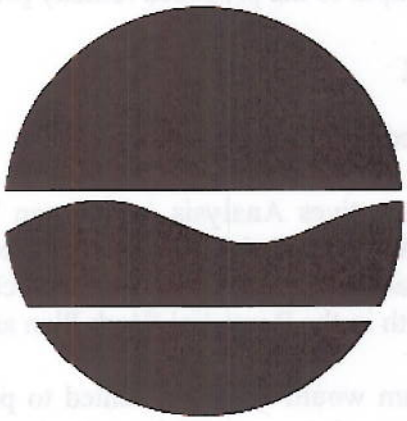
DECISION DOCUMENT

Uniforms for Industry
Operable Unit Number: 01
Brownfield Cleanup Program
Richmond Hill, Queens County
Site No. C241103
January 2011



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Uniforms for Industry
Operable Unit Number: 01
Brownfield Cleanup Program
Richmond Hill, Queens County
Site No. C241103
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Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 01 of the Uniforms for Industry site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law, Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 01 of the Uniforms for Industry site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

Based on the results of the Alternatives Analysis, which can be found in Section 3.0 of the Remedial Action Work Plan (RAWP), and the criteria identified for evaluation of alternatives, the NYSDEC has selected a Track 4 Restricted Residential cleanup for this BCP site. The components of the remedy set forth in the Remedial Work Plan are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.

2. All on-site soils located in the vadose zone (above the water table) in the former UST area in the central portion of the site, and in the east parking lot drainage system distribution box and line repair area which exceed the Part 375 Restricted Residential Soil Cleanup Objectives would be excavated down to a maximum depth of 20 feet and transported off-site for disposal. Approximately 944 cubic yards of soil would be removed. In addition, any soils encountered during any future development or construction work which exhibits visual or olfactory signs of contamination, or if field screening results of the soil are positive for the presence of contamination, will be removed down to a maximum depth of 20 feet. The proposed excavation areas are shown on the attached Figure 7 from the RAWP.

3. Backfilling excavated areas, as needed, with clean soil. Clean soil is soil that is tested

and meets the Division of Environmental Remediation's criteria for backfill and meets the requirements of Part 375-6.7(d).

4. The removal of the top two (2) feet of soil in any "green" or landscaped areas, and covering these areas with 2 feet of soil cover. The two-foot thick cover will consist of clean soil underlain by a demarcation layer to delineate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Non-vegetated areas (buildings, parking lots, etc.) will be covered by either a paving system or concrete at least 6 inches thick.

5. In-situ treatment of contaminated soil and on-site and off-site groundwater via chemical oxidation. The proposed injection points are shown on the attached Figure 8 from the RAWP.

6. Installation of a vapor barrier and active soil vapor mitigation systems, or basement-level mechanical ventilation systems (if the new construction includes a basement-level garage), as part of any new construction to mitigate the potential for soil vapor intrusion.

7. Imposition of an institutional control in the form of an Environmental Easement for the controlled property that:

   (a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3).
   (b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for: restricted residential use;
   (c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;
   (d) prohibits agriculture or vegetable gardens on the controlled property;
   (e) requires compliance with the Department approved Site Management Plan;

8. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

   (a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective:

   Institutional Controls: The Environmental Easement discussed in bullet #7 above.

   Engineering Controls: The soil cover discussed in bullet #4 above and the soil vapor mitigation system (sub-slab depressurization system) discussed in bullet #6 above.

This plan includes, but may not be limited to:

(i) Soil Management Plan which details the provisions for management of future excavations in areas of remaining contamination;
(ii) descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
(iii) provisions for the management and inspection of the identified engineering controls;
(iv) maintaining site access controls and Department notification; and
(v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls;

(b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

(i) monitoring of groundwater to assess the performance and effectiveness of the remedy;
(ii) a schedule of monitoring and frequency of submittals to the Department;
(iii) provision to evaluate the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;
(iv) provision to evaluate the potential for soil vapor intrusion for existing buildings if building use changes significantly or if a vacant building become occupied.

9. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including;

- Energy efficiency and green building design
- Using renewable energy sources
- Reducing green house gas emissions
- Encouraging low carbon technologies
- Conserve natural resources
- Increase recycling and reuse of clean materials
- Design storm water management systems to recharge aquifers

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

1/27/11
Date

Robert Cozzy, Director
Remedial Bureau B

DECISION DOCUMENT

Uniforms for Industry
Richmond Hill, Queens County
Site No. C241103
January 2011

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: SITE DESCRIPTION AND HISTORY

Location:

The Uniforms for Industry (UFI) site is a 1.72 acre parcel located at 129-09 Jamaica Avenue, Richmond Hill, Queens.

Site Features:

Two interconnected buildings make up approximately 2/3 of the site. The remaining area is covered predominantly by pavement. The site is bounded by 127th St. to the west, Jamaica Ave. to the south, residential properties to the north, and a railroad to the east.

Current Zoning/Use:

The surrounding parcels are mainly residential with some first floor commercial and light industrial properties. The site is currently inactive, but was previously used for commercial laundering services.

