleanup Agreement (BCA). This work plan also constituted a conceptual design of the selected remedy with a scope of work for technical plans and will serve as a Remedial Action Work Plan. This work plan was also reviewed and received approval from the NYC Office of Environmental Remediation (OER).

Due to delays in the execution of the development, the project was dropped from the Brownfield Cleanup Program (BCP) in 2010. A n application with the NYC Department of Buildings was approved on July 23, 2010 and OER took over oversight of the existing RAWP implementation.

The remedy selected by the Applicant included the following:

- A Site Management Plan (SMP) was developed to identify any use restrictions and provided for the operation and maintenance of the components of the remedy. The SMP also includes the details for the post remedial monitoring program.

- Achievement of a track 4 clean up intended for commercial/restricted residential use of the site was conducted by removal and disposal at an off -site facility of the top 6 inches of soil over the entire site. In addition, any soil encountered during construction work that exhibited petroleum or other contamination, including historic fill was screened and removed, if above site specific clean up levels.
- Two (2) 8 foot deep test pits were installed in the vicinity of SG-2 and removal of contaminated soil, if warranted.
- One (1) 10 foot test pit was installed proximate to the location of SG-5 and removal of contaminated soil, if warranted.
- Site was completely covered with new buildings and at least 6 inches of pavement. No exposed soils remain, with the exception of a 10,000 sf lot approved by OER to contain 2-feet of clean fill and a vegetated cover .
- Construction of active sub-slab ventilation systems beneath all buildings.
- Collection of 4 soil gas samples from the perimeter of the site subsequent to construction to further evaluate the extent and magnitude of soil gas contamination.
- Imposition of an institutional control in the form of an environmental easement that will (a) require compliance with the approved site management plan; (b) limit the use and development of the property to restricted residential or commercial uses only; (c) restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; and (d) require the property owner to complete and submit to the NYSDEC periodic certifications, if requested.
- Since the remedy may result in some untreated hazardous substances remaining at the property, a long term monitoring program (Site Management Plan) will be instituted. This program will allow the effectiveness of the active sub-slab ventilation systems to be monitored and will be a component of the operation, maintenance, and monitoring for the property.
- A Community air monitoring plan will be developed to monitor air quality during construction.

REMEDIAL ACTION REPORT

1.0 SITE BACKGROUND

Plaza 163, LLC and Bogopa Washington, LLC has investigated and remediated a property located at 445 East 163rd Street in the Morrisania section of the Bronx, New York. The boundary of the property subject to this Remedial Action is shown in Figure 1 and includes, in their entirety, Bronx Block 2385 and Lot 1. The property is on Block 2385; new Lot 15 (part of former 15) and new Lot 1 (includes former Lots 1, 3, 7, 11, 30, 33, 34, 35, 36, 44, 45, 50, 51, 53, 55, 57, 59 and part of former Lot 15). Former Lot 15 was e-designated (E-115) for Hazardous Materials as part of the August 19, 2003 Washington Plaza Rezoning.

Prior to completing the remedial action at the subject site under OER oversight within the E-Designation Program, the site was enrolled in the New York State Brownfield Cleanup Program (NYSBCP). The project enrolled in the NYSBCP on January 11, 2005 and was terminated from the NYSBCP on August 13, 2011. Upon receipt of Remedial Action Work Plan approval dated September 7, 2011, OER issued a Notice to Proceed for the project June 11, 2010. Initial remedial work between August 12, 2008 and September 5, 2008 was conducted under New York State Department of Environmental Conservation (NYSDEC). The extent of work conducted under DEC oversight included the removal and disposal of the top six inches of soil across the entire site, removal of five 550 gallon gasoline USTs and one 550 gallon waste oil UST, remediation of residual soil contamination using RegonOx, spill closure, and disposal of waste oil contaminated soil.

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 within a mixed-use commercial and industrial area in the Morrisania neighborhood of the Bronx. The site comprises an area of 100,440 square feet (sf) and is bounded to the West by Brook Avenue, to the East by Washington Avenue, to the south by East 163rd Street and to the North by 164th Street. The properties were vacant land with the exception of a single story masonry building that was formerly an auto repair business containing five 550-gallon gasoline USTs and one 550-gallon waste oil UST. Historic project documentation indicates auto repair, three junkyards wood working shop, residential uses, and historic uses including a former hay and grain business; potential historic chemical use as well as current and former USTs present. The site location and Tax Map were depicted on Figure 1. The Site Location Map is shown in Figure - 1 - The Site Boundary Map is shown in Figure 2.

1.2 REDEVELOPMENT PLAN

Site zoning provides for UG 6, Occupancy Groups C & E. 27,771.16 square feet of retail space was constructed at the site which is a Food Bazaar supermarket. The building has a 25,117.69 sqft cellar. The cellar contains 15,292.53 sqft of storage space, 2376.44 sqft of utility rooms, and 7,448.72 sqft of freezer/walk-in freezer/deli room. In addition to the Food Bazaar Supermarket retail space, the first floor contains a 2,420.24 sqft warehouse/loading dock area, and a 3,178.25 sqft loading bay. A mezzanine floor contains a lunch room of 520.5 sqft, an office of 442.22 sqft, and a meeting room of 228.91 sqft. The remaining lot area was developed as paved parking (41,596.82 sqft) and sidewalks (8,939.68 sqft) and with vegetative cover (10,390.40 sqft). The Site boundary and Redevelopment Plan is included as Figure 1.

The building has a 25,117.69 sqft cellar which is located underneath the first floor. The remaining lot area was developed as paved parking (41,596.82 sqft) and sidewalks (8,939.68 sqft) underlain by 6-inches of crushed stone and urban fill, and with a vegetative cover (10,390.40 sqft) underlain by 2-feet of Item 4 crushed stone and urban fill. Soil/fill was excavated to a depth of 12 feet below sidewalk grade beneath the building (25,117.69 sqft), 10 feet below sidewalk grade for a total of 9 dry wells (17,718.75 sqft), 6-12 feet below sidewalk grade from a total of 11 UST locations (440 sqft), and to a depth of 6-inches below sidewalk grade across the entire site (83,906.15 sqft). A total of 30,880 tons of non-hazardous contaminated soil/fill was excavated and removed from the property. A total of 740 tons of

hazardous contaminated soil (Lead) was excavated from the property. A map showing the building location, basement location and open space location is shown in the Development Plan in Figure 2.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

The adjacent properties to the north across 164th Street include a sheet metal shop, residential apartments and auto repair establishments. The adjacent properties to the south across163rd street include a park, and residential and commercial buildings. The adjacent properties to the east include auto repair and related services and across Washington Avenue a building supply business, a gas station, and residential buildings. The adjacent properties to the west include vacant lots and across Brook Avenue, a self storage business and commercial warehouses.

1.4 REMEDIAL INVESTIGATION

A final Remedial Investigation Report was prepared by Pressly and submitted to the NYS DEC and the NYS DOH on April 5, 2006. The results indicated the following:

- Chlorinated hydrocarbon compounds were detected at all sample locations above the NYS Groundwater Quality Standards (GWS). The highest levels of Tetrachloroethene were detected at MW-3 (53ppb). Levels of Tetrachloroethene ranged from 12 ppb to 53 ppb. The concentration of Trichloroethene (8ppb) at MW-3 exceeded groundwater standards. Trichloroethene concentrations, below the NYS GWS, were detected at MW-1 and MW-2. Methyl Tertiary Butyl Ether (MtBE) was detected at MW-2 (4 ppb).

- Based on the direction of groundwater flow and off-site groundwater quality data, the levels of VOCs detected in groundwater were attributed to poor background groundwater quality in the area.

- Levels of VOCs in soil gas were detected above NYS DOH Soil Vapor Intrusion Guidance Values. Concentrations of tetrachloroethene (PCE) were detected at all locations above the NYS DOH guidance values for PCE (100 mcg/m3). Levels of trichloroethene (TCE) were detected above NYS DOH guidance value (5 mcg/m3) at SG-1, SG-3, SG-4, SG-5, and SG-7 during round 1 and at SG-3 through SG-7 during round 2. The second round of samples collected on September 7, 2005 reported concentrations of PCE at SG-1 through SG-7 above the 100 mcg/m3 guidance value. The highest levels of TCE were detected during both sampling events at SG-5 (3280.18 and 3710.37 mcg/m3). Relatively low levels of cis-1,2- Dichloroethylene were also detected at SG-5 during both sampling events. In general, the highest levels of petroleum type compounds were detected at SG-9, located proximate to the abandoned auto service building and known UST area.

- SVOCs were detected in soil above the Restricted Residential Soil Cleanup Objectives. Levels of Chrysene ranged from 1800 to 3300 ppm. Levels of Indeno (1,2,3-cd) pyrene ranged from 520 to 1500 ppm. Levels of Benzo (a) anthracene ranged from 1200 to 3500 ppm. Levels of Benzo (a) pyrene ranged from 1100 to 3000 ppm. Levels of Benzo (b) fluoranthene ranged from 1100 to 3900 ppm. Levels of Benzo (k) fluoranthene ranged from 1800 to 4300 ppm.

- In general, much higher levels of inorganic compounds, above the Restricted Residential Soil Cleanup Objectives, were detected within the surface samples as compared with the subsurface soil samples. Arsenic and Chromium were ranged between 47.6 parts per million (ppm) and 59.2 ppm, respectively. Levels of Lead ranged from 560 ppm to 1820 ppm. Nickel was detected at levels ranging from 60.1 ppm and 37.6 ppm. Levels of Barium ranged from 640 ppm to 1280 ppm. Levels of Calcium ranged from 35,200 ppm to 74,000 ppm. Levels of Copper ranged from 59.8 ppm to 1040 ppm. Levels of Magnesium ranged from 5600 ppm to 34,400 ppm. Levels of Zinc ranged from 135ppm to 1620 ppm.

2.0 DESCRIPTION OF REMEDIAL ACTIONS

The Remedial Action was performed pursuant to an NYSDEC-approved NYSBCP RAWP. Upon termination of the NYSBCP agreement, the project was partially conducted under OER oversight. In September 2014, the project team met with OER to manage the transition from NYSDEC oversight to OER oversight. As a result of the meeting and elements of the project that had changed from those outlined in the NYSBCP RAWP, OER developed a Stipulation List to put into place measures that would continue to ensure proper implementation of the remedial action in a manner that would render the property protective of public health and the environment consistent with its intended use. The Stipulation List was not finalized and was not submitted to OER. This RAR describes the remedial action performed under the varying jurisdictions under which the work was conducted. 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.

A general summary of the Remedial Action is as follows:

- A Remedial Investigation (RI) was performed and a Remedial Investigation Report was prepared under the NYSBCP in April 2006.
- A Remedial Action Work Plan (RAWP) was prepared in April 2007 and approved by the NYS DEC in September 2007. OER reviewed the final draft of the document and provided feedback regarding the proposed engineering controls.
- An NYSBCP Application Fact Sheet was released announcing a 30-day public comment period on the RAWP July 21st, 2008.
- OER issued a Notice to Proceed June 11, 2010.
- A new building permit was issued by the NYC Department of Buildings on July 23, 2010
- A Fact Sheet providing notice of the start of the Remedial Action was issued on June 27th, 2008. Remedial Action was begun in August, 2008 under the BCP and completed in May, 2016 under the NYC Department of Buildings permit dated July 23, 2010 and OER.
- The project was terminated from the NYSBCP on August 13, 2011 (see letter attached in Appendix 12).

- A Post-Construction and program transition meeting was held with OER on September 17, 2014 subsequent to the termination of the project from the NYSBCP. OER issued a draft Stipulation Letter September 22, 2014. The applicant did not submit, or finalize in any other way, the Stipulation Letter.
- Pressly began submitting Daily Reports to OER on October 20, 2014.

The remedial action consisted of the following tasks:

1. Implemented a Citizen Participation Plan under the NYSBCP and subsequently under OER.

2. Performed a Community Air Monitoring Program (CAMP) for particulates and volatile organic carbon compounds.

3. Established Track 4 Site-Specific Soil Cleanup Objectives (SCO's). Collected and analyzed end-point samples. Achieved Track 4 SCOs for soil at the Site.

4. Mobilized on site in August, 2008 and established Site security, equipment mobilization, utility mark outs and marking & staking excavation areas.

5. Soil/fill was excavated to a depth of 12 feet below sidewalk grade beneath the building, 10 feet below sidewalk grade for a total of 9 dry wells, 6-8 feet below sidewalk grade from a total of 11 UST locations, and to a depth of 6-inches below sidewalk grade beneath the remainder of the entire site. A total of 30,880 tons of non-hazardous contaminated soil/fill was excavated and removed from the property. A total of hazardous contaminated soil (Lead) was excavated from the property. Soil/fill was disposed at the following facilities:

a. 3,584 tons (contaminated non-hazardous soil/fill) to Middlesmithfield Materials, Bushkill PA.
b. 7,443 tons (contaminated non-hazardous soil/fill) to Clean Earth of Cateret, NJ
c. 4,000 tons (contaminated non-hazardous soil/fill) to Secaucus Brownfield Redevelopment, Secaucus, NJ
d. 14,000 tons (contaminated non-hazardous soil/fill) to PPark, Prospect Park, NJ
e. 1,517 tons (contaminated non-hazardous soil/fill) to Bayshore Soil Management, Keasby, NJ.
f. 336 tons (debris, brick, and concrete) to Inwood Material Removal (IMT), Inwood, NY.
g. 40.6 tons (Lead contaminated hazardous soil/fill) to Clean Earth, Kearny, NJ

6. Removed 5 gasoline USTs each of 550 gallon capacity and 1-550 waste oil UST on August 27 and 28, 2008. A spill was reported (Spill #0805979) for the gasoline USTs and closed on November 4, 2008 after petroleum contaminated soil/fill associated with the gasoline USTs was remediated in compliance with applicable laws and regulations.

7. Removed 5 underground fuel oil storage tanks (USTs) in October 2014 and no petroleum contamination was encountered. Four of the fuel oil USTs were 2,000 to 4,000 gallon capacity and 1 tank was 550 gallon capacity.

8. All excavated soil/fill material was screened during intrusive work for indications of contamination by visual means, odor, and monitoring with a photoionization detector (PID).
9. Sampled and analyzed excavated media as required by disposal facilities. Appropriately segregated excavated media onsite prior to disposal.

10. Transported and disposed all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and the RAWP.

11. Constructed an engineered Composite Cover System consisting of 6 inches of concrete slab underlain by 8 inches of clean sub-base material in building areas; 5 inches of asphalt pavement underlain by 6 inches of clean sub-base material in parking areas, 6 inches of crushed stone and 4 inches of reinforced concrete pavement in sidewalk pedestrian areas and 2 feet of clean fill in open space and landscaped areas to prevent human exposure to residual soil/fill remaining under the Site.

12. Installed a Vapor Barrier System that consisted of a Vapor Block Plus 20 (20mil) vapor barrier beneath the footprint of the building. The vapor barrier was sealed with 2-sided Butyl Seal tape to the concrete spread footing which extended approximately 1foot inward from beneath the building walls as per the original Remedial Action Work Plan (RAWP) approved by NYS DEC and OER and dated September 11, 2007. Penetrations were sealed with Raven VaporBoot Plus preformed pipe boots for 1-4 inch pipes. The boots were sealed in place using 2-sided Butyl Seal Tape and 4-inch VaporBond Plus Tape allowing for 1-inch overlap at the seams. The contractor for construction of the Vapor Barrier System was RD2 Demolition and Construction, LLC, Staten Island, NY.

13. Installed an Active Sub-Slab Depressurization System (SSDS) consisting of two risers, each with a corresponding lateral that extends the length of the building. The piping design utilizes 4-inch (0.020 slot) Schedule 40 PVC well screen aligned horizontally beneath the building slab and attached below the building slab to vertical pipes that traverse the building and vent above the roof of the building. AMG Force vacuum blowers were installed inline on the roof level for each of the 2 risers. Low vacuum alarms and sample ports to enable measurement of the sub-slab vacuum established by the system were installed at a visible section of the stack pipes within the cellar and first floor of the building. The contractor for installation of the well screen lateral piping was JD Plumbing and Heating, LLC and for the vertical risers and stacks was Peak Mechanical Solutions. The contractor for the installation of the vacuum and low vacuum alarm systems was Pressly Associates, LLC.

14. Imported 4,527 tons of clean material for backfill) and 200 tons of clean fill / topsoil cover in compliance with this plan and in accordance with applicable laws and regulations.

15. Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations.

16. Performed all activities required for the Remedial Action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.

17. Residual materials are present beneath the cover layer and will be subject to Site Management under this Remedial Action.

18. Submitted a RAR that describes the Remedial Action, certifies that the remedial requirements defined in the Remedial Action Work Plan have been achieved; defines the Site boundaries; describes all Engineering and Institutional Controls applicable to the Site; and describes any changes from the RAWP.

19. Submitted a Site Management Plan (SMP) for long-term management of residual soil, including plans for operation, maintenance, inspection and certification of the performance of Engineering Controls and Institutional Controls. Results of inspections 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 August 30, 2017 (for the reporting period calendar years 2016-2017), August 30, 2018 (for the reporting period calendar years 2017-2018) and every year thereafter.

