



## **SITE MANAGEMENT PLAN**

### **Parkview Commons Development Site**

421-435 East 160<sup>th</sup> Street

426-440 East 161<sup>st</sup> Street

865-877 Elton Avenue

Borough of Bronx

Bronx County, New York

**Brownfield Cleanup Program: C203014**

**ESI File: LB03027.70R2**

**Date prepared: September 2016**

**Prepared by:**



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Ecosystems Strategies, Inc.

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**Prepared For:**

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The undersigned has reviewed this Site Management Plan and certifies to BX Parkview Associates, LLC that the information provided in this document is accurate as of the date of issuance by this office. Any and all questions or comments, including requests for additional information, should be submitted to the undersigned.

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Paul H. Ciminello  
President



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## **SECTION 1 - INTRODUCTION**

### **1.1 SITE DESCRIPTION**

This Site Management Plan (SMP) details on-going environmental response actions appropriate to satisfy known environmental conditions at the Parkview Commons Development Site (hereafter referred to as the "Site") located at 421-435 East 160<sup>th</sup> Street, 426-440 East 161<sup>st</sup> Street, and 865-877 Elton Avenue, Borough of Bronx, New York (Block 2382, Lot 16). Site Location Map is provided on page 2.

The subject property is an irregularly-shaped, 0.67-acre parcel, which has 200 feet of frontage on the northern side of East 160<sup>th</sup> Street, 150 feet of frontage on the southern side of East 161<sup>st</sup> Street, and 164 feet of frontage on the western side of Elton Avenue.

### **1.2 PURPOSE**

The purpose of this SMP is to provide a detailed description of the procedures warranted to properly manage environmental remediation systems currently installed and monitor the environmental conditions described in Section 2, below. Proper management and monitoring will be achieved by conducting the tasks outlined in Sections 3-6, below.

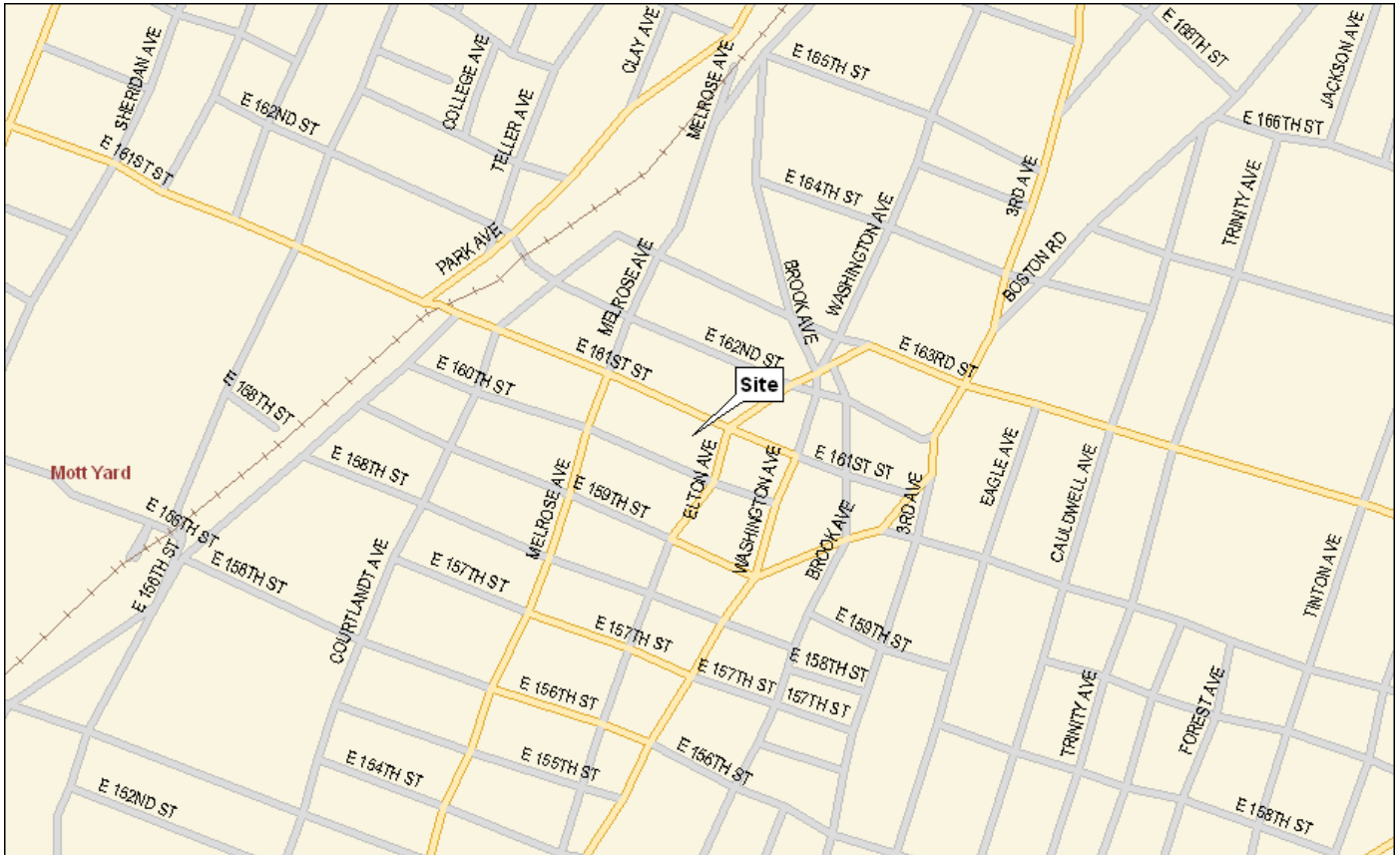
Site management is the last phase of remediation, which begins with the approval of the final remedial report and/or issuing of the certificate of completion and continues until the remedial action objectives for the site have been satisfied and the site is closed out. The remedial party is responsible to ensure that all site management responsibilities are performed. Implementation of the SMP is the responsibility of the Owner and all future owners of the site.

The SMP is intended to provide a detailed description of the procedures required to properly manage residual contamination left in place at the site following completion of the remedial action in accordance with the New York State Brownfield Cleanup agreement with the New York State Department of Environmental Conservation, including (1) development, implementation and management of all engineering and institutional controls; (2) development and implementation of monitoring systems and a monitoring plan; (3) development of a plan to operate and maintain any treatment, collection, containment or recovery systems (including, where appropriate, preparation of an operation and maintenance manual); (4) submittal of site management reports, performance of inspections and certification of results and insurance of proper communication of site information to the Department; and (5) defining criteria for termination of treatment system operation.

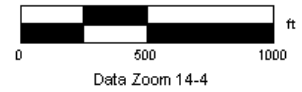
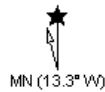
This SMP includes four plans, an Institutional and Engineering Control Plan for implementation and management of institutional and engineering controls; a Monitoring Plan for implementation of site monitoring; an Operation and Maintenance Plan (and manual where appropriate) for implementation of remedial collection, containment, treatment and recovery systems; and a Site Management Reporting Plan for submittal of data, information, recommendations and certifications to the Department.

Where the remedial action objectives call for residual contaminants to be retained and managed onsite, the requirements outlined in this SMP are to be in place in perpetuity, or until removal of the environmental easement according to an approval by the Department, or until otherwise approved by the Department.

This SMP defines the means for implementation of easement requirements. Site management activities, reporting and institutional & engineering control certification will be scheduled on a certification period basis. The certification period will be annually. The Owner of the subject property, BX Parkview Associates, LLC, will identify a qualified environmental consultant to provide all services described in this SMP. The Environmental Easement is binding and enforceable. Penalty for failure to implement this SMP is revocation of COC.



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### Site Location Map

Parkview Commons Development Site  
421-435 East 160th Street, 426-440 East 161st Street  
865-877 Elton Avenue  
Borough of Bronx  
Bronx County, New York



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## **SECTION 2 - BACKGROUND**

### **2.1 SITE DESCRIPTION**

The Site consisted, in part, of a former gasoline station and an active automobile repair shop. The gasoline station operated on the northeastern portion of the property from 1951 until at least 1979 and was demolished in 2004. In May 2003, a Phase 1 Environmental Assessment indicated potential environmental issues associated with the underground storage tanks (USTs) used at the gasoline station. A ground penetrating radar survey was subsequently conducted in the probable location of the gas tanks. In December 2004, ten 550-gallon gasoline USTs were removed and disposed off-site. The remaining petroleum-impacted soils were removed under the current remedial action. Several single-family residences, mixed residential and commercial structures, and multi-family residences were present on the subject property from the late 1800s until the late 1990s. Currently, the property contains a recently constructed, nine-story, mixed-use structure.

Environmental remediation activities at the Site are summarized in the Final Engineering Report, prepared by Ecosystems Strategies, Inc (ESI) and accepted by the NYSDEC.

### **2.2 REMEDIAL INVESTIGATION FINDINGS**

The Final Remedial Report and Remedial Investigation can be found at the NYSDEC Region 2 offices as well as at the local document repository (Bronx Community Board #3). A general discussion of environmental activities is provided below.

#### **2.2.1 Site conditions**

A subsurface investigation of Lot 20, conducted by ATC Associates (Remedial Investigation Report, dated June 18, 2001), documented the presence of fill materials overlying bedrock at ten to eleven feet below grade. A geotechnical investigation of subsurface conditions conducted by URS Corporation (Geotechnical Investigation, dated June 11, 2004) concluded that the subsurface consisted of two to twelve feet of sandy fill material overlying fractured marble bedrock. The property contains primarily dry, sandy, medium-brown soils. One to two feet of clean-fill material covers portions of the property (barrier layer is depicted in Appendix A).

No groundwater was encountered during ATC's investigation. The URS investigation documented groundwater at 7.4 feet below grade in a single groundwater observation well (B-3) located near the southeastern end of the on-site building.

Regional groundwater flow is likely to be in a southeasterly direction, toward the East River, located approximately 1.4 mile southeast of the Site. Shallow groundwater flow is likely to be strongly influenced by bedrock contours and utility conduits. Groundwater at the Site flows north, following the topography of the subject property. A Groundwater Flow Map indicating site elevations, is attached in Appendix B.

#### **2.2.2 Nature and extent of contamination**

ESI's environmental investigation of the Site is documented in a Phase II Environmental Site Assessment and Draft Remedial Action Workplan (Phase II Report) dated October 2004.

