NORTHTOWN INC.

ERIE COUNTY

AMHERST, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C915292

Prepared for:

Northtown Property
Owner LLC
33 Boylston Street,
Suite 3000
Chestnut Hill,
Massachusetts

Prepared by:

GZA GeoEnvironmental
of New York
535 Washington Street
Buffalo, New York
(716) 685-2300

Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

November 2016

CERTIFICATION STATEMENT

I Bart A. Klettke certify that I am currently a NYS registered professional engineer as is defined in 6 NYCRR Part 375 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).

Bart A. Klettke P.E.

November 28, 2016 DATE

TABLE OF CONTENTS

NORTHTOWN INC.
ERIE COUNTY
AMHERST, NEW YORK

SITE MANAGEMENT PLAN

Table of Contents

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

List of Tables

List of Figures (attached)

List of Appendices (attached)

List of Acronyms

ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operations and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RP	Remedial Party
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Soil Management Plan
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVOC	Semi-volatile Organic Compound
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: Site ID # C915292 Northtown Inc., 1.424-acre portion of 3097 Sheridan Drive, Amherst, New York

Institutional Controls:	1. The Controlled Property may be used for commercial and industrial uses.
	2. All Engineering Controls must be operated and maintained as specified in the 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 Erie 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 the Environmental Easement.

	11. The potential for vapor intrusion must be evaluated prior to development of new buildings or re-occupancy of existing buildings in AOI 3 and west of AOI3 to the western boundary of parcel 67.10-1-10 as noted on Figure 8 and any potential impacts that are identified must be monitored and/or mitigated; and
	12. Vegetable gardens and farming on the site are prohibited.
Engineering Controls:	1. Sub-Slab Depressurization Systems (SSDS) where and when applicable, see Section 3.3.1 below.

Inspections:	Frequency
1. SSDS Inspection	Monthly
Maintenance:	
1. SSDS Maintenance	As needed
Reporting:	
1. Periodic Review Report	Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Northtown Inc. BCP Site located in Amherst, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (Site No. C915292) which is administered by New York State Department of Environmental Conservation (NYSDEC).

Northtown Property Owner LLC entered a Brownfield Cleanup Agreement (BCA) on June 17, 2015 (replacing original party on BCA dated May 15, 2015) with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided as Figure 2. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix A.

After completion of the remedial work, low concentrations of some contamination was left at a portion of this site (above unrestricted SCO but below commercial SCOs), which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Erie County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. 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.

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 for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix B of this SMP.

This SMP was prepared by GZA GeoEnvironmental of New York on behalf of Northtown Property Owner LLC in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and ECs that are required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated soil or other significant change to the site conditions. 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.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (other than emergency utility repair or other emergency situations).
- Notice within 48-hours of any damage or defect to the foundation, structures

or EC that reduces or has the potential to reduce the effectiveness of an EC, 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 ECs 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.

- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting 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/Remedial Party has been provided with a copy of the Brownfield Cleanup Agreement (BCA) and all approved work plans and reports, including this SMP.

- 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 to the NYSDEC.

Table 1 on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

Table 1: Notifications*

Name	Contact Information
NYSDEC Project Manager	(716) 851-7220
NYSDEC Regional HW Engineer	(716) 851-7220
NYSDEC Site Control	(518) 402-9553

* Note: Notifications are subject to change and will be updated as necessary.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The site is located in the Town of Amherst, Erie County, New York and is identified as two portions of land within the larger Section 67.10 Block 1 and Lot 10 on the Tax Map (see Figure 3). The site consists of three Areas of Interest (AOIs) comprising 1.424-acre area and is located within the Northtown Plaza which is bounded by Sheridan Drive to the north, Eggert Road to the south, other plaza buildings and Bailey Avenue to the east, and Niagara Falls Boulevard to the west (see Figure 3 – Site Layout Map). The boundaries of the site are more fully described in Appendix A, Environmental Easement/Metes and Bounds. The owner of the site parcels at the time of issuance of this SMP is: Northtown Property Owner LLC.

2.2 Physical Setting

2.2.1 Land Use

The Site consists of commercial retail buildings and related driveways and parking areas. The Site is zoned commercial and is currently used for commercial retail use. Current and/or recent Site occupants include but are not limited to a drop-off/pick-up dry cleaner (cleaning is no longer done on the premises), a tax business, a physical fitness facility, a grocery store, a men's retail clothing store, a pet supply store, and meat market.

AOI 1 is 0.152 acres and includes portions of tenant spaces 21 and 22 and formerly included an abandoned fuel oil underground storage tank (UST). Tenant spaces 21 and 22 are currently vacant and will remain so until the building in which they are housed is demolished. AOI 2 is 0.048 acres and formerly included an abandoned fuel oil UST. AOI 3 is 1.272 acres and includes AOI 2 and tenant spaces 7 through 14. Tenant spaces 10 through 14 are currently vacant and will remain so until the building in which they are housed is demolished pending the expiration of the remaining tenant space lease agreements (see Figure 2 BCP Site Location & Boundaries).

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial and residential properties. The properties immediately south of the plaza include a series of small commercial properties; the properties immediately north of the plaza include commercial properties; the properties immediately

east of the plaza include commercial properties; and the properties to the west of the plaza include commercial properties.

2.2.2 Geology

The topography of the Site area is generally flat. The Site is located between the Niagara and Onondaga Escarpments. Subsurface conditions at the Site consist of a thin layer of fill material sand, gravel, silt, and clay mixed with some anthropogenic materials (depth interval of approximately 1.5 to 5.0 feet) overlying native glacial till soil comprised of silts and clays with varying amounts of sand and gravel. The native glacial till layer is approximately 1.5 to 58 feet thick at the Site. According to the New York State Geological Map – Niagara Sheet, bedrock is of the upper Silurian age, and is composed of sequences of shale, dolomite, salt, and gypsum. The approximate depth to bedrock ranges from between 54 and 58 feet. Site specific boring logs are provided in Appendix C.

2.2.3 Hydrogeology

The regional groundwater aquifer beneath the Site was encountered at a depth of approximately 50 feet below ground surface, at the overburden-bedrock interface. This water bearing zone exhibits artesian conditions due to the overlying glacial till unit which acts as a semi-confining layer. Water levels of wells completed in the aquifer rise to between 6 and 8 feet below ground surface. Table 2 provides depth to groundwater from the three deeper wells MW-1, MW-2, and MW-3 collected on May 23, 2014 and Figure 5 provides the location of the monitoring wells with groundwater elevation contours. Pore water has previously been identified at depths ranging from 5 to 15 feet below ground surface. Due to the fine grain size of the glacial till matrix, hydraulic conductivity of the pore water was observed to be very low such that water did not flow into a newly drilled well for days after the well's installation.

Perched water was observed present within the upper fill soils directly beneath the

pavement, particularly where the fill is loose and of higher permeability than the underlying till. Perched water can be more prevalent following substantial or extended periods of precipitation and during seasonally wet periods. Depth to pore water data is provided in Table 2. Groundwater monitoring well construction logs are provided in Appendix C.

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 – References.

Phase I ESA:

In September of 2013, a Phase I Environmental Site Assessment (ESA) was performed of the Northtown Plaza Site for the future purchase of said property. Recognized Environmental Concerns (RECs) were identified during the due diligence, including the identification of heating oil underground storage tanks (USTs) and the listing of hazardous waste generation for the historic use of chlorinated solvents in dry cleaning operations.

Phase II ESA:

A Phase II ESA was completed at the plaza property in phases between January 2014 and May 2014. The RECs that were identified in the Phase I ESA were investigated and limited impacts were identified as follows:

- Limited areas of impacted soil associated with the two abandoned heating oil underground storage tanks (USTs). Samples collected to assess the impacted soils associated USTs were from the perimeter of visually stained area at depths between four and 12 feet. The laboratory results did not indicate levels above Unrestricted Soil Cleanup Objectives (SCOs) in these samples.

- A limited area of soil impacted by tetrachloroethene (PCE) associated with the former dry cleaner operations in the southwestern portion of the Site was

identified. PCE concentrations in two soil samples exceeded its respective Part 375 Industrial use SCO which were from depths of 6 to 8 feet bgs and 14 to 16 feet BGS. The other 50 samples analyzed were below their respective commercial use SCOs.

- Indoor air impacted by PCE above its respective air guidance value (AGV) in a dry cleaner unit and an adjoining vacant unit in building 3, tenant spaces 14 and 13 respectively.

Groundwater impacts were not identified and PCE is no longer used in the dry cleaner unit on-site.

Brownfield Cleanup Program:

In December of 2014, Northtown Associates LLC predecessors of Northtown Property Owner LLC, submitted a BCP application to NYSDEC. In the BCP application, three areas of interest (AOIs) were identified based on findings from the previous Phase II. AOIs 1 and 2 are associated with two former fuel oil tanks, Figure 4. AOI 3 is associated with the dry cleaning usage at the Site. In February 2015, NYSDEC approved Northtown Associates LLC., application for entry into the BCP, later amending the BCA to accommodate the new name of the property owner, Northtown Property Owner LLC.

Two additional investigations were performed in March and April of 2015 to delineate the vertical and lateral extent of chlorinated volatile organic compounds (CVOCs) at concentrations above the commercial use (SCOs) at AOI3 and to further assess the potential of soil vapor intrusion and shallow pore water impacts throughout AOI3. Examination of the subsurface soil samples collected at the Site demonstrated four isolated areas of PCE impacts at AOI3 that were of limited extent. Soil samples collected surrounding the four data points contained PCE at concentrations below the commercial use SCO, illustrating the limited extent of the higher concentrations of PCE. Soil gas samples collected near the east and west boundaries of AOI3 had low detections of PCE. Sub-slab vapor samples compared with corresponding indoor air samples for AOI3 tenant spaces 7 – 12 not previously investigated

had low concentrations of CVOCs observed in indoor air that are likely not the result of soil vapor. PCE was detected in sub-slab soil vapor from the dry cleaner, adjacent tenant space and building directly west of AOI 3 and mitigation of these areas was selected. An Interim Remedial Measure Work Plan was approved by the DEC to install sub-slab depressurization systems at these three locations as well as remove the USTs and impacted soil described above.

As requested by the NYSDEC, in May 2016, GZA collected groundwater samples from the three deep overburden wells on-site (MW-1, MW-2, and MW-3) and four vertical composite samples of shallow (0 to 4 feet) native soil from the three AOIs and submitted the samples for analysis for Target Analyte List (TAL) metals and pesticides via USEPA SW-846 Test Methods 6010 and 8151, respectively. No analytes were detected at concentrations above the unrestricted use SCOs in the soil samples collected and submitted for analysis except for the metals chromium (detected at 32.6 ppm) and nickel (detected at 34.8 ppm) in a soil sample collected from AOI-3, identified as AOC-3-C-2-051916. These concentrations were below the commercial use SCOs. The metals magnesium and sodium were collectively detected at concentrations above the NYSDEC Class GA Criteria in all three wells sampled; however, such are non-toxic and are common constituents of road salt heavily utilized in the Site area. Therefore, these detections do not represent a concern to the Site.

Based on the results of the subsurface investigations at the Site, it was determined that Interim Remedial Measures (IRMs) would be implemented to address petroleum- and solvent- impacted fill materials at the Site. Between December 2015 and July 2016, three IRMs were completed at the Site, which consisted of the following:

- Installation of sub-slab depressurization systems within tenant space 14 of Building 3 (former on-site dry cleaning operations) in November and December 2015, Figure 7, and within off-site tenant space 1 of Building 2 (former automotive service facility) in January 2016, Figure 7. Buildings 2, 3, and 4 are planned for demolition as part of the overall site redevelopment. Eleven tenant spaces are involved in the BCP in these three building. As tenant leases expire they are not renewed and the tenants vacate the space. The vacated spaces will remain vacant to building demolition. As of October 31, 2016, eight of the 11 subject tenant spaces are vacant as follows; all of building 2, formerly occupied by Total Automotive repair, is vacant. Tenant spaces 10 through 14, in building 3 are vacant. Tenant spaces 21 and 22, located within building 4 are vacant;
- Removal of the two USTs and associated petroleum-impacted soils within AOI 1 and AOI 2 (Figure 4); and

- Removal of solvent-impacted subsurface soil at AOI 3 (Figure 4).

The IRMs were successful in meeting the Remedial Action Objectives (RAOs) for the Site, which were to prevent ingestion/direct contact with contaminated soil, to prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil, and to mitigate potential impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

- Mitigate potential impacts to public health resulting from existing, or the potential for, soil vapor intrusion into occupied buildings on-site.

2.5 Remaining Contamination

Table 3 and Figure 4 summarize the results of all soil samples collected that exceed the Unrestricted Use SCOs at the site after completion of remedial action.

2.5.1 Soil

Figure 4 summarizes the results of all soil samples collected that exceeded the Unrestricted Use SCOs at the site after completion of the previous Phase II investigation and Pre-Design Field Characterization completed at the Site. Soil located at the following borings contained contaminants that exceeded the unrestricted use SCOs, and was not excavated during the IRM: SP-11, SP-16, SP-36, SP-37, SP-44, SP-46, SP-48, SP-51, SP-55, SP-57, SP-58, SP-59, and SP-63 through SP-66 (Table 3). The locations represented by these borings must be considered as areas of remaining contamination above the unrestricted use SCOs. The depth at which post-remedial samples containing CVOCs at concentrations greater than unrestricted use SCOs were collected ranges from 0 to 2 feet at SP-46 to as deep as 22 feet at SP-64.

As detailed in the FER, none of the confirmatory samples collected from the excavations within AOIs 1 and 2 contained contaminants at concentrations above unrestricted use SCOs or commercial use SCOs, with the exception of acetone, a common laboratory contaminant. Due to its close proximity to the building foundation, a small volume of soil with nuisance characteristics of petroleum-impact was left in place at the northern extent of the excavation at AOI 1. The estimated depth to the top and bottom of this soil is one foot and four feet bgs respectively. The estimated thickness between the building foundation and north wall of the excavation is 6 inches and the estimated length is 8 feet. Total estimated volume of remaining soil with nuisance characteristics at AOI1 is 12 cubic feet. The confirmatory sample collected from this soil however did not contain analytes at concentrations above the unrestricted use SCOs. As detailed in the FER, most of the confirmatory samples collected from the two excavations within AOI 3 contained solvents at concentrations above unrestricted use SCOs but below the commercial use SCOs; therefore, the areas around these two excavations must be considered as areas of remaining soil with concentrations potentially above unrestricted use SCOs (Figure 4). Assuming an area of 90 feet by 90 feet and a depth of 20 feet, and taking into account the two areas of PCE excavation, a rough estimate of 3600 cubic yards of soil with chlorinated VOCs at concentrations above unrestricted use SCOs remains on the Site at AOI3.

2.5.2 Groundwater/Pore Water

Table 4 and Figure 5 summarize the results of samples of groundwater and pore water collected from AOI3 prior to soil removal actions. The three deep overburden groundwater monitoring wells (MW-1 through MW-3) were installed at to depths of approximately 55 feet to the overburden-bedrock interface. Wells MW-2 and MW-3 were installed outside of the BCP site and did not contain CVOCs. Refer to Figure 5 for well locations. Well MW-1 did contain PCE at a concentration below the groundwater standard. See Table 2. Results of pore water samples that contained a very high turbidity are not considered indicative of groundwater conditions. Figure 5 provides the locations of the groundwater (MW-1, MW2, and MW-3) and porewater (MW-4 through MW-9) wells installed at the Site. Note that MW-1 was removed during the remedial excavation #2. Groundwater elevation contours from wells MW-1, MW-2, and MW-3 are also provided on Figure 5.

2.5.3 Soil Vapor

- Soil vapor and paired indoor air samples were collected from each of the tenant spaces 7 through 14 in Building #3 and from Building #2. PCE was present in soil gas beneath Building #2 and tenant space 14 of building #3 at concentrations warranting mitigation. PCE was present beneath building #2 at a concentration of 2500 ug/m3 but was not detected in the corresponding indoor air sample at this location. PCE was detected in the soil vapor beneath tenant space 14 at a concentration of 230 ug/m3 and 60 ug/m3 in the corresponding indoor air sample. SSD systems were installed at these two tenant spaces. Tenant space 13 also had PCE in sub-slab soil vapor at an elevated concentration of 6400 ug/m3 with a corresponding indoor air concentration of 70 ug/m3. This unit was vacant at the time of sampling and has remained vacant ever since, therefore a SSD system was not installed at this tenant space. The other tenant spaces sampled were all at low levels or non-detect and did not warrant further investigation or mitigation. Table 5 and Figure 6 summarize the results of samples of indoor air and soil vapor after completion of the SSDS remedial action. Sub-slab depressurization systems have been installed at the two tenant spaces shown on Figure 7. `Note that after installation of the two SSD systems the presumed subsurface source of the PCE was removed by excavation and off-site disposal. As long as the subject tenant spaces are occupied, the SSD system(s) will not be discontinued unless prior written approval is granted by the NYSDEC. Buildings 2, 3, and 4 are planned for demolition as part of

the overall site redevelopment. Eleven tenant spaces are involved in the BCP in these three building. As tenant leases expire they are not renewed and the tenants vacate the space. The vacated spaces will remain vacant to building demolition. As of October 31, 2016, eight of the 11 subject tenant spaces are vacant as follows; all of building 2, formerly occupied by Total Automotive repair, is vacant. Tenant spaces 10 through 14, in building 3 are vacant. Tenant spaces 21 and 22, located within building 4 of AOI1 are also vacant;

In the event that monitoring data indicates that the SSD system(s) may no longer be required, a proposal to discontinue the SSD system(s) will be submitted by the remedial party to NYSDEC and NYSDOH.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

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

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix D 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 IC/ECs required by the site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to commercial and industrial uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are those of the BCP Site Boundaries as illustrated on Figure 2. These ICs are:

- The property may be used for commercial and industrial use;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie 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;
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- 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 the Environmental Easement;
- The potential for vapor intrusion must be evaluated prior to development of new

buildings or re-occupancy of existing buildings in AOI 3 and west of AOI3 to the western boundary of parcel 67.10-1-10 as noted on Figure 8 and any potential impacts that are identified must be monitored and/or mitigated; and

- Vegetable gardens and farming on the site are prohibited.

3.2.1 Excavation Work Plan

The Site has been remediated for restricted commercial or industrial use. Any future intrusive work that will encounter or disturb the remaining contamination will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix D to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) attached as Appendix H to this SMP and the associated Community Air Monitoring Plan (CAMP) prepared for the Site.

3.3 Engineering Controls

3.3.1 Sub-Slab Depressurization (SSD) Systems

In December, 2015 the remedial party completed installation of sub-slab depressurization systems (SSDSs) at the now vacant tenant space 14 within Building 3 in AOI3 and at tenant space 1, the now vacant Building 2 located off-site directly west of AOI 3, see Figure 7 for the locations of the SSD systems. The remedial objective of the SSDSs was to mitigate the risk of exposure to CVOCs in air at occupied buildings with confirmed CVOCs in sub-slab soil vapor. The SSDSs use fan-powered vents and piping to draw vapors from the soil beneath the building slabs and discharge the vapors to the atmosphere. Depressurizing the area beneath the building slabs relative to indoor air pressure creates a relative vacuum that minimizes or prevents the infiltration of sub-slab vapors into the buildings.

As long at the tenant space(s) within which the SSD systems are located remain occupied by a tenant, the SSD systems will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSD system(s) may no longer be required, a proposal to discontinue the SSD system(s) will be submitted by the remedial party to NYSDEC and NYSDOH.

Procedures for operating and maintaining the Sub-slab Depressurization Systems are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As built drawings are included in Appendix I – Operations and Maintenance Manual. Figure 7 shows the location of the ECs for the site.

3.3.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when 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.

4.0 MONITORING PLAN

4.1 General

This Monitoring Plan describes the measures for evaluating the overall performance and effectiveness of the SSD systems. This Monitoring Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the site are included in the Quality Assurance Project Plan provided in Appendix G.

This Monitoring Plan describes the methods to be used for:

- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;
- To adequately address these issues, this Monitoring Plan provides information on: Annual inspection and periodic certification; and
- Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site-wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix E - Site Management Forms. 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; and

• Confirm that site records are up to date.

A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs 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;
- If site records are complete and up to date; and

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 System Monitoring

4.3.1 SSD System Monitoring

Monitoring of the Sub-slab Depressurization Systems will be performed on a routine basis when the systems are operating (i.e. when the spaces are not vacant), as identified in Table 6 Mitigation System Monitoring Requirements and Schedule (see below). Modification to the frequency requirements will require approval from the NYSDEC. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of a Sub-slab Depressurization System has been reported or an

emergency occurs that is deemed likely to affect the operation of the system. SSD system components to be monitored include, but are not limited to, the components included in Table 6 below.

Table 6– Mitigation System Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Monitoring Schedule
Vacuum Blower	Pressure Differentials	Monthly and annually*
General System Piping	Pressure Differentials	Monthly and annually*

*Monitoring will be performed when systems are operating. When in operation, the SSDS will be additionally monitored monthly by the owner representative.

A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix E - Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.4 Post Remedial Media Monitoring and Sampling

4.4.1 Soil Vapor Intrusion Sampling

- Soil vapor intrusion sampling will be performed prior to development of new buildings or re-occupancy of existing buildings in AOI 3 and west of AOI 3 to the western boundary of parcel 67.10-1-10, as noted on Figure 8 Sample types, number, and locations will be determined based on the specifics of the proposed building. Prior to SVI sampling, a SVI Sampling and Analysis Work Plan will be prepared and approved by the NYSDEC.

Deliverables for the soil vapor intrusion sampling program are specified in Section 7.0 – Reporting Requirements.

Detailed sample collection and analytical procedures and protocols are provided in Appendix F – Field Sampling Plan and Appendix G – Quality Assurance Project Plan. Appendix H of this document contains the Health and Safety Plan.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the Sub-slab Depressurization Systems;
- Will be updated periodically to reflect changes in site conditions or the manner in which the Sub-slab Depressurization Systems are operated and maintained.

Further details regarding the Operation and Maintenance of the Sub-slab Depressurization Systems is provided in Appendix I - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

5.2 SSDS Performance Criteria

5.3 Operation and Maintenance of Sub-slab Depressurization Systems

The following sections provide a description of the operations and maintenance of Sub-slab Depressurization Systems. Construction Completion Reports (CCRs) for the sub-slab Depressurization Systems are provided in Appendix I - Operations and Maintenance Manual.

5.3.1 System Start-Up and Testing – performed after installation.

The system testing described above was conducted to establish baseline readings for future reference if, in the course of the Sub-slab Depressurization System lifetime, the system goes down or significant changes are made to the system and the system must be restarted. The SSDS in Tenant Space 14 of Building 3 (former GiRo Cleaners space) includes three suction points connected to one fan (RADONAWAY RP-265 centrifugal fan). The SSDS in Building 2 (former Total Automotive) contains one suction point

connected to one fan (RADONAWAY RP-265 centrifugal fan). The SSDSs have no centralized instrumentation or controls. The individual fans can be switched either from the fan positioned disconnect or at the breaker. Each fan system is equipped with a vacuum indicator mounted in a visible location on an associated riser pipe. The indicator consists of an oil filled U-tube style monometer. The indicator is inspected by observing the level of colored fluid. This indicator is designed primarily to give a simple visual check that vacuum is present in the riser pipe. Fans are to be kept in continuous operation. Fans restart automatically after a power loss.

5.3.2 Routine System Operation and Maintenance

- Inspect fans vacuum indicator to verify that value, indicted by a mark on the gauge, has not changed significantly from the position of the mark. Gauge is inspected by observing the level of colored fluid.
- Inspect visible components of the entire SSDS;
- Record inspection observations.

Refer to Appendix I.

5.3.3 Non-Routine Operation and Maintenance

If changes to the building structure, foundation slab, or HVAC system take place, possible impacts of those changes to the SSDS should be evaluated by a qualified SSDS contractor.

Refer to Appendix I.

Table 6 provides a summary and schedule of routine maintenance.

5.3.4 System Monitoring Devices and Alarms

In the event of a power loss the fan(s) start automatically once power is restored. Operational problems, if encountered, will be noted in the Periodic Review Report to be prepared for that reporting period.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding. This section provides a summary of vulnerability assessments that will be conducted for the site during periodic assessments, and briefly summarizes the vulnerability of the site and/or engineering controls to severe storms/weather events and associated flooding.

Sub-slab depressurizations systems have been installed at the site. As most components of these systems are located indoors, it is not expected that storms/weather events resulting from climate change will significantly impact the performance of these systems. Significant flooding at the site from increased storm activity is not anticipated. The site is not located within a flood plain, low-lying area or low-groundwater recharge area. Drainage at the site is assisted by storm drains located throughout the parking lot, which to date have appeared to be adequate in preventing significant flooding. In addition, as the entire Site is either paved or covered by buildings, erosion of residually impacted soils is not anticipated. As the remedial system components are not located proximate to trees or power lines, damage to the remedial systems from falling objects is not anticipated, but high winds alone may damage components of the remedial systems that are located outdoors. If power to the remedial systems is lost, there is the potential that vapor intrusion could occur. The property owner may consider having a generator as a back-up power source for the remedial systems. The potential for flooding, erosion, high winds, and power loss at the site and any potential impacts on the protectiveness of the remedial systems will be considered during annual inspections.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR). The primary green remediation element that will be implemented during maintenance of the remedy is proper maintenance and prompt troubleshooting of the sub-slab depressurization systems to optimize use of the electrical power inputs to the systems.

6.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at any time that the Project Manager feels appropriate, e.g. during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2 Remedial Systems

Remedial systems will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate.

6.2.3 Building Operations

Structures including buildings and sheds will be operated and maintained to provide for the most efficient operation of the remedy, while minimizing energy, waste generation and water consumption.

6.2.4 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to conduct system checks and or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

6.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study will be conducted any time that the NYSDEC or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and

- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focuses on overall site cleanup strategy, process optimization and management with the intent of identifying impediments to cleanup and improvements to site operations to increase efficiency, cost effectiveness and remedial time frames. Green remediation technology and principals are to be considered when performing the RSO.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in Appendix E. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 7 and summarized in the Periodic Review Report.

Table 7: Schedule of Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Periodic Review Report (PRR)	Annually, or as otherwise determined by the Department
Monthly and Annual SSDS Inspections	Annually (along with the PRR)
(As needed) SSDS Maintenance Reporting	Annually when SSDS is/are operational (along with the PRR)
SVI Evaluation Sampling Results Report(s)	As necessary related to potential future building construction or re-occupancy.

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

All monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed;

- 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

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of records for maintenance work or replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, analytical data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, subsequent PRRs shall be submitted annually to the Department or at another frequency as may be required by the Department. 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 A-Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. 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 site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- 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 in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific Decision Document;
  - The operation and the effectiveness of all SSDSs, 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 and Sampling 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.

- A performance summary for all treatment systems at the site during the calendar year, including information such as:
  - The number of days the system operated for the reporting period;
  - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - A description of the resolution of performance problems;
  - Alarm conditions;
  - Trends in equipment failure; and
  - Comments, conclusions, and recommendations based on data evaluation.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"*For each institutional or engineering control identified for the site, I 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 this 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 assumptions made in the qualitative exposure assessment remain valid.*

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/Remedial Party or Owner's/Remedial Party's Designated Site Representative]

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

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located, and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or the need for additional corrective measures relating to soil vapor intrusion to new or re-occupied buildings is determined necessary, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Work 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 Work Plan until it has been approved by the NYSDEC.