20. The property will continue to be registered with an E-Designation by the NYC Department of Buildings. Engineering Controls and Institutional Controls will be managed in compliance with the SMP. Institutional Controls will include prohibition of the following: (1) prohibition of vegetable gardening and farming in residual soil; (2) prohibition of the use of groundwater beneath the site without treatment rendering it safe for the intended use; (3) prohibition of disturbance of residual soil material unless it is conducted in accordance with the SMP; and (4) prohibition of higher levels of land usage than the restricted residential/restricted commercial uses addressed by this remedial action without prior notification and approval by OER.

Project Correspondence was included in Appendix 12.

3.0 COMPLIANCE WITH REMEDIAL ACTION WORK PLAN

3.1 HEALTH & SAFETY PLAN

The remedial construction activities performed under this program were in compliance with the Health and Safety Plan and applicable laws and regulations with the exception of deviations described in Section 3.5. The Site Safety Coordinator was Nicholas Pressly.

3.2 COMMUNITY AIR MONITORING PLAN

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 from August 12, 2008 to August 26, 2008 and from October 20, 2014 to December 2, 2015 in compliance with the Community Air Monitoring Plan in the approved RAWP, with the exception of deviations described below in Section 3.5. The results of community air monitoring were included in Appendix 3.

3.3 SOIL/MATERIALS MANAGEMENT PLAN

The Soil/Materials Management Plan provided detailed plans for managing all soil/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 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

The original building design, an at grade building with crawl space, was redesigned and constructed as a building with basement. The proposed building footprint was expanded to encompass a loading dock area.

The September 2013 Stipulation List was not completed after termination of the project from the NYSBCP and reengagement with the NYC E Designation Program. Items that were not formalized in the Stipulation List included the following:

Endpoint sampling was not conducted. OER stated that the RI data may be used for end point sampling during the ongoing construction meeting held on September 17, 2014 (See Appendix 13 – Pressly Notes of construction meeting dated September 18, 2014).

A 20 mil vapor barrier could not installed on the exterior surface of sub-grade foundation sidewalls because the building sidewalls were already installed prior to the ongoing construction meeting held on September 17, 2014. Note that the vapor barrier was installed on the spread footing along foundation sidewalls.

During the period between September 23, 2013 and November 12, 2013, soil removal was conducted for the excavation and installation of the building basement and foundation under an NYC Department of Buildings Excavation Permit. This work was not conducted under OER or NYS DEC jurisdiction. The contaminated, non-hazardous soil was disposed of at Middlesmithfield Materials, Bushkill, PA, Clean Earth, Carteret, NJ, Secaucus Brownfield Development, Secaucus, NJ, PPark, Prospect Park, appropriate permitted facilities under all applicable regulations. Manifests, a soil disposal application package and the facility pre-approval letters for the facilities are included in Appendix 4. The soil disposal application package (Appendix 4) includes the waste characterization data submitted to the facility. During this action, waste characterization conducted in a grid cell in the area of the basement of the proposed building identified Hazardous Waste Lead soil. The contaminated, hazardous lead soil was disposed of at Clean Earth, Kearny, NJ, an appropriate permitted facility under all applicable

regulations. Manifests, a soil disposal application package and the facility pre-approval letters for the hazardous waste are included in Appendix 4. The soil disposal application package (Appendix 4) includes the waste characterization data submitted to the facility. The original requirement in the OER – approved RAWP was to perform air monitoring for dust and VOCs under the Community Air Monitoring Program (CAMP) and this was not performed during this soil removal operation. OER was not notified of this change, however, the soil removal consultant, Hydro Environmental Solutions, Somers, NY did perform the work under a an OSHA compliant HASP which included air monitoring using a PID.

During the period between October 15, 2014 and July 1, 2015 a small soil pile that remained onsite after excavation was reused ("spread out"). This was conducted without air monitoring as per the CAMP. Additionally, the quality of the soil was not identified prior to the reuse. OER was notified of the change via email on July 1, 2015 and that all future soil excavation activities complied with CAMP. The material reused on site is beneath the engineered composite cover and therefore does not comprise an exposure risk and is rendered protective by the engineered composite cover completed across the site.

Material imported for former Lot 45 out of compliance with OER policy.

Demarcation layer was not installed on former Lot 45.

Material imported for SSDS permeable layer out of compliance with OER policy.

OER was not notified of the identification of hazardous waste on-site.

Multiple disposal actions not submitted to OER prior to implementation.

4.0 REMEDIAL PROGRAM

4.1 PROJECT ORGANIZATION

The project manager during the soil removal conducted during 2008 and during the period between September 2014 and May 2016 was Nicholas Pressly with Pressly Associates, LLC (Pressly). Mr. Pressly has over 19 years experience in the environmental investigation and remediation field. Mr. Pressly provided oversight of all aspects of the project and prepared the Remedial Investigation Report. The project owner during the soil removal conducted in 2008 was Christine Procida, Plaza 163, LLC. The regulatory contact for the project while under the BCP prior to 2009 was Brian Davidson, NYS DEC, 625 Broadway, Albany, NY 12233. Since 2014, the regulatory contact for the project was Zach Schreiber of OER, 100 Gold Street, NY, NY 10038.

4.2 SITE CONTROLS

Site Preparation

- Mobilization for the excavation of the top 6-inches of soil and initial UST closure was begun in 2008 under the NYS BCP and OER approved RAWP, suspended in late August 2008 after the cessation of the soil removal and UST closure activities and resumed in September 2013 under an NYC Department of Buildings Excavation Permit.
- Grubbing and fencing was performed in 2008 and maintained throughout the project.
- Erosion and sedimentation controls were in place throughout the project;
- Utility marker layouts were performed in July of 2008 and September 2013.
- Acquisition of agency approvals (city permits, etc.) were obtained from the NYS DEC through the BCP on September 11, 2007, from NYC OER on July 11, 2010, and from the NYC Department of Buildings on July 23, 2010.

Soil Screening

Evidence of VOCs was observed visually and confirmed using PID screening during the gasoline UST removal conducted on August 27, 2008. Evidence of VOCs was not observed during the UST removals conducted in October, 2014, No other evidence of VOCs was observed during the

project. In general the remaining site soils can be described as urban fill, including the remains of demolished buildings such as wood, concrete, brick, and miscellaneous solid waste.

Stockpile Management

Soil stockpiles were covered in plastic until removal which occurred generally within 1 week of excavation.

Truck Inspection

A visual inspection of the trucks was performed and trucks were hosed down with water at various times, especially during periods when dust suppression was conducted.

Site Security

A security guard post was maintained during off- hours throughout the construction phases of the project.

Nuisance Controls

With exception of deviations described in Section 3.5, levels of Dust on the site perimeter were well below the action limit of 100 micrograms per cubic meter during the entire project. However, dust suppression was performed based on visual dust observation during truck loading on August 28, September 2, September 3, and September 9, 2015. No complaints were received by the public.

Reporting

All daily and monthly reports are included in Appendix 3. Digital photographs of the Remedial Action were included within the daily reports. Digital photographs from the 2008 soil removal and soil gas sampling, 2014 SSDS system installation, and the 2016 Soil Gas Survey are included in Appendix 11.

4.3 MATERIALS EXCAVATION AND REMOVAL

Soil/Fill Excavation and Removal

A map showing the approximate locations where excavations were performed and approximate thickness of excavated material is shown in Figure 6. Soil/fill was excavated to a depth of 12 feet below sidewalk grade beneath the building, 10 feet below sidewalk grade for a total of 9 dry wells, 6-12 feet below sidewalk grade from a total of 11 UST locations, and to a depth of 6-inches below sidewalk grade beneath the remainder of the entire site. A total of 30,880 tons of non-hazardous contaminated soil/fill was excavated and removed from the property. A total of 740 tons of hazardous contaminated soil (Lead) was excavated from the property. A total of 31,620 tons of soil/fill were excavated and removed from the property during the Removal Action. Materials removed from the property under this Removal Action is generally classified, as follows: 30,880 tons of non hazardous contaminated/petroleum contaminated historic urban fill, and 740 tons of hazardous (Lead) contaminated historic urban fill. With the exception of deviations described in Section 3.5, the Removal Action was performed under the oversight of Nicholas Pressly QEP for the project.

All soil removal was performed using track-mounted excavators of various sizes. The excavated material was stockpiled on plastic and loaded into dump trucks normally within 24 hours and generally within 1 week. Groundwater was encountered during the excavation of the gasoline USTs in August 2008.

Removal Action Performance Criteria. The removal of the top 6-inches of soil was a remedial action to remove the highest levels of non-hazardous soil contamination to achieve SCOs according to the RAWP. Petroleum contaminated soil removal (hot spot removal) to a depth of 12 feet below grade was conducted during the UST/Spill closure (NYS DEC Spill #0805979) in August, 2008. Non-hazardous contaminated urban historic fill removed to a depth of 6-8 feet during the excavation of USTs in October 2014 and was used as backfill for the UST excavations. Non-hazardous contaminated historic urban fill was removed to a depth of 12 feet to enable construction of a basement in the new building. Hot spot removal of hazardous (Lead) contaminated soil was removed to a depth of 12 feet below grade in a section of the building basement.

Material Type. The type of material that was encountered during the removal action included historic fill material consisting of black and brown fine to course sand mixed with construction and demolition material consisting of gravel, brick, concrete, wood, metal, municipal solid waste., hazardous waste (Lead), and petroleum contaminated soil. An unknown quantity of native material was encountered below 10 feet within the building basement excavation.

Onsite Reuse. Excavated material was reused on-site for backfilling of UST excavations to a depth of 6-12 feet. The UST excavation locations were shown on Figure 6.

UST Removal. A total of 5 previously unkown 550 gallon gasoline USTs and 1 550 gallon waste oil UST were detected during the removal of the top 6-inches of soil in August 2008 The tanks were removed by the existing on-site excavation contractor under NYS DEC oversight. A track mounted excavator equipped with a hydraulic jackhammer was used to remove concrete encasement and the USTs. The tanks were inerted with dry ice, cut, and cleaned prior to disposal at a scrapyard. A total of 2700 gallons of gasoline and water were removed from the tanks under NYS DEC oversight using a vac truck for disposal at an appropriately permitted facility. A spill (NYS DEC Spill #0805979) was reported based on visual evidence of waste oil contamination within the 550 gallon waste oil UST excavation. A total of 60 pounds of RegonOx Part A and Part B compound was mixed with water and applied to the waste oil UST excavation prior to backfilling. A total of 4 2000-4000 gallon and one 550 gallon fuel oil USTs were excavated, cut, and cleaned by Universal Tank Services in October, 2014. All five tanks contained mixtures of oil and water. A total of 3162 gallons of tank contents/cleaning fluids were disposed of at an appropriately permitted facility. No petroleum contamination was detected within the UST excavations. The approximate location of USTs are shown in Figure 6. The UST closure reports and the FDNY tank removal affidavit for the October 2014 UST removal are included in Appendix 9. All tanks were registered with NYS DEC PBS unit. The current status of the PBS registration for the fuel oil USTs removed in October, 2014 is “Active”,

NYSDEC Petroleum Spills. The NYS DEC Petroleum Spill Number is 08-05979 was closed on 11/04/2008. Correspondence associated with the NYS DEC Petroleum Spill and a screenshot of the NYS DEC web site showing the spill closure are located in Appendix 9.

Soil Cleanup Objectives

Based on the Remedial Investigation Report Prepared by Pressly and dated April 5, 2006, the following Track 4 cleanup goals were proposed, per Section 375-6.8, Table 375-6(b), commercial/restricted residential Soil Clean Up objectives.

Project Cleanup Goals

Media	Contaminant	Proposed Cleanup Goal	RI Report Reference
Groundwater	Tetrachloroethene	5 ppb	MW-3 (53ppb)
Soil	Lead	400ppm	SB-4, 6-8 feet (257 ppm)
	Zinc	10000ppm	SB-4, 6-8 feet (167ppm)
	Magnesium	26,000 ppm	MW-3,4-6 feet (25,700 ppm)
	Cadmium	4.3ppm	MW-1, 4-6 feet (1.2 ppm)
	Benzo(a)pyrene	1000ppb	MW-3, 4-6 feet (1100 ppb)
	Benzo(a)anthrac-cene	1000 ppb	MW-3, 4-6 feet (920 ppb)
	Benzo(k)fluor-Anthene	3900ppb	MW-3, 4-6 feet (1400 ppb)
	Chrysene	3900 ppb	MW-3, 4-6 feet (930 ppb)

Key: ppb - parts per billion, ppm - parts per million

Compliance with Table 375-6.B(b) Restricted residential, is expected for all other compounds in soil remaining on the site.

The elements of the selected remedy are as follows:

- Removal and disposal at a regulated off-site facility of the top 6 inches of soil over the entire site and all urban fill removed during construction.

- In the area of SG-9, 2 Additional test pits were excavated, screened for elevated VOC's with a PID, and sampled VOCs, SVOCs, TAL Metals, and NY STARS compounds.

- The Site was capped with new buildings, pavement, and a small area of 2-feet of clean fill with a vegetative cover.

- An active sub-slab soil ventilation system was installed in the basement beneath the building constructed on the site to prevent soil gas containing VOCs from entering occupied building areas.

A map showing the location where excavations were performed is shown in Figure 5.

End Point Sample Results

The highest levels of SVOCs (EPA Method 8270C) and Lead (TAL Metals) in excess of the SCOs were detected within the 0-2 inch samples collected from locations SG-1 through SG-9. These levels were removed during the top 6-inches of soil removal conducted over the entire site in August, 2008. End point sampling also consists of samples collected for all parameters below the top six inches of soil at the site during the Remedial Investigation, as well as test pit samples collected as per the NYS DEC RAWP approval letter dated September 11, 2007. As required by the NYS DEC, 4 test pits were excavated and sampled between August 22 and August 25, 2008. Two 8-foot deep test pits (TP-4 and TP-5) were performed in the vicinity of SG-2, one 10-foot deep test pit (TP-3) was performed in the vicinity of SG-5, and one 8-foot deep test pit (TP-1) was performed in the vicinity of SG-9.

Samples collected from MW-1 through MW-3 (4-18 feet below grade) and SB-1 through SB-4 (0-8 feet below grade) showed levels of SVOCs above SCOs at only 1 location (MW-3 – 4-6 feet below grade). These samples are considered to be endpoint samples for the site in excess of the SCOs.

Levels of VOCs and TAL Metals, including Lead were below SCOs within all samples collected at MW-1 through MW-3 and SB-1 through SB-4. SCOs were exceeded for TAL Metals at TP-1 (Barium and Lead) and at TP-2 (Nickel). VOCs were not detected at any of the test pit locations.

Out of 4 sidewall samples collected from TP-2, SCOs were exceeded for SVOCs according to the NY STARS analysis on the west and north sidewalls. However, for all test pits, no SCOs were exceeded for SVOCs according to EPA Method 8270.

The end point sampling results were summarized in Tables 1-7. A map of end-point sample locations is shown in Figure 3. Laboratory data validation reports and test pit sampling analytical reports were included in Appendix 7.

During waste characterization for the on-site building cellar, a grid cell was characterized as exhibiting hazardous waste lead characteristic (TCLP 5.05 µg/L). All other soil sampling data was reported as non-hazardous with TCLP lead levels ranging from 0,001 to 1.84 ug/L). No further information was provided regarding endpoint sampling by Hydro Environmental Solutions, Inc., the soil diposal consultant.. The QEP was not on-site during these activities.

After meeting with OER in 2014, post-excavation confirmation samples were requested via a draft Stipulation Letter dated September 22, 2014. These samples were not collected.

These residual concentrations of metals above the Track 4 SCOs established for this property were evaluated to assess the potential for environmental and public health impact. This evaluation shows that the building is protected with an 8-inch building slab and that exceedences in soils were all located below the building slab, asphalt pavement, and soil cover, with no potential exposure pathways to occupants of the building. Similarly, despite exceedences of Groundwater Quality Standards for VOCs, groundwater use will be restricted through an environmental easement. Finally, potential future exposures from soil excavation after the completion of the Remedial Action will be addressed by the development and implementation of the Site Management Plan in this RAR. On the basis of this evaluation, management of these soils in place was determined to be protective of public health and the environment.

4.4 MATERIALS DISPOSAL

The soil disposal associated with the removal of the top 6-inches of soil across the entire site in August 2008 was conducted by Pure Earth under the BCP. The soil was characterized and disposed of at Middlesmithfield Materials in Bushkill, PA. This soil excavation and removal operation was conducted under direct on-site supervision by Brian Davidson of the NYS DEC and Nicholas Pressly (See Appendix 5– Brian Davidson Confirmation Letter). Documentation of the disposal was provided to Anthony Arnold of Procida in the Pressly letter dated March 11, 2010 (Appendix 5). The manifests, disposal request letters forwarded to, and the approval letters received from, Middlesmithfield Materials are no longer available.