The Phase II Report described the extension of 20 soil cores and test pits at various locations throughout the Site to document the presence or absence of subsurface soil contamination. In addition, a test pit trench was extended for the length of that portion of the Site formerly used as a gas station. Finally, two ground penetrating radar (GPR) surveys were conducted to confirm the presence or absence of on-site USTs. The Phase II Report concluded that eight USTs were located along 161st Street between Elton Avenue and the vacant garage building.

Field evidence and analytical data supported the conclusion that petroleum contaminated soil was present in the vicinity of the USTs. Contaminant levels were low, but obvious odors indicated that soils in the vicinity of the USTs would need to be managed as petroleum contaminated wastes. The total volume of impacted soils was estimated at between 200 and 250 cubic yards. Contaminated soils were subject to NYSDEC regulations and therefore a spill report was made. Spill # 04-07340 was assigned to this Site.

A Tank Closure Site Assessment and Spill Closure Report (TCSA) was issued by ESI in January 2005, chronicling on-site tank removal activities and subsequent endpoint sampling. Ten, 550-gallon USTs were satisfactorily removed. The tanks were properly drained of all remaining product, cleaned, and disposed of off-site. Ten confirmatory endpoint samples were collected from the walls and floors of the gasoline UST excavation.

Laboratory analysis identified no concentrations of VOCs exceeding guidance values (i.e., TAGM levels), however several VOCs were detected at concentrations below guidance values. Minor exceedances of NYSDEC guidance values for PAHs were present in several samples. Given that these soils are capped by the on-site structure, and will not come into human contact, Spill # 04-07340 was closed by the NYSDEC.

Excavation was extended in the vicinity of a purported waste-oil tank and no evidence of a tank or petroleum-contaminated soil was encountered. A 500-gallon fuel-oil tank was excavated from the basement of the former on-site structure; no evidence of contaminated soil was noted in the area of the tank.

A RAWP, issued by ESI in February 2005, identified elevated levels of PAHs in test pits extended in the southwestern portion of the site (consistent with previous characterizations of on-site fill material). Soil gas samples collected throughout the site indicated the presence of high levels of VOCs, including both gasoline related compounds and chlorinated solvents.

## 2.3 REMEDIAL ACTIONS

The following activities were conducted as part of the implementation of the NYSDEC approved Remedial Investigation Report and Remedial Action Workplan (RIR/RAWP):

- A. Excavation and off-site disposition of contaminated soils present in the central portion of the Site. A total of 222.6 tons of soils containing elevated levels of chlorinated pesticides was excavated from the current courtyard area and disposed of off-site at a licensed (Clean Earth facility of Philadelphia) repository. Prior to removal, soil samples documented a peak level of chlordane at 1,400 ppb (TAGM level is 540 ppb), a peak level of dieldrin at 290 ppb (TAGM level is 44 ppb) and a peak level of DDT at 4,100 ppb (TAGM levels is 2,100 ppb). Post excavation sampling in the area documented levels of all pesticides below applicable guidance values. Site-wide, one sample location (FEP-2) exceeds the guidance values; however, this location is along 160<sup>th</sup> Street, representing soils that are at or under the roadway..
- B. Excavation and off-site disposition of fill material present in the footprint of the building and additional soils outside the footprint of the building. Soils/fill material present in the footprint of the building were removed as regulated waste based on documented concentrations of PAHs and metals exceeding respective TAGM levels. A total of 6,140 tons of fill soils were removed. Post excavation sampling documented soils with elevated PAHs and metals remaining under the building as well as under the parking area.
- C. Implementation of a Community Air Monitoring Plan (CAMP), including the monitoring and suppression of fugitive dust migration. Data documents no long term exceedances of dust levels at the monitoring stations.





- D. Installation of demarcation layer, barrier layer and importation of certified clean fill. Upon completion of construction, a barrier layer consisting of certified clean soil (soil testing documented contaminant levels below TAGM levels) and/or pavement (the building itself also serves as a barrier layer). Underlying the imported soil (i.e., between the known on-site contaminated soils and the documented clean imported soils) is demarcation layer consisting of black, porous filter fabric.
- E. Installation and integrity testing of a vapor extraction system. Underlying the on-site structure is an active subslab depressurization system consisting of 4" PVC piping underlying the building connected to rooftop fans. Monitor points through the basement floor documented acceptable vacuum, confirming that the system is effective. Air quality testing from the rooftop discharge points confirm that low levels of VOCs are accumulating under the slab and being redirected by this system to the roof.
- F. Installation of asphalt barrier.

Cover design is included in Appendix A



## 2.4 RESIDUAL CONTAMINATION

The site remediation activities implemented as part of the RIR/RAWP (summarized above) resulted in contaminants remaining on the Site. Specifically, the following known contamination remains on-site:

- A. Groundwater is known to contain low levels of dissolved volatile organic compounds (VOCs), and low level exceedances of dissolved metals; as detailed in Table 2.4-A below. These data document a site condition which has warranted continued monitoring, but no active remediation. Elevated levels of sodium and magnesium in on-site groundwater are considered to be the result of road salting operations.

**Table 2.4-A: Metals in Groundwater**

All data provided in parts per billion.

Concentrations shown in bold exceed NYSDEC established guidance levels.

Metals	Guidance Levels	Sample Identification		
		MW-1	MW-2	MW-4
Aluminum	100	94.6	ND	ND
Antimony	3	ND	ND	ND
Arsenic	50	ND	ND	ND
Barium	1,000	52	43.7	36.6
Beryllium	NA	ND	ND	ND
Cadmium	5	ND	ND	ND
Calcium	NA	261,000	310,000	183,000
Chromium	50	ND	ND	ND
Cobalt	5	<b>6.1</b>	ND	ND
Copper	200	ND	ND	4.7
Iron	300	ND	ND	ND
Lead	50	ND	ND	ND
Magnesium	35,000	<b>132,000</b>	<b>185,000</b>	<b>40,300</b>
Manganese	300	<b>1,470</b>	20.6	ND
Mercury	0.7	ND	ND	ND
Nickel	100	10.9	ND	2.4
Potassium	NA	17,000	16,300	7,980
Selenium	10	ND	8.6	ND
Silver	50	ND	ND	ND
Sodium	20,000	<b>80,700</b>	<b>24,500</b>	<b>23,200</b>
Thallium	8	ND	ND	ND
Vanadium	14	ND	ND	ND
Zinc	NA	ND	ND	ND

Notes:  
Guidance levels for metals are based on NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards And Guidance Values And Groundwater Effluent Limitations, October 22, 1993 (Revised June 1998)

ND = Not detected  
SB = Site Background  
NA = Not Available



- B. Soils containing elevated PAHs are present in the vicinity of the portions of the structure located along Elton Avenue and 160<sup>th</sup> Street; as summarized in Table 2.4-B below. These data document a site condition which warranted a remedial response action (i.e., capping) which, in turn, will require periodic inspection and maintenance; and,

**Table 2.4-B: Soil Clean-up Objectives (SCOs) for Track IV Clean-up**  
(Generic Restricted Use SCOs derived from NYSDEC draft Part 375 regulations)  
All levels are in parts per million

Parameter	Range (Low-High)	TAGM	Proposed SCO	Reference
c-PAHs (benzo(a)pyrene equivalent)	ND-3.4	varies	5	Site Specific Clean-up Objective
<b>METALS</b>				
Barium	11 - 1,020	(SB) 300 ppm	600	Site Specific Clean-up Objective
Lead	3 - 1,980	400 ppm	1,000	Site Specific Clean-up Objective
Zinc	39-869	50 ppm	500	Site Specific Clean-up Objective
Cadmium	0.94-1.8	1 ppm	2.0	Site Specific Clean-up Objective
Mercury	ND-0.7	0.2 ppm	1.0	Site Specific Clean-up Objective
<b>PESTICIDES</b>				
4,4'DDT	ND-2.5	2.4	2.5	Site Specific Clean-up Objective
Chlordane	ND-0.7	0.54	0.71	Site Specific Clean-up Objective

- C. Soil gas present beneath the building contains low level exceedances of VOCs.

A map showing the locations of all residual contamination is provided in Appendix A.

## 2.5 PROVISIONS IN ENVIRONMENTAL EASEMENT

The following controls apply to the use of the Site, run with the land are binding on the Grantor (Site Owner) and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Site, any lessees, and any person using the Site:

- A. The Site may be used for restricted residential use as long as the following long-term engineering controls are employed:
- The barrier layer consisting of the asphalt in the parking area, impervious sidewalks/walkways, the soil cover in the courtyard area, and the building structures is maintained in accordance with the NYSDEC-approved Site Management Plan;
  - All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with this NYSDEC-approved Site Management Plan;
  - Vegetable gardens are prohibited;
  - The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purpose;
  - Groundwater and other environmental or public health monitoring, and reporting of information thus obtained, is performed in a manner specified in the NYSDEC-approved Site Management Plan;



- vi. On-site environmental monitoring devices, including but not limited to, groundwater monitor wells and soil vapor monitoring wells, are protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan; and,
  - vii. Sub-slab soil vapor extraction system is operated and maintained in a manner specified in the NYSDEC-approved Site Management Plan. Annual inspection and reporting, including operational and monitoring data, will be performed in a manner specified in the NYSDEC-approved Site Management Plan.
- B. The Site may not be used for a higher level of use such as unrestricted use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

## **2.6 HASP/CAMP Considerations**

All environmental response work detailed in this SMP will be conducted in accordance with an approved Health and Safety Plan (HASP) as well as a Community Air Monitoring Plan (CAMP). The HASP is intended to protect the health of workers who have the potential to come in contact with known on-site contaminants. The CAMP is intended to protect the health of community residents who have the potential to be exposed to known on-site contaminants as a result of fugitive discharge of dusts and vapors.

## SECTION 3 – INSTITUTIONAL AND ENGINEERING CONTROL PLAN

The Institutional and Engineering Control Plan details the oversight steps and any media-specific requirements necessary to assure that the institutional and engineering controls required by the decision document for the site remain in place and effective.

Following is a description of all institutional controls and engineering controls and the role they are intended to play. The plan for annual inspection and certification of the institutional and engineering controls, including identification of the issues to be specifically evaluated by the inspection and certification, and any criteria that might apply, is included in Sections 4-6, below.

