11075 WALDEN AVENUE
ERIE COUNTY
ALDEN, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C915333

Prepared for:

J&M Walden Holdings Corp. (formerly Doritex Corp.)
and
Walden Realty Limited Partnership
112 Halston Parkway
East Amherst, New York 14051

Prepared by:

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Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

JULY 2025

CERTIFICATION STATEMENT

I, Daniel P. Noll 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).

_____ P.E.

7/21/2025
_____DATE

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List of Acronyms

AS	Air Sparging
ASP	Analytical Services Protocol
AWQS	Ambient Water Quality Standards
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
CO2	Carbon Dioxide
CP	Commissioner Policy
CVOC	Chlorinated Volatile Organic Compound
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
EC	Engineering Control
ECL	Environmental Conservation Law
EE	Environmental Easement
ELAP	Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Greenhouse Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PCE	Tetrachloroethylene
P.E. or PE	Professional Engineer
PFAS	Per- and Polyfluoroalkyl Substances
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
DD	Decision Document
RP	Remedial Party

RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSDS	Sub-Slab Depressurization System
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TCE	Trichloroethene
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
TOGS	Technical and Operations Guidance Series
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

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 SMP:

Site Identification:	Site ID No.C915333 11075 Walden Avenue – Alden, New York (Site)
Institutional Controls (ICs):	1. The Site may be used for commercial or industrial use
	2. The use of groundwater underlying the Site 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.
	3. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP.
	4. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP.
	5. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.
	6. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP.
	7. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP.
	8. 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 EE.
	9. The potential for vapor intrusion must be evaluated for any occupied buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated.
	10. Vegetable gardens and farming on the Site are prohibited.
	11. All ECs must be operated and maintained as specified in the SMP.
	12. All ECs must be inspected at a frequency and in a manner defined in the SMP.

Engineering Controls (ECs):	1. Cover system	
	2. Active Sub-Slab Depressurization System (SSDS)	
Inspections:		Frequency
1. Cover inspection		Annually
2. SSDS inspection		Annually
Monitoring:		
1. Groundwater		Annually
2. Indoor Air (prior to any unoccupied space becoming occupied)		As needed
3. Soil Vapor Intrusion Evaluation for New Buildings		As needed
Reporting:		
1. Periodic Review Report		Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this SMP.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for 11075 Walden Avenue located in Alden, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State Brownfield Cleanup Program (NYS BCP) which is administered by NYSDEC, and is designated as Site No. C915333.

J&M Walden Holdings Corp. (formerly Doritex Corp.) and Walden Realty Limited Partnership (collectively, Walden Realty) entered into a Brownfield Cleanup Agreement (BCA) in September 2018 with the NYSDEC to remediate the Site. A figure showing the Site location and boundaries is provided in 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 recorded on December 12, 2019 (EE) provided in Appendix 4.

After completion of the remedial work, some contamination was left at this Site, which is hereafter referred to as "remaining contamination". ICs and ECs have been incorporated into the Site remedy to control exposure to this remaining contamination to ensure protection of public health and the environment for the continued commercial and/or industrial use of the Site. An EE 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 EE 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 EE and the grantor's successors and assigns, including every owner, tenant or licensee of any portion of the Site. 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 EE. Failure to properly implement the SMP is a violation of the EE, which is grounds for revocation of the Certificate of Completion (COC) for the Site; and,
- failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the BCA (#C915333) 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 1 of this SMP.

This SMP was prepared by LaBella Associates D.P.C. (LaBella) on behalf of Walden Realty in accordance with the requirements of the NYSDEC's DER-10 - "Technical Guidance for Site Investigation and Remediation", dated October 2023 (DER-10), and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the EE for the Site.

1.2 Revisions and Alterations

Revisions and alterations to this plan must be proposed in writing to the NYSDEC's project manager. The NYSDEC can also make changes to the SMP or request revisions from the remedial party. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, such as the SSDS, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. All approved alterations must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations. For example, any changes to as-built drawings must be stamped by a New York State Professional Engineer (PE). In accordance with the EE for the Site, the NYSDEC project manager 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:

1. 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law (ECL).
2. Seven-day advance notice of any field activity associated with the remedial program.
3. 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan appended to this SMP as Appendix 2 (EWP). If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
4. Notice within 48 hours of any damage or defect to the foundation and structures that serve as part of the cover system EC or to any other 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.
5. Notice within 48 hours of any non-routine maintenance activities for any EC.
6. 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.
7. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action under this SMP 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:

1. 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 FER, the EE and this SMP.
2. 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 A below includes contact information for the above notifications. 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 1.

Table A: Notifications*

Name	Contact Information	Required Notification**
Mr. Matthew King, NYSDEC Project Manager	716-851-7258 matthew.king@dec.ny.gov	All Notifications
Mr. Chad Staniszewski, NYSDEC Regional Engineer	716-851-7220 chad.staniszewski@dec.ny.gov	All Notifications
Ms. Kelly Lewandowski, Chief, Site Control Section	(518)402-9553 kelly.lewandowski@dec.ny.gov	Notifications 1 and 8
Ms. Harolyn Hood, NYSDOH Project Manager	518-402-7860 Haroyln.hood@health.ny.gov	Notifications 4, 6, and 7

* Note: Notifications are subject to change and will be updated as necessary.
** Note: Numbers in this column reference the numbered bullets in the notification list in this section.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The Site is located in Alden, Erie County, New York and is identified as Section 96.000 Block 4 and Lot 6.200 on the Erie County Tax Map (see Figure 2). The Site is an approximately 2.94-acre area and is bounded by Walden Avenue to the north, undeveloped land to the south, Commerce Drive to the east, and undeveloped land west (see Figure 2 – Site Layout Map). The boundaries of the Site are more fully described in Appendix 4 –Environmental Easement. The owner of the Site parcel at the time of issuance of this SMP is:

Walden Realty Limited Partnership
112 Halston Parkway
East Amherst, New York 14051

2.2 Physical Setting

2.2.1 Land Use

The Site consists of an approximately 34,858 square-foot commercial building on the central portion of the Site (Site Building). The Site is zoned for commercial use and is currently used for commercial purposes. Site occupants are limited to a truck repair tenant located within

the south portion of the Site Building. The north portion of the Site Building is currently unoccupied. An occupancy sketch is included in Figure 7. The exterior of the Site includes green space to the north, west, and south of the Site Building, and asphalt-paved parking areas to the east and south of the Site Building. Adjacent properties include undeveloped land located west and south of the Site legally addressed as Walden Avenue, commercial buildings located east beyond Commerce Drive legally addressed as 11155 Walden Avenue and 2885 Commerce Drive, commercial buildings located north beyond Walden Avenue legally addressed as 11112 Walden Avenue and Walden Avenue itself, and a residence located north across Walden Avenue legally addressed as 11118 Walden Avenue. It should be noted that the Site obtains potable water from the municipal water system.

2.2.2 Geology

The Site stratigraphy includes soil/fill overlying native material and shale bedrock across the Site. The overburden stratigraphy can be divided into two horizons: Soil/Fill Material and then Glacial Till.