During the period between September 23, 2013 and November 12, 2013, soil removal was conducted for the excavation of the building basement and foundation by Hydro Environmental Services, Somers, NY. The QEP was not on-site during these activities and Daily Reports were not prepared for OER or NYSDEC. A summary table of the soil characterization data was included in Appendix 6,. The contaminated, non-hazardous soil was disposed of at Clean Earth, Carteret, NJ, Secaucus Brownfield Development, Secaucus, NJ, PPark, Prospect Park, aappropriate permitted facilies, under all applicable regulations and the Manifests are included in Appendix 5. The disposal request letters forwarded to, and the approval letters received from Clean Earth, Carteret, NJ, Secaucus Brownfield Development, Secaucus, NJ, PPark, Prospect Parkare provided in Appendix 4.

During the period between September 23, 2013 and November 12, 2013, soil removal was conducted for the excavation of the building basement and foundation by Hydro Environmental Services, Somers, NY. The QEP was not on-site during these activities and Daily Reports were not prepared for OER or NYSDEC. A summary table of the soil characterization data was included in Appendix 6. The contaminated, hazardous lead soil was disposed of at Clean Earth of Kearny, New Jersey, an appropriate permitted facility, under all applicable regulations and the Manifests are included in Appendix 5. The disposal request letters forwarded to, and the approval letters received from Clean Earth of Kearny, New Jersey, are provided in Appendix 4.
During the period between October 2014 and December, 2015, soil samples were collected by Pressly for characterization historic urban fill during site grading activities and for the excavation

of drywells by Taru Associates, Corp, Merrick, NY and provided to Restoration and Conservation, College Point, NY for facility acceptance. The facility acceptance letters, soil sampling laboratory reports, and a table summarizing the soil characterization data is included in Appendix 4.

The material type, quantity and disposal location of material removed and disposed off-Site is presented below:

Disposal Location/Address	Type of Material	Quantity
Middlesmithfield Materials Sand Hill Road, Bushkill, PA 18324	Non-Hazardous Soil	3,584 tons
Clean Earth of Carteret, 24 Middlesex Ave, Carteret, NJ, 07008	Non-Hazardous Soil	7,456 tons
Clean Earth of North Jersey, Kearny, NJ 115 Jacobus Ave., Carteret, NJ, 07032	Hazardous Lead Soil	740 tons
Secaucus Brownfield Redevelopment, (Malanka Landfill), 11 Birch St., Secaucus, NJ, 07432	Non-Hazardous Soil	4,000 tons
PPark, 100 Planten Ave, Prospect Park, NJ 07508	Non-Hazardous Soil	14,000 tons
Bayshore Soil Management, 75 Crows Mill Rd. Keasby, NJ 08832	Non-Hazardous Soil	1,517 tons
Inwood Material Removal, 1 Sheriden Blvd., Inwood, NY 11096	Debris/Brick/Concrete	336 tons
Clean Water of NY, 3249 Richmond Terrace, Staten Island, NY 10303	Petroleum Liquid Waste	3,162gallons
Unkown Appropriate Permitted Facility Under NYS DEC oversight in August 2008	Petroleum Liquid Waste	2,700 gallons

4.5 BACKFILL IMPORT

A total of 4,218 tons of clean material for backfill and cover was obtained from the OER Clean Soil Bank. The material was imported to the site between August 29 and December 2, 2014 and between March 12 and April 2, 2015.

A total of 622 tons of 3/4" Blue Stone (Virgin Stone) for the SSDS permeable layer was obtained from Tilcon/New York Recycling LLC. The material was imported to the site in November and December, 2014. A letter from the facility and truck tickets for the material are included in Appendix 10. The QEP was not on-site during the import or installation of the material.

309 tons of clean material Item 4 crushed stone was obtained from Tilcon/New York Recycling LLC for the parking areas in compliance with this plan and in accordance with applicable laws and regulations. A laboratory test report dated April 30, 2013 is included in Appendix 10. The material was imported to the site on December 10-19, 2015 and on March 24, 2016. The QEP was not on-site during the import or installation of the material.

198 tons for the 2-feet of Item 4 crushed stone for the clean fill/vegetative cover for Lot 45 was obtained from Tilcon/New York Recycling LLC. The material was imported to the site between March 24 and April 4, 2016. The QEP was not on-site during the import or installation of the material.

The chemical analytical results and truck tickets for backfill obtained from Tilcon/New York Recycling Corp, 475 Exterior Street, Bronx, NY 10451and the OER Clean Soil Bank Request forms were included Appendix 10.

A map showing backfill placement locations at the Site is shown in Figure 5. Truck tickets for imported material are included in Appendix 10.

4.6 DEMARCATION

Soil below the final cover is residual soil that will be addressed by site management under this remedial action. A demarcation barrier was not installed.

5.0 ENGINEERING CONTROLS

Engineering Controls were employed in the Remedial Action to address residual materials remaining at the site. The Site has 3 primary Engineering Control Systems. These are:

(1) Composite Cover System consisting of asphalt covered parkinig areas/roads, concrete covered sidewalks, concrete building slabs, 2-feet of clean fill, ;

(2) Vapor Barrier System; and

(3) Active Sub-Slab Depressurization System.

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 is a permanent Engineering Control for the Site.

The Composite Cover System is comprised of a 6 inches of reinforced concrete slab underlain by 8 inches of clean sub-base material in building areas; 5 inches of asphalt pavement underlain by 6 inches of clean sub-base material in parking areas, 4 inches of concrete pavement underlain by 8 inches of sub-base aggregate in the building basement., and 2 feet of clean fill in a fenced in open space area.

The contractor for construction of the Composite Cover System was MCM Paving and Excavation Inc., West Haverstraw, NY. Figure 5 shows the as-built design for each remedial cover type used on this Site. As built drawings and documentation for the Composite Cover System are shown in Figure 5, Figure 6, and Appendix 8. Photographs of construction of the Composite Cover System are included in Appendix 11.

Full details of operation and maintenance are included in the Site Management Plan.

Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. The Vapor Barrier System is a permanent Engineering Control for the Site. As built drawings and documentation for the Vapor Barrier System are shown in Figure 5, Figure 6, and Appendix 8.

The Vapor Barrier System consists of a Vapor Block Plus 20 (20mil) vapor barrier beneath the footprint of the building cellar. Penetrations were sealed with Raven VaporBoot Plus preformed pipe boots for 1-4 inch pipes. The boots were sealed in place using 2-sided Butyl Seal Tape and 4-inch VaporBond Plus Tape allowing for 1-inch overlap at the seams. The design engineer for the Vapor Barrier System was Nicholas Pressly. The contractor for construction of the Vapor Barrier System was RD2 Demolition and Construction, LLC, Staten Island, NY.

The Vapor Barrier System was not installed in the area of the building to the southwest of the primary supermarket structure. This area is used as a loading dock. The loading dock is a space that is well ventilated.

Figure 6 shows the location and as-built design for the Vapor Barrier System used on this Site. Photographs of installation of the Vapor Barrier System are included in Appendix 11. A copy of manufacturer's specifications for the Vapor Barrier System is included on Figure 5.
Full details of operation and maintenance are included in the Site Management Plan.

Active Sub-Slab Depressurization System

Exposure to soil vapor is prevented by an Active Sub-Slab Depressurization System (SSDS) that has been built on the Site. The Active SSDS is a permanent Engineering Control for the Site. As built drawings and documentation for the SSDS are shown in Figure 6 and Appendix 8.

An Active SSDS was installed consisting of two pipe laterals utilizing 4-inch Schedule 40 PVC well screen (0.020 slot) each attached to vertical pipes that traverse the building slab and vent above the roof of the building. The pipes are aligned horizontally beneath the building slab and embedded in an 8" layer of 3/4 inch virgin blue stone sub base aggregate. An AMG Force vacuum blower was installed inline on the roof level for each lateral and riser configuration. Sub-slab vapor sample ports were installed in accessible areas in the basement to enable measurement of the vacuum pressure established by the system, as well as to allow for collection of sub-slab vapor samples at a later date. A low vacuum alarm was installed at a visible section of the vertical stack pipes within the building. Inspection by the QEP for the Remedial Action confirmed vacuum gauge readings of 3-inches of water with a flow rate of 44.9 ft^3/min for the southern pipe lateral and 2-inches of water with a flow rate of 36.2 ft^3/min for the northern pipe lateral, and proper

functioning of alarm lights. The design engineer for the Active SSDS was Nicholas Pressly. The contractor for installation of the well screen piping was JD Plumbing and Heating, LLC and for the vertical stacks was Peak Mechanical Solutions. The contractor for the installation of the vacuum blowers and low vacuum alarm systems was Pressly Associates, LLC. The PE for the Remedial Action designated the QEP to inspect the system during installation on March 15, 2016. The QEP, on behalf of the PE, confirmed that the effluent discharge point is a minimum of 10 feet from any operable window or air intake for any building and overseen the start-up of the active depressurization system on March 15, 2016. Figure 6 shows the as built design for the Active SSDS used on this Site. Photographs of installation of the Active SSDS are included in Appendix 11.

Full details of operation, maintenance and SSDS the Building Management System are included in the Site Management Plan. Monthly and Annual inspection checklists are included in the Site Management Plan.

6.0 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 by 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 periodic written certification that evaluates their performance;

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

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

(7) 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;

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

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 Satisfaction (NOS) by OER. It is the responsibility of the property owner to ensure that all Site Management responsibilities are performed. Failure to implement the SMP will result in revocation of the Notice of Satisfaction.

Engineering Controls and Institutional Controls have been incorporated into this Remedial Action to ensure that the site remains protective of public health and the environment. Generally, EC's provide physical protective measures and IC's provide restrictions on Site usage and establish remedial operation, maintenance, inspection and certification measures. This Site Management Plan has been established to govern long-term performance of EC's and IC's for this 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 NYSDEC-approved NYS BCP Remedial Action Plan, the OER Notice to Proceed and the OER Stipulation Letter dated September 22, 2014. This includes: (1) operation and maintenance of Engineering Controls; (2) inspection of EC's and IC's; and (3) certification of performance of EC's and IC's.

ENGINEERING CONTROLS

Engineering Controls were employed in the remedial action to address residual materials remaining at the site. The Site has 3 Engineering Control Systems. Engineering Controls for this property are:

(1) Composite Cover System consisting of asphalt covered roads, concrete covered sidewalks, and concrete building slabs; and
(2) Vapor Barrier System; and
(3) Active Sub-Slab Depressurization System.

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 is a permanent Engineering Control for the Site.

The Composite Cover System is comprised of a 6 inches of reinforced concrete slab underlain by 8 inches of clean sub-base material in building areas; 5 inches of asphalt pavement underlain by 6 inches of clean sub-base material in parking areas, 4 inches of concrete pavement underlain by 8 inches of sub-base aggregate in the building basement., and 2 feet of clean fill in a fenced in open space area.

The contractor for construction of the Composite Cover System was MCM Paving and Excavation Inc., West Haverstraw, NY. Figure 5 shows the as-built design for each remedial cover type used on this Site. As built drawings and documentation for the Composite Cover System are shown in Figure 5, Figure 6, and Appendix 8. Photographs of construction of the Composite Cover System are included in Appendix 11.

Full details of operation and maintenance are included in the Site Management Plan.

Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. The Vapor Barrier System is a permanent Engineering Control for the Site. As built drawings and documentation for the Vapor Barrier System are shown in Figure 5, Figure 6, and Appendix 8.

The Vapor Barrier System consists of a Vapor Block Plus 20 (20mil) vapor barrier beneath the footprint of the building cellar. Penetrations were sealed with Raven VaporBoot Plus preformed pipe boots for 1-4 inch pipes. The boots were sealed in place using 2-sided Butyl Seal Tape and 4-inch VaporBond Plus Tape allowing for 1-inch overlap at the seams. The design engineer for the Vapor Barrier System was Nicholas Pressly. The contractor for construction of the Vapor Barrier System was RD2 Demolition and Construction, LLC, Staten Island, NY.

The Vapor Barrier System was not installed in the area of the building to the southwest of the primary supermarket structure. This area is used as a loading dock. The loading dock is a space that is well ventilated.

Figure 6 shows the location and as-built design for the Vapor Barrier System used on this Site. Photographs of installation of the Vapor Barrier System are included in Appendix 11. A copy of manufacturer's specifications for the Vapor Barrier System is included on Figure 5.
Full details of operation and maintenance are included in the Site Management Plan.

Active Sub-Slab Depressurization System

Exposure to soil vapor is prevented by an Active Sub-Slab Depressurization System (SSDS) that has been built on the Site. The Active SSDS is a permanent Engineering Control for the Site. As built drawings and documentation for the SSDS are shown in Figure 6 and Appendix 8.

An Active SSDS was installed consisting of two pipe laterals utilizing 4-inch Schedule 40 PVC well screen (0.020 slot) each attached to vertical pipes that traverse the building slab and vent above the roof of the building. The pipes are aligned horizontally beneath the building slab and embedded in an 8" layer of 3/4 inch virgin blue stone sub base aggregate. An AMG Force vacuum blower was installed inline on the roof level for each lateral and riser configuration. Sub-slab vapor sample ports were installed in accessible areas in the basement to enable measurement of the vacuum pressure established by the system, as well as to allow for collection of sub-slab vapor samples at a later date. A low vacuum alarm was installed at a visible section of the vertical stack pipes within the building. Inspection by the QEP for the Remedial Action confirmed vacuum gauge readings of 3-inches of water with a flow rate of 44.9 ft^3/min for the southern pipe lateral and 2-inches of water with a flow rate of 36.2 ft^3/min for the northern pipe lateral, and proper functioning of alarm lights. The design engineer for the Active SSDS was Nicholas Pressly. The contractor for installation of the well screen piping was JD Plumbing and Heating, LLC and for the vertical stacks was Peak Mechanical Solutions. The contractor for the installation of the vacuum blowers and low vacuum alarm systems was Pressly Associates, LLC. The PE for the Remedial Action designated the QEP to inspect the system during installation on March 15, 2016. The QEP, on behalf of the PE, confirmed that the effluent discharge point is a minimum of 10 feet from any operable window or air intake for any building and overseen the start-up of the active depressurization system on March 15, 2016. Figure 6 shows the as built design for the Active SSDS used on this Site. Photographs of installation of the Active SSDS are included in Appendix 11.

Full details of operation, maintenance and SSDS the Building Management System are included in the Site Management Plan. Monthly and Annual inspection checklists are included in the Site Management Plan.

Operation and Maintenance of Composite Cover System

Chapter 5 describes the Composite Cover System utilized in this Remedial Action and provides as-built design details and the location of each cover type. The Composite Cover 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. A Soil/Materials Management Plan is included in this Site Management Plan and outlines 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 Composite Cover 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 system according to the original design and tying newly constructed cover layers into existing cover layers to form a continuous layer(s).

Operation and Maintenance of 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 adhering the newly constructed materials with existing barrier materials in accordance with manufacturer specifications.

Operation and Maintenance of Active Sub-Slab Depressurization System

Chapter 5 describes the Active Sub-Slab Depressurization System utilized in this Remedial Action and provides as-built design details and the system location. The Active SSDS 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 SSDS System does not require any special operation or maintenance activities. If the ventilation fans or the alarm system become inoperable, they will be replaced.

In order to certify system performance, sub slab vacuum measurements will be collected at three sample probe locations depicted on Figure 6.

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. Adherence to these Institutional Controls is required under the Site Management Plan established for this Remedial Action and will be implemented in accordance with the Site Management Plan included in this RAR.

Institutional Controls are also designed to prevent future exposure to residual soil/materials by controlling disturbances in the subsurface, restrict higher uses of the property than those addressed by the Remedial Action and establish restrictions on activities and site usage. Institutional Controls for this property are:

(1) The property will continue to be registered with an E-Designation by 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 periodic written certification that evaluates their performance;

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

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

(7) 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;

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

INSPECTIONS

Engineering Controls and Institutional Controls will be inspected on a regular basis and certified periodically as described below. Inspections will include routine evaluation by custodial and maintenance staff to identify obvious signs of potential failure of system components (i.e., cracks or fissures in the foundation or building slab, erosion of cover soils, Active SSDS alarm warnings, etc.) and periodic inspections by trained personnel for the purpose of certification of the performance of EC's and IC's. The periodic 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 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.

Inspection of Composite Cover System

A qualified environmental professional shall walk the site on an annual basis to determine the presence of any breach in the composite cover system. Breaches may include but are not limited to

penetrations of the building basement slab, paved areas, or soil cover as a result of construction activities, settlement, erosion, or other activity. The condition of the composite cover system will be documented and photographed.

Inspection of Vapor Barrier System

A qualified environmental professional shall enter the building basement on an annual basis to determine the presence of any damage to the building basement slab as a result of construction activities, settlement, erosion, or other activity. The condition of the basement slab will be documented and photographed.

Inspection of Active Sub-Slab Depressurization System

A qualified environmental professional shall enter the building basement and roof on an annual basis to determine whether SSDS system is operating normally. In addition, the following shall be performed as part of the inspection:

(1) Vacuum measurements shall be collected from the Sample Probes located within the building basement and from the ventilation fan intake.