8.0 REFERENCES

Phase I Environmental Site Assessment – Northtown Plaza Sheridan Drive, Eggert Road and Bailey Avenue, Amherst, New York – September 2013

Phase II Environmental Site Assessment – Northtown Plaza Sheridan Drive, Eggert Road and Bailey Avenue, Amherst, New York – July 2014

Application to Brownfield Cleanup Program - Northtown Plaza Amherst, New York – December 2014

Pre-Design Field Characterization - Northtown Plaza BCP Site No. C915292, 3097 Sheridan Drive Amherst, New York - May 2015

Interim Remedial Measures Work Plan - Northtown Inc. Amherst, New York, Brownfield Cleanup Program Site No. C915292 – May 2015

Alternative Analysis Report Northtown Inc., Amherst, New York, Brownfield Cleanup Program Site No. C915292. August, 2016

Interim Remedial Measures Soil and Groundwater Characterization Sampling Results, Northtown Inc., BCP Site 915292, Amherst, New York, July 1, 2016.

Interim Remedial Measures Work Plan Amendment, Northtown Inc., BCP Site 915292, Amherst, New York, March 21, 2016.

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

TABLES

Table 2
Depth to Pore Water and Groundwater
Site Management Plan
Northtown Plaza BCP Site No. C915292
Amherst, New York

Well No.	**Depth to Water**	**Measurement Date**	**Relative GW Elevation** feet AMSL
MW-1 (1)	*8.11*	*5/23/2014*	*91.79*
MW-2 (1)	*7.94*	*5/23/2014*	*92.06*
MW-3 (1)	*8.04*	*5/23/2014*	*91.96*
MW-4 (2)	*14.48*	*3/17/2015*	*82.95*
MW-5 (2)	*DRY*	*3/17/2015*	*NA*
MW-6 (2)	*11.75*	*3/17/2015*	*84.82*
MW-7 (2)	*9.98*	*3/17/2015*	*87.07*
MW-8 (2)	*14.69*	*4/27/2015*	*79.36*
MW-9 (2)	*5.82*	*4/27/2015*	*88.3*

Notes:

(1) Artesian groundwater wells MW-1, MW-2, and MW-3 are deeper overburden wells (~55').

(2) Pore water wells MW-4 through MW-9 are shallow, approximately 20'.

TABLE 3
Analytical Summary of Remaining Soils
Site Management Plan
Northtown Plaza BCP Site No. C915292
Amherst, New York

Parameter	Part 375 - Unrestricted Use SCOs	Part 375 - Commercial Use SCOs	SP-11 01/31/2014 7 ft bgs	SP-11 01/31/2014 10-12 ft	SP-16 01/30/2014 10-12 ft	SP-16 01/30/2014 12-14 ft	SP-36 05/09/2014 4 ft bgs	SP-37 05/09/2014 1 ft bgs	SP-37 05/09/2014 11.9 ft bgs	SP-44 05/09/2014 5 ft bgs	SP-46 05/12/2014 0-2 ft bgs	SP-46 05/12/2014 2-4 ft bgs	SP-48 05/12/2014 10-12 ft bgs	SP-51 05/12/2014 10/12/2016	SP-55 3/11/2015 10-11 ft	SP-57 3/11/2015 12-13 ft	SP-58 3/11/2015 11-12 ft	SP-59 3/11/2015 13-14 ft	SP-59 3/11/2015 20-21 ft	SP-63 3/12/2015 8-9 ft	SP-64 3/12/2015 8-9 ft	SP-64 3/12/2015 21-22 ft	SP-65 3/12/2015 16-17 ft	SP-66 3/12/2015 12-13 ft
Volatile Organic Compounds - EPA Method 8260 TCL (ug/Kg)																								
2-Butanone	120	500,000	<	<	<	<	<	<	<	160	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichlorobenzene	1,100	500,000	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Acetone	50	500,000	<	<	<	<	96.4	<	<	564	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzene	60	44,000	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Toluene	700	500,000	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Ethylbenzene	1,000	390,000	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
m&p-Xylene	260	500,000	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
o-Xylene	260	500,000	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Isopropylbenzene	NV	NV	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Methylcyclohexane	NV	NV	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethene	1,300	150,000	<	**33,000**	**4,400**	**1,510**	<	**5,280**	**137,000**	<	**13,000**	34 J	**15,000**	**4,200**	**1,830**	**9,570**	**24,400**	**105,000**	**82,600**	861	**21,400**	**109,000**	**36,600**	**58,500**
Trichloroethene	470	200,000	<	**<**	<	<	<	**870**	<	<	**480**	<	44 J	<	<	<	<	<	<	**113,000**	<	<	<	<
cis-1,2-Dichloroethene	250	500,000	<	**<**	<	<	<	**343**	<	<	110 J	<	160 J	<	<	<	<	<	<	**32,400 J**	<	<	<	<
Carbon disulfide	NV	NV	<	<	<	<	<	<	<	19.9	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cyclohexane	NV	NV	<	<	<	<	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total VOCs			<	33,000	4,400	1,510	96	6,493	137,000	744	<	<	<	<										
Semi-Volatile Organic Compounds - EPA Method 8270 STARS (ug/Kg)																								
Naphthalene	12,000	500,000	<	<	NT	NT	<	NT	NT	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluorene	30,000	500,000	<	<	NT	NT	<	NT	NT	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	100,000	500,000	<	<	NT	NT	<	NT	NT	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluoranthene	100,000	500,000	<	<	NT	NT	<	NT	NT	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pyrene	100,000	500,000	<	<	NT	NT	<	NT	NT	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo [a] anthracene	1,000	5,600	**<**	**<**	NT	NT	**<**	NT	NT	**<**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chrysene	1,000	56,000	**<**	**<**	NT	NT	**<**	NT	NT	**<**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo [b] fluoranthene	1,000	5,600	**<**	**<**	NT	NT	**<**	NT	NT	**<**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo [a] pyrene	1,000	1,000	**<**	**<**	NT	NT	**<**	NT	NT	**<**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total SVOCs			<	<	NT	NT		NT	NT															
Polychlorinated Biphenyls - EPA Method 8082 (ug/Kg)																								
Total PCBs			<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to the laboratory reports for list of all compounds included in analysis.
2. Soil analytical testing completed by Paradigm Environmental Services, Inc., in Rochester, NY.
3. ug/kg = part per billion.
4. NV = no value. NT = not tested.
5. Yellow shading indicates value exceeds Unrestricted Use Soil Cleanup Objectives.
6. Orange shading indicates value exceeds Commerical Use Soil Cleanup Objectives.
7. Soil cleanup objectives (SCOs) are from NYSDEC Part 375, Subpart 375-6: Unrestricted Use, Commercial Use and Industrial Soil Cleanup Objectives.
8. < indicates compound not detected above method detection limits.
9. TCL = Target Compound List. STARS = NYSDEC Spill Technology and Remediation Series (STARS) Memo #1, Petroleum-Contaminated Soil Guidance Policy, New York
10. detections of 2-butanone and Acetone attributed to laboratory contaminatin and not considered site contaminants.

Table 4
Groundwater/Porewater Sample Data
Site Management Plan
Northtown Plaza BCP Site No. C915292
Amherst, New York

Sample ID Sample Date	NYSDEC Class GA Criteria(µg/L))	MW-1 5/21/2014 µg/L	MW-1 5/17/2016 µg/L	MW-2 5/21/2014 µg/L	MW-2 5/17/2016 µg/L	MW-3 5/21/2014 µg/L	MW-3 5/17/2016 µg/L	MW-4 3/17/2015 µg/L	MW-6 3/17/2015 µg/L	MW-7 3/17/2015 µg/L	MW-8 4/27/2015 µg/L	MW-9 4/27/2015 µg/L
Volatile Organic Compounds - EPA Method 8260 TCL (µg/L)												
cis-1,2-Dichloroethene	5	<	NT	<	NT	<	NT	<	2080	389	<	<
Tetrachloroethene	5	0.46J	NT	<	NT	<	NT	<	21700	31900	<	<
Trichloroethene	5	<	NT	<	NT	<	NT	<	2690	<	<	<
TAL Metals - EPA Methods 7471B/6010C/3050B (mg/L) - Dissolved												
Arsenic	0.025	NT	0.0139	NT	0.0104	NT	<0.0100	NT	NT	NT	NT	NT
Barium	1	NT	0.216	NT	<0.100	NT	<0.100	NT	NT	NT	NT	NT
Beryllium		NT		NT		NT		NT	NT	NT	NT	NT
Calcium	NV	NT	320	NT	483	NT	490	NT	NT	NT	NT	NT
Chromium		NT		NT		NT		NT	NT	NT	NT	NT
Cobalt		NT		NT		NT		NT	NT	NT	NT	NT
Copper	0.2	NT	0.0649	NT	<0.0250	NT	<0.0250	NT	NT	NT	NT	NT
Iron		NT		NT		NT		NT	NT	NT	NT	NT
Lead	0.025	NT	<0.0100	NT	<0.0100	NT	<0.0100	NT	NT	NT	NT	NT
Magnesium	35	NT	19.6	NT	81.4	NT	84.2	NT	NT	NT	NT	NT
Manganese	0.3	NT	<0.0150	NT	0.192	NT	0.0939	NT	NT	NT	NT	NT
Nickel		NT		NT		NT		NT	NT	NT	NT	NT
Potassium	NV	NT	20.2	NT	11.4	NT	5.61	NT	NT	NT	NT	NT
Sodium	20	NT	4,850	NT	99.0 M	NT	94.1	NT	NT	NT	NT	NT
Vanadium		NT		NT		NT		NT	NT	NT	NT	NT
Zinc	2	NT	0.249	NT	<0.0600	NT	<0.0600	NT	NT	NT	NT	NT
Pesticides - EPA Methods 8081B/3550C (mg/L)												
only the three May 17, 2016 samples were analyzed for pesticides. No analytes were detected at concentrations above the laboratory's method detection limits.												

Notes:
NT = Not Tested
1. Compounds detected in one or more samples are presented on this table. Refer to Appendix D for list of all compounds included in analysis.
2. Analytical testing completed by Paradigm Environmental, Inc., in Rochester, New York
3. New York State Department of Environmental Conservation Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) dated October 1993, revised June 1998, January 1999 errata sheet and April 2000 addendum.
4. J = Analyte detected below quanititation limits.
5. µg/L = part per billion (ppb).
6. Yellow shading indicates values exceeding NYSDEC Class GA groundwater criteria.
7. < = compound was not detected above method detection limit.
8. Duplicate sample is associated with MW-6.

Table 5
Summaryof Analytical Results - Soil Vapor Intrusion Samples
Site Management Plan
Northtown Plaza BCP Site No. C915292
Amherst, New York

			Tenant Space 10 Basement Samples		Tenant Space 14			Vacant -Tenant Space 13		
Sample ID Sample Date	NYSDOH "Monitor" Sub-Slab Soil Vapor Concentration	NYSDOH "Mitigate" Sub-Slab Soil Vapor Concentration	Sub-Slab 3/19/2014 µg/m^3	Indoor Air 3/19/2014 µg/m^3	Sub-Slab 3/19/2014 µg/m^3	Indoor Air 3/19/2014 µg/m^3	Outdoor Air 3/19/2014 µg/m^3	Sub-Slab 5/8/2014 µg/m^3	Indoor Air 5/8/2014 µg/m^3	Outdoor Air 5/8/2014 µg/m^3
Volatile Organic Compounds - EPA Method TO-15 (µg/m^3)										
1,1,1-Trichloroethane	*100*	*1000*	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	27
1,1,2-Trichloroethane	*NV*	*NV*	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	27
1,2-Dichloroethane	*NV*	*NV*	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	3
Carbon tetrachloride	*5*	*250*	<0.96	0.58	<0.96	<0.26	0.51	0.45	0.45	0.51
cis-1,2-Dichloroethene	*100*	*1000*	<0.60	<0.60	0.44 J	<0.60	<0.60	<0.60	<0.60	<0.60
Tetrachloroethene	*100*	*1000*	43	<1.0	230	60	1.3	6,400	70	0.9
Trichloroethene	*5*	*250*	1.6	<0.22	2.5	2.4	<0.22	32	0.22	<0.22
Vinyl Chloride	*5*	*250*	<0.39	<0.10	<0.39	<0.10	<0.10	<0.39	<0.10	<0.10

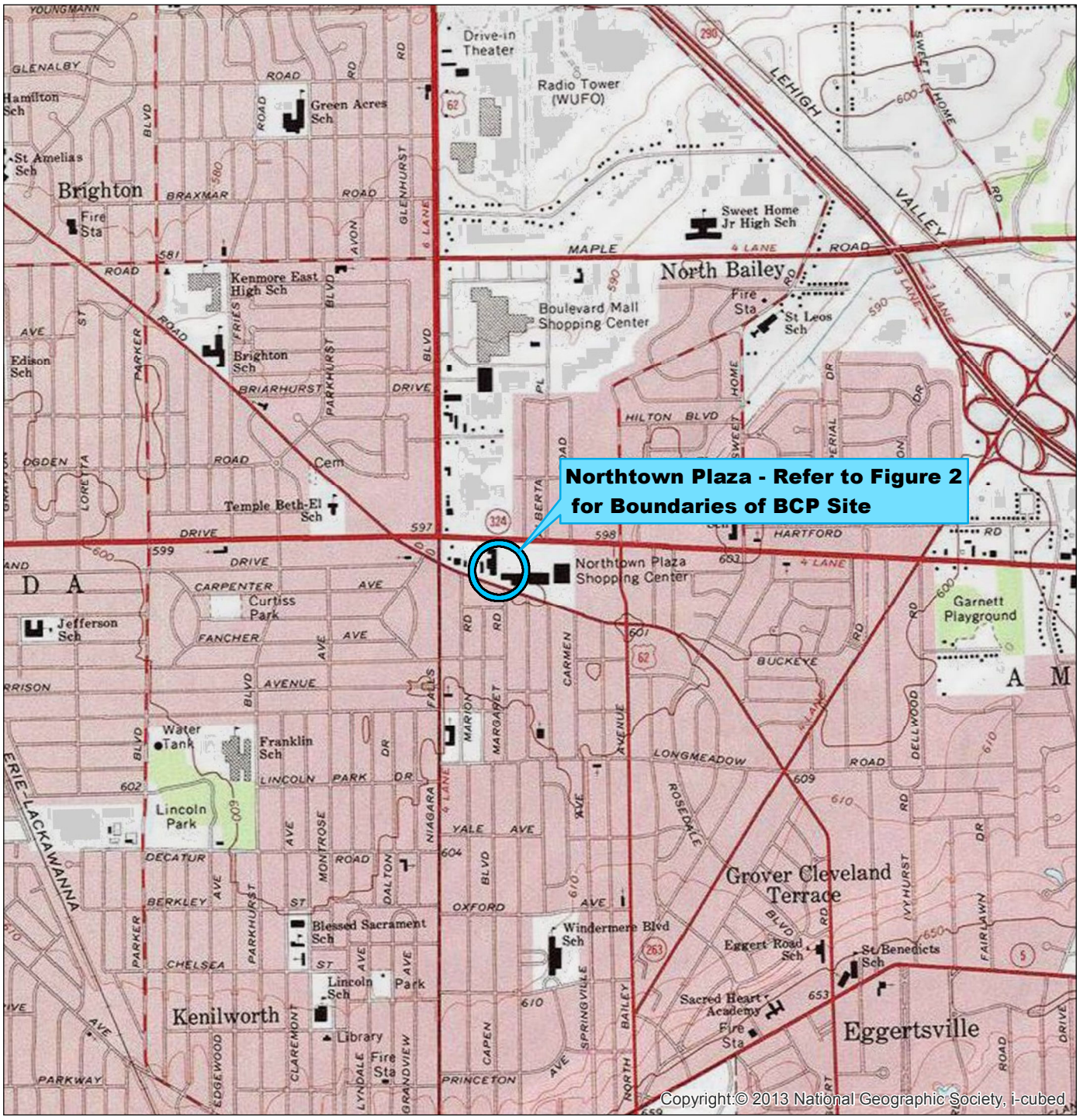
Notes:
1. Compounds detected in one or more samples are presented in this table. Refer to Appendix D for list of all compounds included in analysis.
2. Air sample analytical testing completed by Centek Laboratory in Syracuse, New York.
3. µg/m^3 = microgram per cubic meter.
4. Samples collected were for an approximate 8-hour sample duration.
5. J = estimated concentration detected less than the reporting limit.
6. < = compound was not detected above reporting limit provided.
7. IA = Inddor Air.
8. SS = Sub-Slab Sample.
9. OA = Outdoor Air Sample.
10. MS/MSD = Matrix Spike/Matrix Spike Duplicate collected with IA-6.
11. DUPE-IA = Field Duplicate associated with IA-5.

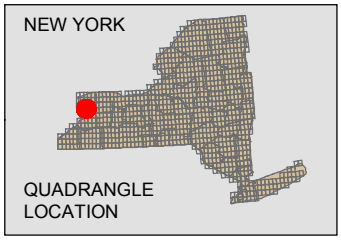
Table 5
Summaryof Analytical Results - Soil Vapor Intrusion Samples
Site Management Plan
Northtown Plaza BCP Site No. C915292
Amherst, New York

			Tenant Space 11		Tenant Space 12		Tenant Space 10		Tenant Space 9		Tenant Space 8		Tenant Space 7				Outdoor Soil Gas Samples		Building #2			Post-Remedial Indoor Air Samples		
Sample ID Sample Date	NYSDOH "Monitor" Sub-Slab Soil Vapor Concentration	NYSDOH "Mitigate" Sub-Slab Soil Vapor Concentration	IA-1 3/10/2015 µg/m^3	SS-1 3/10/2015 µg/m^3	IA-2 3/10/2015 µg/m^3	SS-2 3/10/2015 µg/m^3	IA-3 3/10/2015 µg/m^3	SS-3 3/10/2015 µg/m^3	IA-4 3/10/2015 µg/m^3	SS-4 3/10/2015 µg/m^3	IA-5 3/10/2015 µg/m^3	SS-5 3/10/2015 µg/m^3	IA-6 3/10/2015 µg/m^3	SS-6A 3/10/2015 µg/m^3	SS-6B 3/10/2015 µg/m^3	OA 3/10/2015 µg/m^3	Soil Gas East 3/13/2015 µg/m^3	Soil Gas West 3/13/2015 µg/m^3	TA-SS-04202015 4/20/2015 µg/m^3	TA-IA-04202015 4/20/2015 µg/m^3	TA-OA-04202015 4/20/2015 µg/m^3	Outdoor Air 2/26/2016 µg/m^3	Total Auto 2/26/2016 µg/m^3	Giro Cleaners 2/26/2016 µg/m^3
Volatile Organic Compounds - EPA Method TO-15 (µg/m^3)																								
1,1,1-Trichloroethane	*100*	*1000*	<	<	<	0.71 J	<	3.2	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
1,1,2-Trichloroethane	*NV*	*NV*	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	8.7	<	<	<	<	<
1,2-Dichloroethane	*NV*	*NV*	<	<	<	<	<	<	0.57 J	< 0.61	2.3	< 0.61	5.5	3.1	< 0.61	<	<	<	<	<	<	<	<	<
Carbon tetrachloride	*5*	*250*	<	<	0.63	< 0.94	0.69	< 0.94	0.57	< 0.94	0.63	< 0.94	0.63	< 0.94	< 0.94	0.69	<	<	0.75	0.69	0.94	0.88	0.75	0.82
cis-1,2-Dichloroethene	*100*	*1000*	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	430	<	<	<	2.7	150
Tetrachloroethene	*100*	*1000*	1.8	2	11	2.6	1.2	<	2.2	<	1.1	<	1.1	<	0.88 J	<	5.4	8.5	2500	<	<	<	<	<
Trichloroethene	*5*	*250*	0.43	0.97	<0.21	4.3	<0.21	1.2	0.54	1.5	<	0.86	0.32	0.59 J	0.64 J	<	<	<	2000	<	<	<	<	<
Vinyl Chloride	*5*	*250*	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	0.66	<	<	<	<	<

Notes:
1. Compounds detected in one or more samples are presented in this table. Refer to Appendix D for list of all compc
2. Air sample analytical testing completed by Centek Laboratory in Syracuse, New York.
3. µg/m^3 = microgram per cubic meter.
4. Samples collected were for an approximate 8-hour sample duration.
5. J = estimated concentration detected less than the reporting limit.
6. < = compound was not detected above reporting limit provided.
7. IA = Inddor Air.
8. SS = Sub-Slab Sample.
9. OA = Outdoor Air Sample.
10. MS/MSD = Matrix Spike/Matrix Spike Duplicate collected with IA-6.
11. DUPE-IA = Field Duplicate associated with IA-5.

FIGURES





SOURCE : THIS MAP CONTAINS THE ESRI ARCGIS ONLINE USA TOPOGRAPHIC MAP SERVICE, PUBLISHED DECEMBER 12, 2009 BY ESRI ARCIMS SERVICES AND UPDATED AS NEEDED. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS

Data Supplied by : esri

0 1,000 2,000 4,000
SCALE IN FEET

N W E S

NO.	ISSUE/DESCRIPTION	BY	DATE

3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

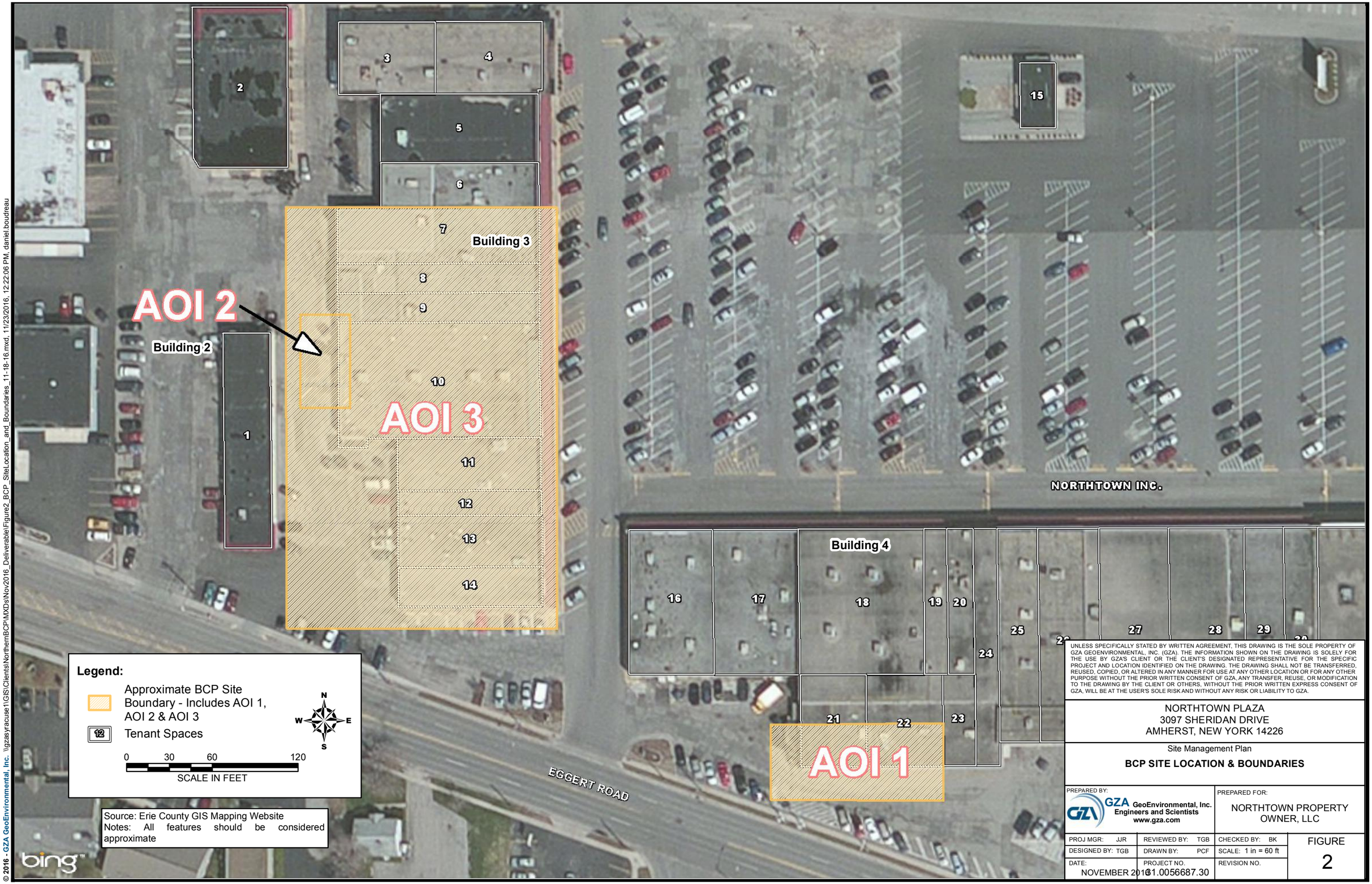
PREPARED BY:
GZA GeoEnvironmental, Inc. of Buffalo
Engineers and Scientists
535 WASHINGTON ST
BUFFALO, NEW YORK 14203

PREPARED FOR:
NORTHTOWN PROPERTY OWNER, LLC

Site Management Plan

SITE LOCUS

PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 " = 2,000 '	1
DATE: August 2016	PROJECT NO. 31.0056687.30	REVISION NO.	



