

**Former Austin Avenue Landfill Site**  
WESTCHESTER COUNTY, NEW YORK

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**Site Management Plan**

**NYSDEC Site Number: C3-60-066**

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**Revisions to Final Approved Site Management Plan:**

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

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**MAY 2011**  
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# CERTIFICATION STATEMENT

I, Wayne E. McFarland, certify that I am currently a NYS registered Professional Engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

NYS Professional Engineer # 59177

Date: April 29, 2015



# TABLE OF CONTENTS

<b>CERTIFICATION STATEMENT .....</b>	<b>II</b>
<b>TABLE OF CONTENTS .....</b>	<b>III</b>
<b>LIST OF TABLES .....</b>	<b>VI</b>
<b>LIST OF FIGURES .....</b>	<b>VII</b>
<b>LIST OF APPENDICES .....</b>	<b>VIII</b>
<b>1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM.....</b>	<b>- 2 -</b>
<b>1.1 INTRODUCTION.....</b>	<b>- 2 -</b>
1.1.1 General.....	- 2 -
1.1.2 Purpose.....	- 3 -
1.1.3 Revisions.....	- 4 -
<b>1.2 SITE BACKGROUND.....</b>	<b>- 4 -</b>
1.2.1 Site Location and Description .....	- 4 -
1.2.2 Site History.....	- 4 -
1.2.3 Geologic Conditions .....	- 7 -
<b>1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS .....</b>	<b>- 8 -</b>
<b>1.4 SUMMARY OF REMEDIAL ACTIONS.....</b>	<b>- 10 -</b>
1.4.1 Removal of Contaminated Materials from the Site .....	- 10 -
1.4.2 Site-Related Treatment Systems.....	- 11 -
1.4.3 Remaining Contamination .....	- 11 -
<b>2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN .....</b>	<b>- 12 -</b>
<b>2.1 INTRODUCTION.....</b>	<b>- 12 -</b>
2.1.1 General.....	- 12 -
2.1.2 Purpose.....	- 12 -

<b>2.2 ENGINEERING CONTROLS.....</b>	<b>- 13 -</b>
2.2.1 Engineering Control Systems .....	- 13 -
2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems .....	- 14 -
<b>2.3 INSTITUTIONAL CONTROLS .....</b>	<b>- 15 -</b>
2.3.1 Soil Management Plan .....	- 17 -
2.3.2 Soil Vapor Intrusion Evaluation .....	- 18 -
<b>2.4 INSPECTIONS AND NOTIFICATIONS.....</b>	<b>- 19 -</b>
2.4.1 Inspections .....	- 19 -
2.4.2 Notifications .....	- 20 -
<b>2.5 CONTINGENCY PLAN .....</b>	<b>- 21 -</b>
2.5.1 Emergency Telephone Numbers .....	- 21 -
2.5.2 Map and Directions to Nearest Health Facility .....	- 22 -
2.5.3 Response Procedures .....	- 23 -
<b>3.0 SITE MONITORING PLAN .....</b>	<b>- 24 -</b>
<b>3.1 INTRODUCTION.....</b>	<b>- 24 -</b>
3.1.1 General.....	- 24 -
3.1.2 Purpose and Schedule .....	- 24 -
<b>3.2 SOIL COVER SYSTEM MONITORING.....</b>	<b>- 25 -</b>
<b>3.3 MEDIA MONITORING PROGRAM.....</b>	<b>- 26 -</b>
3.3.1 Groundwater Monitoring .....	- 26 -

**3.4 SITE-WIDE INSPECTION ..... - 28 -**

**3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL ..... - 29 -**

**3.6 MONITORING REPORTING REQUIREMENTS..... - 30 -**

**4.0 OPERATION AND MAINTENANCE PLAN..... - 32 -**

**4.1 INTRODUCTION..... - 32 -**

**5.0 INSPECTIONS, REPORTING, AND CERTIFICATIONS ..... - 33 -**

**5.1 SITE INSPECTIONS ..... - 33 -**

    5.1.1 Inspection Frequency ..... - 33 -

    5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports..... - 33 -

    5.1.3 Evaluation of Records and Reporting ..... - 33 -

**5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS ..... - 34 -**

**5.3 PERIODIC REVIEW REPORT..... - 35 -**

**5.4 CORRECTIVE MEASURES PLAN ..... - 36 -**

## **LIST OF TABLES**

- 1 Remedial Investigation Soil Contamination Summary
- 2A Remedial Investigation Groundwater Contamination Summary
- 2B Remedial Investigation Groundwater Contamination Summary
- 2C Remedial Investigation Groundwater Contamination Summary
- 2D Remedial Investigation Groundwater Contamination Summary
- 3 Soil Cleanup Objectives for the Site Use, On-Site Soil Re-Use, and Imported Fill
- 4 Emergency Contact Numbers
- 5 Other Contact Numbers
- 6 Monitoring/Inspection Schedule
- 7 Schedule of Monitoring/Inspection Reports

## **LIST OF FIGURES**

- 1 Site Location Map
- 2 Site Layout and Property Boundaries
- 3 Remedial Investigation Groundwater Contamination Summary
- 4 Remedial Investigation Soil Contamination Summary
- 5 Remedial Investigation Explosive Gas Results
- 6 Groundwater Elevation and Flow (June 2007)
- 7 Map Showing Route from the Site to the Hospital
- 8 Groundwater Monitoring Well Network

## **LIST OF APPENDICES**

- A Environmental Easement
- B Metes and Bounds
- C EC As-Built Drawings
- D Soil Management Plan
- E Health and Safety Plan and Community Air Monitoring Plan (Sample Documents)
- F Monitoring Well Boring and Construction Logs
- G Groundwater Monitoring Well Sampling Log Form
- H Site-Wide Inspection Form
- I Quality Assurance Project Plan



# **SITE MANAGEMENT PLAN**

## **1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM**

### **1.1 INTRODUCTION**

This document is required as an element of the remedial program at the Former Austin Avenue Landfill Site (hereinafter referred to as the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index # A3-0542-0306, Site # C3-60-066, which was executed on March 2004.

#### **1.1.1 General**

Austin Avenue Brownfield Redevelopment, LLC., (“Austin Avenue, LLC”) entered into a BCA with the NYSDEC to investigate and remediate an approximately 17.4-acre property located in the city of Yonkers, Westchester County, New York. The full 17.4-acres of the tax parcel were investigated and 14-acres of the property were remediated to a Track 4 Restricted Residential use, which represents the area of the BCP Site. Figures showing the Site location and boundaries of this approximately 17.4-acre Site are provided in Figures 1 and 2, respectively. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement, which is included as Appendix A.

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this Site, which is hereafter referred to as ‘remaining contamination.’ This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports

associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by S&W Redevelopment of North America, LLC. (SWRNA), on behalf of Austin Avenue, LLC., in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated June 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

### **1.1.2 Purpose**

The Site contains contamination left after completion of the remedial action. Engineering Controls (ECs) have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Westchester County Clerk, will require compliance with this SMP, and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring, and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; and (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and

recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375, and the BCA (Index # A3-0542-0306, Site # C3-60-066) for the Site, and thereby subject to applicable penalties.

### **1.1.3 Revisions**

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

## **1.2 SITE BACKGROUND**

### **1.2.1 Site Location and Description**

The Site is located in the City of Yonkers, County of Westchester, New York and is identified as Block 3244 and Lot 1 on Section 3 of the Yonkers Tax Map #3 3244 1 Section 3. The Site is an approximately 17.4-acre area bounded by Austin Avenue to the north, Home Depot back parking lot to the south, Sprain Brook and Sprain Road to the east, and an unimproved road and similar vacant land (Lot 4) to the west (see Figure 2). The boundaries of the Site are more fully described in Appendix B – Metes and Bounds.

### **1.2.2 Site History**

The Site was historically used by the City of Yonkers for the disposal of municipal incinerator ash from the 1960s to 1979. Since 1979, the Site has been idle, and had become overgrown with a natural vegetative cover.

A number of previous Site investigations have been conducted at the Site to characterize the nature of the waste material, and the impacts it may have had on local groundwater and surface water quality. The following sections summarize the scope, and findings of three previous investigations conducted within the BCP Site boundary.

### **1976 Site Study**

In 1976, the Site was investigated by Geraghty & Miller, Inc. (G&M) as part of a larger study of Sites in Westchester County. G&M utilized five (5) temporary well points (W-1 through W-5) to measure groundwater elevations and collect groundwater samples, and collected water samples from Sprain Brook. The investigation results were presented in a report dated June 1977. The section of the report that concerned the Site indicated that groundwater impacts from the Site were evidenced by elevated levels of iron, manganese, chloride and nitrate (Figure 3). Although the report suggested that low levels of organic compounds might be present, there was no quantitative evidence to support that suggestion; laboratory analysis indicated that if organic compounds were present, they were at concentrations below detection limits. In addition, the overall findings and conclusions of the report stated that “Evidence of disposal of hazardous chemical wastes was not found at any Site inspected”.

Groundwater beneath the Site was determined by G&M to flow to the east, eventually discharging to Sprain Brook. Samples collected from Sprain Brook showed no significant impact to surface water quality with respect to the constituents detected in the ground water (iron, manganese, chloride and nitrate).

The G&M report concluded that impact from the Site on groundwater and surface water quality was “not significant”.

### **1995 Groundwater/ Surface Water Study**

In 1995, Leggette, Brashears, & Graham, Inc. (LB&G) investigated surface water and groundwater quality at the Site. The investigation included a review of previously collected data, installation of four (4) overburden monitoring wells, installation of three (3) bedrock groundwater monitoring wells, collection of groundwater samples from the monitoring wells, and collection of surface water samples from Sprain Brook.

Groundwater samples taken from the overburden and bedrock monitoring wells did not contain polychlorinated biphenyls (PCBs) or volatile organic compounds (VOCs) at concentrations in excess of laboratory detection limits. Elevated levels of some naturally-occurring metals were detected in the groundwater samples, specifically iron, manganese and some trace metals (Figure 3). Surface water samples from Sprain Brook

showed no evidence of significant Site-related contamination. Overall, these findings are similar to those of the 1976 study.

The 1995 investigation of the bedrock groundwater confirmed the absence of VOCs and PCBs in groundwater in the fill overburden and bedrock. The conclusion of this investigation was that the impacts to groundwater described in the 1977 Geraghty and Miller study was of a benign nature with respect to groundwater quality.

Semi-annual monitoring of the previously described overburden and bedrock groundwater monitoring wells was conducted in January 1998, July 1998, February 1999, and September 1999. In addition, four (4) locations along the southern perimeter of the Site were screened for combustible gases during each sampling event. The data from these four sampling events indicated similar results to those seen in earlier sampling events.

### **2000 Ash Fill & Methane Gas Study**

In September 2000, an investigation was conducted to further characterize the chemical composition of the ash at the Site, and to define the potential for methane generation in the central portion of the Site. Eight (8) ash fill samples were collected from the Site for the purpose of waste characterization. The samples were numbered HA-1 through HA-8, and their locations are shown on Figure 4. The ash samples were collected from 0.5 and 2 feet below grade (bg) except for sample HA-6, which was collected from the face of a road cut, located off-Site between the Stew Leonard's parking lot and the Site. Laboratory analysis results for the on-site samples are summarized in Table 1.

In addition, twenty-four (24) locations were monitored for the presence of methane gas, using a portable combustible gas indicator (CGI). The sampling locations and results are shown on Figure 5. The monitoring was conducted by driving a steel rod to 3 feet bg to create a pilot hole, inserting a perforated screen and tubing into the pilot hole, and connecting the tubing to the CGI to obtain a reading.

Key findings of the 2000 study were that:

1. The ash fill that currently exists at the Site was not a hazardous waste, based on analysis for total and leachable (TCLP) priority pollutant metals, and TCLP analysis for polycyclic aromatic hydrocarbons (PAHs). Although several leachable metals were detected by TCLP analysis, including cadmium, chromium, copper, lead, nickel, and zinc, their concentrations were well below applicable TCLP toxicity limits for hazardous waste.

2. Methane generation is not a significant problem in the former ash Site. Two (2) of twenty-four (24) sample locations had methane levels above 50 percent lower explosive limit (LEL) and the remaining twenty-two (22) sample locations had methane levels below 8 percent LEL (see Figure 5).

### **2006-2007 Remedial Investigation**

A Remedial Investigation (RI) was completed by S&W Redevelopment of North America, LLC (SWRNA) in 2006 and 2007 to further characterize location and extent of contamination at the Site. Fill material was shown to not be a likely significant source of groundwater contamination. Groundwater contamination was determined to be minor and was attributed to excessive turbidity of sample water rather than groundwater quality. Explosive gases were not detected in any of the explosive gas monitoring wells tested in March 2007 and June 2007. The overall conclusion of the RI was that contamination at the Austin Avenue Landfill is minor and appears to be of a localized extent.

### **Summary of Previous Investigations**

The findings of previous investigations summarized above, and others, identified measurable, but minor, groundwater impacts with respect to inorganic constituents, including iron, manganese, chloride, and nitrate, and little or no evidence of methane gas. These findings are consistent with inorganic material typical of an ash Site. The leachate produced by ash Sites usually lacks soluble organic compounds, and the absence of putrescible waste material limits the formation of methane gas. This means that the impacts from an ash Site, if any, are best measured in terms of the inorganic parameters present in the ash.

## **1.2.3 Geologic Conditions**

### **Lithology**

The depth to bedrock varies from zero feet below ground surface (bgs) in the northwestern portion of the Site to more than 40 feet bgs in the center of the Site, and is approximately 20 feet bgs east of the fill area near Sprain Brook.

The general soil stratigraphy for most of the Site includes manmade fill in the form of incinerator ash, and other debris. The fill has a thickness of up to 40 feet in some locations, based on RI soil borings. Native soil consisting of layered sand and silt is present near Sprain Brook, east of the fill area.

## Hydrogeology

The depth to groundwater in the monitoring wells at the Site, as measured in the RI, ranges from approximately 4 to 38 feet bgs. Groundwater flow at the Site is towards the east (towards Sprain Brook). A groundwater flow figure is shown in Figure 6.

### 1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the following report: *Remedial Investigation Report, Brownfield Cleanup Program, Austin Avenue Site Brownfield Site, Yonkers, New York* (SWRNA, July 2007).

Generally, the RI determined that contamination was not a significant issue at the Site. This determination was based on analytical data of three media: fill, groundwater, and explosive gas. Fill data indicated that fill is confined to the Site. It contains leachable metals that may potentially dissolve in groundwater. The data indicate, however, that the metals are not mobile in groundwater and that the fill material does not have a significance influence over local water quality. Groundwater data detected only one pesticide, and one PCB above TOGS GA groundwater quality guidance values in any of the collected samples. These detections, found in an upgradient well during the first sampling event, were determined to be due to elevated turbidity values as they were not detected in a subsequent sampling event that utilized low-flow sampling methods. The same is true for metals that were detected in the first round of sampling. Explosive gas data did not indicate explosive gas detections at levels that exceeded the lower explosive limit during any sampling event.

In general, the RI determined that contamination at the Austin Avenue Site was minor and appeared to be of a localized extent. The contaminants of potential concern (COPCs) include various metal analytes in the fill material. The potential contamination is associated with ash fill material that has been historically deposited at the Site. The area requiring remediation was determined to be limited to the extent of ash fill. The proposed remedy included installing a minimum of 2 feet of clean soil cover material.

Below is a summary of Site conditions when the RI was performed in 2007:

## Soil

The Site is a former ash debris Site. Toxicity characteristic leaching procedure (TCLP) analytical testing of soil/fill samples during the RI indicated that the fill is non-hazardous. Analysis during the RI indicated that Site soil fill samples contain several metals above the Restricted Residential Soil Cleanup Objectives (SCOs).

## Site-Related Groundwater

Two (2) rounds of groundwater sampling were conducted during the RI. Based on the analytical results of these samples, it was determined that there are no COPCs for Site groundwater. No volatile or semi-volatile organic compounds were detected above class GA groundwater quality standards in either of the sampling events. One pesticide (dieldrin), and one PCB (Aroclor 1260) were detected above Class GA standards in the samples taken from an upgradient groundwater monitoring well (SWRMW-1) during the first RI sampling event. The second sampling event verified that these detections were due to elevated sample turbidity – all pesticides and PCBs were below standards in the second groundwater sampling event. Metals were also affected by sample turbidity during the first sampling event, based on a comparison with results of the second sampling event in which turbidity was much lower. The results of the second sampling event identified iron, magnesium, manganese, and sodium (all natural elements) at concentrations that exceeded groundwater quality standards. However, these exceedances occurred in samples taken from upgradient, and downgradient monitoring wells. A summary of the RI groundwater sample analytical results is included in Figure 3 and Tables 2A thru 2D.

## Site-Related Soil Vapor Intrusion

Based on RI and previous investigation findings, fill at the Site is not generating potentially explosive levels of methane gas. A previous explosive gas survey indicated that explosive gas (methane) levels were below the lower explosive limit (LEL) (i.e., less than 100% of the LEL) at all twenty-four (24) monitoring points that were sampled. Furthermore, only two (2) of the twenty-four (24) monitoring points had levels greater than one half (50%) of the LEL. During the RI, no detectable explosive gas levels were recorded in gas monitoring wells installed along the property boundaries. A summary of the explosive gas readings is included in Figure 5.



## **1.4 SUMMARY OF REMEDIAL ACTIONS**

The Site was remediated in accordance with the NYSDEC-approved Remedial Work Plan dated May 2010, and the NYSDEC-approved Remedial Design dated July 2010.

The following is a summary of the Remedial Actions performed at the Site:

1. Construction and maintenance of a soil cover system consisting of a minimum of 24 inches of imported clean soil fill that meets the criteria for Track 4 Restricted Residential in order to prevent human exposure to contaminated soil/fill remaining at the Site;
2. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to contamination remaining at the Site.
3. End use restrictions at the Site limited to Restricted Residential uses, unless there is an expressed written waiver from an appropriate New York State Department;
4. Groundwater use restrictions at the Site, unless it is treated prior to use, and written consent is granted by the NYSDEC/NYSDOH;
5. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting; and
6. Periodic certification of the institutional and engineering controls listed above.

Remedial activities were completed at the Site in February 2011.

### **1.4.1 Removal of Contaminated Materials from the Site**

A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for the Site is provided in Table 3.

During the remedial activities there were areas of the Site fill that were regraded to accommodate the final Site grading. Regrading was primarily completed on the southern and northeastern slopes. No Site material was excavated for off-Site disposal.

During regrading of soil materials on the southern end of the Site, nine (9) abandoned tanks and nine (9) abandoned drums were unearthed. The drums and tanks were given a visual inspection, as well as being screened with a photoionization detector (PID) to identify potential contamination within or adjacent to them. As a result of visual observations and PID testing, two (2) drums (one 55-gallon and one 30-gallon), and one (1) tank were determined to contain residual materials that could potentially be contaminated. The two (2) drums and one (1) tank were characterized, the residual materials containerized and transported off-Site for proper disposal at a permitted facility. The other drums and tanks were empty and had no evidence of potential contamination.

#### **1.4.2 Site-Related Treatment Systems**

No long-term treatment systems were installed as part of the Site remedy. However, as discussed in the Remedial Work Plan, any new buildings constructed on-Site will have: 1) a passive ventilation system built into the foundation/slab design to mitigate potential explosive gas and/or soil vapor intrusion, and 2) additional sampling and evaluation of soil vapor, indoor air, and sub-slab vapor will be conducted prior to occupancy, in accordance with NYSDOH guidance, to determine if the passive ventilation system is adequate and whether additional, if any, measures need to be taken. This SMP will be revised to include a description of the mitigation system installed in any new buildings constructed on-Site in the future and the appropriate operations, maintenance, inspection and reporting requirements for the system.

#### **1.4.3 Remaining Contamination**

A demarcation layer was placed on-Site below the soil cover to identify the boundary between potentially contaminated soil left in place, and the soil cover system. The demarcation layer consists of a non-woven geotextile fabric. The demarcation layer is located at a minimum depth of 2 feet below the final soil cover ground surface across the BCP Site. The as-builts included in Appendix C show the depth, in feet below ground surface, and aerial extent of the demarcation layer. Areas below the demarcation layer potentially contain material that exceeds Restricted Residential SCOs.

## **2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN**

### **2.1 INTRODUCTION**

#### **2.1.1 General**

Since remaining impacted soil and soil vapor exists beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

#### **2.1.2 Purpose**

This plan provides:

- A description of all EC/ICs on the Site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Soil Management Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the Site remedy, as determined by the NYSDEC.

## **2.2 ENGINEERING CONTROLS**

### **2.2.1 Engineering Control Systems**

#### 2.2.1.1 Soil Cover System

Exposure to remaining contamination in soil/fill at the Site is prevented by a soil cover system placed over the Site. This cover system is comprised of a minimum of 24 inches of clean soil. As-built drawings of the soil cover locations are included in Appendix C. The Soil Management Plan that appears in Appendix D outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed.

The soil cover system for the Site will need to meet the following criteria:

- The Grantor, or its successors in title, must maintain the cover system of either two feet of fill (that meets the criteria in accordance with 6 NYCRR Part 375-3.6(e)(4)(iii)), or an alternative barrier layer approved by the NYSDEC (i.e. concrete, asphalt, or buildings;
- Any on-Site soil that is used to create the soil cover system will meet the Restricted Residential use SCOs identified in 6NYCRR Part 375-6.8(b) for protection of human health; and
- Any off-Site soil that is used for the soil cover system will meet the lower of the SCOs for restricted residential use, or the protection of groundwater as identified in 6NYCRR Part 375-6.8(b).

The maintenance of the soil cover system includes the following requirements, which apply to development of the Site, and future activities at the Site that may disturb the soil cover system and/or underlying soils:

- Any proposed soil excavation on the Site below the barrier layer requires prior notification, and prior approval by NYSDEC in accordance with the Site Management Plan approved by NYSDEC for the Site. The excavated soil

must be managed, characterized, and properly disposed of in accordance with applicable NYSDEC regulations and directives; and

- Any area of soil excavation below the barrier layer that is to be returned to vegetated soil (i.e., not concrete, asphalt or buildings) must be backfilled with a minimum of two (2) feet of fill in accordance with 6 NYCRR Part 375-3.8(e)(4)(iii).

Procedures for inspecting and maintaining the soil cover system are documented in the Operation and Maintenance Plan included in Section 4 of this SMP. Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

#### 2.2.1.2 Soil Vapor Mitigation System

There are currently no buildings constructed on-Site. However, as discussed in the Remedial Work Plan, any new buildings constructed on-Site will have: 1) mitigation passive ventilation system built into the foundation/slab design to mitigate potential explosive gas and/or soil vapor intrusion and 2) additional sampling and evaluation of soil vapor, indoor air, and sub-slab vapor will be conducted prior to occupancy, in accordance with NYSDOH guidance, to determine if the passive ventilation system is adequate and whether additional, if any, measures need to be taken.

Procedures for operating and maintaining the soil vapor mitigation system will need to be included in the Operation and Maintenance Plan (Section 4 of this SMP) following construction of on-Site buildings. Procedures for monitoring the system will need to be included in the Monitoring Plan (Section 3 of this SMP) following construction of on-Site buildings. The Monitoring Plan will also need to be updated to addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

#### **2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems**

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives

identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

#### 2.2.2.1 Soil Cover System

The Soil cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals until such time NYSDEC confirms in writing that such inspections are no longer warranted.

#### 2.2.2.2 Soil Vapor Mitigation System

Any soil vapor mitigation system installed as part of any future buildings constructed on-Site will not be discontinued unless prior written approval is granted by the NYSDEC and NYSDOH. In the event that monitoring data indicates that the soil vapor mitigation system is no longer required, a proposal to discontinue the soil vapor mitigation system will be submitted by the property owner to the NYSDEC and NYSDOH.

### **2.3 INSTITUTIONAL CONTROLS**

A series of Institutional Controls are required by the RAWP to: (1) implement, maintain, and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Track 4 Restricted Residential, Commercial, or Industrial uses only. Adherence to these Institutional Controls on the Site is required by the Environmental Easement, and will be implemented under this Site Management Plan. These Institutional Controls are:

- Prohibition of the Site from ever being used for purposes other than the contemplated use without the expressed written waiver of such prohibition by the Department, or if at such time the Department no longer exists, any New York State Department, Bureau, or other entity replacing the Department;
- Prohibition of the use of the groundwater underlying the Site without treatment rendering it safe for potable or process purposes, as appropriate, unless user first obtains permission to do so from the NYSDOH or

Westchester County Department of Health, or if at such time the Department no longer exists, any New York State Department, Bureau, or other entity replacing the Department;

- Development and implementation of a Site Management Plan (SMP) specifying the use of soil cover systems, and management of soils that may be excavated at the Site during future development;
- The property owner will provide a periodic certification to the NYSDEC, prepared by a professional engineer or such other qualified environmental professional acceptable to the NYSDEC, until the NYSDEC notifies the property owner in writing this certification is no longer needed. This submittal will contain certification that the engineering and institutional controls are still in place, that the NYSDEC is allowed access to the Site, and that nothing has occurred that will impair the ability of the control to protect the public health or the environment, or constitute a violation or failure to comply with the SMP;
- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Site must be inspected at a frequency and in a manner defined in the SMP;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP; and
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Restrictions that apply to the Site are:

- The Site may only be used for Track 4 Restricted Residential, Commercial, or Industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed;
- The Site may not be used for a higher level of use, such as Unrestricted use or Residential use, without amendment of the Environmental Easement, and review and approval by the NYSDEC;
- All future activities on the Site that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed on-Site, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the Site are prohibited; and
- The Site owner or Austin Avenue, LLC will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow, and will be made by an expert that the NYSDEC finds acceptable.

### **2.3.1 Soil Management Plan**

The Site has been remediated for Track 4 Restricted Residential use. Any future intrusive work that will penetrate the soil cover system, or encounter or disturb the



remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Soil Management Plan that is attached as Appendix D to this SMP. Any work conducted pursuant to the Soil Management Plan must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP and CAMP are attached as Appendix E to this SMP that is in current compliance with DER-10, 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the Soil Management Plan. Any intrusive construction work will be performed in compliance with the Soil Management Plan, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

Austin Avenue, LLC and/or the Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The parties will ensure that Site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

### **2.3.2 Soil Vapor Intrusion Evaluation**

Any new buildings constructed on-Site will have: 1) a passive ventilation system built into the foundation/slab design to mitigate potential explosive gas and/or soil vapor intrusion and 2) additional sampling and evaluation of soil vapor, indoor air, and sub-slab vapor will be conducted prior to occupancy, in accordance with NYSDOH guidance, to determine if the passive ventilation system is adequate and whether additional, if any, measures need to be taken. Prior to conducting an SVI investigation, or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH “Guidance for Evaluating Vapor Intrusion in the State of New York”.

Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data, if collected instead of installing an active Soil Vapor Mitigation system, would be collected prior to occupancy of the structure. Sampling data would be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. Validated SVI data will be transmitted to the property owner within 30 days of validation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

## **2.4 INSPECTIONS AND NOTIFICATIONS**

### **2.4.1 Inspections**

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive Site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

#### **2.4.2 Notifications**

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law;
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Soil Management Plan;
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls, and likewise any action to be taken to mitigate the damage or defect;
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public; and
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Brownfield Cleanup Agreement (BCA) and all approved work plans and reports, including this SMP; and
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

## 2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

### 2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner’s representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to S&W Redevelopment of North America, LLC the environmental consultant. These emergency contact lists must be maintained in an easily accessible location at the Site.

**Table 4: Emergency Contact Numbers**

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

**Table 5: Contact Numbers**

GHD Consulting Engineers, LLC	(315) 679-5800
Yonkers Industrial Development Agency	(914) 509-8651

\* Note: Contact numbers subject to change and should be updated as necessary

### **2.5.2 Map and Directions to Nearest Health Facility**

Site Location: Austin Avenue, Yonkers, New York

Nearest Hospital Name: St. John's Riverside Hospital – Andrus Pavilion

Hospital Location: 967 N. Broadway, Yonkers, NY 10701

Hospital Telephone: 1-914-964-4444

Directions to the Hospital:

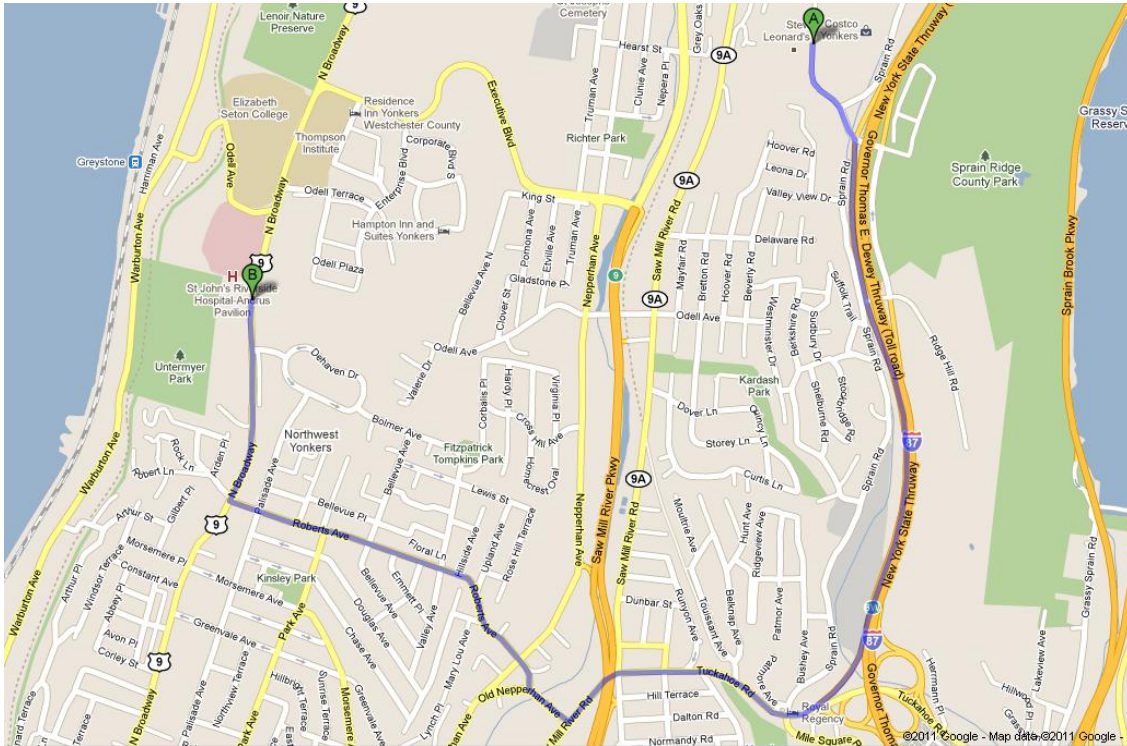
- |   |        |
|---|--------|
| 1. Head south on Stew Leonard Dr toward Sprain Rd | 0.2 mi |
| 2. Continue onto Corporate Dr                     | 387 ft |
| 3. Turn right to merge onto I-87 S                | 1.0 mi |
| 4. Take exit 6W for Tuckahoe Rd W toward Yonkers  | 0.3 mi |
| 5. Merge onto Tuckahoe Rd                         | 0.4 mi |
| 6. Continue onto New York 9A S/Saw Mill River Rd  | 0.1 mi |
| 7. Turn right at Old Nepperhan Ave                | 0.1 mi |
| 8. Take the 1st right onto Roberts Ave            | 0.8 mi |
| 9. Turn right at N Broadway                       | 0.4 mi |

Destination will be on the left

Total Distance: 3.4 miles

Total Estimated Time: 9 minutes

Figure 7: Map Showing Route from the Site to the Hospital:



### 2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 4). The list will also be posted prominently at the Site and made readily available to all personnel at all times.

## **3.0 SITE MONITORING PLAN**

### **3.1 INTRODUCTION**

#### **3.1.1 General**

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected Site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

#### **3.1.2 Purpose and Schedule**

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and

- Annual inspection and periodic certification.

Annual monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first five years. The frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in air, soil, and/or groundwater in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 6 and outlined in detail in Sections 3.2 and 3.3 below.

**Table 6: Monitoring/Inspection Schedule**

<b>Monitoring Program</b>	<b>Frequency*</b>	<b>Matrix</b>	<b>Analysis</b>
Soil Cover System	Semi-annual	Soil	Visual Inspection
Soil Vapor Mitigation System <sup>(1)</sup>	To Be Determined <sup>(1)</sup>	Soil Vapor	Visual Inspection
Groundwater	Semi-annual	Groundwater	TAL Metals, SVOCs and PCBs

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

(1) Any future buildings constructed on-Site will have: 1) a passive ventilation system built into the foundation/slab design to mitigate potential explosive gas and/or soil vapor intrusion and 2) additional sampling and evaluation of soil vapor, indoor air, and sub-slab vapor will be conducted prior to occupancy, in accordance with NYSDOH guidance, to determine if the passive ventilation system is adequate and whether additional, if any, measures need to be taken. This SMP will be revised to include a description of the mitigation system installed in any new buildings constructed on-Site in the future and the appropriate operations, maintenance, inspection, and reporting requirements for the system.