(2) A determination shall be provided as to whether the vacuum pressure at each ventilation fan intake meets the design minimum value of 0.1 inches H_2O.

(3) The ventilation fans shall be shut down temporarily to verify that the functionality of the system alarms.

Site Use Prohibitions

Inspections to evaluate the status of site use prohibitions will include an evaluation of whether there is vegetable gardening or farming in residual soil/fill; whether groundwater underlying the site has been used without treatment rendering it safe for its intended use; whether activities that have disturbed site soil/fill have been conducted pursuant to the Soil/Material Management provisions of the SMP, or otherwise approved by OER; and whether the site has been used for a higher level of use other than the restricted commercial use addressed by the Remedial Action.

INSPECTION AND CERTIFICATION LETTER REPORT

Results of inspections 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 30, 2017 (for the reporting period calendar years 2016-2017), July 30, 2018 (for the reporting period calendar years 2017-2018) and every year thereafter. Inspection and Certification Letter Reports will be submitted to OER in digital format.

Certification frequency for remedial actions consist of:

- Engineered cover systems (slabs, pavement, etc.) including vapor barrier: routine inspections annually with Certification Letter Report every 5 to 10 years (longer for commercial

- Active SSDS: routine inspections monthly with detailed inspections bi-annually and Certification Letter Report after the first full year of operation and every 1 to 3 years thereafter.

The Certification 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;
- A determination as to whether groundwater plume conditions, if any, have changed since the last reporting event; and
- Certification of the performance of Engineering Controls and Institutional Controls, as discussed below.

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 vegetable gardening and farming in residual soils has been prevented;
- If groundwater underlying the Site is being utilized without treatment rendering it safe for the intended purpose has been prevented;
- If activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in this SMP;
- If the Site has been used for a higher level of use other than the restricted commercial 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 and IC's.

NOTIFICATIONS

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

- 60-day advance notice of any proposed changes in Site use, such as an upgrade from existing use to residential use that was not contemplated is the Remedial Action.
- Notice within 14 days of any emergency, such as a fire, flood, or earthquake that has the potential to reduce the effectiveness of Engineering Controls in place at the Site.

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) in Appendix 1. Intrusive work will also be conducted in accordance with the procedures defined in the Community Air Monitoring Plan (CAMP) included as Appendix 2 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.

The SMMP was included in Appendix 1 and the CAMP was included in Appendix 2.

CONTINGENCY PLAN

Emergency Telephone Numbers

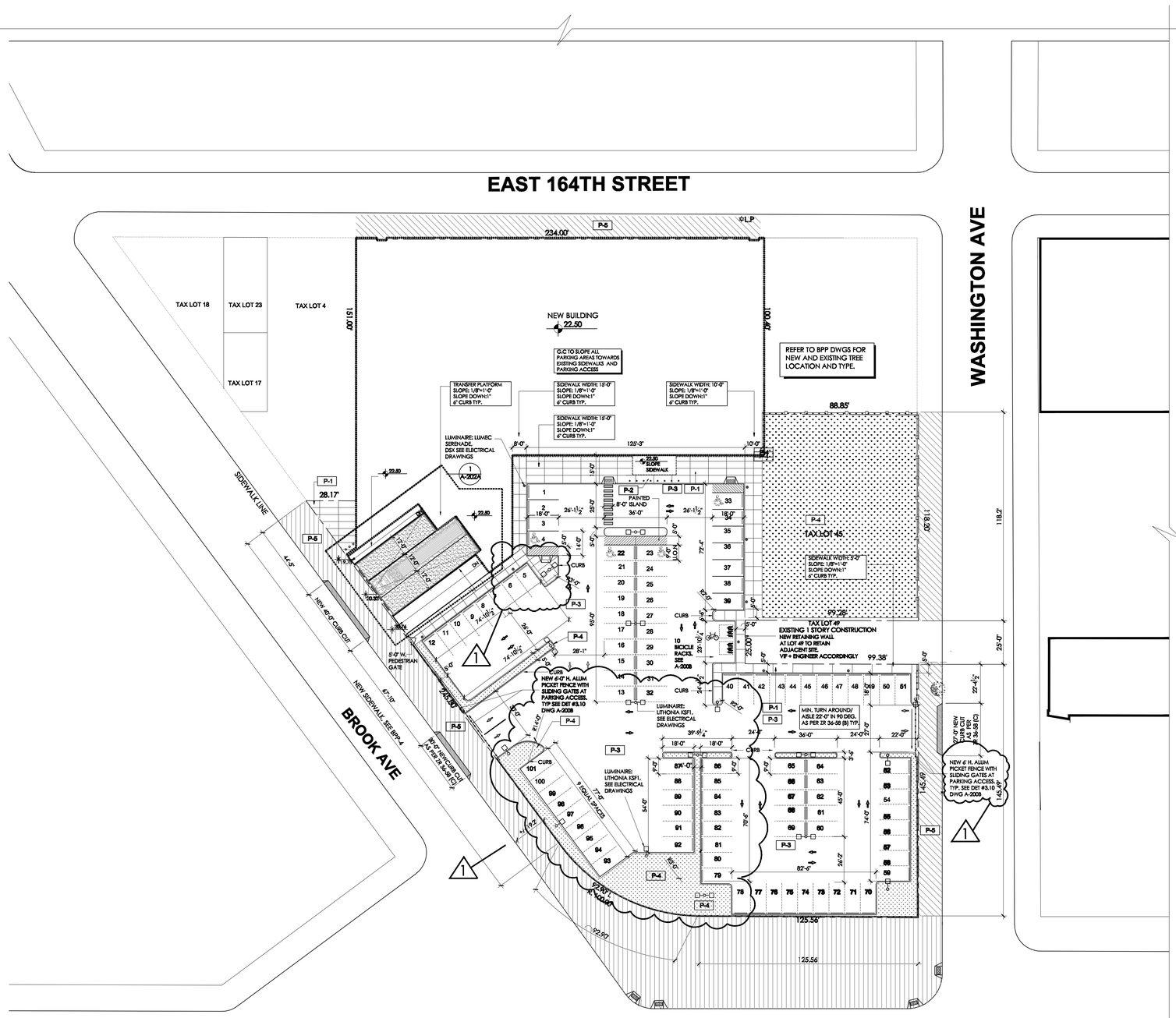
In the event of any emergency condition pertaining to these remedial systems, the Owner's representative(s) should contact the appropriate parties from the contact list below. Prompt contact should also be made to Nicholas Pressly, Qualified Environmental Professional. These emergency contact lists must be maintained in an easily accessible location at the Site.

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

Qualified Environmental Professional	(607) 435-9589
Office of Environmental Remediation	(212) 788-8841; 311



1 SITE PLAN

SCALE: 1'-0"=1/32"

SITE HATCH LEGEND

SYMBOL	DESCRIPTION
	EXISTING ADJACENT LOT
	REPLACEMENT OF EXISTING SIDEWALK
	NEW GRASS AREA

MATERIAL LEGEND

SYMBOL	TAG	DESCRIPTION
	P-1	CONCRETE PAVING
	P-2	TACTILE CAST IN PLACE WARNING SYSTEM
	P-3	ASPHALT
	P-4	NEW GRASS AREA
	P-5	REPLACEMENT OF EXISTING SIDEWALK

EXISTING TREE (SEE BPP PLAN)

NEW TREE (SEE BPP PLAN)

SITE ELEVATION NOTES

XXX EXISTING ELEVATION POINTS FOR REFERENCE ONLY

XXXX PROPOSED ELEVATION POINTS

PLAZA 163

EAST 163RD STREET
BRONX, NY

NO	DATE	ISSUE
1	03/05/14	ISSUED TO BUILDING DEPARTMENT
2	08/30/14	ISSUED FOR CONSTRUCTION
3	04/30/16	ISSUED TO BUILD. DEPT.

BERNARD OCASIO ARCHITECT. P.C
ARCHITECTS, CONSULTANTS, PLANNERS
29-10 120th. STREET, FLUSHING,NY.
OFF. (212) 481-7448 FAX. (718) 886-9358

MEP ENGINNER
ABRAHAM JOSELOW P.C
45 WEST 34TH ST # 1101 NEW YORK ,NY.
OFF. (212) 736-2584 FAX. (212) 736 0241

WEXLER ASSOCIATES.
STRUCTURAL ENGINEERS
12 WEST 32ND ST , 8TH FLOOR
NEW YORK, NY 10001
TEL: 212-643-1500

NO	DATE	REVISION
1	04/30/16	ISSUED TO DOB_PAA

SITE PLAN AND PARKING LAYOUT

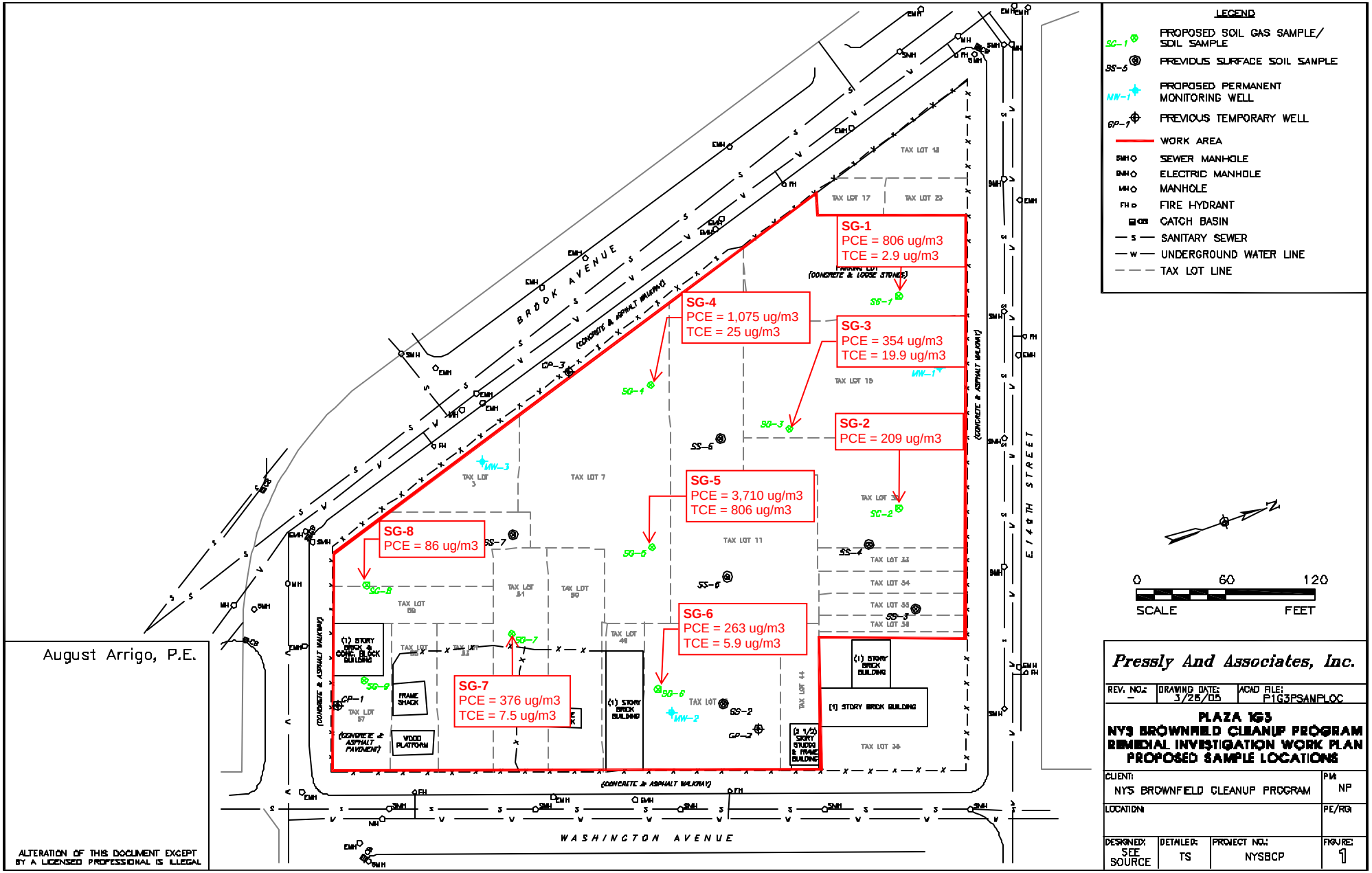
SIGNED BY:

DATE: 10-14-13
PROJECT: ——
DWG BY: C.O
CHK BY: B.O
DWG No:

A-200-A.02

SIGNED BY: BERNARD OCASIO

Figure 2
Site Location/Tax Map



August Arrigo, P.E.

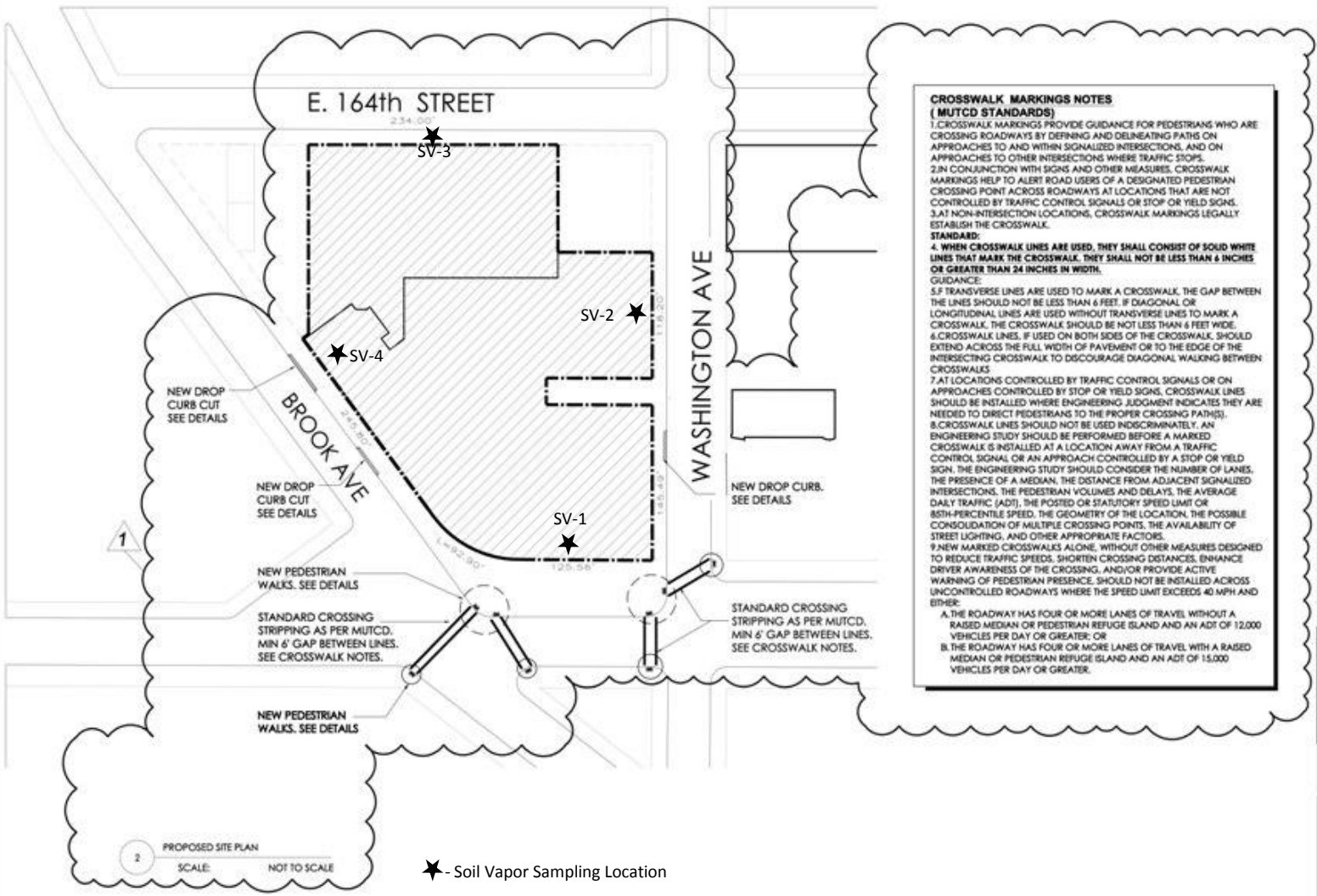
Pressly And Associates, Inc.