2.2.2.1 Soil/Fill Material

The soil/fill material on the Site is present as the uppermost unit at the Site and varies in thickness from zero to two feet below the ground surface (ft bgs). In general, the uppermost soil/fill material primarily consists of two types of material that include topsoil; asphalt and subbase materials; and a silty clay with intermingled gravel and concrete. Asphalt and subbase were encountered in select exterior areas of the Site. The silty clay fill material was encountered proximate the Site Building foundation. Topsoil was typically encountered in vegetated areas.

2.2.2.2 Glacial Till (Native Material)

A layer of glacial till deposits, consisting of silts and clays, was observed across the entire Site during the subsurface investigations. This layer was encountered from one ft bgs to a maximum depth of thirty-one ft bgs. The silts and clays were typically brown-red and brown-gray in color. Site specific boring logs are provided in Appendix 5.

2.2.2.3 Hydrogeology

Groundwater was present in the soil/fill material and in the native glacial till deposits. The depths to groundwater generally ranged from approximately 1 to 31.5 ft bgs, and groundwater flows generally to the west/northwest. A groundwater contour map is shown in Figure 3. Groundwater elevation data is provided in Table D in Section 4.3.1. Groundwater monitoring well construction logs are provided in Appendix 5.

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.

2.3.1 Site History

The Site consisted of undeveloped land from at least 1880 to at least 1938 and agricultural land from at least 1938 to at least 1951. The Site appears to have been developed with the original portion of the Site Building in at least 1964 for, among other activities, printing operations. Although available resources to date were consulted, the exact use of the Site

Building in the 1960s is unknown. The Site was also historically utilized as a commercial laundry facility, including dry cleaning, from at least 1988 (potentially as early as the 1970s by others) through 2006. It should be noted that the Site was listed within the Federal Drycleaners, Resource Conservation and Recovery Act Generator, and Aerometric Information Retrieval System's programs associated with the dry-cleaning operations. The Site also reportedly utilized a septic system prior to the mid-1980s. Floor drains noted throughout the Site Building may have previously discharged to that on-site septic system. Adjacent properties have been historically utilized agriculturally and commercially.

2.3.2 Transaction Screen/Environmental Assessment

A Transaction Screen/Environmental Assessment was completed on the Site by Lender Consulting Services, Inc. dated May 4, 2017. The Transaction Screen/Environmental Assessment identified potential environmental concerns and concluded that further investigation of the Site was warranted because it had been utilized as a laundry facility, including drycleaning.

2.3.3 Supplemental Phase II Environmental Site Assessment

A Supplemental Phase II ESA was completed on at Site by LaBella dated December 4, 2017. The following areas of impact were identified at the Site:

1. Soil sampling identified chlorinated volatile organic compound (CVOC)-impacted soil beneath the west-central portion of the Site Building.
2. Soil vapor intrusion sampling conducted within the Site Building identified CVOCs in both indoor air and sub-slab soil vapor samples at concentrations requiring mitigation when compared to NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006.
3. The source of the CVOC impacts to soil, indoor air, and soil vapor appeared to be related to historical dry-cleaning operations conducted within the Site Building; specifically, a drycleaning machine was historically located proximate the subsurface soil impacts identified.
4. Acetone was identified above NYSDEC TOGS 1.1.1 AWQS in groundwater samples collected from five of the nine temporary groundwater monitoring wells installed at the Site, including in at least one of the upgradient perimeter wells (SB-3/MW-2) of the Site.

2.3.4 Interim Remedial Measures

Below is a summary of the IRMs implemented at the Site. It should be noted that IRM activities are summarized in detail within the Interim Remedial Measures, Remedial Investigation, & Alternatives Analysis Report dated February 7, 2025.

2.3.4.1 IRM Excavation

The objective of this IRM was to remove accessible CVOC-impacted soil from beneath the concrete slab in the west-central portion of the Site Building to eliminate the primary source of CVOCs contributing to impacted soil vapor, and to reduce partitioning of CVOCs from soil into groundwater.

Prior to advancement of the IRM Excavation, the concrete floor was saw-cut and jack-hammered. Loose concrete was placed to the south of the Site Building for later off-site disposal. The IRM excavation was advanced between May 29 and June 5, 2019. The IRM

Excavation consisted of a 1,176 square-foot area and was extended to a maximum depth of approximately 10 ft bgs beneath the previous dry cleaner machine location and four ft bgs in the remainder of the excavation. It should be noted that the presence of foundational components, specifically the Site Building footer located immediately adjacent the west limits of the IRM Excavation limited the vertical extent of the excavation as well as the lateral extent of the excavation to the west. Approximately 117.46 tons of hazardous soil, 99.34 tons of non-hazardous soil, and 160-gallons of groundwater were staged on-site and subsequently disposed of properly. The approximate extent of the IRM Excavation is depicted on Figure 4.

Confirmatory soil samples were collected from the excavation areas and chemically analyzed to verify attainment of the applicable NYSDEC Soil Cleanup Objectives set forth at 6 NYCRR 375-6.8(b) (SCOs) cleanup levels. As reflected in Table 1 the confirmatory soil sampling results, no VOCs were detected in the confirmatory soil samples collected from the IRM Excavation at concentrations exceeding NYSDEC Part 375 Commercial Use SCOs with the exception of Floor 1. Tetrachloroethylene a/k/a Perchloroethylene (PCE) was documented in Floor 1 at a concentration of 170,000 µg/kg exceeding NYSDEC Part 375 Commercial Use SCO of 150,000 µg/kg. Additional details related to post IRM Excavation soil sampling are detailed within Section 2.5.

2.3.4.2 Sub-Slab Depressurization System

A SSDS was installed with the Site Building in accordance with the USEPA 402-L-03-007 (May 2006) and the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006. Installation of the SSDS within the Site Building was completed by Mitigation Tech on March 24, 2020 and the SSDS system was subsequently activated. The primary objective of the SSDS was to mitigate potential intrusion of CVOC vapors that could migrate into occupied space from beneath the Site Building slab (AOC #1). This mitigation is achieved by maintaining a negative pressure of at least 0.004 water column inches (wci) below the Site Building's concrete floor slab relative to the air pressure above the slab.

Preliminary sub-slab air communication testing was performed October 3, 2019 as part of a general assessment of the scope of work. The communication testing procedure included drilling core borings into the concrete at likely suction cavity locations, at which vacuum was temporarily applied. Small diameter test holes were established to measure vacuum influence away from core boring locations. It was determined that a multi-fan system with multiple suction points could best provide comprehensive coverage.

Work began with confirmation of feasible and appropriate locations for fans, suction cavities and other SSDS components. Work was coordinated with Site Building as-built plans to minimize disturbance of future, potential equipment placement and operations. Work occurred over an extended period of time to accommodate general construction schedule. Vacuum testing was performed continuously during construction to determine the most efficient system configuration and verify integrity of design for the SSDS. At commissioning, all components were inspected for condition and proper operation.