### **3.2 SOIL COVER SYSTEM MONITORING**

The soil cover system will be inspected twice each year, following any Site work that potentially affects the soil cover system, and following any necessary modifications to the soil cover system that arise from routine maintenance or following Site work. No



samples of the cover material are required during the semi-annual monitoring. During Site work or modifications to the soil cover system, soil sampling requirements are outlined in Appendix D (Soil Management Plan).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the soil cover system.

### **3.3 MEDIA MONITORING PROGRAM**

#### **3.3.1 Groundwater Monitoring**

Groundwater monitoring will be performed on a periodic basis to assess the performance of the remedy. Monitoring wells SWR-MW01, SWR-MW03, SWR-MW04, and SWR-MW05 (Figure 8) will be sampled semi-annually, until NYSDEC determines a decrease in frequency is appropriate. The groundwater samples will be analyzed for semi-volatile organic compounds (SVOCs), target analyte list (TAL) metals, and polychlorinated biphenyls (PCBs).

The network of monitoring wells has been installed to monitor both up-gradient and down-gradient groundwater conditions at the Site. The network of on-Site wells has been designed based on one (1) upgradient well and three (3) downgradient wells.

Monitoring wells were constructed in each boring using 2 inch diameter PVC well screen and riser. A sand pack was placed around the well screen to a height of 2 feet above the top of screen. Bentonite chips were placed above the sand. The remainder of the annulus was filled with grout and soil cuttings. Monitoring well construction logs are included in Appendix F.

The monitoring wells were installed at the following depths:

- SWR-MW01: approximately 44' bgs
- SWR-MW03: approximately 30' bgs
- SWR-MW04: approximately 16' bgs
- SWR-MW05: approximately 19' bgs

Monitoring wells were screened in Site overburden above the bedrock.

The sampling frequency may be modified with the approval of NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

Deliverables for the groundwater monitoring program are specified below.

#### 3.3.1.1 Sampling Protocol

All monitoring well sampling activities will be recorded in a field book and a groundwater-sampling log presented in Appendix G. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network.

Depth to water and total depth of well measurements will be collected using an electronic water level meter in order to calculate well volumes. A minimum of three (3) well volumes will be purged prior to groundwater sample collection. Field parameters (temperature, conductivity, salinity, dissolved oxygen, pH, Eh, and turbidity) will be continuously monitored and periodically recorded during purging. Groundwater samples will be collected using low flow methodologies in order to minimize turbidity, and allow for continuous monitoring of field parameters.

Groundwater samples must be sent to a NYS ELAP certified laboratory for analysis following proper chain of custody procedures. Laboratory analysis will include, TCL SVOCs, TAL Metals, and PCBs using the current US EPA Method for each analyte.

#### 3.3.1.2 Monitoring Well Repairs, Replacement and Decommissioning

If biofouling or silt accumulation occurs in the on-Site and/or off-Site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and

replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

### **3.4 SITE-WIDE INSPECTION**

Site-wide inspections will be performed on a regular schedule at a minimum of twice a year. The purpose of the Site-wide inspections will be to determine that the soil cover Engineering Controls are still in place and operating as intended. The Site-wide inspections should take place generally at the beginning and end of the growing season (i.e. in late spring and early autumn) to identify any soil cover repairs or maintenance that may be needed. Any damage to or potential for damage to (i.e. woody growth and/or burrowing animals) the soil cover engineering control that may allow exposure to the underlying soils will be documented and repairs and/or mitigation measures implemented in a timely manner. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix H). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that Site records are up to date.

### **3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL**

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the Site (Appendix I). Main Components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
  - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such;
  - Sample holding times will be in accordance with the NYSDEC ASP requirements; and
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
  - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions; and
  - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method;
- Internal QC and Checks;
- QA Performance and System Audits;

- Preventative Maintenance Procedures and Schedules; and
- Corrective Action Measures.

### **3.6 MONITORING REPORTING REQUIREMENTS**

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-Site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC, and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared subsequent to each sampling event. The report (or letter) will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 7 below.

**Table 7: Schedule of Monitoring/Inspection Reports**

<b>Task</b>	<b>Reporting Frequency*</b>
Groundwater Sampling	Semi-Annual Letter Report Annual Periodic Review Report
Soil Cover System Inspection	Semi-Annual Letter Report Annual Periodic Review Report
Soil Vapor Mitigation System	To Be Determined

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC.

\*\* Future buildings may have a soil vapor mitigation system, which will need to be included in future inspections and reports. This SMP will be revised to include a description of the mitigation system installed in any new buildings constructed on-Site in the future and the appropriate operations, maintenance, inspection, and reporting requirements for the system.

## **4.0 OPERATION AND MAINTENANCE PLAN**

### **4.1 INTRODUCTION**

There are currently no on-Site buildings. As a result, there are no mechanical components of the remedy that need to be operated or maintained. However, any new buildings constructed on-Site will have: 1) a passive ventilation system built into the foundation/slab design to mitigate potential explosive gas and/or soil vapor intrusion and 2) additional sampling and evaluation of soil vapor, indoor air, and sub-slab vapor will be conducted prior to occupancy, in accordance with NYSDOH guidance, to determine if the passive ventilation system is adequate and whether additional, if any, measures need to be taken. This SMP will be revised to include a description of the mitigation system installed in any new buildings constructed on-Site in the future and the appropriate operations, maintenance, inspection, and reporting requirements for the system. The Operation and Maintenance Plan would need to include:

- The steps necessary to allow individuals unfamiliar with the Site to operate and maintain the systems;
- An operation and maintenance contingency plan; and
- Will be updated periodically to reflect changes in Site conditions or the manner in which the systems are operated and maintained.

Information on non-mechanical Engineering Controls (i.e. soil cover system) is provided in Section 3 - Engineering and Institutional Control Plan. A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

## **5.0 INSPECTIONS, REPORTING, AND CERTIFICATIONS**

### **5.1 SITE INSPECTIONS**

#### **5.1.1 Inspection Frequency**

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan of this SMP. At a minimum, a Site-wide inspection will be conducted semi-annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

#### **5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports**

All inspections and monitoring events will be recorded on the appropriate forms for their respective system which are contained in Appendix H. Additionally, a general Site-wide inspection form will be completed during the Site-wide inspection (see Appendix H). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report.

#### **5.1.3 Evaluation of Records and Reporting**

The results of the inspection and Site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,



- The Site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

## **5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS**

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certifications:

- No new information has come to the Site owners attention, including groundwater monitoring data from wells located at the Site boundary, to indicate that the assumptions made in the Qualitative Environmental Assessment (QEA) of off-Site contamination are no longer valid; and
- Every five (5) years, that the assumptions in the QEA remain valid.

For each institutional or engineering control identified for the Site, a Professional Engineer licensed to practice in New York State will also certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at the Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- 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;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;

- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program; and
- The information presented in this report is accurate and complete.

The following signed certification will be included in the Periodic Review Report described below.

- 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, [name], of [business address], am certifying as [Owner or Owner’s Designated Site Representative] (and if the Site consists of multiple properties): [I have been authorized and designated by all Site owners to sign this certification] for the Site.

### **5.3 PERIODIC REVIEW REPORT**

A Periodic Review Report will be submitted to the Department every year, beginning eighteen months after the Certificate of Completion is issued. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix B (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10, and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual Site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;

- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Site-specific RAWP, ROD or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
  - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - The overall performance and effectiveness of the remedy.

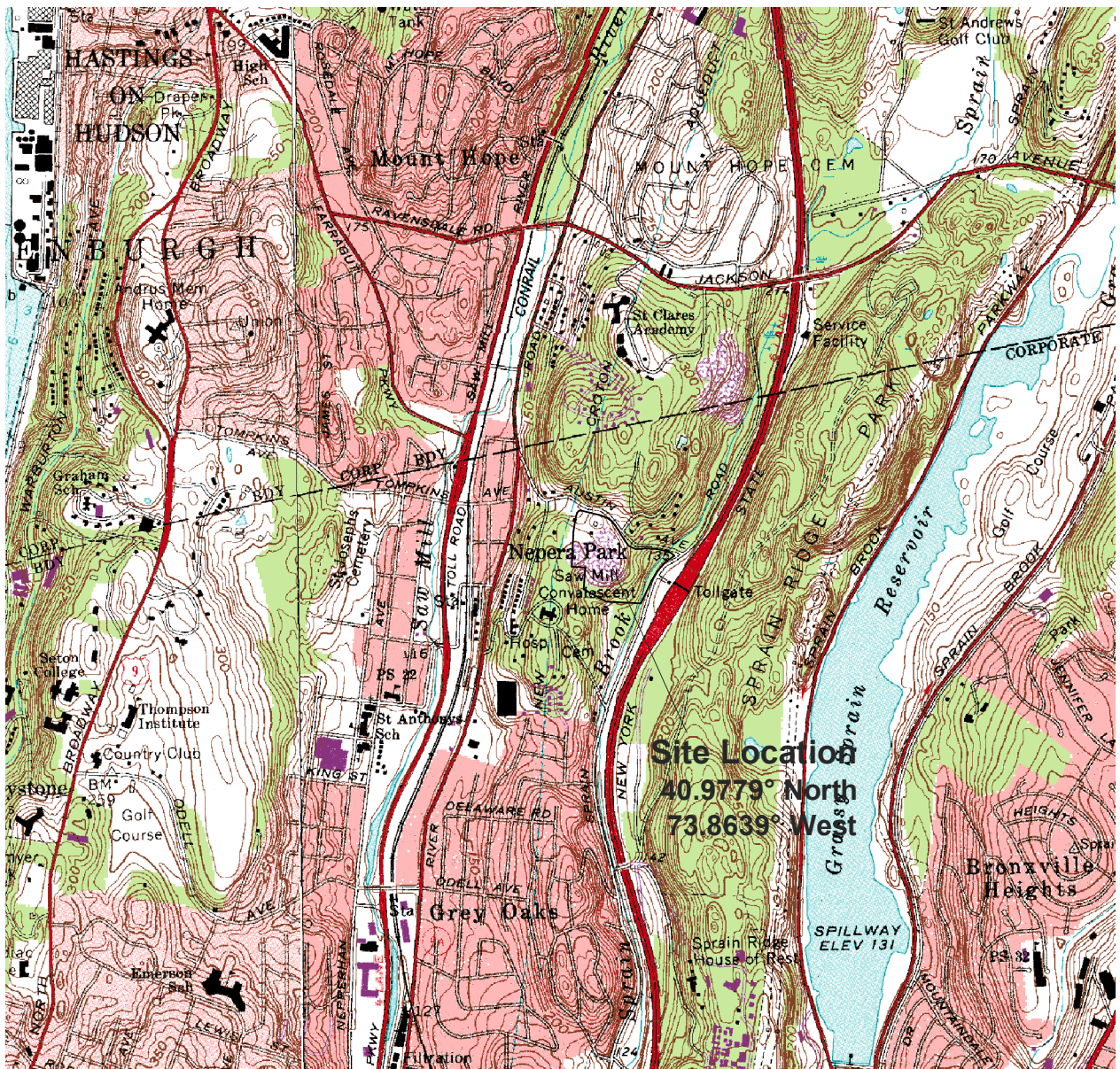
The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

#### **5.4 CORRECTIVE MEASURES PLAN**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work

necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

## **FIGURES**



**Site Location**  
 40.9779° North  
 73.8639° West



Contour Interval: 10 Feet

Map Taken From: USGS 7.5 Minute Series  
 Topographic Quadrangles:  
 Mount Vernon(1966, Photorevised 1979) & Yonkers  
 (1966, Photorevised 1979)  
 (www.nysgis.state.ny.us/quads/usgdrgr.htm)

X-REF: 040073417, 040073418  
 2010/dec/31/ann  
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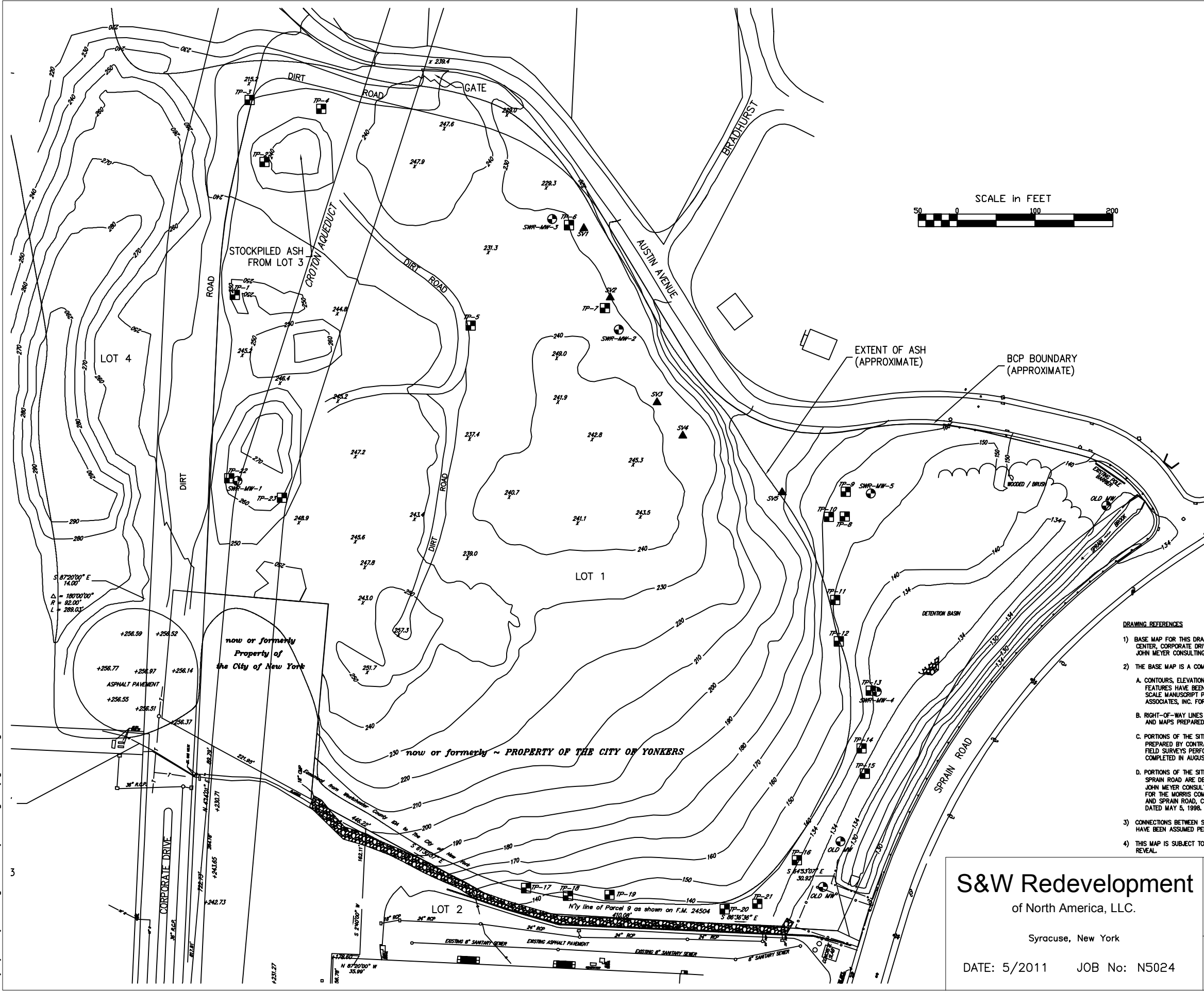
**S&W Redevelopment**

of North America, LLC.  
 Syracuse, New York

DATE: 5/2011 JOB No.: N5024

Former Austin Ave. Landfill Site (BCP #C3-60-066)  
 Site Management Plan  
 Yonkers, Westchester County, New York

**Figure 1**  
**Site Location Map**



- LEGEND:**
- SWR-MW-1 Groundwater Well Location and ID
  - SV-1 Soil Vapor Well Location and ID
  - TP-1 Test Pit Location and ID
  - 240 Ground Elevation Contour
  - Right of Way Boundary
  - Property Boundaries
  - Manhole Cover
  - Storm Drain Inlet
  - Water Line
  - Telephone Line
  - Gas Line
  - Electric Line
  - Storm Sewer



Well Identification	Ground Elevation	Cover Elevation	Top of PVC Elevation
SWR-MW-1	252.41	254.85	
SWR-MW-2	233.94	236.63	236.46
SWR-MW-3	231.08	233.69	233.53
SWR-MW-4	132.68	135.09	134.89
SWR-MW-5	153.42	156.14	155.90
SV-1	229.79	232.51	232.32
SV-2	231.40	234.48	234.36
SV-3	235.98		238.95
SV-4	237.07		239.80
SV-5	181.01	184.28	184.10

Elevations in Feet

Test Pit Identification	Ground Elevation
TP-1	249.54
TP-2	238.01
TP-3	231.61
TP-4	237.77
TP-5	234.44
TP-6	230.50
TP-7	231.41
TP-8	152.74
TP-9	155.79
TP-10	157.52
TP-11	148.54
TP-12	146.70

Test Pit Identification	Ground Elevation
TP-13	133.62
TP-14	133.02
TP-15	138.44
TP-16	134.94
TP-17	143.37
TP-18	140.26
TP-19	142.58
TP-20	139.48
TP-21	138.43
TP-22	252.03
TP-23	250.66

Elevations in Feet

**DRAWING REFERENCES**

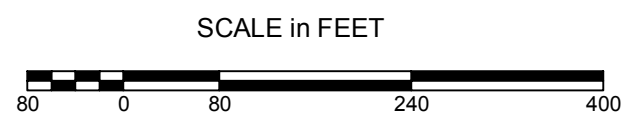
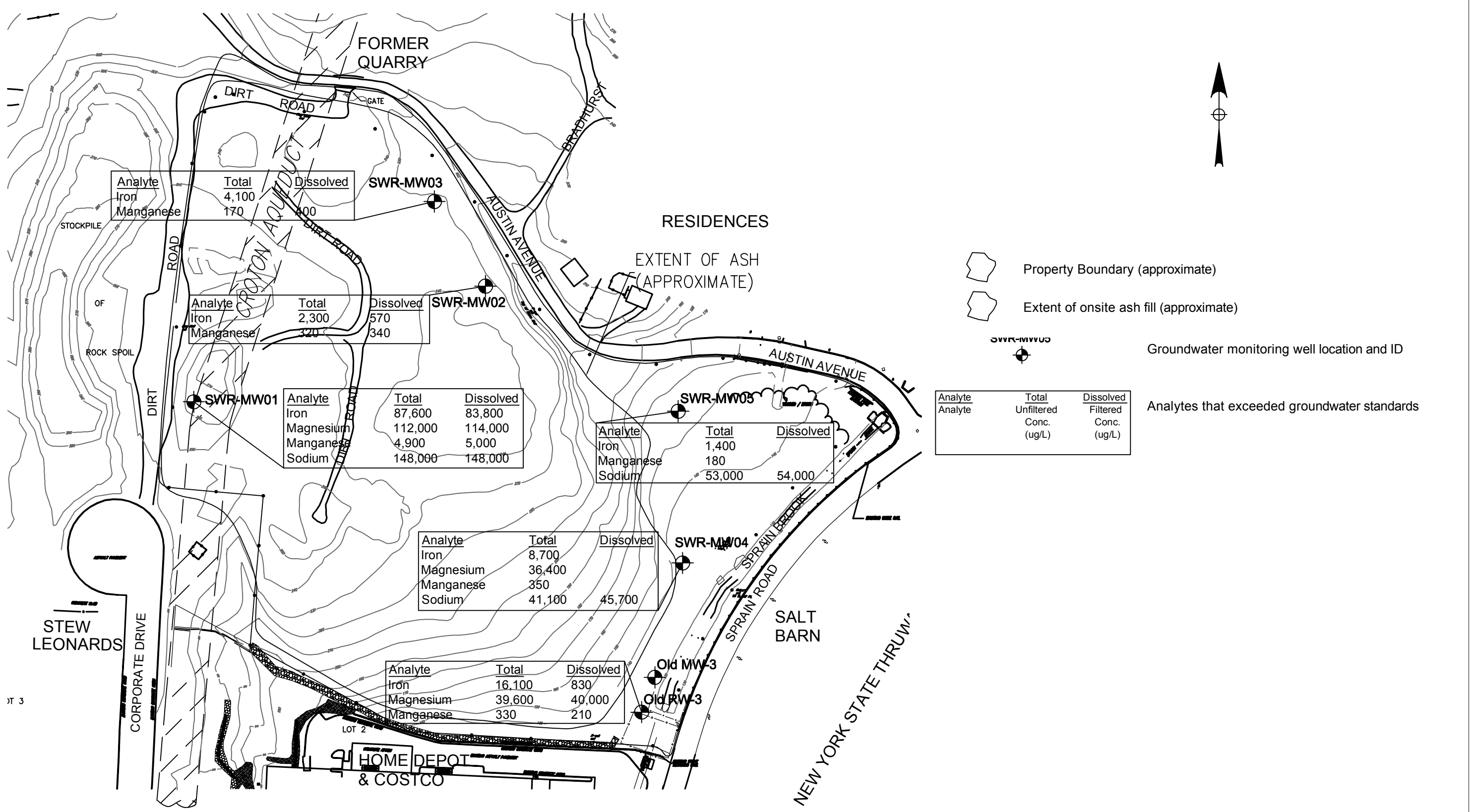
- 1) BASE MAP FOR THIS DRAWING IS "EXISTING TOPOGRAPHY MAP, WESTCHESTER RETAIL CENTER, CORPORATE DRIVE, YONKERS, NEW YORK", NO. EXT-1, PREPARED BY JOHN MEYER CONSULTING, DATED 9/15/1999, LAST REVISED 11/17/1999.
- 2) THE BASE MAP IS A COMPILED DATA FROM THE FOLLOWING SOURCES:
  - A. CONTOURS, ELEVATIONS, PAVEMENT, HORIZONTAL GRID AND OTHER FEATURES HAVE BEEN SCALED (DIGITIZED) FROM AN UNDATED 40 SCALE MANUSCRIPT PREPARED BY AERIAL DATA REDUCTION ASSOCIATES, INC. FOR ARISTOTLE BOURNAZOS, L.S., CIRCA 1984.
  - B. RIGHT-OF-WAY LINES HAVE BEEN SCALED FROM VARIOUS SURVEYS AND MAPS PREPARED BY ARISTOTLE BOURNAZOS, L.S.
  - C. PORTIONS OF THE SITE ARE DEPICTED PER A DIGITAL (CAD) FILE PREPARED BY CONTRACTOR'S LINE AND GRADE SOUTH, BASED UPON FIELD SURVEYS PERFORMED TO LOCATE SOIL AND ASH PILES COMPLETED IN AUGUST, 1999 AND OCTOBER, 1999.
  - D. PORTIONS OF THE SITE AT THE INTERSECTION OF AUSTIN AVENUE AND SPRAIN ROAD ARE DEPICTED PER A DIGITAL (CAD) FILE PREPARED BY JOHN MEYER CONSULTING, BASED UPON "TOPOGRAPHIC MAP PREPARED FOR THE MORRIS COMPANIES OF PREMISES LOCATED AT AUSTIN AVENUE AND SPRAIN ROAD, CITY OF YONKERS, WESTCHESTER COUNTY, NEW YORK", DATED MAY 5, 1998.
- 3) CONNECTIONS BETWEEN SCALED TOPO AND DIGITAL SURVEY OF PILES HAVE BEEN ASSUMED PER THE CONSTRUCTION OF PROBABLE CONTOURS.
- 4) THIS MAP IS SUBJECT TO THOSE FACTS WHICH A CURRENT SURVEY MAY REVEAL.

X-REF: MANHOLE  
 2011/05/27/08  
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**S&W Redevelopment**  
 of North America, LLC.  
 Syracuse, New York  
 DATE: 5/2011 JOB No: N5024

Former Austin Ave. Landfill Site  
 BCP Site #C3-60-066  
 Site Management Plan  
 Yonkers, Westchester County, New York

Figure 2  
 Site Layout and Property Boundaries



-Site topographic survey (John Meyer Consulting 11/17/1999) as provided by Morris Companies, Inc.  
 -Site boundary and sample locations from survey completed by Ward Carpenter Engineers, Inc., March 28, 2007  
 -Current topography differs from survey

Property Boundary (approximate)

Extent of onsite ash fill (approximate)

Groundwater monitoring well location and ID

Analyte	Total Unfiltered Conc. (ug/L)	Dissolved Filtered Conc. (ug/L)
Iron	1,400	54,000
Manganese	180	
Sodium	53,000	

Analytes that exceeded groundwater standards

Analyte	Total	Dissolved
Iron	4,100	400
Manganese	170	

Analyte	Total	Dissolved
Iron	2,300	570
Manganese	320	340

Analyte	Total	Dissolved
Iron	87,600	83,800
Magnesium	112,000	114,000
Manganese	4,900	5,000
Sodium	148,000	148,000

Analyte	Total	Dissolved
Iron	1,400	54,000
Manganese	180	
Sodium	53,000	

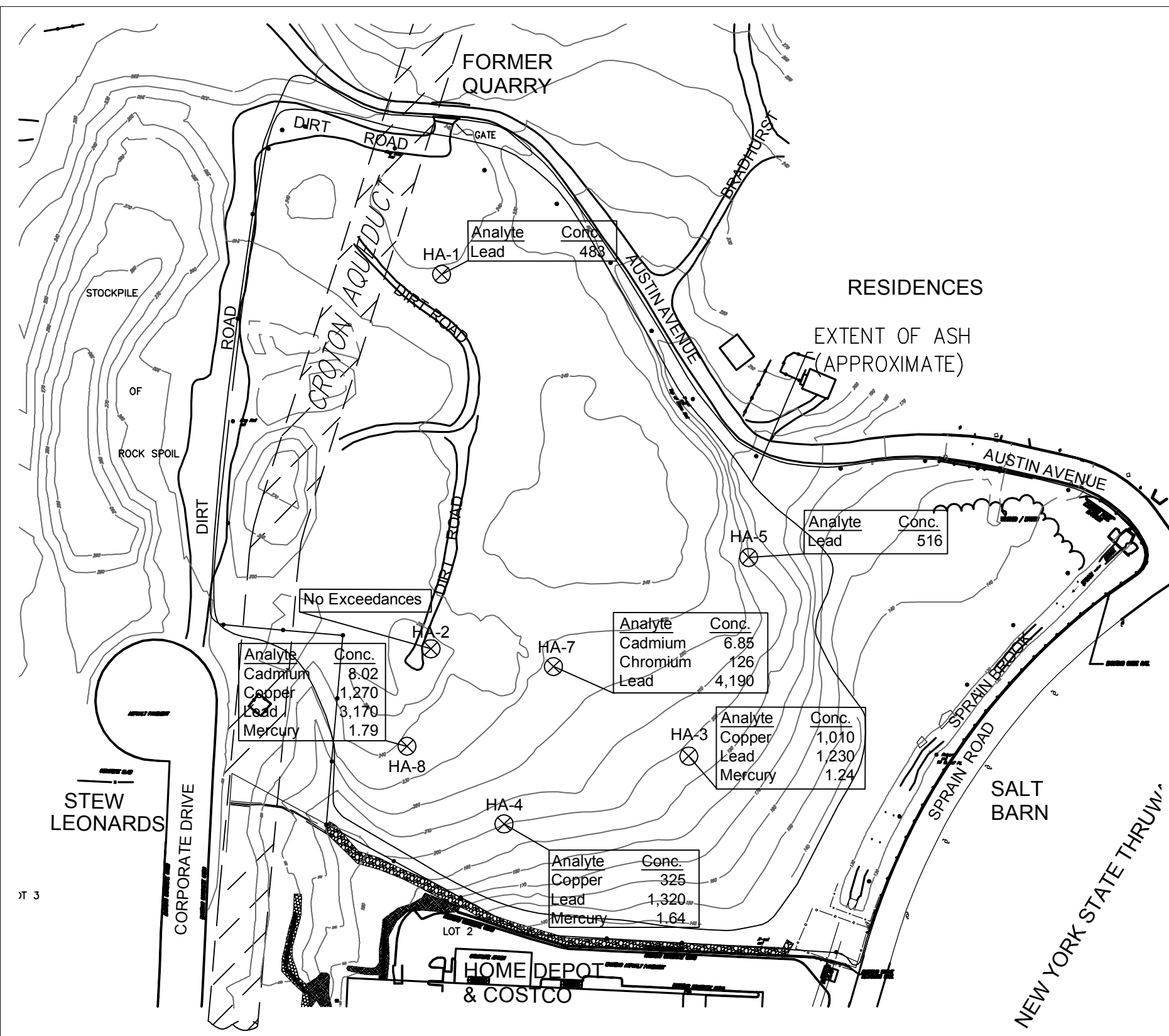
Analyte	Total	Dissolved
Iron	8,700	45,700
Magnesium	36,400	
Manganese	350	
Sodium	41,100	

Analyte	Total	Dissolved
Iron	16,100	830
Magnesium	39,600	40,000
Manganese	330	210

<p><b>S&amp;W Redevelopment</b> of North America, LLC.</p> <p>Syracuse, New York</p> <p>DATE: 5/2011    JOB No: N5024</p>	<p>Former Austin Ave. Landfill Site BCP Site #C3-60-066 Site Management Plan Yonkers, Westchester County, New York</p>
	<p>Figure 3 – Remedial Investigation Groundwater Contamination Summary</p>

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 2007\Remediation Management Plan\SWR004\_Figures\Figure 3.dwg  
 5/14/10



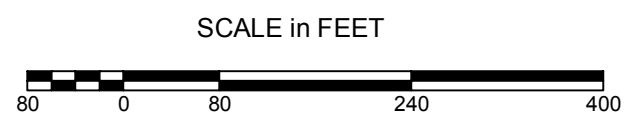


- Property Boundary (approximate)
- Extent of onsite ash fill (approximate)
- HA-1 Hand auger soil sample - metals analytical results that exceed Restricted Residential Use SCOs.

**Notes:**

Data as presented by Leggette, Brashears, & Graham, Inc. October 2000 Supplemental Site Characterization Activities Former Austin Ave. Landfill.

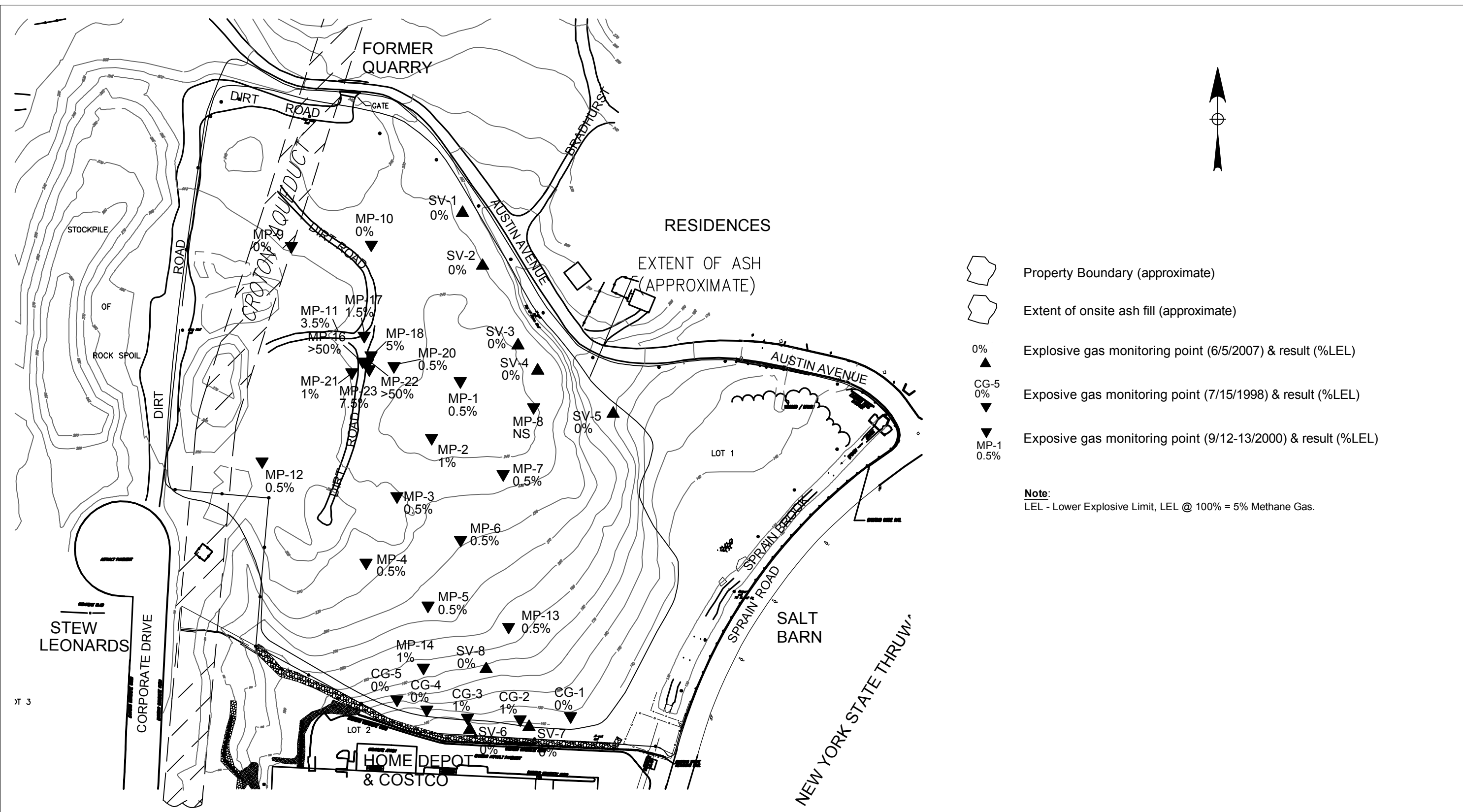
Soil sample analytical results did not indicate exceedances of Restricted Residential Use SCOs for VOCs, SVOCs, Pesticides, or PCBs.