Legend:

- Approximate BCP Site Boundary - Includes AOI 1, AOI 2 & AOI 3
- 12 Tenant Spaces

N W E S

0 30 60 120

SCALE IN FEET

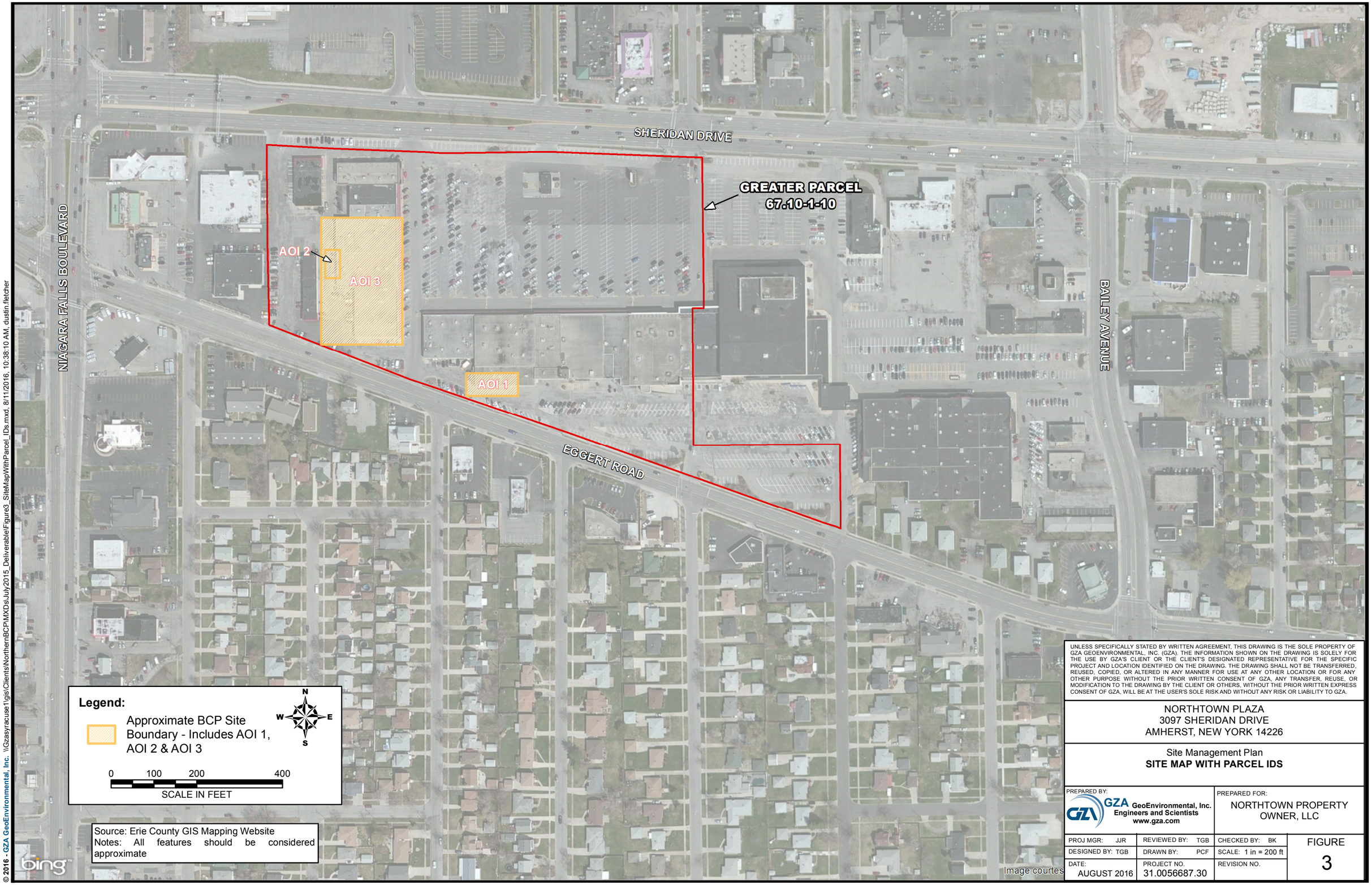
Source: Erie County GIS Mapping Website
Notes: All features should be considered approximate

NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

Site Management Plan

BCP SITE LOCATION & BOUNDARIES

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: NORTHTOWN PROPERTY OWNER, LLC	
PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE 2
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 60 ft	
DATE: NOVEMBER 2016	PROJECT NO. 01.0056687.30	REVISION NO.	



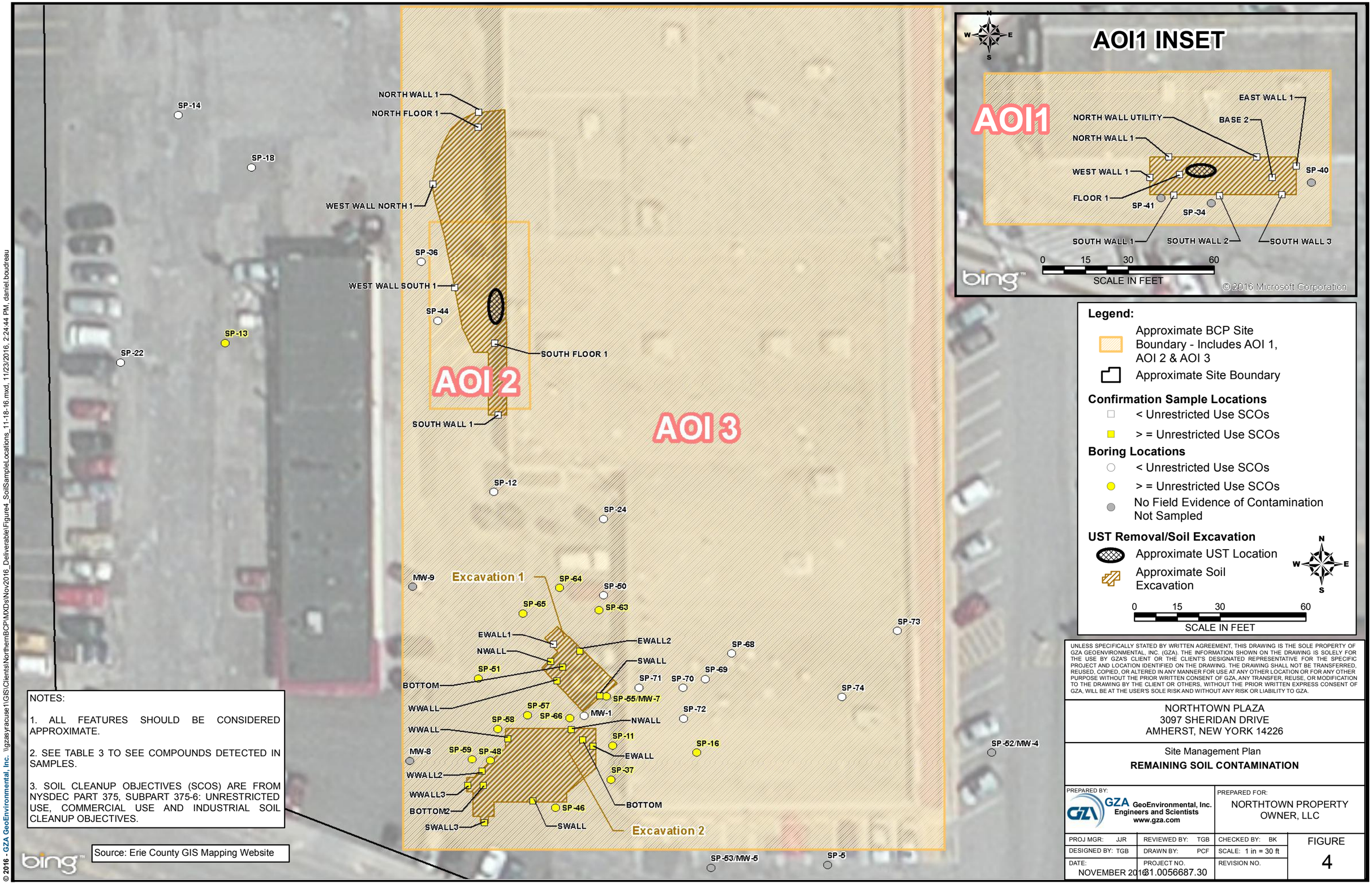
NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

Site Management Plan
SITE MAP WITH PARCEL IDS

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
NORTHTOWN PROPERTY OWNER, LLC

PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE 3
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 200 ft	
DATE: AUGUST 2016	PROJECT NO. 31.0056687.30	REVISION NO.	



NOTES:

1. ALL FEATURES SHOULD BE CONSIDERED APPROXIMATE.

2. SEE TABLE 3 TO SEE COMPOUNDS DETECTED IN SAMPLES.

3. SOIL CLEANUP OBJECTIVES (SCOS) ARE FROM NYSDEC PART 375, SUBPART 375-6: UNRESTRICTED USE, COMMERCIAL USE AND INDUSTRIAL SOIL CLEANUP OBJECTIVES.

Source: Erie County GIS Mapping Website

NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

Site Management Plan
REMAINING SOIL CONTAMINATION

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
NORTHTOWN PROPERTY OWNER, LLC

PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE 4
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 30 ft	
DATE: NOVEMBER 2016	PROJECT NO. 01.0056687.30	REVISION NO.	

NOTES:

1. ALL FEATURES SHOULD BE CONSIDERED APPROXIMATE.

2. SEE TABLE 4 TO SEE COMPOUNDS DETECTED IN SAMPLES.

3. NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CLASS GA CRITERIA OBTAINED FROM DIVISION OF NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CLASS GA CRITERIA OBTAINED FROM DIVISION OF JANUARY 1999 ERRATA SHEET AND APRIL 2000 ADDENDUM.

MW-2
(92.06)

MW-3
(91.96)

92.0

91.9

MW-9

MW-1
(91.8)

SP-55/MW-7

SP-54/MW-6

MW-8

SP-52/MW-4

SP-53/MW-5

Legend:

91.9 Groundwater Elevation Contour

Approximate Site Boundary

Groundwater Sample Locations

< NYSDEC Class GA groundwater criteria

> = NYSDEC Class GA groundwater criteria

N
W E
S

0 20 40 80
SCALE IN FEET

Source: Erie County GIS Mapping Website

bing

NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

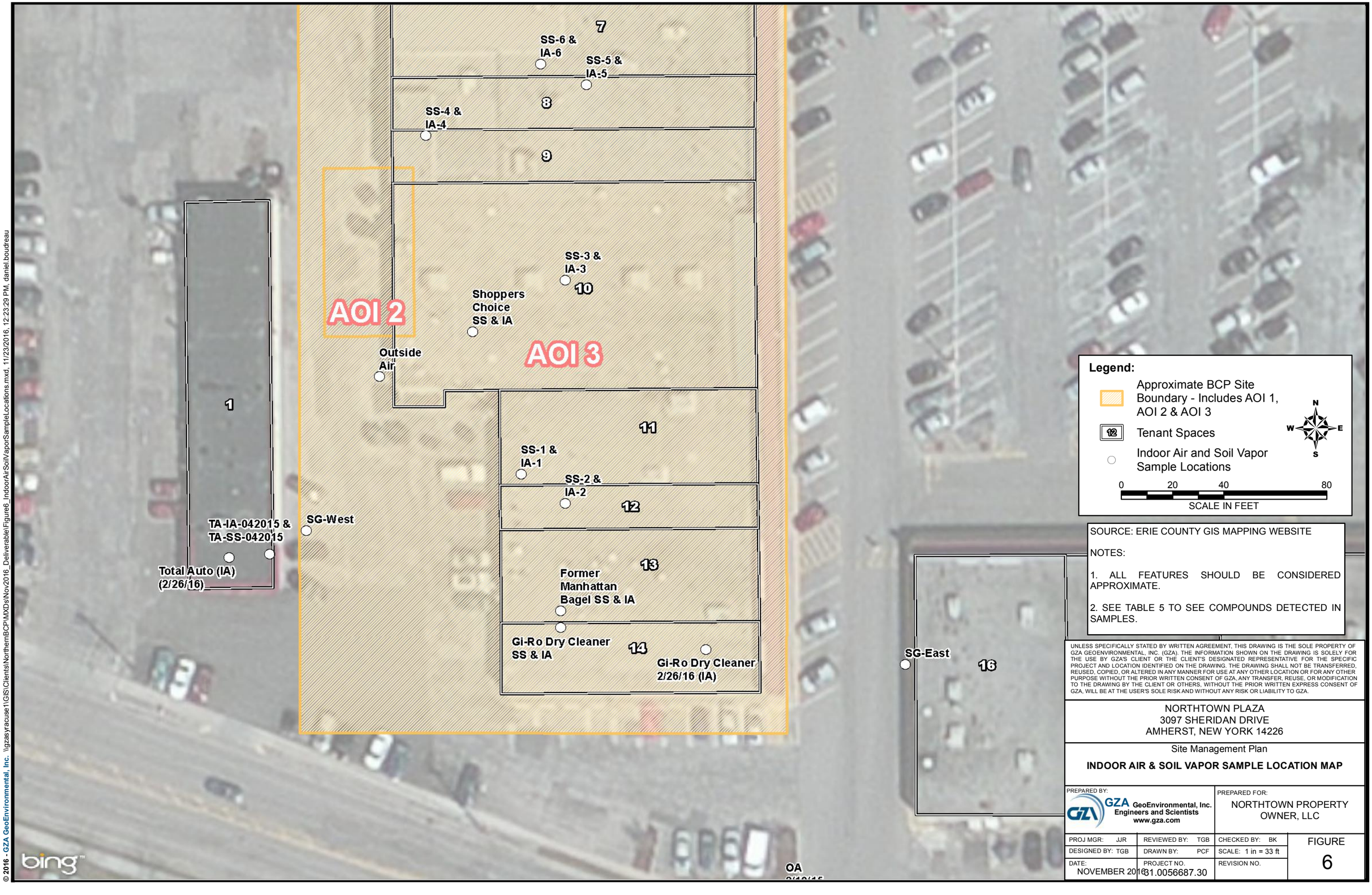
Site Management Plan

GROUNDWATER SAMPLE LOCATION MAP

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
NORTHTOWN PROPERTY OWNER, LLC

PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 40 ft	5
DATE: NOVEMBER 2016	PROJECT NO. 31.0056687.30	REVISION NO.	



SOURCE: ERIE COUNTY GIS MAPPING WEBSITE

NOTES:

1. ALL FEATURES SHOULD BE CONSIDERED APPROXIMATE.

2. SEE TABLE 5 TO SEE COMPOUNDS DETECTED IN SAMPLES.

NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

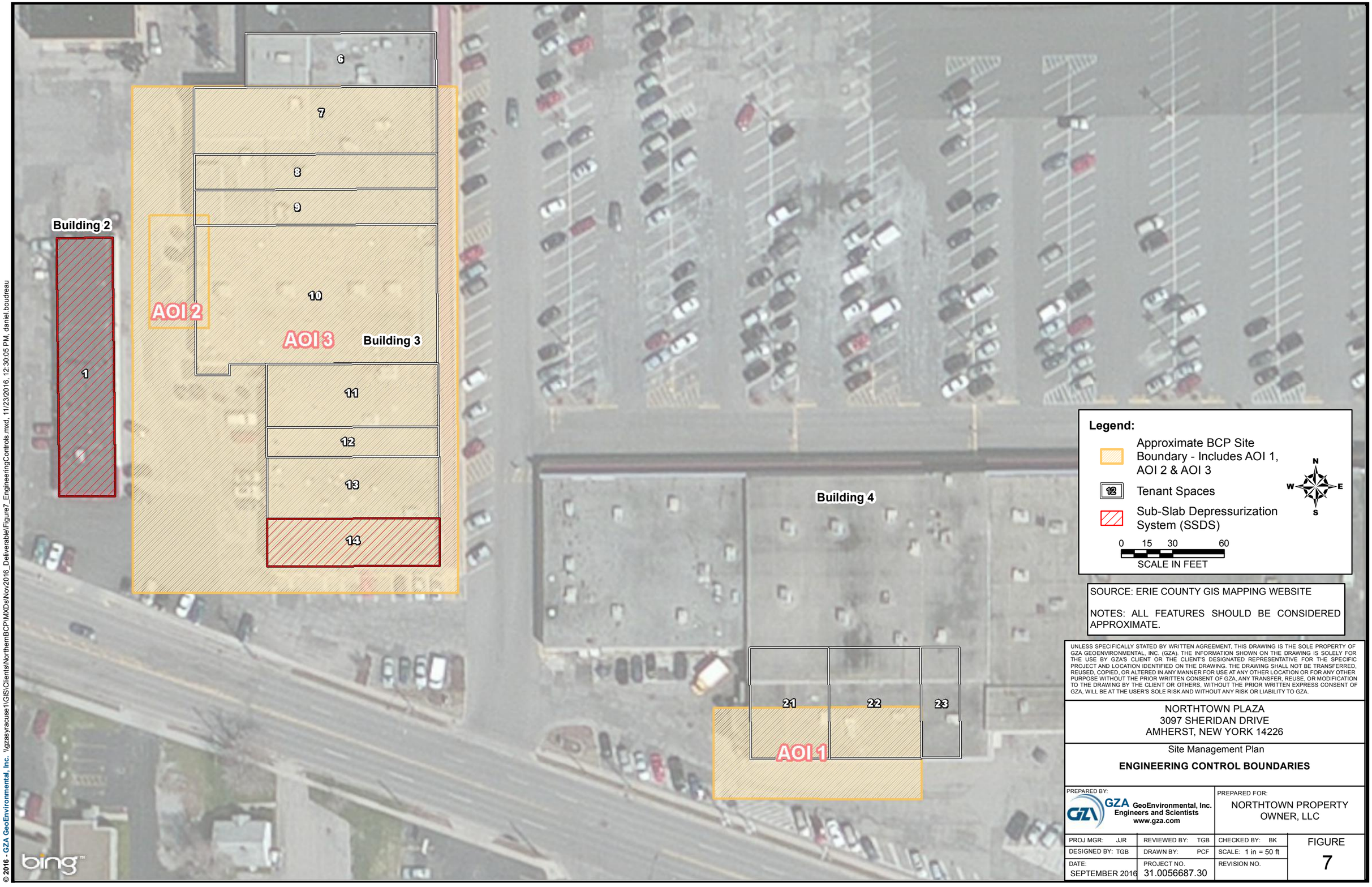
Site Management Plan

INDOOR AIR & SOIL VAPOR SAMPLE LOCATION MAP

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
NORTHTOWN PROPERTY OWNER, LLC

PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE 6
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 33 ft	
DATE: NOVEMBER 2016	PROJECT NO. 31.0056687.30	REVISION NO.	



SOURCE: ERIE COUNTY GIS MAPPING WEBSITE

NOTES: ALL FEATURES SHOULD BE CONSIDERED APPROXIMATE.

NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

Site Management Plan

ENGINEERING CONTROL BOUNDARIES

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
NORTHTOWN PROPERTY OWNER, LLC

PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 50 ft	7
DATE: SEPTEMBER 2016	PROJECT NO. 31.0056687.30	REVISION NO.	

SHERIDAN DRIVE

NIAGARA FALLS BOULEVARD

BAILEY AVENUE

EGGERT ROAD

GREATER PARCEL
67.10-1-10

AOI 1

AOI 2

AOI 3

Legend:

Approximate BCP Site Boundary - Includes AOI 1, AOI 2 & AOI 3

Area Requiring Vapor Intrusion Assessment Prior to Occupancy

N
W E
S

0 100 200 400
SCALE IN FEET

Source: Erie County GIS Mapping Website
Notes: All features should be considered approximate

bing

Image courtes

NORTHTOWN PLAZA
3097 SHERIDAN DRIVE
AMHERST, NEW YORK 14226

Site Management Plan
AREA REQUIRING VAPOR INTRUSION ASSESSMENT PRIOR TO OCCUPANCY

PREPARED BY:		PREPARED FOR:	
GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		NORTHTOWN PROPERTY OWNER, LLC	
PROJ MGR: JJR	REVIEWED BY: TGB	CHECKED BY: BK	FIGURE 8
DESIGNED BY: TGB	DRAWN BY: PCF	SCALE: 1 in = 200 ft	
DATE: SEPTEMBER 2016	PROJECT NO. 31.0056687.30	REVISION NO.	

APPENDIX A – ENVIRONMENTAL EASEMENT/METES AND BOUNDS

Recording Information

Abstract No.: 54U542

Property Address: Amherst

Owner: Northtown Property

Recording Info.:

CHRISTOPHER L. JACOBS, ERIE COUNTY CLERK
REF:

DATE:10/11/2016
TIME:2:27:16 PM
RECEIPT: 16169847

ACCOUNT #: 0

ITEM - 01 VRD
RECD: 10/12/2016 1:00:45 PM
FILE: 2016214475 BK/PG V 107/3178
NORTHTOWN PROPERTY OWNER LLC
STATE OF NEW YORK
Recording Fees 95.50
Subtotal 95.50 95.50

TOTAL DUE $95.50
PAID TOTAL $95.50
PAID CHECK $95.50
Check #7908: 95.50

REC BY: Scott
COUNTY RECORDER

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

THIS INDENTURE made this 15th day of September, 2016, between Owner(s) Northtown Property Owner LLC, having an office at 33 Boylston Street, Suite 3000, Chestnut Hill, MA 02467, County of Middlesex, State of Massachusetts (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 3045 – 3139 Sheridan Drive in the Town of Amherst, County of Erie and State of New York, known and designated on the tax map of the County Clerk of Erie as tax map parcel numbers: Section 67.10 Block 1 Lot 3.1, being the same as a portion of the property conveyed to Grantor by deed dated May 15, 2015 and recorded in the Erie County Clerk's Office in Liber and Page 11279/6982. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 1.424 +/- acres, and is hereinafter more fully described in the Land Title Survey dated March 11, 2008 and last revised April 13, 2015 prepared by McIntosh & McIntosh, P.C., 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: C915292-03-15 as amended on June 17, 2015, 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:

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 Erie 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 or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), 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; said access to include the entire deeded property as the easement is landlocked and does not contain a direct access to the controlled property referenced herein;

(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: C915292
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.

Remainder of Page Intentionally Left Blank

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

Northtown Property Owner LLC:

By: Deirdre A Geoghegan

Print Name: Deirdre A. Geoghegan
Assistant Treasurer

Title: _____ Date: 9/7/16

Grantor's Acknowledgment

STATE OF ~~NEW YORK~~ Massachusetts)
) ss:
COUNTY OF Middlesex)

On the 7th day of September in the year 20 16, before me, the undersigned, personally appeared Deirdre A. Geoghegan 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.

Jaime-Leigh Sullivan
Notary Public - State of ~~New York~~ Massachusetts

JAIME-LEIGH M. SULLIVAN
Notary Public
Commonwealth of Massachusetts
My Commission Expires May 7, 2021

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 15th day of September, in the year 2016, 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

LEGAL DESCRIPTION
FOR
ENVIROMENTAL EASEMENT AREA AOI 1
NYSDEC SITE NO. C915292
PART OF TAX PARCEL TA# 67.10-1-3.1
AMHERST, NEW YORK

All that piece or parcel of land situate in Town Lot 84, Township 12, Range 7 of the Holland Purchase, Town of Amherst, County of Erie, State of New York, being part of lands now or formerly Northtown Property Owner LLC, Tax No. 67.10-1-3.1 bounded and described as follows:

Commencing at a point in the northeasterly highway boundary of the existing Eggert Road (County Road 130) (Width Varies) at its intersection with the division line between the lands now or formerly Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 on the east and the lands now or formerly of Kavcon Development LLC, Tax No. 67.10-1-5.1 on the west; thence, southeasterly along the last mentioned highway boundary the following four courses and distances: (1) Southeasterly on a bearing of South 67° 43' 01" East a distance of 166.02 feet to a point; thence (2) Southeasterly on a bearing of South 63° 41' 38" East a distance of 34.96 feet to a point; thence (3) Southwesterly on a bearing of South 20° 55' 27" West a distance of 1.27 feet to a point; thence (4) Southeasterly on a bearing of South 69° 04' 33" East a distance of 256.82 feet to a point; thence through the lands now or formerly Falls Boulevard Shopping Center Inc. Tax No. 67.10-1-3.1, northeasterly on a bearing of North 20° 55' 27" East a distance of 4.31 feet to the point of beginning; thence

1) Continuing through the lands now or formerly of Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 the following four (4) courses and distances:

   (1) Northerly on a bearing of North 01° 09' 28" East a distance of 54.00 feet to a point; thence
   (2) Easterly on a bearing of South 88° 50' 32" East a distance of 123.00 feet to a point; thence
   (3) Southerly on a bearing of South 01° 09' 28" West a distance of 54.00 feet to a point; thence
   (4) Westerly on a bearing of North 88° 50' 32" West a distance of 123.00 feet to the point of beginning, being 0.152 acres, more or less.

LEGAL DESCRIPTION
FOR
ENVIROMENTAL EASEMENT AREA AOI 2 AND AOI 3
NYSDEC SITE NO. C915292
PART OF TAX PARCEL TA# 67.10-1-3.1
AMHERST, NEW YORK

All that piece or parcel of land situate in Town Lot 84, Township 12, Range 7 of the Holland Purchase, Town of Amherst, County of Erie, State of New York, being part of lands now or formerly Northtown Property Owner LLC, Tax No. 67.10-1-3.1 bounded and described as follows:

Commencing at a point in the northeasterly highway boundary of the existing Eggert Road (County Road 130) (Width Varies) at its intersection with the division line between the lands now or formerly Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 on the east and the lands now or formerly of Kavcon Development LLC, Tax No. 67.10-1-5.1 on the west; thence, Southeasterly along the last mentioned highway boundary South 67° 43' 01" East a distance of 93.13 feet to a point, thence through the lands now or formerly Falls Boulevard Shopping Center Inc. Tax No. 67.10-1-3.1, Northeasterly on a bearing of North 22° 16' 46" East a distance of 3.34 feet to the point of beginning; thence

1) Continuing through the lands now or formerly of Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 the following four (4) courses and distances:

   (1) Northerly on a bearing of North 01° 09' 28" East a distance of 290.00 feet to a point; thence
   (2) Easterly on a bearing of South 88° 50' 32" East a distance of 191.00 feet to a point; thence
   (3) Southerly on a bearing of South 01° 09' 28" West a distance of 290.00 feet to a point; thence
   (4) Westerly on a bearing of North 88° 50' 32" West a distance of 191.00 feet to the point of beginning, being 1.272 acres, more or less.

ENVIRONMENTAL EASEMENT AREA AOI 3 DESCRIPTION
NYSDEC SITE NO. C915292

Part of Tax Parcel TA#67.10-1-3.1
Amherst, New York

All that piece or parcel of land situate in Town Lot 84, Township 12, Range 7 of the Holland Purchase, Town of Amherst, County of Erie, State of New York, being part of lands now or formerly Northtown Property Owner LLC, Tax No. 67.10-1-3.1 bounded and described as follows:

Commencing at a point in the northeasterly highway boundary of the existing Eggert Road (County Road 130) (Width Varies) at its intersection with the division line between the lands now or formerly Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 on the east and the lands now or formerly of Kavcon Development LLC, Tax No. 67.10-1-5.1 on the west; thence, Southeasterly along the last mentioned highway boundary South 67° 43' 01" East a distance of 93.13 feet to a point, thence through the lands now or formerly Falls Boulevard Shopping Center Inc. Tax No. 67.10-1-3.1, Northeasterly on a bearing of North 22° 16' 46" East a distance of 3.34 feet to the point of beginning; thence

1) Continuing through the lands now or formerly of Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 the following four (4) courses and distances:
(1) Northerly on a bearing of North 01° 09' 28" East a distance of 290.00 feet to a point; thence
(2) Easterly on a bearing of South 88° 50' 32" East a distance of 191.00 feet to a point; thence
(3) Southerly on a bearing of South 01° 09' 28" West a distance of 290.00 feet to a point; thence
(4) Westerly on a bearing of North 88° 50' 32" West a distance of 191.00 feet to the point of beginning, being 1.272 acres, more or less.

ENVIRONMENTAL EASEMENT AREA AOI 2 DESCRIPTION
NYSDEC SITE NO. C915292

Part of Tax Parcel TA#67.10-1-3.1
Amherst, New York

All that piece or parcel of land situate in Town Lot 84, Township 12, Range 7 of the Holland Purchase, Town of Amherst, County of Erie, State of New York, being part of lands now or formerly Northtown Property Owner LLC, Tax No. 67.10-1-3.1 bounded and described as follows:

Commencing at a point in the northeasterly highway boundary of the existing Eggert Road (County Road 130) (Width Varies) at its intersection with the division line between the lands now or formerly Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 on the east and the lands now or formerly of Kavcon Development LLC, Tax No. 67.10-1-5.1 on the west; thence, southeasterly along the last mentioned highway boundary South 67° 43' 01" East a distance of 93.13 feet to a point; thence through the lands now or formerly Falls Boulevard Shopping Center Inc. Tax No. 67.10-1-3.1, the following three (3) courses and distances: (1) Northeasterly on a bearing of North 22° 16' 46" East a distance of 3.34 feet to a point; thence (2) Northerly on a bearing of North 01° 09' 28" East a distance of 146.35 feet to a point: thence (3) Easterly on a bearing of South 88° 50' 32" East a distance of 5.00 feet to the point of beginning; thence

1) Continuing through the lands now or formerly of Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 the following four (4) courses and distances:
(1) Northerly on a bearing of North 01° 09' 28" East a distance of 65.00 feet to a point; thence
(2) Easterly on a bearing of South 88° 50' 32" East a distance of 32.00 feet to a point; thence
(3) Southerly on a bearing of South 01° 09' 28" West a distance of 65.00 feet to a point; thence
(4) Westerly on a bearing of North 88° 50' 32" West a distance of 32.00 feet to the point of beginning, being 0.048 acres, more or less.