REV. NO.:	DRAWING DATE:	ACAD FILE:
–	3/25/05	P1G3PSANPLOC

PLAZA 1G3
NYS BROWNFIELD CLEANUP PROGRAM
REMEDIAL INVESTIGATION WORK PLAN
PROPOSED SAMPLE LOCATIONS

CLIENT:	PM
NYS BROWNFIELD CLEANUP PROGRAM	NP
LOCATION:	PE/RGI

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
SEE SOURCE	TS	NYSBCP	1



CROSSWALK MARKINGS NOTES
(MUTCD STANDARDS)

1.CROSSWALK MARKINGS PROVIDE GUIDANCE FOR PEDESTRIANS WHO ARE CROSSING ROADWAYS BY DEFINING AND DELINEATING PATHS ON APPROACHES TO AND WITHIN SIGNALIZED INTERSECTIONS, AND ON APPROACHES TO OTHER INTERSECTIONS WHERE TRAFFIC STOPS.
2.IN CONJUNCTION WITH SIGNS AND OTHER MEASURES, CROSSWALK MARKINGS HELP TO ALERT ROAD USERS OF A DESIGNATED PEDESTRIAN CROSSING POINT ACROSS ROADWAYS AT LOCATIONS THAT ARE NOT CONTROLLED BY TRAFFIC CONTROL SIGNALS OR STOP OR YIELD SIGNS.
3.AT NON-INTERSECTION LOCATIONS, CROSSWALK MARKINGS LEGALLY ESTABLISH THE CROSSWALK.
STANDARD:
4. WHEN CROSSWALK LINES ARE USED, THEY SHALL CONSIST OF SOLID WHITE LINES THAT MARK THE CROSSWALK. THEY SHALL NOT BE LESS THAN 6 INCHES OR GREATER THAN 24 INCHES IN WIDTH.
GUIDANCE:
5.F TRANSVERSE LINES ARE USED TO MARK A CROSSWALK, THE GAP BETWEEN THE LINES SHOULD NOT BE LESS THAN 6 FEET. IF DIAGONAL OR LONGITUDINAL LINES ARE USED WITHOUT TRANSVERSE LINES TO MARK A CROSSWALK, THE CROSSWALK SHOULD BE NOT LESS THAN 6 FEET WIDE.
6.CROSSWALK LINES, IF USED ON BOTH SIDES OF THE CROSSWALK, SHOULD EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS
7.AT LOCATIONS CONTROLLED BY TRAFFIC CONTROL SIGNALS OR ON APPROACHES CONTROLLED BY STOP OR YIELD SIGNS, CROSSWALK LINES SHOULD BE INSTALLED WHERE ENGINEERING JUDGMENT INDICATES THEY ARE NEEDED TO DIRECT PEDESTRIANS TO THE PROPER CROSSING PATH(S).
8.CROSSWALK LINES SHOULD NOT BE USED INDISCRIMINATELY. AN ENGINEERING STUDY SHOULD BE PERFORMED BEFORE A MARKED CROSSWALK IS INSTALLED AT A LOCATION AWAY FROM A TRAFFIC CONTROL SIGNAL OR AN APPROACH CONTROLLED BY A STOP OR YIELD SIGN. THE ENGINEERING STUDY SHOULD CONSIDER THE NUMBER OF LANES, THE PRESENCE OF A MEDIAN, THE DISTANCE FROM ADJACENT SIGNALIZED INTERSECTIONS, THE PEDESTRIAN VOLUMES AND DELAYS, THE AVERAGE DAILY TRAFFIC (ADT), THE POSTED OR STATUTORY SPEED LIMIT OR 85TH-PERCENTILE SPEED, THE GEOMETRY OF THE LOCATION, THE POSSIBLE CONSOLIDATION OF MULTIPLE CROSSING POINTS, THE AVAILABILITY OF STREET LIGHTING, AND OTHER APPROPRIATE FACTORS.
9.NEW MARKED CROSSWALKS ALONE, WITHOUT OTHER MEASURES DESIGNED TO REDUCE TRAFFIC SPEEDS, SHORTEN CROSSING DISTANCES, ENHANCE DRIVER AWARENESS OF THE CROSSING, AND/OR PROVIDE ACTIVE WARNING OF PEDESTRIAN PRESENCE, SHOULD NOT BE INSTALLED ACROSS UNCONTROLLED ROADWAYS WHERE THE SPEED LIMIT EXCEEDS 40 MPH AND EITHER:
A. THE ROADWAY HAS FOUR OR MORE LANES OF TRAVEL WITHOUT A RAISED MEDIAN OR PEDESTRIAN REFUGE ISLAND AND AN ADT OF 12,000 VEHICLES PER DAY OR GREATER; OR
B. THE ROADWAY HAS FOUR OR MORE LANES OF TRAVEL WITH A RAISED MEDIAN OR PEDESTRIAN REFUGE ISLAND AND AN ADT OF 15,000 VEHICLES PER DAY OR GREATER.

PLAZA 163
EAST 163RD STREET
BRONX, NY

NO	DATE	ISSUE
1	07/07/14	ISSUED TO BUILDING DEPARTMENT
2	08/28/14	READY TO BUILD (RBP)

BERNARD OCASIO ARCHITECT, P.C
ARCHITECTS, CONSULTANTS, PLANNERS
29-10 120th. STREET, FLUSHING,NY.
OFF. (212) 481-7448 FAX. (718) 886-9358

NO	DATE	REVISION
1	08/28/14	AS PER DOB COMMENTS

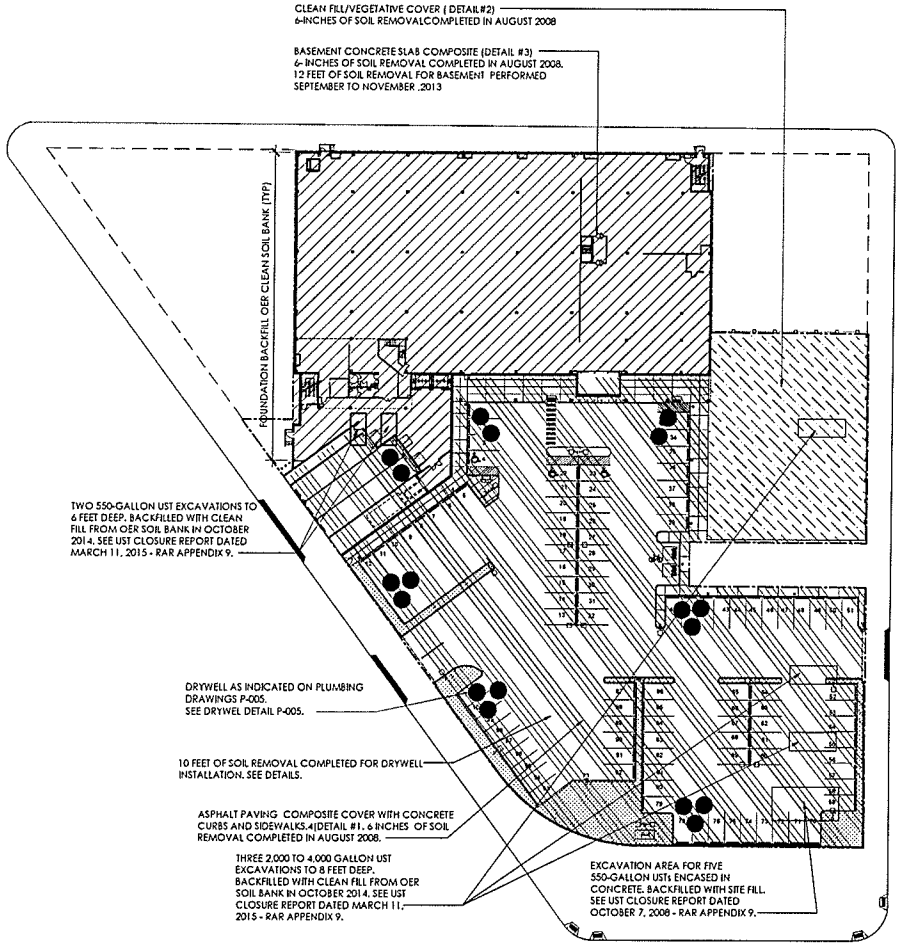
SITE PLAN

SIGNED BY:
DATE: 10-14-15
PROJECT: ——
DWG BY: C.G.
CHK. BY: B.O.
DWG No.
BPP-01A:00
SIGNED BY: BERNARD OCASIO

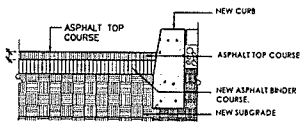
PLAZA 163
EAST 163RD STREET
BRONX, NY

NO	DATE	ISSUE

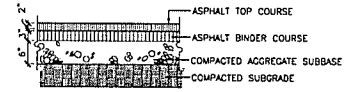
Pressley Associates, LLC
Environmental Consultants
721 County Highway 54
Cherry Valley, NY 13320
Tel: 607-435-9589



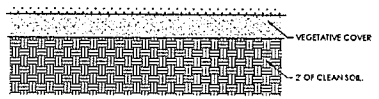
1 SITE PLAN
SCALE 1/32" = 1'-0"



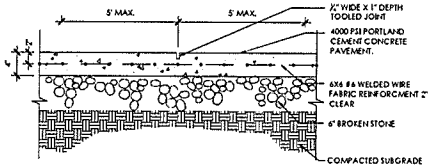
4 ASPHALT TOP COURSE
SCALE NOT TO SCALE



3 FULL DEPTH ASPHALT PAVEMENT
SCALE NOT TO SCALE



2 CLEAN FILL/VEGETATIVE COVER
SCALE NOT TO SCALE



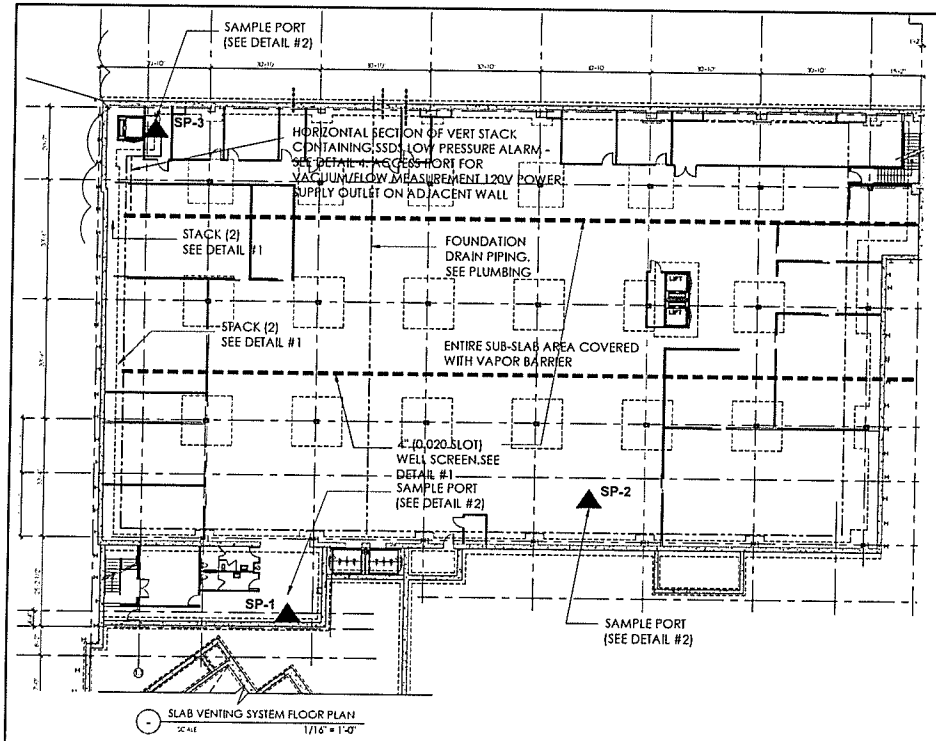
1 SIDEWALK DETAIL
SCALE NOT TO SCALE

NO	DATE	REVISION

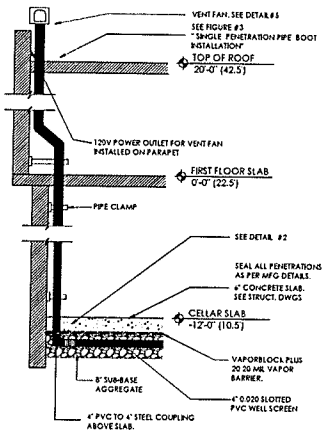
MAP OF EXCAVATIONS AND SOURCE REMOVAL/SOIL-FILL REUSE AND BACKFILL PLACEMENT LOCATIONS/LOCATION OF COMPOSITE COVER SYSTEM

SIGNED BY:	DATE: 08-30-16
	PROJECT: ———
	DWG BY: BOB
	CHK BY: NP
	DWG No:

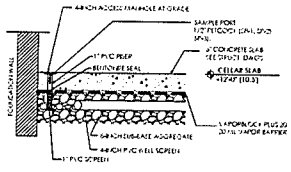
FIGURE 5



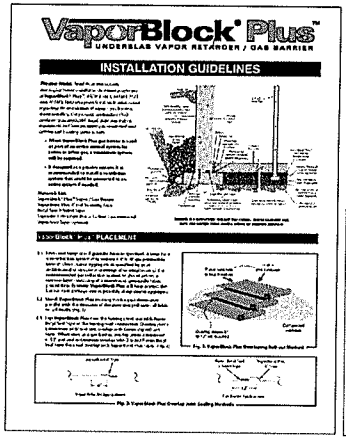
1 SLAB VENTING SYSTEM FLOOR PLAN
SCALE 1/16" = 1'-0"

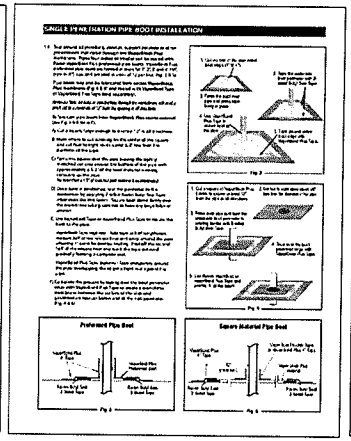


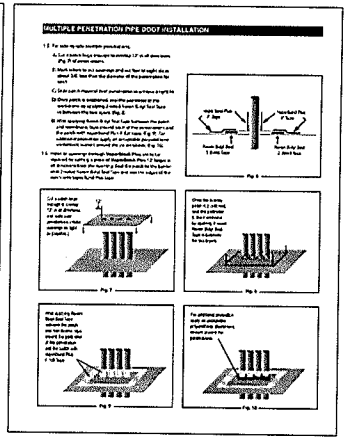
1 SUB-SLAB STACK VENTING DET.
SCALE NOT TO SCALE



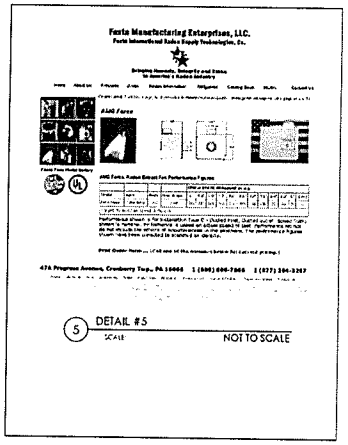
2 SAMPLE PORT DETAIL
SCALE NOT TO SCALE



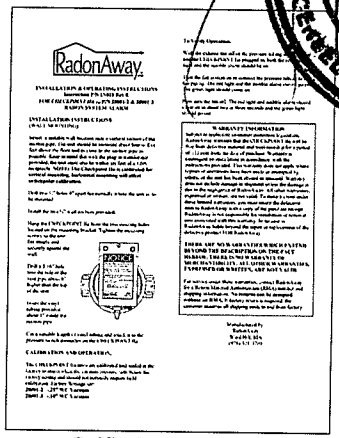




3 VAPOR BLOCK PLUS 20
INSTALLATION GUIDELINES
SCALE NOT TO SCALE



5 DETAIL #5
SCALE NOT TO SCALE



4 DETAIL #4
SCALE NOT TO SCALE

PLAZA 163
EAST 163RD STREET
BRONX, NY

NO	DATE	ISSUE

Pressley Associates, LLC
Environmental Consultants
721 County Highway 54
Cherry Valley, NY 13320
Tel: 607-435-9589