-Site topographic survey (John Meyer Consulting 11/17/1999) as provided by Morris Companies, Inc.  
 -Site boundary and sample locations from survey completed by Ward Carpenter Engineers, Inc., March 28, 2007  
 -Current topography differs from survey

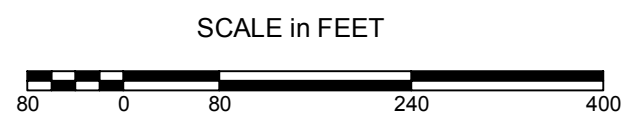
<p><b>S&amp;W Redevelopment</b> of North America, LLC.</p> <p>Syracuse, New York</p> <p>DATE: 5/2011    JOB No: N5024</p>	<p>Former Austin Ave. Landfill Site BCP Site #C3-60-066 Site Management Plan Yonkers, Westchester County, New York</p>
<p>Figure 4 – Remedial Investigation Soil Contamination Summary</p>	

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- Property Boundary (approximate)
- Extent of onsite ash fill (approximate)
- Explosive gas monitoring point (6/5/2007) & result (%LEL)
- Explosive gas monitoring point (7/15/1998) & result (%LEL)
- Explosive gas monitoring point (9/12-13/2000) & result (%LEL)

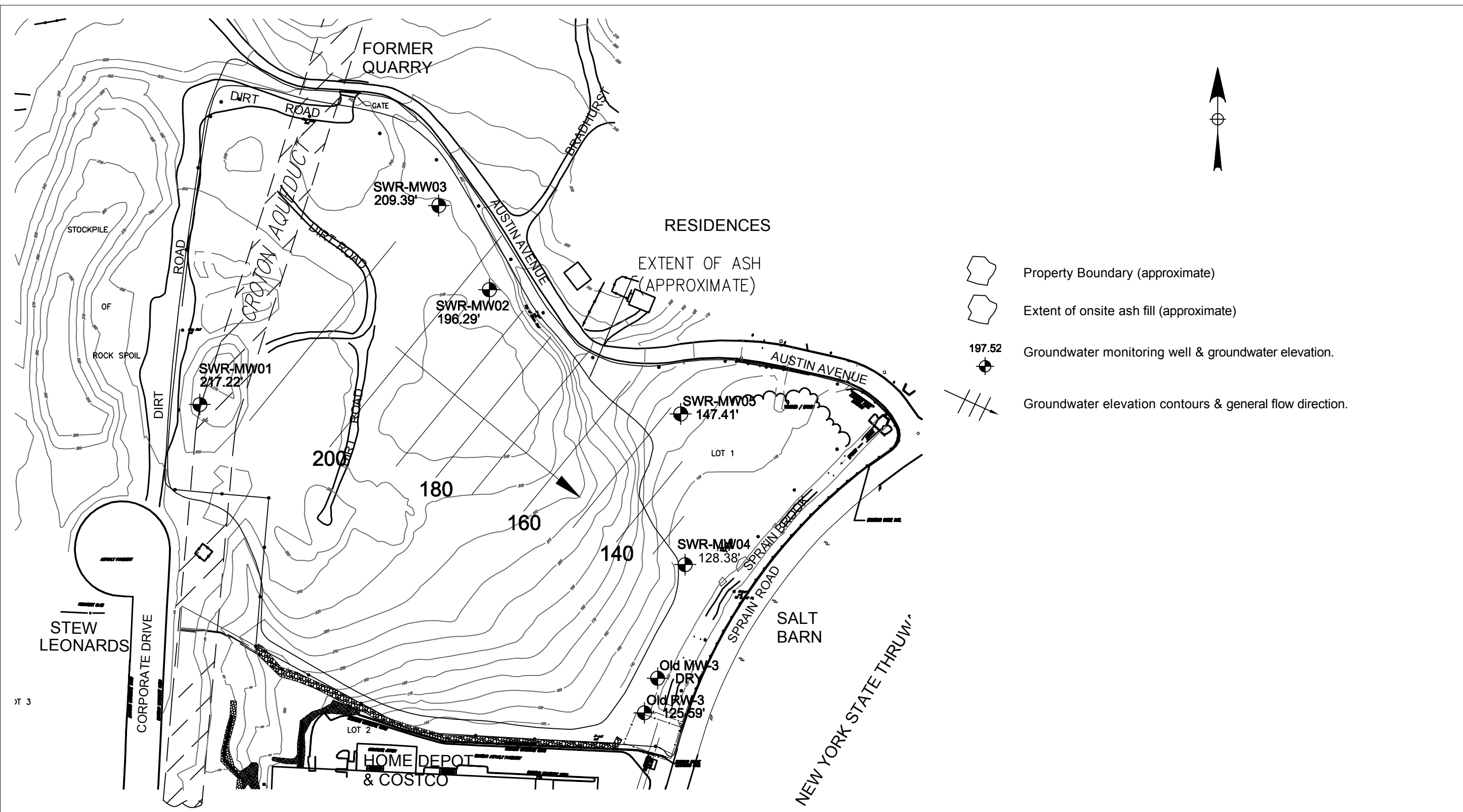
**Note:**  
LEL - Lower Explosive Limit, LEL @ 100% = 5% Methane Gas.







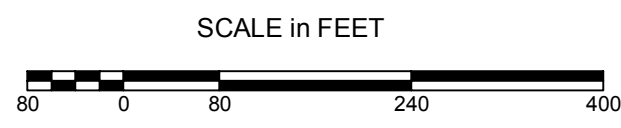
-Site topographic survey (John Meyer Consulting 11/17/1999) as provided by Morris Companies, Inc.  
 -Site boundary and sample locations from survey completed by Ward Carpenter Engineers, Inc., March 28, 2007  
 -Current topography differs from survey

<b>S&amp;W Redevelopment</b> of North America, LLC.  Syracuse, New York  DATE: 5/2011    JOB No: N5024	Former Austin Ave. Landfill Site BCP Site #C3-60-066 Site Management Plan Yonkers, Westchester County, New York
	Figure 5 – Remedial Investigation Explosive Gas Results

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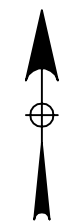
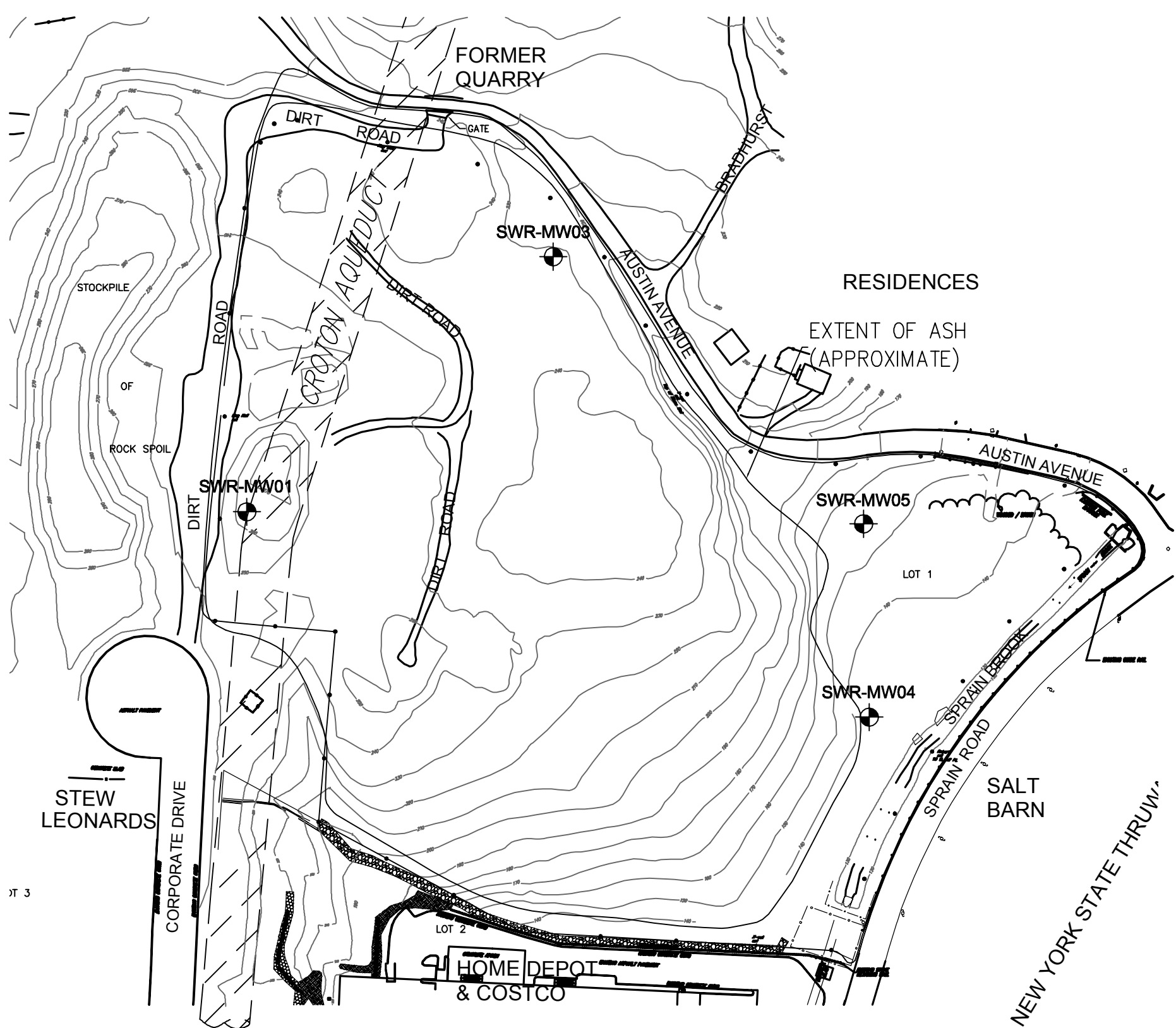
-  Property Boundary (approximate)
-  Extent of onsite ash fill (approximate)
-  197.52 Groundwater monitoring well & groundwater elevation.
-  Groundwater elevation contours & general flow direction.






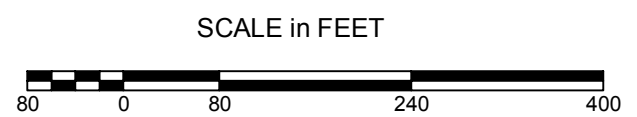
-Site topographic survey (John Meyer Consulting 11/17/1999) as provided by Morris Companies, Inc.  
 -Site boundary and sample locations from survey completed by Ward Carpenter Engineers, Inc., March 28, 2007  
 -Current topography differs from survey

<b>S&amp;W Redevelopment</b> of North America, LLC.  Syracuse, New York  DATE: 5/2011    JOB No: N5024	Former Austin Ave. Landfill Site BCP Site #C3-60-066 Site Management Plan Yonkers, Westchester County, New York
	Figure 6 Groundwater Elevation and Flow (June 2007)

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-  Property Boundary (approximate)
-  Extent of onsite ash fill (approximate)
-  Groundwater monitoring well location and ID



-Site topographic survey (John Meyer Consulting 11/17/1999) as provided by Morris Companies, Inc.  
 -Site boundary and sample locations from survey completed by Ward Carpenter Engineers, Inc., March 28, 2007  
 -Current topography differs from survey

**S&W Redevelopment**  
 of North America, LLC.  
 Syracuse, New York  
 DATE: 5/2011 JOB No: N5024

Former Austin Ave. Landfill Site  
 BCP Site #C3-60-066  
 Site Management Plan  
 Yonkers, Westchester County, New York

Figure 8  
 Groundwater Monitoring Well Network

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# **TABLES**

**TABLE 1 REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY**  
 Remedial Investigation, Austin Avenue Landfill, Yonkers, NY, BCP Site No. C3-60-066, 2007

**Metal Analysis for Near Surface Soil Samples - October 2000.**

Parameter (mg/kg)	Unrestricted Use SCOs	Restricted Residential SCOs	HA-1	HA-2	HA-3	HA-4	HA-5	HA-7	HA-8
antimony									
arsenic	13	16	5.29 U	4.47 U	7.44 U	4.22 U	4.6 U	2.87 U	1.55 U
beryllium	7.2	72	U	U	U	U	U	U	U
cadmium	2.5	4.3	0.66 U	U	3.25 * U	3.27 * U	0.89 U	<b>6.85</b> * U	<b>8.02</b> * U
chromium	1	110	20.4 * U	4.97 * U	44.1 * U	32.5 * U	21.2 * U	<b>126</b> * U	53.6 * U
copper	50	270	149 * U	41.9 U	<b>1010</b> * U	<b>325</b> * U	63.6 * U	210 * U	<b>1270</b> * U
lead	63	400	<b>483</b> * U	76.3 * U	<b>1230</b> * U	<b>1320</b> * U	<b>516</b> * U	<b>4190</b> * U	<b>3170</b> * U
nickel	30	310	80 * U	13 U	61 * U	42.4 * U	23.1 U	90.3 * U	110 * U
selenium	3.9	180	2.19 U	U	U	U	2.93 U	U	U
silver	2	180	1.56 U	U	4.31 * U	U	U	4.41 * U	13.8 * U
thallium			U	U	U	U	U	U	U
zinc	109	10,000	287 * U	139 * U	1050 * U	1230 * U	370 * U	1480 * U	2760 * U
mercury	0.18	0.81	0.506 * U	0.439 * U	<b>1.237</b> * U	<b>1.636</b> * U	0.661 * U	0.373 * U	<b>1.791</b> * U

Data as presented by Leggette, Brashears, & Graham, Inc. October 2000 - Supplemental Site Characterization Activities Former Austin Avenue Landfill.

**Fill Sample Analytical Results - Pesticides**

Parameter (mg/kg)	Unrestricted Use SCOs	Restricted Residential SCOs	TP-01B 12/19/2006 mg/Kg	TP-06 12/19/2006 mg/Kg	TP-07 12/19/2006 mg/Kg	TP-17 12/20/2006 mg/Kg	TP-23 12/20/2006 mg/Kg
alpha-BHC		0.48	U	U	0.0012 J	0.0048 J	U
beta-BHC	0.04	0.36	U	0.0015 J	U	U	U
delta-BHC		100	U	0.0024 J	U	U	U
gamma-BHC (Lindane)	0.1	1.3	U	U	U	U	U
Heptachlor	0.042	2.1	U	0.0079 U	0.0055 U	0.005 J	U
Aldrin	0.005	0.097	U	0.0025 J	U	U	U
Heptachlor epoxide			U	0.0037 J	0.00091 J	0.0096 J	U
Endosulfan I	2.4	24	U	U	U	U	U
Dieldrin	0.005	0.2	U	0.0086 * J	0.0052 * J	0.023 * J	0.0011 J
4 4'-DDE	0.0033	8.9	0.0016 J	U	U	0.0071 * J	0.012 * J
Endrin	0.014	11	U	U	0.003 J	U	0.0035 J
Endosulfan II	2.4	24	U	0.018 J	U	U	U
4 4'-DDD	0.0033	13	U	U	U	U	0.0048 * J
Endosulfan sulfate	2.4	24	U	U	U	U	U
4 4'-DDT	0.0033	7.9	U	0.12 * J	0.056 * J	0.1 * J	0.016 * J
Methoxychlor			U	U	U	U	U
alpha-Chlordane	0.094	4.2	U	U	U	0.043 J	U
gamma-Chlordane			U	U	U	0.051 J	U
Toxaphene			U	U	U	U	0.19 U
Endrin aldehyde			U	U	0.068 J	0.02 J	0.0045 U
Endrin ketone			0.0015 J	U	U	U	0.006 J

**Fill Sample Analytical Results - PCBs**

Parameter (mg/kg)	Unrestricted Use SCOs	Restricted Residential SCOs	TP-01B 12/19/2006 mg/Kg	TP-06 12/19/2006 mg/Kg	TP-07 12/19/2006 mg/Kg	TP-17 12/20/2006 mg/Kg	TP-23 12/20/2006 mg/Kg
Aroclor 1016			U	U	U	U	U
Aroclor 1221			U	U	U	U	U
Aroclor 1232	0.1	1	U	U	U	U	U
Aroclor 1242			U	U	U	U	U
Aroclor 1248			U	U	U	0.023 M	U
Aroclor 1254			0.0078 JM	U	U	0.22 M	U
Aroclor 1260			U	0.05 M	0.25 * M	0.086 M	0.027 M

**SOIL SAMPLES TAKEN PRIOR TO REMEDIAL ACTIVITIES WHICH INCLUDES THE PLACEMENT OF A SOIL ENGINEERING CONTROL**

SCOs - 6NYCRR Part 375-6.8(b) Final Soil Cleanup Objectives

J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).

U Analyte was not detected at or above the reporting limit.

M - Manually integrated calculation

\* Indicates exceeds applicable Unrestricted Use SCOs

**Bold highlighted cell** Exceeds applicable Restricted Residential Use Soil Cleanup Objectives (SCOs)

**TABLE 2A REMEDIAL INVESTIGATION GROUNDWATER CONTAMINATION SUMMARY**

Groundwater VOCs Analytical Data. Brownfield Remedial Investigation, Austin Avenue Landfill, Yonkers, NY, BCP Site No. C3-60-066, 2007

Sample ID Date Sampled Parameter	TOGS* (ug/L)	SWRMW-1		SWRMW-2		SWRMW-3		SWRMW-4		SWRMW-5		RW-03
		3/14/2007	6/5/2007	3/14/2007	6/5/2007	3/14/2007	6/5/2007	3/14/2007	6/6/2007	3/14/2007	6/6/2007	6/6/2007
Chloromethane		U	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	5	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	U	U	U	U	U	U	U
1 1-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide	60	1.3	J	U	U	U	U	U	U	U	U	U
Acetone	50	U	U	U	U	U	U	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U
trans-1 2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U
Methyl-tert-butyl-ether (MTBE)	10(G)	U	U	U	U	U	U	U	U	U	U	U
1 1-Dichloroethane	5	U	U	U	U	1.6	J	U	U	U	U	U
cis-1 2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)	50	U	U	U	U	U	U	U	U	U	U	U
Chloroform	7	U	U	U	U	U	U	U	U	U	U	U
1 1 1-Trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U
Benzene	1	U	U	U	U	U	U	U	U	U	U	U
1 2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	5	U	U	U	U	U	U	U	U	U	U	U
1 2-Dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	50	U	U	U	U	U	U	U	U	U	U	U
cis-1 3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone (MIBK)		U	U	U	U	U	U	U	U	U	U	U
Toluene	5	U	U	U	U	U	U	U	U	U	U	U
trans-1 3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U
1 1 2-Trichloroethane	1	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	50	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	50	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U
Styrene	5	U	U	U	U	U	U	U	U	U	U	U
Bromoform	50	U	U	U	U	U	U	U	U	U	U	U
1 1 2 2-Tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U
Xylenes (total)	5	U	U	U	U	U	U	U	U	U	U	U
<b>Total VOCs</b>		<b>1.3</b>	<b>0</b>	<b>0</b>	<b>2.1</b>	<b>1.6</b>	<b>1.5</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1.4</b>

\*Groundwater standards from Technical and Operational Guidance Series (TOGS) Class GA ambient water quality standards - New York State

Department of Environmental Conservation

(G) Signifies a NYSDEC guidance value where a standard has not been established.

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero.

The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the sample.

Bold Highlighted Cell - Exceeds applicable NYSDEC TOGS Class GA Standard

All concentrations in parts per billion (ppb)

**TABLE 2B REMEDIAL INVESTIGATION GROUNDWATER CONTAMINATION SUMMARY**

Groundwater SVOCs Analytical Data, Brownfield Remedial Investigation, Austin Avenue Landfill, Yonkers, NY, BCP Site No. C3-60-066, 2007

Sample ID Date Sampled Parameter	TOGS* (ug/L)	SWRMW-1		SWRMW-2		SWRMW-3		SWRMW-4		SWRMW-5		RW-03 6/6/2007 (ug/L)
		3/14/2007	6/5/2007	3/14/2007	6/5/2007	3/14/2007	6/5/2007	3/14/2007	6/6/2007	3/14/2007	6/6/2007	
Bis(2-chloroethyl)ether	1	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U
Benzyl alcohol		U	U	U	U	U	U	U	U	U	U	U
2-Methylphenol		U	U	U	U	U	U	U	U	U	U	U
2,2-oxybis (1-chloropropane)		U	U	U	U	U	U	U	U	U	U	U
n-Nitroso-di-n-propylamine		U	U	U	U	U	U	U	U	U	U	U
Hexachloroethane	5	U	U	U	U	U	U	U	U	U	U	U
4-Methylphenol		U	U	U	U	U	U	U	U	U	U	U
2-Chlorophenol		U	U	U	U	U	U	U	U	U	U	U
Nitrobenzene	0.4	U	U	U	U	U	U	U	U	U	U	U
Bis(2-chloroethoxy)methane	5	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U
Isophorone	50(G)	U	U	U	U	U	U	U	U	U	U	U
2,4-Dimethylphenol	50(G)	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	U	U	U	U	U	U	U	U	U	U	U
2,4-Dichlorophenol	1	U	U	U	U	U	U	U	U	U	U	U
4-Chloroaniline	5	U	U	U	U	U	U	U	U	U	U	U
2,4,6-Trichlorophenol		U	U	U	U	U	U	U	U	U	U	U
2,4,5-Trichlorophenol		U	U	U	U	U	U	U	U	U	U	U
Hexachlorocyclopentadiene	5	U	U	U	U	U	U	U	U	U	U	U
2-Methylnaphthalene		U	U	U	U	U	U	U	U	U	U	U
2-Nitroaniline	5	U	U	U	U	U	U	U	U	U	U	U
2-Chloronaphthalene	10(G)	U	U	U	U	U	U	U	U	U	U	U
4-Chloro-3-methylphenol		U	U	U	U	U	U	U	U	U	U	U
2,6-Dinitrotoluene	5	U	U	U	U	U	U	U	U	U	U	U
2-Nitrophenol		U	U	U	U	U	U	U	U	U	U	U
3-Nitroaniline	5	U	U	U	U	U	U	U	U	U	U	U
Dimethyl phthalate	50(G)	U	U	U	U	U	U	U	U	U	U	U
2,4-Dinitrophenol	10(G)	U	U	U	U	U	U	U	U	U	U	U
Acenaphthylene		U	U	U	U	U	U	U	U	U	U	U
2,4-Dinitrotoluene	5(G)	U	U	U	U	U	U	U	U	U	U	U
Acenaphthene	20(G)	U	U	U	U	U	U	U	U	U	U	U
Dibenzofuran		U	U	U	U	U	U	U	U	U	U	U
4-Nitrophenol		U	U	U	U	U	U	U	U	U	U	U
Fluorene	50(G)	U	U	U	U	U	U	U	U	U	U	U
4-Nitroaniline	5(G)	U	U	U	U	U	U	U	U	U	U	U
4-Bromophenyl phenyl ether		U	U	U	U	U	U	U	U	U	U	U
Hexachlorobenzene	0.04	U	U	U	U	U	U	U	U	U	U	U
Diethyl phthalate	50(G)	U	U	U	U	U	U	U	U	U	U	U
4-Chlorophenyl phenyl ether		U	U	U	U	U	U	U	U	U	U	U
Pentachlorophenol		U	U	U	U	U	U	U	U	U	U	U
n-Nitrosodiphenylamine	50(G)	U	U	U	U	U	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol		U	U	U	U	U	U	U	U	U	U	U
Phenanthrene	50(G)	U	0.72	J	U	U	U	U	U	U	U	U
Anthracene	50(G)	U	U	U	U	U	U	U	U	U	U	U
Carbazole		U	U	U	U	U	U	U	U	U	U	U
Di-n-butyl phthalate		U	U	U	2.3	J	U	U	U	U	U	3.5
Fluoranthene	50(G)	U	U	U	U	U	U	U	U	U	U	U
Pyrene	50(G)	U	U	U	U	U	U	U	U	U	U	U
Butyl benzyl phthalate	50(G)	U	U	U	U	U	U	U	U	U	U	U
Benzo(a)anthracene	0.002(G)	U	U	U	U	U	U	U	U	U	U	U
Chrysene	0.002(G)	U	U	U	U	U	U	U	U	U	U	U
3,3-Dichlorobenzidine	5(G)	U	U	U	U	U	U	U	U	U	U	U
Bis(2-ethylhexyl)phthalate	5	3.2	J	U	2.6	J	U	U	U	U	U	U
Di-n-octyl phthalate	50(G)	U	U	U	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	0.002(G)	U	U	U	U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	0.002(G)	U	U	U	U	U	U	U	U	U	U	U
Benzo(a)pyrene	ND	U	U	U	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.002(G)	U	U	U	U	U	U	U	U	U	U	U
Dibenzo(a,h)anthracene		U	U	U	U	U	U	U	U	U	U	U
Benzo(ghi)perylene		U	U	U	U	U	U	U	U	U	U	U
<b>Total SVOCs</b>		<b>3.2</b>	<b>0.72</b>	<b>0</b>	<b>4.9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3.5</b>

\*Groundwater standards from Technical and Operational Guidance Series (TOGS) Class GA ambient water quality standards - New York State

Department of Environmental Conservation

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J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero.



**TABLE 2C REMEDIAL INVESTIGATION GROUNDWATER CONTAMINATION SUMMARY**  
 Groundwater Metals Analytical Data. Brownfield Remedial Investigation, Austin Avenue Landfill, Yorkers, NY, BCP Site No. C3-60-066, 2007

Sample ID Date Sampled Parameter	TOGS* (ug/L)	SWRMW-1			SWRMW-2			SWRMW-3			SWRMW-4			SWRMW-5			RW-03	
		3/14/2007 TOTAL	6/5/2007 TOTAL (ug/L)	DISSOLVED	3/14/2007 TOTAL	6/5/2007 TOTAL (ug/L)	DISSOLVED	3/14/2007 TOTAL	6/5/2007 TOTAL (ug/L)	DISSOLVED	3/14/2007 TOTAL	6/6/2007 TOTAL (ug/L)	DISSOLVED	3/14/2007 TOTAL	6/6/2007 TOTAL (ug/L)	DISSOLVED	6/6/2007 TOTAL (ug/L)	DISSOLVED
Aluminum	3	437,000	870	J 130	154,000	740	J 500	206,000	2400	J 500	101,000	5000	J	211,000	950	J	500	U
Antimony	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Arsenic	25	21	J	U	44	J	U	90	U	U	U	U	U	U	U	U	U	U
Barium	1,000	5900	J	500	480	2,200	J	100	120	48	28	1000	90	44	1700	J	3.9	2.7
Beryllium	3	9.7	J	U	U	6.2	J	U	U	U	U	3.3	J	U	5.6	J	U	U
Cadmium	5	29	J	U	U	11	J	U	U	U	U	4.8	J	U	8.9	J	U	U
Calcium		298,000		302000	312000	40,400		25500	38800	55,300	17900	18400	99,100	77400	79900	63,100	51,300	53,600
Chromium	50	950	J	2.9	J 1.5	460	J	2.1	J	620	6.5	J 10	280	13	U	740	3.2	J
Cobalt		290	U	U	U	130	U	2	J	190	4.1	J 2.5	120	11	U	210	2.1	J
Copper	200	990	J	3.2	J	790	J	4.5	J	460	6.6	J	460	28	3	860	4.5	J
Iron	300	877,000	J	87600	83800	320,000	J	2300	570	353,000	4100	U	188,000	8700	57	337,000	1,400	U
Lead	25	820	J	U	U	2400	J	16	U	460	6.9	J	62	4.4	J	64	U	U
Magnesium	35000 (G)	258,000	J	112000	114000	52,500	9500	14300	107,000	7000	6100	U	81,000	36400	34800	138,000	24,700	24,900
Manganese	300	10,900	J	4900	5000	7000	320	340	3,500	170	400	2,400	350	19	5,800	180	180	39,600
Mercury	0.7	0.6	J	U	U	0.81	J	U	U	0.24	J	U	U	U	U	U	U	40,000
Nickel	100	590	J	2.9	J 2.8	290	J	1.7	J	560	7	J	250	14	3.2	540	3.4	J
Potassium		403,000	U	153000	152000	29100	7200	9000	78,700	4500	4100	51,300	19000	19200	88,000	18,100	18,000	13,300
Selenium	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	13400
Silver	50	U	U	U	U	3.9	J	U	U	U	U	U	U	U	U	U	U	U
Sodium	20,000	153,000	J	148000	148000	22900	14800	16300	24,600	8800	8500	59,400	41100	45700	63,400	53,000	54,000	18,200
Thallium	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	18300
Vanadium		1200	J	2.8	J 0.94	420	J	1.6	J	500	5.3	U	280	13	U	520	1.7	J
Zinc	2,000	2500	J	U	U	2700	J	22	J	990	11	J	360	19	J	490	U	U

\*Groundwater standards from Technical and Operational Guidance Series (TOGS) Class GA ambient water quality standards - New York State Department of Environmental Conservation

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U - The compound was not detected at the indicated concentration.

J - Data indicate the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero.

The concentration given is an approximate value.

Bold Highlighted Cell - Exceeds applicable NYSDEC TOGS Class GA Standard

**TABLE 2D REMEDIAL INVESTIGATION GROUNDWATER CONTAMINATION SUMMARY**

Groundwater PCBs and Pesticides Analytical Data. Brownfield Remedial Investigation, Austin Avenue Landfill, Yonkers, NY, BCP Site No. C3-60-066, 2007

Sample ID Date Sampled Parameter	TOGS* (ug/L)	SWRMW-1		SWRMW-2		SWRMW-3		SWRMW-4		SWRMW-5		RW-07
		3/14/2007 (ug/L)	6/5/2007 (ug/L)	3/14/2007 (ug/L)	6/5/2007 (ug/L)	3/14/2007 (ug/L)	6/5/2007 (ug/L)	3/14/2007 (ug/L)	6/6/2007 (ug/L)	3/14/2007 (ug/L)	6/6/2007 (ug/L)	6/6/2007 (ug/L)
<b>PCBs</b>												
Aroclor 1016	0.09	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1221	0.09	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232	0.09	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1242	0.09	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1248	0.09	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1254	0.09	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1260	0.09	<b>0.76</b>	U	U	U	U	U	U	U	U	U	U
<b>TCLP Pesticides</b>												
alpha-BHC		U	U	0.012	J	U	U	U	U	U	U	U
beta-BHC		U	U	U	U	U	U	U	U	U	U	U
delta-BHC		U	U	U	U	U	U	U	U	U	U	U
gamma-BHC (Lindane)		U	U	U	U	U	U	U	U	U	U	U
Heptachlor	0.04	0.021	J	U	U	U	U	U	U	U	U	U
Aldrin	ND	U	U	U	U	U	U	U	U	U	U	U
Heptachlor epoxide	0.03	U	U	U	U	U	U	U	U	U	U	U
Endosulfan I		U	U	U	U	U	U	U	U	U	U	U
Dieldrin	0.004	<b>0.018</b>	J	U	U	U	U	U	U	U	U	U
4 4'-DDE	0.2	0.016	J	U	U	U	U	U	U	U	U	U
Endrin	ND	U	U	U	U	U	U	U	U	U	U	U
Endosulfan II		U	U	U	U	U	U	U	U	U	U	U
4 4'-DDD	0.3	U	U	U	U	U	U	U	U	U	U	U
Endosulfan sulfate		U	U	U	U	U	U	U	U	U	U	U
4 4'-DDT	0.2	0.057	J	U	U	U	U	U	U	U	U	U
Methoxychlor	35	U	U	U	U	U	U	U	U	U	U	U
alpha-Chlordane	5	U	U	U	U	U	U	U	U	U	U	U
gamma-Chlordane	5	U	U	U	U	U	U	U	U	U	U	U
Toxaphene	0.06	U	U	U	U	U	U	U	U	U	U	U
Endrin aldehyde	0.05	0.036	J	U	U	U	U	U	U	U	U	U
Endrin ketone	0.05	U	U	U	U	U	U	U	U	U	U	U

\*Groundwater standards from Technical and Operational Guidance Series (TOGS) Class GA ambient water quality standards - New York

State Department of Environmental Conservation

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U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero.