ENVIRONMENTAL EASEMENT AREA AOI 1 DESCRIPTION
NYSDEC SITE NO. C915292

Part of Tax Parcel TA#67.10-1-3.1
Amherst, New York

All that piece or parcel of land situate in Town Lot 84, Township 12, Range 7 of the Holland Purchase, Town of Amherst, County of Erie, State of New York, being part of lands now or formerly Northtown Property Owner LLC, Tax No. 67.10-1-3.1 bounded and described as follows:

Commencing at a point in the northeasterly highway boundary of the existing Eggert Road (County Road 130) (Width Varies) at its intersection with the division line between the lands now or formerly Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 on the east and the lands now or formerly of Kavcon Development LLC, Tax No. 67.10-1-5.1 on the west; thence, southeasterly along the last mentioned highway boundary the following four courses and distances: (1) Southeasterly on a bearing of South 67° 43' 01" East a distance of 166.02 feet to a point; thence (2) Southeasterly on a bearing of South 63° 41' 38" East a distance of 34.96 feet to a point; thence (3) Southwesterly on a bearing of South 20° 55' 27" West a a distance of 1.27 feet to a point; thence (4) Southeasterly on a bearing of South 69° 04' 33" East a distance of 256.82 feet to a point; thence through the lands now or formerly Falls Boulevard Shopping Center Inc. Tax No. 67.10-1-3.1, northeasterly on a bearing of North 20° 55' 27" East a distance of 4.31 feet to the point of beginning; thence

1) Continuing through the lands now or formerly of Falls Boulevard Shopping Center Inc., Tax No. 67.10-1-3.1 the following four (4) courses and distances:
(1) Northerly on a bearing of North 01° 09' 28" East a distance of 54.00 feet to a point; thence
(2) Easterly on a bearing of South 88° 50' 32" East a distance of 123.00 feet to a point; thence
(3) Southerly on a bearing of South 01° 09' 28" West a distance of 54.00 feet to a point; thence
(4) Westerly on a bearing of North 88° 50' 32" West a distance of 123.00 feet to the point of beginning, being 0.152 acres, more or less.

L-11279, P-6982, PARCEL 1 (14.022± Acres)

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Amherst, County of Erie, State of New York, and being part of Lot 84, Township 12, Range 7 of the Holland Land Company Survey (so-called), bounded and described as follows:
BEGINNING AT A POINT on the south line of Sheridan Drive as now laid out at the intersection of the south line of Parcel No. 484 as shown on Map No. 431 of lands acquired by the People of the State of New York for Sheridan Drive, S.H. No. 9216 and the centerline of former Laverne Avenue as shown on a map for North Bailey Meadows No. 3 as filed in the Erie County Clerk's Office under Map Cover No. 1316;
RUNNING THENCE: The following three (3) courses and distances along the south line of Sheridan Drive as now laid out and the south line of Map No. 431, Parcel No. 484; Map No. 65, Parcel No. 72; Map No. 431, Parcel No. 487; Map No. 65, Parcel No. 73; Map No. 431, Parcel No. 488; Map No. 65, Parcel No. 74 and Map No. 431, Parcel No. 489:
1. S-85°-30'-55"-E, a distance of 330.58 feet to a point;
2. S-88°-22'-52"-E, a distance of 400.0 feet to a point;
3. S-85°-30'-55"-E, a distance of 250.22 feet to a point;
RUNNING THENCE: S-01°-09'-28"-W, a distance of 351.62 feet to a point;
RUNNING THENCE: N-88°-50'-32"-W, a distance of 25.0 feet to a point;
RUNNING THENCE: S-01°-09'-28"-W, a distance of 319.67 feet to a point;
RUNNING THENCE: S-88°-50'-32"-E, a distance of 340.89 feet to a point;
RUNNING THENCE: S-01°-09'-28"-W, a distance of 195.50 feet to a point on the north line of Eggert Road;
RUNNING THENCE: N-69°-04'-33"-W, along the north line of Eggert Road, a distance of 1179.09 feet to the southeasterly corner of Parcel No. 4 as shown on Map No. 4 of lands acquired by the People of the State of New York for Eggert Road, CR 130;
RUNNING THENCE: N 20°-55'-27"-E, along the north line of Eggert Road and the east line of said Parcel No. 4, a distance of 1.27 feet to the northeast corner thereof;
RUNNING THENCE: N-63°-41'-38"-W, along the north line of Eggert Road and the north line of said Parcel No. 4, a distance of 34.96 feet to an angle point therein:
RUNNING THENCE: N-67°-43'-01"-W, along the north line of Eggert Road and the north line of said Parcel No. 4, a distance of 166.02 feet to a point, said point being on the centerline of former Laverne Avenue;
RUNNING THENCE: N 01°-09'-28"-E, along the centerline of former Laverne Avenue, a distance of 429.07 feet to the POINT OR PLACE OF BEGINNING.
EXCEPTING from the above described parcel ALL THAT TRACT OR PARCEL OF LAND bounded and described as follows:
BEGINNING AT A POINT on the west line of Margaret Avenue, as originally laid out, a distance of 103.63 feet southerly measured along the west line of Margaret Avenue from its intersection with the south line of Sheridan Drive as originally laid out and as shown on a map filed in the Erie County Clerk's Office under Map Cover No. 1316;
RUNNING THENCE: S-01°-09'-28"-W, along the west line of Margaret Drive, a distance of 48.0 feet to a point;
RUNNING THENCE: N-88°-50'-32"-W, a distance of 140.0 feet to a point;
RUNNING THENCE: N-01°-09'-28"-E, a distance of 48.0 feet to a point;
RUNNING THENCE: S-88°-50'-32"-E, a distance of 140.0 feet to the POINT OR PLACE OF BEGINNING.
SUBJECT to easements, rights of way and restrictions of record.
Said land being shown as Parcel 1 (and as containing 14.022 acres of land) on a map prepared by McIntosh & McIntosh, P.C., dated March 11, 2008, last resurveyed April 13, 2015 and identified as Job No. 7598-B.

ENVIRONMENTAL EASEMENT AREA ACCESS

THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT

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 CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY , NY 12233 OR AT DERWEB@GW.DEC.STATE.NY.US.

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 NEW YORK ENVIRONMENTAL CONSERVATION LAW

NOTES

1) SBL – TOWN OF AMHERST TAX MAP NOS. 67.10-1-3.1 & 67.41-1-2.1, 3, 15 & 17

REFERENCE MAPS FILED IN THE ERIE COUNTY CLERK'S OFFICE UNDER MAP COVER NO. 1315, NORTH BAILEY MEADOWS NO. 2 & MAP COVER NO. 1316, NORTH BAILEY MEADOWS PART NO. 3

NYS DEC BCP SITE NO. C915292
SITE ADDRESS: 3047-3079 & 3085-3163 SHERIDAN DRIVE

McINTOSH & McINTOSH, P.C.
CONSULTING ENGINEERS, LAND SURVEYORS, PLANNERS
LOCKPORT, NEW YORK PHONE 434-9138
BUFFALO, NEW YORK PHONE 625-8360

NOTE: THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN EXAMINATION OF SUCH.

RESURVEYED	REVISION
SEPTEMBER 4, 2014	MODIFY SETBACK INFO & CERT. NAME 5/12/2015
APRIL 13, 2015	ADDED PROPOSED EASEMENTS JUNE 16, 2015
	ADDED DESCRIPTION FOR PARCEL 1 – JUNE 29, 2015

NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

SURVEY OF PART OF LOT-84, TWP.-12, R.-7, HOLLAND PURCHASE
LOCATION: **TOWN OF AMHERST, ERIE COUNTY, NEW YORK**
SHEET 1 OF 1
JOB No. **7598-EE** SCALE: **1"= 80'** DATE: **MARCH 11, 2008**

DRAWN	MAS
COMP.	GNZ
DESC.	
CADFILE	7598EE.DWG

APPENDIX B – LIST OF SITE CONTACTS

Name	Phone Number
Northtown Property Owner LLC	(617) 232-8900
GZA GeoEnvironmental of New York	(716) 685-2300
NYSDEC Regional HW Engineer	(716) 851-7220
NYSDEC Site Control	(518) 402-9553
Goulston & Storrs (Owners Attorney)	(617) 482-1776

APPENDIX C –MONITORING WELL BORING AND CONSTRUCTION LOGS

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-52
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/10/2015 - 3/10/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Dual Tube
Sampler O.D. (in.): 1.25
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	40		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1.8			0.0	S1: FILL - Dark brown, SILT, little coarse Gravel, dry.			FILL	1.8
	S1	1.8-4			0.0	S1: Red brown, CLAY with Silt, some medium to coarse Sand, sub-angular, dry.				
					0.0					
	S2	4-8	48	48	0.0	S2: Red brown, CLAY with Silt, some fine to coarse Gravel, little medium to coarse Sand, sub-angular, dry.				
5					0.0					
					0.0					
					0.0					
	S3	8-12	48	48	0.0	S3: Red brown, CLAY, little fine Gravel, some medium to coarse Sand, sub-angular, dry, homogenous, penetration is hard with thumb.	1			
					0.0					
10					0.0					
					0.0				GLACIAL TILL	
	S4	12-14	24	24	0.0	S4: Red brown, CLAY, little fine Gravel, some medium to coarse Sand, sub-angular, dry to moist, homogenous, toughness softens as moisture increases.				
					0.0					
	S5	14-16	24	24	0.0	S5: Red brown, CLAY, little fine Gravel, some medium to coarse Sand, sub-angular, moist, homogenous.				
15					0.0					
	S6	16-18	24	24	0.0	S6: Red brown, CLAY, little fine Gravel, some medium to coarse Sand, sub-angular, moist, homogenous.				
					0.0					
	S7	18-20	24	24	0.0	S7: Red brown, CLAY, little fine Gravel, some medium to coarse Sand, sub-angular, moist, homogenous.				
					0.0					
20					0.0					20
						End of exploration at 20 feet.	2			
25										

REMARKS

1 - Soil sample collected from 8-9' at 10:30 on 03/10/2015. Submitted for EPA Method 8260B analysis.
2 - Soil boring converted to a 1-inch groundwater monitoring well. See MW-4 Well Construction Report.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-52

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:07 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-53
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/10/2015 - 3/10/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	20		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-0.8			0.0	S1: FILL - Gray, fine GRAVEL, some fine to coarse Sand, dry.				
	S1	0.8-4			0.0	S1: Brown/Black, CLAY, dry.			FILL	4
5	S2	4-8	48	48	0.0	S2: Red brown, CLAY, some medium to coarse Sand, little fine Gravel, sub-angular, dry.				
					0.0					
					0.0		1			
	S3	8-12	48	36	0.0	S3: Red brown, CLAY, some medium to coarse Sand, little fine Gravel, sub-angular, dry.				
10					0.0					
					0.0					
	S4	12-16	48	36	0.0	S4: Red brown, CLAY, some medium to coarse Sand, little fine Gravel, sub-angular, dry, homogenous.			GLACIAL TILL	
					0.0					
15					0.0					
	S5	16-20	48	42	0.0	S5: Red brown, CLAY, some medium to coarse Sand, little fine Gravel, sub-angular, dry, homogenous.				
					0.0					
					0.0					
20					0.0					20
						End of exploration at 20 feet.	2			
25										

REMARKS

1 - Soil sample collected from 7-8' at 13:15 on 03/10/2015. Submitted for EPA Method 8260B analysis.
2 - Soil boring converted to a 1-inch groundwater monitoring well. See MW-5 Well Construction Report.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-53

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:08 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-54
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 21
Date Start - Finish: 3/10/2015 - 3/10/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Dual Tube
Sampler O.D. (in.): 1.25
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	32		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1			0.0	S1: FILL - Gray/Black, fine GRAVEL, some Silt, little medium to coarse Sand, dry.			FILL	1
	S1	1-4			0.0	S1: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, dry.				
5	S2	4-8	48	48	2.1	S2: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.				
					4.6					
					7.8					
	S3	8-10	24	24	11.3	S3: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.	1			
					49.1					
10	S4	10-12	24	24	34.8	S4: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.				
					41.9					
	S5	12-14	24	24	38.3	S5: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.			GLACIAL TILL	
					28.0					
	S6	14-16	24	24	11.6	S6: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.				
15					62.2		2			
	S7	16-20	48	48	10	S7: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.				
					9.1					
					10					
					8.1					
20	S8	20-21	12	12	6.1	S8: Red brown, CLAY, some fine Gravel, little medium to fine Sand, sub-angular, moist.	3			
					0.3					21
						End of exploration at 21 feet.				
25										

REMARKS

1 - Soil sample collected from 8-9' at 15:35 on 03/10/2015. Submitted for EPA Method 8260B analysis.
2 - Soil sample collected from 15-16' at 15:30 on 03/10/2015. Submitted for EPA Method 8260B analysis.
3 - Soil boring converted to a 1-inch groundwater monitoring well. See MW-6 Well Construction Report.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-54

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:09 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-55
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/11/2015 - 3/11/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54UD
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	42		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-4			0.1	S1: FILL - Gray/Black/Brown, fine GRAVEL with Silt, some medium to coarse Sand, dry.				
					0.1				FILL	
					0.3					
					0.1					4
5	S2	4-8	48	36	1.5	S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, sub-angular, dry.				
					4.1					
					6.4					
	S3	8-12	48	40	5.7	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, sub-angular, moist.				
					5.9					
10					5.9		1			
					27.3					
	S4	12-16	48	31	21.8	S4: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, sub-angular, moist.			GLACIAL TILL	
					9.2					
					6.5					
15					8.7					
	S5	16-20	48	24		S5: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, sub-angular, moist.				
					0.1					
					0.1					
20										20
						End of exploration at 20 feet.	2			
25										

REMARKS

1 - Soil sample collected from 10-11' at 10:05 on 03/11/2015. Submitted for EPA Method 8260B analysis.
2 - Soil boring converted to a 1-inch groundwater monitoring well. See MW-7 Well Construction Report.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-55

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:10 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-56
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/11/2015 - 3/11/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54UD
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	48		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1			0.1	S1: FILL - Gray/Black, SILT with fine Gravel, some medium to coarse Sand, dry.			FILL	1
	S1	1-4			0.1	S1: Red brown, CLAY, little fine Gravel and medium to coarse Sand, sub-angular, petroluem-like odor (2-4'), dry.				
					5.8					
					29.9					
5	S2	4-8	48	44	36	S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, sub-angular, solvent -like odor, dry. Seam of fine to coarse Gravel, wet at 6.6 feet.				
					7					
					980					
	S3	8-12	48	26	169	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, solvent-like odor, moist.				
					116					
10					365					
					38					
	S4	12-16	48	30		S4: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, solvent-like odor, moist.			GLACIAL TILL	
					77					
					647		1			
15					2000					
	S5	16-20	48	34		S5: Red brown, CLAY, some fine Gravel and medium to coarse Sand, solvent-like odor, moist.				
					31					
					77					
					3.1					
20	S6	20-24	48	35		S6: Red brown, CLAY, some fine Gravel and medium to coarse Sand, moist.				
					270					
					64					
					0.1					24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 14-15' at 12:05 on 03/11/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-56

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:11 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-57
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/11/2015 - 3/11/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54UD
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	46		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1.3			0.0	S1: FILL - Gray/Black, SILT with fine Gravel, moist.			FILL	1.3
	S1	1.3-4			0.0	S1: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, dry.				
					0.0					
	S2	4-8	48	46	0.0	S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, dry.				
5					0.5					
					0.7					
					1.4					
	S3	8-12	48	42	5.7	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, solvent-like odor, moist.				
					8.8					
10					19.0					
					77.5					
	S4	12-16	48	42	12.3	S4: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.	1		GLACIAL TILL	
					100.5					
					33.2					
15					17.2					
	S5	16-20	48	42	26.9	S5: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					9.0					
					41.3					
					11.3					
20	S6	20-24	48	42	6.5	S6: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					12.2					
					11.3					
					3.2					
					1.8					24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 12-13' at 14:00 on 03/11/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-57

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:12 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-58
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/11/2015 - 3/11/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54UD
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	47		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1.3			0.0	S1: FILL - Gray/Black, SILT with fine Gravel, moist.			FILL	1.3
	S1	1.3-4			0.0	S1: Red brown, CLAY, little fine Gravel and medium to coarse Sand, moist.				
					0.0					
	S2	4-8	47	48	0.0	S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
5					0.0					
					0.5					
					4.2					
	S3	8-12	44	48	2.5	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					7.2					
10					23.1					
					112.7		1			
	S4	12-16	43	48	27.3	S4: Red brown, CLAY, little fine Gravel and medium to coarse Sand, solvent-like odor, moist.			GLACIAL TILL	
					142.8					
					54.8					
15					7.4					
	S5	16-20	48	24	3.1	S5: Red brown, CLAY, little fine Gravel and medium to coarse Sand, solvent-like odor, moist.				
					5.4					
					87.5					
20										
	S6	20-24	48	36		S6: Red brown, CLAY, little fine Gravel and medium to coarse Sand, moist.				
					7.3					
					41.7					
					1.2					
										24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 11-12' at 15:10 on 03/11/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-58

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:12 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-59
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/11/2015 - 3/11/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54UD
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	38		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1.9			0.7	S1: FILL - Gray/Black, SILT with fine Gravel, trace fragments of porcelein, moist.			FILL	1.9
	S1	1.9-4			0.2	S1: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					0.2					
	S2	4-8	48	43		S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, wet from 4 - 6 feet and moist from 6 - 8 feet.				
5					0.0					
					0.0					
					0.0					
	S3	8-12	48	36	0.3	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					0.2					
10					1.5					
					3.5					
	S4	12-16	48	31		S4: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, no odor, moist. Seam of brown, fine GRAVEL with medium to coarse Sand, wet, from 12 - 12.5 feet.	1		GLACIAL TILL	
					7.7					
					28.1					
15					9.1					
	S5	16-20	48	30		S5: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					2.4					
					5.5					
					9.9					
20										
	S6	20-24	48	18		S6: Brown, CLAY, little fine Gravel, little medium to coarse Sand, moist, soft penetration with thumb.	2			
					62.5					
					12.8					24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 13-14' at 16:35 on 03/11/2015. Submitted for EPA Method 8260B analysis.
2 - Soil sample collected from 20-21' at 16:40 on 03/11/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-59

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:13 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-60
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 6
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	26		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-4			0.1	S1: FILL - Gray/Black, fine GRAVEL with Silt, trace fine Sand, moist.				
					0.1				FILL	
5	S2	4-6	24	18	2.9	S2: Brown, SILT, solvent-like odor, moist.	1			
					6.6	End of exploration at 6 feet.				6
10										
15										
20										
25										

REMARKS

1 - Soil sample collected from 5-6' at 09:25 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-60

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:14 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-61
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	30		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-4			0.1	S1: FILL - Brown/Black, CLAY, some medium to coarse Sand, moist.				
					0.1				FILL	
					0.1					4
5	S2	4-8	48	46		S2: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.				
					0.3					
					1.7					
					13.6		1			
	S3	8-10	24	24	37.1	S3: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.				
					2.0					
10	S4	10-12	24	24	3.0	S4: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.				
					9.0					
	S5	12-14	24	24	3.7	S5: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.			GLACIAL TILL	
					4.7					
	S6	14-16	24	24	6.2	S6: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.				
15					4.0					
	S7	16-18	24	24	3.0	S7: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.				
					4.1					
	S8	18-20	24	24	4.1	S8: Red brown, CLAY, little fine Gravel and medium to coarse sand, moist.				
					28.6					
20					42.9		2			20
						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 7-8' at 10:10 on 03/12/2015. Submitted for EPA Method 8260B analysis.
2 - Soil sample collected from 19-20' at 10:20 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-61

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:14 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-62
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	36		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-3			0.0	S1: FILL - Gray/Black, CLAY, little fine Gravel, little medium to coarse Sand, moist.			FILL	
					0.0					
					0.0					3
	S1	3-4				S1: Red brown, CLAY, little fine Gravel, little medium to coarse Sand, moist.				
	S2	4-8	48	48		S2: Red brown, CLAY, little fine Gravel and medium to coarse Sand, no odor, moist.				
5					9.6					
					1.5					
					0.8					
	S3	8-12	48	32	2.6	S3: Red brown, CLAY, little fine Gravel and medium to coarse Sand, no odor, moist.				
					26.6					
10					22.0					
					21.8					
	S4	12-16	48	32	69.8	S4: Red brown, CLAY, little fine Gravel and medium to coarse Sand, no odor, moist.				
					21.8					
					83.7				GLACIAL TILL	
15					110					
	S5	16-20	48	20		S5: Red brown, CLAY, little fine Gravel and medium to coarse Sand, solvent-like odor, moist.	1			
					60.9					
					74.1					
20	S6	20-24	48	5		S6: Red brown, CLAY, little fine Gravel and medium to coarse Sand, solvent-like odor, moist.				
					24.3					
										24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 16-17' at 11:35 on 03/12/2015; Field Duplicate 01 is also associated with this sample. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-62

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:15 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-63
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.5	48	36		S1: ASPHALT			ASPHALT	0.5
	S1	0.5-2			0.0	S1: FILL - Red brown, CLAY, little fine Gravel and medium to coarse Sand, dry.			FILL	
					0.0					2
	S1	2-4			0.1	S1: Black, CLAY, little medium to coarse Sand, trace roots, faint organic odor, moist.				
	S2	4-8	48	44		S2: Red brown, CLAY, some fine Gravel, little fine to coarse Sand, moist.				
5					0.0					
					0.0					
					3.3					
	S3	8-12	48	44	3.0	S3: Red brown, CLAY, some fine Gravel, little fine to coarse Sand, moist. Seam of medium Sand, wet, from 8 to 8.5 feet.	1			
					10.8					
10					1.2					
					0.4					
	S4	12-16	48	4	0.4	S4: Red brown, CLAY, some medium Sand, moist.			GLACIAL TILL	
					0.0					
15										
	S5	16-20	48	46		S5: Red brown, CLAY, some medium to coarse Sand, moist.				
					0.0					
					0.0					
					0.0					
20	S6	20-24	48	10	0.0	S6: Red brown, CLAY, some medium to coarse Sand, moist.				
					0.0					
					0.0					
										24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 8-9' at 12:15 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-63

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:16 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-64
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	39		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-4			0.0	S1: FILL - Gray brown/black, CLAY, some fine Gravel, little medium to coarse Sand, moist				
					0.0				FILL	
					0.0					4
5	S2	4-8	48	45		S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					2.8					
					3.6					
					5.0					
	S3	8-12	48	43	9.7	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, some black organic soils observed, moist.	1			
					23.3					
10					12.1					
					2.3					
	S4	12-16	48	43	1.0	S4: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					5.8					
					1.4				GLACIAL TILL	
15					0.4					
	S5	16-20	48	22	0.4	S5: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					22.5					
					17.5					
20	S6	20-24	48	26		S6: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.	2			
					23.7					
					30.3					24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 8-9' at 13:30 on 03/12/2015. Submitted for EPA Method 8260B analysis.
2 - Soil sample collected from 20-21' at 13:35 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-64

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:17 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-65
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.4	48	36		S1: ASPHALT			ASPHALT	0.4
	S1	0.4-1.8			0.0	S1: FILL - Brown, CLAY, some coarse Sand, little fine Gravel, dry.			FILL	1.8
	S1	1.8-4			0.0	S1: Gray/brown, CLAY, some coarse Sand, little fine Gravel, dry.				
					0.0					
5	S2	4-8	48	44		S2: Brown, CLAY, some fine Gravel, little medium to coarse Sand, dry to moist.				
					0.4					
					3.5					
					4.5					
	S3	8-12	48	24	11.3	S3: Brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					3.8					
10					4.9					
	S4	12-16	48	24		S4: Brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.			GLACIAL TILL	
					8.9					
					13.2					
15										
	S5	16-20	48	31		S5: Brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.	1			
					22.7					
					13.1					
					2.9					
20	S6	20-24	48	30		S6: Brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					4.5					
					2.1					
					2.2					
										24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 16-17' at 14:25 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-65

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:18 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-66
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	40		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-1			0.0	S1: FILL - Black/brown, SILT, little medium Sand, dry.			FILL	1
	S1	1-4			0.0	S1: Brown, SILT, little fine Gravel, dry.				
					1.6					
5	S2	4-8	48	46		S2: Red brown, SILT, little fine Gravel, dry.				
					18.5					
					11.3					
					7.7					
	S3	8-12	48	40	62.4	S3: Red brown, SILT, little fine Gravel, dry.				
					162					
10					67.8					
					11.3					
	S4	12-16	48	37	7.4	S4: Red brown, SILT, little fine Gravel, dry.	1		GLACIAL TILL	
					221					
					162					
15					6.4					
	S5	16-20	48	40		S5: Red brown, CLAY, some fine Gravel, little medium to coarse				
					5.4	Sand, moist.				
					5.4					
					0.0					
20	S6	20-24	48	28		S6: Red brown, CLAY, some fine Gravel, little medium to coarse				
					1.8	Sand, moist.				
					0.0					
										24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 12-13' at 15:20 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-66

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:18 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-67
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 24
Date Start - Finish: 3/12/2015 - 3/12/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 6620DT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.3	48	16		S1: ASPHALT			ASPHALT	0.3
	S1	0.3-4			0.0	S1: FILL - Gray, fine GRAVEL with Silt, dry.				
					0.0				FILL	
	S2	4-5	48	31		S2: Gray, fine GRAVEL with Silt, wet.				
5	S2	5-8			0.0	S2: Red brown, CLAY, little medium to caorse Sand, trace fine				5
					0.0	Gravel, moist.				
					0.0					
	S3	8-12	48	12		S3: Brown, CLAY with medium Sand, wet.				
					0.0					
10										
	S4	12-16	48	43		S4: Brown, CLAY, some medium to coarse Sand, trace Gravel,				
					1.0	moist to wet.				
					1.2					
15					1.0		1		GLACIAL TILL	
	S5	16-20	48	20	3.3	S5: Brown, CLAY, some medium to caorse Sand, wet.				
					0.0					
					0.0					
20										
	S6	20-24	48	20		S6: Brown, CLAY, some medium to caorse Sand, wet.				
					0.0					
					0.0					24
25						End of exploration at 24 feet.				