Historical Uses:

The site was formerly owned and operated by Ideal Vortex Laundry, which utilized a petroleum-based dry-cleaning machine during the 1930s through the 1950s. UFI acquired the property in the 1950s and continued laundry operations through November 2002, when all operations ceased. A number of spills from machinery and underground storage tanks (USTs) have led to soil and groundwater contamination. In June 2007, the Department entered into a Brownfield Cleanup Agreement (BCA) with UFI. Fieldwork associated with the BCA commenced in November 2008, and was performed by Environmental Liability Management, LLC. The Department received the Remedial Investigation Report (RIR) on January 15, 2010. The revised RIR, dated April 16, 2010, was approved for placement in the document repository on August 30, 2010. The RIR found that the on-site soil was contaminated with elevated levels of petroleum-based compounds, and the on-site soil vapor was contaminated with elevated levels of chlorinated volatile organic compounds (CVOCs). In addition, the on-site and off-site groundwater was found to be contaminated with volatile organic compounds (VOCs), including CVOCs such as tetrachloroethylene (PCE). Based on the results of the RIR, an off-site Soil Vapor Intrusion Investigation (SVI) will be performed as part of remedy to determine whether contaminated soil vapor has migrated off-site, and to assess the potential for off-site soil vapor intrusion. The off-site SVI will be managed as a separate operable unit, and is currently underway. The public comment period for the proposed Remedial Action Work Plan to address the on-site contamination ended on December 6, 2010.

Operable Units:

As alluded to above, the site was divided into two operable units. An operable unit represents a portion of the a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable unit 1 (OU1) is the on-site source area. OU2 consists of the off-site soil vapor plume.

Site Geology and Hydrogeology:

The site overlies the Upper Glacial Aquifer of Long Island. The Upper Glacial Aquifer is approximately 115 feet thick at this location and is underlain by the Gardiners Clay which is approximately 75 to 100 feet thick beneath the site area and is a major confining unit. Underlying the Gardiners Clay lies approximately 125 feet of the Magothy Aquifer, followed by 180 feet of clay, which forms the Raritan confining unit. The Lloyd Aquifer, which is approximately 195 feet thick, underlies the Raritan confining unit. Bedrock below the site is located at approximately 650 feet.

The groundwater table surface lies approximately 38 to 40 feet below ground surface and flows to the southwest.

Operable Unit (OU) Number 01 is the subject of this document.

A Decision Document has yet to be issued for OU 02.

A site location map is attached as Figure 1.

SECTION 3: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) is/are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 4: ENFORCEMENT STATUS

The cleanup agreement is with a Volunteer. The Volunteer does not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

One of the Applicants under the Brownfield Cleanup Agreement is a Participant. As such, the Participant (UFI) has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

SECTION 5: SITE CONTAMINATION

5.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 5.4.

5.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

5.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site is/are:

tetrachloroethylene (pce)	dichloroethylene
vinyl chloride	1,2,4-trimethylbenzene

The contaminant(s) of concern exceed the applicable standards, criteria and guidance for:

- groundwater
- soil
- soil vapor

While there are currently no SCGs for soil vapor, the observed soil vapor concentrations were elevated enough to warrant mitigation.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

5.3: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

Exposure to site contaminants in drinking water is unlikely since the area is served with public water. Contact with potentially contaminated soil is not likely since the site is covered by buildings and pavement. If the on-site building is occupied in the future the inhalation of site contaminants in the indoor air from vapor intrusion is possible. The indoor air and vapor beneath nearby residences will be tested to determine if site contaminants are entering homes through vapor intrusion.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Contamination was identified by the Remedial Investigation of this site, which represents a significant threat to public health and the environment, requiring a remedial program for the site to address the contamination identified below.

Nature of contamination: Based on previous investigations, the primary contaminants of concern (COCs) at the site include chlorinated organic compounds, primarily perchloroethylene (PCE) and its breakdown products including 1,2-dichloroethylene (1,2-DCE) and vinyl chloride, and secondary COCs, primarily petroleum-based compounds, including 1,2,4-trimethylbenzene (1,2,4-TMB) and 1,3,5-TMB. Significant contamination was not detected in the on-site shallow soils. However, up to 170 ppm of 1,2,4-TMB was detected in the central portion of the site in the deeper saturated zone, i.e. 52.5 feet below ground surface (bgs). The soil cleanup objectives (SCOs) for restricted residential use for 1,2,4-TMB is 52 ppm.

Volatile organic compounds (VOCs) including petroleum-based compounds were detected in on-site groundwater at concentrations up to 4,200 ppb total VOCs. This also included PCE and its breakdown products (PCE up to 81 ppb; 1,2-DCE up to 980 ppb; and vinyl chloride up to 580 ppb. The groundwater standard for these compounds is 5 ppb, 5 ppb, and 2 ppb, respectively. Semi-volatile organic compounds (SVOCs) were also detected in on-site groundwater at concentrations up to 11,337 ppb total SVOCs. The highest SVOC concentrations were detected in the southwest portion of site and included the following constituents: acenaphthene (540 ppb); anthracene (200 ppb); fluorene (740 ppb); pyrene (240 ppb); and 2-methynaphthalene, naphthalene, and phenanthrene at 5,700 ppb, 2,500 ppb, and 1,300 ppb, respectively. Off-site groundwater is also contaminated with chlorinated VOCs above groundwater standards, including PCE up to 40 ppb. Free product (petroleum) which was encountered in a number of the on-site wells appears to be stable within the boundaries of the site. Groundwater grab

samples were also collected at various depths while advancing soil borings. In the central portion of the site PCE was detected at 5 ppb at 112 feet bgs. TCE was detected at 15 ppb and 22 ppb at 93 feet bgs and 112 feet bgs, respectively. Ethylbenzene, total xylenes and naphthalene were detected at 620 ppb, 700 ppb and 130 ppb at 67 feet bgs; however concentrations of these fuel-related compounds declined by more than one order of magnitude in the 78-foot bgs sample. The soil boring and groundwater sample results are summarized in Figure 5 and Figure 6 from the draft Remedial Action Work Plan (attached).

On-site soil vapor is contaminated with site-related VOCs, mainly PCE, at concentrations up to 4,200,000 µg/m3. The soil vapor sample results are summarized in Figure 4-F (attached).