The concentration given is an approximate value.

Bold Value - Exceeds applicable NYSDEC TOGS Class GA Standard

All concentrations in parts per billion (ppb)

**TABLE 3 SOIL CLEANUP OBJECTIVES FOR THE SITE USE, ON-SITE SOIL RE-USE, AND IMPORTED FILL**

(Page 2 of 2) Site Management Plan, Former Austin Avenue Landfill Site, Yonkers, Westchester County, NY, BCP Site No. C3-60-066.

Analyte	Brownfield Soil Cleanup Objectives
	Track 4 Restricted Residential
<b>SVOCs by EPA Method 8270D</b>	
Pyridine	
N-Nitrosodimethylamine	
Phenol	100
Aniline	
2-Chlorophenol	
Bis(2-Chloroethyl)ether	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Benzyl alcohol	
1,2-Dichlorobenzene	
2-Methylphenol	100
Bis(2-chloroisopropyl)ether	
Hexachloroethane	
3/4-Methylphenol	100
N-Nitroso-di-n-propylamine	
Nitrobenzene	
Isophorone	
2-Nitrophenol	
2,4-Dimethylphenol	
Benzoic acid	
bis(2-chloroethoxy)methane	
2,4-Dichlorophenol	
1,2,4-Trichlorobenzene	
Naphthalene	100
4-Chloroaniline	
Hexachlorobutadiene	
4-Chloro-3-methylphenol	
2-Methylnaphthalene	
Hexachlorocyclopentadiene	
2,4,6-Trichlorophenol	
2,4,5-Trichlorophenol	
2-Chloronaphthalene	
2-Nitroaniline	
Dimethyl phthalate	
Acenaphthylene	100
2,6-Dinitrotoluene	
3-Nitroaniline	
Acenaphthene	100
2,4-Dinitrophenol	
Dibenzofuran	59
4-Nitrophenol	
2,4-Dinitrotoluene	
Fluorene	100
Diethyl phthalate	
4-chlorophenyl phenyl ether	
4-Nitroaniline	
4,6-Dinitro-2-methylphenol	
N-Nitrosodiphenylamine	
Azobenzene	
4-Bromophenyl Phenyl ether	
Hexachlorobenzene	
Pentachlorophenol	6.7
Phenanthrene	100
Anthracene	100
Carbazole	
Di-n-butyl phthalate	
Fluoranthene	100
Pyrene	100
Benzidine	
Butyl benzyl phthalate	
Benzo(a)anthracene	1
Chrysene	3.9
3,3'-Dichlorobenzidine	
Bis(2-Ethylhexyl)phthalate	
Di-n-octyl phthalate	
Benzo(b)fluoranthene	1
Benzo(k)fluoranthene	3.9
Benzo(a)pyrene	1
Indeno(1,2,3-cd)pyrene	0.5
Dibenzo(a,h)anthracene	0.33
Benzo(g,h,i)perylene	100

Analyte	Brownfield Soil Cleanup Objectives
	Track 4 Restricted Residential
<b>Pesticides by EPA Method 8081B</b>	
alpha-BHC	0.48
gamma-BHC	
beta-BHC	0.36
delta-BHC	100
Heptachlor	2.1
Aldrin	0.097
Heptachlor Epoxide	
gamma-Chlordane	
alpha-Chlordane	4.2
4,4'-DDE	8.9
Endosulfan I	24
2,4'-DDD	
Dieldrin	0.2
Endrin	11
4,4'-DDD	13
Endosulfan II	24
4,4'-DDT	7.9
Endrin Aldehyde	
Methoxychlor	
Endosulfan Sulfate	24
Endrin Ketone	
Chlordane	
Toxaphene	
<b>PCBs by EPA Method 8082A</b>	
Aroclor-1016	
Aroclor-1260	
Aroclor 1221	
Aroclor 1232	
Aroclor 1242	
Aroclor 1248	
Aroclor 1254	
Total PCBs	1
<b>Metals by EPA Method RCRA 23</b>	
Aluminum	
Mercury	0.81
Antimony	
Arsenic	16
Barium	400
Beryllium	72
Cadmium	4.3
Calcium	
Chromium	110
Cobalt	
Copper	270
Iron	
Lead	400
Magnesium	
Manganese	2,000
Nickel	310
Potassium	
Selenium	180
Silver	180
Sodium	
Thallium	
Vanadium	
Zinc	10,000

Restricted Residential Use Soil Cleanup Objectives from 6 NYCRR Subpart 375-6, Remedial Program Soil Cleanup Objectives (SCOs), December 2006.

Values are mg/kg (ppm)

**TABLE 3 SOIL CLEANUP OBJECTIVES FOR THE SITE USE, ON-SITE SOIL RE-USE, AND IMPORTED FILL**

(Page 1 of 2) Site Management Plan, Former Austin Avenue Landfill Site, Yonkers, Westchester County, NY, BCP Site No. C3-60-066.

Analyte	Brownfield Soil Cleanup Objectives
	Track 4 Restricted Residential
<b>VOCs by EPA Method 8260B</b>	
Dichlorodifluoromethane	
Chlorodifluoromethane	
Chloromethane	
Vinyl chloride	0.9
Bromomethane	
Chloroethane	
Trichlorofluoromethane	
Acetone	100
1,1-Dichloroethylene	100
1,1,2-Trichloro-1,2,2-trifluoroethane	
Methylene Chloride	100
Carbon disulfide	
Methyl-tert-Butyl Ether	100
trans-1,2-Dichloroethylene	100
1,1-Dichloroethane	26
Vinyl acetate	
Methyl Ethyl Ketone (2-Butanone)	100
cis-1,2-Dichloroethylene	100
2,2-Dichloropropane	
Bromochloromethane	
Chloroform	49
1,1,1-Trichloroethane	100
1,2-Dichloroethane	3.1
1,1-Dichloropropylene	
Carbon Tetrachloride	2.4
Benzene	4.8
Trichloroethylene	21
1,2-Dichloropropane	
Dibromomethane	
Bromodichloromethane	
2-Chloroethyl Vinyl Ether	
Methyl Isobutyl Ketone	
cis-1,3-Dichloropropylene	
Toluene	100
trans-1,3-Dichloropropylene	
1,1,2-Trichloroethane	
Methyl Butyl Ketone (2-Hexanone)	

Analyte	Brownfield Soil Cleanup Objectives
	Track 4 Restricted Residential
<b>VOCs by EPA Method 8260B</b>	
1,3-Dichloropropane	
Dibromochloromethane	
Tetrachloroethylene	19
1,2-Dibromoethane	
Chlorobenzene	100
1,1,1,2-Tetrachloroethane	
Ethylbenzene	41
m,p-Xylenes	100
Styrene	
o-Xylene	100
Bromoform	
1,1,2,2-Tetrachloroethane	
Isopropylbenzene (Cumene)	
1,2,3-Trichloropropane	
Bromobenzene	
n-Propylbenzene	100
2-Chlorotoluene	
4-Ethyltoluene	
4-Chlorotoluene	
1,3,5-Trimethylbenzene	52
tert-Butylbenzene	100
1,2,4-Trimethylbenzene	52
sec-Butylbenzene	100
1,3-Dichlorobenzene	49
4-Isopropyltoluene	
1,4-Dichlorobenzene	13
1,2-Dichlorobenzene	100
1,4-Diethylbenzene	
n-Butylbenzene	100
1,2-Dibromo-3-chloropropane	
1,2,4,5-Tetramethylbenzene	
1,2,4-Trichlorobenzene	
Naphthalene	
Hexachlorobutadiene	
1,2,3-Trichlorobenzene	
Acrylonitrile	
1,4-Dioxane	13

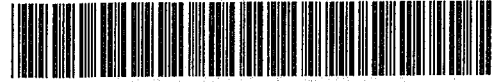
Restricted Residential Use Soil Cleanup Objectives from 6 NYCRR Subpart 375-6, Remedial Program Soil Cleanup Objectives (SCOs), December 2006.

Values are mg/kg (ppm)

# **APPENDICES**

**Appendix A**  
Environmental Easement

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.



\*550653029EAS001Z\*

**Westchester County Recording & Endorsement Page**

Prepared: 4/22/2015 3:12:27 PM

**Submitter Information**

Name:	DMR	Phone:	914-298-3014
Address 1:	445 Hamilton Avenue	Fax:	913-683-1210
Address 2:	Suite 1206	Email:	drothman@harrisbeach.com
City/State/Zip:	White Plains NY 10601	Reference for Submitter:	Austin Ave

**Document Details**

Control Number:	<b>550653029</b>	Document Type:	<b>Easement (EAS)</b>
Package ID:	2015030600015001000	Document Page Count:	<b>9</b>
		Total Page Count:	<b>10</b>

**Parties**

Additional Parties on Continuation page

**1st PARTY**

**2nd PARTY**

1: COUNTY OF WESTCHESTER INDUSTRIAL DEVELOPMEN - Other	1: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL C - Other
2:	2:

**Property**

Additional Properties on Continuation page

Street Address: 323 SPRAIN ROAD	Tax Designation: 3-3244-1
City/Town: YONKERS	Village:

**Cross-References**

Additional Cross-Refs on Continuation page

1:	2:	3:	4: —
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**Supporting Documents**

1: TP-584	2: Yonkers Local
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**Recording Fees**

Statutory Recording Fee:	\$40.00
Page Fee:	\$50.00
Cross-Reference Fee:	\$0.00
Mortgage Affidavit Filing Fee:	\$0.00
RP-5217 Filing Fee:	\$0.00
TP-584 Filing Fee:	\$5.00
<b>Total Recording Fees Paid:</b>	<b>\$95.00</b>

**Mortgage Taxes**

Document Date:	
Mortgage Amount:	\$0.00
Basic:	\$0.00
Westchester:	\$0.00
Additional:	\$0.00
MTA:	\$0.00
Special:	\$0.00
Yonkers:	\$0.00
<b>Total Mortgage Tax:</b>	<b>\$0.00</b>

**Transfer Taxes**

Consideration:	\$0.00
Transfer Tax:	\$0.00
Mansion Tax:	\$0.00
Transfer Tax Number:	

Dwelling Type:	Exempt: <input type="checkbox"/>
Serial #:	

**Record and Return To**

Pick-up at County Clerk's office

WESTCHESTER COUNTY CLERK  
TIMOTHY CLONDI

2015 APR 22 4:51

RECEIVED

**David Rothman**  
**Harris Beach PLLC**  
 445 Hamilton Ave, Suite 1206  
 White Plains, NY 10601



Office of the Westchester County Clerk



\*20150306000150010011\*

### Payment Cover Page

#### Submitter Information

Name:	DMR	Phone:	914-298-3014
Address 1:	445 Hamilton Avenue	Fax:	913-683-1210
Address 2:	Suite 1206	Email:	drothman@harrisbeach.com
City/State/Zip:	White Plains NY 10601	Reference for Submitter:	Austin Ave

#### Payment Due

Control Number	Document Type	Fees	Transfer Tax	Mortgage Tax	Total
550653029	Easement (EAS)	\$95.00	\$0.00	\$0.00	\$95.00
<b>Total Due :</b>					<b>\$95.00</b>

#### Payment Details

Fees	CHECK # 1247 (Check, Uncertified)	PENDING	\$95.00
<b>Total Amount :</b>			<b>\$95.00</b>



RECEIVED

WESTCHESTER COUNTY  
MUNICIPAL REAL ESTATE TRANSFER TAX RECEIPT

2015 APR 22 A 4:57

MT. VERNON

PEEKSKILL

TIMOTHY C. IDONI  
WESTCHESTER COUNTY CLERK  
YONKERS

**LOCATIONS OF PROPERTY TRANSFERRED**

ADDRESS:	<u>323 Sprain Road</u>	<u>Yonkers</u>	<u>10701</u>
	<small>Street</small>	<small>City</small>	<small>Zip</small>
	<u>3</u>	<u>3244</u>	<u>1</u>
	<small>Section</small>	<small>Block</small>	<small>Lot</small>

NAME OF GRANTOR(S): County of Westchester Industrial Development Agency

NAME OF GRANTEE(S): The People of the State of New York Acting Through DEC

DATE OF DELIVERY OF DEED: 12/18/2014 (easement)

CONSIDERATION: \$0.00

TRANSFER TAX PAID: \$0.00

If Exempt from payment of Real Estate Transfer Tax check box:

Municipal Receipt No. N/A

Return receipt to: DRothman@harrisbeach.com (email or fax) (The

municipality will return this receipt to the above address. The party recording the deed is responsible for submitting this form along with the deed to the Office of the Westchester County Clerk.)

**PROOF OF PAYMENT**

**TRANSFER TAX**



DATE PAID APR 15 2015  
BLOCK 3244 LOT 1 LOT 0

REC # N/A

*[Handwritten Signature]*  
AUTHORIZED SIGNATURE ONLY

Upon the affixment of proof of payment to the municipality, the Office of the Westchester County Clerk is authorized to record the deed for the transfer of the above-referenced property.

The forgery or falsification of any information in this document may be punishable by law, including but not limited to punishment for violations pursuant to N.Y. Penal Law Articles 170 and 175.



**CITY OF YONKERS**  
**REAL PROPERTY TRANSFER TAX RETURN**  
**FINANCE DEPARTMENT**  
 PURSUANT TO CHAPTER 15 TAXES, ARTICLE V, GENERAL ORDINANCE 8-1973 AS AMENDED  
 BY G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

(Grantor:)	County of Westchester Industrial Development Agency			
	Name			
	148 Martine Avenue, Room 903	White Plains	NY	10601
	Address	City	State	Zip
(Grantee)	The People of the State of New York Acting Through Commissioner of			
	Department of Environmental Conservation			
	625 Broadway	Albany	NY	12233
	Address	City	State	Zip
(Grantor's Att'y)	John Loveless, One North Lexington Avenue, White Plains, NY 10601			
	Name	Address	City	State Zip
(Grantee's Att'y)	Office of General Counsel, NYSDEC, 625 Broadway, Albany, NY 12233-5500			
	Name	Address	City	State Zip

NOTE: FILING OF THIS RETURN DOES NOT CONSTITUTE NOTICE TO THE CITY OF YONKERS TO CHANGE THE ADDRESS FOR PROPERTY TAXES. PROPERTY OWNERS MUST PROVIDE A WRITTEN NOTICE ADVISING THE CITY OF CORRECT NAME AND MAILING ADDRESS.

SEND INFORMATION TO:

**CITY OF YONKERS**  
**ROOM 116**  
**40 SOUTH BROADWAY**  
**YONKERS, N.Y. 10701**

LOCATION OF PROPERTY TRANSFERRED			
Address:	323 Sprain Road		
	3	3244	1
City Tax Map	Section	Block	Lot
DATE OF DELIVERY OF DEED TO GRANTEE:	Easement to Grantee: 12/18/2014		

**FOR DEPARTMENT USE ONLY**

**COMPUTATION OF TAX**

NOTES:

- If item 1 is \$25,000 or less, enter zero in items 3 and 5. If exemption is claimed, attach signed affidavit showing grounds for exemption.
- Where the transfer is by a corporation in liquidation or to a corporation in exchange for capital stock, complete Schedule B on Page 2.

1. Total Consideration Paid or Required to be Paid	0
2. Allocated Consideration Subject to Tax (Schedule A)	0
3. Tax Due-1.5% of Item 1 or 2 Whichever is Applicable	0
4. Add - Penalty and Interest	0
5. Total Tax, Penalty and Interest Due	0

MAKE CERTIFIED CHECK PAYABLE TO **THE CITY OF YONKERS**  
 CITY HALL - ROOM 210, 40 SOUTH BROADWAY, YONKERS, NEW YORK 10701

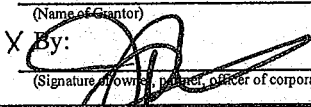
**AFFIDAVIT OF GRANTOR**

I swear (or affirm) that this return including the accompanying schedules or statements, has been examined by me, and is to the best of my knowledge and belief, a true and complete return, made in good faith, pursuant to Chapter 15, Article V, of the General Ordinance 8-1973 as amended by G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

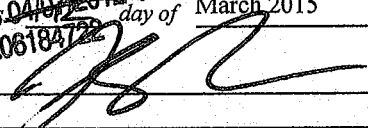
Sworn to and subscribed to before me this 29 day of March 2015

County of Westchester Industrial Development Agency

(Name of Grantor)

X By: 

(Signature of owner, officer, partner, officer of corporation, etc.)

Signature of Officer Administering Oath: 

**JOHN M. LOVELESS**  
**NOTARY PUBLIC**  
**STATE OF NEW YORK**  
**MY COMMISSION EXPIRES 04/07/2016**  
**REGISTRATION NO. 02L0818472**

**AFFIDAVIT OF GRANTEE**

I swear (or affirm) that this return including the accompanying schedules or statements, has been examined by me, and is to the best of my knowledge and belief, a true and complete return, made in good faith, pursuant to Chapter 15, Article V, of the General Ordinance 8-1973 as amended by G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

Sworn to and subscribed to before me this \_\_\_\_\_ day of March 2015

The People of the State of New York Acting Through  
 Commissioner of Department of Environmental  
 Conservation

(Name of Grantee)

**Wiring information: Hudson Valley Bank Getty Square Office | 61 South Broadway Yonkers NY 10701 | ABA#021909300 | ACCOUNT # 0324910701 | Email Paper work To: transfertax@yonkersny.gov**



**CITY OF YONKERS**  
**REAL PROPERTY TRANSFER TAX RETURN**  
**FINANCE DEPARTMENT**

PURSUANT TO CHAPTER 15 TAXES, ARTICLE V, GENERAL ORDINANCE 8-1973 AS AMENDED  
 BY G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

(Grantor:)	County of Westchester Industrial Development Agency			
	Name			
Address	148 Martine Avenue, Room 903	White Plains	NY	10601
	City		State	Zip
(Grantee)	The People of the State of New York Acting Through Commissioner of			
	Department of Environmental Conservation			
Address	625 Broadway	Albany	NY	12233
	City		State	Zip
(Grantor's Att'y)	John Loveless, One North Lexington Avenue, White Plains, NY 10601			
	Name	Address	City	State Zip
(Grantee's Att'y)	Office of General Counsel, NYSDEC, 625 Broadway, Albany, NY 12233-5500			
	Name	Address	City	State Zip

NOTE: FILING OF THIS RETURN DOES NOT CONSTITUTE NOTICE TO THE CITY OF YONKERS TO CHANGE THE ADDRESS FOR PROPERTY TAXES. PROPERTY OWNERS MUST PROVIDE A WRITTEN NOTICE ADVISING THE CITY OF CORRECT NAME AND MAILING ADDRESS.

SEND INFORMATION TO:

**CITY OF YONKERS**  
**ROOM 116**  
**40 SOUTH BROADWAY**  
**YONKERS, N.Y. 10701**

**LOCATION OF PROPERTY TRANSFERRED**

Address: 323 Sprain Road

City Tax Map	3	3244	1
	Section	Block	Lot

DATE OF DELIVERY OF DEED TO GRANTEE: Easement to Grantee: 12/18/2014

**FOR DEPARTMENT USE ONLY**

**COMPUTATION OF TAX**

NOTES:

- If item 1 is \$25,000 or less, enter zero in items 3 and 5. If exemption is claimed, attach signed affidavit showing grounds for exemption.
- Where the transfer is by a corporation in liquidation or to a corporation in exchange for capital stock, complete Schedule B on Page 2.

1. Total Consideration Paid or Required to be Paid	0
2. Allocated Consideration Subject to Tax (Schedule A)	0
3. Tax Due-1.5% of Item 1 or 2 Whichever is Applicable	0
4. Add - Penalty and Interest	0
5. Total Tax, Penalty and Interest Due	0

MAKE CERTIFIED CHECK PAYABLE TO THE CITY OF YONKERS  
 CITY HALL - ROOM 210, 40 SOUTH BROADWAY, YONKERS, NEW YORK 10701

**AFFIDAVIT OF GRANTOR**

I swear (or affirm) that this return including the accompanying schedules or statements, has been examined by me, and is to the best of my knowledge and belief, a true and complete return, made in good faith, pursuant to Chapter 15, Article V, of the General Ordinance 8-1973 as amended by G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

Sworn to and subscribed to before me this 12 day of March 2015

**JOHN J. AM. LOVELESS**  
**NOTARY PUBLIC**  
**STATE OF NEW YORK**  
**MY COMMISSION EXPIRES 04/07/2014**  
**REGISTRATION NO. 02L06184722**

County of Westchester Industrial Development Agency  
 (Name of Grantor)  
 By:   
 (Signature of Owner, purchaser, officer of corporation, etc.)

**AFFIDAVIT OF GRANTEE**

I swear (or affirm) that this return including the accompanying schedules or statements, has been examined by me, and is to the best of my knowledge and belief, a true and complete return, made in good faith, pursuant to Chapter 15, Article V, of the General Ordinance 8-1973 as amended by G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

Sworn to and subscribed to before me this \_\_\_\_\_ day of March 2015

The People of the State of New York Acting Through  
 Commissioner of Department of Environmental  
 Conservation  
 (Name of Grantee)







# Combined Real Estate Transfer Tax Return, Credit Line Mortgage Certificate, and Certification of Exemption from the Payment of Estimated Personal Income Tax

See Form TP-584-1, Instructions for Form TP-584, before completing this form. Print or type.

**Schedule A – Information relating to conveyance**

Grantor/Transferor <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial) ( <input type="checkbox"/> check if more than one grantor) County of Westchester Industrial Development Agency Mailing address Michaelian Office Bldg., Room 903, 148 Martine Ave. City State ZIP code Yonkers NY 10710 Single member's name if grantor is a single member LLC (see instructions)	Social security number Social security number Federal EIN 52-1294265 Single member EIN or SSN
Grantee/Transferee <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input checked="" type="checkbox"/> Other	Name (if individual, last, first, middle initial) ( <input type="checkbox"/> check if more than one grantee) People of NYS through their Commissioner of the NYS Dept. Env. Conservation Mailing address 625 Broadway City State ZIP code Albany NY 12233-1500 Single member's name if grantee is a single member LLC (see instructions)	Social security number Social security number Federal EIN 14-6013200 Single member EIN or SSN

Location and description of property conveyed

Tax map designation – Section, block & lot (include dots and dashes)	SWIS code (six digits)	Street address	City, town, or village	County
Sec. 3 Block 3244 Lot 1		323 Sprain Road	Yonkers	Westchester

Type of property conveyed (check applicable box)

1 <input type="checkbox"/> One- to three-family house 2 <input type="checkbox"/> Residential cooperative 3 <input type="checkbox"/> Residential condominium 4 <input type="checkbox"/> Vacant land	5 <input type="checkbox"/> Commercial/Industrial 6 <input type="checkbox"/> Apartment building 7 <input type="checkbox"/> Office building 8 <input type="checkbox"/> Other _____	Date of conveyance <table style="width: 100%; border: 1px solid black;"> <tr> <td style="width: 33%; text-align: center;">month</td> <td style="width: 33%; text-align: center;">day</td> <td style="width: 33%; text-align: center;">year</td> </tr> </table>	month	day	year	Percentage of real property conveyed which is residential real property <u>0.00</u> % (see instructions)
month	day	year				

Condition of conveyance (check all that apply)

a. <input type="checkbox"/> Conveyance of fee interest b. <input type="checkbox"/> Acquisition of a controlling interest (state percentage acquired _____ %) c. <input type="checkbox"/> Transfer of a controlling interest (state percentage transferred _____ %) d. <input type="checkbox"/> Conveyance to cooperative housing corporation e. <input type="checkbox"/> Conveyance pursuant to or in lieu of foreclosure or enforcement of security interest (attach Form TP-584.1, Schedule E)	f. <input type="checkbox"/> Conveyance which consists of a mere change of identity or form of ownership or organization (attach Form TP-584.1, Schedule F) g. <input type="checkbox"/> Conveyance for which credit for tax previously paid will be claimed (attach Form TP-584.1, Schedule G) h. <input type="checkbox"/> Conveyance of cooperative apartment(s) i. <input type="checkbox"/> Syndication j. <input type="checkbox"/> Conveyance of air rights or development rights k. <input type="checkbox"/> Contract assignment	l. <input type="checkbox"/> Option assignment or surrender m. <input type="checkbox"/> Leasehold assignment or surrender n. <input type="checkbox"/> Leasehold grant o. <input checked="" type="checkbox"/> Conveyance of an easement p. <input type="checkbox"/> Conveyance for which exemption from transfer tax claimed (complete Schedule B, Part III) q. <input type="checkbox"/> Conveyance of property partly within and partly outside the state r. <input type="checkbox"/> Conveyance pursuant to divorce or separation s. <input checked="" type="checkbox"/> Other (describe) <u>Env. Easement</u>
--	--	---

For recording officer's use	Amount received Schedule B., Part I \$ _____ Schedule B., Part II \$ _____	Date received	Transaction number
-----------------------------	--	---------------	--------------------

**Schedule C – Credit Line Mortgage Certificate (Tax Law, Article 11)**

Complete the following only if the interest being transferred is a fee simple interest.

I (we) certify that: (check the appropriate box)

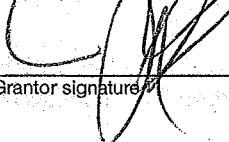

1.  The real property being sold or transferred is not subject to an outstanding credit line mortgage.
2.  The real property being sold or transferred is subject to an outstanding credit line mortgage. However, an exemption from the tax is claimed for the following reason:
  - The transfer of real property is a transfer of a fee simple interest to a person or persons who held a fee simple interest in the real property (whether as a joint tenant, a tenant in common or otherwise) immediately before the transfer.
  - The transfer of real property is (A) to a person or persons related by blood, marriage or adoption to the original obligor or to one or more of the original obligors or (B) to a person or entity where 50% or more of the beneficial interest in such real property after the transfer is held by the transferor or such related person or persons (as in the case of a transfer to a trustee for the benefit of a minor or the transfer to a trust for the benefit of the transferor).
  - The transfer of real property is a transfer to a trustee in bankruptcy, a receiver, assignee, or other officer of a court.
  - The maximum principal amount secured by the credit line mortgage is \$3,000,000 or more, and the real property being sold or transferred is **not** principally improved nor will it be improved by a one- to six-family owner-occupied residence or dwelling.

**Please note:** for purposes of determining whether the maximum principal amount secured is \$3,000,000 or more as described above, the amounts secured by two or more credit line mortgages may be aggregated under certain circumstances. See TSB-M-96(6)-R for more information regarding these aggregation requirements.

- Other (attach detailed explanation).
3.  The real property being transferred is presently subject to an outstanding credit line mortgage. However, no tax is due for the following reason:
    - A certificate of discharge of the credit line mortgage is being offered at the time of recording the deed.
    - A check has been drawn payable for transmission to the credit line mortgagee or his agent for the balance due, and a satisfaction of such mortgage will be recorded as soon as it is available.
  4.  The real property being transferred is subject to an outstanding credit line mortgage recorded in \_\_\_\_\_ (insert liber and page or reel or other identification of the mortgage). The maximum principal amount of debt or obligation secured by the mortgage is \_\_\_\_\_. No exemption from tax is claimed and the tax of \_\_\_\_\_ is being paid herewith. (Make check payable to county clerk where deed will be recorded or, if the recording is to take place in New York City but not in Richmond County, make check payable to the **NYC Department of Finance**.)

**Signature (both the grantor(s) and grantee(s) must sign)**

The undersigned certify that the above information contained in schedules A, B, and C, including any return, certification, schedule, or attachment, is to the best of his/her knowledge, true and complete, and authorize the person(s) submitting such form on their behalf to receive a copy for purposes of recording the deed or other instrument effecting the conveyance.

 Grantor signature	Title	 Grantee signature	Assoc. Attorney Title
Grantor signature	Title	Grantee signature	Attorney Title

**Reminder:** Did you complete all of the required information in Schedules A, B, and C? Are you required to complete Schedule D? If you checked e, f, or g in Schedule A, did you complete Form TP-584.1? Have you attached your check(s) made payable to the county clerk where recording will take place or, if the recording is in the New York City boroughs of Manhattan, Bronx, Brooklyn, or Queens, to the **NYC Department of Finance**? If no recording is required, send your check(s), made payable to the **Department of Taxation and Finance**, directly to the NYS Tax Department, RETT Return Processing, PO Box 5045, Albany NY 12205-5045.

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36  
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

**THIS INDENTURE** made this 18<sup>th</sup> day of December, 2014, between Owner(s) The County of Westchester Industrial Development Agency, having an office at Michaelian Office Building, Room 903, 148 Martine Avenue, Yonkers New York 10710, County of Westchester, State of New York (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 ("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 the 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 site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

**WHEREAS**, Grantor, is the owner of real property located at the address of 323 Sprain Road in the City of Yonkers, County of Westchester and State of New York, known and designated on the tax map of the County Clerk of Westchester as tax map parcel numbers: Section 3 Block 3244 Lot 1, being the same as that property conveyed to Grantor by deed dated May 3, 1989 and recorded in the Westchester County Clerk's Office in Liber and Page, Liber 9528 Page 268. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 17.4369 +/- acres, and is hereinafter more fully described in the Land Title Survey dated April 16, 2011, prepared by Contractor's Line & Grade South, LLC, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

**WHEREAS**, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation



established for the 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 mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: W3-1056-05-03, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 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 restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements 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. (1) The Controlled Property may be used for:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),  
Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial  
as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, New York 12233  
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL 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 to Title 36 of Article 71 of the Environmental Conservation Law.**

F. 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.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:  
(i) are in-place;  
(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

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

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

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 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 part or all of the underlying fee interest to the Controlled Property, 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 violates this Environmental Easement, the Grantee may revoke the Certificate of Completion 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, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

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 any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:      Site Number: C360066  
Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:      Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

All notices and correspondence shall be delivered by hand, 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. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, 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, or the Commissioner's Designee, 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.

The County of Westchester Industrial Development Agency:

By: 

Print Name: James R. Coleman

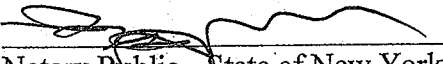
Title: Exec. Direct

Date: 12/2/14


**Grantor's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF                    )

On the 2nd day of December in the year 20 14, before me, the undersigned, personally appeared James Coleman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
\_\_\_\_\_  
Notary Public - State of New York  
YU FLORA WU-BIAGI  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01WU6260232  
Qualified in Westchester County  
My Commission Expires April 23, 20 16

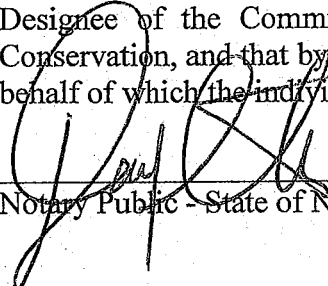
**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK**, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:   
Robert W. Schick, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

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

On the 18<sup>th</sup> day of December, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public - State of New York

**David J. Chiusano**  
Notary Public, State of New York  
No. 01CH5032146  
Qualified in Schenectady County  
Commission Expires August 22, 2018

**SCHEDULE "A" PROPERTY DESCRIPTION**

(Section 3 Block 3244 Lot 1)

All that certain piece or parcel of land, situate, lying and being in the City of Yonkers, County of Westchester and State of New York, known and designated as Lots P6 and P5 (also known as Block 3244, Lot 1) on a composite map of properties for Westchester Corporate Center prepared by Aristotle Bournazos dated 07/10/1989 last revised 11/02/1992 and being more particularly bounded and described as follows:

**BEGINNING** at a point along the southeasterly corner of Lot P6, said point being on the division line between Lots P6 and P2;

**RUNNING THENCE** from said point of beginning the following eighteen (18) courses and distances:

North 86° 36' 36" West a distance of 410.08 feet to a point;

North 61° 30' 37" West a distance of 304.00 feet to a point;

North 05° 02' 23" East a distance of 251.76 feet to a point;

North 84° 57' 37" West a distance of 159.18 feet to a point;

North 02° 40' 00" East a distance of 406.19 feet to a point;

Along a curve to the right having a radius of 730.00 feet and an arc length of 140.32 feet to a point;

North 13° 40' 49" East a distance of 89.22 feet to a point;

Along a curve to the right having a radius of 39.74 feet and an arc length of 62.85 feet to a point;

South 76° 19' 11" East a distance of 245.10 feet to a point;

Along a curve to the right having a radius of 270.00 feet and an arc length of 212.91 feet to a point;

South 31° 08' 20" East a distance of 211.14 feet to a point;

Along a curve to the left having a radius of 195.00 feet and an arc length of 229.58 feet to a point;

North 81° 24' 15" East a distance of 42.45 feet to a point;

Along a curve to the right having a radius of 364.12 feet and an arc length of 140.57 feet to a point;

South 76° 28' 37" East a distance of 123.89 feet to a point;

Along a curve to the right having a radius of 145.00 feet and an arc length of 98.41 feet to a point of reverse curve;

Along a curve to the left having a radius of 675.00 feet and an arc length of 401.63 feet to a point;

South 24° 58' 31" West a distance of 293.49 feet to a point, to the point and place of **BEGINNING**.