REMARKS

1 - Soil sample collected from 15-16' at 16:30 on 03/12/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-67

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:19 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-68
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.4	48	38		S1: Concrete Floor			CONCRETE	0.4
		0.4-4			0.0	: FILL - Red brown, SILT with fine Sand, dry.				
					0.0					
					0.0					
	S2	4-8	48	48		S2: Red brown, CLAY, some fine Gravel, little medium to coarse				
5					0.0	Sand, dry to moist.				
					0.0					
					0.0		1			
	S3	8-12	48	12	0.0	S3: Red brown, CLAY, some medium to coarse Sand, moist.				
					0.0					
10									GLACIAL TILL	
	S4	12-16	48	20		S4: Red brown, CLAY, some medium to coarse Sand, moist.				
					0.0					
					0.0					
15										
	S5	16-20	48	30		S5: Red brown, CLAY, some fine Gravel, little medium to coarse	2			
					0.0	Sand, moist.				
					0.0					
					0.0					
20										20
						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 7-8' at 09:30 on 03/13/2015. Submitted for EPA Method 8260B analysis.
2 - Soil sample collected from 16-17' at 09:35 on 03/13/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-68

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:20 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-69
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.4	48	30		S1: Concrete Floor			CONCRETE	0.4
	S1	0.4-4	48		0.0	S1: FILL - Brown, SILT with fine to medium Sand, dry.				
					0.0					
					0.0					
	S2	4-8	48	48		S2: Red brown, CLAY, some fine Gravel, little medium to coarse				
5					0.0	Sand, dry to moist.				
					0.0					
					0.0					
	S3	8-12	48	24	0.0	S3: Red brown, CLAY, some medium to coarse Sand, moist.				
					0.1					
10					0.2				GLACIAL TILL	
	S4	12-16	48	16		S4: Red brown, CLAY, some medium to caorse Sand, moist.	1			
					0.5					
					0.8					
15										
	S5	16-20	48	44		S5: Red brown, CLAY, some medium to caorse Sand, moist.				
					0.0					
					0.0					
					0.0					
20					0.0					20
						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 12-13' at 10:40 on 03/13/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-69

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:21 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-70
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.4	48	36		S1: Concrete Floor			CONCRETE	0.4
	S1	0.4-4			0.1	S1: FILL - Red brown, CLAY with fine Sand, moist.				
					0.4					
					0.1					
	S2	4-8	48	46		S2: Red brown, CLAY, some fine Gravel, little medium to coarse				
5					0.2	Sand, moist.				
					0.4		1			
					1.2					
	S3	8-12	48	0	0.4	S3: No Recovery.				
10									GLACIAL TILL	
	S4	12-16	48	38		S4: Red brown, CLAY, some fine Gravel, little medium to coarse				
					0.1	Sand, moist.				
					0.1					
15					0.1					
	S5	16-20	48	30	0.0	S5: Red brown, CLAY, some fine Gravel, little medium to coarse				
					0.3	Sand, moist.				
					0.1					
20										20
						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 6-7' at 11:30 on 03/13/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-70

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:21 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-71
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.4	48	40		S1: Concrete Floor			CONCRETE	0.4
	S1	0.4-4			0.0	S1: FILL - Brown, CLAY, Some medium to coarse Sand, dry to moist.				
					0.0					
					0.0		1			
	S2	4-8	48	46	0.0	S2: Red brown, CLAY, some medium to coarse Sand, moist.				
5					0.0					
					0.0					
					0.0					
	S3	8-12	48	44	0.0	S3: Red brown, CLAY, some medium to coarse Sand, little fine Gravel, moist.				
					0.0					
10					0.0				GLACIAL TILL	
					0.0					
	S4	12-16	48	38	0.0	S4: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					0.0					
					0.0					
15					0.0					
	S5	16-20	48	36		S5: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					0.0					
					0.0					
					0.0					
20										20
						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 3-4' at 13:15 on 03/13/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-71

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:22 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-72
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S1	0-0.4	48	41		S1: Concrete Floor			CONCRETE	0.4
	S1	0.4-4			0.3	S1: FILL - Brown, CLAY, some fine Gravel, little medium to coarse Sand, solvent-like odor, dry.				
					1.1					
	S2	4-8	48	46	0.6	S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, solvent-like odor, dry to moist.				
5					0.8					
					2.0					
					3.0					
	S3	8-12	48	44	0.8	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, solvent-like odor, dry to moist.				
					1		1			
10					5				GLACIAL TILL	
					3					
	S4	12-16	48	28	1	S4: Red brown, CLAY, some fine to medium Sand, trace fine Gravel, moist.				
					3.2					
					1					
15										
	S5	16-20	48	30		S5: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					0.1					
					0.1					
					0.1					
20										20
						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 9-10' at 14:05 on 03/13/2015; Field Duplicate 02 is also associated with this sample. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-72

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:23 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-73
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 20
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Stratum Depth (ft.)
	S1	0-0.4	48	40		S1: Concrete Floor			CONCRETE	0.4
	S1	0.4-4			0.1	S1: FILL - Brown, CLAY, little fine to medium Sand, trace fine Gravel, dry.			GLACIAL TILL	4
					0.1					
					0.1					
					0.1					
5	S2	4-8	48	43	0.1	S2: Brown, CLAY, little fine to medium Sand, trace fine Gravel, dry to moist.	1			
					0.1					
					0.1					
					0.1					
	S3	8-12	48	26	0.1	S3: Red brown, CLAY, some fine Gravel, little fine to medium Sand, moist.				
10					0.1					
	S4	12-16	48	20		S4: Red brown, CLAY, little fine Gravel, little fine to medium Sand, moist.				
					0.1					
					0.1					
15										
	S5	16-20	48	40		S5: Red brown, CLAY, little fine Gravel, little fine to medium Sand, moist.				
					0.1					
					0.1					
					0.1					
20						End of exploration at 20 feet.				
25										

REMARKS

1 - Soil sample collected from 6-7' at 15:25 on 03/13/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-73

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:24 PM

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Northtown Associates LLC
Northtown Plaza BCP Site
Amherst, New York

EXPLORATION NO.: SP-74
SHEET: 1 of 1
PROJECT NO: 31.0056687.30
REVIEWED BY: J. Richert

Logged By: T. Bown
Drilling Co.: Trec Environmental Inc.
Foreman: J. Ager

Geoprobe Location: See Plan
Ground Surface Elev. (ft.):
Final Geoprobe Depth (ft.): 11.5
Date Start - Finish: 3/13/2015 - 3/13/2015

H. Datum:
V. Datum:

Type of Rig: Geoprobe
Rig Model: 54LT
Drilling Method: Direct Push

Sampler Type: Macro
Sampler O.D. (in.): 1.75
Sampler Length (in.): 48
Rock Core Size: NA

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
		NA	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Stratum Depth (ft.)
	S1	0-0.4	48	46		S1: Concrete Floor			CONCRETE	0.4
	S1	0.4-4			0.1	S1: FILL - Brown, CLAY, some fine to coarse Sand, trace fine Gravel, dry.				
					0.0				GLACIAL TILL	
					0.1					
					0.1					4
	S2	4-8	48	46		S2: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, dry.				
5					0.3		1			
					0.2					
					0.1					
	S3	8-11.5	42	40	0.1	S3: Red brown, CLAY, some fine Gravel, little medium to coarse Sand, moist.				
					0.1					
10					0.1					
					0.1					
						End of exploration at 11.5 feet.				
15										
20										
25										

REMARKS

1 - Soil sample collected from 5-6' at 15:55 on 03/13/2015. Submitted for EPA Method 8260B analysis.

Field Screening performed with PID equipped with a 11.7 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for explanation of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual.

SP-74

GZA TEMPLATE GEOPROBE; 3/31/2015; 3:45:24 PM

Monitoring Well Installation
Northtown Plaza
Amherst, New York

Boring No. MW-8
Flie No. 31.0056687.30
Checked By: JR

25'S, 9'E of T. Automotive SE corner

CONTRACTOR	TREC Environmental, Inc.	BORING LOCATION	See Location Plan
DRILLER	Jim Ager	GROUND SURFACE ELEVATION	DATUM
START DATE: 4/22/2015	END DATE: 4/22/2015	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
4/22/15	1330	Dry	1" PVC	

TYPE OF DRILL RIG	Geo Probe 6620 DT
CASING SIZE AND DIAMETER	
OVERBURDEN SAMPLING METHOD	Direct Push
ROCK DRILLING METHOD	Not Applicable

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUES /RQD	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
1	S-1		0-2		50	Asphalt (3-inches) Dark Brown / Black f/c SAND, little Gravel, tr. Silt, moist (FILL)			0.5
2	S-2		2-4		50	Brown Silty CLAY, tr. Sand, tr. Gravel, moist (NATIVE)			0
3								1" Ø Microwell installed	
4	S-3		4-6		100			• screened - w/ pre-Sand pack - 5-20' bgs	0 (10 slot)
5									
6	S-4		6-8		100				0
7								• Sand Pack (ODN Sand) to 4' bgs	
8	S-5		8-10		100				0
9									
10	S-6		10-12		100			• Medium Bentonite Chips to ~1.5' bgs	0
11									
12	S-7		12-14		100				0
13									
14	S-8		14-16		100			BOW = 19.47' from TOR	0
15									
16	S-9		16-18		100			TOR to Top of pad box = 0.08'	0
17									
18	S-10		18-20		100				0
19									
20						End @ 20' bgs			

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) Water level data referenced to ground surface elevation.
2) BGS = below ground surface, NV = no value, WOH = weight of hammer, WOR = weight of rods.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Monitoring Well Installation
Northtown Plaza
Amherst, New York

Boring No. MW-~~8~~ 9
Flie No. 31.0056687.30
Checked By: JR

36.5' N, 9' E of T. Automotive SE corner

CONTRACTOR	TREC Environmental, Inc.	BORING LOCATION	See Location Plan
DRILLER	Jim Ager	GROUND SURFACE ELEVATION	DATUM
START DATE: 4/22/2015	END DATE: 4/22/2015	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
4/22/15	1341	12.81	1" PVC	

TYPE OF DRILL RIG	Geoprobe 6610 DT
CASING SIZE AND DIAMETER	
OVERBURDEN SAMPLING METHOD	Direct Push
ROCK DRILLING METHOD	Not Applicable

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUES /RQD	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
1	S-1		0-2		60	Asphalt (3") / little Gravel / P. Brown f/c SAND, tr. Silt, moist (FILL).			0
2	S-2		2-4		60	Brown Silty CLAY, tr. Sand, tr. Gravel, moist (NATIVE).			0
3									
4	S-3		4-6		100	(Sleeve wet - core moist - perched).		1" ϕ Microwell installed	0
5								• screened -	10 slot
6	S-4		6-8		100			w/ pre-Sand pack - ~5-20' bgs.	0
7									
8	S-5		8-10		70			• Sand Pack (00 N Sand) to 4' bgs	0
9									
10	S-6		10-12		70			• Medium Bentonite Chips to ~ 0.65' bgs	0.2
11									
12	S-7		12-14		80				0
13									
14	S-8		14-16		60			BOW = 19.32' TOR	0
15									
16	S-9		16-18		10			TOR - Top of road box = 0.34'	0
17									
18	S-10		18-20		10				0
19									
20						End @ 20' bgs			

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) Water level data referenced to ground surface elevation.
2) BGS = below ground surface, NV = no value, WOH = weight of hammer, WOR = weight of rods.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Chad Britton	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	1/30/2014 END DATE 1/30/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	Geoprobe 6620 DT Track-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	100	Asphalt - 4-inches.		0.3
1				Fill - Dark Brown SAND, some Gravel, little Slag, trace Silt,		
				trace Clay, moist.		
2				Native - Black Silty CLAY, trace Gravel, trace Sand,		
				moist from 1 to 1.5 feet bgs. Grades to…. Reddish Brown at 1.5		0.1
3				feet bgs.		
4						
	S-2	4 - 8	100			0.1
5						
6						
						0.1
7						
8						
	S-3	8 - 12	100			0.2
9						
10						
						0.1
11						
12						
	S-4	12 - 16	100			0.1
13						
14						
						0.1
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Chad Britton	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	END DATE	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	Geoprobe 6620 DT Track-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	100	Asphalt - 4-inches.		2.1
1				Fill - Dark Brown SAND, some Gravel, trace Silt, trace Clay		
				moist. 2-inches of coarse SLAG at 1-foot bgs.		
2				Native - Reddish Brown Silty CLAY, trace Gravel, trace Sand,		
				moist.		0.4
3						
4						
	S-2	4 - 8	100			0.8
5						
6						
						7.3
7						
				Green/Gray Discoloration (small area approximately the size of	Sampled this green/	
8				a quarter). Slight solvent (sweet) odor observed.	gray discolored area .	
	S-3	8 - 12	100			2.6
9						
10						
						173
11						
12						
	S-4	12 - 16	100			104
13						
14						
				Solvent odor no longer observed.		1.7
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Chad Britton	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	1/31/2014 END DATE 1/31/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	Geoprobe 6620 DT Track-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	100	Asphalt - 4-inches.		0.4
1				Fill - Dark Brown/Gray SAND, some Gravel, trace Slag, trace		
				Silt, trace Clay, moist.		
2				Native - Reddish Brown Silty CLAY, trace Gravel, trace Silt, moist.		
						0.3
3						
4						
	S-2	4 - 8	100			0.6
5						
6						
						0.6
7						
8						
	S-3	8 - 12	100			1.6
9						
10						
						0.6
11						
12						
	S-4	12 - 16	100			0
13						
14						
						0
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Jim Agar	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	3/30/2014 END DATE 3/30/14	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	Geoprobe 54LT Track Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	70	Concrete (4-inches). Fill - Dark Brown fine SAND, trace Gravel, moist (2-inches).		0
1				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						0
3						
4						
	S-2	4 - 8	100			1
5						
6						
						5
7						
				Grades to: moist/wet.		
8						
	S-3	8 - 12	100			13.1
9						
				Grades to: moist.		
10						
						22.3
11						
12						
	S-4	12 - 16	100			5.5
13						
14						
						0.4
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Jim Agar	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	3/30/2014 END DATE 3/30/14	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	Geoprobe 54LT Track Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	25	Concrete (4-inches).		0
1				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						0
3						
4						
	S-2	4 - 8	100			0.2
5						
6				Grades to: moist/wet.		0
7						
8						
	S-3	8 - 12	100			1.1
9						
10						
11				Grades to moist.		1.3
12						
	S-4	12 - 16	100			0.1
13						
14						
15						0
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Jim Agar	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	3/31/2014 END DATE 3/31/14	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING
#######	17:45	Dry	1" PVC

TYPE OF DRILL RIG	540 UB Truck-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	90	Asphalt (5-inches). Fill - Dark Brown fine to coarse SAND	1-inch diameter micro-	0.3
1				(3-inches).	well installed with	
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.	roadbox.	
2					Bentonite chips from	
				Grades to: Gray.	0 to 3 feet bgs.	0.7
3				Grades to: Brown.	Riser pipe from 0 to 4	
					feet bgs.	
4						
	S-2	4 - 8	100		10-slot screen from 4	20.7
5					to 18.9 feet bgs.	
				Solvent-like odor observed.		
6					Sand pack (OON) from	
					3 to 18.9 feet bgs.	20.5
7						
8						
	S-3	8 - 12	100			18.8
9						
10						
						51.2
11						
12						
	S-4	12 - 16	10			71.3
13						
14						
						71.3
15						
16						
	S-5	16-19	100	Grades to: moist/wet.		68
17						
18						32
					Bottom of well at	
19					18.9-feet bgs.	
				Soil probe refusal at 19 feet bgs.		
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Jim Agar	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	3/31/2014 END DATE 3/31/14	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	540 UB Truck-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	80	Asphalt (5-inches). Fill - Dark Brown SAND and Gravel, trace		4.5
1				Silt, trace Clay, trace Slag, moist.		
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
				Grades to: Gray.		0.2
3						
4				Grades to: Brown.		
	S-2	4 - 8	100			17.1
5						
6						
						1.5
7						
8				Solvent-like odor observed.		
	S-3	8 - 12	100			25.6
9						
10						
						8.7
11						
12						
	S-4	12 - 16	100	End of solvent-like odor.		2.5
13						
14						
						0
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Jim Agar	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	3/31/2014 END DATE 3/31/14	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	540 UB Truck-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	90	Asphalt (5-inches). Fill - Dark Brown SAND and Gravel, trace		3.5
1				Silt, trace Clay, moist		
				Native - Gray Silty CLAY, trace Gravel, trace Sand, moist.		
2				Gray discoloration.		
						0.4
3				Grades to: Brown.		
4						
	S-2	4 - 8	100			0.2
5						
6						
						0.2
7						
8						
	S-3	8 - 12	100			0.1
9						
10						
						0
11						
12						
				End of soil probe at 12 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Jim Agar	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	3/31/2014 END DATE 3/31/14	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	540 UB Truck-Mounted Rig
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	100	Asphalt (4-inches). Fill - Dark Brown SAND and Gravel, trace		0
1				Silt, trace Clay, trace Slag, moist.		
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						0
3						
4						
	S-2	4 - 8	100			0
5						
6						
						0
7						
8						
	S-3	8 - 12	100			0
9						
10						
						0
11						
12						
				End of soil probe at 12 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/8/2014 END DATE 5/8/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	50	Asphalt (4-inches). Fill - Gray GRAVEL and Sand, trace Silt,		51.3
1				trace Clay, moist.		
2						
						23.8
3						
				Black Staining/Sheen (2-inches), wet. Petroleum odor.		
4				Black Silty CLAY, trace Gravel, trace Sand, moist. Petroleum		
	S-2	4 - 8	100	odor.		0.9
5				Grades to: Brown.		
6						
				Grades to: No petroleum odor.		0.7
7						
8						
	S-3	8 - 11	100			2.2
9						
10						
11						
				Refusal at 11 feet below ground surface.		
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/8/2014 END DATE 5/8/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	100	Asphalt (4-inches). Fill - Gray GRAVEL and Sand, trace Silt,		5.3
1				trace Clay, moist.		
2				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
						0
3						
4						
	S-2	4 - 8	100			0
5						
6						
						0
7						
8						
	S-3	8 - 11.5	100			0
9						
10						
11						
12				Refusal at 11.5 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	40	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace		5.7
1				Silt, trace Clay, moist.		
2						
						0
3						
4				Native - Gray Silty CLAY, trace Gravel, trace Sand, moist.		
	S-2	4 - 8	100			0
5						
6						
						0
7						
8						
	S-3	8 - 11.7	100			0
9						
10						
				Grades to: Brown.		
11						
12						
				Refusal at 11.7 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	80	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace Slag, trace Silt, trace Clay, moist.		20.7
1						
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						0.6
3						
4						
	S-2	4 - 8	100			13.6
5						
6						
						22.5
7						
8						
	S-3	8 - 11.9	100			13.5
9						
10						
						13.9
11						
12						
				Refusal at 11.9 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	20	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace		9.3
1				Slag, trace Silt, trace Clay, moist.		
2						
						12.1
3						
4				Black Staining, Sheen, Product, and Petroleum odor. Wet.		
	S-2	4 - 8	90			177
5						
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
6						
						23.3
7						
8						
	S-3	8 - 11.5	100			4.0
9						
10						
11						
12				Refusal at 11.5 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	10	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace		6.2
1				Slag, trace Silt, trace Clay, moist.		
2						12.6
3						
4				Black Staining, Sheen, and Petroleum odor. Wet.		
	S-2	4 - 8	10			13.4
5				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
6						1.6
7						
8						
	S-3	8 - 11.5	100			1.4
9						
10						1.4
11						
12				Refusal at 11.5 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	100	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace Slag, trace Silt, trace Clay, moist.		24.7
1						
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						3.1
3						
4						
	S-2	4 - 8	100			1.2
5						
6						
						0.6
7						
8						
				End of soil probe at 8 feet below ground surface.		
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	100	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace Slag, trace Silt, trace Clay, moist.		3.9
1						
				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						0.8
3						
4						
	S-2	4 - 8	100			1.2
5						
6						
						1.4
7						
8						
				End of soil probe at 8 feet below ground surface.		
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	30	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace		0.3
1				Slag, trace Silt, trace Clay, moist.		
2						
						2.1
3						
				Grades to: Black staining, sheen, and petroleum odor.		
4						
	S-2	4 - 8	70	Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		18.8
5				Black staining and petroleum odor.		
6						
						62.8
7						
8						
	S-3	8 - 11.8	100	Grades to: No black staining or petroleum odor.		5.8
9						
10						
11						
12						
				Refusal at 11.8 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	90	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace		0.2
1				Silt, trace Clay, moist.		
2				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
						0.1
3						
4						
	S-2	4 - 8	100	Grades to: Gray, petroleum odor.		36.9
5						
6						
						11.1
7						
8						
	S-3	8 - 12	100	Grades to: Brown, no petroleum odor.		0.2
9						
10						
						0
11						
12						
				End of soil probe at 12 feet below ground surface.		
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Justin Hofschneider	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/9/2014 END DATE 5/9/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	T. Bohlen

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	60	Asphalt (4-inches). Fill - Brown/Gray GRAVEL and Sand, trace		0
1				Slag, trace Silt, trace Clay, moist.		
2						
						0.4
3				Native - Brown Silty CLAY, trace Gravel, trace Sand, moist.		
4						
	S-2	4 - 8	100	Grades to: Gray.		0
5						
6						
						0
7				Grades to: Brown.		
8						
				End of soil probe at 8 feet below ground surface.		
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	30	Asphalt (5-inches). Fill - Gray GRAVEL and Sand, trace Silt, trace Clay, moist.		0.3
1				Fill - Brown fine to coarse SAND, some Gravel, little Silt, moist.		
2						0.3
3						
4						
	S-2	4 - 8	30	Native - Grayish Brown Silty CLAY, trace Gravel, trace Sand, moist.		2.2
5						
6						2.2
7						
8						
	S-3	8 - 12	40	Grades to: Brown, trace organics.		1.8
9						
10						1.8
11						
12						
	S-4	12 - 16	80			1.2
13						
14						1.2
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	40	Asphalt (2-inches). Fill - Brown fine to coarse SAND, little Silt,		9.8
1				trace Gravel, moist (to 8" below ground surface).		
				Fill - Gray GRAVEL and Sand, trace Silt, moist.		
2				Native - Reddish Brown Silty CLAY, trace Gravel, trace Sand,		
				moist.		9.8
3						
4						
	S-2	4 - 8	100	Grades to: trace Gravel, trace Sand.		2.9
5						
6						
						2.9
7						
8						
	S-3	8 - 12	100			5.2
9						
10						
						1.9
11						
12						
	S-4	12 - 16	100			0.3
13						
14						
						0.2
15						
16						
				End of soil probe at 16 feet below ground surface.		
17						
18						
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION: Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	40	Asphalt (2-inches). Fill - Gray SAND and Gravel, trace Silt,		5.1
1				moist.		
2				Native - Reddish Brown Silty CLAY, trace Gravel, trace Sand,		
				moist.		18.4
3						
4						
	S-2	4 - 8	100			67
5						
6						
				Pungent odor.		4,554
7						
8						
	S-3	8 - 12	100	End pungent odor.		416
9						
10						
						374.2
11						
12						
	S-4	12 - 16	100			364.4
13						
14						
						371.8
15						
16						
	S-5	16 - 20	100			352.8
17						
18						
						51.5
19						
20				End of soil probe at 20 feet below ground surface.		

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	40	Asphalt (4-inches). Fill - Gray SAND and Gravel, trace Silt,		2.1
1				moist.		
				Native - Dark Grayish Brown Silty CLAY, trace Gravel, trace		
2				Sand, moist. Grades to: Brown at 1.5 feet below ground		
				surface.		2.4
3						
4						
	S-2	4 - 8	100			16.1
5						
6						
						67.9
7						
8						
	S-3	8 - 12	100			220.5
9						
10						
						286.0
11						
12						
	S-4	12 - 16	100			196.9
13						
14						
						263.6
15						
16						
	S-5	16 - 20	100			331.7
17						
18						
						396.6
19						
20				End of soil probe at 20 feet below ground surface.		

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	100	Asphalt (6-inches). Fill - Gray SAND and Gravel, trace Silt, moist.		2.7
1				Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						3.8
3						
4						
	S-2	4 - 8	100			249.6
5						
6						
						357.1
7						
8						
	S-3	8 - 12	100			362.5
9						
10						
						284.7
11						
12						
	S-4	12 - 16	100			447.7
13						
14						
						380.6
15						
16						
	S-5	16 - 20	100			389.9
17						
18						
						378.8
19						
20				End of soil probe at 20 feet below ground surface.		

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION Sample Number	DEPTH (FT)	RECOVERY (%)	SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	S-1	0 - 4	20	Asphalt (5-inches). Fill - Gray SAND and Gravel, moist.		0.8
1						
				Brown Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						0.8
3						
4						
	S-2	4 - 8	20			1.2
5						
6						
						1.2
7						
8						
	S-3	8 - 12	100			84.5
9						
10						
						60.7
11						
12						
	S-4	12 - 16	100			7.3
13						
14						
						1.8
15						
16						
	S-5	16 - 20	100	End of soil probe at 20 feet below ground surface.		
17						
18						
						378.8
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CONTRACTOR	TREC Environmental	BORING LOCATION	See Site Plan
DRILLER	Kurt Ballfastern	GROUND SURFACE ELEVATION	NM DATUM NA
START DATE	5/12/2014 END DATE 5/12/2014	GZA GEOENVIRONMENTAL REPRESENTATIVE	J. Beninati

WATER LEVEL DATA

DATE	TIME	WATER	CASING

TYPE OF DRILL RIG	
CASING SIZE AND DIAMETER	2" diameter by 48" long
OVERBURDEN SAMPLING METHOD	Direct push
ROCK DRILLING METHOD	NA

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	OVM (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
	S-1	0 - 4	20	Asphalt (6-inches). Fill - Gray SAND and Gravel, trace Silt,		3.4
1				trace Glass, moist.		
				Brownish Gray Silty CLAY, trace Gravel, trace Sand, moist.		
2						
						6.8
3						
4						
	S-2	4 - 8	20			4.1
5						
6						
						5.8
7						
8						
	S-3	8 - 12	100			6.4
9						
10						
						7.3
11						
12						
	S-4	12 - 16	100			3.6
13						
14						
						3.3
15						
16						
	S-5	16 - 20	100	End of soil probe at 20 feet below ground surface.		
17						
18						
						378.8
19						
20						

S - Split Spoon Sample
C - Rock Core Sample

NOTES: MiniRAE 3000 was used to field screen and headspace soil samples.
bgs = Below ground surface. ppm = parts per million.

General Notes:
1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York

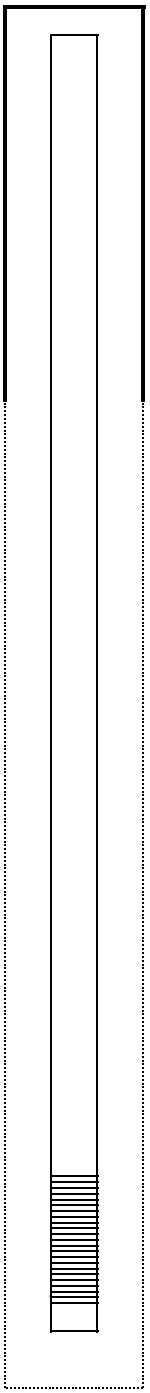
MONITORING WELL INSTALLATION REPORT

Well No. MW - 4

Project Number: 31.0056687.30	**Field Geologist**: T. Bown	**Ground El.:** 97.43
Client: Northtown Associates	**Project Manager:** J. Richert	**El. Datum:** Ground Shot
Location (City, State): Amherst, NY	☐ Stick-Up ☑ Flushmou **Installation Date:** 03/10/2015	**Latitude:**
Contractor: Trec Environmental Inc.	**Water Level:** NA	**Longitude:**
Driller: J. Ager		

Location Notes: MW-4 is associated with SP - 52, see boring log for subsurface details. Elevation survey is relative to a 100-foot reference point measured from the top of the westernmost bollard on the southwest corner of the plaza building protecting a gas meter.