A copy of the Environmental Easement requiring the institutional controls for the site is included in Appendix C.

The remedial party at a site must provide, in a computer database format acceptable to the DER, the following information for any environmental easement or other institutional control approved by the Department, the following data, including but not limited to:

- A. A site summary;
- B. Name of current site owner and/or the remedial party implementing the SMP for the site;
- C. The location of the site;
- D. The current status of site remedial activity;
- E. A copy of the environmental easement; and
- F. A contact name and phone number of a person knowledgeable of the easement, in order for the DER to obtain additional information.

If and when an environmental easement is modified or extinguished, the copy of the environmental easement contained in the database should be updated accordingly.

### 3.1 ENGINEERING CONTROL COMPONENTS

On-site environmental monitoring devices (groundwater monitor wells) will be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Groundwater Monitoring Plan (described in Section 4.1, below). The purpose of groundwater monitoring wells is to facilitate documentation of changes in groundwater quality that may have a material effect on site usage.

All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction must be conducted in accordance with the NYSDEC-approved Soil Management Plan (described in Section 4.2, below) to ensure contaminated media (described above) will be properly maintained.

Sub-slab soil vapor extraction (VES) system will be operated and maintained in a manner specified in the NYSDEC-approved Operation and Maintenance Plan (described in Section 5.1, below). Annual inspection and reporting, including operational and monitoring data, will be performed in a manner specified in the NYSDEC-approved Site Management Plan. The purpose of the active VES system is to intercept vapors containing petroleum hydrocarbons that may accumulate under the building.

The barrier layer consisting of the asphalt in the parking area, impervious sidewalks/walkways, the soil cover in the courtyard area, and the building structures, must be maintained in accordance with the NYSDEC-approved Operation and Maintenance Plan (described in section 5.2, below). The purpose of the barrier layer is to provide sufficient distance between known contaminated soil and future users of the property.

Description of physical components of engineering controls are included on the Environmental Remediation Map (Appendix A).



These engineering controls will be inspected annually to ensure that they continue to perform as designed and continue to be protective of human health and the environment. Inspections should also occur after any severe condition occurs such as major erosion or flooding (see Sections 4-6 for details). Inspections will continue until treatment remedy is complete.

### **3.2 INSTITUTIONAL CONTROL COMPONENTS**

- Vegetable gardens are prohibited;
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purpose;
- Groundwater and other environmental or public health monitoring, and reporting of information thus obtained, will be performed in a manner specified in the NYSDEC-approved Site Management Plan;
- If there is a proposed change of use, the NYSDEC will be notified;

Groundwater monitoring and soil management plans are described in Section 4.

## SECTION 4 – MONITORING PLAN

The Monitoring Plan details the steps necessary to inspect, monitor and report the performance and effectiveness of the remedy, both short and long-term, by assessing compliance with actual or equivalent discharge permit limits; assessing achievement of the remedial performance criteria; sampling and analysis of appropriate media; evaluating site information periodically to confirm that the remedy continues to be effective for the protection of public health and the environment; and preparing the necessary reports of the results of this monitoring.

The monitoring plan is required to assess both the performance of the remedy, as well as the effectiveness of the remedy in restoring the impacted environmental media.

### 4.1 GROUNDWATER MONITORING

Four groundwater monitoring wells were previously installed on the Site for the purpose of documenting changes in groundwater quality and the direction of groundwater flow. Two of the wells were destroyed during construction activities, one was closed, and the fourth currently remains on-site.

The relocation of three on-site groundwater monitoring wells and the collection and analysis of quarterly groundwater samples will occur at the completion of site re-development and construction. This includes: the relocation of MW-1 and MW-2 on to the sidewalk of Elton Avenue (identified as MW-1R and MW-2R); the installation of a new, down-gradient well at the western end of the Site on East 161st Street (identified as MW-5); the closure of MW-3; and, the proper development of MW-1R, MW-2R, and MW-5 and quarterly sampling of all wells for VOCs, PAHs, and dissolved metals.

The location of these wells is included on the Environmental Remediation Map (Appendix A).

#### *Sample Collection Procedures*

Groundwater wells will be sampled following a schedule determined by the NYSDEC. All wells will be sampled on each collection date, beginning at the well expected to show the lowest contaminant levels. The following list details procedures to be followed at each monitoring well during each collection date. All measurements indicated below, as well as any other relevant field observations, will be recorded on log sheets.

- A. Weather conditions (e.g., temperature, precipitation) will be recorded at the time each well is sampled.
- B. The protective casing on the well will be unlocked, and air in the well-head screened for organic vapors.
- C. Height of standing water in the well will be measured. Using the well diameter, total well depth, and the measured depth of the standing water, the volume of standing water in the well will be calculated.
- D. The well will be purged using a submersible pump. The pump will be properly decontaminated between wells to prevent cross-contamination.
  - i. Dedicated, disposable, polyethylene tubing will be used at each well. Care will be taken to minimize the amount of groundwater agitation created during purging.



- ii. The number of well volumes to be removed during purging may vary with site characteristics, well design, and the chemicals or parameters for which analyses shall be performed. At a minimum, three well volumes to a maximum of five well volumes will be purged from each well prior to sampling. The purged volumes will be calculated by discharging the purge water into a container of known volume. Time at which purging begins and ends will be recorded.
- E. Samples will be collected with dedicated, disposable bailers and/or submersible pumps. Water samples will be immediately transferred to the appropriate sample containers. Samples collected for volatile organic analyses will be collected first. Sample jars will be labeled, preserved if necessary, stored on ice, sample information will be recorded, and laboratory chain-of-custody forms completed.
- F. Quality control samples (e.g., field duplicates, equipment blanks) will be collected as required. A trip blank will be included in each cooler.
- G. The standing water level in the well after sampling will be re-measured and the protective cap on the well will be replaced and locked.

#### *Groundwater Analyses*

Groundwater will be analyzed by a laboratory certified through the Environmental Laboratory Approval Program (ELAP) of the NYS Department of Health. All samples will be analyzed for VOCs (ASP-1) and SVOCs (ASP-2) and metals. The laboratory will use New York State Analytical Services Protocols in each test. The laboratory will provide data to the Owner and/or Owner's consultant within fifteen business days of receipt of samples.

#### *Sampling Frequency*

Samples will be collected for a minimum of eight consecutive quarters. Upon completion of this regimen, data will be reviewed and a determination of future sampling requirements will be made with the NYSDEC.

#### *Reports*

Quarterly reports detailing the results of groundwater analyses for each collection date will be submitted to the NYSDEC. These reports will include groundwater contaminant concentrations, comparisons to previous groundwater data, and groundwater flow maps. Reports will be submitted to the NYSDEC within 30 days of sample collection.

A written report summarizing these quarterly reports will be submitted annually to the NYSDEC. The annual report will include detailed laboratory reports, and laboratory-provided quality assurance and quality control documentation.

#### *Well Closure*

Groundwater monitoring wells will be closed upon receipt of written authorization to do so from the NYSDEC. Well closure procedures will be in accordance with all relevant NYSDEC guidelines.

This determination will be based on changes in contamination concentrations; no changes in contamination levels or decrease in those levels will be considered sufficient justification for stopping groundwater testing.



## 4.2 SOIL MANAGEMENT

This section of the SMP provides a contingency plan for future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction. All such projects **where disturbance of soils beneath the barrier or demarcation layers will occur** must be overseen by a full time qualified environmental professional, the NYSDEC must be notified of all work, and work must be certified according to the SMP. Projects where only soils above the demarcation layer will be disturbed do not require notification of the NYSDEC.

All endemic (non-imported, previously existing) on-site soils are assumed to be contaminated with petroleum hydrocarbons and, as a result, any of these soils must be handled as regulated material. Excavated soil (of endemic nature) must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. All exported soils will be considered a regulated waste, subject to management under NYSDEC regulation (6NYCRR, Part 360 and Part 370). Excavated soils that remain on-site as fill and any certified soils imported to the Site are not considered regulated waste. This SMP addresses the management of any soils generated by potential future soil disturbances or soils imported onto the property, and addresses these contingencies.

Particulate air monitoring of fugitive dust is to be conducted on the site at all times when endemic soils are being disturbed. Air monitoring is to be conducted consistent with the NYSDEC approved CAMP.

### *Disturbed Soil Remaining On-Site*

Qualified personnel will be on-site to monitor any activities that might disturb soils. Air in the excavation area will be monitored with a PID for dangerous levels of organic vapors. Excavated soils that remain on-site as fill are not considered regulated waste. As such, this soil may be used as backfill. If the barrier has been disturbed due to soil excavation activities, it must be repaired. All soils proposed for re-interment must be placed under the barrier layer.

### *Disturbed Soil Disposed of Off-Site*

All exported soils will be considered a regulated waste, subject to management under NYSDEC regulation (6NYCRR, Part 360 or 370). The following will occur in the case that soil is exported off-site:

- A. Qualified personnel will be on-site to monitor any activities that might disturb soils. Air in the excavation area will be monitored with a PID for dangerous levels of organic vapors.
- B. Excavated soil with visual evidence of contamination, including staining or elevated PID measurements, will be sampled using one composite sample and a duplicate sample per 100 cubic yards of stockpiled soil.
- C. Excavated soil showing no evidence of contamination will be sampled by collecting one composite sample and a duplicate sample per 2,000 cubic yards of stockpiled soil. A minimum of one sample will be collected for volumes less than 2,000 cubic yards.
- D. Composite samples will be collected from five locations within each stockpile. PID measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest PID measurement. If none of the five individual sample locations exhibit PID readings, one location will be selected at random. The composite sample will be analyzed by an ELAP-certified laboratory for pH, RCRA metals, pesticides, polychlorinated biphenyl compounds (PCBs), VOCs and cyanide. Stockpiled soil cannot be transported off-site until the analytical results are received.



E. Stockpile Management

- i. Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.
- ii. Soil stockpiles will be continuously encircled with silt fences. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

F. Truck Management

- i. All trucks leaving the site will be lined with plastic and covered with plastic and will have tight-fitting covers.
- ii. All trucks will be washed prior to leaving the site. Truck wash waters will be collected and disposed offsite in an appropriate manner.
- iii. All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes.
- iv. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed onsite in order to minimize off-site disturbance. Off-site queuing of trucks is prohibited.