Extent of contamination:

Source areas/Waste disposal – The former UST area located in the central portion of the site has been identified as a primary source area which has led to soil and groundwater contamination. All known USTs have previously been removed from the site. In addition, the site was previously owned and operated by Vortex Laundry which utilized a petroleum solvent dry-cleaning machine during the 1930s through the 1950s. It is believed spills from these machines may have also contributed to the observed soil and groundwater contamination. The remedy must address soil, soil vapor and groundwater contamination in this area.

Surface soil – Most of the site is covered with either structures or pavement. However, any areas not covered by buildings or pavement must be addressed by the remedy.

Subsurface soil – Petroleum-based organic compounds, including 1,2,4-TMB were identified at levels exceeding restricted residential SCOs in an area surrounding the former UST area located in the central portion of the site. The remedy must address the area of identified subsurface soil contamination in the central portion of the site.

Groundwater - Both on-site and off-site groundwater has been impacted by VOCs, primarily PCE. Exposure to contaminated groundwater is not expected since the area is served by public water. However, the remedy must address the existing groundwater contamination.

Soil Vapor – Elevated levels of VOCs, primarily PCE were identified in on-site soil vapor. An off-site soil vapor investigation has also been proposed. The remedy must address the on-site soil vapor contamination. The off-site soil vapor will be handled under Operable Unit No. 2.

More information regarding the site can be found in the documents placed in the Site Document Repository: QUEENS BOROUGH PUBLIC LIBRARY in RICHMOND HILL, NY.

Significant Threat:

Based on the findings of the RIR, the Department in consultation with the New York State Department of Health has determined that the site poses a significant threat due to elevated concentrations of contaminants in soil vapor.

SECTION 6: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and evaluation of the remedial criteria are present in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

Based on the results of the Alternatives Analysis, which can be found in Section 3.0 of the Remedial Action Work Plan (RAWP), and the criteria identified for evaluation of alternatives, the NYSDEC has selected a Track 4 Restricted Residential cleanup for this BCP site. The components of the remedy set forth in the Remedial Work Plan are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.

2. All on-site soils located in the vadose zone (above the water table) in the former UST area in the central portion of the site, and in the east parking lot drainage system distribution box and line repair area which exceed the Part 375 Restricted Residential Soil Cleanup Objectives would be excavated down to a maximum depth of 20 feet and transported off-site for disposal. Approximately 944 cubic yards of soil would be removed. In addition, any soils encountered during any future development or construction work which exhibits visual or olfactory signs of contamination, or if field screening results of the soil are positive for the presence of contamination, will be removed down to a maximum depth of 20 feet. The proposed excavation areas are shown on the attached Figure 7 from the RAWP.

3. Backfilling excavated areas, as needed, with clean soil. Clean soil is soil that is tested and meets the Division of Environmental Remediation's criteria for backfill or local site background, and meets the requirements of Part 375-6.7(d).

4. The removal of the top two (2) feet of soil in any "green" or landscaped areas, and covering these areas with 2 feet of soil cover. The two-foot thick cover will consist of clean soil underlain by a demarcation layer to delineate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Non-vegetated areas (buildings, parking lots, etc.) will be covered by either a paving system or concrete at least 6 inches thick.

5. In-situ treatment of contaminated soil and on-site and off-site groundwater via chemical oxidation. The proposed injection points are shown on the attached Figure 8 from the RAWP.

6. Installation of a vapor barrier and active soil vapor mitigation systems, or basement-level mechanical ventilation systems (if the new construction includes a basement-level garage), as part of any new construction to mitigate the potential for soil vapor intrusion.

7. Imposition of an institutional control in the form of an Environmental Easement for the controlled property that:

(a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3).
(b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for: restricted residential use
(c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;
(d) prohibits agriculture or vegetable gardens on the controlled property;
(e) requires compliance with the Department approved Site Management Plan;

8. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

(a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in bullet #7 above.

Engineering Controls: The soil cover discussed in bullet #4 above and the soil vapor mitigation system (sub-slab depressurization system) discussed in bullet #6 above.

This plan includes, but may not be limited to:

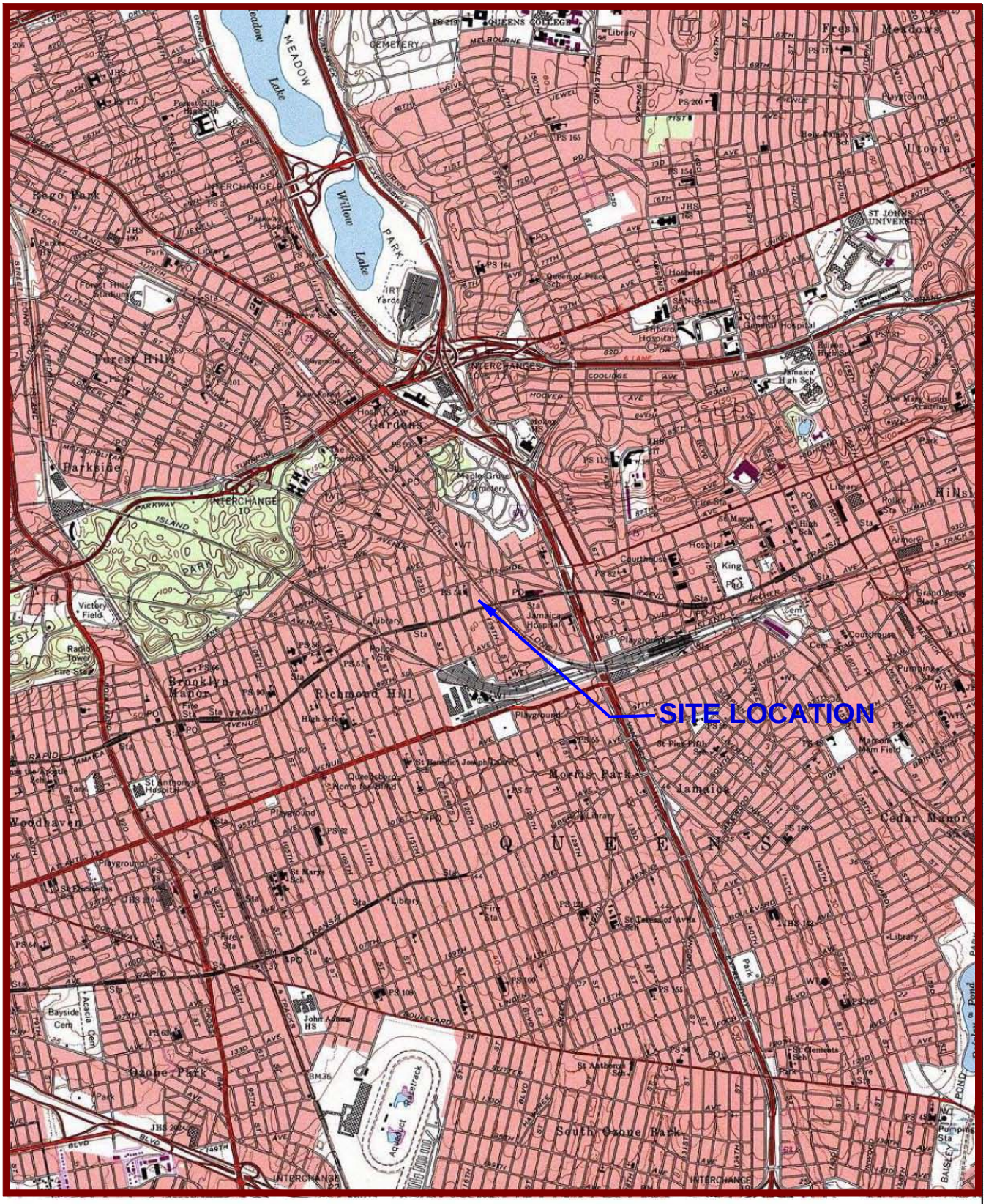
(i) Soil Management Plan which details the provisions for management of future excavations in areas of remaining contamination;
(ii) descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
(iii) provisions for the management and inspection of the identified engineering controls;
(iv) maintaining site access controls and Department notification; and
(v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls;

(b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but not be limited to:

(i) monitoring of groundwater to assess the performance and effectiveness of the remedy;
(ii) a schedule of monitoring and frequency of submittals to the Department;
(iii) provision to evaluate the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;
(iv) provision to evaluate the potential for soil vapor intrusion for existing buildings if building use changes significantly or if a vacant building become occupied.

9. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including;

- Energy efficiency and green building design
- Using renewable energy sources
- Reducing green house gas emissions
- Encouraging low carbon technologies
- Conserve natural resources
- Increase recycling and reuse of clean materials
- Design storm water management systems to recharge aquifers