The above-described parcel contains 759,552.90 S.F. (17.4369 Acres) more or less.





**CITY OF YONKERS**  
**REAL PROPERTY TRANSFER TAX RETURN**  
**FINANCE DEPARTMENT**  
 PURSUANT TO CHAPTER 15 TAXES, ARTICLE V, GENERAL ORDINANCE 8-1973 AS AMENDED  
 BY G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

(Grantor:) <u>County of Westchester Industrial Development Agency</u> <small>Name</small> 148 Martine Avenue, Room 903 White Plains NY 10601 <small>Address City State Zip</small>	<b>NOTE: FILING OF THIS RETURN DOES NOT CONSTITUTE NOTICE TO THE CITY OF YONKERS TO CHANGE THE ADDRESS FOR PROPERTY TAXES. PROPERTY OWNERS MUST PROVIDE A WRITTEN NOTICE ADVISING THE CITY OF CORRECT NAME AND MAILING ADDRESS.</b>  SEND INFORMATION TO:  <b>CITY OF YONKERS</b> <b>ROOM 116</b> <b>40 SOUTH BROADWAY</b> <b>YONKERS, N.Y. 10701</b>
(Grantee) <u>The People of the State of New York Acting Through Commissioner of Department of Environmental Conservation</u> 625 Broadway Albany NY 12233 <small>Address City State Zip</small>	
(Grantor's Att'y) <u>John Loveless, One North Lexington Avenue, White Plains, NY 10601</u> <small>Name Address City State Zip</small>	
(Grantee's Att'y) <u>Office of General Counsel, NYSDEC, 625 Broadway, Albany, NY 12233-5500</u> <small>Name Address City State Zip</small>	
<b>LOCATION OF PROPERTY TRANSFERRED</b>	
Address: <u>323 Sprain Road</u>	
City Tax Map <u>3</u> <u>3244</u> <u>1</u> <small>Section      Block      Lot</small>	<b>FOR DEPARTMENT USE ONLY</b>
DATE OF DELIVERY OF DEED TO GRANTEE: <u>Easement to Grantee: 12/18/2014</u>	

**COMPUTATION OF TAX**

NOTES:

1. If item 1 is \$25,000 or less, enter zero in items 3 and 5. If exemption is claimed, attach signed affidavit showing grounds for exemption.
2. Where the transfer is by a corporation in liquidation or to a corporation in exchange for capital stock, complete Schedule B on Page 2.

1. Total Consideration Paid or Required to be Paid	0
2. Allocated Consideration Subject to Tax (Schedule A)	0
3. Tax Due-1.5% of Item 1 or 2 Whichever is Applicable	0
4. Add - Penalty and Interest	0
5. Total Tax, Penalty and Interest Due	0

MAKE CERTIFIED CHECK PAYABLE TO THE CITY OF YONKERS  
 CITY HALL - ROOM 210, 40 SOUTH BROADWAY, YONKERS, NEW YORK 10701

**AFFIDAVIT OF GRANTOR**

I swear (or affirm) that this return including the accompanying schedules or statements, has been examined by me, and is to the best of my knowledge and belief, a true and complete return, made in good faith, pursuant to Chapter 15, Article V, of the General Ordinance 8-1973 as amended by G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

Sworn to and subscribed to before me this \_\_\_\_\_ day of March 2015

County of Westchester Industrial Development Agency  
(Name of Grantor)

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

(Signature of owner, partner, officer of corporation, etc.)



Signature of Officer Administering Oath

**AFFIDAVIT OF GRANTEE**

I swear (or affirm) that this return including the accompanying schedules or statements, has been examined by me, and is to the best of my knowledge and belief, a true and complete return, made in good faith, pursuant to Chapter 15, Article V, of the General Ordinance 8-1973 as amended by G.O. 4-1984, G.O. 10-1989, G.O. 3-1998 and G.O. 7-2005

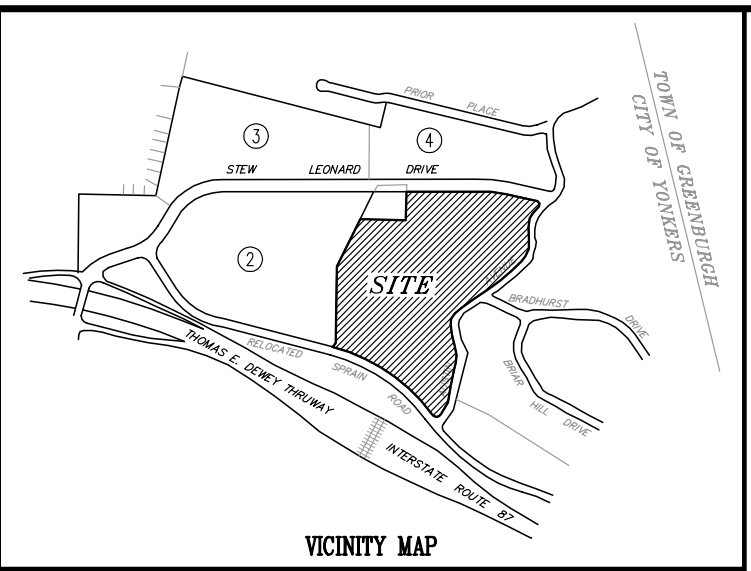
Sworn to and subscribed to before me this \_\_\_\_\_ day of March 2015

The People of the State of New York Acting Through Commissioner of Department of Environmental Conservation  
(Name of Grantee)



# **Appendix B**

## Metes and Bounds



**SURVEY CERTIFICATION:**  
 THIS CERTIFICATION IS MADE TO THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AMERICAN LAND SERVICES, INC. (TITLE NO. AL-41157) AND YONKERS CONTRACTING COMPANY, INC.

I HEREBY CERTIFY THAT THE SURVEY JOB NO. 10-1804, ENTITLED "FINAL ASBUILT (LOT 1, BLOCK 3244, SECTION 3) PREPARED FOR YONKERS CONTRACTING COMPANY, INC." WAS ACTUALLY MADE ON THE GROUND AND THAT IT AND THE INFORMATION, COURSES AND DISTANCES SHOWN THEREON ARE CORRECT AS RETURNED BY SAID SURVEYOR. THAT THE PROPERTY DESCRIBED HEREON IS THE SAME PROPERTY DESCRIBED IN TITLE REPORT NO. AL-41157, EFFECTIVE MARCH 15, 2011 ISSUED BY AMERICAN LAND SERVICES, INC., THAT ALL EASEMENTS, RIGHTS OF WAY, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY; THAT THE TITLE LINES AND LINES OF ACTUAL POSSESSION ARE THE SAME EXCEPT WHERE NOTED; THAT THE SIZE, LOCATION AND TYPE OF BUILDINGS AND IMPROVEMENTS ARE AS SHOWN AND ALL ARE WITHIN THE BOUNDARY LINES AND APPLICABLE SETBACK LINES OF THE PROPERTY; THE UNDERSIGNED IS NOT AWARE OF ANY VIOLATIONS OF ORDINANCES, RESTRICTIONS OR OTHER RULES AND REGULATIONS WITH REFERENCE TO THE LOCATION OF SAID BUILDINGS AND IMPROVEMENTS; THAT THERE ARE NOT ANY EASEMENTS OR USES AFFECTING THIS PROPERTY FROM A CAUTIONAL PHYSICAL INSPECTION OF THE SAME, OTHER THAN THOSE SHOWN AND DESCRIBED THEREON; THAT THERE ARE NO ENCROACHMENTS OR PARTY WALLS AFFECTING THIS PROPERTY OTHER THAN AS SHOWN; THAT POTABLE AND WASTE WATER, ELECTRIC, GAS AND TELEPHONE UTILITIES ARE LOCATED ON THE TRAIL AND APPEAR OPERATIONAL; THAT TO THE EXTENT KNOWN BY THE UNDERSIGNED, ANY UTILITY TRANSFORMERS ARE SPECIALLY NOTED; THAT ANY DISCHARGE INTO STREAMS, RIVERS OR OTHER CONVEYANCE SYSTEM IS SHOWN ON THE SURVEY; THAT THE PARCEL DESCRIBED HEREON DOES NOT LIE WITHIN FLOOD HAZARD AREAS IN ACCORDANCE WITH ANY MAPS ENTITLED "FLOOD INSURANCE RATE MAP" "FLOOD HAZARD FLOODWAY BOUNDARY MAP" "FLOOD HAZARD BOUNDARY MAP" OR "FLOOD BOUNDARY AND FLOODWAY MAP" PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY OR A FLOOD HAZARD BOUNDARY MAP PUBLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; THAT THE DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF "ZONE C", AREA OF MINIMAL FLOODING, BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT ON FLOOD INSURANCE RATE MAP WITH A DATE OF IDENTIFICATION OF AUGUST 15, 1980 FOR COMMUNITY PANEL NO. 30039-0004 IN WESTCHESTER COUNTY, STATE OF NEW YORK, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED; THE SAID PROPERTY CONSTITUTES ONE TAX LOT EXCEPT AS SHOWN ON THE SURVEY; AND THAT THE PROPERTY HAS DIRECT ACCESS TO SPRAIN ROAD AND STEW LEONARD DRIVE, PUBLIC ROADS MAINTAINED BY THE CITY OF YONKERS AND THE PROPERTY DESCRIBED IS THE SAME PROPERTY DESCRIBED IN TITLE REPORT NO. AL-41157 EFFECTIVE MARCH 15, 2011 ISSUED BY AMERICAN LAND SERVICES, INC.

THIS SURVEY WAS MADE IN ACCORDANCE WITH THE SURVEY REQUIREMENTS SET FORTH BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FOR AN ENVIRONMENTAL EASEMENT PACKAGE SUBMISSION.

DATE: APRIL 16, 2011  
 PRINT NAME: STEVEN J. WILLARD  
 REGISTERED PROFESSIONAL SURVEYOR  
 NO. 05064

CERTIFIED, AS NOTED AND LIMITED BELOW, ONLY TO:  
 - NEW YORK STATE - DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 - YONKERS CONTRACTING COMPANY, INC.

**NOTES & REFERENCES:**  
 THIS MAP IS BASED UPON A FIELD SURVEY COMPLETED IN MARCH 2011 AND UPON THE DEEDS AND TITLE INFORMATION PROVIDED BY AMERICAN LAND SERVICES, INC., TITLE NO. AL-41157, DATED MARCH 15, 2011.  
 PREMISES SHOWN HEREON IS LOT 1 OF BLOCK 3244 OF SECTION 3 OF THE CITY OF YONKERS TAX ASSESSMENT MAPS.  
 TOTAL SITE AREA - 758,552.90 S.F. (17,439 ACRES)  
 DEMARCATION LAYER AREA (EASEMENT SITE NO. C360066) - 610,072.38 S.F. (14,120 ACRES)  
 CONTOURS AND ELEVATIONS SHOWN HEREON ARE FROM AN ACTUAL FIELD SURVEY PERFORMED BY THE OFFICE OF CONTRACTORS' LINE & GRADE SOUTH IN MARCH 2011 AND REFER TO THE U.S. COASTAL & GEODETIC SURVEY DATUM (NAD83-29).  
 THE FOLLOWING MAPS WERE USED AS REFERENCES IN THE PREPARATION OF THE SURVEY:  
 A) "COUNTY OF WESTCHESTER, SURVEY OF LANDS TO BE CONVEYED BY THE CITY OF YONKERS TO THE COUNTY OF WESTCHESTER," BY ARISTOTLE BOURNAZOS, P.L.S., DATED JANUARY 29, 1983, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON APRIL 27, 1983 AS MAP NO. 21197.  
 B) "COUNTY OF WESTCHESTER, SURVEY OF LANDS FOR AUSTIN AVENUE DEVELOPMENT," BY ARISTOTLE BOURNAZOS, P.L.S., DATED FEBRUARY 1984, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON JUNE 13, 1984 AS MAP NO. 23357.  
 C) "COUNTY OF WESTCHESTER, SURVEY OF LANDS FOR AUSTIN AVENUE DEVELOPMENT," BY ARISTOTLE BOURNAZOS, P.L.S., DATED FEBRUARY 1984, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON APRIL 18, 1989 AS MAP NO. 23665.  
 D) "MAP OF LANDS & EASEMENT TO BE CONVEYED BETWEEN THE CITY OF NEW YORK AND THE WESTCHESTER COUNTY INDUSTRIAL DEVELOPMENT AGENCY," BY ARISTOTLE BOURNAZOS, P.L.S., LAST REVISED AUGUST 15, 1991, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON SEPTEMBER 1, 1991 AS MAP NO. 24561.  
 E) "MAP OF NEPPERHAN HEIGHTS," DATED FEBRUARY 1, 1889, FILED IN THE WESTCHESTER COUNTY REGISTERS OFFICE ON APRIL 18, 1889 AS MAP NO. 513.  
 F) "MAP OF NEPPERHAN HEIGHTS," BY W.K. COUZENS, CIVIL ENGINEER, DATED DECEMBER 11, 1872, FILED IN THE OFFICE OF REGISTER OF WESTCHESTER COUNTY ON APRIL 1, 1873 AS MAP NO. 57.  
 G) MAP ENTITLED "LAYING OUT AND OPENING OF CORPORATE DRIVE BETWEEN THOMAS E. DENEY THRUWAY AND AUSTIN AVENUE AND THE STRAIGHTENING AND WIDENING OF AUSTIN AVENUE BETWEEN SPRAIN ROAD AND PRIOR PLACE" FOR CITY OF YONKERS, DEPARTMENT OF ENGINEERING, PREPARED BY ARISTOTLE BOURNAZOS P.L.S. DATED JANUARY 20, 1989 LAST REVISED MARCH 15, 1989 AND FILED IN THE OFFICE OF THE COUNTY CLERK OF WESTCHESTER COUNTY (DEPARTMENT OF LAND RECORDS) ON APRIL 12, 1989 AS FILED MAP NO. 23658.

**SOURCES OF TITLE:**  
 A) AMERICAN LAND SERVICES, INC. TITLE NUMBER - AL-41157.  
 B) DEED FROM THE COUNTY OF WESTCHESTER TO THE COUNTY OF WESTCHESTER INDUSTRIAL DEVELOPMENT AGENCY, DATED MAY 3, 1989, RECORDED IN LIBER 9238 AT PAGE 268.  
**EASEMENTS OF RECORD:**  
 A) SUBSURFACE EASEMENT RIGHTS IN REFERENCE TO THE NEW CROTON ADEQUATE AND SURFACE EASEMENT RIGHTS IN REFERENCE TO SHAFT NO. 16 (LOCATED ON THE PARCEL OF LAND NORTH OF THE NORTHWEST CORNER OF THE SUBJECT PARCEL) CONTAINED IN DEED FROM THE CITY OF NEW YORK TO THE CITY OF YONKERS RECORDED IN LIBER 6655, PAGE 81.  
 B) SUBSURFACE EASEMENT RIGHTS OF THE NEW CROTON ADEQUATE AS SHOWN ON FILED MAPS NO. 21197 & NO. 23665, AND AS RELEASED ON THIS MAP.  
 C) COVENANTS AND RESTRICTIONS IN DEED IN LIBER 2799 PAGE 4, AS CORRECTED IN DEED IN LIBER 2992 PAGE 133.  
 D) RESERVATIONS AND RESTRICTIONS IN LIBER 6287 PAGE 330.  
 E) COVENANTS AND RESTRICTIONS AND EASEMENTS IN LIBER 6605 PAGE 81.  
 F) EASEMENT IN LIBER 11225 PAGE 59.  
 G) NOTICE OF APPROPRIATION IN LIBER 5337 PAGE 90.  
 H) EASEMENT RIGHTS (CROTON ADEQUATE) AS SHOWN ON MAP NUMBERS 87 & 2197.  
 I) EASEMENT SITE NUMBER (DEMARCATION LAYER) - C360066.

THE LOCATION OF EASEMENTS OF RECORD ON THIS MAP ARE REPRODUCED FROM THE ABOVE MENTIONED DEEDS AND FILED MAPS AND DUE TO THE LACK OF PHYSICAL MONUMENTATION, THEIR EXACT LOCATION MAY DIFFER SLIGHTLY BETWEEN SURVEYS.  
 THE LOCATION OF SUB-SURFACE UTILITIES ARE SHOWN PER PHYSICAL FEATURES FOUND, EVIDENCE VISIBLE FROM SURFACE INSPECTION AND AS MARKED IN THE FIELD BY AGENTS ON BEHALF OF THE UTILITY COMPANIES.  
 THIS PROPERTY FALLS WITHIN "ZONE C" IDENTIFIED AS AN AREA OF MINIMAL FLOODING AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 30039-0004, EFFECTIVE DATE AUGUST 15, 1980.  
 ONLY COPIES OF THIS SURVEY MAP MARKED WITH BOTH THIS SURVEYOR'S ORIGINAL SEAL AND SIGNATURE SHALL BE CONSIDERED AS VALID TRUE COPIES.  
 UNDERGROUND IMPROVEMENTS, STRUCTURES, UTILITIES OR ENCROACHMENTS, AND ANY EASEMENTS RELATED THEREON, ARE NOT SHOWN HEREON UNLESS OTHERWISE NOTED. THE LOCATION, EXTENT AND SIZES OF UNDERGROUND UTILITIES ARE NOT GUARANTEED OR CERTIFIED AS COMPLETE OR ACCURATE. CONSULT WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO DESIGNING IMPROVEMENTS, COMMENCING CONSTRUCTION, OR CONSTRUCTION.  
 THE PROPERTY SHOWN HEREON MAY BE SUBJECT TO RESTRICTIONS, COVENANTS AND/OR EASEMENTS, WRITTEN OR IMPLIED.  
 THE SURVEYOR'S SEAL SIGNATURE AND ANY CERTIFICATION APPEARING HEREON SIGNIFY THAT, TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR LAND SURVEYS AS SET FORTH IN THE CODE OF PRACTICE ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC.  
 UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.  
 CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THIS SURVEY WAS PREPARED, AND ON HIS BEHALF, TO THE TITLE COMPANY, LENDING INSTITUTION AND GOVERNMENTAL AGENCY LISTED HEREON. SAID CERTIFICATIONS ARE NOT INTENDED TO RUN TO ANY OTHER COMPANIES, LENDING INSTITUTIONS, SUBSEQUENT OWNERS OR FUTURE CONTRACT VENUEES.

**CONTRACTORS' LINE & GRADE SOUTH L.L.C.**  
 23 Nepperhan Avenue  
 Elmsford, New York 10523  
 Phone: (914) 347-3142 Fax: (914) 347-3120

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL, 625 BROADWAY, ALBANY, NY 12233 OR AT [deweb@dec.state.ny.us](mailto:deweb@dec.state.ny.us)

**SUBJECT PARCEL DESCRIPTION**  
 (Section 3 Block 3244 Lot 1)

All that certain piece or parcel of land, situate, lying and being in the City of Yonkers, County of Westchester and State of New York, known and designated as Block 3244, Lot 1 on a map entitled "Laying Out and Opening of Corporate Drive between Thomas E. Denev Thruway and Austin Avenue and the Straightening and Widening of Sprain Road between Corporate Drive and North City Line and the Straightening and Widening of Austin Avenue between Sprain Road and Prior Place" for City of Yonkers, Department of Engineering prepared by Aristotile Bournazos P.L.S. dated January 20, 1989 last revised March 15, 1989 and filed in the Office of the County Clerk of Westchester County (Department of Land Records) on April 12, 1989 as Filed Map No. 23658, and being more particularly bounded and described as follows:  
 BEGINNING at a point along the southeasterly corner of Lot 1, said point being on the division line between Lots 1 and 2;  
 RUNNING THENCE from said point of beginning the following eighteen (18) courses and distances:

- Along a curve to the left having a radius of 675.00 feet and an arc length of 401.63 feet to a point;
  - South 24 degrees 58 minutes 31 seconds West a distance of 283.49 feet to a point;
  - North 86 degrees 36 minutes 36 seconds West a distance of 410.06 feet to a point;
  - North 61 degrees 30 minutes 37 seconds West a distance of 304.00 feet to a point;
  - North 05 degrees 02 minutes 23 seconds East a distance of 251.76 feet to a point;
  - North 84 degrees 57 minutes 37 seconds West a distance of 159.18 feet to a point;
  - North 02 degrees 40 minutes 00 seconds East a distance of 408.19 feet to a point;
  - Along a curve to the right having a radius of 750.00 feet and an arc length of 140.32 feet to a point;
  - North 15 degrees 19 minutes 49 seconds East a distance of 89.22 feet to a point;
  - Along a curve to the right having a radius of 39.74 feet and an arc length of 62.85 feet to a point;
  - South 76 degrees 19 minutes 11 seconds East a distance of 245.10 feet to a point;
  - Along a curve to the right having a radius of 270.00 feet and an arc length of 212.91 feet to a point;
  - South 31 degrees 08 minutes 20 seconds East a distance of 211.14 feet to a point;
  - Along a curve to the left having a radius of 195.00 feet and an arc length of 229.36 feet to a point;
  - North 81 degrees 24 minutes 15 seconds East a distance of 42.45 feet to a point;
  - Along a curve to the right having a radius of 364.12 feet and an arc length of 140.57 feet to a point;
  - South 76 degrees 28 minutes 37 seconds East a distance of 123.89 feet to a point;
  - Along a curve to the right having a radius of 145.00 feet and an arc length of 98.41 feet to the point of reverse curve and place of BEGINNING.
- The above-described parcel contains 759,552.90 S.F. (17,439 Acres) more or less.

**ENVIRONMENTAL EASEMENT DESCRIPTION & CHART**  
 DEMARCATION LAYER (EASEMENT SITE NO. C360066)  
 AREA - 614,482.80 S.F. (14,106 ACRES)

All that certain piece or parcel of land, situate, lying and being in the City of Yonkers, County of Westchester and State of New York, known and designated as Block 3244, Lot 1 on a map entitled "Laying Out and Opening of Corporate Drive between Thomas E. Denev Thruway and Austin Avenue and the Straightening and Widening of Sprain Road between Corporate Drive and North City Line and the Straightening and Widening of Austin Avenue between Sprain Road and Prior Place" for City of Yonkers, Department of Engineering prepared by Aristotile Bournazos P.L.S. dated January 20, 1989 last revised March 15, 1989 and filed in the Office of the County Clerk of Westchester County (Department of Land Records) on April 12, 1989 as Filed Map No. 23658, and being more particularly bounded and described as follows:  
 RUNNING THENCE from a point along the southeasterly corner of Lot 1, said point being on the division line between Lots 1 and 2;  
 RUNNING THENCE the following six (6) courses and distances:

- Along a curve to the left having a radius of 675.00 feet and an arc length of 401.63 feet to a point;
- South 24 degrees 58 minutes 31 seconds West a distance of 283.49 feet to a point;
- North 86 degrees 36 minutes 36 seconds West a distance of 410.06 feet to a point;
- North 61 degrees 30 minutes 37 seconds West a distance of 304.00 feet to a point;
- North 05 degrees 02 minutes 23 seconds East a distance of 251.76 feet to a point;
- North 84 degrees 57 minutes 37 seconds West a distance of 159.18 feet to the place and point of BEGINNING.

RUNNING THENCE along the following courses and distances in the chart below:

COURSE	LENGTH	RADIUS	BEARING	COURSE	LENGTH	RADIUS	BEARING
C1	140.32	750.00	S 76°19'11" E	L1	408.19	0.00	N 02°40'00" E
C2	62.85	39.74	S 76°19'11" E	L2	211.14	0.00	N 31°08'20" E
L3	251.76	0.00	N 05°02'23" E	L11	211.14	0.00	S 76°19'11" E
L4	251.76	0.00	N 05°02'23" E	L12	211.14	0.00	S 76°19'11" E
L5	245.10	0.00	S 76°19'11" E	L13	211.14	0.00	S 76°19'11" E
L6	159.18	0.00	S 76°19'11" E	L14	211.14	0.00	S 76°19'11" E
L7	189.85	0.00	S 76°19'11" E	L15	211.14	0.00	S 76°19'11" E
L8	159.18	0.00	S 76°19'11" E	L16	211.14	0.00	S 76°19'11" E
L9	410.06	0.00	S 76°19'11" E	L17	211.14	0.00	S 76°19'11" E
L10	283.49	0.00	S 24°58'31" W	L18	211.14	0.00	S 24°58'31" W
L19	283.49	0.00	S 24°58'31" W	L19	211.14	0.00	S 24°58'31" W
L20	283.49	0.00	S 24°58'31" W	L20	211.14	0.00	S 24°58'31" W
L21	283.49	0.00	S 24°58'31" W	L21	211.14	0.00	S 24°58'31" W
L22	283.49	0.00	S 24°58'31" W	L22	211.14	0.00	S 24°58'31" W
L23	283.49	0.00	S 24°58'31" W	L23	211.14	0.00	S 24°58'31" W
L24	283.49	0.00	S 24°58'31" W	L24	211.14	0.00	S 24°58'31" W
L25	283.49	0.00	S 24°58'31" W	L25	211.14	0.00	S 24°58'31" W
L26	283.49	0.00	S 24°58'31" W	L26	211.14	0.00	S 24°58'31" W
L27	283.49	0.00	S 24°58'31" W	L27	211.14	0.00	S 24°58'31" W
L28	283.49	0.00	S 24°58'31" W	L28	211.14	0.00	S 24°58'31" W
L29	283.49	0.00	S 24°58'31" W	L29	211.14	0.00	S 24°58'31" W
L30	283.49	0.00	S 24°58'31" W	L30	211.14	0.00	S 24°58'31" W
L31	283.49	0.00	S 24°58'31" W	L31	211.14	0.00	S 24°58'31" W
L32	283.49	0.00	S 24°58'31" W	L32	211.14	0.00	S 24°58'31" W
L33	283.49	0.00	S 24°58'31" W	L33	211.14	0.00	S 24°58'31" W
L34	283.49	0.00	S 24°58'31" W	L34	211.14	0.00	S 24°58'31" W
L35	283.49	0.00	S 24°58'31" W	L35	211.14	0.00	S 24°58'31" W
L36	283.49	0.00	S 24°58'31" W	L36	211.14	0.00	S 24°58'31" W
L37	283.49	0.00	S 24°58'31" W	L37	211.14	0.00	S 24°58'31" W
L38	283.49	0.00	S 24°58'31" W	L38	211.14	0.00	S 24°58'31" W
L39	283.49	0.00	S 24°58'31" W	L39	211.14	0.00	S 24°58'31" W
L40	283.49	0.00	S 24°58'31" W	L40	211.14	0.00	S 24°58'31" W
L41	283.49	0.00	S 24°58'31" W	L41	211.14	0.00	S 24°58'31" W
L42	283.49	0.00	S 24°58'31" W	L42	211.14	0.00	S 24°58'31" W
L43	283.49	0.00	S 24°58'31" W	L43	211.14	0.00	S 24°58'31" W
L44	283.49	0.00	S 24°58'31" W	L44	211.14	0.00	S 24°58'31" W
L45	283.49	0.00	S 24°58'31" W	L45	211.14	0.00	S 24°58'31" W
L46	283.49	0.00	S 24°58'31" W	L46	211.14	0.00	S 24°58'31" W
L47	283.49	0.00	S 24°58'31" W	L47	211.14	0.00	S 24°58'31" W
L48	283.49	0.00	S 24°58'31" W	L48	211.14	0.00	S 24°58'31" W
L49	283.49	0.00	S 24°58'31" W	L49	211.14	0.00	S 24°58'31" W
L50	283.49	0.00	S 24°58'31" W	L50	211.14	0.00	S 24°58'31" W
L51	283.49	0.00	S 24°58'31" W	L51	211.14	0.00	S 24°58'31" W
L52	283.49	0.00	S 24°58'31" W	L52	211.14	0.00	S 24°58'31" W
L53	283.49	0.00	S 24°58'31" W	L53	211.14	0.00	S 24°58'31" W
L54	283.49	0.00	S 24°58'31" W	L54	211.14	0.00	S 24°58'31" W
L55	283.49	0.00	S 24°58'31" W	L55	211.14	0.00	S 24°58'31" W
L56	283.49	0.00	S 24°58'31" W	L56	211.14	0.00	S 24°58'31" W
L57	283.49	0.00	S 24°58'31" W	L57	211.14	0.00	S 24°58'31" W
L58	283.49	0.00	S 24°58'31" W	L58	211.14	0.00	S 24°58'31" W



**FINAL ASBUILT**  
 (LOT 1, BLOCK 3244, SECTION 3)  
 PREPARED FOR  
**YONKERS CONTRACTING CO., INC.**  
 PROPERTY SITUATE IN THE  
**CITY OF YONKERS**  
**COUNTY OF WESTCHESTER**  
 STATE OF NEW YORK  
 GRAPHIC SCALE  
 1 inch = 50 ft.  
 DATE: MAY 11, 2011

NO.	DATE	DESCRIPTION	BY
2.	03/06/2014	REVISED ENVIRONMENTAL EASEMENT	TZ
1.	11/09/2013	REVISED PARCEL & EASEMENT DESCRIPTIONS	TZ

# **Appendix C**

## EC As-Built Drawings

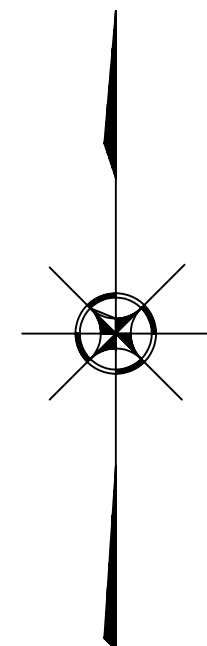
UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THIS SURVEY WAS PREPARED, AND ON HIS BEHALF, TO THE TITLE COMPANY, LENDING INSTITUTION AND GOVERNMENTAL AGENCY LISTED HEREON; SAID CERTIFICATIONS ARE NOT INTENDED TO RUN TO ADDITIONAL TITLE COMPANIES, LENDING INSTITUTIONS, SUBSEQUENT OWNERS OR FUTURE CONTRACT VENEDEES.

ONLY COPIES OF THIS SURVEY MAP MARKED WITH BOTH THIS SURVEYOR'S ORIGINAL SEAL AND SIGNATURE SHALL BE CONSIDERED AS VALID TRUE COPIES.