G. Odor Controls

- i. Odor control methods will be capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of all other complaints about the project.
- ii. All necessary means will be employed to control odors and eliminate associated nuisances on- and off-site. The means to be considered for odor control when odors are caused by remedial actions or associated work include, but are not limited to: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; (c) use of foams to cover exposed odorous soils; (d) use of chemical odorants in spray or misting systems; and, (e) use of staff to monitor odors in surrounding neighborhoods. If these and other methods are not successful, enclosures will be erected around remedial work areas to control odors.

*Imported Soil*

Imported soil must meet all applicable NYSDEC guidelines as "clean fill". Soil imported for use above the barrier layer will be analyzed for total weight VOCs, PAHs, TAL Metals, pesticides and PCBs, and TCLP VOCs, PAHs, RCRA Metals, and pesticides. Only soils with documented contaminated concentrations below respective TAGM 4046 levels will be acceptable as "clean fill", unless the NYSDEC is petitioned and approves such alternative soils.

## SECTION 5 – OPERATION AND MAINTENANCE PLAN

This Operation and Maintenance Plan describes the measures necessary to operate and maintain any mechanical components of the remedy.

### 5.1 INSPECTION OF VAPOR EXTRACTION SYSTEM

As a supplemental preventative measure, a vapor barrier underlain by three separate vapor extraction systems (VES) were installed under the building foundation. The purpose of this barrier and VES is to eliminate the migration of vapors containing petroleum hydrocarbons into the building, consistent with good construction practices. The locations of the roof-mounted fans as well as the locations of the monitoring points in the building's slab floors are provided on the Environmental Remediation Map (Appendix A).

#### *Inspection Procedures*

Annual inspections of the VES will include the following procedures:

#### A. Inspection of VES Equipment

A qualified person will assess the integrity of the accessible VES equipment and piping by visual inspection. The inspector will ensure, at a minimum, that the systems are intact, free from damage, and that the fans are working as required.

#### B. Assessment of Vacuum Function

A qualified person will assess the strength of the vacuum created by the VES. A monitoring point for each system will be installed to confirm effective vacuum in the entire sub-grade. Vacuum data (as measured in inches of water) will be collected from the monitoring points. Sufficient vacuum will be achieved if levels greater than 0.02 inches of water are measured at each monitor point.

#### *Annual Certification*

An annual report will be based on the inspection described in Section 2.3.A. This report will be provided to the Owner and to the NYSDEC. Should any failures or potential failures of the VES be observed, the Owner will be given a reasonable amount of time to complete remedial actions as required by the NYSDEC. A subsequent inspection and report will then be made.

#### *Additional Inspections and Reporting*

In addition to the inspections and reporting described above, Site personnel will conduct biweekly readings (i.e. every other week) of all three U-manometers. ESI will train site personnel to take correct measurements and will repeat this training as necessary. U-manometer readings will be recorded on a log sheet to document vacuum measurements at the influent vertical pipes. Sample log sheet records will be provided to ESI monthly for the first year. Log sheets will be included in the annual reports. If adequate vacuum is not documented, ESI personnel will be contacted by Site personnel within 48 hours to evaluate the VES.

### 5.2 INSPECTION OF BARRIER

For the purpose of this SMP, the barrier layer is defined as the asphalt parking area, impervious sidewalks/walkways, building slab and soil cover. The soil cover consists of a minimum thickness of two feet of certified clean soil over all contaminated areas (where applicable) not covered by asphalt or buildings to prohibit potential contact with subsurface contaminated soils. The barrier layer is represented in the "Barrier Layer Inspection Map" (see Appendix A).



*Inspection Procedures*

A qualified person will conduct a yearly inspection of the barrier layer. This inspection will include, at a minimum, visual confirmation that the system is intact and free from damage.

*Annual Certification*

An annual report will be based on the inspection described in Section 2.3.A. This report will be provided to the Owner and to the NYSDEC. Should any failures or potential failures of the barrier layer be observed, the Owner will be given a reasonable amount of time to complete remedial actions as required by the NYSDEC. A subsequent inspection and report will then be made.

## SECTION 6 – SITE MANAGEMENT REPORTING PLAN

An annual Site Management Report will be submitted and will include the certification of engineering and institutional controls and the product of required site inspections. The Site Management Report must identify all required institutional and engineering controls required by the decision document, should include an evaluation of Engineering and Institutional Control Plan, and assessment and certification of the continued effectiveness of all institutional and/or engineering controls required by the decision document for a site.

The following schedule will be adhered to by the Site Owner unless modifications are otherwise agreed to by the NYSDEC:

### A. Groundwater Monitoring

Well installation will occur within 30 days of building completion but no later than August 1, 2006.

Groundwater monitoring will occur on a quarterly basis (August, November, February and May), until a determination has been made otherwise. Quarterly reports will be issued to the Owner and the NYSDEC no later than 30 days after the sampling has occurred. An Annual Report will be submitted to the Owner and NYSDEC after the first year (on or about October 1<sup>st</sup> of each year). See Appendix E, NYSDEC Institutional and Engineering Controls Certification Form.

### B. Monitoring of the Vapor Extraction System

The VES system will be inspected on an annual basis. An Annual Report will be submitted to the Owner and NYSDEC after the first year (on or about October 1<sup>st</sup> of each year).

### C. Monitor the Integrity of the Barrier Layer

The Barrier Layer will be inspected on an annual basis. An Annual Report will be submitted to the Owner and NYSDEC after the first year (on or about October 1<sup>st</sup> of each year).

## 6.1 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

Annual certification is to be a written statement prepared and signed by a professional engineer licensed to practice in New York State. The engineer must inspect the site (see requirements in section 6.2) and must certify that the institutional controls and/or engineering controls employed at the site are: unchanged from the previous certification; in-place and effective; and performing as designed. Certification must also be made that: nothing has occurred that would impair the ability of the controls to protect the public health and environment; nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls; access is available to the site to evaluate continued maintenance of such controls; and site usage is compliant with environmental easement.

This site which is a BCP site determined to be non-significant threat site, but where contaminants in groundwater contravene drinking water standards at the site border, in addition to the items noted above the Site owner, will also, have to certify on a yearly basis that no new information has come to the site owner's attention, including groundwater monitoring data from wells located at the site boundary, to indicate that the assumptions made in the qualitative exposure assessment of offsite contamination are no longer valid; and every five years, that the assumptions made in the qualitative exposure assessment remain valid.

Certification must be included in a Site Management Report submitted annually by March 1 following the calendar year reporting period.

## 6.2 SITE INSPECTION

The person responsible for implementing the SMP for a site should conduct inspections of the site to assure the remedy remains in place and effective. Inspection of a site should be at least annually. Inspection should also occur whenever a severe condition, such as major erosion, flooding, which could effect engineering controls or a breakdown of the treatment system occurs at a site.

Inspections should be documented on an inspection form developed for the site, which should compile sufficient information to assess:

- A. Compliance with all institutional controls, including site usage;
- B. The site conditions at the time of the inspection, including an evaluation of the condition and continued effectiveness of engineering controls;
- C. The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- D. Compliance with permits and schedules included in the Operation and Maintenance Plan; and

### *Evaluation of Records and Reporting*

The results of the inspection and site monitoring data should be evaluated to provide certification (see section 6.1) that the:

- A. Engineering controls, including necessary treatment systems, and associated institutional controls are in place, are performing properly and remain effective;
- B. Monitoring plan is being implemented;
- C. Operation and maintenance activities are being conducted properly; and, based on the above items;
- D. Remedy continues to be protective of public health and the environment and compliant with the decision document for the site. See Appendix E.

## 6.3 SITE MANAGEMENT REPORT

A Site Management Report (SMR) will be prepared for the site certification period. In accordance with the results of the monitoring plan, inspections, and the project evaluation discussed in above. This report should be submitted, within 45 days of the date of the end of the certification period, and include:

- A. The IC/EC certification required for the site;
- B. A site evaluation, which should address the following:
  - i. The compliance of the remedy with the requirements of the decision document for the site;
  - ii. The performance and effectiveness of the remedy;
  - iii. The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;



- iv. Any new conclusions or observations regarding the site contamination based on the inspections or data generated by the site monitoring plan for the media being monitored; and
  - v. Recommendations regarding any necessary changes to the remedy and/or monitoring plan.
- C. Comments, conclusions and recommendations based on an engineering evaluation of the information included in the report, must be prepared by a professional engineer, where engineering controls or a treatment system are components of the site remedy;
- D. Comments, conclusions and recommendations based on an evaluation of the information in the report where institutional controls exist, prepared by a qualified person;
- E. Where the Operation and Maintenance Plan or manual section of the Site Management Plan identifies the need for monthly, quarterly or biannual reports of performance monitoring this report should include and summarize the following:
  - i. A description of routine maintenance and inspection forms;
  - ii. A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - iii. A summary of the performance or effectiveness monitoring; and
  - iv. Comments, conclusions and recommendations based on an evaluation and resolution of performance problems.
  - v. A figure showing sampling and well locations, and significant analytical values at sampling locations, if effectiveness monitoring is performed;
  - vi. Where cumulative data summary tables and/or graphical representations of contaminants of concern are to be included in the report:
    - a. Provide a listing of all compounds analyzed for along with the applicable standards, however only report by sampling point detected compounds, with any exceedance highlighted; unless
    - b. Where no Site Management Plan is required, in such cases the results of all analyses, copies of all laboratory data sheets and the required laboratory data deliverables are required to be submitted electronically, in the DER identified format, for all points sampled.