USGS Jamaica Quadrangle 1994, Contour Interval = 10 feet

0 .5 1 MILES

1000 0 1000 2000 3000 4000 5000 FEET

1 .5 0 KILOMETERS 1

1000 0 METERS 1000

MN 13° 10/19/10

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS

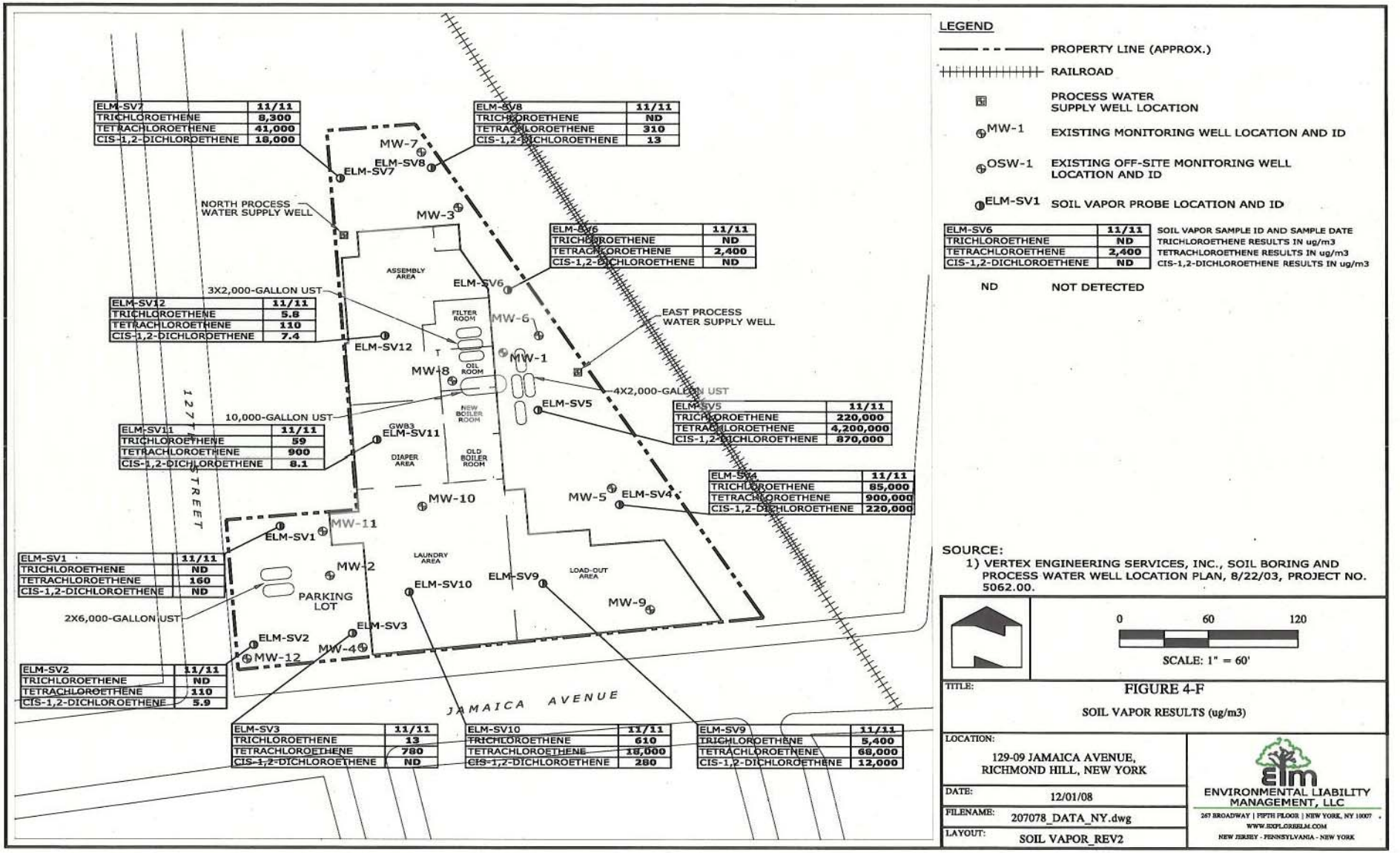
Phone 631.504.6000
Fax 631. 924 .2870

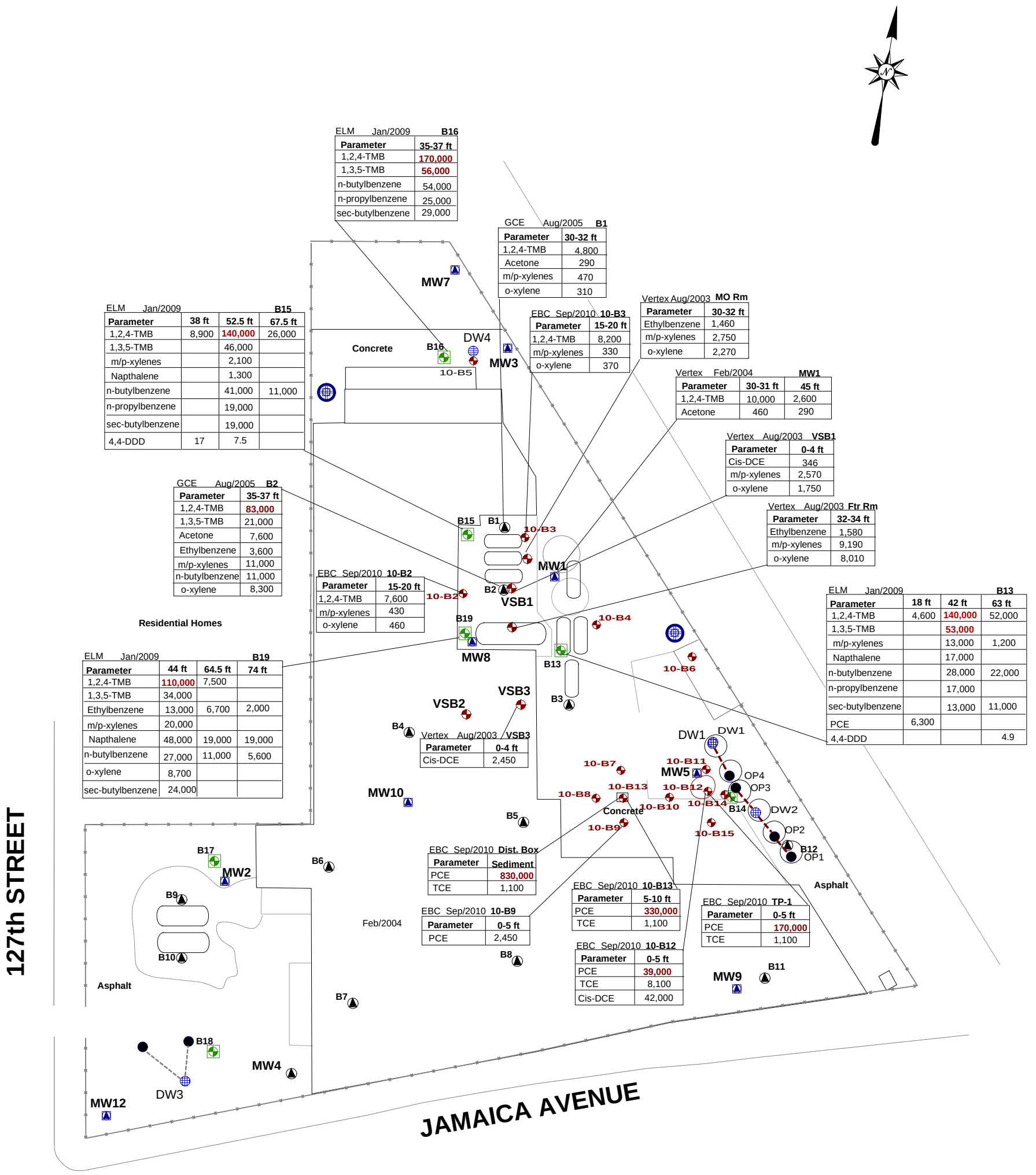
FORMER UNIFORMS FOR INDUSTRY SITE

129-09 JAMAICA AVENUE, RICHMOND HILL, NY

FIGURE 1 SITE LOCATION MAP

VOCs in Soil Gas





Notes:

* Samples not analyzed for full suite of petroleum VOCs during this round

All results in ug/kg

All Values indicate exceedance in Unrestricted SCOs

Values in Red indicate exceedance in Restricted Residential SCOs

EBC
Environmental Business Consultants

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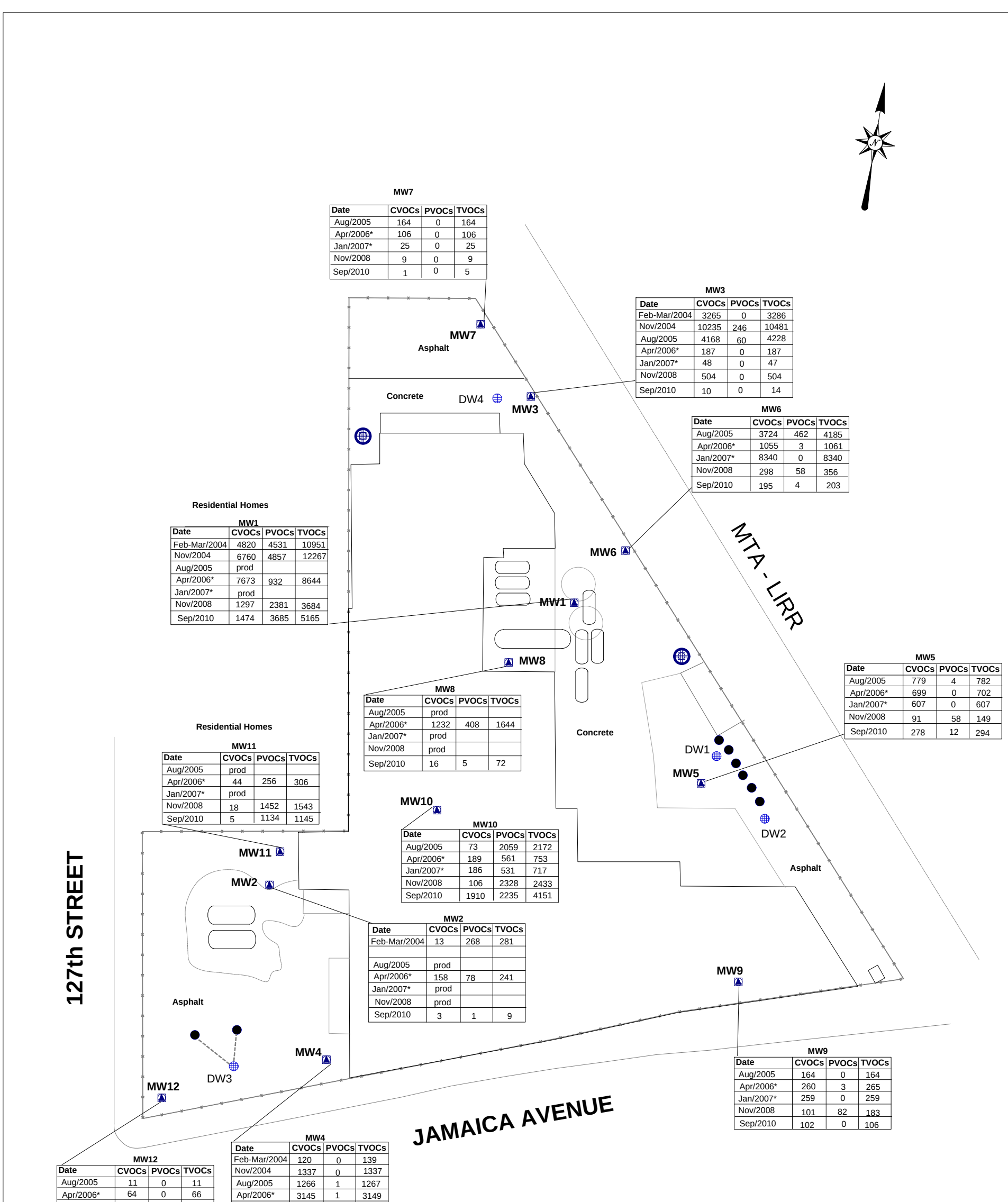
Figure No. 5

Site Name: Former Uniforms For Industry Site

Site Address: 129-09 Jamaica Avenue, Richmond Hill, NY

Drawing Title: Exceedance of Track 1 & Track 4 SCOs



MW7

Date	CVOCs	PVOCs	TVOCs
Aug/2005	164	0	164
Apr/2006*	106	0	106
Jan/2007*	25	0	25
Nov/2008	9	0	9
Sep/2010	1	0	5

MW3

Date	CVOCs	PVOCs	TVOCs
Feb-Mar/2004	3265	0	3286
Nov/2004	10235	246	10481
Aug/2005	4168	60	4228
Apr/2006*	187	0	187
Jan/2007*	48	0	47
Nov/2008	504	0	504
Sep/2010	10	0	14

MW6

Date	CVOCs	PVOCs	TVOCs
Aug/2005	3724	462	4185
Apr/2006*	1055	3	1061
Jan/2007*	8340	0	8340
Nov/2008	298	58	356
Sep/2010	195	4	203

MW1

Date	CVOCs	PVOCs	TVOCs
Feb-Mar/2004	4820	4531	10951
Nov/2004	6760	4857	12267
Aug/2005	prod		
Apr/2006*	7673	932	8644
Jan/2007*	prod		
Nov/2008	1297	2381	3684
Sep/2010	1474	3685	5165