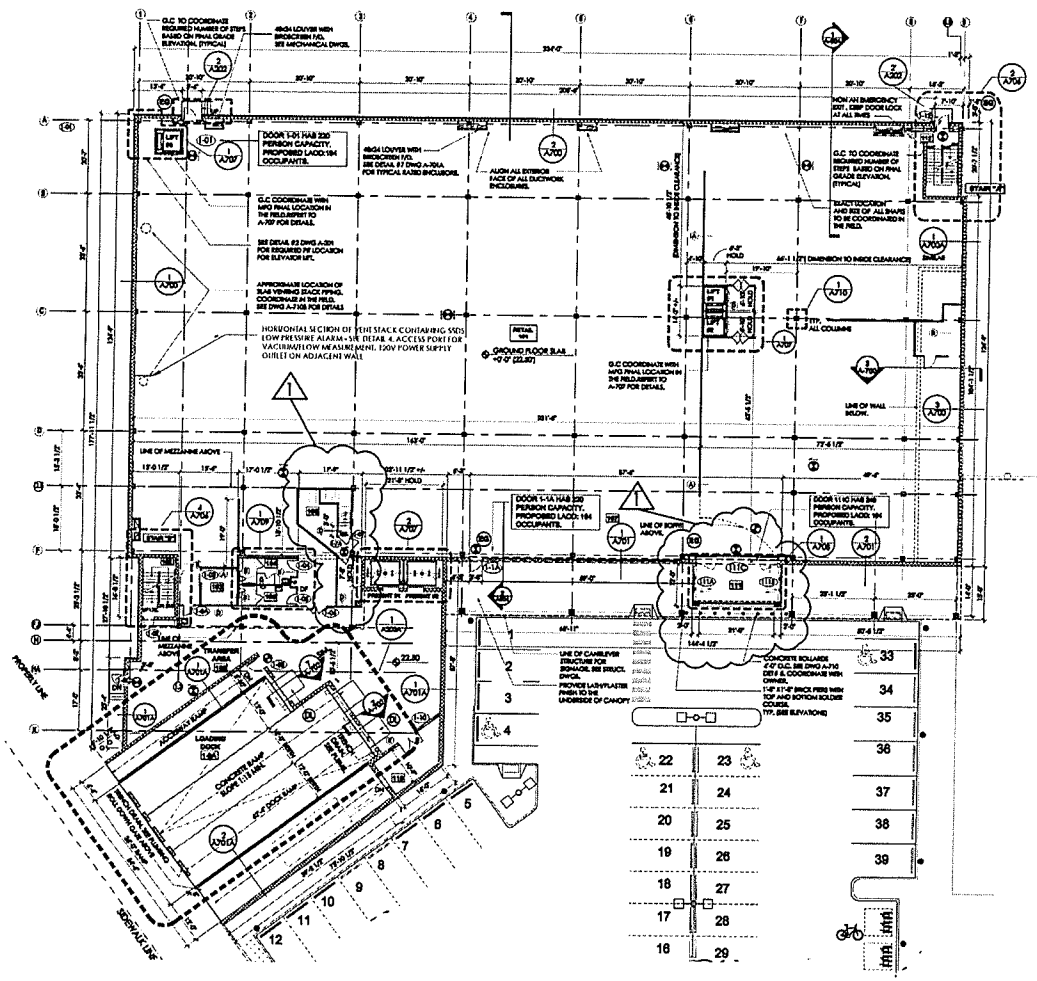
HRP

STATE OF NEW YORK
THOMAS S. SEQUINO
75180
LICENSED PROFESSIONAL ENGINEER

NO	DATE	REVISION

SUB SLAB VENTING SYSTEM DETAILS AND SPECS

SIGNED BY:	DATE: 08-30-16
	PROJECT: ——
	DWG BY: BOB
	CHK BY: NP
	DWG No. FIGURE 6



CONSTRUCTION LEGEND

SYMBOL	DESCRIPTION
	CMU WALL CONSTRUCTION, SEE A700, A701 FOR EXTERIOR APPLIED FOR FINISH
	CONCRETE FOUNDATION WALL, SEE A700, A701 FOR EXTERIOR APPLIED FINISH
	EXTERIOR STUD WALL CONSTRUCTION, SEE A700, 701 FOR EXTERIOR APPLIED FINISH
	2 HR. RATED WALL CONSTRUCTION
	1 HR. RATED INT. WALL CONSTRUCTION
	PARTIAL HEIGHT INTERIOR WALL
	WINDOW OR STOREFRONT CONSTRUCTION
(A)	PARTITION TYPE, SEE INTERIOR WALL PARTITIONS
X-XX	DOOR TAG (DOOR NUMBER / FLOOR NUMBER)
EG	EGRESS DOORS
	EXT. ELEV. TAG (ELEVATION NUMBER / SHEET NUMBER)
	SECTION TAG (SECTION NUMBER / SHEET NUMBER)
	DETAIL TAG (DETAIL NUMBER / SHEET NUMBER)
	COLUMN GRID LINES AND KEYS
	ROOM NAME & NUMBER
DL	6'x8' DOCK LEVELER AS MFG BY KELLEY. INSTALLATION AS PER MFG SPECIFICATIONS. (5 LOCATIONS) SEE DETAIL #2 DWG A-202A

CONSTRUCTION NOTES

1. EXISTING ELEVATION POINTS SHOWN IN DRAWINGS ARE FOR REFERENCE ONLY. G.C TO VERIFY IN FIELD ALL ELEVATION POINTS AS REQUIRED TO ESTABLISH ALL CLEARANCES AND PROPER RUN FOR LOADING DOCK RAMP AND AS SHOWN IN DRAWINGS. SEE DWG A-002.
2. G.C TO CONTACT ARCHITECT IF ANY DISCREPANCIES OCCUR BETWEEN LOADING DOCK CONSTRUCTION DRAWINGS AND FIELD CONDITIONS.
3. G.C TO PROVIDE SHOP DRAWINGS WITH FINAL ELEVATION POINTS WITH ALL DIMENSIONS INDICATING RUN, PITCH AND CLEARANCES FOR LOADING DOCK.
4. G.C TO PROVIDE CUT SHEETS FOR ALL LOADING DOCK ACCESSORIES AS FOLLOWS:
1. EDGE -OF-DOCK LEVELER AS MFG. BY BOMDOR. LOADING DOCK BUFFER OR APPROVED EQUAL.
G.C TO FOLLOW ALL MFG. INSTALLATION REQUIREMENTS FOR PROPER INSTALLATION. PROVIDE WELD LEVELER EDGE ANCHORING CHANNEL EMBEDDED IN CONCRETE AT DOCK FACE.
5. G.C TO PROVIDE AUTOMATED 8'-0" W X 8'-0" H, ROLL DOWN GATES MARKED AS [EG-X] 2 IN TOTAL AT LOADING DOCK. PROVIDE SHOP DRAWINGS FOR APPROVAL. REFER TO ELECTRICAL DWGS FOR FURTHER INFORMATION.
6. NEW 4,000 LBS FRONT AND REAR LOADING MR. PASSENGER ELEVATOR COORDINATE WITH STRUCTURAL DWGS AND REFER TO DETAILS FOR FURTHER INFORMATION. G.C TO COORDINATE TO REFER TO SPECIFICATIONS FOR INSTALLATION REQUIREMENTS ETC.
6A. NEW 4,000 LBS FREIGHT LIFT. COORDINATE WITH STRUCTURAL DWGS AND REFER TO DETAILS FOR FURTHER INFORMATION. G.C TO COORDINATE TO REFER TO SPECIFICATIONS FOR# INSTALLATION REQUIREMENTS ETC.
7. G.C TO PROVIDE ALL ASPHALT MARKINGS AND ALL 3.5 PIPE RAILINGS AT LOADING DOCK.
8. G.C TO PROVIDE ROLL DOWN GATE AT LOADING DOCK ENTRANCE. PROVIDE MOUNTING AND CUT SHEETS FOR APPROVAL.
9. CONTRACTOR TO PROVIDE PARTITION LAYOUTS FOR APPROVAL BEFORE CONSTRUCTION.
10. PROVIDE ARCHITECTURAL SHOP DRAWINGS FOR ALL NEW GALVANIZED STAIRS AT NEW ROOFS. COORDINATE DURING ROOF INSTALLATION FOR PROPER # OF RISERS BASED ON FINAL ROOF ELEVATION.
11. ALL STRUCTURE TO BE FIREPROOFED.
CONSTRUCTION CLASSIFICATION TABLE 601. ALL STRUCTURE CROSSING OR INSIDE SHAFTS TO BE 2 HR RATED.
12. FOR CONSTRUCTION, IN THE CASE OF ANY DISCREPANCIES BETWEEN THE ARCHITECTS OR ENGINEERING DWGS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT, THE HIGHER QUANTITY OF ITEMS OR MATERIALS, PRODUCTS OR MEANS AND METHODS SHALL PREVAIL UNLESS DEEMED OTHERWISE BY THE ARCHITECT.
13. PRIOR TO CLOSING WALLS, G.C TO COORDINATE INSTALLATION OF VOICE/DATA WIRING AND CONDUIT WITH TELEPHONE VENDOR.
14. CONTRACTOR TO PROVIDE FIRE RETARDANT BLOCKING AT ALL MILLWORK, WALL HUNG EQUIPMENT ETC AS REQUIRED.
15. G.C TO PROVIDE S.D FOR ALL NEW GLAZING AND SLIDING DOOR SYSTEM AT NEW VESTIBULE FOR APPROVAL, INCLUDING MFG. SIZES, OPERATION, COLOR CHART AND SAMPLE.

NOTE:
SEE ARCHITECT DRAWING A-202.02 FOR ARCHITECT DETAIL NOTES.

RadonAway

INSTALLATION & OPERATING INSTRUCTIONS
Instruction P/N 19015 Rev F
FOR *CHECKPOINT IIa* /P/N 28001-2 & 28001-3
RADON/RADON ALARM

INSTALLATION INSTRUCTIONS
(WALL MOUNTING)

Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. NOTE: The Checkpoint IIa is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.

Drill two 1/4" holes 4" apart horizontally where the unit is to be mounted.

Install the two 1/4" wall anchors provided.

Hang the CHECKPOINT IIa from the two mounting holes located on the mounting bracket. Tighten the mounting screws so the unit fits snugly and securely against the wall.

Drill a 5/16" hole into the side of the vent pipe about 6" higher than the top of the unit.

Insert the vinyl tubing provided about 1" inside the suction pipe.

Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

CALIBRATION AND OPERATION.

The CHECKPOINT IIa units are calibrated and sealed at the factory to alarm when the vacuum pressure falls below the factory setting and should not normally require field calibration. Factory Settings are:
28001-2 -.25" W.C Vacuum
28001-3 -.10" W.C Vacuum

To Verify Operation:

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on at about two or three seconds and the green light should go out.

WARRANTY INFORMATION

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective material and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others, or the unit has been abused or misused. Warranty does not include damage at shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns may be accepted without an RMA. If factory return is required, the customer assumes all shipping costs to and from factory.

Manufactured by:
RadonAway
Ward Hill, MA
(978)-521-1703

DETAIL #4
SCALE: NOT TO SCALE

PLAZA 163
EAST 163RD STREET
BRONX, NY

NO	DATE	ISSUE

Pressley Associates, LLC
Environmental Consultants
721 County Highway 54
Cherry Valley, NY 13320
Tel: 607-435-9589

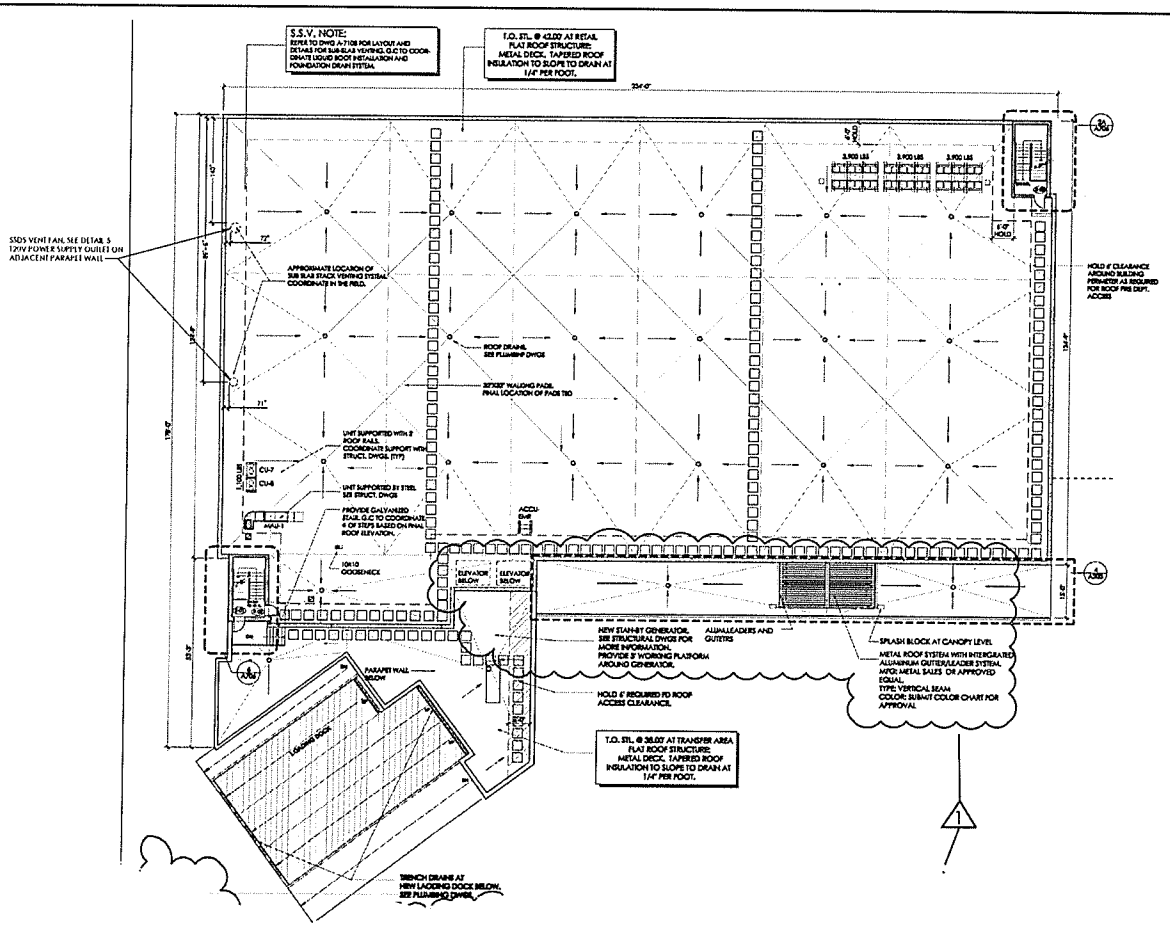
HRP

STATE OF NEW YORK
THOMAS S. PEQUIGNOT
75180
LICENSED PROFESSIONAL ENGINEER

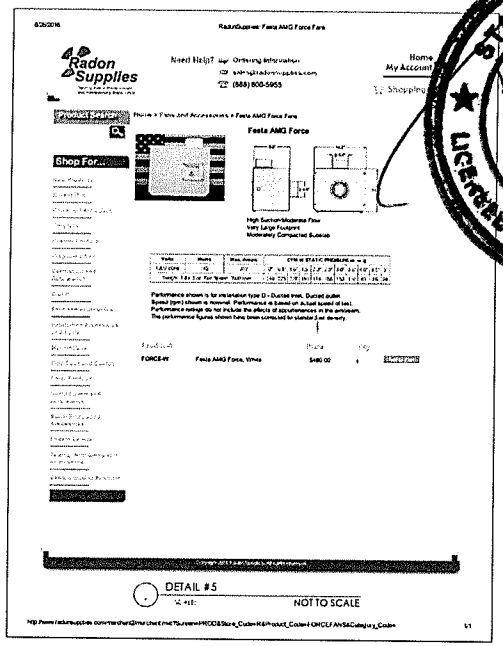
NO	DATE	REVISION

FIRST FLOOR CONSTRUCTION PLAN

SIGNED BY:	DATE: 08-30-16
	PROJECT: ———
	DWG BY: BOB
	CHK BY: NP
	DWG No: FIGURE 7



NOTE:
SEE ARCHITECT DRAWING A-203.01 FOR ARCHITECT DETAIL NOTES.