Subsequent to installation of the SSDS, Post-SSDS Construction Air Sampling was conducted. Based on the laboratory results from the Post-SSDS Construction Air Sampling, no analytes were detected at concentrations exceeding NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 and Soil Vapor/Indoor Air Matrix Tables Addendum dated May 2017, with the exception of Trichloroethylene (TCE)

within indoor air samples ID2-A [3.27 micrograms per cubic meter (µg/m^3)], ID3-A [2.56 µg/m^3], and ID4-A [2.81 µg/m^3] at the north/northwest end of the Site Building. Air sampling results are included within Table 3. Details related to additional IRM activities performed to mitigate the TCE identified within indoor air samples ID2-A, ID3-A, and ID4-A are summarized in Section 2.3.4.4 below.

2.3.4.3 Enhanced Reductive Dechlorination Injections

Following completion of the IRM excavation, limited residual subsurface CVOC (dry cleaning solvent)-impacted soil remained beneath the limits of the IRM Excavation. In addition, limited CVOC-impacted groundwater appeared to be present downgradient of the IRM Excavation within groundwater monitoring well MW-12, but met TOGS 1.1.1 AWQS at nearby but slightly more distant downgradient wells MW-8 and MW-15. The remaining soil and groundwater impacts were primarily associated with elevated levels of PCE. The purpose of the Enhanced Reductive Dechlorination Injections was to address the CVOC impacted soil and groundwater located proximate to the IRM Excavation, and thereby, further reduce the potential for the residual CVOC impacted groundwater to migrate off-site beyond downgradient wells MW-8 and MW-15 to the west Site boundary, by injecting a mixture of Anaerobic BioChem and Zero Valent Iron to provide enhanced reductive dechlorination of the remaining subsurface solvent and its degradation constituents beneath the IRM Excavation and proximate to the west exterior wall of the Site Building. Two groundwater sampling events were completed (one prior to, and one subsequent to) injection completion and included collection of groundwater samples from groundwater monitoring wells MW-12 and MW-15.

Starting on May 4, 2020, a total of 20 source area injections were advanced within a 50 foot by 50 foot plot centered on the source area (IRM Excavation and Floor 1/SB-40) spaced on a grid approximately 10 feet apart. An additional four source area injections were advanced to the west exterior of the Site Building proximate the IRM Excavation and bracketing MW-12. Each source area injection location was advanced with a 1.5-inch diameter direct-push injection point to reach a target depth of approximately 30 ft bgs. Once the target depth was reached, an expendable point was released from the end of the geoprobe and the ABC+ mixture was introduced at each injection location from the bottom of the injection location upwards at two-foot increments as the geoprobe equipment was extracted. Care was taken to monitor the shallow backfill material in the IRM Excavation area to prevent it from becoming a preferential outlet. This was accomplished by gauging/sounding the injection material as the injections were ongoing. It should be noted that this method of direct push injections did not generate any soil cuttings or waste water requiring later, proper off-site disposal.

Proximate to the two wells that never showed CVOC contamination, MW-8 and MW-15, a total of 13 injection locations were advanced in two offset rows along a 50 foot transect spaced on a grid approximately 10 feet apart proximate the west exterior of the Site Building and the western property line to create a barrier of ABC+ between the known CVOC contamination and the adjoining property. The downgradient injection locations are depicted in Figure 4. Each downgradient injection location was advanced a 1.5-inch diameter direct-push injection point to reach a target depth of approximately 30 ft bgs. Once the target depth was reached, an expendable point was released from the end of the geoprobe and the ABC+ mixture was introduced at each injection location from the bottom of the injection location upwards at two-foot increments as the geoprobe equipment was extracted. As continued installation of downgradient injection points occurred, daylighting was observed on the west adjacent property just past the Site Boundary. As a result, the NYSDEC conducted an inspection at the

Site to observe this migration of material onto the west adjacent property. It was decided that select injection points (IPD-10 through IPD-13) in the downgradient area would not inject solutions above 10 ft bgs. Additionally, a reduction was made in the total volume of ABC+ mixture injected per interval from 13 gallons to 10 gallons; however, the concentration of ABC+ was increased accordingly in each of the 10 gallons injected. Per Redox, this reduction should not compromise the effectiveness of the ABC+ Solution. A total of approximately 7,870 gallons of ABC+ mixture was injected between the Source and Downgradient areas.

Good housekeeping practices were followed to prevent leaving material on the ground surface (e.g., precautions were taken to prevent impacts to the ground surface due to material spilled from the drilling or injection equipment). Any material that did inadvertently drip or spill onto the ground surface was promptly picked up and placed in an appropriate location.

Details related to post Enhanced Reductive Dechlorination Injection groundwater sampling is detailed within Section 2.3.5.4.

2.3.4.4 Epoxy Floor Covering, Vent Closure, and P-Trap Wetting

Subsequent to the installation of the SSDS, post-SSDS construction indoor air samples ID2-A, ID3-A, and ID4-A collected from the north and central portions of the Site Building identified TCE concentrations slightly exceeding the NYSDOH Table 3.1, August 2015 revision TCE indoor air guidance value of 2 µg/m^3. Additional assessment of the Site conditions revealed the following.

1. Screening the concrete within the north portion of the Central Warehouse and Utility Room identified residual TCE and PCE concentrations. The existing epoxy floor coating within the Central Warehouse of the Site Building was heavily damaged and in poor condition. It was concluded that that volatilization of the residual TCE and PCE contained within the concrete floor is the likely source of and/or contributor to, the indoor air impact identified within the post-SSDS construction indoor air samples.
2. A wall mounted "vent" was allowing free air exchange between north portions of the Site Building (Utility Room and the immediately adjacent Office Kitchen/Breakroom located within the office portion of the Site Building).
3. Floor drains and plumbing fixtures (toilets, sinks, urinals) located within the north portion of the Site Building (Office) were potentially a source or contributor to TCE within the Office indoor air. Evaluation of the P-traps associated with the floor drain and fixtures found that they were "dry" allowing for free exchange of air between the floor drains/fixtures and indoor air.

Below is a summary of the IRMs implemented to address the above.

<u>Epoxy Floor Covering</u>

Removal and replacement of the existing damaged epoxy floor covering included an area of approximately 3,100 square feet (ft^2) within the north portion of the Central Warehouse and Utility Room. The area of the floor that was treated was established based on the results of the TCE Indoor Air Source Evaluation detailed with the Interim Remedial Measures, Remedial Investigation, & Alternatives Analysis Report dated February 7, 2025, while also extending the footprint of the epoxy floor to the south and east to match existing concrete floor expansion joints. Removal of the existing epoxy floor and application of the new epoxy floor was completed by Martens Specialty Flooring (Martens). The scope of work included removal

of an existing floor coating by diamond grinding and installing a high quality two part epoxy floor coating. Cracks and large surface deviations were filled and leveled with an epoxy mortar to ensure the new floor coating was level and will resist cracking under normal conditions. Any penetrations in the floor surface (i.e. utility, etc.) were sealed during the application of the new epoxy floor. One utility trench located within the Utility Room and one trench drain located within the Central Warehouse were cleaned, filled with concrete, and covered with the new epoxy coating.

Vent Closure

A qualified contractor was retained to remove the vent and permanently close the opening between the Utility Room and the adjacent Office Kitchen/Breakroom located within the office portion of the Site Building.