MW8

Date	CVOCs	PVOCs	TVOCs
Aug/2005	prod		
Apr/2006*	1232	408	1644
Jan/2007*	prod		
Nov/2008	prod		
Sep/2010	16	5	72

MW5

Date	CVOCs	PVOCs	TVOCs
Aug/2005	779	4	782
Apr/2006*	699	0	702
Jan/2007*	607	0	607
Nov/2008	91	58	149
Sep/2010	278	12	294

MW11

Date	CVOCs	PVOCs	TVOCs
Aug/2005	prod		
Apr/2006*	44	256	306
Jan/2007*	prod		
Nov/2008	18	1452	1543
Sep/2010	5	1134	1145

MW10

Date	CVOCs	PVOCs	TVOCs
Aug/2005	73	2059	2172
Apr/2006*	189	561	753
Jan/2007*	186	531	717
Nov/2008	106	2328	2433
Sep/2010	1910	2235	4151

MW2

Date	CVOCs	PVOCs	TVOCs
Feb-Mar/2004	13	268	281
Aug/2005	prod		
Apr/2006*	158	78	241
Jan/2007*	prod		
Nov/2008	prod		
Sep/2010	3	1	9

MW9

Date	CVOCs	PVOCs	TVOCs
Aug/2005	164	0	164
Apr/2006*	260	3	265
Jan/2007*	259	0	259
Nov/2008	101	82	183
Sep/2010	102	0	106

MW12

Date	CVOCs	PVOCs	TVOCs
Aug/2005	11	0	11
Apr/2006*	64	0	66
Jan/2007*	47	0	47
Nov/2008	109	0	115
Sep/2010	29	5	38

MW4

Date	CVOCs	PVOCs	TVOCs
Feb-Mar/2004	120	0	139
Nov/2004	1337	0	1337
Aug/2005	1266	1	1267
Apr/2006*	3145	1	3149
Jan/2007*	1387	0	1387
Nov/2008	953	12	965
Sep/2010	176	9	190

KEY:

MWX Monitoring Well

Surface Drain Drywell

Suspect Overflow Drywell - No Surface Access

Water Supply Well

0 25 50 100

1 Inch = 50 feet

Notes:

* Samples not analyzed for full suite of petroleum VOCs during this round

All results in ug/L

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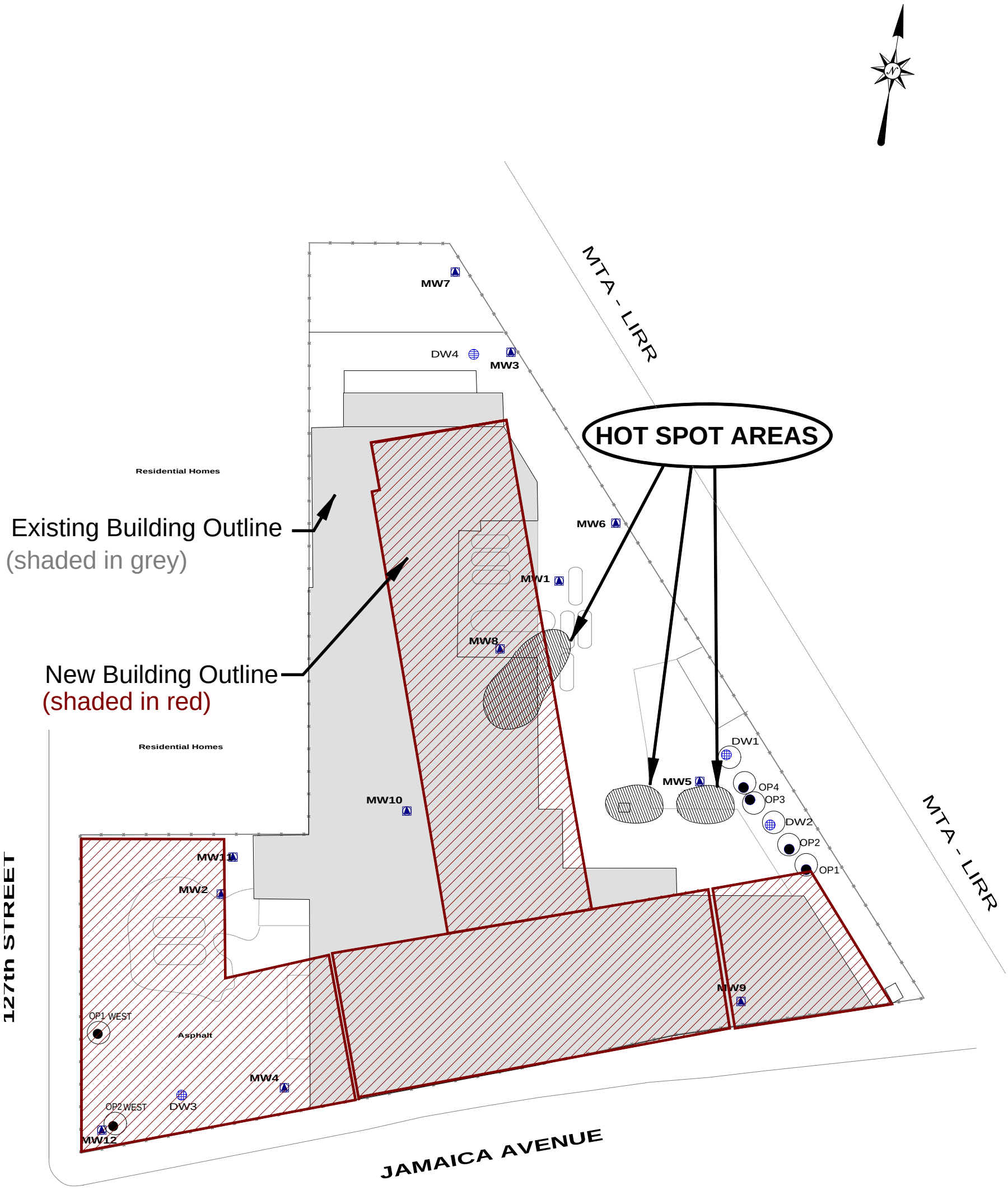
Figure No. **6**