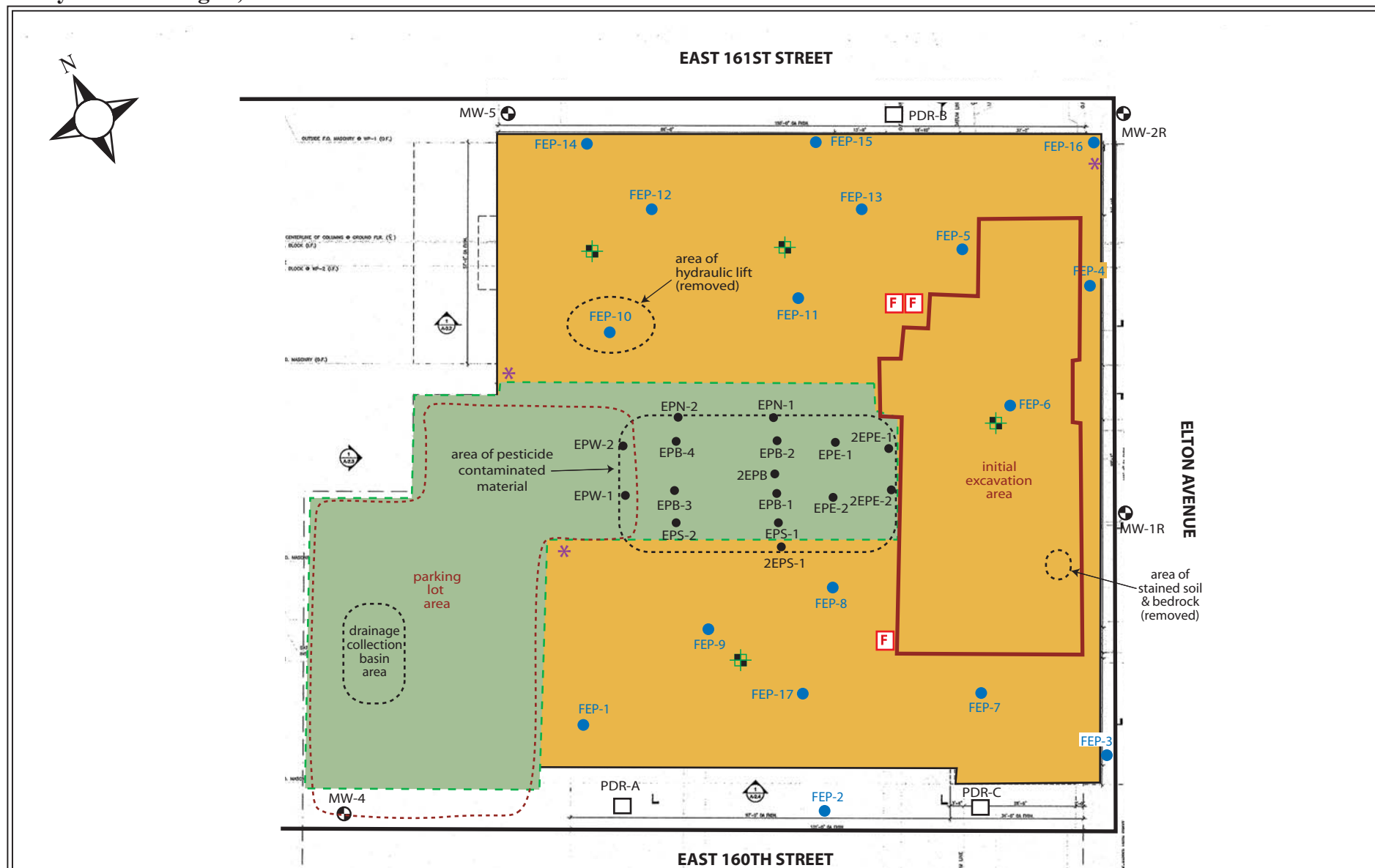




**APPENDIX A**

***Environmental Remediation Map***

***Area of Post Construction Contamination Map***



Source: Map based on Magnusson Architecture & Planning PC - Cellar Construction Plan Drawing #A-1.1

## Environmental Remediation Map

Parkview Commons Development Site  
421-335 East 160th Street, 426-440 East 161st Street  
865-877 Elton Avenue  
Borough of Bronx, Bronx County, New York

### Legend:

- sample location
- previous soil samples
- ⊙ monitoring wells
- \* VES monitoring point
- + VES extraction point
- dust monitoring stations
- ▭ barrier layer parking lot
- ▭ barrier layer foundation
- [F] location of VES roof mounted fan

ESI File: LB03027.70R

September 2006

Not to scale

Appendix A



**Area of Post Construction Contamination**  
Parkview Commons Development Site  
421-335 East 160th Street, 426-440 East 161st Street  
865-877 Elton Avenue  
Borough of Bronx, Bronx County, New York

 area no contamination  
(excavation to bedrock)

## Appendix A



## **APPENDIX B**

### ***Groundwater Flow Map***

**Ecosystems Strategies, Inc.**  
*Environmental Services and Solutions*  
 24 Davis Avenue  
 Poughkeepsie, NY 12603  
 ph: (845) 452-1658 / fax: (845) 485-7083

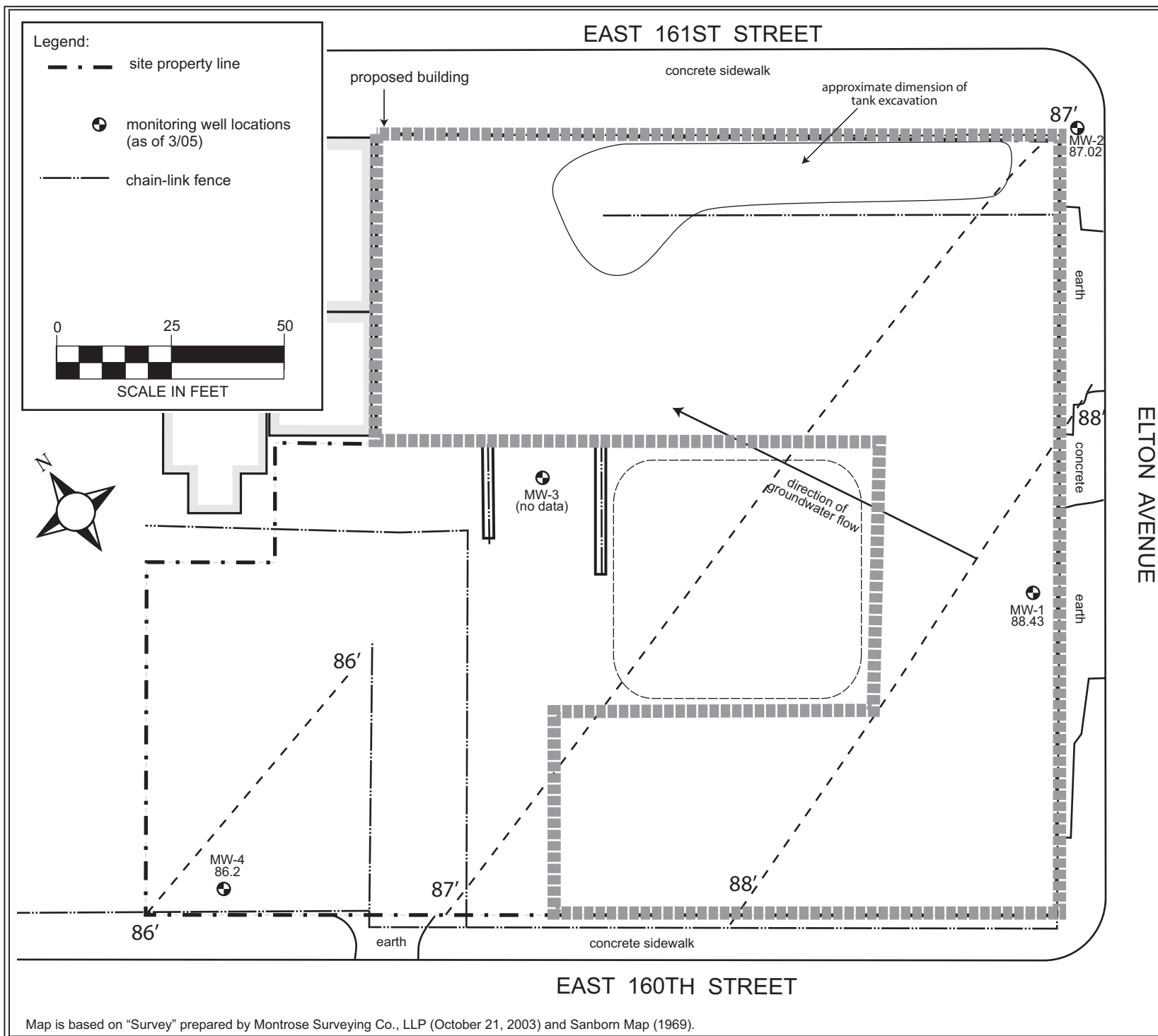
**Groundwater Flow Map**  
 "Parkview Commons Site"

located at  
 421-435 East 160th Street,  
 426-440 East 161st Street,  
 and 865-877 Elton Avenue  
 Borough of Bronx  
 Bronx County, New York

File: LB03027.70R

September 2006

Appendix B



Map is based on "Survey" prepared by Montrose Surveying Co., LLP (October 21, 2003) and Sanborn Map (1969).

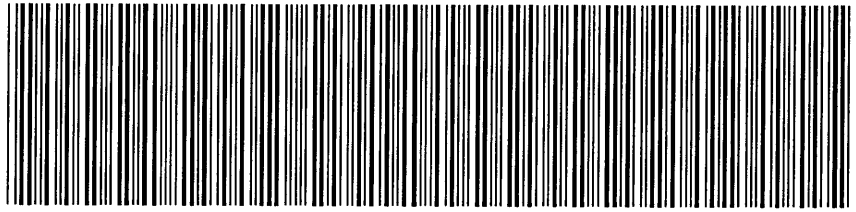


## **APPENDIX C**

### ***Environmental Easement***

**NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER**

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



2006082301969001001E9C94

**RECORDING AND ENDORSEMENT COVER PAGE**

**PAGE 1 OF 10**

**Document ID: 2006082301969001**

**Document Date: 03-24-2006**

**Preparation Date: 08-23-2006**

**Document Type: EASEMENT**

**Document Page Count: 8**

**PRESENTER:**

ALL NEW YORK TITLE AGENCY (PICK-UP)  
AS A DIVISION OF FIRST AMERICAN TITLE  
INSURANCE CO  
180 EAST POST ROAD^(ANY2006-3371C)  
WHITE PLAINS, NY 10601  
914-686-5600

**RETURN TO:**

DEBRA M. KENYON, ESQ.  
L & M EQUITY PARTICIPANTS  
1865 PALMER AVENUE - SUITE 203  
LARCHMONT, NY 10538

**PROPERTY DATA**

Borough	Block	Lot	Unit	Address
BRONX	2382	16	Entire Lot	871 ELTON AVENUE
<b>Property Type: APARTMENT BUILDING</b>				

**CROSS REFERENCE DATA**

CRFN \_\_\_\_\_ or Document ID \_\_\_\_\_ or \_\_\_\_\_ Year \_\_\_\_\_ Reel \_\_\_\_\_ Page \_\_\_\_\_ or File Number \_\_\_\_\_