P-Trap Wetting

One week prior to post-IRM Indoor Air Sampling detailed in Section 2.3.4.4, approximately two gallons of water was discharged to each floor drain/fixture to ensure P-Traps were maintained in a wet condition. In addition, approximately two gallons of water was discharged to each floor drain/fixture to ensure P-Traps maintained a wet condition on the date post-IRM Indoor Air Sampling was completed.

Post Floor Coating and P-trap Wetting IRM Air Sampling

Following the installation of the new epoxy floor covering, post IRM indoor air samples were collected to evaluate the effectiveness of the IRMs. Three indoor air post IRM samples, ID-2B, ID-3B, and ID-4B, were collected from locations consistent with indoor air samples ID2-A, ID3-A, and ID4-A. One ambient outdoor air sample (OD-4) was collected from location upwind of the Site Building. Based on the laboratory results, neither TCE nor any other CVOC was detected at concentrations exceeding the laboratory method detection or reporting limits within any of the post IRM air samples. As such, it appears that the IRMs were successful in mitigating indoor air concentrations of TCE within the Site Building.

2.3.5 Remedial Investigation

A RI was completed to further evaluate the nature and extent of the contaminants of concern (CVOC-impacts), including to soil, soil vapor, and groundwater, at the Site identified during previous investigations. Tasks completed associated with the RI are summarized below.

2.3.5.1 Soil Vapor

Laboratory analysis via USUSEPA Method TO-15 of four soil vapor implant samples (SV-1 through SV-4) and one outdoor ambient air sample (OD-1). Although the NYSDOH has not established guidance for analytes within soil vapor, NYSDOH has established air guidance values for CVOCs PCE, TCE, and Methylene Chloride. Based on the laboratory results, none of the CVOC analytes for which the NYSDOH has established air guidance values were detected above the laboratory method detection limits within the soil vapor implant samples collected.

2.3.5.2 Surface Soil

Five surface soil samples (SF-1 through SF-5) were collected with a hand auger throughout the Site and submitted for laboratory analysis of TCL SVOCs, TAL Metals, PCBs, pesticides and herbicides. Based on the laboratory results, no analytes were detected at

concentrations exceeding NYSDEC Part 375 Commercial Use SCOs in any of the surface soil samples collected and submitted for laboratory analysis.

2.3.5.3 Subsurface Soil

16 soil borings were advanced throughout the Site as part of the RI using direct push and hollow-stem auger drilling methods. The soil borings are designated SB-29 through SB-45. Evidence of impairment was not observed in a majority of the soil borings advanced with the exception of SB-40. The highest PID reading [85.2 parts per million (ppm)] was observed at 10-11 ft bgs within SB-40 which was advanced directly through the center and into the floor of the post-IRM Excavation area from 10 to 24 ft bgs. Odors suspected to be associated with PCE were also observed within SB-40 from 10-17 ft bgs. A total of 18 subsurface soil samples were collected and generally submitted for laboratory analysis for TCL + CP-51 VOCs, TCL SVOCs, TAL metals, PCBs, pesticides and herbicides. Based on the laboratory results, no analytes were detected exceeding Part 375 Commercial Use SCOs, with the exception of PCE detected in the soil sample collected from soil boring SB-40 (15-16 ft bgs) at a concentration of 310,000 µg/kg which exceeds the respective Part 375 Commercial Use SCO value of 150,000 µg/kg. Because SB-40 (15-16 ft bgs) is beneath the Site Building's floor slab, the Protection of Ecological Resources SCOs appear to be inapplicable. And because of the use of the Site has been restricted to commercial and industrial uses consistent with the institutional controls set forth in the Environmental Easement, and because of the success of the ABC+ injections discussed below, the Protection of Groundwater SCOs also appear to be inapplicable pursuant to Part 375-6.5(a)(1) to this Site.

2.3.5.4 Groundwater

Nine temporary overburden groundwater monitoring wells were installed throughout the Site designated as MW-1 through MW-9 during a Phase II ESA conducted prior to enrollment of the Site in the NYSDEC BCP. Six permanent overburden groundwater monitoring wells were installed throughout the Site designated as MW-10 through MW-15 during the RI. Evidence of impairment was not observed in any of these groundwater monitoring wells at the time of installation.

Based on the groundwater laboratory results, groundwater samples collected from groundwater monitoring wells MW-2, MW-4, MW-5, MW-6, MW-7, MW-12, and MW-13, only exhibited acetone concentrations exceeding the NYSDEC TOGS 1.1.1 AWQS standard for acetone of 50 µg/l. Note that both MW-2 and MW-5 are upgradient wells. While the source of the acetone within the on-site groundwater has not been confirmed, no on-site subsurface soil source of acetone has been identified. Based on the groundwater flow to the north-northwest, the acetone impact appears to be originating from an off-site source. Furthermore, the groundwater samples collected from wells located north (MW-14) and west (MW-8 and MW-15) of the Site Building and generally downgradient of the Site did not exhibit concentrations of acetone exceeding NYSDEC TOGS 1.1.1 AWQS. So, it does not appear that on-site acetone impacted groundwater is migrating off-site in consequential concentrations.

Methyl Ethyl Ketone (MEK) was detected in groundwater samples collected from groundwater monitoring well MW-12 and MW-15 at concentrations of 100 µg/l and 170 µg/l, respectively, exceeding the NYSDEC TOGS 1.1.1 AWQS standard of 50 µg/l. In addition, benzene was detected in the groundwater sample collected from groundwater monitoring well MW-15, at a concentration of 3.2 µg/l slightly exceeding the NYSDEC TOGS 1.1.1 AWQS standard of 1 µg/l. It should be noted that no on-site subsurface soil sources of MEK or benzene have been identified, and no other groundwater samples collected from the Site

have identified concentrations of benzene or MEK exceeding their respective NYSDEC TOGS 1.1.1 AWQS.

The CVOCs PCE, TCE, c12-DCE, and VC were detected within groundwater samples collected from groundwater monitoring well MW-12 in March 2019, July 2019, May 2020, and August 2020, at concentrations exceeding NYSDEC TOGS 1.1.1 AWQS. Those CVOCs were not detected at concentrations exceeding NYSDEC TOGS 1.1.1 AWQS in any other well. MW-12 is located directly downgradient and adjacent to the IRM Excavation. Groundwater samples collected from MW-12 exhibited a peak total CVOC concentration of 3,932 µg/l in July 2019. Subsequent to completion in May 2020 of the ABC+ amendment injection IRM activities outlined in Section 2.3.4, total CVOC concentrations in the groundwater sample collected from MW-12 decreased to 864 µg/l. As such, it appears that IRM activities have successfully reduced the concentrations of CVOCs present within groundwater in MW-12. It should be noted that CVOC concentrations, in the groundwater samples collected from MW-8 and MW-15 located immediately north-northwest and downgradient of MW-12 have not exceeded NYSDEC TOGS 1.1.1 AWQS. In fact, no cVOCs have been detected at MW-15 and the maximum total CVOC concentration at MW-8 was 0.89 µg/l. As such, it appears that the extent of the cVOC groundwater impact is highly localized proximate MW-12, has not migrated off-site, and cVOC groundwater conditions should continue to decrease.