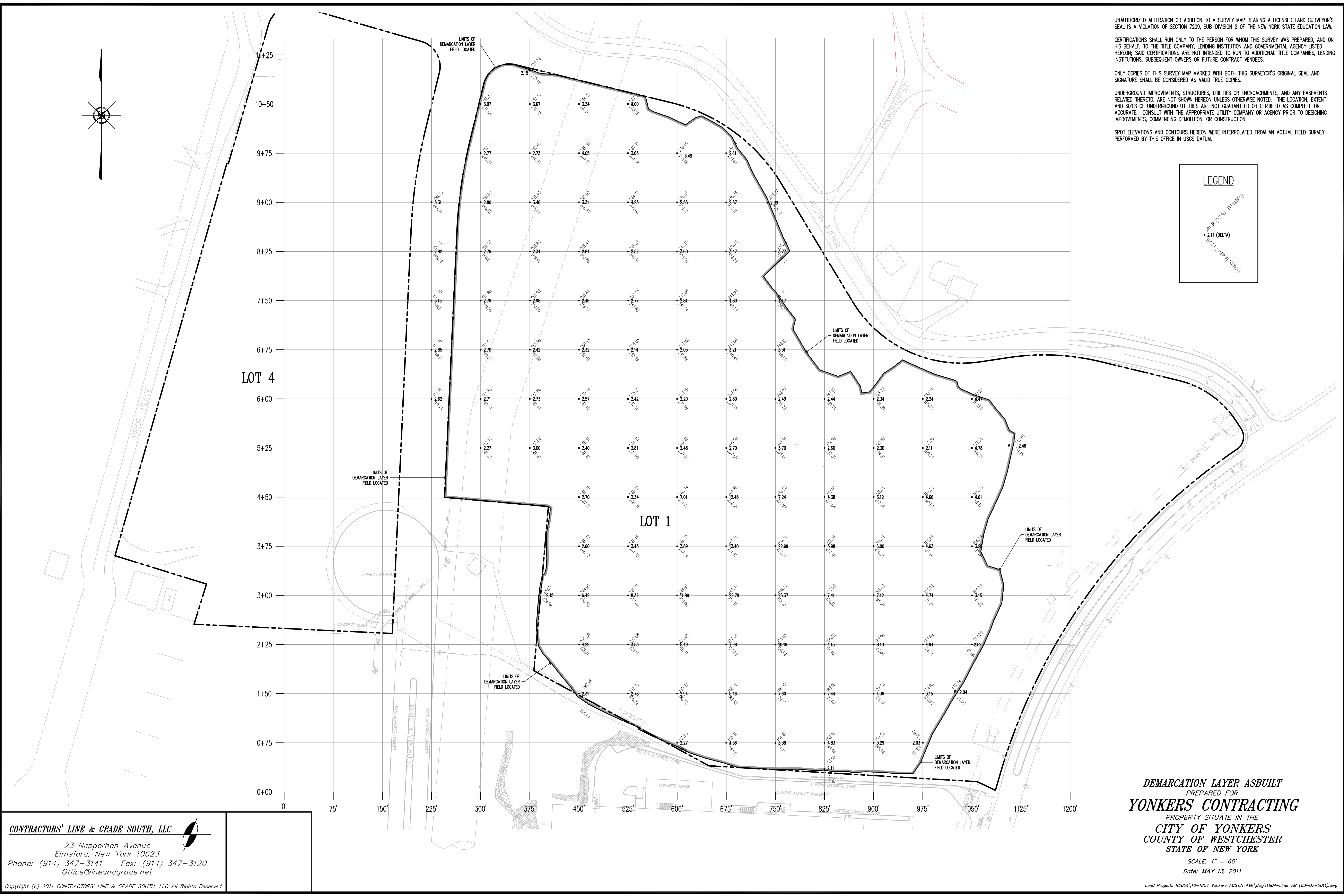
UNDERGROUND IMPROVEMENTS, STRUCTURES, UTILITIES OR ENCROACHMENTS, AND ANY EASEMENTS RELATED THERETO, ARE NOT SHOWN HEREON UNLESS OTHERWISE NOTED. THE LOCATION, EXTENT AND SIZES OF UNDERGROUND UTILITIES ARE NOT GUARANTEED OR CERTIFIED AS COMPLETE OR ACCURATE. CONSULT WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO DESIGNING IMPROVEMENTS, COMMENCING DEMOLITION, OR CONSTRUCTION.

SPOT ELEVATIONS AND CONTOURS HEREON WERE INTERPOLATED FROM AN ACTUAL FIELD SURVEY PERFORMED BY THIS OFFICE IN USGS DATUM.



**LEGEND**

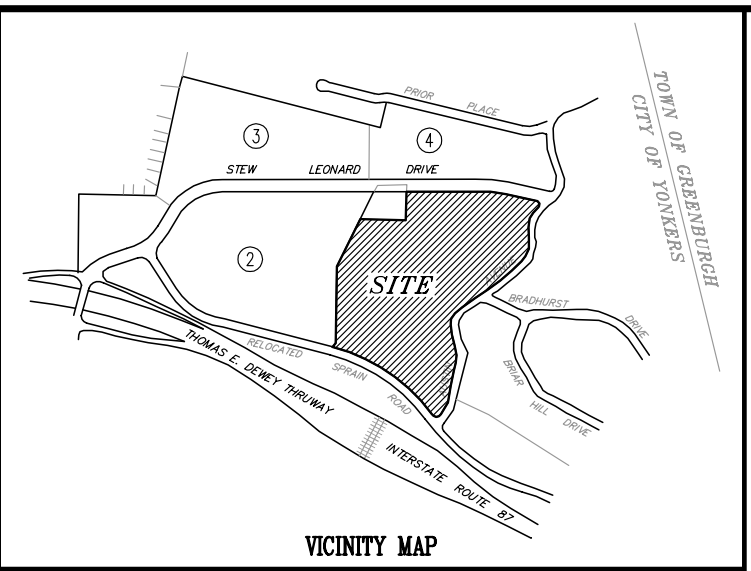
- 78.58 (TERRAIN ELEVATION)
- 2.11 (DELTA)
- 29.27 (LOWER ELEVATION)



**CONTRACTORS' LINE & GRADE SOUTH, LLC**  
23 Nepperhan Avenue  
Elmsford, New York 10523  
Phone: (914) 347-3141 Fax: (914) 347-3120  
Office@ineandgrade.net

**DEMARCATION LAYER ASBUILT**  
PREPARED FOR  
**YONKERS CONTRACTING**  
PROPERTY SITUATE IN THE  
**CITY OF YONKERS**  
**COUNTY OF WESTCHESTER**  
**STATE OF NEW YORK**

SCALE: 1" = 60'  
Date: MAY 13, 2011



**SURVEY CERTIFICATION:**  
 THIS CERTIFICATION IS MADE TO THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AMERICAN LAND SERVICES, INC. (TITLE NO. AL-41157) AND YONKERS CONTRACTING COMPANY, INC.

I HEREBY CERTIFY THAT THE SURVEY JOB NO. 10-1804, ENTITLED "FINAL ASBUILT (LOT 1, BLOCK 3244, SECTION 3) PREPARED FOR YONKERS CONTRACTING COMPANY, INC." WAS ACTUALLY MADE ON THE GROUND AND THAT IT AND THE INFORMATION, COURSES AND DISTANCES SHOWN THEREON ARE CORRECT AS RETURNED BY SAID SURVEYOR. THAT THE PROPERTY DESCRIBED HEREON IS THE SAME PROPERTY DESCRIBED IN TITLE REPORT NO. AL-41157, EFFECTIVE MARCH 15, 2011 ISSUED BY AMERICAN LAND SERVICES, INC., THAT ALL EASEMENTS, RIGHTS OF WAY, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY; THAT THE TITLE LINES AND LINES OF ACTUAL POSSESSION ARE THE SAME EXCEPT WHERE NOTED; THAT THE SIZE, LOCATION AND TYPE OF BUILDINGS AND IMPROVEMENTS ARE AS SHOWN AND ALL ARE WITHIN THE BOUNDARY LINES AND APPLICABLE SETBACK LINES OF THE PROPERTY; THE UNDERSIGNED IS NOT AWARE OF ANY VIOLATIONS OF ORDINANCES, RESTRICTIONS OR OTHER RULES AND REGULATIONS WITH REFERENCE TO THE LOCATION OF SAID BUILDINGS AND IMPROVEMENTS; THAT THERE ARE NOT ANY EASEMENTS OR USES AFFECTING THIS PROPERTY FROM A CAUTIONAL PHYSICAL INSPECTION OF THE SAME, OTHER THAN THOSE SHOWN AND DESCRIBED THEREON; THAT THERE ARE NO ENCROACHMENTS OR PARTY WALLS AFFECTING THIS PROPERTY OTHER THAN AS SHOWN; THAT POTABLE AND WASTE WATER, ELECTRIC, GAS AND TELEPHONE UTILITIES ARE LOCATED ON THE TRAIL AND APPEAR OPERATIONAL; THAT TO THE EXTENT KNOWN BY THE UNDERSIGNED, ANY UTILITY TRANSFORMERS ARE SPECIALLY NOTED; THAT ANY DISCHARGE INTO STREAMS, RIVERS OR OTHER CONVEYANCE SYSTEM IS SHOWN ON THE SURVEY; THAT THE PARCEL DESCRIBED HEREON DOES NOT LIE WITHIN FLOOD HAZARD AREAS IN ACCORDANCE WITH ANY MAPS ENTITLED "FLOOD INSURANCE RATE MAP" "FLOOD HAZARD FLOODWAY BOUNDARY MAP" "FLOOD HAZARD BOUNDARY MAP" OR "FLOOD BOUNDARY AND FLOODWAY MAP" PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY OR A FLOOD HAZARD BOUNDARY MAP PUBLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; THAT THE DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF "ZONE C", AREA OF MINIMAL FLOODING, BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT ON FLOOD INSURANCE RATE MAP WITH A DATE OF IDENTIFICATION OF AUGUST 15, 1980 FOR COMMUNITY PANEL NO. 30039-0004 IN WESTCHESTER COUNTY, STATE OF NEW YORK, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED; THE SAID PROPERTY CONSTITUTES ONE TAX LOT EXCEPT AS SHOWN ON THE SURVEY; AND THAT THE PROPERTY HAS DIRECT ACCESS TO SPRAIN ROAD AND STEW LEONARD DRIVE, PUBLIC ROADS MAINTAINED BY THE CITY OF YONKERS AND THE PROPERTY DESCRIBED IS THE SAME PROPERTY DESCRIBED IN TITLE REPORT NO. AL-41157 EFFECTIVE MARCH 15, 2011 ISSUED BY AMERICAN LAND SERVICES, INC.

THIS SURVEY WAS MADE IN ACCORDANCE WITH THE SURVEY REQUIREMENTS SET FORTH BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FOR AN ENVIRONMENTAL EASEMENT PACKAGE SUBMISSION.

*Steven Willard* DATE: APRIL 16, 2011

PRINT NAME: STEVEN WILLARD

REGISTERED PROFESSIONAL SURVEYOR  
 NO. 05064

CERTIFIED, AS NOTED AND LIMITED BELOW, ONLY TO:  
 - NEW YORK STATE - DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 - YONKERS CONTRACTING COMPANY, INC.

**NOTES & REFERENCES:**  
 THIS MAP IS BASED UPON A FIELD SURVEY COMPLETED IN MARCH 2011 AND UPON THE DEEDS AND TITLE INFORMATION PROVIDED BY AMERICAN LAND SERVICES, INC., TITLE NO. AL-41157, DATED MARCH 15, 2011.

PREMISES SHOWN HEREON IS LOT 1 OF BLOCK 3244 OF SECTION 3 OF THE CITY OF YONKERS TAX ASSESSMENT MAPS.  
 TOTAL SITE AREA - 768,592.90 S.F. (17,439 ACRES)  
 DEMARCATION LAYER AREA (EASEMENT SITE NO. C360066) - 610,072.38 S.F. (14,120 ACRES)

CONTOURS AND ELEVATIONS SHOWN HEREON ARE FROM AN ACTUAL FIELD SURVEY PERFORMED BY THE OFFICE OF CONTRACTORS' LINE & GRADE SOUTH IN MARCH 2011 AND REFER TO THE U.S. COASTAL & GEODETIC SURVEY DATUM (MGSN-29).

THE FOLLOWING MAPS WERE USED AS REFERENCES IN THE PREPARATION OF THE SURVEY:

- "COUNTY OF WESTCHESTER, SURVEY OF LANDS TO BE CONVEYED BY THE CITY OF YONKERS TO THE COUNTY OF WESTCHESTER," BY ARISTOTLE BOURNAZOS, P.L.S., DATED JANUARY 29, 1983, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON APRIL 27, 1983 AS MAP NO. 21197.
- "COUNTY OF WESTCHESTER, SURVEY OF LANDS FOR AUSTIN AVENUE DEVELOPMENT," BY ARISTOTLE BOURNAZOS, P.L.S., DATED FEBRUARY 1984, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON JUNE 13, 1984 AS MAP NO. 22357.
- "COUNTY OF WESTCHESTER, SURVEY OF LANDS FOR AUSTIN AVENUE DEVELOPMENT," BY ARISTOTLE BOURNAZOS, P.L.S., DATED FEBRUARY 1984, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON APRIL 18, 1989 AS MAP NO. 23665.
- "MAP OF LANDS & EASEMENT TO BE CONVEYED BETWEEN THE CITY OF NEW YORK AND THE WESTCHESTER COUNTY INDUSTRIAL DEVELOPMENT AGENCY," BY ARISTOTLE BOURNAZOS, P.L.S., LAST REVISED AUGUST 15, 1991, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON SEPTEMBER 1, 1991 AS MAP NO. 24561.
- "MAP OF NEPPERHAN HEIGHTS," DATED FEBRUARY 1, 1989, FILED IN THE WESTCHESTER COUNTY REGISTERS OFFICE ON APRIL 18, 1989 AS MAP NO. 513.
- "MAP OF NEPPERHAN HEIGHTS," BY M.K. COUZENS, CIVIL ENGINEER, DATED DECEMBER 11, 1972, FILED IN THE OFFICE OF REGISTER OF WESTCHESTER COUNTY ON APRIL 1, 1973 AS MAP NO. 57.
- "MAP ENTITLED 'LAYING OUT AND OPENING OF CORPORATE DRIVE BETWEEN THOMAS E. DENEY THRUWAY AND AUSTIN AVENUE AND THE STRAIGHTENING AND WIDENING OF AUSTIN AVENUE BETWEEN SPRAIN ROAD AND PRIOR PLACE' FOR CITY OF YONKERS, DEPARTMENT OF ENGINEERING, PREPARED BY ARISTOTLE BOURNAZOS P.L.S. DATED JANUARY 20, 1989 LAST REVISED MARCH 15, 1989 AND FILED IN THE OFFICE OF THE COUNTY CLERK OF WESTCHESTER COUNTY (DEPARTMENT OF LAND RECORDS) ON APRIL 12, 1989 AS FILED MAP NO. 23658.

**SOURCES OF TITLE:**

- AMERICAN LAND SERVICES, INC. TITLE NUMBER - AL-41157.
- DEED FROM THE COUNTY OF WESTCHESTER TO THE COUNTY OF WESTCHESTER INDUSTRIAL DEVELOPMENT AGENCY, DATED MAY 3, 1989, RECORDED IN LIBER 9238 AT PAGE 268.

**EASEMENTS OF RECORD:**

- SUBSURFACE EASEMENT RIGHTS IN REFERENCE TO THE NEW CROTON ADEQUATE AND SURFACE EASEMENT RIGHTS IN REFERENCE TO SHAFI NO. 16 (LOCATED ON THE PARCEL OF LAND NORTH OF THE NORTHWEST CORNER OF THE SUBJECT PARCEL) CONTAINED IN DEED FROM THE CITY OF NEW YORK TO THE CITY OF YONKERS RECORDED IN LIBER 6655, PAGE 81.
- SUBSURFACE EASEMENT RIGHTS OF THE NEW CROTON ADEQUATE AS SHOWN ON FILED MAPS NO. 21197 & NO. 23665, AND AS RECORDED ON THIS MAP.
- COVENANTS AND RESTRICTIONS IN DEED IN LIBER 2799 PAGE 4, AS CORRECTED IN DEED IN LIBER 2992 PAGE 133.
- RESERVATIONS AND RESTRICTIONS IN LIBER 6287 PAGE 330.
- COVENANTS AND RESTRICTIONS AND EASEMENTS IN LIBER 6605 PAGE 81.
- EASEMENT IN LIBER 11225 PAGE 59.
- NOTICE OF APPROPRIATION IN LIBER 5337 PAGE 90.
- EASEMENT RIGHTS (CROTON ADEQUATE) AS SHOWN ON MAP NUMBERS 87 & 2197.
- EASEMENT SITE NUMBER (DEMARCATION LAYER) - C360066.

THE LOCATION OF EASEMENTS OF RECORD ON THIS MAP ARE REPRODUCED FROM THE ABOVE MENTIONED DEEDS AND FILED MAPS AND DUE TO THE LACK OF PHYSICAL MONUMENTATION, THEIR EXACT LOCATION MAY DIFFER SLIGHTLY BETWEEN SURVEYS.

THE LOCATION OF SUB-SURFACE UTILITIES ARE SHOWN PER PHYSICAL FEATURES FOUND, EVIDENCE VISIBLE FROM SURFACE INSPECTION AND AS MARKED IN THE FIELD BY AGENTS ON BEHALF OF THE UTILITY COMPANIES.

THIS PROPERTY FALLS WITHIN "ZONE C" IDENTIFIED AS AN AREA OF MINIMAL FLOODING AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 30039-0004, EFFECTIVE DATE AUGUST 15, 1980.

ONLY COPIES OF THIS SURVEY MAP MARKED WITH BOTH THIS SURVEYOR'S ORIGINAL SEAL AND SIGNATURE SHALL BE CONSIDERED AS VALID TRUE COPIES.

UNDERGROUND IMPROVEMENTS, STRUCTURES, UTILITIES OR ENCROACHMENTS, AND ANY EASEMENTS RELATED THEREON, ARE NOT SHOWN HEREON UNLESS OTHERWISE NOTED. THE LOCATION, EXTENT AND SIZES OF UNDERGROUND UTILITIES ARE NOT GUARANTEED OR CERTIFIED AS COMPLETE OR ACCURATE. CONSULT WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO DESIGNING IMPROVEMENTS, COMMENCING CONSTRUCTION, OR CONSTRUCTION.

THE PROPERTY SHOWN HEREON MAY BE SUBJECT TO RESTRICTIONS, COVENANTS AND/OR EASEMENTS, WRITTEN OR IMPLIED.

THE SURVEYOR'S SEAL SIGNATURE AND ANY CERTIFICATION APPEARING HEREON SIGNIFY THAT, TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR LAND SURVEYS AS SET FORTH IN THE CODE OF PRACTICE ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THIS SURVEY WAS PREPARED, AND ON HIS BEHALF, TO THE TITLE COMPANY, LENDING INSTITUTION AND GOVERNMENTAL AGENCY LISTED HEREON. SAID CERTIFICATIONS ARE NOT INTENDED TO BIND TO ANY OTHER COMPANIES, LENDING INSTITUTIONS, SUBSEQUENT OWNERS OR FUTURE CONTRACT VENUEES.

**CONTRACTORS' LINE & GRADE SOUTH L.L.C.**  
 23 Nepperhan Avenue  
 Elmsford, New York 10523  
 Phone: (914) 347-3142 Fax: (914) 347-3120

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL, 625 BROADWAY, ALBANY, NY 12233 OR AT [derweb@dec.state.ny.us](mailto:derweb@dec.state.ny.us)

2.	03/06/2014	REVISED ENVIRONMENTAL EASEMENT	TZ
1.	11/09/2013	REVISED PARCEL & EASEMENT DESCRIPTIONS	TZ
NO.	DATE	DESCRIPTION	BY

**SUBJECT PARCEL DESCRIPTION**  
 (Section 3 Block 3244 Lot 1)

All that certain piece or parcel of land, situate, lying and being in the City of Yonkers, County of Westchester and State of New York, known and designated as Block 3244, Lot 1 on a map entitled "Laying Out and Opening of Corporate Drive between Thomas E. Deneby Thruway and Austin Avenue and the Straightening and Widening of Sprain Road between Corporate Drive and North City Line and the Straightening and Widening of Austin Avenue between Sprain Road and Prior Place" for City of Yonkers, Department of Engineering prepared by Aristotile Bournazos P.L.S. dated January 20, 1989 last revised March 15, 1989 and filed in the Office of the County Clerk of Westchester County (Department of Land Records) on April 12, 1989 as Filed Map No. 23658, and being more particularly bounded and described as follows:

BEGINNING AT A POINT ALONG THE SOUTHEASTERLY CORNER OF LOT 1, SAID POINT BEING ON THE DIVISION LINE BETWEEN LOTS 1 AND 2;

RUNNING THENCE FROM SAID POINT OF BEGINNING THE FOLLOWING EIGHTEEN (18) COURSES AND DISTANCES:

- Along a curve to the left having a radius of 675.00 feet and an arc length of 401.63 feet to a point;
- South 24 degrees 58 minutes 31 seconds West a distance of 283.49 feet to a point;
- North 86 degrees 36 minutes 36 seconds West a distance of 410.08 feet to a point;
- North 61 degrees 30 minutes 37 seconds West a distance of 304.00 feet to a point;
- North 05 degrees 02 minutes 23 seconds East a distance of 251.76 feet to a point;
- North 84 degrees 57 minutes 37 seconds West a distance of 159.18 feet to a point;
- North 02 degrees 40 minutes 00 seconds East a distance of 408.19 feet to a point;
- Along a curve to the right having a radius of 750.00 feet and an arc length of 140.32 feet to a point;
- North 15 degrees 19 minutes 49 seconds East a distance of 89.22 feet to a point;
- Along a curve to the right having a radius of 39.74 feet and an arc length of 62.85 feet to a point;
- South 76 degrees 19 minutes 11 seconds East a distance of 245.10 feet to a point;
- Along a curve to the right having a radius of 270.00 feet and an arc length of 212.91 feet to a point;
- South 31 degrees 08 minutes 20 seconds East a distance of 211.14 feet to a point;
- Along a curve to the left having a radius of 195.00 feet and an arc length of 229.36 feet to a point;
- North 81 degrees 24 minutes 15 seconds East a distance of 42.45 feet to a point;
- Along a curve to the right having a radius of 364.12 feet and an arc length of 140.57 feet to a point;
- South 76 degrees 28 minutes 37 seconds East a distance of 123.89 feet to a point;
- Along a curve to the right having a radius of 145.00 feet and an arc length of 98.41 feet to the point of reverse curve and place of BEGINNING.

The above-described parcel contains 759,552.90 S.F. (17,439 Acres) more or less.

**ENVIRONMENTAL EASEMENT DESCRIPTION & CHART**  
 DEMARCATION LAYER (EASEMENT SITE NO. C360066)  
 AREA - 614,482.80 S.F. (14,106 ACRES)

All that certain piece or parcel of land, situate, lying and being in the City of Yonkers, County of Westchester and State of New York, known and designated as Block 3244, Lot 1 on a map entitled "Laying Out and Opening of Corporate Drive between Thomas E. Deneby Thruway and Austin Avenue and the Straightening and Widening of Sprain Road between Corporate Drive and North City Line and the Straightening and Widening of Austin Avenue between Sprain Road and Prior Place" for City of Yonkers, Department of Engineering prepared by Aristotile Bournazos P.L.S. dated January 20, 1989 last revised March 15, 1989 and filed in the Office of the County Clerk of Westchester County (Department of Land Records) on April 12, 1989 as Filed Map No. 23658, and being more particularly bounded and described as follows:

RUNNING THENCE FROM A POINT ALONG THE SOUTHEASTERLY CORNER OF LOT 1, SAID POINT BEING ON THE DIVISION LINE BETWEEN LOTS 1 AND 2;

RUNNING THENCE THE FOLLOWING SIX (6) COURSES AND DISTANCES:

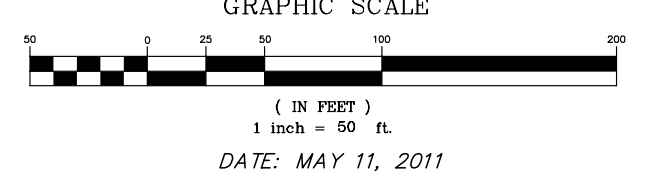
- Along a curve to the left having a radius of 675.00 feet and an arc length of 401.63 feet to a point;
- South 24 degrees 58 minutes 31 seconds West a distance of 283.49 feet to a point;
- North 86 degrees 36 minutes 36 seconds West a distance of 410.08 feet to a point;
- North 61 degrees 30 minutes 37 seconds West a distance of 304.00 feet to a point;
- North 05 degrees 02 minutes 23 seconds East a distance of 251.76 feet to a point;
- North 84 degrees 57 minutes 37 seconds West a distance of 159.18 feet to the place and point of BEGINNING.

RUNNING THENCE ALONG THE FOLLOWING COURSES AND DISTANCES IN THE CHART BELOW:

COURSE	LENGTH	RADIUS	LINE	BEARING	LINE	LENGTH	BEARING
C1	142.19	750.00	L	N 15° 19' 49" E	L1	89.22	S 76° 19' 11" E
C2	62.85	39.74	L2	S 76° 19' 11" E	L2	245.10	S 76° 19' 11" E
L3	251.76	0.00	L3	S 76° 19' 11" E	L3	251.76	S 76° 19' 11" E
L4	251.76	0.00	L4	S 76° 19' 11" E	L4	251.76	S 76° 19' 11" E
L5	245.10	0.00	L5	S 76° 19' 11" E	L5	245.10	S 76° 19' 11" E
L6	159.18	0.00	L6	S 76° 19' 11" E	L6	159.18	S 76° 19' 11" E
L7	159.18	0.00	L7	S 76° 19' 11" E	L7	159.18	S 76° 19' 11" E
L8	159.18	0.00	L8	S 76° 19' 11" E	L8	159.18	S 76° 19' 11" E
L9	159.18	0.00	L9	S 76° 19' 11" E	L9	159.18	S 76° 19' 11" E
L10	159.18	0.00	L10	S 76° 19' 11" E	L10	159.18	S 76° 19' 11" E
L11	159.18	0.00	L11	S 76° 19' 11" E	L11	159.18	S 76° 19' 11" E
L12	159.18	0.00	L12	S 76° 19' 11" E	L12	159.18	S 76° 19' 11" E
L13	159.18	0.00	L13	S 76° 19' 11" E	L13	159.18	S 76° 19' 11" E
L14	159.18	0.00	L14	S 76° 19' 11" E	L14	159.18	S 76° 19' 11" E
L15	159.18	0.00	L15	S 76° 19' 11" E	L15	159.18	S 76° 19' 11" E
L16	159.18	0.00	L16	S 76° 19' 11" E	L16	159.18	S 76° 19' 11" E
L17	159.18	0.00	L17	S 76° 19' 11" E	L17	159.18	S 76° 19' 11" E
L18	159.18	0.00	L18	S 76° 19' 11" E	L18	159.18	S 76° 19' 11" E
L19	159.18	0.00	L19	S 76° 19' 11" E	L19	159.18	S 76° 19' 11" E
L20	159.18	0.00	L20	S 76° 19' 11" E	L20	159.18	S 76° 19' 11" E
L21	159.18	0.00	L21	S 76° 19' 11" E	L21	159.18	S 76° 19' 11" E
L22	159.18	0.00	L22	S 76° 19' 11" E	L22	159.18	S 76° 19' 11" E
L23	159.18	0.00	L23	S 76° 19' 11" E	L23	159.18	S 76° 19' 11" E
L24	159.18	0.00	L24	S 76° 19' 11" E	L24	159.18	S 76° 19' 11" E
L25	159.18	0.00	L25	S 76° 19' 11" E	L25	159.18	S 76° 19' 11" E
L26	159.18	0.00	L26	S 76° 19' 11" E	L26	159.18	S 76° 19' 11" E
L27	159.18	0.00	L27	S 76° 19' 11" E	L27	159.18	S 76° 19' 11" E
L28	159.18	0.00	L28	S 76° 19' 11" E	L28	159.18	S 76° 19' 11" E
L29	159.18	0.00	L29	S 76° 19' 11" E	L29	159.18	S 76° 19' 11" E
L30	159.18	0.00	L30	S 76° 19' 11" E	L30	159.18	S 76° 19' 11" E
L31	159.18	0.00	L31	S 76° 19' 11" E	L31	159.18	S 76° 19' 11" E
L32	159.18	0.00	L32	S 76° 19' 11" E	L32	159.18	S 76° 19' 11" E
L33	159.18	0.00	L33	S 76° 19' 11" E	L33	159.18	S 76° 19' 11" E
L34	159.18	0.00	L34	S 76° 19' 11" E	L34	159.18	S 76° 19' 11" E
L35	159.18	0.00	L35	S 76° 19' 11" E	L35	159.18	S 76° 19' 11" E
L36	159.18	0.00	L36	S 76° 19' 11" E	L36	159.18	S 76° 19' 11" E
L37	159.18	0.00	L37	S 76° 19' 11" E	L37	159.18	S 76° 19' 11" E
L38	159.18	0.00	L38	S 76° 19' 11" E	L38	159.18	S 76° 19' 11" E
L39	159.18	0.00	L39	S 76° 19' 11" E	L39	159.18	S 76° 19' 11" E
L40	159.18	0.00	L40	S 76° 19' 11" E	L40	159.18	S 76° 19' 11" E
L41	159.18	0.00	L41	S 76° 19' 11" E	L41	159.18	S 76° 19' 11" E
L42	159.18	0.00	L42	S 76° 19' 11" E	L42	159.18	S 76° 19' 11" E
L43	159.18	0.00	L43	S 76° 19' 11" E	L43	159.18	S 76° 19' 11" E
L44	159.18	0.00	L44	S 76° 19' 11" E	L44	159.18	S 76° 19' 11" E
L45	159.18	0.00	L45	S 76° 19' 11" E	L45	159.18	S 76° 19' 11" E
L46	159.18	0.00	L46	S 76° 19' 11" E	L46	159.18	S 76° 19' 11" E
L47	159.18	0.00	L47	S 76° 19' 11" E	L47	159.18	S 76° 19' 11" E
L48	159.18	0.00	L48	S 76° 19' 11" E	L48	159.18	S 76° 19' 11" E
L49	159.18	0.00	L49	S 76° 19' 11" E	L49	159.18	S 76° 19' 11" E
L50	159.18	0.00	L50	S 76° 19' 11" E	L50	159.18	S 76° 19' 11" E
L51	159.18	0.00	L51	S 76° 19' 11" E	L51	159.18	S 76° 19' 11" E
L52	159.18	0.00	L52	S 76° 19' 11" E	L52	159.18	S 76° 19' 11" E
L53	159.18	0.00	L53	S 76° 19' 11" E	L53	159.18	S 76° 19' 11" E
L54	159.18	0.00	L54	S 76° 19' 11" E	L54	159.18	S 76° 19' 11" E
L55	159.18	0.00	L55	S 76° 19' 11" E	L55	159.18	S 76° 19' 11" E
L56	159.18	0.00	L56	S 76° 19' 11" E	L56	159.18	S 76° 19' 11" E
L57	159.18	0.00	L57	S 76° 19' 11" E	L57	159.18	S 76° 19' 11" E
L58	159.18	0.00	L58	S 76° 19' 11" E	L58	159.18	S 76° 19' 11" E

- LEGEND**
- DRAINAGE MANHOLE
  - SEWER MANHOLE
  - ELECTRIC MANHOLE
  - TELEPHONE MANHOLE
  - CATCH BASIN
  - WV WATER VALVE
  - HYDRANT
  - UTILITY POLE
  - LIGHT POLE

**FINAL ASBUILT**  
 (LOT 1, BLOCK 3244, SECTION 3)  
 PREPARED FOR  
**YONKERS CONTRACTING CO., INC.**  
 PROPERTY SITUATE IN THE  
**CITY OF YONKERS**  
**COUNTY OF WESTCHESTER**  
**STATE OF NEW YORK**  
 GRAPHIC SCALE



# **Appendix D**

## Soil Management Plan



# SOIL MANAGEMENT PLAN

## 1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the Department. Currently, this notification will be made to:

Mr. Randy Whitcher, Project Manager  
Division of Environmental Remediation  
NYSDEC Remedial Section A, Remedial Bureau C  
625 Broadway, 11<sup>th</sup> Floor  
Albany, New York 12233-7014

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this Soil Management Plan;
- A statement that the work will be performed in compliance with this Soil Management Plan, and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix E of this Site Management Plan;
- Identification of disposal facilities for potential waste streams; and

- Identification of sources of any anticipated backfill, along with all required chemical testing results.

## 2 SOIL SCREENING METHODS

Site soil that is excavated must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done, and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-Site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

For excavated soil with evidence of contamination (i.e., visual, olfactory, and/or PID indications), soil samples will be collected in accordance with Table 5.4 of NYSDEC’s Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation* (June 2010 or latest revision), as indicated below:

Recommended Number of Soil Samples for Soil Imported To or Exported From a Site as set forth in DER-10 Paragraphs 5.4(e) & 5.4(f)									
Contaminant	Semivolatiles		Volatiles		Inorganics		Pesticides/PCBs		
Soil Quantity (yd3)	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	
0-50	1	1	1	NA	1	1	1	1	
50-100	1	2	2	NA	1	2	1	2	
100-200	1	3	3	NA	1	3	1	3	
200-300	1	4	4	NA	1	4	1	4	
300-400	2	4	4	NA	2	4	2	4	
400-500	2	5	5	NA	2	5	2	5	
500-800	2	6	6	NA	2	6	2	6	
800-1,000	2	7	7	NA	2	7	2	7	
> 1,000	Submit Proposed Sampling Plan								

NA = Not Applicable

For soil with no evidence of contamination (i.e., visual, olfactory, and/or PID indications), the number of required samples may be modified with NYSDEC concurrence, per DER-10 Section 5.4(f)2.