Soil/Rock Conditions	Borehole Backfill
ASPHALT 0.3	0 Concrete 1
0.3 FILL 1.8	1
1.8 GLACIAL TILL	Bentonite 3.5
	3.5 PrePacked 00N Sand
20	19.5
20	19.5



Type of Lock (Key Number): Not Applicable

Protective Casing (ft.) 0
at ground surface
Length (in.): 12
Diameter (in.): 8

depth of top of well riser below ground surface (ft.): 0.5
Installation Notes: Monitoring well was installed using a Geoprobe.

Well riser material: Sch. 40 PVC
Diameter (in.): 1.0

Well Material Types	Top Depth (ft.)	Bottom Depth (ft.)
Concrete	0.0	1.0
Portland grout	NA	NA
Bentonite Grout	1.0	3.5
Sand Pack	3.5	19.5

Top of well screen (ft.): 4.5
Sand Pack Type: Prepacked 00N
Well Screen Material: Sch. 40 PVC 0.010 Slot
Diameter (in.): 1.0
Bottom of well screen (ft.): 19.5

Bottom of silt trap (ft.):

Bottom of borehole (ft.): 20.0

4	+	15	+		=	19
Riser Length (ft.)	+	Screen Length (ft.)	+	Silt Trap Length (ft.)	=	Total Length (ft.)

Well No. MW - 4

GZA GeoEnvironmental of New York

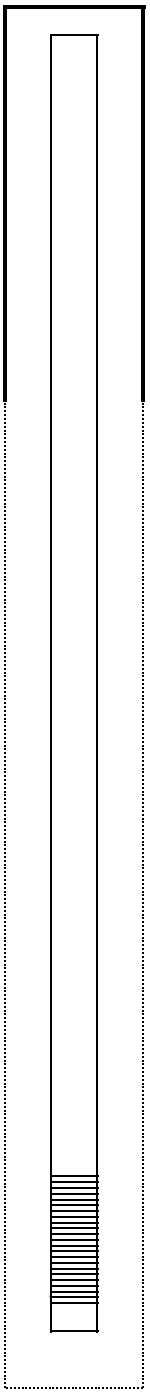
MONITORING WELL INSTALLATION REPORT

Well No. MW - 5

Project Number: 31.0056687.30	**Field Geologist**: T. Bown	**Ground El.:** 97.2
Client: Northtown Associates	**Project Manager:** J. Richert	**El. Datum:** Ground Shot
Location (City, State): Amherst, NY	**Installation Date:** 03/10/2015	**Latitude:**
Contractor: Trec Environmental Inc.	**Water Level:** NA	**Longitude:**
Driller: J. Ager		☐ Stick-Up ☑ Flushmount

Location Notes: MW-5 is associated with SP - 53, see boring log for subsurface details. Elevation survey is relative to a 100-foot reference point measured from the top of the westernmost bollard on the southwest corner of the plaza building protecting a gas meter.

Soil/Rock Conditions	Borehole Backfill
ASPHALT 0.3	0 Concrete 1
0.3 FILL 4	1 Bentonite 2.5
4 GLACIAL TILL 20	2.5 PrePacked 00N Sand 18
20	18



Type of Lock (Key Number): Not Applicable

Protective Casing (ft.) 0
at ground surface
Length (in.): 12
Diameter (in.): 8

depth of top of well riser below ground surface (ft.): 0.5
Installation Notes: Monitoring well was installed using a Geoprobe.

Well riser material: Sch. 40 PVC
Diameter (in.): 1.0

Well Material Types	Top Depth (ft.)	Bottom Depth (ft.)
Concrete	0.0	1.0
Portland grout	NA	NA
Bentonite Grout	1.0	2.5
Sand Pack	2.5	18.0

Top of well screen (ft.): 3.0
Sand Pack Type: Prepacked 00N
Well Screen Material: Sch. 40 PVC 0.010 Slot
Diameter (in.): 1.0
Bottom of well screen (ft.): 18.0

Bottom of silt trap (ft.):

Bottom of borehole (ft.): 20.0

2.5	+	15	+		=	17.5
Riser Length (ft.)	+	Screen Length (ft.)	+	Silt Trap Length (ft.)	=	Total Length (ft.)

Well No. MW - 5

GZA GeoEnvironmental of New York

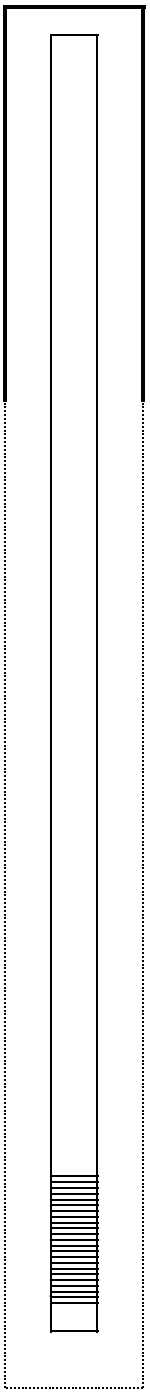
MONITORING WELL INSTALLATION REPORT

Well No. MW - 6

Project Number: 31.0056687.30	**Field Geologist**: T. Bown	**Ground El.:** 96.57
Client: Northtown Associates	**Project Manager:** J. Richert	**El. Datum:** Ground Shot
Location (City, State): Amherst, NY	☐ Stick-Up ☑ Flushmou **Installation Date:** 03/10/2015	**Latitude:**
Contractor: Trec Environmental Inc.	**Water Level:** NA	**Longitude:**
Driller: J. Ager		

Location Notes: MW-5 is associated with SP - 54, see boring log for subsurface details. Elevation survey is relative to a 100-foot reference point measured from the top of the westernmost bollard on the southwest corner of the plaza building protecting a gas meter.

Soil/Rock Conditions	Borehole Backfill
ASPHALT 0.3	0 Concrete
0.3 FILL 1	1
1	1 Bentonite 2.5
	2.5 PrePacked 00N Sand
GLACIAL TILL 20	19.5
20	19.5



Type of Lock (Key Number): Not Applicable

Protective Casing (ft.) 0
at ground surface
Length (in.): 12
Diameter (in.): 8

depth of top of well riser below ground surface (ft.): 0.5
Installation Notes: Monitoring well was installed using a Geoprobe.

Well riser material: Sch. 40 PVC
Diameter (in.): 1.0

Well Material Types	Top Depth (ft.)	Bottom Depth (ft.)
Concrete	0.0	1.0
Portland grout	NA	NA
Bentonite Grout	1.0	3.5
Sand Pack	3.5	19.5

Top of well screen (ft.): 4.5
Sand Pack Type: Prepacked 00N
Well Screen Material: Sch. 40 PVC 0.010 Slot
Diameter (in.): 1.0
Bottom of well screen (ft.): 19.5

Bottom of silt trap (ft.):

Bottom of borehole (ft.): 20.0

4	+	15	+		=	19
Riser Length (ft.)	+	Screen Length (ft.)	+	Silt Trap Length (ft.)	=	Total Length (ft.)

Well No. MW - 6

GZA GeoEnvironmental of New York

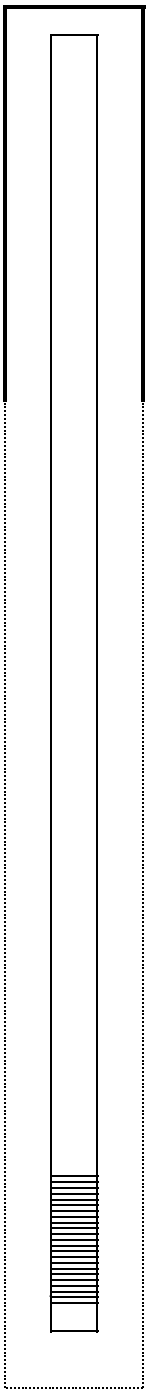
MONITORING WELL INSTALLATION REPORT

Well No. MW - 7

Project Number: 31.0056687.30	**Field Geologist**: T. Bown	**Ground El.:** 97.05
Client: Northtown Associates	**Project Manager:** J. Richert	**El. Datum:** Ground Shot
Location (City, State): Amherst, NY	**Installation Date:** 03/11/2015 ☐ Stick-Up ☑ Flushmou	**Latitude:**
Contractor: Trec Environmental Inc.	**Water Level:** NA	**Longitude:**
Driller: J. Ager		

Soil/Rock Conditions	Borehole Backfill
ASPHALT 0.3	0 Concrete 1
0.3 FILL 4	1 Bentonite 6
4 GLACIAL TILL 22	6 PrePacked 00N Sand 18
22	18

Location Notes: MW-7 is associated with SP - 55, see boring log for subsurface details. Elevation survey is relative to a 100-foot reference point measured from the top of the westernmost bollard on the southwest corner of the plaza building protecting a gas meter.



Type of Lock (Key Number): Not Applicable

Protective Casing (ft.) 0
at ground surface
Length (in.): 12
Diameter (in.): 8

depth of top of well riser below ground surface (ft.): 0.5
Installation Notes: Monitoring well was installed using a Geoprobe.

Well riser material: Sch. 40 PVC
Diameter (in.): 1.0

Well Material Types	Top Depth (ft.)	Bottom Depth (ft.)
Concrete	0.0	1.0
Portland grout	NA	NA
Bentonite Grout	1.0	6.0
Sand Pack	6.0	18.0

Top of well screen (ft.): 8.0
Sand Pack Type: Prepacked 00N
Well Screen Material: Sch. 40 PVC 0.010 Slot
Diameter (in.): 1.0
Bottom of well screen (ft.): 18.0

Bottom of silt trap (ft.):

Bottom of borehole (ft.): 22.0

7.5	+	10	+		=	17.5
Riser Length (ft.)	+	Screen Length (ft.)	+	Silt Trap Length (ft.)	=	Total Length (ft.)

Well No. MW - 7

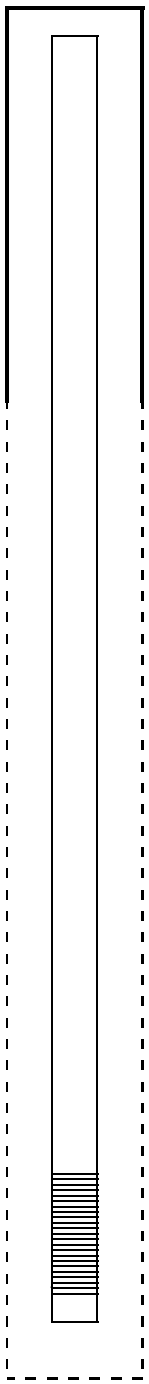
GZA GeoEnvironmental of New York

MONITORING WELL INSTALLATION REPORT

Well No. MW - 8

Project Number: 31.0056687.30	**Field Geologist**: T. Bohlen	**Ground El.:**
Client: Northtown Associates	**Project Manager:** J. Richert	**El. Datum:**
Location (City, State): Amherst, NY	**Installation Date:** 04/22/2015	**Latitude:**
Contractor: Trec Environmental Inc.	**Water Level:** NA	**Longitude:**
Driller: J. Ager		☐ Stick-Up ☑ Flushmount

Soil/Rock Conditions	Borehole Backfill	**Location Notes**: See boring log for subsurface details.
ASPHALT 0.3	0 Concrete 1	
0.3 FILL 1.5	1 Bentonite 4	
1.5 GLACIAL TILL 20	4 PrePacked 00N Sand 20	
20	20	



Type of Lock (Key Number): Not Applicable

Protective Casing (ft.) 0
at ground surface
Length (in.): 12
Diameter (in.): 8

depth of top of well riser below ground surface (ft.): 0.28
Installation Notes: Monitoring well was installed using a Geoprobe.

Well riser material: Sch. 40 PVC
Diameter (in.): 1.0

Well Material Types	Top Depth (ft.)	Bottom Depth (ft.)
Concrete	0.0	1.5
Portland grout	NA	NA
Bentonite Grout	1.5	4.0
Sand Pack	4.0	20.0

Top of well screen (ft.): 5.0
Sand Pack Type: Prepacked 00N
Well Screen Material: Sch. 40 PVC 0.010 Slot
Diameter (in.): 1.0
Bottom of well screen (ft.): 20.0

Bottom of silt trap (ft.):

Bottom of borehole (ft.): 20.0

4.72	+	15	+		=	19.72
Riser Length (ft.)	+	**Screen Length (ft.)**	+	**Silt Trap Length (ft.)**	=	**Total Length (ft.)**

Well No. MW - 8

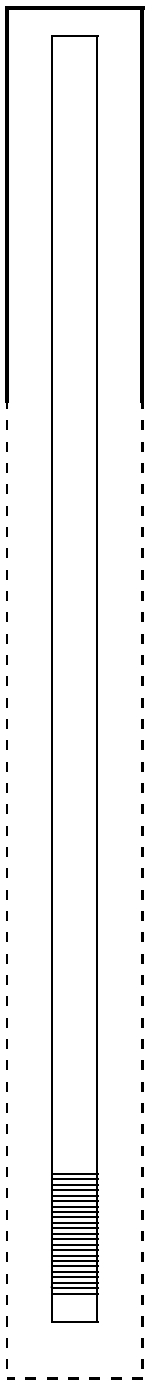
GZA GeoEnvironmental of New York

MONITORING WELL INSTALLATION REPORT

Well No. MW - 9

Project Number: 31.0056687.30	**Field Geologist**: T. Bohlen	**Ground El.:**
Client: Northtown Associates	**Project Manager:** J. Richert	**El. Datum:**
Location (City, State): Amherst, NY	**Installation Date:** 04/22/2015	**Latitude:**
Contractor: Trec Environmental Inc.	**Water Level:** NA	**Longitude:**
Driller: J. Ager		☐ Stick-Up ☑ Flushmount

Soil/Rock Conditions	Borehole Backfill	Location Notes: See boring log for subsurface details.
ASPHALT 0.3	0 Concrete 0.65	
0.3 FILL 1	0.65 Bentonite 4	
1 GLACIAL TILL 20	4 PrePacked 00N Sand 20	
20	20	



Type of Lock (Key Number): Not Applicable

Protective Casing (ft.) 0
at ground surface
Length (in.): 12
Diameter (in.): 8

depth of top of well riser below ground surface (ft.): 0.32
Installation Notes: Monitoring well was installed using a Geoprobe.

Well riser material: Sch. 40 PVC
Diameter (in.): 1.0

Well Material Types	Top Depth (ft.)	Bottom Depth (ft.)
Concrete	0.0	0.7
Portland grout	NA	NA
Bentonite Grout	0.7	4.0
Sand Pack	4.0	20.0

Top of well screen (ft.): 5.0
Sand Pack Type: Prepacked 00N
Well Screen Material: Sch. 40 PVC 0.010 Slot
Diameter (in.): 1.0
Bottom of well screen (ft.): 20.0

Bottom of silt trap (ft.):

Bottom of borehole (ft.): 20.0

4.68	+	15	+		=	19.68
Riser Length (ft.)	+	Screen Length (ft.)	+	Silt Trap Length (ft.)	=	Total Length (ft.)

Well No. MW - 9

APPENDIX D – EXCAVATION WORK PLAN (EWP)

D-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination (other than unplanned emergency utility repair or other emergency work), the site owner or their representative will notify the NYSDEC. Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

Table 1: Notifications*

NAME

Central Office NYSDEC Representative	(716) 402-9553
Regional Office NYSDEC Representative	(716) 851-7220
NYSDEC Site Control	(518) 402-9553

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of planned excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered 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 EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix H of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with required chemical testing results.

D-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when 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 and material that requires testing to determine if the material can be reused on-site. Further discussion of off-site disposal of materials and on-site reuse is provided in Section D-6 of this Appendix.

D-3 SOIL STAGING 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 and maintained at the site and available for inspection by the NYSDEC.

D-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 remedial party (if applicable) and its contractors are 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 SMP is posed by utilities or easements on the site.

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 other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

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.

D-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.

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.

Truck transport routes will be determined based on the location of impacted materials and planned destination. All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes. The truck transport route will take 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; (g) community input where necessary.

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.

D-6 MATERIALS DISPOSAL OFF-SITE

All material 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 material 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 Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

D-7 MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP 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 reuse 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.

D-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters 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, and will be managed off-site, unless prior approval is obtained from NYSDEC.

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.

D-9 BACKFILL FROM OFF-SITE SOURCES

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. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or 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 10. Soils that meet 'exempt' fill requirements under 6 NYCRR 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.

D-10 STORMWATER POLLUTION PREVENTION

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 the 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 SMP 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.

D-11 EXCAVATION 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.

D-12 COMMUNITY AIR MONITORING PLAN

The location of air sampling stations will be selected based on the location of the work area relative to generally prevailing wind conditions. 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. Because of the adjacent residential area to the south of the site, a fixed monitoring station will be located at that southern site perimeter, regardless of wind direction.

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

D-13 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site and on-site. Specific odor control methods to be used on a routine basis will include:

- Limiting the time of excavation exposure;
- Covering of excavated soils;
- Expedited removal of impacted soils;

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 remedial party'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. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

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.

D-14 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 though 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.
- Gravel will be used on roadways, as appropriate, to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

APPENDIX E
SITE MANAGEMENT FORMS

Northtown Plaza
BCP Site No.: C915292
Site Management Form

SITE DETAILS	
Site No.:	Site Name:
Site Address:	
PERSON PERFORMING INSPECTION	
Name:	Email:
Company:	Phone Number:
Others Present:	
INSPECTION DATE AND SITE CONDITIONS	
Insepction Date:	Inspection Time:
Weather Conditions:	
REASON FOR SITE INSPECTION	
Type of Inspection: ☐ Annual Inspection ☐ Routine Maintenance Inspection ☐ Non-Routine Inspection	
Inspection after a Severe Condition that could effect Site control ☐ Yes ☐ No	
Describe severe condition triggering inspection:	
VERIFICATION OF SITE DETAILS	
Current Site Owner:	
Current Site Operator:	
Describe Current Site Use (*check all that apply*)	
☐ Industrial ☐ Commercial ☐ Residential ☐ Other	
Briefly describe observed site uses:	
Note any additional pertinent information to Verification of Site Details (use additional pages if necessary.	
DESCRIPTION OF ENGINEERING CONTROLS	
Are the Engineering Controls still in place: ☐ Yes ☐ No	
If No, explain:	
Is the Site Management Plan still in place: ☐ Yes ☐ No	
If No, explain:	
AREAS IN NEED OF REPAIR OR MAINTENANCE	
Area discussed in this section must be shown on a figure and have photographic documentation.	

Northtown Plaza
BCP Site No.: C915292
Site Management Form

INTRUSIVE ACTIVITIES PERFORMED AT SITE DURING INSPECTION PERIOD	
Location:	Date:
Description of activities being performed:	
Are Site records being properly generated and maintained: ☐ Yes ☐ No	
Provide a summary of recordkeeping review and adeuacy:	

ADDITIONAL NOTES & COMMENTS

INSPECTION CERTIFICATION

I hereby certify that the information included in this report is complete and accurate to the best of my knowledge

Inspector Signature: _____ Date: _____

Northtown Plaza BCP Site No. C915292

Monthly Sub-Slab Blower Inspection Check List

Building No.: ____________ SSDS Unit No.: __________ Tenant Occupant: ___________________________________

Date	Initials	Time	All Blowers Operational?	Are there any cracks in the visible piping?	Is the discharge stack clear?	Press. Readings	Comments
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		

APPENDIX F – FIELD SAMPLING PLAN

Excavations/Pits/Trenches

If sampling of subsurface soil is warranted per the provisions of the Excavation Work Plan, then such sampling will be conducted following the provisions of this Field Sampling Plan. Confirmation samples are used to establish that the chosen remedies have been achieved regarding the soil cleanup levels. Confirmation samples are required when the limits of the soil cleanup objectives are being determined in the field, and below is the minimal confirmation soil sampling frequencies for soil excavations from NYSDEC DER-10:

- If the area perimeter is less than 20 feet, one sample is to be collected from the bottom of the excavation, and one sample is to be collected on the sidewall sample biased in the direction of surface runoff.
- If the excavation area is between 20 to 300 feet in diameter, then one sample from the top of each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.
- If the excavation is to be greater than 300 feet in diameter, then a sampling plan shall be submitted to DER for approval. The sampling plan should have supporting rationale for reduced sampling frequency of appropriate.
- If multiple excavations are to be located within a larger excavation, each excavation will be considered a separate excavation.
- Confirmation samples will be analyzed for EPA Method 8260 (VOCs) in AOIs 1, 2 and 3. Additional confirmation samples will be analyzed for EPA Method 8270 (SVOCs) in AOIs 1 and 2. Confirmation samples are to be collected from sidewalls and floor bottoms as described above. Confirmation samples for VOCs from any excavation should follow:
    - Within 24 hours of the excavation, they should be collected from the zero to six inch interval at the excavation floor; or
    - After 24 hours, the samples should be taken at six to twelve inches, and
    - No water shall be present in the exaction bottom where bottom samples are to be collected.
- In an excavation where multiple layers of contamination have been visually or analytically identified, additional side wall samples in the horizon in which contamination was necessary

Soil Imported/Exported To/From Site

If importing or exporting fill materials at the Site for AOIs 1, 2, and 3, sample and analyze the fill as outline below and in the following table:

VOC grab samples are to be collected and analyzed for EPA Method 8260, these samples will be collected from discrete locations within the fill material. Composites samples for SVOCs, PCB, and Pesticides will be collected and are to be analyzed for EPA Methods 8270, 8082, and 8151, respectfully. SVOCs, PCBs, Pesticide composite samples are to be prepared by collecting samples from three to five random locations, mixing the samples together, then preparing the sample for analysis. Volume of samples to be collected and analyzed are provided in the table below:

Recommended Number of Soil Samples for Soil Imported To or Exported From a Site			
Contaminant	**VOCs**	**SVOCs, Inorganics & PCBs/Pesticides**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
> 1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

APPENDIX G – QUALITY ASSURANCE PROJECT PLAN

QUALITY ASSURANCE PROJECT PLAN
NORTHTOWN INC.
AMHERST, NEW YORK
BROWNFIELD CLEANUP PROGRAM
SITE NO. C915292

TABLE OF CONTENTS

LIST OF TABLES

1.0 INTRODUCTION

1.1 PURPOSE AND OBJECTIVE

This Quality Assurance Project Plan (QAPP) has been developed for the Site Management Plan (SMP) associated with the Northtown Inc. Brownfield Cleanup Program (BCP) Site No. C915292 located at 3097 Sheridan Drive, Amherst, New York. This QAPP presents the project scope, objectives, organization, planned activities, sampling procedures, data quality objectives and quality assurance/quality control (QA/QC) procedures.

Protocols for sample collection, sample handling and storage, equipment decontamination, chain-of-custody procedures, etc. are described in Section 3. This QAPP was developed in general accordance with the requirements of Section 2.4 of the NYSDEC DER-10/Technical Guidance for Site Investigation and Remediation, effective May 3, 2010 (NYSDEC DER-10).

1.2 PROJECT BACKGROUND

For project backgrounds, please refer to the following sections in the Site Management Plan (SMP):

- 2.0 Summary of Previous Investigations and Remedial Actions
- 3.0 Institutional and Engineering Control Plan

1.3 PROJECT DESCRIPTION

This QAPP is the quality control basis for the scope of work, which is further described in the Excavation Work Plan of the Site Management Plan. The major task involved at the Site are:

- Implementation of the Site Management Plan

2.0 SITE INVESTIGATION PROCEDURES AND RATIONALE

Former fuel oil USTs and surrounding impacted soils have been removed from AOIs 1 and 2 and soils impacted with VOCs were removed from AOI3. Environmental sampling was performed in conjunction with the removal actions for the following purposes:

- confirmation sampling of excavation sidewalls and bottom; and
- characterization of soil and waters (if present) for disposal purposes.

Environmental sampling and other field activities have been performed in general accordance with the NYSDEC DER-10 guidance document.

General field activities are described in the following sections and described in further detail in the Interim Remedial Measures Work Plan.

2.1 AIR SURVEILLANCE AND MONITORING

Air surveillance screening for total volatile organics and particulates for health and safety concerns will be performed with a portable organic vapor meter (OVM) equipped with a photoionization detector (PID) that is using a 11.7 electron volt (eV) bulb and dust monitors placed both upwind and downwind of intrusive work sites. Monitoring will be performed during invasive activities such as soil excavation and UST removal. The OVM will also be used to field screen samples. Additional details are presented in the Site-specific Health and Safety Plan which includes the NYSDOH generic Community Air Monitoring Plan (CAMP).

2.2 SOIL SAMPLING

Soil sampling will occur during any site improvement activities where disturbance of remaining contaminated soils in AOIs 1, 2, and 3 may occur. This may include but not be limited too, remedial activities involving excavation and removal of impacted soil, confirmatory sampling and waste characterization. Samples will be collected and transferred to sample containers as soon as possible after being retrieved from the subsurface (i.e., excavator bucket).

The excavator will be decontaminated by the subcontractor prior to arrival on-Site. During remedial activities, decontamination will be accomplished using steam cleaning or high pressure hot water to wash equipment prior to moving to the next location. Stainless steel sampling devices will be cleaned manually with non-phosphate detergent (i.e., alconox) wash and potable water followed by a potable water rinse or a second steam cleaning followed by a distilled/deionized water rinse. Equipment will be similarly cleaned prior to leaving the Site.

Soil samples, with the exception of those for VOCs, will be homogenized using a "coning and quartering" procedure. The soil will be removed from the sampling equipment and transferred to a clean surface (metal foil, steel pan, bowl, etc.). Observed debris, such as bricks, large stones, organics, etc. will be removed from the sample. The soil will be mixed to provide a more homogeneous sample for lab analysis. The soil will be scraped from the sides, corners, and bottom of the clean surface, rolled to the middle, and thoroughly mixed until the material appears homogenous. An aliquot of this pile will then be transferred to the

required sample containers, slightly tamped-down, filled to near the top of the container, and sealed with the appropriate cap. Soil or sediment on the threads of the container will be removed prior to placing the cap on the sample container. Soil samples for VOC analysis will be collected and directly placed into one unpreserved 2 oz jar per sample location.

Soil screening will be performed in two ways: by holding the probe of the OVM directly over the sample once it is retrieved from the subsurface and again by headspace screening after a representative portion of the soil samples has been placed in plastic bags, allowed to warm to ambient temperature, and placing the tip of the OVM into the plastic bag. The OVM used will be equipped with a PID that is using a 11.7 eV bulb.

The OVM will be calibrated daily, in accordance to manufacturer's requirements using a standard gas. Prior to screening, the headspace soil samples will be allowed to equilibrate to ambient temperature. For headspace screening, a hole will be made in the sample bag and the tip of the OVM inserted into the bag, and the peak response will be recorded. A response of less than 1 part per million (ppm), using this method, is not considered significant and will be reported as not detected. A blank will be run between test samples to check that extraneous contamination was not carried over.

2.3 EQUIPMENT DECONTAMINATION

To avoid cross contamination, non-disposable sampling equipment (defined as any piece of re-usable equipment which may contact a sample) will be decontaminated according to the following procedures outlined below.

2.3.1 Non-Dedicated Reusable Equipment

Non-dedicated reusable equipment such as stainless steel mixing bowls; pumps used for groundwater evacuation (and sampling, if applicable) etc. will require field decontamination. Acids and solvents will not be used in the field decontamination of such equipment. Decontamination typically involves scrubbing/washing with a laboratory grade detergent (e.g. alconox) to remove visible contamination, followed by potable (tap) water and analyte-free water rinses. Tap water may be used from any treated municipal water system; the use of an untreated potable water supply is not an acceptable substitute. Equipment should be allowed to dry prior to use. Steam cleaning or high pressure hot water cleaning may be used in the initial removal of gross, visible contamination. Tubing will not be re-used (new tubing will be used for each well).