**PARTIES**

**GRANTOR/SELLER:**

BX PARKVIEW HOUSING DEVELOPMENT FUND  
CORP.  
811 COURTLAND AVENUE  
BRONX, NY 10451  
x Additional Parties Listed on Continuation Page

**GRANTEE/BUYER:**

THE PEOPLE OF ST OF NY BY NYS DEPT OF ENV  
CONSERVA  
625 BROADWAY  
ALBANY, NY 12233

**FEES AND TAXES**

<b>Mortgage</b>			Recording Fee: \$	77.00
Mortgage Amount:	\$	0.00	Affidavit Fee: \$	0.00
Taxable Mortgage Amount:	\$	0.00	NYC Real Property Transfer Tax Filing Fee:	
Exemption:			\$	50.00
TAXES: County (Basic):	\$	0.00	NYS Real Estate Transfer Tax:	
City (Additional):	\$	0.00	\$	0.00
Spec (Additional):	\$	0.00		
TASF:	\$	0.00		
MTA:	\$	0.00		
NYCTA:	\$	0.00		
Additional MRT:	\$	0.00		
TOTAL:	\$	0.00		



**RECORDED OR FILED IN THE OFFICE  
OF THE CITY REGISTER OF THE  
CITY OF NEW YORK**

Recorded/Filed 08-29-2006 09:41

City Register File No. (CRFN):

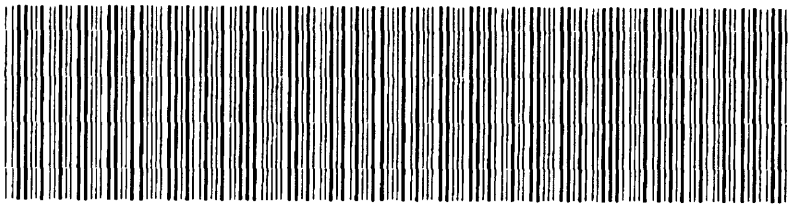
2006000487054

*Annette M. Hill*

**City Register Official Signature**



**NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER**



**2006082301969001001C9E14**

**RECORDING AND ENDORSEMENT COVER PAGE (CONTINUATION) PAGE 2 OF 10**

**Document ID: 2006082301969001**

**Document Date: 03-24-2006**

**Preparation Date: 08-23-2006**

**Document Type: EASEMENT**

**PARTIES**

**GRANTOR/SELLER:**

**BX PARKVIEW ASSOCIATES LLC  
1865 PALMER AVENUE - SUITE 203  
LARCHMONT, NY 10538**

8/

Any 2006-337C  
B: 2382  
L: 16  
Bronx

## ENVIRONMENTAL EASEMENT

THIS INDENTURE made this 24<sup>th</sup> day of MARCH, 2006, between BX Parkview Housing Development Fund Corp. ("Grantor Fee Owner"), a New York Not-for profit corporation, having an office at 811 Courtland Avenue, Bronx, New York 10451, and BX Parkview Associates LLC ("Grantor Beneficial Owner"), a New York limited liability company, having an office at 1865 Palmer Avenue, Suite 203, Larchmont, New York 10538 (collectively the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("brownfield sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of environmental easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and of ensuring the potential restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

**WHEREAS**, the Legislature of the State of New York has declared that environmental easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a brownfield site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and;

**WHEREAS**, Grantor Fee Owner, is the owner of real property located in the City of New York, Bronx County, New York known and designated on the tax map of the Borough of Bronx as tax map section 9 block 2382 lot 16, being the same as that property conveyed to Grantor Fee Owner by deed from BX Parkview Associates LLC on December 8, 2004, and recorded on January 3, 2005 in the Land Records of the Office of the City Register of the City of New York, Bronx County as CRFN: 2005000001215, comprised of approximately 0.67 acres, consisting of former lots 16, 20, 22, 23, 24, 25, 27, 28, 30 consolidated on November 3, 2005, and hereinafter more fully described in Schedule A attached hereto and made a part hereof (the "Controlled Property"); and;

**WHEREAS**, Grantor Beneficial Owner, is the owner of the beneficial interest in the Controlled Property being the same as that beneficial interest conveyed to Grantor Beneficial Owner by means of a Declaration of Interest and Nominee Agreement dated December 8, 2004 between BX Parkview Housing Development Fund Corp. and BX Parkview Associates LLC, and recorded on January 3, 2005 in the Land Records of the Office of the City Register of the City of New York, Bronx County as CRFN: 2005000001216; and;

**WHEREAS**, the Commissioner does hereby acknowledge that the Department accepts this Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established at this Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36;and

**NOW THEREFORE**, in consideration of the covenants and mutual promises contained herein and the terms and conditions of Brownfield Cleanup Agreement Index No.: W2-1024-04-10, Grantor grants, conveys and releases to Grantee a permanent Environmental Easement pursuant to Article 71, Title 36 of the ECL in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The following controls apply to the use of the Controlled Property, run with the land are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees, and any person using the Controlled Property:

A. The Controlled Property may be used for restricted residential use as long as the following long-term engineering controls are employed:

- a) the barrier layer consisting of the asphalt in the parking area, impervious sidewalks/walkways, the soil cover in the courtyard area, and the building structures is maintained in accordance with the NYSDEC-approved Site Management Plan,
- b) all future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the NYSDEC-approved Site Management Plan,
- c) vegetable gardens are prohibited.
- d) the use of the groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose.

e) groundwater and other environmental or public health monitoring, and reporting of information thus obtained, will be performed in a manner specified in the NYSDEC-approved Site Management Plan.

f) onsite environmental monitoring devices, including but not limited to, groundwater monitor wells and soil vapor monitoring stacks, will be protected and replaced as necessary to ensure continued functioning in the manner specified in the NYSDEC-approved Site Management Plan, and

g) sub-slab soil vapor extraction system will be operated and maintained in a manner specified in the NYSDEC-approved Site Management Plan. Annual inspection and reporting, including operational and monitoring data, will be performed in a manner specified in the NYSDEC-approved Site Management Plan.

B. The Controlled Property may not be used for a higher level of use such as unrestricted use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

**This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.**

D. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

E. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Controlled Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer the underlying fee interest to the Controlled Property by operation of law, by deed, or by indenture, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This environmental easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this environmental easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person intentionally violates this environmental easement, the Grantee may revoke the Certificate of Completion provided under ECL Article 27, Title 14, or the Satisfactory Completion of Project provided under ECL Article 56, Title 5 with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach. Grantor shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, Grantee may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement in accordance with applicable law to require compliance with the terms of this Environmental Easement.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of or noncompliance with any of the terms of this Environmental easement.

6. Notice. Whenever notice to the State (other than the annual certification) or approval

from the State is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing its County tax map number or the Liber and Page or computerized system tracking/identification number and address correspondence to:

Division of Environmental Enforcement  
Office of General Counsel  
New York State Department of Environmental Conservation  
625 Broadway  
Albany New York 12233-5500

Such correspondence shall be delivered by hand, or by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This environmental easement may be amended only by an amendment executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This environmental easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

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

**BX Parkview Housing Development Fund Corp.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: MARCH 24 2006



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

Notary Public - State of New York

KEVIN F. McCARTHY  
Notary Public, State of New York  
No. 01MC6008702  
Qualified in Westchester County  
Commission Expires June 15, 2006

STATE OF NEW YORK )  
 ) ss:  
COUNTY OF *Albany* )

W. D. Sanyal  
Notary Public - State of New York

MARK D. SANZA  
Notary Public, State of New York  
No. 02SA6010701  
Qualified in Albany County  
Commission Expires July 20, 2010

Record - Return:  
Kevin McLeath  
L-100 G-factory Parkings  
1865 Park Ave - Suite 203  
Larchmont, NY 10538

**ALL NEW YORK TITLE AGENCY, INC.**

**Title No. ANY2006-33710**

**ALL** that certain plot, piece or parcel of land situate, lying and being in the Borough and County of the Bronx, City and State of New York bounded and described as follows:

**BEGINNING** at the corner formed by the intersection of the southerly side of East 161<sup>st</sup> Street (100 feet wide) with the westerly side of Elton Avenue (50 feet wide);

**RUNNING THENCE** westerly along the southerly side of East 161<sup>st</sup> Street 150 feet to a point;

**RUNNING THENCE** southerly at right angles to the southerly side of 161<sup>st</sup> Street, 63 feet to a point;

**RUNNING THENCE** westerly at right angles to the last mentioned course, 22 feet to a point;

**RUNNING THENCE** southerly at right angles right angles to the last mentioned course 25 feet to a point;

**RUNNING THENCE** westerly at right angles to the last mentioned course, 28 feet to a point;

**RUNNING THENCE** southerly at right angles to the mentioned course, 75 feet to the northerly side of eliminated East 160<sup>th</sup> Street.