### **3 STOCKPILE METHODS**

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters, and other discharge points.

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.

Stockpiles will be inspected at a minimum once each week, and after every storm event. Results of inspections will be recorded in a logbook maintained at the Site and available for inspection by NYSDEC.

Stockpiled soil will not be transported off-Site until analytical results are received and evaluated.

### **4 MATERIALS EXCAVATION AND LOAD OUT**

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this Soil Management Plan is posed by utilities or easements on the Site. The locations and clearing of utilities will be the responsibility of the contractor performing the work.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-Site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

## **5 MATERIALS TRANSPORT OFF-SITE**

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

If analytical results indicate that concentrations exceed standards for RCRA characteristics, or the soils are determined to be a listed hazardous waste per 6NYCRR Part 371, the material will be considered a hazardous waste, and must be properly disposed off-Site at a permitted facility within 90 days of excavation.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

All trucks loaded with Site materials will exit the vicinity of the Site using the most appropriate truck routes. This takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-Site queuing of trucks entering the facility; (d) limiting total distance to

major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

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 on-Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited.

## **6 MATERIALS DISPOSAL OFF-SITE**

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360), and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated off-Site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-Site management of materials from this Site will not occur without formal NYSDEC approval.

Off-Site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

## **7 MATERIALS REUSE ON-SITE**

Soil excavated from above the demarcation layer is known to meet or exceed Restricted Residential SCOs, so there is no need for visual, olfactory, PID screening, or testing. This soil may be reused as backfill on-Site either above or below the demarcation layer. Soil excavated from outside the soil cover system area, or from below the demarcation layer, may be reused as backfill material on-Site below the demarcation layer provided it contains no readily observable (visual, olfactory, or having PID readings of 10 ppm above background or greater) evidence of contamination. These soils may be used as backfill above the demarcation layer provided they are tested and identify that they meet Unrestricted Use Soil Cleanup Objectives.

Soil with readily observable evidence of contamination will be analyzed as specified in Section A-2. If analytical results verify that no contaminants are present above NYS Restricted Residential soil cleanup objectives (SCOs) per 6NYCRR Part 375-6.8(b), the soil may be used as backfill on-Site.

Chemical criteria for on-Site reuse of material have been approved by NYSDEC and are listed in Table 2. The qualified environmental professional will ensure that procedures defined for materials reuse in this Soil Management Plan are followed and that unacceptable material does not remain on-Site. Contaminated on-Site material, including historic fill and contaminated soil, that is acceptable for re-use on-Site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-Site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-Site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-Site.

## **8 FLUIDS MANAGEMENT**

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported

and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-Site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

## **9 COVER SYSTEM RESTORATION**

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the RWP. The demarcation layer, consisting of black geotextile fabric or equivalent material will be replaced to provide a visual reference to the top of the ‘Remaining Contamination Zone’, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the ‘Remaining Contamination Zone’. A figure showing the modified surface will be included in the subsequent Periodic Review Report, and in any updates to the Site Management Plan.

## **10 BACKFILL FROM OFF-SITE SOURCES**

Backfill from off-Site sources imported to the Site must meet requirements of 6NYCRR Part 375-6.7(d), and as specified by DER-10 Section 5.4(e).

Soil imported to a Site for use in a soil cap, soil cover, or as backfill will be free of extraneous debris or solid waste; consist of soil or other unregulated material as set forth in 6NYCRR Part 360; and not exceed the allowable constituent levels for imported fill or soil for the use of the Site. The applicable level for Restricted Residential use Sites are the lower of the:

1. protection of groundwater standards; or
2. protection of public health soil cleanup objectives for the identified use of the Site as set forth in 6NYCRR Part 375 Table 375-6.8(b).

Soil samples from off-Site sources will be collected as indicated on the table presented in Section A-2 of this Soil Management Plan (Table 5.4 of DER-10 Section 5.4(e)) to verify they are suitable for use on-Site.

All materials proposed for import onto the Site will be approved by the qualified environmental professional, and will be in compliance with provisions in this SMP prior to receipt at the Site.

Material from industrial sites, spill sites, other environmental remediation sites, or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 2 of the SMP. Soils that meet 'exempt' fill requirements under 6NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

## **11 STORMWATER POLLUTION PREVENTION**

A Stormwater Pollution Prevention Plan for the Site will need to be developed as appropriate, based on the planned Site work.

Barriers and hay bale checks will be installed and inspected once a week, and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.



All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the Stormwater Pollution Prevention Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

## **12 CONTINGENCY PLAN**

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report prepared pursuant to Section 5 of the SMP.

### **13 COMMUNITY AIR MONITORING PLAN**

Air monitoring will be conducted during Site work, in accordance with a Community Air Monitoring Plan (CAMP), as required by Appendix A-1 of NYSDEC's DER-10. The CAMP is included in the SMP in Appendix E. The objective of this CAMP is to provide a measure of protection for the downwind community from potential airborne contaminant releases that might arise as a result of work conducted on-Site. The CAMP includes monitoring for volatile organic compounds (VOCs) and particulate matter (e.g. airborne "dust").

The CAMP also specifies methods that must be used to conduct air monitoring, and the specific instruments to be used, as well as action levels for VOCs and dust.

The location of air sampling stations should be based on generally prevailing wind conditions at the Site. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

### **14 ODOR CONTROL PLAN**

This odor control plan is capable of controlling emissions of nuisance odors off-Site and on-Site, if there are residents or tenants on the property. If nuisance odors are identified at the Site boundary, or if odor complaints are received, 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 any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c)

using foams to cover exposed odorous soils, or other measures. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (a) direct load-out of soils to trucks for off-Site disposal; (b) use of chemical odorants in spray or misting systems; and, (c) use of staff to monitor odors in surrounding neighborhoods, or other measures as necessary.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

## **15 DUST CONTROL PLAN**

A dust suppression plan that addresses dust management during invasive on-Site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles;
- Clearing and grubbing of larger Sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production;
- Gravel will be used on roadways to provide a clean and dust-free road surface; and
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

## **16 OTHER NUISANCES**

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

**Appendix E**  
Health and Safety Plan and  
Community Air Monitoring Plan  
(Sample Documents)

## SITE HEALTH AND SAFETY PLAN

### 1 SITE DESCRIPTION

Date .....Date: February 2010 Revised: \_\_\_\_\_  
 Location .....Austin Avenue Landfill,  
 Austin Ave & Corporate Drive, Westchester County, NY  
 Potential Hazards .....Metals in soil  
 Area Affected .....Surface and subsurface soil and fill material  
 Surrounding Population .....Mixed commercial/residential  
 Topography .....Approximate 5% to 25% slope  
 Weather Conditions .....Usually partly sunny to overcast, southeast winds

**2 ENTRY OBJECTIVES:** The objective of site entry is to excavate, stage, and transport soil/fill material in order to implement engineering controls as a site remedy under the Brownfield Cleanup Program (BCP).

**3 ON-SITE ORGANIZATION AND COORDINATION.** The following GHD Consulting Engineers, LLC (GHD) personnel are designated to observe the stated job functions on site. (Note: One person may carry out more than one job function.)

Remediation Program Manager:.....Damian J. Vanetti or designee (315) 679-5838  
 Field Team Leader:.....Ian E. McNamara or designee (315) 679-5732

**4 ON-SITE CONTROL.** The Yonkers Industrial Development Agency (YIDA) or its designated agent will coordinate access control and security for the work area for each day of on site work. No unauthorized personnel should be within the established work area.

### 5 HAZARD EVALUATION.

**A. Chemical Hazards.** Based on Remedial Investigation (RI) Results, the principal suspected chemical hazard for the site is believed to be associated with metals present in the disposed ash. The primary potential metals are identified.

SUBSTANCE	PRIMARY HAZARDS
Lead	Eye irrit., stomach pain, weakness, insomnia, kidney dis.
Copper	Irrit eyes, nose, metallic taste

**B. Physical Hazards.** Physical hazards for this project relate to mechanical exposure associated with working around heavy equipment and vehicles, noise exposure, and heat or cold stress. Basic safety guidelines for the above noted main physical hazards are included below.

- 1. Excavation and Backfilling.** Site activities will involve excavation and trenching of impacted material. The estimated location of all underground utilities must be determined before digging begins. Necessary clearances must be observed. Appropriate controls will be implemented during excavation to maintain road stability and protect the public.

The standard operating procedure (SOP) for excavation and construction work will follow New York State Department of Labor (NYSDOL), Division of Safety and Health, Industrial Code Rules (Part 23).

- 2. Utility Clearances.** Prior to any intrusive activities (e.g. drilling, excavating, probing) New York State Dig Safe shall be contacted to mark underground lines before any work is started.

Personnel directly involved in intrusive work shall determine the minimum distance from marked utilities which work can be conducted with the assistance of the locator line service.

- 3. Heavy Lifting Method.** Personnel conducting work that may require lifting of heavy objects should use the following proper lifting techniques:

- Feet must be parted, with one foot alongside the object being lifted and one foot behind. When the feet are comfortably spread a more stable lift can occur and the rear foot is in a better position for the upward thrust of the lift.
- Use the squat position and keep the back straight. A straight back means the spine, back muscles, and organs of the body in correct alignment.
- To grip the item being lifted, the fingers and the hand are extended around the object being lifted, using the full palm. Fingers have very little power – use the strength of the entire hand.
- The load must be drawn close, and the arms and elbows must be tucked into the side of the body. Holding the arms away from the body increases the strain on the arms and elbows. Keeping the arms tucked in helps keep the body weight centered.

The body must be positioned so that the weight of the body is centered over the feet. This provides a more powerful line of thrust and also ensures better balance. Start the lift with a thrust of the rear foot. Do not twist.

- 4. Slip/Trip/Hit/Fall.** These injuries are the most frequent of all injuries to workers. They occur for a wide variety of reasons, but can be minimized by the following practices:
  - Spot-check the work area to identify hazards;

- Establish and utilize pathways that are most free of slip and trip hazards. Avoid pathways that are more hazardous;
- Beware of trip hazards such as wet floors, slippery floors, and uneven terrain;
- Carry only loads you can see over;
- Keep work areas clean and free of clutter, especially in storage areas and walkways;
- Communicate observed hazards to site personnel.

**5. Heat Stress.** All field personnel engaged in site work shall have completed training to recognize and avoid heat related illness. Proper training and preventive measures will aid in averting loss of worker productivity and serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat-related illness. To avoid heat stress, the following steps may be taken:

- Adjust work schedules.
- Modify work/rest schedules according to monitoring requirements.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat, i.e., eight fluid ounces (0.23 liters) of water must be ingested for approximately every eight ounces (0.23 kg) of weight lost. The normal thirst mechanism is not sensitive enough to ensure that enough water will be drunk to replace lost sweat. When heavy sweating occurs, encourage the worker to drink more. The following strategies may be useful:
- Members of each Work Crew shall be properly trained by each Crew's respective employer to recognize the symptoms of heat-related illnesses.

- 6. Adverse Weather Conditions.** The Field Leader for each Work Crew will be responsible for deciding on the continuation or discontinuation of work for his/her Crew based on current and pending weather conditions. Electrical storms, tornado warnings, and strong winds are examples of conditions that would call for the discontinuation of work and evacuation of the site. Site operations should not be permitted during an electrical storm.
- 7. Vehicle Traffic.** As the scope of work includes the transport and disposal of material, there is a potential to encounter a temporarily high volume of vehicular traffic. Project Work Crews that have the potential to be exposed to vehicle traffic should wear a high visibility safety vest. The excavation Work Crew will provide proper signage, flagging, and barricades to maintain a safe flow of traffic.

POTENTIAL HAZARD	PREVENTATIVE MEASURES
Slip/Trip/Falls	Use three points of contact to mount and dismount equipment. Continuously inspect work areas for slip, trip, & fall hazards. Be aware of surroundings. Practice good housekeeping.
Noise	Wear appropriate hearing protection.
Pinch Points	Keep hands, feet, & clothing away from moving parts/devices.
Utilities	Maintain proper utility clearances. All utilities should be properly located and marked out prior to start of work.
Heavy Lifting	Follow safe lifting practices. Lift items within your capabilities and assigned project role. Ask for assistance if necessary.
Proximity to Heavy Equipment and Vehicles	Maintain adequate distance from trucks/equipment. Obey barriers and/or signage
Heat/Cold Stress	Dress appropriately and follow HASP guidelines
Dangerous Weather Conditions	Consult local weather reports daily, watch for signs of severe weather, etc. Suspend or reduce work during severe weather.
Chemical hazards	Use PID as indicated in HASP. Wear specified PPE. No smoking.
Biological Hazards – Insects, Snakes, Poison Plants, etc.	Wear appropriate PPE and keep necessary first aid supplies readily available. Use insect repellent and snake chaps as needed. Learn to identify poisonous plants.



- 6 PERSONAL PROTECTIVE EQUIPMENT.** Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas or tasks:

LOCATION	JOB FUNCTION	LEVEL OF PROTECTION
Work zone	Site investigation	A B C <b>Ⓓ</b> Other

Specific protective equipment for each level of protection is as follows:

Level A	Fully-encapsulating suit SCBA (disposable coveralls)
Level B	Splash gear (saranax-coated Tyvek suit) SCBA or airline respirators
Level C	Splash gear (Tyvek suit) Half-face canister respirator Safety glasses Boots Gloves Hard hat
<b><u>Level D</u></b>	<b>Work boots</b> <b>Gloves (latex)</b> <b>Hard hat</b>

**Action Levels.** Action levels shall be determined by monitoring of work zone breathing space with a portable photoionization detector (PID) or comparable instrument. Measurement of a sustained concentration above ambient (background) conditions shall initiate action. The following criteria shall be used to determine appropriate action:

VOLATILE ORGANICS IN BREATHING ZONE (SUSTAINED AND ABOVE BACKGROUND)	LEVEL OF RESPIRATORY PROTECTION
0-5 ppm	Level D
5-200 ppm	Level C
200-1000 ppm	Level B - air line
1000+ ppm	Level B - SCBA

% LOWER EXPLOSIVE LIMIT (LEL)	ACTION
Above 10	Discontinue work and take remedial action

**NO CHANGE TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SITE SAFETY OFFICER AND THE PROJECT TEAM LEADER.**

**If the above criteria indicate the need to increase from Level D to a higher level of personal protection, work will be immediately suspended in that particular site area until the required personal protective equipment is made available, or until Level D conditions return.**

7 **ON-SITE WORK PLANS.** The following personnel or designated alternate(s) will perform the field investigation.

Field Team Leader: ..... Ian McNamara or designee  
Work Party ..... Designated as needed to support field effort

The work party was briefed on the contents of this plan prior to commencement of work.

8 **COMMUNICATION PROCEDURES.** The Project Manager should remain in communication with the Field Team Leader. A cellular phone will be used in the field.

Continuous horn blast is the emergency signal to indicate that all personnel should leave the Work Zone.

In the event that radio communications are used, the following standard hand signals will be used in case of failure of radio communications:

Hand gripping throat ..... Out of air; can't breathe  
Grip partner's wrist or both hands around waist..... Leave area immediately  
Hands on top of head ..... Need assistance  
Thumbs up ..... OK; I am all right; I understand  
Thumbs down..... No; negative

9 **SITE HEALTH AND SAFETY PLAN.**

A. The designated Site Safety Officer will be directly responsible for safety recommendations on site. The Field Team Leader will be responsible for carrying out the Site Health and Safety Plan, and for enforcing it on all GHD employees engaged in site work.

B. **Emergency Medical Care.** St Joseph's Medical Center is located approximately 5 miles southwest of the site at 127 South Broadway. A map to this facility will be available at the field vehicle. Directions are provided below:

- Take NYS Thruway from site, and go SOUTH (I-87S)
- Get off at Exist 6W towards Yonkers (TUCKAHOE ROAD WEST)
- Turn slight RIGHT on TUCKAHOE ROAD
- TUCKAHOE ROAD becomes SAW MILL RIVER ROAD (NY 9A)
- Turn RIGHT on ASHBURTON AVE (NY 9A)
- Turn LEFT on NEPPERHAN AVE (NY 9A)
- Turn LEFT on US-9/S BROADWAY/ NY-9A
- Go to 127 S BROADWAY

First aid equipment is available on site at the following locations:

First aid kit                      Field vehicle

List of emergency phone numbers:

AGENCY/FACILITY	PHONE NUMBER
Police (Yonkers Police Department)	911 or (914) 377-7900
Fire	911
Ambulance	911
Saint Joseph's Medical Center	(914) 378-7000

**C. Environmental Monitoring.** The following environmental monitoring instruments shall be used on site at the specified intervals:

- MiniRAE photoionization detector (PID). Continuous during installation of soil borings and soil gas monitoring probes.
- Dust (particulate) monitor. Continuous during excavation and grading of soils and installation of soil borings per Community Air Monitoring Plan (CAMP)

**D. Emergency Procedures.** The following standard procedures will be used by on-site personnel. The Site Safety Officer shall be notified of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed:

1. **Personnel Injury in the Work Zone.** Upon notification of an injury in the Work Zone, the designated emergency signal, a continuous horn blast, shall be sounded. A rescue team will enter the Work Zone (if required) to remove the injured person to safety. Appropriate first aid shall be initiated and contact should be made for an ambulance and with the designated medical facility (if required). No persons shall re-enter the Work Zone until the cause of the injury or symptoms is determined.
2. **Fire/Explosion.** Upon notification of a fire or explosion on site, the designated emergency signal, a continuous horn blast, shall be sounded and all site personnel assembled at the decontamination line. The fire department shall be alerted and all personnel moved to a safe distance from the involved area.
3. **Personal Protective Equipment Failure.** If any site worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy shall immediately leave the Work Zone. Re-entry shall not be permitted until the equipment has been repaired or replaced.
4. **Other Equipment Failure.** If any other equipment on site fails to operate properly, the Project Team Leader and Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, all personnel shall leave the Work Zone until the situation is evaluated and appropriate actions taken.

In all situations, when an on-site emergency results in evacuation of the Work Zone, personnel shall not re-enter until:

- a. The conditions resulting in the emergency have been corrected.
- b. The hazards have been reassessed.
- c. The Site Health and Safety Plan has been reviewed.

d. Site personnel have been briefed on any changes in the Site Health and Safety Plan.

**E. Personal Monitoring.** The following personal monitoring will be in effect on site:

Personal exposure sampling: MiniRAE PID screening, sampling pumps/tubes , or organic vapor monitors.

Medical monitoring: The expected air temperature will be less than 70 degrees F. If it is determined that heat stress monitoring is required (mandatory if over 70 degrees F), the following procedures shall be followed: Monitoring body temperature, body weight, pulse weight.

# **COMMUNITY AIR MONITORING PLAN**

## **1 - INTRODUCTION**

As part of a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) (BCA No. C3-60-066), Austin Avenue Brownfield Redevelopment, LLC (the Volunteer) has completed a Remedial Investigation (RI) at the former Austin Avenue Landfill site, and is prepared to proceed with the Remedial Action component of the BCA. The site located at Corporate Drive and Austin Avenue is proposed to be redeveloped into 100,000 square feet of residential buildings with associated parking and access drives.

This Community Air Monitoring Plan (CAMP) describes the measures that will be undertaken during field work to monitor ambient air at the downwind site perimeter during site activities that disturb soil or fill material.

## **2 - OBJECTIVES**

The objective of this CAMP is to provide a measure of protection for the downwind community from potential airborne contaminant releases that might arise as a result of the planned Remedial Action, which will include the excavation and subsequent backfilling of soil and fill material, to establish a soil cover as an engineering control to mitigate potential exposure. The CAMP also provides a means to measure and properly control airborne dust.

## **3 - METHODS**

The CAMP will include monitoring for particulate matter (e.g. airborne “dust”) and volatile organic vapors. Readings will be recorded and will be available for State (DEC and DOH) personnel to review, as requested.

### **A. PARTICULATE MONITORING**

Particulate (e.g. “dust”) emissions will be measured continuously at the upwind and downwind property boundaries. Real time monitoring equipment (e.g. MiniRAM or equivalent), with audible alarms and capable of measuring particulate matter less than 10 micrometers in size, will be used.

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

## **B. VOLATILE ORGANIC VAPOR MONITORING**

Volatile organic vapor emissions will be measured continuously in the work zones. Real time monitoring equipment (e.g. MiniRAE photoionization detector or equivalent) will be used.

- ◆ If ambient air concentrations of total organic vapors exceed 5 parts per million (ppm) above background for a 15 minute average, work activities need to be temporarily halted, and monitoring continued. If the total organic vapors level readily decreases to below 5 ppm over background, work activities can be resumed with continued monitoring.
- ◆ If ambient air concentrations of total organic vapors persist at levels in excess of 5 ppm above background, but less than 25 ppm, work activities need to be halted, the source of the vapors identified, corrective actions taken to abate emissions, and monitoring continued. Work can resume following these steps with continued monitoring, as long as concentrations decrease to levels below 5 ppm.
- ◆ If ambient air concentrations of total organic vapors exceed 25 ppm over background work must be halted.

**Appendix F**  
Monitoring Well Boring and  
Construction Logs

S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-1

(Page 1 of 2)

Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/13/07  
Time : 2:15  
Date Completed : 2/16/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 44 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition		Water Levels		Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-1
				No Recovery	Recovery	During Drilling	After Completion					
DESCRIPTION												
0	0											
2	-2	20						0-2	14,10,35,46	0.0		
4	-4	24						2-4	9,10,10,10	0.0		
6	-6	18						4-6	2,2,4,3	0.0		
8	-8	18						6-8	10,17,14,21	0.0		
10	-10	18						8-10	10,10,13,10	0.0		
12	-12	6						10-12	5,5,5,5	0.0		
14	-14	6						12-14	22,2,9,13	0.0		
16	-16	0						14-16	5,4,4,3	0.0		
18	-18	8						16-18	4,2,3,3	-		
20	-20	10						18-20	2,2,3,2	3.5		
22	-22	6						20-22	5,4,4,4	1.3		
24								22-24	4,4,3,2	2.4		

NOTES:  
bgs- below ground surface  
TOC- top of casing

LOG OF BORING SWR MW-1

(Page 1 of 2)



S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-1

(Page 2 of 2)

Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/13/07  
Time : 2:15  
Date Completed : 2/16/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 44 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition	Water Levels	Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-1
				No Recovery Recovery Refusal	During Drilling After Completion					
DESCRIPTION										
24	-24	6		Black, coarse FILL w/ trace CLAY, wood, coal & fragments of slate		24				
26	-26	6		Dry, black to gray, FILL w/ cinders & slate fragments		26	24-26	2,3,4,4	4.1	
28	-28	8		Dry, black to dark gray & some brown, stiff FILL material & SILT, w/ coal, brick & glass pieces		28	26-28	2,32,34,19	0.0	
30	-30	7		Dry, black, sand-sized FILL w/ bits of coal, brick & glass		30	28-30	10,15,18,20	0.0	
32	-32	4		Dry, black, sand-sized FILL w/ bits of coal, brick & glass		32	30-32	8,7,7,8	0.2	
34	-34	2		Moist, black, mucky FILL		34	32-34	7,6,5,6	0.7	
36	-36					36	34-36	50/1	0.0	
38	-38			Not sampled from 36' to Total Depth, hard to drill, no cuttings coming back up auger, probably hitting rock.		38	36-38	50/2	-	
40	-40					40	38-40	-	-	
42	-42					42	40-42	-	-	
44	-44					44	42-44	-	-	

NOTES:  
bgs- below ground surface  
TOC- top of casing

LOG OF BORING SWR MW-1

(Page 2 of 2)

S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-2

(Page 1 of 2)

Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/14/07  
Time : 11:00  
Date Completed : 2/16/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 44 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition	Water Levels	Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-2
				No Recovery Recovery Refusal	During Drilling After Completion					
DESCRIPTION										
0	0	9		Frozen, dark brown medium sand-sized FILL, glass fragments		0				
2	-2	10		Dark brown, coarse sand-sized FILL, cinders		2	0-2	10,5,5,8	0.0	
4	-4	10		Dark brown, coarse sand-sized FILL, cinders		4	2-4	4,5,5,5	0.0	
6	-6	14		Dark brown, coarse sand-sized FILL, some clay-sized FILL, with orange brown cinders		6	4-6	2,2,2,1	0.0	
8	-8	14		Brown, fine sand-sized FILL with clay		8	6-8	10,17,23,7	0.0	
10	-10	18		Dark brown, coarse sand-sized FILL, glass		10	8-10	16,3,4,1	0.0	
12	-12	16		Dark brown to orange, coarse sand-sized FILL, cinders, some glass		12	10-12	4,3,1,4	0.0	
14	-14	14		Black, coarse sand-sized FILL, with orange cinders, milky glass fragments, coal fragments		14	12-14	3,3,6,8	0.0	
16	-16	8		Dark brown to orange, coarse sand-sized FILL, glass fragments		16	14-16	4,3,3,3	0.0	
18	-18	9		Moist, black to brown, coarse sand-sized FILL, with bits of charcoal, cinders, green plastic fibers		18	16-18	4,6,4,2	0.0	
20	-20	8		Wet, black, coarse sand-sized FILL, with bits of charcoal, tire fragments		20	18-20	2,2,6,8	0.0	
22	-22	9		Brown, coarse sand-sized FILL, some wood fragments, top 3" wet, lower 6" moist		22	20-22	11,12,6,5	-	
24		8		Wet, brown, coarse sand-sized FILL, cinders, glass		24	22-24	6,8,10,10	-	

NOTES:  
bgs- below ground surface  
TOC- top of casing

LOG OF BORING SWR MW-2

(Page 1 of 2)

S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-2

(Page 2 of 2)

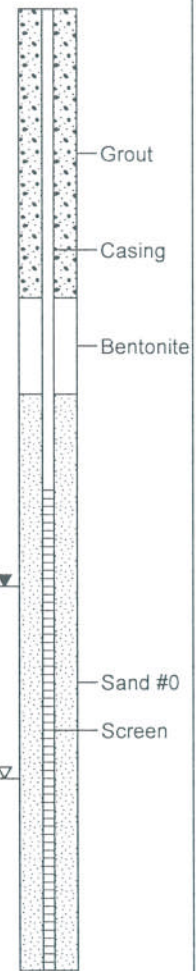
Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/14/07  
Time : 11:00  
Date Completed : 2/19/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 44 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition		Water Levels		Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-2
				No Recovery	Recovery	Refusal	During Drilling					
DESCRIPTION												
24	-24	12						24				
26	-26	-						26	24-26	4,4,22,10	-	
28	-28	4						28	26-28	6,4,3,1	-	
30	-30	3						30	28-30	5,3,14,7	-	
32	-32	-						32	30-32	4,5,4,4	-	
34	-34	12						34	32-34	WOH,1,4	-	
36	-36	12						36	34-36	8,10,9,8	-	
38	-38	10						38	36-38	4,4,6,1	-	
40	-40	16						40	38-40	3,3,4,4	-	
42	-42	24						42	40-42	1,12,10,14	-	
44	-44							44	42-44	1,7,31,50/4	-	
46	-46							46				
48	-48							48				



NOTES:  
bgs- below ground surface  
TOC- top of casing

## LOG OF BORING SWR MW-2

(Page 2 of 2)

S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-3

(Page 1 of 1)

Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/20/07  
Time : 11:00  
Date Completed : 2/21/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 30 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition		Water Levels		Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-3
				No Recovery	Recovery	During Drilling	After Completion					
DESCRIPTION												
0	0	18						0				
2	-2	16						2	0-2	8,7,4,4	0.0	
4	-4	24						4	2-4	3,4,4,4	0.0	
6	-6	18						6	4-6	4,8,7,9	0.0	
8	-8	10						8	6-8	21,28,31,34	0.0	
10	-10	10						10	8-10	21,19,18,20	0.0	
12	-12	6						12	10-12	6,4,2,2	0.0	
14	-14	19						14	12-14	2,2,2,2	0.0	
16	-16	18						16	14-16	12,20,16,14	0.0	
18	-18	14						18	16-18	12,28,31,30	1.5	
20	-20	10						20	18-20	10,18,12,14	0.5	
22	-22	18						22	20-22	2,2,2,2	0.0	
24	-24	20						24	22-24	2,8,10,7	0.0	
26	-26	10						26	24-26	5,5,10,31	0.0	
28	-28	18						28	26-28	50/14	0.0	
30								30	28-30	-	0.0	

NOTES:  
bgs- below ground surface  
TOC- top of casing

LOG OF BORING SWR MW-3

(Page 1 of 1)

S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-4






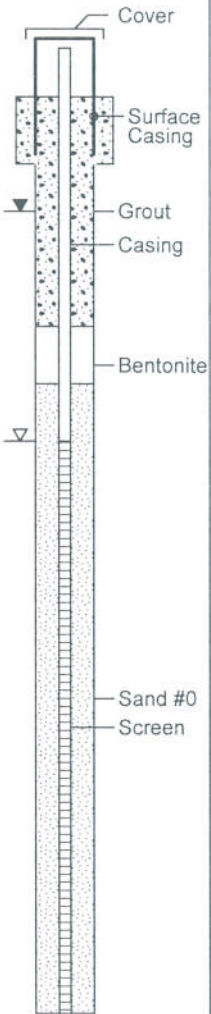
(Page 1 of 1)

Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/20/07  
Time : 2:30  
Date Completed : 2/21/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 16 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition	Water Levels	Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-4
				 No Recovery  Recovery  Refusal	 During Drilling  After Completion					
0	0					0				
2	-2	24				2	0-2	18,12,17,15	0.0	
4	-4	20				4	2-4	10,12,10,11	0.0	
6	-6	18				6	4-6	4,2,4,3	0.0	
8	-8	18				8	6-8	2,2,2,2	0.0	
10	-10	14				10	8-10	2,4,4,7	0.0	
12	-12	14				12	10-12	10,11,8,12	0.0	
14	-14	5				14	12-14	10,10,16,17	0.0	
16	-16					16	14-16	-	-	
18	-18					18				
20	-20					20				

NOTES:  
bgs- below ground surface  
TOC- top of casing

LOG OF BORING SWR MW-4

(Page 1 of 1)

S & W Redevelopment  
of North America LLC  
Syracuse, NY

# LOG OF BORING SWR MW-5

(Page 1 of 1)

Austin Avenue  
Yonkers, NY  
Westchester County  
BCP Site No. C36-00-86

Date Started : 2/21/07  
Time : 10:10  
Date Completed : 2/21/07  
Drilling Contractor : Parratt Wolff  
Drillers : Grassi/Palmer

Staff : BMH  
Depth of Boring : 19.4 ft bgs'  
Drilling Method : Hollow-Stem Augers  
Drilling Equipment : ATV Mounted  
Sampling Method : Split Spoon, 1-3/8"

N5024

Depth in Feet	Surf. Elev. 0	Recovery (inches)	Sample	Sample Condition		Water Levels		Depth in Feet	Sample Interval	Blow Counts	PID Results (ppm)	Well: SWR MW-5
				No Recovery	Recovery	Refusal	During Drilling					
DESCRIPTION												
0	0							0				
2	-2	20						2	0-2	18,12,10,10	0.0	
4	-4	20						4	2-4	10,7,6,6	0.0	
6	-6	13						6	4-6	6,8,7,9	0.0	
8	-8	15						8	6-8	7,12,10,8	0.0	
10	-10	19						10	8-10	10,10,21,17	0.0	
12	-12	8						12	10-12	22,47,28,40	0.0	
14	-14	5						14	12-14	38,50/2	0.0	
16	-16	0						16	14-16	50/14	0.0	
18	-18	0						18	16-18	-	-	
20	-20							20	18-19	-	-	

NOTES:  
bgs- below ground surface  
TOC- top of casing

LOG OF BORING SWR MW-5

(Page 1 of 1)

**Appendix G**  
Groundwater Monitoring Well  
Sampling Log Form

**GROUNDWATER FIELD SAMPLING RECORD**  
**S&W Redevelopment of NA, LLC**

Site Identification: \_\_\_\_\_

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

Job # \_\_\_\_\_

Sampler(s): \_\_\_\_\_

Sample ID: \_\_\_\_\_

**Well Information:**

Depth of Well (Top of PVC): \_\_\_\_\_  
 Initial Static Water Level (Top of PVC): \_\_\_\_\_  
 Depth to LNAPL/DNAPL: \_\_\_\_\_  
 LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

**Well Volume Calculation:**

1 in. casing: \_\_\_\_\_ ft. of water X .041 = \_\_\_\_\_  
 2 in. casing: \_\_\_\_\_ ft. of water X .16 = \_\_\_\_\_

**Evacuation Method:**

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_

Airlift \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_

Bailer \_\_\_\_\_ Ded. Pump \_\_\_\_\_

Volume of Water Removed: \_\_\_\_\_ gallons  
 > 3 volumes: yes no  
 dry: yes no

**Field Tests:**

Sample Temp. \_\_\_\_\_ °C  
 pH: \_\_\_\_\_  
 ORP: \_\_\_\_\_ mV

Turbidity: \_\_\_\_\_ NTU  
 DO: \_\_\_\_\_ ml/L  
 Spec. Conductivity: \_\_\_\_\_ uS/cm

**Sampling:**

Time: \_\_\_\_\_

**Sampling Method:**

Stainless Bailer \_\_\_\_\_  
 Teflon Bailer \_\_\_\_\_  
 Pos. Disp. Pump \_\_\_\_\_  
 Dis. Bailer \_\_\_\_\_  
 Ded. Pump \_\_\_\_\_  
 Other \_\_\_\_\_

**Analyses:**

Baseline \_\_\_\_\_  
 Routine \_\_\_\_\_  
 Other: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Observations:**

Weather/Temperature: \_\_\_\_\_

Physical appearance and odor of Sample: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**Appendix H**  
Site-Wide Inspection Form

# SITE INSPECTION FORM

Inspections to be conducted at least semi-annually

**SITE:** Former Austin Avenue Site (LOT 1)  
**BCP #** C3-60-066

**DATE/TIME:** \_\_\_\_\_  
**WEATHER:** \_\_\_\_\_  
\_\_\_\_\_

**INSPECTORS NAME:** \_\_\_\_\_

**COMPANY NAME:** \_\_\_\_\_

**GENERAL SITE CONDITIONS:**

Site Access Control \_\_\_\_\_  
Change in Use \_\_\_\_\_  
Unauthorized Activities \_\_\_\_\_  
\_\_\_\_\_

**ENGINEERING CONTROLS**

**SOIL COVER**

Soil Cover Condition \_\_\_\_\_  
Vegetative Cover \_\_\_\_\_  
Breach of the Soil Cover \_\_\_\_\_  
Woody Growth \_\_\_\_\_  
Surface Settling \_\_\_\_\_  
Burrowing Animals \_\_\_\_\_  
Sediment/Erosion Controls \_\_\_\_\_  
Surface Erosion \_\_\_\_\_  
Off-site Sediment Transport \_\_\_\_\_

**SOIL VAPOR MITIGATION**

System In Place \_\_\_\_\_  
System Operating \_\_\_\_\_  
Component Conditions \_\_\_\_\_  
Damaged Equipment \_\_\_\_\_  
\_\_\_\_\_

**ENVIRONMENTAL MONITORING**

**GROUNDWATER MONITORING WELLS**

Condition of Monitoring Wells \_\_\_\_\_  
Well Caps In Place \_\_\_\_\_  
Locks In Place and Secure \_\_\_\_\_  
\_\_\_\_\_

**Identify Groundwater Samples Taken:** \_\_\_\_\_

**Identify Photos Taken:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**OTHER COMMENTS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INSPECTOR SIGNATURE:** \_\_\_\_\_

**Appendix I**  
Quality Assurance Project Plan

**QUALITY ASSURANCE PROJECT PLAN  
TABLE OF CONTENTS**

SECTION 1 – PROJECT DESCRIPTION

SECTION 2 – PROJECT ORGANIZATION

SECTION 3 – QA/QC OBJECTIVES FOR MEASUREMENT OF DATA

SECTION 4 – SAMPLING PROCEDURES

SECTION 5 – SAMPLE CUSTODY

SECTION 6 – CALIBRATION PROCEDURES

SECTION 7 – ANALYTICAL PROCEDURES

**LIST OF TABLES**

Table

No.