2.3.2 Disposable Sampling Equipment

Disposable sampling equipment will not be field-decontaminated; equipment may be rinsed with laboratory-provided analyte-free water prior to use. Disposable spoons or spatulas

purchased from non-environmental equipment vendors (such as restaurant supply houses) will be decontaminated by scrubbing/washing with a laboratory grade detergent followed by potable water and Analyte-free water rinse; or by using steam or high pressure hot water rinse, followed by analyte free water rinse. The equipment will be allowed to air dry prior to use.

2.3.3 Heavy Equipment

Certain heavy equipment such as, excavator buckets, etc. may be used to obtain samples. Such equipment will be subject to high pressure hot water or steam cleaning between uses. A member of the sampling team will visually inspect the equipment to check that visible contamination has been removed by this procedure prior to sampling. Such equipment will be cleaned between excavation locations. Decontamination between excavation samples at a single location will be performed using alconox and water to clean the samplers. Samples submitted for analysis will not include material, which has been in direct contact with the excavator bucket.

2.4 Storage and Disposal of Waste Generated During Site Improvement Activiites

The sampling methods and equipment have been selected to limit both the need for decontamination and the volume of waste material to be generated. Investigation-derived material (e.g., decon sediments and water) generated during this project shall be presumed to be non-hazardous waste and will be characterized for off-site disposal at a permitted and NYSDEC-approved waste disposal facility.

Personal protective equipment and disposable sampling equipment will be placed in plastic garbage bags for disposal as a non-hazardous solid waste.

Decontamination Fluids

Wash water and rinse water, including detergent, may be generated during Site work. Non-phosphate detergent and water rinse will be disposed off-Site along with water generated from excavations if present.

3.0 SAMPLE HANDLING

3.1 SAMPLE IDENTIFICATION/LABELING

Samples will be assigned a unique identification using the sample location or other sample-specific identifier. Sample identification will be limited to seven alphanumeric characters to

be consistent with the limitations of the laboratory tracking/reporting software. The general sample identification format follows.

SW - XX - Y-Y

Where:

SW	=	Type of sample (i.e., Side Wall, Excavation Bottom)
XX	=	Numeric character indicating the number from which the sample was obtained.
Y-Y	=	Depth of the sample.

Quality control (QC) field duplicate samples will be submitted blind to the laboratory; a fictitious sample identification will be created using the same system as the original. The sample identifications (of the original sample and its field duplicate) will be marked in the project specific field book and on the copy of the chain-of-custody kept by the sampler and copied to the project manager. Sample containers will be labeled in the field prior to the collection of samples. Affixed to each sampling container will be a non-removable label on which the following information will be recorded with permanent water-proof ink:

- Site name and location;
- Sample identification code;
- Date and time;
- Sampler's initials;
- Preservative; and
- Requested analyses.

3.2 SAMPLES, BOTTLES, PRESERVATION, AND HOLDING TIME

Table 1 specifies the analytical method, matrix, holding time, containers, and preservatives for the various analyses to be completed. Sample bottle requirements and holding times are discussed further below.

3.2.1 Sample Bottles

The selection of sample containers used to collect samples is based on the criteria of sample matrix, analytical method, potential contaminants of concern, reactivity of container material with the sample, QA/QC requirements and regulatory protocol requirements. Sample bottles will be provided by the analytical laboratory and will conform to the requirements of USEPA's Specifications and Guidance for Contaminant-Free sample Containers.

3.2.2 Holding Times

Holding times are judged from the verified time of sample receipt (VTSR) by the laboratory; samples will be shipped from the field to arrive at the lab no later than 48 hours from the time of sample collection. Holding time requirements will be those specified in the NYSDEC ASP; it should be noted that for some analyses, these holding times are more stringent than the holding time for the corresponding USEPA method.

Although trip blanks are prepared in the analytical laboratory and shipped to the Site prior to the collection of environmental samples, for the purposes of determining holding time conformance, trip blanks will be considered to have been generated on the same day as the environmental samples with which they are shipped and delivered. Procurement of bottles and blanks will be scheduled to prevent trip blanks from being stored for excessive periods prior to their return to the laboratory; the goal is that trip blanks should be held for no longer than one week prior to use.

3.3 CHAIN OF CUSTODY AND SHIPPING

A chain-of-custody form will trace the path of sample containers from the project site to the laboratory. A sample Chain of Custody is included in Attachment 1, Field Forms. Sample/bottle tracking sheets or the chain-of-custody will be used to track the containers from the laboratory to the containers' destination. The project manager will notify the laboratory of upcoming field sampling events and the subsequent transfer of samples. This notification will include information concerning the number and type of samples, and the anticipated date of arrival. Insulated sample shipping containers (typically coolers) will be provided by the laboratory for shipping samples. All sample bottles within each shipping container will be individually labeled with an adhesive identification label provided by the laboratory. Project personnel receiving the sample containers from the laboratory will check each cooler for the condition and integrity of the bottles prior to field work.

Once the sample containers are filled, they will be immediately placed in the cooler with ice (in plastic bags to prevent leaking) or synthetic ice packs to maintain the samples at 4 ^{o}C. The field sampler will indicate the sample designation/location number in the space provided on the chain-of-custody form for each sample. The chain of custody forms will be signed and placed in a sealed plastic bag in the cooler. The completed shipping container will be closed for transport with nylon strapping, or a similar shipping tape, and two paper seals will be affixed to the lid. The seals must be broken to open the cooler and will indicate tampering if the seals are broken before receipt at the laboratory. The cooler will be shipped either by laboratory-provided courier or by an overnight delivery service to the laboratory. When the laboratory receives the coolers, the custody seals will be checked and lab personnel will sign the chain-of-custody form.

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOLS

This section describes the analytical methods, principles and procedures that will be used to generate quality data. These protocols include laboratory calibration, field equipment calibration, QC sample collection and analysis, quantitative evaluation of data quality protocols and data qualification, if necessary.

4.1 ANALYTICAL METHODS, PROCEDURES & CALIBRATION

4.1.1 Methods

Analytical methods to be used during this project are presented in the NYSDEC Analytical Services Protocol (ASP), June 2005. Specific methods and references for each parameter are shown in Table 1. The sample preservation and holding time requirements are also identified in Table 1. Quantification and detections limits for all analysis are those specified under the appropriate test methods.

It is the laboratory's responsibility to be familiar with this document, procedures and deliverables pertaining to the Site work. Alpha Analytical is tentatively scheduled to perform the analytical testing. Alpha is certified by the NYSDOH Environmental Laboratory Approval Program and Contract Laboratory Protocol certified.

4.1.2 Laboratory Instrumentation & Equipment

Laboratory instruments and equipment will be calibrated following SW-846 analytical methods protocol. Initial calibrations will be performed before samples analysis. Calibration checks will be performed at the frequencies specified in each analytical method.

4.1.3 Field Equipment

Field equipment will be used during various activities of the project and during the collection of environmental samples. The field equipment to be used may include the following.

Field equipment used includes:

- OVM with a photoionization detector.
- Electronic water level indicator.
- Multi-gas meter (CO, LEL, O_2, and H_2S).
- Particulate monitor

Field equipment will be cleaned and calibrated prior to use. The Operating and

Maintenance (O&M) manuals for the field equipment will be kept in the field when in use and a copy will be retained in project files.

Calibration and standardization for the field equipment during project use will be in accordance with the manufacturer's recommendations, and will be recorded in the field log book. If instrument performance or data fall outside acceptable limits, then corrective actions will be taken. These actions may include recalibration of instruments, acquiring new standards, replacing equipment or repairing equipment. Subcontractors providing analytical services should perform their own internal laboratory audits and calibration procedures with data review conducted at a frequency so that errors and problems are detected early, thus avoiding the prospect of redoing large segments of work.

4.2 QUALITY CONTROL SAMPLES

4.2.1 Analytical Equipment

The analytical methods to be utilized (see Table 1) for laboratory sample analysis address the quality control to be used and the frequency of replicates, blanks and calibration standards for laboratory analytical equipment.

Table 1
Summary of Sample Methods, Container, Preservation and Holding Time Requirements
Quality Assurance Project Plan
Northtown Inc.
Amherst, New York
Brownfield Cleanup Program
Site No. C915292

Analysis	Method	Holding Time (days)		Containers		Preservative
		To Extraction	To Analyze	Number	Type	
Soil Samples						
Volatile Organic Compounds	SW-846 8260B		14	2	L	Cool
Semivolatile Organic Compounds	SW-846 8270C	14	40	1 *	J	Cool
Aqueous Samples						
Volatile Organic Compounds	SW-846 8260B		14	3	G	Cool
Semivolatile Organic Compounds	SW-846 8270C	7	40	2	H	Cool
Notes:						
Container Types						
G - 40 ml glass, Teflon septum cap liner, HCL						
H - 1000 ml glass, Teflon cap liner						
J - 8 oz. wide mouth glass, Teflon cap liner						
L - 2 oz. glass widemouth with Teflon cap liner						
Preservatives						
Cool - Cool to 4 degrees Celsius						
* - Semi-volatiles analyses can take place from a single 8 ounce glass widemouth jar with a teflon lined cap.						

4.2.2 Field Samples

Field quality control samples will consist of trip blanks, sample duplicate, matrix spike and matrix spike duplicate. Trip blanks, for VOCs only, will consist of analyte free reagent grade water in VOC sampling containers to be used for the project. Trip blanks will be prepared at the laboratory, sealed, transported to the Site and returned without being

opened to assess contamination that may have occurred during transport. Trip blanks will be submitted at a rate of one per sampling event when VOCs are shipped to the laboratory.

Field duplicate samples are used to assess the variability of a matrix at a specific sampling point and to assess the reproducibility of the sampling method. For soil samples, these samples are separate aliquots of the same sample; prior to dividing the sample into "sample" and "duplicate" aliquots, the samples are homogenized (except for the VOC aliquots, which are not homogenized). Aqueous field duplicate samples are second samples collected from the same location, at the same time, in the same manner as the first, and placed into a separate container. Each duplicate sample will be analyzed for the same parameters as the original sample collected that day. The blind field duplicate Relative Percent Difference (RPD) objective will be ±50% percent RPD for all matrices. Field duplicates will be collected at a frequency of 1 per 20 environmental samples for both matrices (aqueous and non-aqueous) and test parameters.

Matrix spike/matrix spike duplicate (MS/MSD) samples are used to assess the laboratory method's accuracy and precision. These samples are spiked with known quantities of target analytes at the laboratory. The samples are collected at a frequency of five percent(1 in 20).

5.0 DATA DOCUMENTATION

5.1 FIELD NOTEBOOK

Field notebooks will be initiated at the start of on-Site work, in addition to field forms that will be filled out summarizing field work and become part of the project file. The field notebook will include the following daily information for Site activities:

- Date;
- Meteorological conditions (temperature, wind, precipitation);
- Site conditions (e.g., dry, damp, dusty, etc.);
- Identification of crew members (GZA and subcontractor present) and other personnel (e.g., agency or site owner) present;
- Description of field activities;
- Location(s) where work is performed;
- Problems encountered and corrective actions taken;
- Records of field measurements or descriptions recorded; and,
- Notice of modifications to the scope of work.

5.2 FIELD REPORTING FORMS

Field reporting forms (or their equivalent) to be utilized during the remediation may include the following:

- Excavation Log;
- Sample Collection Log;
- Chain of Custody Form; and
- Calibration Log.

These forms, when completed, will become part of the project file.

6.0 CORRECTIVE ACTIONS

If instrument performance or data fall outside acceptable limits, then corrective actions will be taken. These actions may include recalibration or standardization of instruments, acquiring new standards, replacing equipment, repairing equipment, and reanalyzing samples or redoing sections of work. Subcontractors providing analytical services should perform their own internal laboratory audits and calibration procedures with data review conducted at a frequency so that errors and problems are detected early, thus avoiding the prospect of redoing large segments of work.

Situations related to this project requiring corrective action will be documented and made part of the project file. For each measurement system identified requiring corrective action, the responsible individual for initiating the corrective action and also the individual responsible for approving the corrective action, if necessary, will be identified. As part of its total quality management program, GZA makes the results of laboratory audits and data validation reports available to the analytical laboratories. The laboratories are therefore made aware of non-critical items and areas where improvement may be made in subsequent NYSDEC ASP work.

7.0 DATA REDUCTION, VALIDATION, AND REPORTING

The guidance followed to perform quality data validation, and the methods and procedures outlined herein pertain to initiating and performing data validation, as well as reviewing data validation performed by others (if applicable). An outline of the data validation process is presented here, followed by a description of data validation review summaries.

7.1 LABORATORY DATA REPORTING AND REDUCTION

The laboratory will meet the applicable documentation, data reduction, and reporting protocols as specified in the 2005 revision of the NYSDEC ASP CLP. Laboratory data reports for non-CLP data will conform to NYSDEC Category B deliverable requirements. With full CLP documentation, deliverables will include, but not be limited to:

Organics	**Inorganics**
Chains of Custody	Chains of Custody
Blanks	Blanks
Holding Times	Holding Times
Internal Standards	Furnace AA QC
Laboratory Duplicates	CRDL Standards
Tentatively Identified Compounds	ICP Serial Dilutions
GC/MS Instrument Performance Check	Laboratory Control Samples
System Monitoring Compound Recovery	Laboratory Duplicates
Matrix Spike & Matrix Spike Duplicates	ICP Interference Check
GC/MS Tuning	Spiked Sample Recovery
Surrogate Recoveries	

Copies of the laboratory's generic Quality Assurance Plan (QAP) will be on file at GZA. The laboratory's QAP will indicate the standard methods and practices for obtaining and assessing data, and how data are reduced from the analytical instruments to a finished report, indicating levels of review along the way.

In addition to the hard copy of the data report, the laboratory will be asked to provide the sample data in spreadsheet form to minimize possible transcription errors resulting from the manual transcription of data.

7.2 DATA VALIDATION AND DATA USABILITY SUMMARY REPORT

CLP data will be validated by a data validation subcontractor. Data validation will be performed in accordance with guidelines established in Appendix 2B of the NYSDEC DER-

10. Where necessary and appropriate, supplemental validation criteria may be derived from the EPA Functional Guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, EPA-540/R-94/012, February 1993; and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA-540/R-94/013, February, 1994).

Data Usability Summary Reports (DUSRs) will consist of text results of the review and marked up copies of Form I (results with qualifiers applied by the validator). Validation will consist of target and non-target compounds with corresponding method blank data, spike and surrogate recoveries, sample data, and a final note of validation decision or qualification, along with any pertinent footnote references. Qualifiers applied to the data will be documented in the report text.

There may be some analyses for which there is no established USEPA or NYSDEC data validation protocol. In such cases, validation will be based on the EPA Region II SOPs and EPA Functional Guidelines as much as possible, as well as the laboratory's adherence to the technical requirements of the method, and the professional judgment of the validator. The degree of rigor in such validation will correspond to the nature of the data and the significance of the data and its intended use. Unless otherwise requested, non-CLP data (e.g., total organic carbon) is not subject to validation.

7.3 FIELD DATA

Field chemistry data collected during air monitoring, and soil screening (e.g., OVM readings), will be presented on field logs and provided in the appendices of the report.

8.0 PERFORMANCE AND SYSTEM AUDITS

An audit of the laboratory(s) during the BCP work will not be performed unless warranted by a problem(s) that cannot be resolved by any other means, or at the discretion of GZA or NYSDEC.

9.0 QUALITY ASSURANCE REPORTS TO MANAGEMENT

Monthly project status reporting to the NYSDEC will include aspects of quality control that were pertinent during the month's activities. Problems revealed during review of the month's

activities will be documented and addressed. These reports will include a description of completed and on-going activities, and an indication how each task is progressing relative to the project schedule.

The project manager, through task managers, will be responsible for verifying that records and files related to this project are stored appropriately and are retrievable.

The laboratory will submit memoranda or correspondence related to quality control of this project's samples as part of its deliverables package.

APPENDIX H – HEALTH AND SAFETY PLAN

1. CLIENT/SITE/PROJECT INFORMATION		
Client: Northtown Property Owner LLC		
Site Address: 3097 Sheridan Drive, Amherst, NY 14226		
Site Description, Work Environment: Active suburban shopping plaza, work environment is primarily outdoors in parking areas and indoors in active and vacant retail space.		
Job/Project #: 31.0056687.50	Estimated Start Date: TBD	Estimated Finish Date: TBD
Site is Covered by the Following Regulations:	OSHA HAZWOPER Standard ☒	Mine Safety and Health Administration ☐
	OSHA Construction Regulations ☒	None of these ☐

2. EMERGENCY INFORMATION		
Hospital Name: Millard Fillmore Suburban Hospital		Hospital #: (716) 568-3600
Hospital Address: 1540 Maple Road, Williamsville, NY 14221		Directions and Street Map Attached: ☒ Yes
Local Fire #: 911 or	Local Ambulance #: 911 or	Local Police #: 911 or
WorkCare Incident Intervention Services:	**For non-emergencies, if an employee becomes hurt or sick call 888-449-7787**	
Other Emergency Contact(s):	Phone #'s:	
Site-Specific Emergency Preparedness/Response Procedures/Concerns:		

- All EHS Events (incidents, first aid, near misses, unsafe acts/conditions, fires, chemical spills, property damage, extraordinary safe behaviors) must be reported immediately to the Project Manager, and within 24hours to the EHS Event Reporting Portal at www.kelleronline.com/portal. Username gempl1; Password 4Incidents!.
- In the event of a chemical release greater than 5 gallons, site personnel will evacuate the affected area and relocate to an upwind location. The Field Safety Officer and client site representative shall be contacted immediately.
- Site work shall not be conducted during severe weather, including high winds and lightning. In the event of severe weather, stop work, lower any equipment (drill rigs), and evacuate the affected area.

3. SUB-SURFACE WORK, UNDERGROUND UTILITY LOCATION	
Will subsurface explorations be conducted as part of this work? ☒ Yes ☐ No	
Site property ownership where underground explorations will be conducted on:	Public Access Property ☒ Yes ☐ No Private Property ☒ Yes ☐ No
Have Necessary Underground Utility Notifications for Subsurface Work Been Made?	☐ Yes ☒ Yet to be conducted
Specify Clearance Date & Time, Dig Safe Clearance I.D. #, And Other Relevant Information: Any sub-contractors performing sub-surface earthwork activities will the call in the NYS UFPO, prior to commencing any intrusive work.	

IMPORTANT! For subsurface work, prior to the initiation of ground penetrating activities, personnel to assess whether the underground utility clearance (UUC) process has been completed in an manner that appears acceptable, based on participation/ confirmation by other responsible parties (utility companies, subcontractor, client, owner, etc.), for the following:				
Electric:	☐ Yes	☐ No	☐ NA	☐ Other_____
Fuel (gas, petroleum, steam):	☐ Yes	☐ No	☐ NA	☐ Other_____
Communication:	☐ Yes	☐ No	☐ NA	☐ Other_____
Water:	☐ Yes	☐ No	☐ NA	☐ Other_____
Sewer:	☐ Yes	☐ No	☐ NA	☐ Other_____
Other:_____	☐ Yes	☐ No	☐ NA	☐ Other_____
Comments:				

4. SCOPE OF WORK	
Any OSHA PERMIT-REQUIRED CONFINED SPACE entry? ☐ **YES** ☒ **NO** If yes, use Site Specific H&S Plan/Confined Space Entry Permit for that portion of the work	**Any INDOOR fieldwork?** ☐ **YES** ☐ **NO** If yes, explain: Will be conducting sub-slab vapor system monitoring.
General project description, and phase(s) or work to which this H&S Plan applies.	will perform environmental monitoring and sampling of any excavation work to be completed in remaining contaminated areas of AOI 1, 2, and 3.
Specific Tasks Performed by :	will screen all soil excavated, staged, live loaded, or brought onto Site for work being completed in contaminated areas of AOIs 1, 2, and 3. willcollect soil samples, from any excavation work completed in contaminated areas of AOIs 1, 2, and 3.
Concurrent Tasks to be Performed by Subcontractors (List Subcontractors by Name):	
Concurrent Tasks to be Performed by Others:	

5. SITE-SPECIFIC OVERVIEW OF H&S HAZARDS/MITIGATIONS (NOTE: Based on Hazard Assessment, Section 10)	
Describe the major hazards expected to be present at the jobsite, and describe the safety measures to be implemented for worker protection. Use brief abstract statements or more detailed narrative as may be appropriate.	
ON-SITE HAZARDS:	**HAZARD MITIGATIONS:**
Site Traffic	Use of Hi-Vis Safety vests and traffic cones. Avoiding work in main drive lanes of plaza
Underground Utilities	Review of site drawings, ground disturbance approval from facility management, UFPO clearance.
Soil Vapor	Screen the breathing zone for presence of organic vapors
Pore Water	Wear appropriate PPE when site porewater is encountered in any excavation work
Soil	Wear appropriate PPE when Site soils are encountered during excavation work.

6. HEALTH AND SAFETY EQUIPMENT AND CONTROLS

AIR MONITORING INSTRUMENTS

- ☒ PID Type: Lamp Energy: 11.7 eV
- ☐ FID Type:
- ☐ Carbon Monoxide Meter
- ☐ Hydrogen Sulfide Meter
- ☐ O_2/LEL Meter
- ☐ Particulate (Dust) Meter
- ☐ Calibration Gas Type
- ☐ Others:

Note: Ensure instruments have been properly calibrated

OTHER H&S EQUIPMENT & GEAR

- ☒ Fire Extinguisher
- ☒ Caution Tape
- ☒ Traffic Cones or Stanchions
- ☒ Warning Signs or Placards
- ☒ Decon Buckets, Brushes, etc.
- ☐ Portable Ground Fault Interrupter (GFI)
- ☐ Lockout/Tagout Equipment
- ☐ Ventilation Equipment
- ☐ Others:

PERSONAL PROTECTIVE EQUIPMENT

- ☐ Respirator Type:
- ☐ Resp-Cartridge Type:
- ☒ Hardhat
- ☒ Outer Gloves Type: Nitrile (Disposable)
- ☐ Inner Gloves Type:
- ☒ Steel-toed boots/shoes
- ☐ Coveralls Type:
- ☐ Outer Boots Type:
- ☒ Eye Protection with side shields
- ☐ Face Shield
- ☒ Traffic Vest
- ☐ Personal Flotation Device (PFD)
- ☐ Fire Retardant Clothing
- ☐ EH (Electrical Hazard) Rated Boots, Gloves, etc.
- ☒ Noise/Hearing Protection
- ☐ Others:

Discuss/Clarify, as Appropriate:

7. AIR MONITORING ACTION LEVELS

Is air monitoring to be performed for this project? Yes ☒ **No** ☐

Make sure air monitoring instruments are in working order and have been calibrated prior to use. Depending on project-specific requirements, periodic field calibration checks may be necessary during the day of instrument use.

ACTION LEVELS FOR OXYGEN DEFICIENCY AND EXPLOSIVE ATMOSPHERIC HAZARDS (Action levels apply to occupied work space in general work area)

☐ **Applicable, See Below.** ☒ **Not Applicable**

Parameter	Response Actions for Elevated Airborne Hazards
Oxygen	**At 19.5% or below** – Exit area, provide adequate ventilation, or proceed to Level B, or discontinue activities Verify presence of adequate oxygen (approx. 12% or more) before taking readings with LEL meter. Note: If oxygen levels are below 12%, LEL meter readings are not valid.
LEL	**Less than 10% LEL** – Continue working, continue to monitor LEL levels **Greater than or Equal to 10% LEL** – Discontinue work operations and immediately withdraw from area. Resume work activities ONLY after LEL readings have been reduced to less than 10% through passive dissipation, or through active vapor control measures.

ACTION LEVELS FOR INHALATION OF TOXIC/HAZARDOUS SUBSTANCES (Action levels are for sustained breathing zone concentrations)

☒ **Applicable, See Below.** ☐ **Not Applicable**

Air Quality Parameters (Check all that apply)	Remain in Level D or Modified D	Response Actions for Elevated Airborne Hazards
☒ VOCs	0 to 5 ppm	From 5 ppm to 10 ppm: Proceed to Level C, or Ventilate, or Discontinue Activities If greater than 10 ppm: Proceed to Level B, or, Ventilate, or Discontinue Activities
☐ Carbon Monoxide	0 to 35 ppm	At greater than 35 ppm, exit area, provide adequate ventilation, proceed to Level B, or discontinue activities.
☐ Hydrogen Sulfide	0 to 10 ppm	At greater than 10 ppm, exit area, provide adequate ventilation, proceed to Level B, or discontinue activities
☐ Dust	0 to mg/m^3	
☐		
SPECIAL INSTRUCTIONS/COMMENTS REGARDING AIR MONITORING (IF APPLICABLE)		
—		

8. H&S TRAINING/QUALIFICATIONS FOR FIELD PERSONNEL

☒ Project-Specific H&S Orientation (Required for All Projects/Staff)	☐ Bloodborne Pathogen Training
☒ OSHA 40-Hour HAZWOPER/8 Hour Refreshers	☐ Fall Protection Training
☒ Hazard Communication (for project-specific chemical products)	☒ Trenching & Excavation
☒ First Aid/CPR (at least one individual on site)	☐ Current Medical Clearance Letter
☒ General Construction Safety Training	☐
☐ Lockout/Tagout Training	☐
☐ Electrical Safety Training	☐

Discuss/Clarify, as needed:

9. PROJECT PERSONNEL - ROLES AND RESPONSIBILITIES

ON-SITE PERSONNEL:

Name(s)	Project Title/Assigned Role	Telephone Numbers
	Site Supervisor	Work: Cell:
	Field Safety Officer	Work: Cell:
	First Aid Personnel	Work: Cell:
	Project Team Members	Cell: Cell:

Site Supervisors and Project Managers (SS/PM): Responsibility for compliance with Health and Safety programs, policies, procedures and applicable laws and regulations is shared by all management and supervisory personnel. This includes the need for effective oversight and supervision of project staff necessary to control the Health and Safety aspects of on-site activities.

Site Safety Officer (SSO): The SSO is responsible for implementation of the Site Specific Health and Safety Plan.

First Aid Personnel: At least one individual designated by who has current training and certification in basic first aid and cardiopulmonary resuscitation (CPR) must be present during on-site activities involving multiple personnel.

Project Team: Follow instructions relayed by the HASP and manager on-site.		
OTHER PROJECT PERSONNEL:		
Name	**Project Title/Assigned Role**	**Telephone Numbers**
	Associate/Principal-in-Charge	Work: Cell:
	Project Manager	Work: Cell:
	Health and Safety Coordinator (HSC)	Work: Cell:
	EHS Director	Work: Cell:

Principal-in-Charge: Responsible of overall project oversight, including responsibility for Health and Safety.

Project Manager: Responsible for day-to-day project management, including Health and Safety.

Health and Safety Coordinator: General Health and Safety guidance and assistance.

EHS Director: H &S technical and regulatory guidance, assistance regarding H&S policies and procedures.