Nevertheless, out of an abundance of caution, a total of 13 ABC+ injection locations were advanced in two offset rows along a 50 foot transect spaced on a grid approximately 10 feet apart proximate the west exterior of the Site Building and the western property line proximate to the two wells that never showed cVOC contamination, MW-8 and MW-15, to create a barrier of ABC+ between the known cVOC contamination and the adjoining property.

Groundwater containing cVOCs has not been detected migrating off-site and, after the ABC+ injections, is not likely to migrate off-site. Downgradient ABC+ injections have treated and controlled any potential cVOCs.

2.4 Remedial Action Objectives

The following RAOs were identified for this Site.

Groundwater RAOs

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- Restore groundwater to pre-release conditions, to the extent practicable.
- Remove the source of groundwater contamination.

Surface/Subsurface Soil RAOs

- Prevent migration of contaminants from the soil that may result in groundwater contamination.
- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from soils.

Soil Vapor RAOs

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into the indoor air of the current Site Building and future Site buildings.

2.5 Remaining Contamination

Based on the collective result of the RI and IRMs completed, the following contamination remains at the Site.

2.5.1 Subsurface Soil

Based on the collective RI and IRM subsurface post remedial soil samples collected, no analytes were detected at the Site exceeding NYSDEC Part 375 Commercial Use SCOs with the exception of PCE detected in IRM confirmatory soil sample Floor 1 and the RI soil sample collected from soil boring SB-40 (15-16 ft bgs).

Prior to implementation of the ABC+ Injection IRM, PCE exceeding the NYSDEC Part 375 Commercial Use SCO of 150,000 µg/kg was detected within Floor 1 at a concentration of 170,000 µg/kg, and within SB-40 (15-16 ft bgs) at a concentration of 310,000 µg/kg. A second soil sample collected from soil boring SB-40 (23-24 ft bgs) identified PCE at a concentration of 82,000 µg/kg which is well below the Part 375 Commercial Use SCO value of 150,000 µg/kg. It should be noted that the soil sample collected from Floor 1 was collected from approximately 10 ft bgs, and soil boring SB-40 was advanced through the IRM excavation immediately proximate the location of Floor 1 to evaluate the vertical extent of the PCE impact proximate Floor 1. Laboratory analysis of soil samples collected from beyond the limits of the IRM Excavation from soil borings SB-14, SB-19 though SB-22, SB-28, and SB-41 through SB-45 generally exhibited results below the laboratory method detection limits for PCE, or PCE at concentrations significantly below NYSDEC Part 375 Commercial Use SCOs [the maximum PCE concentration was 360 µg/kg (which is below the Unrestricted Use SCO of 1,300 ug/kg) in the soil sample collected from SB-45 (21-22 ft bgs)].

As such, remaining subsurface soil exhibiting analyte concentrations exceeding NYSDEC Part 375 Commercial Use SCOs is expected to be limited to highly localized PCE impact immediately proximate confirmatory soil sample Floor 1 and soil boring SB-40 between approximately 10 ft bgs to approximately 16 ft bgs. Table 1 and Figure 4 summarize the results of all soil samples collected that exceed the Commercial Use SCOs at the Site after completion of the IRM excavation.

2.5.2 Groundwater

Below is a summary of the groundwater samples collected from the Site which exhibited analyte concentrations exceeding their respective SCG.

Acetone was detected in the following groundwater samples at concentrations exceeding the Groundwater SCG of 50 µg/l.

- MW-2 (6/12/2017) – 110 µg/l
- MW-4 (6/12/2017) – 63 µg/l
- MW-5 (6/12/2017) – 58 µg/l
- MW-6 (6/12/2017) – 76 µg/l
- MW-7 (6/12/2017) – 62 µg/l

- MW-12 (3/1/2019) – 58 µg/l
- MW-12 (8/4/2020) – 63 µg/l
- MW-13 (2/28/2019) – 280 µg/l

Benzene was detected in the groundwater sample from the deep well, MW-15, at a concentration exceeding the Groundwater SCG of 1 µg/l.

- MW-15 (8/4/2020) – 3.2 µg/l

c12-DCE was detected in the following groundwater samples at concentrations exceeding the Groundwater SCG of 5 µg/l.

- MW-12 (7/9/2019) – 470 µg/l
- MW-12 (5/4/2020) – 930 µg/l
- MW-12 (8/4/2020) – 420 µg/l

Methyl ethyl ketone (MEK) was detected in the following groundwater samples at concentrations exceeding the Groundwater SCG of 50 µg/l.

- MW-12 (8/4/2020) – 100 µg/l
- MW-15 (8/4/2020) – 170 µg/l

PCE was detected in the following groundwater samples at concentrations exceeding the Groundwater SCG of 5 µg/l.

- MW-12 (3/1/2019) – 1,000 µg/l
- MW-12 (7/9/2019) – 2,500 µg/l
- MW-12 (5/4/2020) – 1,200 µg/l
- MW-12 (8/4/2020) – 370 µg/l

TCE was detected in the following groundwater samples at concentrations exceeding the Groundwater SCG of 5 µg/l.

- MW-12 (3/1/2019) – 19 µg/l
- MW-12 (7/9/2019) – 950 µg/l
- MW-12 (5/4/2020) – 480 µg/l
- MW-12 (8/4/2020) – 52 µg/l

VC was detected in the following groundwater samples at concentrations exceeding the Groundwater SCG of 2 µg/l.

- MW-12 (3/1/2019) – 2.3 µg/l
- MW-12 (7/9/2019) – 12 µg/l
- MW-12 (5/4/2020) – 25 µg/l
- MW-12 (8/4/2020) – 22 µg/l

Total PFOS was detected within the groundwater sample collected from MW-13 at a concentration of 10 nanograms per liter (ng/l) slightly exceeding the Groundwater SCG of 6.7 ng/l.

1,4-dioxane was detected within the groundwater sample collected from MW-12 at a concentration of 929 ng/l, slightly exceeding the Groundwater SGC of 350 ng/l.

In-situ groundwater treatment measures implemented at the Site are expected to result in the continued attenuation of remaining contaminant levels in the groundwater which occurs at depths ranging from 2 to 15 ft bgs proximate the IRM excavation and MW-12. The direction of groundwater flow is to the west and northwest. Table 2 and Figure 5 summarize the results of all samples of groundwater that exceed the SCGs after completion of the remedial action.

2.5.5 Soil Vapor Intrusion

Although implementation the IRMs appear to have successfully mitigated soil vapor intrusion within the Site Building, as CVOC impacted soil remains proximate Floor 1 and SB-40 and CVOC impacted groundwater remains proximate MW-12, there is remaining CVOCs in soil vapor. The soil vapor intrusion sampling within the Site Building prior to IRM construction identified CVOCs in both indoor air and sub-slab soil vapor samples at concentrations requiring mitigation when compared to NYSDOH Soil Vapor Intrusion guidance. Therefore, it is expected that soil vapor contamination remains beneath the footprint of the Site Building and the SSDS will need to be operated as an EC.