**RUNNING THENCE** easterly along the northerly side of eliminated East 160<sup>th</sup> Street, 200 feet to the corner formed by the intersection of the northerly side of said East 160<sup>th</sup> Street with the westerly side of Elton Avenue;

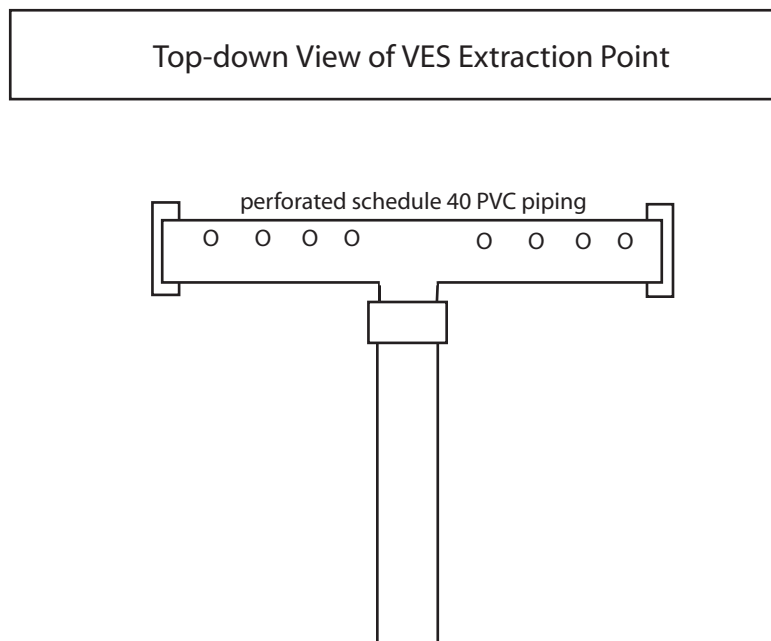
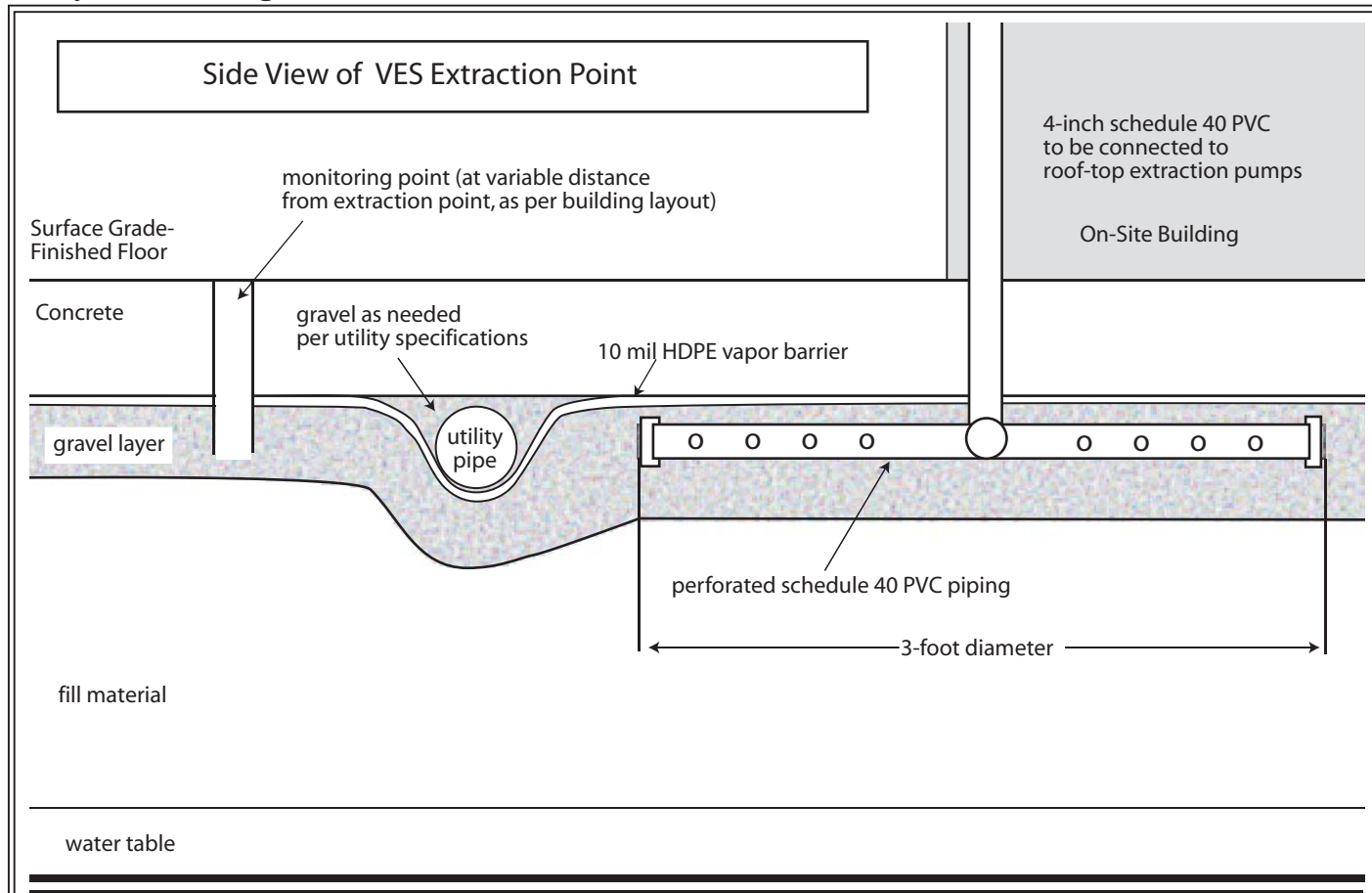
**RUNNING THENCE** northerly along the westerly side of Elton Avenue, 165 feet to the corner, the point or place of **BEGINNING**.

Said premises are known as Block 2382, Lot 16, County of Bronx, City of New York.



## **APPENDIX D**

### ***VES System Details***



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

### VES System Detail "A"

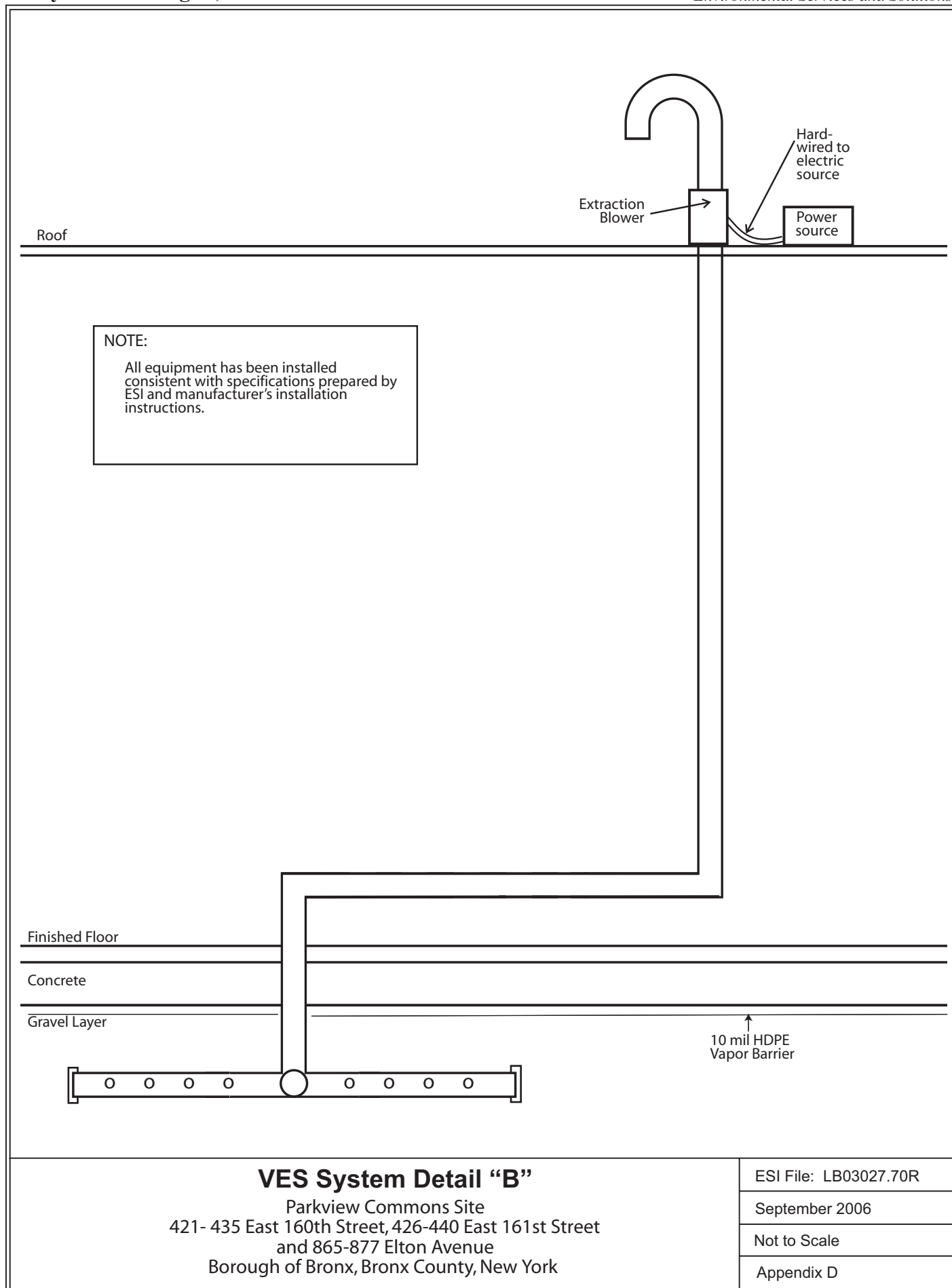
Parkview Commons Site  
421- 435 East 160th Street, 426-440 East 161st Street  
and 865-877 Elton Avenue  
Borough of Bronx, Bronx County, New York

ESI File: LB03027.70R

September 2006

Not to scale

Appendix D





Ecosystems Strategies, Inc.

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## **APPENDIX E**

### ***NYSDEC Institutional and Engineering Controls Certification Form***



**ENCLOSURE 1**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM**

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**SITE DETAILS**

**SITE NO.** C203014

**SITE NAME** Parkview Commons Development Site

**SITE ADDRESS:** 421-435 East 160th Street, 426-440 East 161st Street and  
865-877 Elton Avenue **ZIP CODE:** 10451

**CITY/TOWN:** Bronx

**COUNTY:** Bronx

**CURRENT USE:** Mixed Use (commercial and residential)

**CURRENT CERTIFICATION FREQUENCY:** EVERY 1 YEAR(S)

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**VERIFICATION OF SITE DETAILS**

	YES	NO
1. Are the SITE DETAILS above, correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, are changes handwritten above or included on a separate sheet?	<input type="checkbox"/>	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment since the initial/last certification?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	<input type="checkbox"/>	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property since the initial/last certification?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	<input type="checkbox"/>	
4. Has a change-of-use occurred since the initial/last certification?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	<input type="checkbox"/>	
5. Has any new information come to your attention to indicate that assumptions made in the qualitative exposure assessment for offsite contamination are no longer valid (applies to non-significant threat sites subject to ECL 27-1415.7(c))? NA	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is the new information or evidence that new information has been previously submitted included with this certification?	<input type="checkbox"/>	
6. Are the assumptions in the qualitative exposure assessment still valid (must be certified every five years for non-significant threat sites subject to ECL 27-1415.7(c))? NA	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, are changes in the assessment included with this certification?	<input type="checkbox"/>	

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**SITE NO.** C203014

**Description of Institutional/Engineering Control****Control Certification**

ENVIRONMENTAL EASEMENT

☒

DEED RESTRICTIONS

☐

OTHER CONTROLS (Engineering Controls)

☒

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**CONTROL CERTIFICATION STATEMENT**

For each institutional or engineering control listed above, I certify by checking "Yes" that all of the following statements are true:

(a) the institutional control and/or engineering control employed at this site is unchanged from the date the control was put in-place, or last approved by the Department;

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

(c) nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control; and

(d) access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.