Site Name: FORMER UNIFORMS FOR INDUSTRY SITE

Site Address: 129-09 JAMAICA AVENUE, RICHMOND HILL, NY

Drawing Title: HISTORIC GROUNDWATER RESULTS



KEY:

MWX
- Monitoring Well
- Surface Drain Drywell
- Suspect Overflow Drywell - No Surface Access

0 25 50 100

1 Inch = 50 feet

Notes:

The locations of DW4, MW6, MW9 and MW10 not field verified

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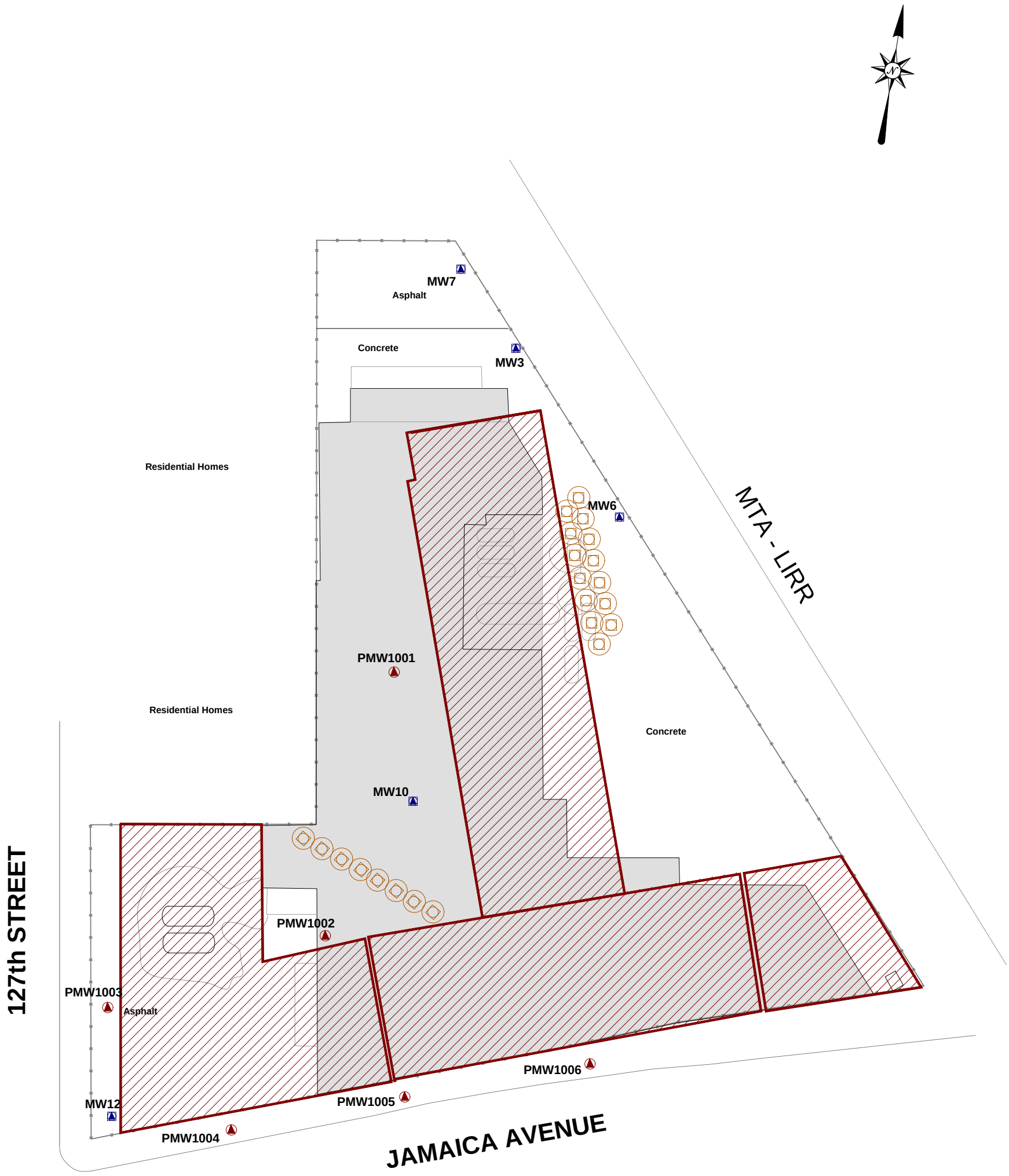
Figure No. **7**

Site Name: FORMER UNIFORMS FOR INDUSTRY SITE

Site Address: 129-09 JAMAICA AVENUE, RICHMOND HILL, NY

Drawing Title: HOT SPOT EXCAVATION PLAN



KEY:

MWX Existing Monitoring Well

PMW10XX Proposed Monitoring Well

Chemical Oxidant Injection Well (5 ft inj. radius)

Surface Drain Drywell

0 25 50 100

1 Inch = 50 feet

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Figure No. **8**

Site Name: FORMER UNIFORMS FOR INDUSTRY SITE

Site Address: 129-09 JAMAICA AVENUE, RICHMOND HILL, NY

Drawing Title: CHEMICAL OXIDANT INJECTION PLAN