It should be noted that the NYSDOH has not established standards for analytes detected within soil vapor; however, no analytes were detected within the soil vapor samples collected as part of the RI (SV-1 through SV-4) at concentrations above NYSDOH 2006 Guidance Soil Vapor/Indoor Air Matrix Tables A through C (addendum May 2017) which suggests that soil vapor impact does not extend to portions of the Site beyond the immediate vicinity of the Site Building.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the Site, ICs and 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 a component of the SMP and is subject to revision by the NYSDEC project manager. This IC/EC Plan provides:

1. A description of all ICs/ECs applicable to the Site;
2. The basic implementation and intended role of each IC/EC;
3. A description of the key components of the ICs set forth in the Environmental Easement;
4. A description of the controls to be evaluated during each required inspection and periodic review;
5. A description of plans and procedures to be followed for implementation of ICs/ECs, such as the implementation of the EWP (as provided in Appendix 2) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and,

6. Any other provisions necessary to identify or establish methods for implementing the ICs/ECs required by the Site remedy, as determined by the NYSDEC project manager.

3.2 Institutional Controls

A series of ICs are required by the Decision Document to: (1) implement, maintain and monitor the ECs; (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 consistent with the Limits of Environmental Easement depicted within the June 17, 2019 Survey included in Appendix 4. The ICs are as follows:

1. The property may only be used for commercial and industrial use;
2. All ECs must be operated and maintained as specified in this SMP;
3. All ECs 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 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 this SMP;
6. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
7. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
9. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this 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 for any new occupied buildings developed in the area within the IC boundaries noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated;
12. Vegetable gardens and farming on the Site are prohibited; and,
13. An evaluation shall be performed to determine the need for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible.

3.3 Engineering Controls

3.3.1 Cover System

Exposure to remaining CVOC contamination in soil at the Site proximate Floor 1 and SB-40 is prevented by the concrete building slab located within the footprint of the IRM excavation. Figure 4 shows the location of the IRM excavation. In addition, a new epoxy floor was

installed within the north portion of the Central Warehouse and Utility Room which is the other part of the Site's cover system EC.

An EWP, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in an Appendix of the SMP. Figure 6 depicts the location of the cover system. The EWP provided in Appendix 2 outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of 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} and associated Community Air Monitoring Plan (CAMP) prepared for the Site and provided in Appendix 8. Any breach of the Site's cover system must be overseen by a Professional Engineer who is licensed and registered in New York State or a qualified person who directly reports to a PE who is licensed and registered in New York State.

3.3.2 Sub-Slab Depressurization System

An active SSDS was installed throughout the Site Building to prevent vapor intrusion into the structure, and is the other EC for this Site. Procedures for operating and maintaining the SSDS are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As-built drawings are included in Appendix 10 – Operations and Maintenance Manual.

3.3.3 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 6.4 of NYSDEC DER-10. Unless waived by the NYSDEC, confirmation samples of applicable environmental media are required before terminating any remedial actions at the Site. Confirmation samples require Category B deliverables and a Data Usability Summary Report (DUSR).

As discussed below, the NYSDEC may approve termination of a groundwater monitoring program. When a remedial party receives this approval, the remedial party must decommission all Site-related monitoring, injection and recovery wells as per the NYSDEC CP-43 policy.

The remedial party will also conduct any needed site restoration activities, such as asphalt patching and decommissioning treatment system equipment. In addition, the remedial party will conduct any necessary restoration of vegetation coverage, trees and wetlands, and will comply with NYSDEC and United States Army Corps of Engineers regulations and guidance. Also, the remedial party will ensure that no ongoing erosion is occurring on the Site.

3.3.3.1 Cover System

The cover system is a permanent control and the quality and integrity of this system, including the epoxy surface installed on the concrete floor to the north of the IRM excavation concrete floor patch, will be inspected at defined, regular intervals in accordance with this SMP in perpetuity.

3.3.3.2 Sub-Slab Depressurization System

The SSDS will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH project managers. If monitoring data indicates that the SSDS may no longer be required, a proposal to discontinue the operation and maintenance of the SSDS will be submitted by the remedial party to the NYSDEC and NYSDOH project managers.

3.3.3.3 Monitoring Wells Associated With In-Situ Remediation

Groundwater monitoring activities to assess the in-situ remediation by ABC+ injections will continue, as determined by the NYSDEC project manager in consultation with NYSDOH project manager, until residual groundwater concentrations are found to be consistently below ambient water quality standards or the Site SCGs, or have become asymptotic at an acceptable level to NYSDEC over an extended period. If monitoring data indicates that monitoring may no longer be required, a proposal to discontinue the remedy will be submitted by the remedial party to NYSDEC. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC project manager. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional injections, source removal, treatment and/or control measures will be evaluated.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC project manager. 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 7. This Monitoring and Sampling Plan describes the methods to be used for:

1. Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soil);
2. Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and,
3. Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment for commercial and industrial use of the Site;

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

1. Sampling locations, protocol and frequency;
2. Information on all designed monitoring systems;
3. Analytical sampling program requirements;
4. Inspection and maintenance requirements for monitoring wells;
5. Monitoring well decommissioning procedures; and,
6. Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site – Wide Inspection

Site-wide inspections will be performed annually, i.e., at a minimum of once per year. These inspections must be conducted when the ground surface is visible (i.e. no snow cover). Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or duration of the inspections will require approval from the NYSDEC project manager. 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 9 – Site Management Forms. The form will compile sufficient information to assess the following:

1. Compliance with all ICs, including site usage;
2. An evaluation of the condition and continued effectiveness of ECs;
3. General Site conditions at the time of the inspection;
4. The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and,
5. Confirmation that Site records are up to date.

Inspections of all remedial components installed at the Site will be conducted. 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:

1. Whether ECs continue to perform as designed;
2. If these controls continue to be protective of human health and the environment;
3. Compliance with requirements of this SMP and the Environmental Easement;
4. Achievement of remedial performance criteria; and,
5. If Site records are complete and up to date.

Reporting requirements are outlined in Section 7 of this SMP.

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 project manager must be given by noon of the following day. In addition, an inspection of the Site must be conducted within five days of the event to verify the continued effectiveness of the ICs/ECs implemented at the Site by a qualified environmental professional, as defined in 6 NYCCR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Written confirmation must be provided to the NYSDEC project manager within 7 days of the event that includes a summary of any actions taken, or to be taken, and the potential impact to the environment and the public. The remedial party will submit follow-up status reports to the NYSDEC within 45 days of the event on actions taken to respond to any emergency event requiring ongoing responsive action, describing and documenting any actions taken to restore the effectiveness of the ECs.

4.3 Treatment System Monitoring and Sampling

4.3.1 Sub-Slab Depressurization Monitoring

Monitoring and inspection of the SSDS will be performed on a routine basis, as identified in Table B Remedial System Performance Monitoring Requirements and Schedule (see below). The monitoring of remedial systems must be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager. A visual inspection of the complete system will be conducted during each monitoring event to confirm continued performance. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS components to be monitored include, but are not limited to, the components included in Table B below.