PLAZA 163
EAST 163RD STREET
BRONX, NY

NO	DATE	ISSUE

Pressley Associates, LLC
Environmental Consultants
721 County Highway 54
Cherry Valley, NY 13320
Tel: 607-435-9589

HRP

STATE OF NEW YORK
THOMAS S. PRESSLEY
75180
LICENSED PROFESSIONAL ENGINEER

NO	DATE	REVISION

ROOF PLAN

SIGNED BY:	DATE: 08-30-16
	PROJECT: ——
	DWG BY: BOB
	CHK BY: NP
	DWG No: FIGURE 8

Table 1
End Point Samples
TP-2 - STARS
Sampled on 8/27/08
Compounds Exceeding TAGM 4046
Parts Per Million

Sample Name	Parameter Detected	Concentration	Historic TAGM Guideline	Restricted Residential SCO	Commercial SCO
West	Benzo(a)anthracene	3.5	0.224	1	1
	Benzo(a)pyrene	2.9	0.61	1	1
	Benzo(b)fluoranthene	3	1.1	1	1.7
	Benzo(k)fluoranthene	2.1	1.1	1.7	1.7
	Dibenz(a,h)anthracene	0.45	0.014	0.33	0.56
	Chrysene	2.9	0.4	1	1
North	Benzo(a)anthracene	0.49	0.224	1	1
	Chrysene	0.45	0.4	1	1

Key: SCO - NYS DEC Soil Cleanup Objectives October 10, 2010

Table 2
End Point Samples
Results of EPA 8270 Analyses In Soil (PPB)
Plaza 163
Sampled 8/22/08-8/25/08

Sample ID	Depth	Compounds Detected	Concentration	Reference	Historic TAGM 4046	Restricted Residential SCO	Commerical SCO
TP-1	8feet	Benzo(a)anthracene	630	SG-9	224	1000	1000
TP-1	8feet	Benzo(a)pyrene	180	SG-9	61	1000	1000
TP-1	8feet	Benzo(b)fluoranthene	280	SG-9	1100	1000	1700
TP-1	8feet	Chrysene	660	SG-9	400	1000	1000
TP-1	8feet	Fluoranthene	1200	SG-9	50000	100000	500000
TP-1	8feet	Phenanthrene	510	SG-9	50000	100000	500000
TP-1	8feet	Pyrene	1000	SG-9	50000	100000	500000
TP-3	10feet	Pyrene	180	SG-5	50000	100000	500000
TP-4	8feet	Benzo(a)anthracene	540	SG-2	224	1000	1000
TP-4	8feet	Benzo(b)fluoranthene	230	SG-2	1100	1000	1700
TP-4	8feet	Benzo(k)fluoranthene	210	SG-2	1100	1700	1700
TP-4	8feet	Chrysene	490	SG-2	400	1000	1000
TP-4	8feet	Phenanthrene	540	SG-2	50000	100000	500000
TP-4	8feet	Pyrene	960	SG-2	50000	100000	500000
TP-5	8feet	Benzo(a)anthracene	180	SG-2	224	1000	1000
TP-5	8feet	Chrysene	190	SG-2	400	1000	1000
TP-5	8feet	Fluoranthene	330	SG-2	50000	100000	500000
TP-5	8feet	Phenanthrene	170	SG-2	50000	100000	500000
TP-5	8feet	Pyrene	310	SG-2	50000	100000	500000

Notes:

SCO - NYS DEC Soil Cleanup Objectives October, 10, 2010

TABLE 3
End Point Samples
Target Analyte List Inorganics (PPM)
Plaza 163
Sampled 8/22/08-8/25/08

	Location					Restricted	
	TP-1	TP-3	TP-4	TP-5	TAGM	Residential	Commercial
Analyte	8feet	10feet	8feet	8feet	4046	SCO	SCO
Aluminum	4860	9140	11600	8250	33000	NA	NA
Antimony	3.66	3.37	5.3	2.97		NA	NA
Arsenic	8.04	4.18	2.7	4.37	7.5-12	16	16
Barium	1800	106	56.9	216	300-600	400	400
Baryllium	ND	ND	ND	ND	0.16-1.75	47	47
Cadmium	1.35	ND	ND	ND	1	4.3	7.5
Calcium	40800	18800	1350	20700	35000	NA	NA
Chromium*	30.8	21.2	48	21.2	40	19-180	19-1500
Cobalt	5.53	8.97	8.3	7.11	60	NA	NA
Copper	66.4	32.9	27.7	48.4	25-50	270	270
Iron	11500	14400	21600	12600	550000	NA	NA
Lead	2220	158	4400	373	200-500	400	450
Magnesium	9300	10300	108	6290	100-5000	NA	NA
Manganese	250	320	15.4	259	50-5000	2000	2000
Nickel	14.6	13.9	1200	15	13-25	130	130
Potassium	1250	2140	1200	1290	43000	NA	NA
Selenium	1.13	ND	ND	ND	2-3.9	4	4
Silver	ND	ND	ND	ND		8.3	8.3
Sodium	956	303	ND	143	6000-8000	NA	NA
Thallium	ND	ND	ND	ND		NA	NA
Vanadium	26	24.4	35.4	23.3	150-300	NA	NA
Zinc	968	130	43.9	214	20-50	2480	2480
Mercury	ND	ND	ND	ND		0.73	0.73

ND - Not Detected

* Total Chromium includes SCOs for Hexavalent (19) and Trivalent (180-1500)

Table 4
End Point Samples
Results of EPA 8260 Analyses In Soil (PPB)
Plaza 163
Sampled 8/22-8/25, 2008

Sample ID	Depth	Compounds Detected	Concentration	Reference
TP-1	8feet	ND	NA	SG-9
TP-3	10feet	ND	NA	SG-5
TP-4	8feet	ND	NA	SG-2
TP-5	8feet	ND	NA	SG-2

Notes:

ND - Not Detected
NA - Not Applicable
Q - Data qualifiers

TAGM - 4046 NYS Soil Cleanup Objectives

Table 5
End Point Samples
Target Analyte List Inorganics (PPM)
Plaza 163
Sampled 8/24/05-9/1/05

	Location														Restricted	
	MW-1		MW-1	MW-2	MW-3		SB-1		SB-2		SB-3		SB-4	TAGM	Residential	Commercial
Analyte	4-6	10-12	Dup(4-6)	12-14	4-6	16-18	4-6	10-12	6-8	16-18	0-2	14-16	6-8	4046	SCO	SCO
Aluminum	8950	5660J	3090J	2020	5120	6710	8190	4670	9170	2810	9840	3200	8240	33000	NA	NA
Antimony	U	U	U	U	U	U	U	U	U	U	U	U	U		NA	NA
Arsenic	U	U	U	U	U	U	1.3	U	0.47	U	4.5	U	3.1	7.5-12	16	16
Barium	56.9	44.4	24	13.3	67.2	82.8	116	21.1	52.7	15.1	115	27.9	227	300-600	400	400
Baryllium	0.44	0.33	0.18	0.15	0.27	0.55	0.42	0.31	0.5	0.17	0.53	0.29	0.41	0.16-1.75	47	47
Cadmium	1.2	1	0.48	0.35	1.1	1.5	1.1	0.75	1.5	0.51	1.7	0.71	2.1	1	4.3	7.5
Calcium	3140	1670	1050	718	91400	5790	42600	1970	3450	1270	5100	1040	20600	35000	NA	NA
Chromium*	15.4	14	10.3	6	14.4	16.9	15.2	12.3	21.7	26.2	20.7	10.8	16.8	40	19-180	19-1500
Cobalt	4.6	6.1	3.9	2.4	4.2	7.7	3.5	5.1	6.4	3.8	6.2	4.4	7.1	60	NA	NA
Copper	22	21.4	12	6.9	25.8	25.3	19.2	10.1	10	11.6	72.5	13.4	31.1	25-50	270	270
Cyanide	U	U	U	U	U	U	U	U	U	U	U	U	U	ND	27	27
Iron	14100	11800J	6730J	4610	9550	15700	10500	7810	17300	6210	16100	7580	22500	550000	NA	NA
Lead	37.1	6.8	4.1	2.9	79.1	8.6	254	7.4	35.5	3.1	189	5.6	257	200-500	400	450
Magnesium	2880	3240	1910	1420	25700	5120	4970	2540	2850	1830	3750	2010	4640	100-5000	NA	NA
Manganese	207	294J	187J	128	165	780	230	153	448	82.8	361	168	344	50-5000	2000	2000
Mercury	U	U	U	U	U	U	U	U	U	U	U	U	U		0.73	0.73
Nickel	13.1	15.3	9.1	5.4	9.3	19.2	8.6	13.2	10.7	8.3	15.2	8.8	14.9	13-25	130	130
Potassium	725	1280	531	495	1650	1750	818	601	308	507	1030	758	1580	43000	NA	NA
Selenium	0.34J	UJ	UJ	UJ	UJ	UJ	0.10J	UJ	U	UJ	0.38U	UJ	0.13J	2-3.9	4	4
Silver	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ		8.3	8.3
Sodium	79.2	51.4	93.2	41.5	U	121	94	105	72.3	143	50.2	86.3	167	6000-8000	NA	NA
Thallium	U	U	U	U	U	U	U	U	U	R	U	U	U		NA	NA
Vanadium	18.9	16.2	9.8	6.3	14.8	23.1	14.1	12.5	25.2	9.2	23.3	9.8	20.5	150-300	NA	NA
Zinc	47.5	34.5	19	13.2	81.7	41.3	93.3	30.4	48.3	19.7	131	22.2	167	20-50	2480	2480

U - Undetected

R - Rejected

* Total Chromium includes SCO rangess for Hexavalent and Trivalent Chromium

Table 5
End Point Samples Continued
Target Analyte List Inorganics (PPM)
Plaza 163
Sampled 8/24/05-9/1/05

	Location											Restricted	
											TAGM	Residenti	Commercial
Analyte	SG-1	SG-2	SG-3	SG-4	SG-5	SG-6	SG-7	SG-8	SG-9	SG-9Dup	4046	SCO	SCO
Aluminum	9430	6490	5200	6130	6520	6850	7110	7580	6100	6480	33000	NA	NA
Antimony	U	U	U	U	U	U	U	U	U	U		NA	NA
Arsenic	47.6	3.2	1.4	0.73	U	1.5	U	8.4	1.2	0.95	7.5-12	16	16
Barium	739	344	94.2	124	280	1260	574	640	84.5	47.2	300-600	400	400
Baryllium	0.41	0.5	0.34	0.41	0.41	0.45	0.48	0.48	0.29	0.27	0.16-1.75	47	47
Cadmium	5.9	2	1.9	1.6	1.6	5	2.3	3.5	2.8	1.4	1	4.3	7.5
Calcium	35200	23400	28200	41800	28500	40000	74000	25100	54000	49100	35000	NA	NA
Chromium	59.2	23.2	17.7	20.2	17.9	27.2	25.1	25.4	20	13.5	40	19-180	19-1500
Cobalt	10.2	6	4.4	4.8	6.4	3.6	4.9	6.4	4.2	4.1	60	NA	NA
Copper	1040	59.8	65.3	47	41	61.6	105	139	888J	182J	25-50	270	270
Cyanide	U	U	U	U	U	U	U	U	U	U	ND	27	27
Iron	25500	12700	17700	15100	12700	34300	16200	24000	13100J	12300J	550000	NA	NA
Lead	721	449	194	191	818	714	312	560	1820J	372J	200-500	400	450
Magnesium	7460	5600	9740	10000	14500	9460	34400	10400	11900	7360	100-5000	NA	NA
Manganese	505	255	236	245	266	314	424	214	240J	291J	50-5000	2000	2000
Mercury	U	U	U	U	U	U	U	U	U	U		0.73	0.73
Nickel	60.1	17.5	17	13.2	16.2	19.1	37.6	23.4	13.8	10.2	13-25	130	130
Potassium	1830	1170	1580	1890	2270	1240	1380	1630	1050	1030	43000	NA	NA
Selenium	0.072J	0.19J	0.2J	0.14J	0.17J	0.17J	UJ	0.25J	UJ	UJ	2-3.9	4	4
Silver	4.6J	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ		8.3	8.3
Sodium	331	15.1	U	U	U	U	U	20.4B	72.6	55.2	6000-8000	NA	NA
Thallium	U	0.95	U	U	U	U	0.72	U	R	U		NA	NA
Vanadium	28.6	25.7	20.1	19.9	21.4	25.5	21	36.6	22	21.5	150-300	NA	NA
Zinc	1620	594	135	117	209	972	652	734	434	118J	20-50	2480	2480

U - Undetected B - Compound Also Found In Blank

R - Rejected

TAGM 4046 - NYS Soil Cleanup Objectives

Table 6
End Point Samples
Results of EPA 8260B Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Restricted Residential SCO	Commercial SCO
MW-1	4-6 feet	ND	NA	NA			
MW-1	10-12 feet	ND	NA	NA			
MW-1	Dup (4-6)	ND	NA	NA			
MW-2	12-14 feet	ND	NA	NA			
MW-3	4-6 feet	ND	NA	NA			
MW-3	16-18 feet	ND	NA	NA			
SB-1	4-6 feet	Acetone	39	J	200	50	50
SB-1	10-12 feet	ND	NA	NA			
SB-2	6-8 feet	ND	NA	NA			
SB-2	16-18 feet	ND	NA	NA			
SB-3	0-2 feet	ND	NA	NA			
SB-3	14-16 feet	ND	NA	NA			
SB-4	6-8 feet	Tentatively identified compounds	Refer To Lab Report	NJ			
SG-1	0-2 inches	ND	NA	NA			
SG-2	0-2 inches	ND	NA	NA			
SG-3	0-2 inches	Tetrachloroethylene	6	J	1400	1300	1300
SG-4	0-2 inches	ND	NA	NA			
SG-5	0-2 inches	ND	NA	NA			
SG-6	0-2 inches	ND	NA	NA			
SG-7	0-2 inches	ND	NA	NA			
SG-8	0-2 inches	ND	NA	NA			
SG-9	0-2 inches	Acetone	13	J	200	500	500
SG-9	0-2 inches	Toluene	3	J	1500	700	700
SG-9	0-2 inches	EthylBenzene	1	J	5500	1000	100
SG-9	0-2 inches	m,p-xylene	10	J	1200	1600	1600
SG-9	0-2 inches	0-xylene	9	J	1200	1600	1600
SG-9	0-2 inches	Napthalene	8	J	13000	12000	12000
SG-9	0-2 inches	n-Propylbenzene	3	J			
SG-9	0-2 inches	1,2,4 Trimethylbenzene	42	J	3400	3600	3600
SG-9	0-2 inches	1, 3, 5 Trimethylbenzene	18	J			
SG-9	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ			
SG-9Dup	0-2 inches	Acetone	18	J	200	500	500
SG-9Dup	0-2 inches	Toluene	2	J	1500	700	700
SG-9Dup	0-2 inches	m,p-xylene	5	J	1200	1600	1600
SG-9Dup	0-2 inches	0-xylene	4	J	1200	1600	1600
SG-9Dup	0-2 inches	Napthalene	8	J	13000	12000	12000
SG-9Dup	0-2 inches	n-Propylbenzene	2	J			
SG-9Dup	0-2 inches	1,2,4 Trimethylbenzene	29	J	3400	3600	3600
SG-9Dup	0-2 inches	1, 3, 5 Trimethylbenzene	11	J			
SG-9Dup	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ			

Notes:

ND - Not Detected
NA - Not Applicable
Q - Data qualifiers

TAGM - 4046 NYS Soil Cleanup Objectives

Table 7
Results of EPA 8270C Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Resctricted Residential SCO	Commercial SCO
MW-1	4-6 feet	Anthracene	110	J	50000	100000	500000
MW-1	4-6 feet	Benzo(a)anthracene	150	J	224	1000	1000
MW-1	4-6 feet	Benzo(a)pyrene	140	J	61	1000	1000
MW-1	4-6 feet	Benzo(b)fluoranthene	120	J	1100	1000	1700
MW-1	4-6 feet	Benzo(g,h,I)perylene	120	J	50000	100000	500000
MW-1	4-6 feet	Benzo(k)fluoranthene	190	J	1100	1700	1700
MW-1	4-6 feet	Bis (2-ethylhexyl) phthalate	250	J	50000	NA	NA
MW-1	4-6 feet	Chrysene	150	J	400	1000	1000
MW-1	4-6 feet	Fluoranthene	230	J	50000	100000	500000
MW-1	4-6 feet	Indeno(1,2,3-cd) pyrene	89	J	3200	500	5600
MW-1	4-6 feet	Phenanthrene	120	J	50000	100000	500000
MW-1	4-6 feet	Pyrene	280	J	50000	100000	500000
MW-1	4-6 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
MW-1	10-12 feet	Bis (2-ethylhexyl) phthalate	140	J	50000	NA	NA
MW-1	10-12 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
MW-1Dup	10-12 feet	Butyl benzyl phthalate	57	J	50000	NA	NA
MW-1Dup	10-12 feet	Bis (2-ethylhexyl) phthalate	260	J	50000	NA	NA
MW-1Dup	10-12 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
MW-2	12-14	Bis (2-ethylhexyl) phthalate	130	J	50000	NA	NA
MW-2	12-14	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
MW-3	4-6 feet	Carbazole	210	J	NA	NA	NA
MW-3	4-6 feet	Acenaphthene	320	J	41000	98000	98000
MW-3	4-6 feet	Anthracene	660		50000	100000	500000
MW-3	4-6 feet	Benzo(a)anthracene	920		224	1000	1000
MW-3	4-6 feet	Benzo(a)pyrene	**1100**	J	61	1000	1000
MW-3	4-6 feet	Benzo(b)fluoranthene	**1100**	J	1100	1000	1700
MW-3	4-6 feet	Benzo(g,h,I)perylene	1200	J	50000	100000	500000
MW-3	4-6 feet	Benzo(k)fluoranthene	1400	J	1100	1700	1700
MW-3	4-6 feet	Butyl benzyl phthalate	160	J	50000	NA	NA
MW-3	4-6 feet	Bis (2-ethylhexyl) phthalate	390		50000	NA	NA
MW-3	4-6 feet	Chrysene	930		400	1000	1000
MW-3	4-6 feet	Fluoranthene	1500		50000	100000	500000
MW-3	4-6 feet	Fluorene	51	J	50000	100000	386000
MW-3	4-6 feet	Indeno(1,2,3-cd) pyrene	**1000**	J	3200	500	5600
MW-3	4-6 feet	Phenanthrene	670		50000	100000	500000
MW-3	4-6 feet	Pyrene	2200		50000	100000	500000
MW-3	4-6 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
MW-3	16-18 feet	Anthracene	49	J	50000	100000	500000
MW-3	16-18 feet	Benzo(a)anthracene	120	J	224	1000	1000
MW-3	16-18 feet	Benzo(a)pyrene	140	J	61	1000	1000
MW-3	16-18 feet	Benzo(b)fluoranthene	120	J	1100	1000	1700
MW-3	16-18 feet	Benzo(k)fluoranthene	150	J	50000	1700	1700
MW-3	16-18 feet	Butyl benzyl phthalate	170	J	1100	NA	NA
MW-3	16-18 feet	Bis (2-ethylhexyl) phthalate	1100		50000	NA	NA
MW-3	16-18 feet	Chrysene	120	J	400	1000	1000
MW-3	16-18 feet	Fluoranthene	200	J	50000	100000	500000
MW-3	16-18 feet	Phenanthrene	230	J	50000	100000	500000
MW-3	16-18 feet	Pyrene	400		50000	100000	500000
MW-3	16-18 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA

Results of EPA 8270C Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Resctricted Residential SCO	Commercial SCO
SB-1	4-6 feet	Bis (2-ethylhexyl) phthalate	720	J	50000	NA	NA
SB-1	4-6 feet	Fluoranthene	460	J	50000	100000	500000
SB-1	4-6 feet	Pyrene	500	J	50000	100000	500000
SB-1	10-12 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SB-2	6-8 feet	Carbazole	150	J	NA	NA	NA
SB-2	6-8 feet	Acenaphthene	150	J	41000	98000	98000
SB-2	6-8 feet	Anthracene	95	J	50000	100000	500000
SB-2	6-8 feet	Benzo(a)anthracene	520		224	1000	1000
SB-2	6-8 feet	Benzo(a)pyrene	700		61	1000	1000
SB-2	6-8 feet	Benzo(b)fluoranthene	850		1100	1000	1700
SB-2	6-8 feet	Benzo(g,h,I)perylene	530		50000	100000	500000
SB-2	6-8 feet	Benzo(k)fluoranthene	780		1100	1700	1700
SB-2	6-8 feet	Butyl benzyl phthalate	340	J	50000	NA	NA
SB-2	6-8 feet	Bis (2-ethylhexyl) phthalate	720		50000	NA	NA
SB-2	6-8 feet	Chrysene	510		400	1000	1000
SB-2	6-8 feet	Fluoranthene	830		50000	100000	500000
SB-2	6-8 feet	Fluorene	46	J	50000	100000	386000
SB-2	6-8 feet	Indeno(1,2,3-cd) pyrene	480		3200	500	5600
SB-2	6-8 feet	Phenanthrene	500		50000	100000	500000
SB-2	6-8 feet	Pyrene	960		50000	100000	500000
SB-2	6-8 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SB-2	16-18 feet	Bis (2-ethylhexyl) phthalate	220	J	50000	NA	NA
SB-2	16-18 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SB-3	0-2 feet	Anthracene	84	J	50000	100000	500000
SB-3	0-2 feet	Benzo(a)anthracene	130	J	224	1000	1000
SB-3	0-2 feet	Benzo(a)pyrene	170	J	61	1000	1000
SB-3	0-2 feet	Benzo(b)fluoranthene	210	J	1100	1000	1700
SB-3	0-2 feet	Benzo(g,h,I)perylene	160	J	50000	100000	500000
SB-3	0-2 feet	Benzo(k)fluoranthene	200	J	1100	1700	1700
SB-3	0-2 feet	Bis (2-ethylhexyl) phthalate	98	J	50000	NA	NA
SB-3	0-2 feet	Chrysene	200	J	400	1000	1000
SB-3	0-2 feet	Fluoranthene	170	J	50000	100000	500000
SB-3	0-2 feet	Indeno(1,2,3-cd) pyrene	170	J	3200	500	5600
SB-3	0-2 feet	2-Methylnaphthalene	78	J	36400	NA	NA
SB-3	0-2 feet	Phenanthrene	84	J	50000	100000	500000
SB-3	0-2 feet	Pyrene	180	J	50000	100000	500000
SB-3	0-2 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SB-3	14-16 feet	Bis (2-ethylhexyl) phthalate	67	J	50000	NA	NA
SB-3	14-16 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA

Results of EPA 8270C Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Resctricted Residential SCO	Commercial SCO
SB-4	6-8 feet	Carbazole	41	J	NA	NA	NA
SB-4	6-8 feet	Anthracene	380		50000	100000	500000
SB-4	6-8 feet	Benzo(a)anthracene	290	J	224	1000	1000
SB-4	6-8 feet	Benzo(a)pyrene	250	J	61	1000	1000
SB-4	6-8 feet	Benzo(b)fluoranthene	230	J	1100	1000	1700
SB-4	6-8 feet	Benzo(g,h,I)perylene	160	J	50000	100000	500000
SB-4	6-8 feet	Benzo(k)fluoranthene	250	J	1100	1700	1700
SB-4	6-8 feet	Butyl benzyl phthalate	310	J	50000	NA	NA
SB-4	6-8 feet	Bis (2-ethylhexyl) phthalate	680		50000	NA	NA
SB-4	6-8 feet	Chrysene	270	J	400	1000	1000
SB-4	6-8 feet	Fluoranthene	600		50000	100000	500000
SB-4	6-8 feet	Indeno(1,2,3-cd) pyrene	160	J	3200	500	5600
SB-4	6-8 feet	Phenanthrene	390		50000	100000	500000
SB-4	6-8 feet	Pyrene	510		50000	100000	500000
SB-4	6-8 feet	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-1	0-2 inches	Carbazole	210	J	NA	NA	NA
SG-1	0-2 inches	Anthracene	300	J	50000	100000	500000
SG-1	0-2 inches	Benzo(a)anthracene	**1200**		224	1000	1000
SG-1	0-2 inches	Benzo(a)pyrene	**1200**	J	61	1000	1000
SG-1	0-2 inches	Benzo(b)fluoranthene	**1100**	J	1100	1000	1700
SG-1	0-2 inches	Benzo(g,h,I)perylene	640	J	50000	100000	500000
SG-1	0-2 inches	Benzo(k)fluoranthene	1600	J	1100	1700	1700
SG-1	0-2 inches	Butyl benzyl phthalate	54000	D	50000	NA	NA
SG-1	0-2 inches	Bis (2-ethylhexyl) phthalate	1000		50000	NA	NA
SG-1	0-2 inches	Chrysene	**1400**		400	1000	1000
SG-1	0-2 inches	Di-n-butyl phthalate	1300		8100	NA	NA
SG-1	0-2 inches	Fluoranthene	2500		50000	100000	500000
SG-1	0-2 inches	Indeno(1,2,3-cd) pyrene	**650**	J	3200	500	5600
SG-1	0-2 inches	Phenanthrene	1400	J	50000	100000	500000
SG-1	0-2 inches	Pyrene	2500		50000	100000	500000
SG-1	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-2	0-2 inches	Carbazole	490	J	NA	NA	NA
SG-2	0-2 inches	Acenaphthene	200	J	41000	98000	98000
SG-2	0-2 inches	Anthracene	760		50000	100000	500000
SG-2	0-2 inches	Benzo(a)anthracene	**1900**		224	1000	1000
SG-2	0-2 inches	Benzo(a)pyrene	**1400**		61	1000	1000
SG-2	0-2 inches	Benzo(b)fluoranthene	**1300**		1100	1000	1700
SG-2	0-2 inches	Benzo(g,h,I)perylene	660	J	50000	100000	500000
SG-2	0-2 inches	Benzo(k)fluoranthene	**1800**		1100	1700	1700
SG-2	0-2 inches	Bis (2-ethylhexyl) phthalate	640	J	50000	NA	NA
SG-2	0-2 inches	Chrysene	**1800**		400	1000	1000
SG-2	0-2 inches	Di-n-butyl phthalate	190	J	NA	NA	NA
SG-2	0-2 inches	Dibenz(a,h)anthracene	290	J	14	NA	NA
SG-2	0-2 inches	Dibenzofuran	130	J	6200	NA	NA
SG-2	0-2 inches	Fluoranthene	3800		50000	100000	500000
SG-2	0-2 inches	Fluorene	340	J	50000	100000	386000

Results of EPA 8270C Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Resctricted Residential SCO	Commercial SCO
SG-2	0-2 inches	Indeno(1,2,3-cd) pyrene	**680**	J	3200	500	5600
SG-2	0-2 inches	Phenanthrene	3100	J	50000	100000	500000
SG-2	0-2 inches	Pyrene	3600		50000	100000	500000
SG-2	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-3	0-2 inches	Carbazole	100	J	NA	NA	NA
SG-3	0-2 inches	Acenaphthylene	98	J	41000	100000	107000
SG-3	0-2 inches	Benz (a) anthracene	580	J	224	1000	1000
SG-3	0-2 inches	Benzo(a)pyrene	700	J	61	1000	1000
SG-3	0-2 inches	Benzo(b)fluoranthene	600	J	1100	1000	1700
SG-3	0-2 inches	Benzo(g,h,I)perylene	550	J	50000	100000	500000
SG-3	0-2 inches	Benzo(k)fluoranthene	1000		1100	1700	1700
SG-3	0-2 inches	Bis (2-ethylhexyl) phthalate	230	J	50000	NA	NA
SG-3	0-2 inches	Chrysene	640	J	400	1000	1000
SG-3	0-2 inches	Fluoranthene	890		50000	100000	500000
SG-3	0-2 inches	Indeno(1,2,3-cd) pyrene	**520**	J	3200	500	5600
SG-3	0-2 inches	Phenanthrene	340	J	50000	100000	500000
SG-3	0-2 inches	Pyrene	930		50000	100000	500000
SG-3	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-4	0-2 inches	Carbazole	170	J	NA	NA	NA
SG-4	0-2 inches	Acenaphthylene	210	J	41000	100000	107000
SG-4	0-2 inches	Anthracene	840		50000	100000	500000
SG-4	0-2 inches	Benz (a) anthracene	860		224	1000	1000
SG-4	0-2 inches	Benzo(a)pyrene	910		61	1000	1000
SG-4	0-2 inches	Benzo(b)fluoranthene	**1100**		1100	1000	1700
SG-4	0-2 inches	Benzo(g,h,I)perylene	520	J	50000	100000	500000
SG-4	0-2 inches	Benzo(k)fluoranthene	1200		1100	1700	1700
SG-4	0-2 inches	Butyl benzyl phthalate	140	J	50000	NA	NA
SG-4	0-2 inches	Bis (2-ethylhexyl) phthalate	200	J	50000	NA	NA
SG-4	0-2 inches	Chrysene	860		400	1000	1000
SG-4	0-2 inches	Fluoranthene	1600		50000	100000	500000
SG-4	0-2 inches	Indeno(1,2,3-cd) pyrene	**520**	J	3200	500	5600
SG-4	0-2 inches	Phenanthrene	860	J	50000	100000	500000
SG-4	0-2 inches	Pyrene	1600		50000	100000	500000
SG-4	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-5	0-2 inches	Acenaphthylene	98	J	41000	100000	107000
SG-5	0-2 inches	Benz (a) anthracene	450	J	224	1000	1000
SG-5	0-2 inches	Benzo(a)pyrene	500	J	61	1000	1000
SG-5	0-2 inches	Benzo(b)fluoranthene	500	J	1100	1000	1700
SG-5	0-2 inches	Benzo(g,h,I)perylene	270	J	50000	100000	500000
SG-5	0-2 inches	Benzo(k)fluoranthene	610	J	1100	1700	1700
SG-5	0-2 inches	Bis (2-ethylhexyl) phthalate	240	J	50000	NA	NA
SG-5	0-2 inches	Chrysene	480	J	400	1000	1000
SG-5	0-2 inches	Di-n-butyl phthalate	79	J	NA	NA	NA
SG-5	0-2 inches	Fluoranthene	790		50000	100000	500000
SG-5	0-2 inches	Indeno(1,2,3-cd) pyrene	280	J	3200	500	5600
SG-5	0-2 inches	Phenanthrene	260	J	50000	100000	500000
SG-5	0-2 inches	Pyrene	790		50000	100000	500000
SG-5	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA

Results of EPA 8270C Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Resctricted Residential SCO	Commercial SCO
SG-6	0-2 inches	Carbazole	570	J	NA	NA	NA
SG-6	0-2 inches	Acenaphthylene	530	J	41000	100000	107000
SG-6	0-2 inches	Anthracene	840		50000	100000	500000
SG-6	0-2 inches	Benz (a) anthracene	**3300**		224	1000	1000
SG-6	0-2 inches	Benzo(a)pyrene	**2900**	J	61	1000	1000
SG-6	0-2 inches	Benzo(b)fluoranthene	**2600**	J	1100	1000	1700
SG-6	0-2 inches	Benzo(g,h,I)perylene	1600	J	50000	100000	500000
SG-6	0-2 inches	Benzo(k)fluoranthene	**3400**	J	1100	1700	1700
SG-6	0-2 inches	Bis (2-ethylhexyl) phthalate	67000	J	50000	NA	NA
SG-6	0-2 inches	Chrysene	**3300**		400	1000	1000
SG-6	0-2 inches	Di-n-butyl phthalate	140	J	NA	NA	NA
SG-6	0-2 inches	Dibenzofuran	97	J	6200	NA	NA
SG-6	0-2 inches	Fluoranthene	6200		50000	100000	500000
SG-6	0-2 inches	Fluorene	200	J	50000	100000	386000
SG-6	0-2 inches	Indeno(1,2,3-cd) pyrene	**1500**	J	3200	500	5600
SG-6	0-2 inches	Phenanthrene	4100	J	50000	100000	500000
SG-6	0-2 inches	Pyrene	11000		50000	100000	500000
SG-6	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-7	0-2 inches	Carbazole	290	J	NA	NA	NA
SG-7	0-2 inches	Acenapthene	82	J	NA	98000	98000
SG-7	0-2 inches	Acenaphthylene	340	J	41000	100000	107000
SG-7	0-2 inches	Anthracene	350	J	50000	100000	500000
SG-7	0-2 inches	Benz (a) anthracene	**2200**		224	1000	1000
SG-7	0-2 inches	Benzo(a)pyrene	**2800**	J	61	1000	1000
SG-7	0-2 inches	Benzo(b)fluoranthene	**2700**	J	1100	1000	1700
SG-7	0-2 inches	Benzo(g,h,I)perylene	1400	J	50000	100000	500000
SG-7	0-2 inches	Benzo(k)fluoranthene	**3700**	J	1100	1700	1700
SG-7	0-2 inches	Butyl benzyl phthalate	330	J	50000	NA	NA
SG-7	0-2 inches	Bis (2-ethylhexyl) phthalate	810		50000	NA	NA
SG-7	0-2 inches	Chrysene	**2200**		400	1000	1000
SG-7	0-2 inches	Di-n-butyl phthalate	91	J	NA	NA	NA
SG-7	0-2 inches	Fluoranthene	3400		50000	100000	500000
SG-7	0-2 inches	Fluorene	140	J	50000	100000	386000
SG-7	0-2 inches	Indeno(1,2,3-cd) pyrene	**1400**	J	3200	500	5600
SG-7	0-2 inches	Phenanthrene	1800	J	50000	100000	500000
SG-7	0-2 inches	Pyrene	5100		50000	100000	500000
SG-7	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-8	0-2 inches	Carbazole	290	J	NA	NA	NA
SG-8	0-2 inches	Acenapthene	84	J	NA	98000	98000
SG-8	0-2 inches	Acenaphthylene	310	J	41000	100000	107000
SG-8	0-2 inches	Anthracene	520	J	50000	100000	500000
SG-8	0-2 inches	Benz (a) anthracene	**3500**		224	1000	1000
SG-8	0-2 inches	Benzo(a)pyrene	**3000**	J	61	1000	1000
SG-8	0-2 inches	Benzo(b)fluoranthene	**3900**	J	1100	1000	1700
SG-8	0-2 inches	Benzo(g,h,I)perylene	1300	J	50000	100000	500000
SG-8	0-2 inches	Benzo(k)fluoranthene	**4300**	J	1100	1700	1700
SG-8	0-2 inches	Butyl benzyl phthalate	2000		50000	NA	NA

Table 7
End Point Sampling
Results of EPA 8270C Analyses In Soil (PPB)
Plaza 163
Sampled 8/24/05-9/1/05

Sample ID	Depth	Compounds Detected	Concentration	Q	Historic TAGM 4046	Resctricted Residential SCO	Commercial SCO
SG-8	0-2 inches	Bis (2-ethylhexyl) phthalate	3200		50000	NA	NA
SG-8	0-2 inches	Chrysene	**3300**		400	1000	1000
SG-8	0-2 inches	Di-n-butyl phthalate	160	J	NA	NA	NA
SG-8	0-2 inches	Fluoranthene	5600		50000	100000	500000
SG-8	0-2 inches	Fluorene	150	J	50000	100000	386000
SG-8	0-2 inches	Indeno(1,2,3-cd) pyrene	**1300**	J	3200	500	5600
SG-8	0-2 inches	Phenanthrene	2300	J	50000	100000	500000
SG-8	0-2 inches	Pyrene	8400		50000	100000	500000
SG-8	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-9	0-2 inches	Bis (2-ethylhexyl) phthalate	22000	J	50000	NA	NA
SG-9	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA
SG-9Dup	0-2 inches	Tentatively identified compounds	Refer To Lab Report	NJ	NA	NA	NA

Notes:

ND - Not Detected
NA - Not Applicable
Q - Data Qualifiers
J - Estimated Value
NJ - Tentatively Identified Compound

TAGM 4046- Refers to NYS Soil Cleanup Objectives