10. HAZARD ASSESSMENT (CHECK ALL THAT APPLY)

A. GENERAL FIELDWORK HAZARDS

- ☐ Confined Space Entry (STOP – Use Confined Space Entry HASP)
- ☐ Abandoned or vacant building/Enclosed Spaces
- ☒ Significant Slip/Trip/Fall Hazards
- ☐ Unsanitary/Infectious Hazards
- ☐ Poisonous Plants
- ☐ Biting/Stinging Insects
- ☐ Feral Animal Hazards
- ☐ Water/Wetlands Hazards
- ☐ Remote Locations/Navigation/Orientation hazards
- ☒ Heavy Traffic or Work Alongside a Roadway
- ☒ Weather-Related Hazards
- ☒ Motor vehicle operation Hazards
- ☒ Heavy Equipment Hazards
- ☐ Structural Hazards (i.e. unsafe floors/stairways/roof)
- ☒ Demolition/Renovation
- ☒ Presence of Pedestrians or the General Public
- ☐ Overhead Hazards (i.e. falling objects, overhead power lines)
- ☒ Portable Hand Tools or Power Tools
- ☒ Significant Lifting or Ergonomic Hazards
- ☐ Electrical Hazards (i.e. Equipment 120 Volts or Greater, Work Inside Electrical Panels, or Maintenance of Electrical Equipment)
- ☐ Other Stored energy Hazards (i.e. Equipment with High Pressure or Stored Chemicals)
- ☐ Fire and/or Explosion Hazard
- ☒ Elevated Noise Levels
- ☒ Excavations/Test Pits
- ☐ Explosives or Unexploded Ordinance/MEC
- ☐ Long Distance or Overnight Travel
- ☐ Personal Security or High Crime Area Hazards
- ☐ Working Alone
- ☐ Ionizing Radiation or Non-Ionizing Radiation
- ☒ Chemical/Exposure Hazards (See Part B for Details)
- ☐ Other:

B. CHEMICAL/EXPOSURE HAZARDS

☐ No chemical hazards anticipated	☐ Methane
☐ Hydrogen Sulfide (H2S)	☐ Chemicals Subject to OSHA Hazard Communication (Note: For commercial chemical products, attach MSDSs if applicable)
☐ Cyanides, Hydrogen Cyanide (HCN)	☐ Containerized Waste, Chemicals in Piping & Process Equipment
☐ Carbon Monoxide	☒ Emissions from Gasoline-, Diesel-, Propane-fired Engine, Heater, Similar Equipment
☐ Herbicides, Pesticide, Fungicide, Animal Poisons	☐ General Work Site Airborne Dust Hazards
☐ Metals, Metal Compounds	☒ Volatile Organic Compounds (VOCs), BTEX
☐ Corrosives, Acids, Caustics, Strong Irritants	☒ Chlorinated Organic Compounds
☐ Polychlorinated Biphenyls (PCBs)	☒ Fuel Oil, Gasoline, Petroleum Products, Waste Oil
☐ Polycyclic Aromatic Hydrocarbons (PAHs)	☐ Asbestos
☐ Compressed Gases	☐ Oxygen Deficiency, Asphyxiation Hazards
☐ Flammable/Combustible Liquids	☐ Other:
☐ Radiation Hazards (i.e. radioactive sealed/open source, x-rays, ultra violet, infrared, radio-frequency, etc.)	

11. PLAN ACKNOWLEDGEMENT AND APPROVALS

Employee Plan Acknowledgement

I have read, understood, and agree to abide by the information set forth in this Safety and Accident Prevention Plan. I will follow guidance in this plan and in the Health and Safety Program Manual. I understand the training and medical monitoring requirements covered by the work outlined in this plan and have met those requirements.

Employee Name	Employee Signature	Date

Subcontractor Employee Plan Acknowledgement

This plan has been prepared solely for the purpose of protecting the health and safety for future workers. Subcontractors, visitors, and others at the site must refer to their organization's health and safety program or site-specific HASP for their protection. Subcontractor employees may use this plan for general informational purposes only. Subcontractor firms are obligated to comply with safety regulations applicable to their work, and understand this plan covers Northtown Property, LLC. Activities only.

Subcontractor Employee Name	Subcontractor Employee Signatures	Date

Site-Specific Health and Safety Plan Approval Signatures

The following individuals indicate their acknowledgement and/or approval of the contents of this Site Specific H&S Plan based on their understanding of project work activities, associated hazards and the appropriateness of health and safety measures to be implemented.

Signatory	Employee Name	Employee Signature	Date
Preparer:	Todd Bown		
EHS Reviewer:	Jim Richert		
PIC Approval:	Bart Klettke		

Map & Directions | Map Only | Directions Only | Print

YAHOO! MAPS

A 3097 Sheridan Dr, Buffalo, NY 14226-1910

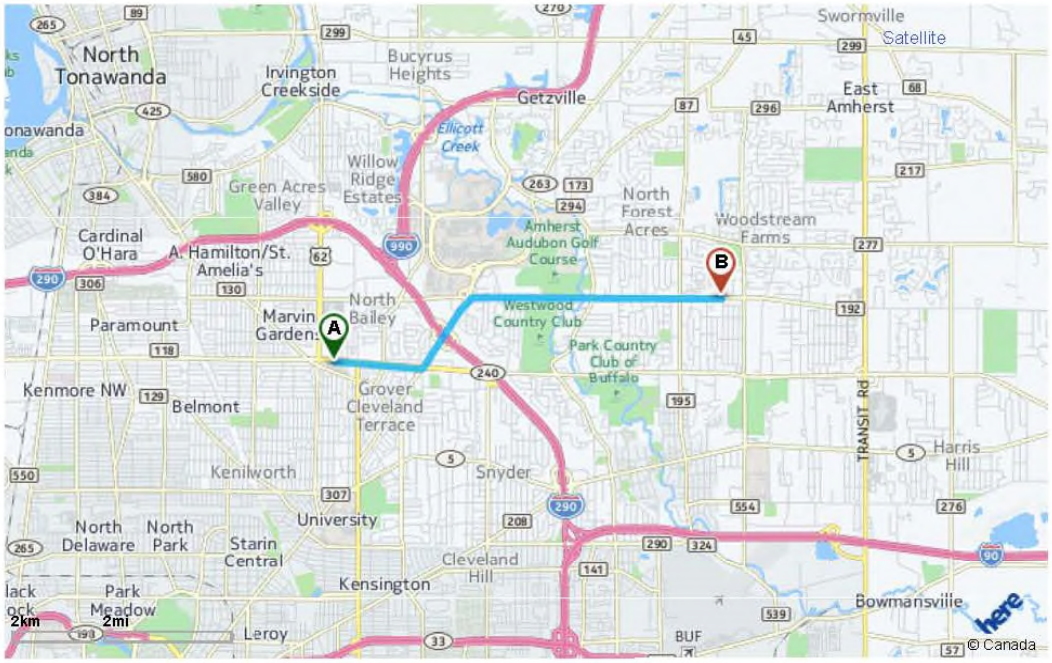
B 1540 Maple Rd, Buffalo, NY 14221-3647

Enter notes here

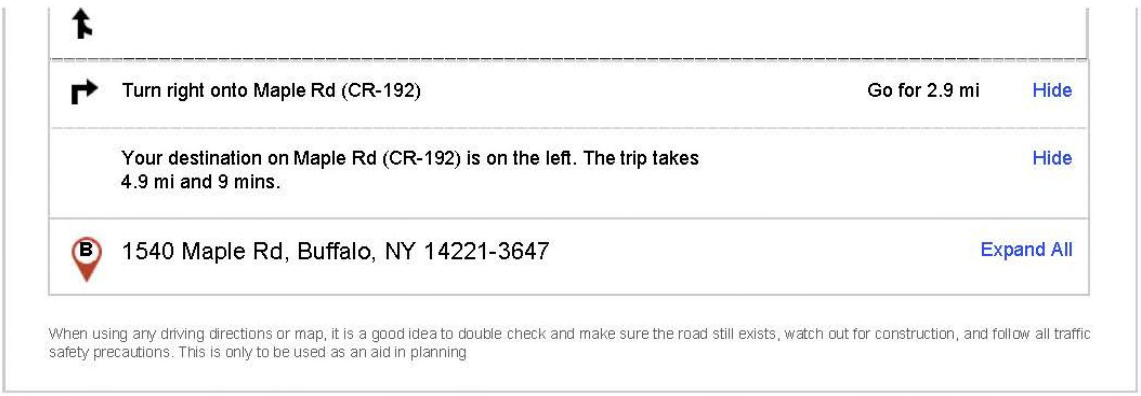
255

Total Distance: 4.92 mi— Total Time: 9 mins

Map Layout



A	3097 Sheridan Dr, Buffalo, NY 14226-1910		Expand All
	Head toward Alberta Dr on Sheridan Dr (US-62 S)	Go for 0.3 mi	Hide
↑	Continue on Sheridan Dr (RT-324 E)	Go for 0.8 mi	Hide
↰	Turn left onto Millersport Hwy (RT-263)	Go for 0.8 mi	Hide
	Take ramp toward Maple Rd	Go for 0.2 mi	Hide


Turn right onto Maple Rd (CR-192)
Go for 2.9 mi
Hide
Your destination on Maple Rd (CR-192) is on the left. The trip takes 4.9 mi and 9 mins.
Hide
B
1540 Maple Rd, Buffalo, NY 14221-3647
Expand All
When using any driving directions or map, it is a good idea to double check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning

COMMUNITY AIR MONITORING PLAN

This Community Air Monitoring Plan (CAMP) is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC and it follows procedures and practices outlined under DER-10 Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring).

Real-time community air monitoring will be performed by GZA during remedial action activities, including soil excavations.

Particulate and vapor monitoring will be performed at a distance of approximately 100 feet downwind of the work area and at the downwind property boundary during remedial action intrusive activities. An upwind particulate monitor will also be utilized to establish background particulate conditions.

Organic vapors will be monitored with a portable organic vapor meter (OVM) equipped with a photoionization detector (PID) using a 10.6 electron volt (eV) bulb. The particulates will be monitored using equipment that tis capable of measuring particle sizes greater than 10-micrometers (PM-10) and can integrate measurements over a 15-minute time frame. The equipment will also have a visible alarm light indicating an exceedance of the action level. Continuous recording of the air monitoring readings will be collected throughout each work day downloaded daily for reporting and inclusion in the Final Engineering Report.

No visible dust will be allowed beyond Site boundaries. Dust suppression, if necessary, will be completed as outlined in Section D-14 of the Excavation work plan. If necessary, odor control will be completed as outlined in Section D-13 of the Excavation Work Plan.

APPENDIX I

O&M MANUAL FOR SUBSLAB DEPRESSURIZATION SYSTEMS

February 23, 2016

Mr. David York
W.S. Development
33 Boylston Street
Suite 3000
Chestnut Hill, MA 02467
Via email: "York, Dave" <Dave.York@wsdevelopment.com>
Via email: James Richert <J.Richert@palmertongroup.com>

Re: Northtown Plaza, 3045 Sheridan Dr., Amherst NY
Construction of sub-slab depressurization systems

CONSTRUCTION COMPLETION REPORT

1. OVERVIEW

This document presents a construction report, performance evaluation, O&M advice and certification of effectiveness for the sub-slab depressurization (SSD) systems installed by *Mitigation Tech* at Northtown Plaza, 3045 Sheridan Dr., Amherst NY, as commissioned February 19, 2016. Work was completed under the oversight of GZA GeoEnvironmental, Inc.

The subject area is 1) the stand alone building currently occupied by Total Automotive, and 2) the southernmost portion of the large central building currently occupied by Giro Cleaners. Based on an analysis of sub-slab air communication data and a general building assessment, an independent SSD System was installed in each area using principles and equipment typically used for radon mitigation in buildings. The primary objective of implementing this preemptive measure was to mitigate potential intrusion of vapors related to former dry cleaning or manufacturing operations that could migrate into occupied space from beneath the slab. This would be achieved by maintaining a negative pressure of at least .004 water column inches (wci) below the slab relative to the air pressure above the slab. All work is in compliance with the NYS DOH document, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006".

2. BUILDING ASSESSMENT AND WORK CONDITIONS

Prior to construction, *Mitigation Tech* conducted a site visit for the purpose of building assessment, collection of sub-slab air communication data and system design. Significant findings:

- Asbestos Containing material present at Giro Cleaners in areas required for suction cavities and test points. Abatement was performed by an outside contractor.

- Most efficient design was to construct independent multi-point SSD systems with exterior sidewall located vacuum fans

- Sub-slab air flow testing indicated generally moderate sub-slab porosity, but with specific areas of low permeability corresponding to presence of sub-slab water specifically at the south end of Total Automotive. Owner of Total Automotive reports likely sub-slab water leak in vicinity of water service entrance – SW corner. Total Automotive was formerly a car wash and has irregularly filled in sub-slab sections.

- Giro Cleaners is generally open space with low customer traffic and easy accessibility; dust control measures required. Total Automotive is cluttered, very active with customers and difficult to access during working hours; owner has very limited after hours availability and wants to present for any activity.

- Certain slab defects would require sealing.

Work began with an analysis of appropriate locations for fan, suction cavities and other SSD system components. Both for physical protection and minimum impact on active use areas, riser pipes were surface mounted on perimeter or interior walls; horizontal pipe was installed as close to ceiling and established raceways as possible. Work was coordinated with client to minimize disturbance of work areas, relocate obstacles and control dust. Vacuum and air flow measurements were performed continuously during construction to ensure integrity of design. Various fans were evaluated in place and in combination to determine the most effective configuration. At commissioning, all components inspected for condition and proper operation. Premises left in clean condition.

Diagnostic evaluation began on November 13, 2015. Construction work began on November 19 and was substantially completed December 10, as of which date fans were creating sub-slab depressurization in both areas. Giro Cleaners was fully functional. Total Automotive was largely depressurized, except that no vacuum was observable in certain water saturated areas. This issue was documented and submitted to NYS DEC for review and comment, via GZA GeoEnvironmental. No work was performed in January. In mid February, GZA reported that NYS DEC was satisfied with system performance as is. Mitigation Tech performed a site visit on February 19 to do a final review, affix labels and install gauges. Although the systems had been operating in present configuration since mid December, February 19, 2016 was selected as the commissioning date.

Key on site personnel were Aaron Hurysz and Robert Beck, both highly experienced soil vapor intrusion technicians. Weather conditions were favorable. Daily tailgate meetings were held to review the daily work objective and relevant aspects of the Health & Safety Plan. Oversight was continuously provided by GZA Geo Environmental, Inc. No accidents or incidents occurred during the construction. Job photos are included in separate file.

3. SUB-SLAB DEPRESSURIZATION SYSTEM GENERAL DESCRIPTION

3.0 Introduction. The system consists of (2) SSD systems operating independently. Each individual system consists of a sidewall exterior mounted fan and one or more vapor extraction points. The systems were constructed using principles and equipment typically used for radon mitigation in buildings as detailed in the United States Environmental Protection Agency (EPA) EPA 402-K-03-007 (May 2006), and the final NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). The SSD systems were installed as permanent, integral additions to the structures. The key components of the SSD system are described below.

3.1 General System Configuration

a. Giro Cleaners – (3) suction points – (1) RP-265 fan
b. Total Automotive (1) suction points – (1) RP-265 fan

3.2. Suction Points. The location of each suction point (vapor extraction point) is shown on the attachments to this document titled "Figure 1 Vacuum Communication Giro Cleaners" and "Figure 2 Vacuum Communication Total Automotive". Each suction point consists of a 5" core boring into the slab to a depth of 12", through which appx. 1 cubic feet of sub-slab material has been removed. Perforated pipe extends to the core base. Mechanically suspended Schedule 40 3" or 4" PVC pipe has been inserted into the boring and sealed with urethane sealant

3.3. Riser Piping. The riser piping consists of 3" schedule 40 PVC pipe that follows a route from the extraction point to a manifold then to an exterior mounted vacuum fan, through a sidewall penetration. Weatherproof flashing or sealant has been applied to all penetrations. Vent pipes were installed at a pitch that ensures that any rainwater or condensation within the pipes drains downward into the ground beneath the slab. Piping is independently supported, and not supported from existing building mechanical systems. Piping is labeled at each level as "Sub-Slab Vent" with column designation.

3.4. Exhaust Fans. Exhaust fans consist of (2) RADONAWAY RP-265 centrifugal fans. Fans consume approximately 150w of electricity each, and were field selected for efficiency and minimum maintenance. Fans have an adjacent disconnect switch connected to a circuit in the vicinity. Fans are mounted with rubber Fernco brand rubber couplings, for simplified maintenance.

3.5. Instrumentation and Control. There is no centralized instrumentation or control for the SSD System. Individual fans can be switched either from the fan positioned disconnect or at the breaker in the vicinity. Each RP-265 exhaust fan system is equipped with a vacuum indicator mounted in a visible location on an associated riser pipe. The indicator consists of an oil filled U-tube style manometer. The indicator is inspected by observing the level of colored fluid. This indicator is designed primarily to give a simple visual check that vacuum is present in the riser pipe, specifically by observation that the fluid levels on each side of the indicator are not even. Indicators are marked at levels observed on February 19, 2016.

3.7. Sealing measures. Polyurethane sealants have been applied to floor cracks, slab penetrations and other openings to enhance the barriers between sub-slab and ambient air and improve the efficiency of the SSD System. Sealant has been applied primarily in the vicinity of suction points and at cracks in concrete bases of columns.

3.6. Monitoring Points. There are (4) sub-slab vacuum test points in Giro Cleaners and (10) in Total Automotive. These consist of ¾" drill points through the slab into which a digital micromanometer probe can be inserted. They are semi-permanently closed with closed cell backer rod and polyurethane sealant. These were established to aid in original system design and confirmatory testing. The primary future use is in annual recertification of system effectiveness.

3.7. Performance Evaluation In order to verify system effectiveness and as a performance evaluation, test points were established at various distances from the suction cavities suitable to determine that the sub-slab of the entire subject area was being depressurized at least to the objective. Test point locations and values are given in attachments to this report entitled "Figure 1 Vacuum Communication Giro Cleaners" and "Figure 2 Vacuum Communication Total Automotive".

4. SUB-SLAB DEPRESSURIZATION SYSTEM OPERATION

4.1. All fans should be kept in continuous operation. New York State Soil Vapor Intrusion Guidance (2006) specifies that operation, maintenance and monitoring of the SSD system should be included as part of site management. Until subsurface remediation efforts eventually address VOCs in soil and/or groundwater to acceptable levels (i.e. SSD operation no longer required) operation of the SSD system should continue. At that point, the vapor mitigation system may be shut down and/or removed and O&M requirements would cease.

4.2. Reset. Fans restart automatically in event of power loss.

4.3. In the event of unusual fan noise, failure to start, physical damage, or repeated circuit breaker trip, turn fan off and call for service. MITIGATION TECH –585- 637-7430

4.4. Regularly inspect fan gauge to verify that value, indicated by a mark on the gauge, has not changed significantly from the position of the mark. Gauge is inspected by observing the level of colored fluid or, in the case of a dial gauge, the position of the indicator needle.

4.5. Normal system operation requires unchanged structural conditions. Report any changes in structure, HVAC systems, slab conditions, etc., so that the change can be evaluated for impact on the SSD System. For service, call MITIGATION TECH at 637-7430
4.6. Ensure that a periodic inspection is performed

5. SUB-SLAB DEPRESSURIZATION SYSTEM PERFORMANCE MONITORING

5.1. Monthly Monitoring

5.1.1. Inspect each fan vacuum indicator to verify that value, indicated by a mark on the gauge, has not changed significantly from the position of the mark. Gauge is inspected by observing the level of colored fluid.

5.1.2. Record the observed measurement for each fan vacuum indicator on form labeled "SSD System Vacuum Gauge Record". Store all forms in the facility maintenance office.

5.1.3. Inspect visible components of SSD system in vicinity of gauge for degraded condition.

5.1.4. Investigate and report any gauge reading that deviates significantly from its historical average, or any degraded condition of visible components. For reporting, call MITIGATION TECH at 585-637-7430.

5.2. Annual Inspection

5.2.1. Conduct a visual inspection of the complete System (e.g., vent fans, piping, warning devices, labeling)

5.2.2. Inspect all components for condition and proper operation;

5.2.3. Identify and repair any leaks in accordance with Sections 4.3.1(a) and 4.3.4(a) of the NYS DOH VI Guidance (i.e.; with the systems running, use smoke sticks to check for leaks through concrete cracks, floor joints and at the suction points; any leaks will be resealed until smoke is no longer observed flowing through the opening).

5.2.4. Inspect the exhaust or discharge point of each exhaust fan to verify that no air intakes have been located within 10 feet

5.2.5. Conduct pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the entire slab). Perform at least one differential pressure reading for each building slab section enclosed by a separate footer

5.2.6. Interview appropriate building occupants seeking comments and observations regarding the operation of the System

5.2.7. Check to see that the circuit breakers controlling the circuits on which the soil vapor vent fans operate are labeled "Soil Vapor System"

5.3. Annual Certification of Effectiveness

5.3.1. Upon completion of the tasks outlined in section 5.2 above, the installing contractors shall submit a Certification of Effectiveness document, stating that the SSD system continues to perform to the purpose for which it was designed.

6. SUB-SLAB DEPRESSURIZATION SYSTEM MAINTENANCE

6.1. Routine Maintenance

6.1.1. Perform procedures as specified in sections 5.2 and 5.3

6.1.2. There are no routine component replacement procedures; Replace components upon findings of damage or failure

6.1.3. All routine and non-routine maintenance activities should be documented and reported to the agencies, as appropriate

6.2. Non-Routine Maintenance

6.2.1. Non-routine maintenance may also be appropriate during the operation of the mitigation system. Examples of such situations include the following:

6.2.2. It is determined through inspection or notification by others that the warning device indicates the mitigation system is not operating properly

6.2.3. the mitigation system becomes damaged

6.2.4. the building has undergone renovations that may reduce the effectiveness of the mitigation system.

6.2.5. Activities conducted during non-routine maintenance visits will vary depending upon the reason for the visit. In general, building-related activities may include examining the building for structural or HVAC system changes, or other changes that may affect the performance of the depressurization system (e.g., new combustion appliances, deterioration of the concrete slab, or other significant changes). Depressurization system-related activities may include examining the operation of the warning device or indicator and the vent fan, or measurement of the extent of sub-slab depressurization. Repairs or adjustments should be made to the system as appropriate.

Certification

I hereby certify that the SSD System at this location is installed properly and is effective in achieving its above stated purpose.

End of report

Thank you

Nicholas E. Mouganis EPA listing # 15415-I; NEHA ID# 100722

mitigation tech *soil vapor intrusion specialists*

VAPOR INTRUSION MITIGATION SYSTEM

Giro Cleaners - Northtown Plaza, Amherst NY

Operating and Maintenance Instructions

Standard Operating Procedure for Existing Sub-slab Depressurization System

1. Become familiar with the Sub-Slab Depressurization (SSD) System which has been permanently installed in this building to mitigate the potential intrusion of harmful soil vapor. This system consists of an exterior sidewall mounted vacuum fan, suction cavities, pipe, indicator gauge and other components designed to create vacuum beneath the concrete slab.
2. Leave the fan in continuous operation, except for emergency conditions. The fan restarts automatically in event of power loss. There is an on/off switch next to the fan. The fan is powered from the breaker panel in the utility area. In the event of unusual fan noise, failure to start, or repeated circuit breaker trip, turn fan off and call for service. For service, call MITIGATION TECH at 1-800-637-9228
3. Regularly (weekly or more frequently) inspect fan gauge to verify that vacuum value, indicated by a mark on the gauge, has not changed significantly from the position of the mark. Gauge is located on the rear vertical PVC pipe near the central corner.
4. Normal system operation requires unchanged structural conditions. Report any changes in structure, HVAC systems, slab conditions, etc., so that the change can be evaluated for impact on the SSD System. For service, call MITIGATION TECH
   at 1-800-637-9228
5. Ensure that a periodic inspection is performed, to include the following:
   - Visual inspection of the complete Sub-Slab Depressurization System (e.g., vent fans, piping, vacuum gauge, labeling, etc.)
   - Inspection of all components for condition and proper operation
   - Identification of any leaks in accordance with Sections 4.3.1(a) of the NYS DOH Guidance
   - Inspection discharge point to verify that no air intakes have been located nearby
   - Performance of pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the slab)

Maintenance Procedure for Existing Sub-slab Depressurization System

Commence by: March 31, 2017
Frequency - Annually

1. Conduct a visual inspection of the complete SSD System (e.g., vent fan, piping, warning device, labeling on systems, etc.);
2. Inspect all components for condition and proper operation;
3. Identify and repair any leaks in accordance with Sections 4.3.1(a) and 4.3.4(a) of the NYS DOH Guidance (i.e.; with the systems running, smoke tubes will used to check for leaks through concrete cracks, floor joints and at the suction points and any leaks will be resealed until smoke is no longer observed flowing through the opening).
4. Inspect the exhaust or discharge points to verify that no air intakes have been located nearby;
5. Conduct pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the entire slab) ; and
6. Interview an appropriate occupant seeking comments and observations regarding the operation of the System.

Nicholas E. Mouganis EPA listing # 15415-I; NEHA ID# 100722

Call for Service: 800-637-9228

mitigation tech *soil vapor intrusion specialists*

VAPOR INTRUSION MITIGATION SYSTEM

Total Automotive - Northtown Plaza, Amherst NY

Operating and Maintenance Instructions

Standard Operating Procedure for Existing Sub-slab Depressurization System

1. Become familiar with the Sub-Slab Depressurization (SSD) System which has been permanently installed in this building to mitigate the potential intrusion of harmful soil vapor. This system consists of an exterior sidewall mounted vacuum fan, suction cavity, pipe, indicator gauge and other components designed to create vacuum beneath the concrete slab.
2. Leave the fan in continuous operation, except for emergency conditions. The fan restarts automatically in event of power loss. There is an on/off switch next to the fan. The fan is powered from the breaker panel on the west wall. In the event of unusual fan noise, failure to start, or repeated circuit breaker trip, turn fan off and call for service. For service, call MITIGATION TECH at 1-800-637-9228
3. Regularly (weekly or more frequently) inspect fan gauge to verify that vacuum value, indicated by a mark on the gauge, has not changed significantly from the position of the mark. Gauge is located on the vertical PVC pipe in the center of the east wall.
4. Normal system operation requires unchanged structural conditions. Report any changes in structure, HVAC systems, slab conditions, etc., so that the change can be evaluated for impact on the SSD System. For service, call MITIGATION TECH
   at 1-800-637-9228
5. Ensure that a periodic inspection is performed, to include the following:
   - Visual inspection of the complete Sub-Slab Depressurization System (e.g., vent fans, piping, vacuum gauge, labeling, etc.)
   - Inspection of all components for condition and proper operation
   - Identification of any leaks in accordance with Sections 4.3.1(a) of the NYS DOH Guidance
   - Inspection discharge point to verify that no air intakes have been located nearby
   - Performance of pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the slab)

Maintenance Procedure for Existing Sub-slab Depressurization System

Commence by: March 31, 2017
Frequency - Annually

1. Conduct a visual inspection of the complete SSD System (e.g., vent fan, piping, warning device, labeling on systems, etc.);
2. Inspect all components for condition and proper operation;
3. Identify and repair any leaks in accordance with Sections 4.3.1(a) and 4.3.4(a) of the NYS DOH Guidance (i.e.; with the systems running, smoke tubes will used to check for leaks through concrete cracks, floor joints and at the suction points and any leaks will be resealed until smoke is no longer observed flowing through the opening).
4. Inspect the exhaust or discharge points to verify that no air intakes have been located nearby;
5. Conduct pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the entire slab) ; and
6. Interview an appropriate occupant seeking comments and observations regarding the operation of the System.

Nicholas E. Mouganis EPA listing # 15415-I; NEHA ID# 100722

Call for Service: 800-637-9228