Table B – Remedial System Performance Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
SSDS Fans	Visual inspection	Factory setting	Annually
System Piping	Visual inspection	Not Applicable	Annually
Concrete Floor Condition over IRM Excavation	Visual inspection	Crack or penetrations	Annually
Epoxy Floor Condition	Visual inspection	Cracks, penetrations, wear, etc.	Annually

A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix 9 - 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; then prompt maintenance and repair, as per the Operation and Maintenance Plan, is required.

4.4 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from groundwater monitoring wells MW-12 and MW-15 on a routine basis; prior to any unoccupied space in the Site Building becoming occupied, indoor air quality in that space should be sampled, and prior to any new building on the site becoming occupied, soil vapor intrusion evaluation for the new building. Sampling locations, required analytical parameters, and schedule are provided in Table C – Remedial System Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

Table C – Post Remediation Sampling Requirements and Schedule

Sampling Location	Kind of Sample	Analytical Parameters		Schedule
		TCL VOCs (EPA Method 624)	VOCs (EPA Method TO-15)[1]	
MW-12	Groundwater	X		Annually
MW-15	Groundwater	X		Annually
Previously Unoccupied Space	Indoor Air		X	Prior to any unoccupied space becoming occupied
New Buildings	Soil Vapor Intrusion		X	Prior to any new building on the site becoming occupied

[1] VOC indoor air sampling and/or soil vapor intrusion sampling will be limited to CVOC analytes detailed within NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, and Soil Vapor/Indoor Air Matrix Tables Addendum dated May 2017, Table 3.1 (revised September 2013 and August 2015) air guidance values.

Detailed sample collection and analytical procedures and protocols are provided in Appendix 6 – Field Activities Plan and Appendix 7 – Quality Assurance Project Plan.

4.4.1 Groundwater Sampling

Groundwater monitoring will be performed annually to assess the performance of the remedy. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager. The groundwater monitoring wells to be sampled have been selected to monitor CVOC conditions in groundwater proximate to, and immediately downgradient of, the IRM Excavation, and within the zone of in-situ ABC+ treatment injections.

The monitoring wells to be sampled include: (i) sentinel well MW-15 to monitor downgradient CVOC migration (sentinel wells are uncontaminated wells located directly downgradient of contaminated wells and upgradient of sensitive receptors), and (ii) the CVOC impact well MW-12,. MW-15 was selected as the sentinel well because it is located immediately downgradient from MW-12, and between MW-12 and the west Site boundary. MW-12 is proximate to, and downgradient of, the former CVOC source area, and is the only groundwater monitoring well impacted with CVOCs

Table D summarizes the wells identification numbers, as well as the purpose, location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, these two on-site wells are sampled to evaluate the effectiveness of the remedial system. The remedial party will measure depth to the water table for each monitoring well before sampling.

Table D – Monitoring Well Construction Details

Monitoring Well ID	Well Location	Coordinates (longitude / latitude)	Well Diameter (inches)	Elevation (feet above mean sea level)			
				Casing	Surface	Screen Top	Bottom Screen
MW-12	Immediately down gradient of former CVOC source area		Two	777.31	777.51	771.81	761.81
MW-15	Sentinel		Two	780.07	777.43	752.57	742.57

Table E summarizes detection limits and minimum reporting limits to be achieved by the Environmental Laboratory Approval Program (ELAP) certified laboratory.

Table E – Groundwater Sampling Analytical Summary

	TCL VOCs (EPA Method 8260	
Monitoring Well ID	Method Detection Limit (MDL)	Reporting Limit (RL)
MW-12	2.0 ug/l	5.0 ug/l
MW-15	2.0 ug/l	5.0 ug/l

The MDLs and RLs must be achieved by the Environmental Laboratory Approved Program certified laboratory, or resampling will be required.

Monitoring well construction logs are included in Appendix 5 of this document. The locations of the groundwater monitoring wells and groundwater contours are depicted in Figure 3A through Figure 3C.

If biofouling or silt accumulation occurs in either or both of these monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced if an event renders the wells unusable. Repairs and/or replacement of monitoring wells will be performed based on assessments of structural integrity and overall performance.

The NYSDEC project manager will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC project manager. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC project manager.

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

Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

4.4.2 Indoor Air Sampling

Indoor air sampling will be performed prior to any unoccupied space in the Site Building becoming occupied in order to confirm the continued protectiveness of Site conditions post-remedy. The indoor air samples will be analyzed by EPA Method TO-15 and reporting will be limited to CVOC analytes detailed within NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, and Soil Vapor/Indoor Air Matrix Tables Addendum dated May 2017, Table 3.1 (revised September 2013 and August 2015) air guidance values. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

The location of the indoor air samples will be dependent on the location of the space within the Site Building to be occupied by the new occupant; however, when possible and appropriate, the indoor air sample locations should be consistent with indoor air sample locations previously collected from within the Site Building. Due to interfering conditions caused by the truck repair tenant located within the south portion of the Site Building, ventilation may be appropriate prior to sampling to minimize work-related contamination in the indoor air. If ventilation is deemed appropriate, it will be completed 24 hours or more prior to the scheduled sampling time. In addition, 24-hours prior to indoor air sampling, water will be released to interior floor drains and fixtures located within areas targeted for indoor air testing to confirm wet p-trap conditions.

This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC project manager.

Deliverables for the indoor air sampling program are specified in Section 7.0 – Reporting Requirements.

4.4.3 Soil Vapor Intrusion Sampling

Soil vapor intrusion sampling will be performed prior to any new building on the Site becoming occupied in order to confirm the continued protectiveness of Site conditions post-remedy. The soil vapor intrusion samples will be analyzed by EPA Method TO-15 and conform to NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, and Soil Vapor/Indoor Air Matrix Tables Addendum dated May 2017, Table 3.1 (revised September 2013 and August 2015).

Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC project manager.

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

4.4.4 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix 9 - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network. Additional detail regarding monitoring and

sampling protocols are provided in the site-specific Field Activities Plan provided as Appendix 6 of this document.

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 SSDS;
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSDS are operated and maintained.

Further detail regarding the Operation and Maintenance of the SSDS is provided in Appendix 10 - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be 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 Remedial System (or other Engineering Control) Performance Criteria

The SSDS performance criteria are specified in Table B (Section 3.3.1). The following sections provide a description of the operations and maintenance of the SSDS. Cut-sheets and as-built drawings for the SSDS are provided in Appendix 10 - Operations and Maintenance Manual.

5.2.1 System Start-Up and Testing

System start-up and monitoring will be conducted to verify the system is operating properly and consist of verification of fan function and monitoring vacuum at SSDS manometer monitoring locations. The fans restart automatically in the event of power loss. The system testing described above will be conducted if, in the course of the SSDS lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

5.2.2 Routine System Operation and Maintenance

The installed SSDS was constructed by Mitigation Tech and requires little to no maintenance. Inspection and certification of effectiveness should be conducted annually. Periodic monthly inspection of the SSDS system will be completed to confirm SSDS operation by the property owner, or an individual designated by the property owner, and recorded in a SSDS monthly inspection log.