(e) if a financial assurance mechanism is required under the remedial work plan for the site, the mechanism remains valid and sufficient for their intended purpose under the work plan.

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**CONTROL CERTIFICATIONS**

**SITE NO.** C203014

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Paul H. Ciminello (print name), Ecosystems Strategies, Inc,

(print business address), am certifying as Owners Designated Site Representative (Owner or Owner's Designated Site Representative (if the site consists of multiple properties, I have been authorized and designated by all site owners to sign this certification) for the Site named in the Site Details section of this form.



Signature of Site Owner or Representative Rendering Certification

10/3/06

Date

**QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE**

I certify that all information and statements in this Certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Paul H. Ciminello (print name), 24 Davis Avenue, Poughkeepsie, NY 12603

( print business address), am certifying as a Qualified Environmental Professional for the Owner,

BX Parkview Associates, LLC (Owner or Owner's Representative) for the Site named in the Site Details section of this form.



10-3-06

Signature of Qualified Environmental Professional, for the Owner or the Owner's Representative, Rendering Certification

Stamp (if Required)

Date

## Enclosure 2

### **Certification of Institutional Controls/ Engineering Controls (ICs/ECs) Step-by-Step Instructions, Certification Requirements and Definitions**

The Site owner, or site owner's representative, and when necessary, a Professional Engineer (P.E.), or the Qualified Environmental Professional (QEP), must review and complete the IC/EC Certification Form, sign it, and return it, along with the Periodic Site Management Report, within 45 days of the date of this notice.

Institutional Controls (defined below) are organized into 4 categories: Governmental Controls (e.g., groundwater-use restrictions), Proprietary Controls (e.g., Environmental Easements), Enforcement and Permit Tools (e.g., Consent Orders), and Informational Devices (e.g., State Registries of Inactive Hazardous Waste Sites). The Certification Form shows the Control information the Department has for this Site. Please use the following instructions to complete the IC/EC Certification.

#### **I. Verification of Site Details (First and Second Boxes):**

1. Verify the accuracy of information in the **Site Details** section by answering the 6 questions. If necessary, you and/or your P.E. or QEP may handwrite changes and submit supporting documentation.

#### **II. Verification of Institutional / Engineering Controls (Third and Fourth Boxes)**

1. Review the listed Institutional / Engineering Controls and select "YES" or "NO" for **Control Certification** for each IC/EC, based on Sections (a)-(d) of the **Control Certification Statement**.
2. If you cannot certify "Yes" for each Control, please continue to complete the remainder of this **Control Certification** form. Attach supporting documentation that explains why the **Control Certification** cannot be rendered, as well as a statement of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Control Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is conducted.

If the Department concurs with the explanation, the corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued. If the Department has any questions or concerns regarding the completion of the certification, the Project Manager will contact you.

### III. Certification by Signature (Fifth and Sixth Boxes):

1. WHY IC/EC Certification is required:

The Section of the New York Environmental Conservation Law that includes the requirement of a periodic certification of IC(s) and EC(s) is as follows:

For Environmental Restoration Projects: N.Y. Env'tl Conserv.Law Section 56-0503  
(Environmental restoration projects; state assistance)

For State Superfund Projects: Env'tl Conserv.Law Section 27-1318.  
(Institutional and engineering controls)

For Brownfields Cleanup Program Projects: Env'tl Conserv.Law Section 27-1415.  
(Remedial program requirements)

Voluntary Cleanup Program: Applicable program guidance.

2. To determine WHO signs the **Control Certification**, please use the following table:

Signature Requirements for IC/EC Certification Form		
Type of Control	Example of IC/EC	Required Signatures
IC	Environmental Easement Deed Restriction.	Site Owner or their designated representative, e.g., a Property Manager.
EC with no treatment system, or engineered caps.	Fence, Clean Soil Cover.	Site Owner or their designated representative, <u>and</u> QEP. (P.E. license not required)
EC that includes treatment systems, or engineered caps.	Pump & Treat System providing hydraulic control of a plume, Part 360 Cap.	Site Owner or his designated representative, <u>and</u> QEP <u>with</u> P.E. License.

3. WHERE to mail the signed Certification Form within 45 days of the date of the notice:

**[generated from UIS]**

New York State Department of Environmental Conservation

Division of Environmental Remediation

Central Office or Regional Address

City Name, NY Zipcode

Attn: \_\_\_\_\_, Project Manager

**Please note that extra postage may be required.**

#### **IV. Definitions:**

**"Engineering Control" (EC)**, means any physical barrier or method employed to actively or passively contain, stabilize, or monitor any hazardous waste or petroleum waste to ensure the long-term effectiveness of an inactive site remedial program or brownfield site remedial program or environmental restoration project, or to eliminate potential exposure pathways to any such hazardous waste or petroleum waste. Engineering Controls include, but are not limited to: pavement, caps, covers, subsurface barriers and slurry walls; building ventilation systems; fences, other barriers and access controls; and provision of alternative water supplies via connection to an existing public water supply, addition of treatment technologies to an existing public water supply, and installation of filtration devices on an existing private water supply.

**"Institutional Control" (IC)**, means any non-physical means of enforcing a restriction on the use of real property, that limits human or environmental exposure to any hazardous waste or petroleum waste, restricts the use of groundwater; provides notice to potential owners, operators, or members of the public; or prevents actions that would interfere with the effectiveness of an inactive site remedial program or brownfield site remedial program or environmental restoration project, or with the effectiveness and/or integrity of Site Management activities at or pertaining to any site.

**"Professional Engineer"** means a person, including a firm headed by such a person, who holds a current New York State Professional Engineering license or registration, and has the equivalent of three (3) years of full-time relevant experience in site investigation and remediation of the type detailed in this Control Certification.

**"Property Owner"** means, for purposes of an IC/EC certification, the actual owner of a property. If the site has multiple properties with different owners, the Department requires that the owners be represented by a single representative to sign the certification.

**"Oversight Document"** means any document the Department issues pursuant to each Remedial Program (see below) to define the role of a person participating in the investigation and/or remediation of a site or area(s) of concern. Examples for the various programs are as follows:

**BCP** (after approval of the BCP application by DEC) - Brownfield Site Cleanup Agreement.

**ERP** (after approval of the ERP application by DEC) - State Assistance Contract.

**Federal Superfund Sites** - Federal Consent Decrees, Administrative Orders on Consent or Unilateral Orders issued pursuant to CERCLA.

**Oil Spill Program** - Order on Consent, or Stipulation pursuant to Article 12 of the Navigation Law (and the New York Environmental Conservation Law).

**State Superfund Program** - Administrative Consent Order.

**VCP** (after approval of the VCP application by DEC) - Voluntary Cleanup Agreement.

**RCRA Corrective Action Sites- Federal Consent Decrees, Administrative Orders on Consent or permit conditions issued pursuant to RCRA.**

**“Qualified Environmental Professional” (QEP)**, means a person, including a firm headed by such a person, who possesses sufficient specific education, training, and experience necessary to exercise professional judgment, to develop opinions and conclusions regarding the presence of releases or threatened releases to the surface or subsurface of a property or off-site areas, sufficient to meet the objectives and performance factors for the areas of practice identified by this guidance (DER10 Technical Guide).

1. Such a person must:
  - i. Hold a current Professional Engineering or a Professional Geologist license or registration, and have the equivalent of three (3) years of full-time relevant experience in site investigation and remediation of the type detailed in this guidance; or
  - ii. Be a site remediation professional licensed or certified by the federal government, a state; or a recognized, accrediting agency, to perform investigation or remediation tasks identified by this guidance, and have the equivalent of three (3) years of full-time relevant experience. Examples of such license or certification include, but are not limited to, the following titles:
    - Licensed Site Professional, by the State of Massachusetts
    - Licensed Environmental Professional, by the State of Connecticut
    - Qualified Environmental Professional, by the Institute of Professional Environmental Practice
    - Certified Hazardous Materials Manager, by the Institute of Hazardous Materials Management
2. The definition of QEP provided above does not preempt State Professional licensing or registration requirements such as those for a Professional Geologist, Engineer, or Site Remediation Professional. Before commencing work, a person should determine the applicability of State professional licensing or registration laws to the activities to be undertaken pursuant to section 1.5 (DER10 Technical Guide).
3. A person who does not meet the above definition of a QEP under the foregoing definition may assist in the conduct of all appropriate investigation or remediation activities in accordance with this document if such person is under the supervision or responsible charge of a person meeting the definition provided above.

**“Remedial Party”** means any person or persons, as defined in 6NYCRR 375, who executes, or is otherwise subject to, an oversight document (State Superfund, BCP, ERP or VCP Program). For purposes of this guidance, remedial party also includes:

1. Any person or persons who is performing the investigation and/or remediation, or has control over the person (for example, contractor or consultant) who is performing the investigation and/or remediation, including, without limitation, an owner, operator or volunteer; and

2. The DER for State-funded investigation and/or remediation activities.

**“Site Management”** (SM) means the activities included in the last phase of the remediation of a site, in accordance with a Site Management Plan, which continue until the remedial action objectives for the project are met and the site can be closed-out. Site Management includes the management of the institutional and engineering controls required for a site, as well as the implementation of any necessary long-term monitoring and/or operation and maintenance of the remedy. (Formerly referred to as Operation and Maintenance (O&M)).

**“Site Management Plan”** (SMP) means a document which details the steps necessary to assure that the institutional and engineering controls required for a site are in-place, and any physical components of the remedy are operated, maintained and monitored to assure their continued effectiveness, developed pursuant to Section 6 (DER10 Technical Guide).

**“Site Owner”** means the actual owner of a site. If the site has multiple owners of multiple properties with ICs and/or ECs, the Department requires that the owners designate a single representative for IC/EC Certification activities.

**“Site Owner’s Designated Representative”** means a person, including a firm headed by such a person, who has been designated in writing by the Site Owner(s) to complete and sign the Institutional and Engineering Controls Certification Form.