4.1 Sample Containerization

4.2 Sampling Procedure for Monitoring Wells

7.1 Proposed Method Detection Limits and Analytical Methods

## SECTION 1

### PROJECT DESCRIPTION

The Austin Avenue Landfill was formerly owned and operated by the City of Yonkers, and consists of approximately 20-acres containing primarily incinerator ash and bulky waste, including trees, brush, and building debris. The landfill began receiving waste in the 1960's, and continued operation into the 1970s. The landfill had ceased operating by 1979, at which time the City of Yonkers entered into a consent order with the New York State Department of Environmental Conservation (NYSDEC) to properly close the former landfill. The landfill property was transferred to Westchester County in 1979, and is currently owned by the Westchester County Industrial Development Agency (IDA).

In 2004, the Yonkers Industrial Development Agency (YIDA) completed an application on behalf of the Westchester County IDA, for entry into the New York State Brownfield Cleanup Program (BCP). The "site", as defined under the Brownfield Cleanup Agreement (BCA Site No. C360066), consists of Westchester County, City of Yonkers Tax Parcel Section 3, Block 3244, Lot 1.

Under the BCP, a Brownfield Site Investigation must be completed in accordance with NYSDEC's *Technical Guidance for Site Investigation and Remediation* (DER-10), to provide a systematic assessment of environmental conditions on the property. This Quality Assurance Project Plan sets forth the quality assurance measures for completing the Brownfield Site Investigation.

## SECTION 2

### PROJECT ORGANIZATION

The organization of the key project management and field sampling teams, and areas of responsibility are shown presented below.

Project Principal	Damian J. Vanetti, P.E.	Provide technical and administrative oversight and guidance throughout the project, assist in securing company resources, participate in technical review of deliverables, and attend key meetings as needed.
Principal Engineer	Damian J. Vanetti, P.E.	Provide technical guidance and review of reports, analytical data. Will have key involvement in screening and development of remedial alternatives.
Project Manager	Damian J. Vanetti, P.E.	Responsible for maintaining the day-to-day schedule for completing the fieldwork and deliverables according to program objectives.
Field Team Leader	Ian E. McNamara	Responsible for coordinating and directing field efforts of GHD staff and subcontractors

## SECTION 3

### QA/QC OBJECTIVES FOR MEASUREMENT OF DATA

In cases where NYSDOH ELAP Certification exists for a specific group or category of parameters, the laboratories performing analysis in connection with this project will have appropriate NYSDOH ELAP Certification. For analysis of samples where Analytical Service Protocol (ASP, June 2000) Category B deliverables are required, NYSDOH ELAP CLP certification is required.

Detection limits set by NYSDEC-ASP (June 2000) will be used for all sample analyses unless otherwise noted. If NYSDEC-ASP-dictated detection limits prove insufficient to assess project goals (i.e., comparison to drinking water standards or attainment of ARARs), then ASP Special Analytical Services (SAS) or other appropriate methods will be utilized.

The quality assurance/quality control objectives for all measurement data include completeness, representativeness, comparability, precision and accuracy.

#### 3.1 COMPLETENESS

The analyses performed must be appropriate and inclusive. The parameters selected for analysis are chosen to meet the objectives of the study.

Completeness of the analyses will be assessed by comparing the number of parameters intended to be analyzed with the number of parameters successfully determined and validated. Data must meet QC acceptance criteria for 100 percent or more of requested determinations.

#### 3.2 REPRESENTATIVENESS

Samples must be taken of the population and, where appropriate, the population will be characterized statistically to express the degree to which the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process, or environmental condition.

Non-dedicated sampling devices will be cleaned between sampling points by washing and

rinsing with pesticide-grade methanol, followed by a thorough rinse with distilled water. Specific cleaning techniques are described in the Field Sampling Procedure. Two types of blank samples will accompany each sample set where Target Compound List (TCL) volatiles are to be analyzed (water matrix only). A trip blank, consisting of a 40 ml VOA vial of organic-free water prepared by the laboratory, will accompany each set of sample bottles from the laboratory to the field and back. This bottle will remain sealed throughout the shipment and sampling process. This blank will be analyzed for TCL volatile organic compounds along with the groundwater samples to ensure that contamination with TCL volatile compounds has not occurred during the bottle preparation, shipment and sampling phase of the project. In order to check for contaminant carryover when non-dedicated sampling equipment is used, a rinsate blank will be submitted to the laboratory. This blank will also be analyzed for TCL volatile organic compounds. The TCL compounds are identified in the United States Environmental Protection Agency (USEPA) Contract Laboratory Program dated 7/85 or as periodically updated.

The analysis results obtained from the determination of identical parameters in field duplicate samples can be used to further assess the representativeness of the sample data.

### **3.3 COMPARABILITY**

Consistency in the acquisition, preparation, handling and analysis of samples is necessary in order for the results to be compared where appropriate. Additionally, the results obtained from analyses of the samples will be compared with the results obtained in previous studies, if available.

To ensure the comparability of analytical results with those obtained in previous or future testing, all samples will be analyzed by NYSDEC-approved methods. The NYSDEC-ASP mandated holding times for various analyses will be strictly adhered to.

### **3.4 PRECISION AND ACCURACY**

The validity of the data produced will be assessed for precision and accuracy. Analytical methods which will be used include gas chromatography/mass spectrometry (GC/MS), gas chromatography (GC), colorimetry, atomic spectroscopy, gravimetric and titrametric techniques. The following outlines the procedures for evaluating precision and accuracy, routine monitoring procedures, and corrective actions to maintain analytical quality control. All data evaluations



will be consistent with NYSDEC-ASP procedures. Data will be 100 percent compliant with NYSDEC-ASP requirements.

The requirements of QA/QC are both method specific and matrix dependent. The procedures to be used are described on this basis in Sections 6 and 9. The number of duplicate, spiked and blank samples analyzed will be dependent upon the total number of samples of each matrix to be analyzed, but there will be at least one split per matrix. The inclusion and frequency of analysis of field blanks and trip blanks will be on the order of one per each site. Samples to be analyzed for volatile organic compounds will be accompanied by trip and field blanks (water matrix) or field blanks (soil, sediment matrix).

Quality assurance audit samples will be prepared and submitted by the laboratory QA manager for each analytical procedure used. The degree of accuracy and the recovery of analyte to be expected for the analysis of QA samples and spiked samples is dependent upon the matrix, method of analysis, and compound or element being determined. The concentration of the analyte relative to the detection limit is also a major factor in determining the accuracy of the measurement. The lower end of the analytical range for most analyses is generally accepted to be five times the detection limit. At or above this level, the determination and spike recoveries for metals in water samples will be expected to range from 75 to 125 percent. The recovery of organic surrogate compounds and matrix spiking compounds determined by GC/MS will be compared to the guidelines for recovery of individual compounds as established by the United States Environmental Protection Agency Contract Laboratory Program dated 7/85 or as periodically updated.

The quality of results obtained for inorganic ion and demand parameters will be assessed by comparison of QC data with laboratory control charts for each test.

## SECTION 4

### SAMPLING PROCEDURES

#### 4.1 SAMPLING PROGRAM

The soil sampling program will include the collection of soil samples from split spoon sampling devices retrieve from soil borings. Groundwater samples will be collected from groundwater monitoring wells.

**A. Drilling/Sampling Procedures.** Test borings shall be completed using the hollow stem auger drilling method or rotary drilling method to a depth specified by the GHD geologist.

If a hollow stem auger drilling method is to be utilized for monitoring well completion, the minimum inside diameter of the augers shall be 4-1/4 inches.

Samples of the encountered surface materials shall be collected at a minimum of every 5 feet and/or change in material or at the discretion of the geologist. The sampling method employed shall be ASTM D-1586/Split Barrel Sampling using a standard 2-foot long, 2-inch outside diameter split- spoon sampler with a 140-pound hammer. Upon retrieval of the sampling barrel, the collected sample shall be placed in glass jars and labeled, stored on site (on ice in a cooler if necessary), and transmitted to the appropriate testing laboratory or storage facility. Chain-of-custody procedures will be practiced following Section 15, EPA-600/4-82-029, Handbook for Sampling and Sample Preservation of Water and Waste Waters.

A geologist will be on site during the drilling operations to fully describe each soil sample, following the New York State Soil Description Procedure, and to retain representative portions of each sample.

The drilling contractor will be responsible for obtaining accurate and representative samples, informing the geologist of changes in drilling pressure, keeping a separate general log of soils encountered including blow counts [i.e., the number of blows from a soil sampling drive weight (140 pounds)] required to drive the split-spoon sampler in 6-inch increments and installing monitoring wells to levels directed by the supervising geologist following specifications further outlined in this protocol.

**B. Monitoring Well Completion.** Initial downgradient monitoring wells will be constructed of 10 feet of .010-inch slot size PVC well screen and riser casing that will extend from the screened interval to 2 to 3 feet above existing grade. The selection of stainless steel or PVC for supplemental wells will depend on groundwater quality results from the initial wells. Other materials utilized for completion will be washed silica sand (Q-Rock No. 4 or approved equivalent) bentonite grout, Portland cement, and a protective steel locking well casing and cap with locks.

The monitoring well installation method for wells installed within unconsolidated sediments shall be to place the screen and riser assembly into the casing once the screen interval has been selected. At that time, a washed silica sand pack will be placed around the well screen if required to prevent screen plugging. If a sand pack is not warranted, the auger string will be pulled back to allow the native aquifer material to collapse 2 to 3 feet above the top of the screen. Bentonite pellets will then be added to the annulus between the casing and the inside auger to insure proper sealing. Cement/bentonite grout will continue to be added during the extraction of the augers until the entire aquifer thickness has been sufficiently sealed off from horizontal and/or vertical flow above the screened interval. During placement of sand and bentonite pellets, frequent measurements will be made to check the height of the sand pack and thickness of bentonite layers by a weighted drop tape measure.

A vented protective steel casing shall be located over the standpipe extending 2 feet below grade and 2 to 3 feet above grade, secured by a Portland cement seal. The cement seal shall extend laterally at least 1 foot in all directions from the protective casing and shall slope gently away to drain water away from the well. A vented steel cap will be fitted on the protective casing. The cap shall be constructed so it may be secured with a steel lock.

**C. Well Development.** All monitoring wells will be developed or cleared of all fine-grained materials and sediments that have settled in or around the well during installation so that the screen is transmitting representative portions of the groundwater. The development will be by one of two methods, pumping or bailing groundwater from the well until it yields relatively sediment-free water.

A decontaminated pump or bailer will be used and subsequently decontaminated after each use following procedures outlined in the Decontamination Protocol. Pumping or bailing will cease

when the turbidity falls below 50 NTUs or until specific conductivity, pH, and temperature are stable (i.e., consecutive readings are within 10 percent with no overall upward or downward trends in measurements). The decision to stop well development at a turbidity level above 50 NTUs is made only after consultation with the NYSDEC. Well development water will be disposed of on the ground surface at each well location or contained in drums as conditions warrant.

**D. Decontamination.** All drilling equipment and associated tools including augers, drill rods, sampling equipment, wrenches and any other equipment or tools that have come in contact with contaminated materials will be decontaminated before any drilling on site begins, between each well, and prior to removing any equipment from the site. The preferred decontamination procedure will be to use a high pressure steam cleaner to remove soils and volatile organics from the equipment. The water used for this procedure will be contained and shall come from a controlled source, preferably a municipal drinking supply. Representative samples of the contained decontamination water and well development water will be screened in the field to determine the proper method of disposal. Every effort will be made to minimize the generation of contaminated water.

**E. Groundwater Sampling Program.**

1. **Well Evacuation.** Prior to sampling a monitoring well, the static water level will be recorded and the wells evacuated to assure that the water in the well is truly representative of the groundwater. All well data will be recorded on a field sampling record. For shallow wells or deep wells with a relatively low static water level, evacuation will be accomplished by using a stainless steel or teflon bailer with a ball check valve at its lower end. A bladder may be used to evacuate the deeper wells at a rate of approximately 1 gpm. Water samples to be analyzed for volatile and/or semi-volatile organics must be sampled by bailer.

2. **Sampling Procedure.** Groundwater samples will be collected using either stainless steel, teflon, or disposable polyethylene bailers with a ball check valve at the lower end. Incorporation of a check valve onto the bailers assures that a sample is representative of the depth to which the bailer is lowered. All samples will be removed from a depth just above the well screen to further assure a representative groundwater sample. Before and after sampling, the sampling device will be cleaned inside and out with soapy water, methanol,

and then rinsed with distilled deionized water. Sampling procedures are summarized on Table 4.2.

In addition to water samples collected from the monitoring wells, two types of "blanks" will be collected and submitted to the chemical laboratory for analyses. The blanks will consist of 40 ml VOA vials, as follows:

a. **Trip Blank.** A trip blank will be prepared before the sample bottles are sent by the laboratory. It consists of a sample of distilled, deionized water which accompanies the other sample bottles into the field and back to the laboratory. A trip blank will be included with each shipment of samples where sampling and analysis for TCL volatiles is planned (water matrix only). The trip blank will be analyzed for TCL volatile organic compounds as a measure of the internal laboratory procedures and their effect on the results.

b. **Field (Wash) Blanks.** Field wash blanks are analyzed to check the effectiveness of decontamination. Each sample consists of distilled deionized water (prepared by the laboratory) poured through a decontaminated bailer or other sampling apparatus. It is usually collected as a last step in the decontamination procedure prior to sampling of a monitoring well. The wash blank can be analyzed for all or some of the compounds which the subsequent monitoring well sample is scheduled for.

#### **F. Soil Vapor Sampling.**

Soil vapor samples will be collected in the vadose zone at a target depth of 5 feet, using 1-inch diameter PVC well points. Each well point will be installed in a shallow boring drilled by hand-operated equipment, such as hand auger or percussion hammer drill. Drilling equipment used shall be based on soil conditions, and the method that provides the most practical approach.

After each well point is installed native soil will be packed around the annulus to form a seal at the ground surface. Each designated soil vapor sampling location will be purged of a minimum of three volumes using an SKC low volume pump, and then capped with bee's wax. A ¼-inch inside diameter sampling tube will be inserted through the wax cover to the bottom of each gas well probe. The other end of the soil gas tube will be attached to a Centek regulator, and secured with a clamp. The regulator will then be attached to a 1-liter summa canister.

The regulator will be set to collect a soil vapor sample over a duration of 1 hour, at an approximate flow rate of 13 cubic cm per minute. After 1 hour of sampling the regulator will be disconnected from the summa canister, and the canister valve will be closed.

Each canister will be listed according to a specific sample I.D. on a chain of custody form. Sample canisters will be delivered to the laboratory within 24 hours, and analyzed for VOCs by method TO-15.

#### **4.2 SAMPLE PRESERVATION AND SHIPMENT**

Since all bottles will contain the necessary preservatives as shown in Table 4.1, they need only be filled. The 40 ml VOA vials must be filled brim full with no air bubbles. The other bottles should be filled to within about 1 inch from the top.

The bottles will be sent from the laboratory in coolers which will be organized on a per site basis. Following sample collection, the bottles should be placed on ice in the shipping cooler. The samples will be cooled to 4°C, but not frozen.

Final packing and shipment of coolers will be performed in accordance with guidelines outlined in the "User's Guide to the CLP".

## SECTION 5

### SAMPLE CUSTODY

The program for sample custody and sample transfer is in compliance with the NYSDEC-ASP, June 2000. If samples may be needed for legal purposes, chain-of-custody procedures, as defined by NEIC Policies and Procedures (USEPA-330/9-78-001-R, Revised June 1988) will be used. Sample chain-of-custody is initiated by the laboratory with selection and preparation of the sample containers. To reduce the chance for error, the number of personnel handling the samples should be minimized.

#### 5.1 FIELD SAMPLE CUSTODY

A chain-of-custody record accompanies the sample from initial sample container selection and preparation at the laboratory, shipment to the field for sample containment and preservation, and return to the laboratory. Two copies of this record follow the samples to the laboratory. The laboratory maintains one file copy and the completed original is returned to the site inspection team. Individual sample containers provided by the laboratory are used for shipping samples. The shipping containers are insulated and chemical or ice water is used to maintain samples at approximately 4°C until samples are returned and in the custody of the laboratory. All sample bottles within each shipping container are individually labeled and controlled. Samples are to be shipped to the laboratory within 24-48 hours of the day of collection.

Each sample shipping container is assigned a unique identification number by the laboratory. This number is recorded on the chain-of-custody record and is marked with indelible ink on the outside of the shipping container. The field sampler will indicate the sample designation/location number in the space provided on the appropriate chain-of-custody form for each sample collected. The shipping container is closed and a seal provided by the laboratory is affixed to the latch. This seal must be broken to open the container, and this indicates possible tampering if the seal is broken before receipt at the laboratory. The laboratory will contact the site investigation team leader and the sample will not be analyzed if tampering is apparent.

## 5.2 LABORATORY SAMPLE CUSTODY

The site investigation team leader or Project Quality Assurance Officer notifies the laboratory of upcoming field sampling activities and the subsequent transfer of samples to the laboratory. This notification will include information concerning the number and type of samples to be shipped as well as the anticipated date of arrival.

The laboratory sample program meets the following criteria:

- A. The laboratory has designated a sample custodian who is responsible for maintaining custody of the samples and for maintaining all associated records documenting that custody.
- B. Upon receipt of the samples, the custodian will check the original chain-of-custody documents and compare them with the labeled contents of each sample container for correctness and traceability. The sample custodian signs the chain-of-custody record and records the date and time received.
- C. Care is exercised to annotate any labeling or descriptive errors. In the event of discrepant documentation, the laboratory will immediately contact the site investigation team leader as part of the corrective action process. A qualitative assessment of each sample container is performed to note any anomalies, such as broken or leaking bottles. This assessment is recorded as part of the incoming chain-of-custody procedure.
- D. The samples are stored in a secured area at a temperature of approximately 4°C until analyses are to commence.
- E. A laboratory chain-of-custody record accompanies the sample or sample fraction through final analysis for control.
- F. A copy of the chain-of-custody form will accompany the laboratory report and will become a permanent part of the project records.



### **5.3 FINAL EVIDENCE FILES**

Final evidence files include all originals of laboratory reports and are maintained under documented control in a secure area.

A sample or an evidence file is under custody if:

- It is in your possession; it is in your view, after being in your possession.
- It was in your possession and you placed it in a secure area.
- It is in a designated secure area.

## **SECTION 6**

### **CALIBRATION PROCEDURES**

Instruments and equipment used to gather, generate or measure environmental data will be calibrated with sufficient frequency and in such a manner that accuracy and reproducibility of results are consistent with the appropriate manufacturer's specifications or project specific requirements. The procedures for instrument calibration, calibration verification, and the frequency of calibrations are described in the NYSDEC-CLP. The calibration of instruments used for the determination of metals will be as described in the appropriate CLP standard operating procedures.

Calibration of other instruments required for measurements associated with these analyses will be in accordance with the manufacturer's recommendations and the standard operating procedures of the laboratory.

## **SECTION 7**

### **ANALYTICAL PROCEDURES**

Analytical procedures shall conform to the most recent revision of the NYSDEC-ASP and are summarized on Table 7.1. In the absence of USEPA or NYSDEC guidelines, appropriate procedures shall be submitted for approval by NYSDEC prior to use.

The procedures for the sample preparation and analysis for organic compounds are as specified in the NYSDEC-ASP. Analytical cleanups are mandatory where matrix interferences are noted. No sample shall be diluted any more than 1 to 5. The sample shall be either re-extracted, re-sonicated, re-stream distilled, etc. or be subjected to any one analytical cleanup noted in SW846 or a combination thereof. The analytical laboratory shall expend such effort and discretion to demonstrate good laboratory practice and demonstrate an attempt to best achieve the method detection limit.

#### **7.1 VOLATILE ORGANIC COMPOUNDS (VOCs)**

For the analysis of water samples for Target Compound List (TCL), volatile organic compounds (VOCs), no sample preparation is required. The analytical procedure for volatiles is detailed in NYSDEC-ASP (Volume I, Section D-I). A measured portion of the sample is placed in the purge and trap apparatus and the sample analysis is performed by gas chromatography/mass spectrometry for the first round. USEPA Methods 8010 or 8020 (gas chromatography with different detectors) will be used if subsequent rounds with lower limits of detection are warranted.

#### **7.2 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)**

The extraction and analytical procedures used for preparation of water, soil and sediment samples for the analysis of the TCL semi-volatile organic compounds are described in NYSDEC-ASP Volume I, Section D-III.

Instrument calibration, compound identification, and quantitation are performed as described in Section 6 of this document and in the NYSDEC-ASP.

### **7.3 METALS**

Water, soil and waste samples will be analyzed for the metals listed in Table 7.1. The detection limits for these metals are as specified in the NYSDEC-ASP, Section D-V. The instrument detection limits will be determined using calibration standards and procedures specified in the NYSDEC-ASP. The detection limits for individual samples may be higher due to the sample matrix. The procedures for these analyses will be as described in the NYSDEC-ASP.

The digestion procedures for water samples are not recommended for samples requiring analysis for mercury, arsenic or selenium. The aliquot of sample analyzed for As and Se will be prepared using the modifications described in USEPA Methods 206.2 CLP-M and 270.2 CLP-M, respectively. Analysis for mercury requires a separate digestion procedure (245.1 CLP-M, or 245.2 CLP-M).

The analyses for metals will be performed by atomic absorption spectroscopy (AAS) or inductively-coupled plasma emission spectroscopy (ICPES), as specified in the ASP with regard to AAS flame analysis.

### **7.4 SITE SPECIFICITY OF ANALYSES**

Work plans prepared for remedial investigation waste sites contain recommendations for the chemical parameters to be determined for each site. Thus, some or all of the referenced methods will apply to the analysis of samples collected at the individual waste sites. Analyses of Target Compound List (TCL) analytes will be performed on all samples.

**TABLE 4.1**

**SAMPLE CONTAINERIZATION**

<b>ANALYSIS</b>		<b>BOTTLE TYPE</b>	<b>PRESERVATIVE<sup>(1)</sup></b>	<b>HOLDING TIME<sup>(2)</sup></b>
<b>Soil</b>				
TCL organics		Wide mouth, plastic or glass	None	7 days (until extraction, 40 days extracted)
TAL Metals		Wide mouth, plastic or glass	None	6 months

- (1) All samples will be preserved with ice during collection and shipment.
- (2) From verified time of sample receipt by the analytical laboratory (within 24 to 48 hours of collection).

TABLE 4.2

SAMPLING PROCEDURE FOR MONITORING WELLS

1. Initial static water level recorded with an electric contact probe accurate to the nearest 0.1 foot.
2. Sampling device and electric contact probe decontaminated.
  - Sampling device and probe are rinsed with pesticide-grade methanol and distilled water.
  - Methanol is collected into a large funnel which empties into a five- gallon container.
3. Sampling device lowered into well.
  - Bailer lowered by dedicated PVC or polypropylene line.
4. Sample taken.
  - Sample is poured slowly from the open end of the bailer and the sample bottle tilted so that aeration and turbulence are minimized.
  - Duplicate sample is collected when appropriate.
5. Samples are capped, labeled and placed in laboratory coolers with ice packs or bagged ice.
6. All equipment is cleaned with successive rinses of pesticide-grade methanol and distilled water.
  - Dedicated line is disposed of or left at well site.
7. Equipment/wash blanks are collected when non-dedicated sampling equipment is used.
8. Chain-of-custody forms are completed in triplicate.
  - The original and one carbon copy are put into a zip-lock bag and placed into the cooler. The original will be returned following sample analysis.
  - A second carbon copy is kept on file.
9. Cooler is sealed with strapping tape and chain-of-custody seals to assure integrity and to prevent tampering of sample.

TABLE 7-1

PROPOSED METHOD DETECTION LIMITS AND  
ANALYTICAL METHODS  
ASP INORGANICS, ASP VOLATILES, ASP SEMI-VOLATILES.

Superfund Target Compound List (TCL) and Contract-Required Quantitation Limit

SECTION 1 - ASP INORGANICS  
Method: NYSDEC-ASP, June 2000

PARAMETER		CONTRACT-REQUIRED DETECTION LEVEL* ( $\mu\text{g/l}$ )
1.	Aluminum	200
2.	Antimony	60
3.	Arsenic	10
4.	Barium	200
5.	Beryllium	5
6.	Cadmium	5
7.	Calcium	5000
8.	Chromium	10
9.	Cobalt	50
10.	Copper	25
11.	Iron	100
12.	Lead	3
13.	Magnesium	5000
14.	Manganese	15
15.	Mercury	0.2
16.	Nickel	40
17.	Potassium	5000
18.	Selenium	5
19.	Silver	10
20.	Sodium	5000
21.	Thallium	10
22.	Vanadium	50
23.	Zinc	20
24.	Cyanide	10

\*Matrix: groundwater. For soil matrix, multiply CRDL by 100.

TABLE 7-1 (continued)

SECTION I - ASP ORGANICS  
Method: NYSDEC-ASP, June 2000

VOLATILE		PROPOSED METHOD DETECTION LIMITS (µg/l)*
1.	Chloromethane	1
2.	Bromomethane	1
3.	Vinyl chloride	1
4.	Chloroethane	1
5.	Methylene chloride	1
6.	Acetone	1
7.	Carbon disulfide	1
8.	1,1-Dichloroethylene	1
9.	1,1-Dichloroethane	1
10.	1,2-Dichloroethylene (total)	1
11.	Chloroform	1
12.	1,2-Dichloroethane	1
13.	2-Butanone	1
14.	1,1,1-Trichloroethane	1
15.	Carbon tetrachloride	1
16.	Bromodichloromethane	1
17.	1,1,2,2-Tetrachloroethane	1
18.	1,2-Dichloropropane	1
19.	cis-1,3-Dichloropropene	1
20.	Trichloroethene	1
21.	Dibromochloromethane	1
22.	1,1,2-Trichloroethane	1
23.	Benzene	1
24.	Trans-1,3-Dichloropropene	1
25.	Bromoform	1
26.	2-Hexanone	1
27.	4-Methyl-2-pentanone	1
28.	Tetrachloroethylene	1
29.	Toluene	1
30.	Chlorobenzene	1
31.	Ethylbenzene	1
32.	Styrene	1
33.	Total xylenes	1

\*Quantitation limit for medium-level soil is 1200 µg/kg (wet weight basis).



TABLE 7-1 (continued)

SECTION I - ASP ORGANICS  
Method: NYSDEC-ASP, June 2000

SEMI-VOLATILES		CONTRACT-REQUIRED QUANTITATION LIMIT (µg/l)
34.	Phenol	10
35.	Bis(2-chloroethyl) ether	10
36.	2-Chlorophenol	10
37.	1,3-Dichlorobenzene	10
38.	1,4-Dichlorobenzene	10
39.	1,2-Dichlorobenzene	10
40.	2-Methylphenol	10
41.	2,2' oxybis(1-Chloropropane)	10
42.	4-Methylphenol	10
43.	N-Nitroso-dipropylamine	10
44.	Hexachloroethane	10
45.	Nitrobenzene	10
46.	Isophorone	10
47.	2-Nitrophenol	10
48.	2,4-Dimethylphenol	10
49.	bis(2-Chloroethoxy) methane	10
50.	2,4-Dichlorophenol	10
51.	1,2,4-Trichlorobenzene	10
52.	Naphthalene	10
53.	4-Chloroaniline	10
54.	Hexachlorobutadiene	10
55.	4-Chloro-3-methylphenol	10
56.	2-Methylnaphthalene	10
57.	Hexachlorocyclopentadiene	10
58.	2,4,6-Trichlorophenol	10
59.	2,4,5-Trichlorophenol	25
60.	2-Chloronaphthalene	10
61.	2-Nitroaniline	25
62.	Dimethyl phthalate	10
63.	Acenaphthylene	10
64.	2,6-Dinitrotoluene	10
65.	3-Nitroaniline	25
66.	Acenaphthene	10
67.	2,4-Dinitrophenol	25

TABLE 7-1 (continued)

**SECTION I - ASP ORGANICS**  
 Method: NYSDEC-ASP, June 2000

SEMI-VOLATILES		CONTRACT-REQUIRED QUANTITATION LIMIT (µg/l)
68.	4-Nitrophenol	25
69.	Dibenzofuran	10
70.	Dinitrotoluene	10
71.	Diethylphthalate	10
72.	4-Chlorophenyl phenyl ether	10
73.	Fluorene	10
74.	4-Nitroanile	25
75.	4,6-Dinitro-2-methylphenol	25
76.	N-nitrosodiphenylamine	10
77.	4-Bromophenyl phenyl ether	10
78.	Hexachlorobenzene	10
79.	Pentachlorophenol	25
80.	Phenanthrene	10
81.	Anthracene	10
82.	Carbazole	10
83.	Di-n-butyl phthalate	10
84.	Fluoranthene	10
85.	Pyrene	10
86.	Butyl benzyl phthalate	10
87.	3,3'-Dichlorobenzidine	10
88.	Benz(a) anthracene	10
89.	Chrysene	10
90.	bis(2-ethylhexyl)phthalate	10
91.	Di-n-octyl phthalate	10
92.	Benzo(b)fluoranthene	10
93.	Benzo(k)fluoranthene	10
94.	Benzo(a)pyrene	10
95.	Indeno(1,2,3-cd)pyrene	10
96.	Dibenz(a,h)anthracene	10
97.	Benzo(g,h,i)perylene	10