5.2.3 Non-Routine Operation and Maintenance

In the event of a SSDS fan failure, the fan will be repaired or replaced in kind. If piping is damaged, it will be replaced or repaired. Table B provides a summary and schedule of routine monitoring. Maintenance will be conducted on an as-needed basis in the event of a fan or system failure.

5.2.4 System Monitoring Devices and Alarms

The SSDS has manometer monitoring locations installed throughout the system which are marked to indicate proper operational pressures . In the event that any of the manometers read insufficient pressure, applicable maintenance and repairs must be conducted, as specified in the Operation and Maintenance Plan, and the SSDS will be restarted. Operational problems 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 ECs to severe storms/weather events and associated flooding. The ECs are limited to an SSDS and cover system. The SSDS and cover system are marginally influenced by climate change. Based on the following conditions, there are no apparent vulnerabilities to the Site:

1. Flood Plain: The Site is not located within the 100-year flood plain.
2. Site Drainage and Storm Water Management: The Site drainage/storm water system management system is functioning properly.
3. Erosion: The Site consists of paved and vegetated surfaces to prevent erosion.
4. High Wind: There are no large trees in the area and the Site is not susceptible to damage from the wind itself or falling objects during periods of high wind.
5. Electricity: The Site and the SSDS receives electricity from the power grid. As such, there is limited susceptibility to power loss and/or dips/surges in voltage during severe weather events, including lightning strikes. The SSDS was designed to reset once powered is restored in the event of a power outage.
6. Spill/Contaminant Release: There is no remedial systems or outdoor hazardous materials storage facilities that could be susceptible to a spill or other contaminant release due to storm-related damage caused by flooding, erosion, high winds and loss of power.

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 PRR. None of the EC's involve waste generation and the only EC requiring energy on a long-term basis is the SSDS.

1. Waste Generation: None of the ECs involve waste generation.
2. Energy usage: The only EC requiring energy on a long-term basis is the SSDS. The SSDS will be operated in accordance with the manufacturer's recommendations.
3. Emissions: Transportation to and from the Site for inspections and/or sampling will be coordinated to minimize fuel usage.
4. Water usage: The Site's water supply (sourced from Erie County) will be utilized for any water needs.
5. Land and/or ecosystems: The Site cover is inside the Site building, so land and ecosystem restorations were not applicable.

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 NYSDEC 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 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.

6.2.3 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site, 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 formal RSO study will be conducted any time that the NYSDEC project manager 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:

1. The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;

2. The management and operation of the remedial system is exceeding the estimated costs;
3. The remedial system is not performing as expected or as designed;
4. Previously unidentified source material may be suspected;
5. Plume shift has potentially occurred;
6. Site conditions change due to development, change of use, change in groundwater use, etc.;
7. There is an anticipated transfer of the site management to another remedial party or agency; and
8. 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 focus 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 9. These forms are subject to NYSDEC revision. All site management inspection, maintenance, and monitoring events will be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State.

All applicable inspection forms and other records, including media sampling data and 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 F and summarized in the Periodic Review Report.

Table F: Schedule of Annual Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Site Inspection	Annually
Groundwater Monitoring	Annually

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

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

1. Date of event or reporting period;
2. Name, company, and position of person(s) conducting monitoring/inspection activities;

3. Description of the activities performed;
4. 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);
5. Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
6. Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation);
7. Sampling results in comparison to appropriate standards/criteria;
8. A figure illustrating sample type and sampling locations;
9. 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);
10. Any observations, conclusions, or recommendations; and,
11. A determination as to whether contaminant conditions have changed since the last reporting event.

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

1. Date of event;
2. Name, company, and position of person(s) conducting maintenance activities;
3. Description of maintenance activities performed;
4. Any modifications to the system;
5. 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,
6. Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

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

1. Date of event;
2. Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
3. Description of non-routine activities performed;
4. 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,
5. 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 project manager. Currently, 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 PRR will be submitted to the NYSDEC project manager beginning sixteen (16) months after the COC or equivalent document is issued. After submittal of the initial PRR, the next PRR shall be submitted annually to the NYSDEC project manager or at another frequency as may be required by the NYSDEC project manager. In the event that the Site is subdivided into separate parcels with different ownership, a single PRR will be prepared that addresses the Site described in Appendix 4 - 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. Media sampling results and site inspection results will also be incorporated into the PRR. The PRR report will include:

1. Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.
2. Results of the required annual Site inspections, fire inspections and severe condition inspections, if applicable.
3. Description of any change of use, import of materials, or excavation that occurred during the certifying period.
4. 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.
5. Identification of any wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
6. A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
7. Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These tables and figures will include a presentation of past data as part of an evaluation of contaminant concentration trends, including but not limited to:
    a. Trend monitoring graphs that present groundwater contaminant levels from before the start of the remedy implementation to the most current sampling data;
    b. Trend monitoring graphs depicting system influent analytical data on a per event and cumulative basis;
    c. O&M data summary tables;
    d. A current plume map for sites with remaining groundwater contamination; and,
    e. A groundwater elevation contour map for each gauging event.
8. 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 EQuISTM database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
9. A Site evaluation, which includes the following:
    a. The compliance of the remedy with the requirements of the site-specific Decision Document;

b. The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
c. 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;
d. Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
e. An evaluation of trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the RAWP, ROD or Decision Document; and,
f. The overall performance and effectiveness of the remedy.

10. Every five years, the PRR will certify that the assumptions made in the qualitative exposure assessment remain valid regarding groundwater contamination.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional as defined in 6 NYCRR Part 375 or Professional Engineer licensed to practice and registered in New York State 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:

1. *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;*
2. *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;*
3. *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*
4. *Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;*
5. *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;*
6. *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;*
7. *Use of the Site is compliant with the environmental easement;*
8. *The engineering control systems are performing as designed and are effective;*
9. *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 generally accepted engineering practices; and,*
10. *The information presented in this report is accurate and complete.*

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]: [I have been authorized and designated by all Site owners/remedial parties to sign this certification] for the Site."

No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid.

The signed certification will be included in the Periodic Review Report. The Periodic Review Report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager. The Periodic Review Report may also need to be submitted in hard-copy format if requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC or EC, or failure to conduct site management activities, a Corrective Measures Work Plan will be submitted to the NYSDEC project manager 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 project manager.

7.4 Remedial System Optimization Report

If an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC project manager for approval. A general outline for the RSO report is provided in Appendix 11. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual Site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager.

8.0 REFERENCES

LaBella Associates, D.P.C., 2025. Interim Remedial Measures, Remedial Investigation & Alternatives Analysis Report.

6 NYCRR 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).

NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” dated October 2006, and Soil Vapor/Indoor Air Matrix Tables Addendum dated May 2017, Table 3.1 (revised September 2013 and August 2015) air guidance values.

TABLES

Table 1
11075 Walden Avenue
Alden, New York
Remaining Soil Sample Exceedances
(Detected Analytes Only)

Sample ID	SB-40	Floor 1	Commercial Use SCOs
Depth (ft bgs)	15-16	10	
Sample Date	7/8/2019	6/5/2019	
Volatile Organic Compounds (µg/kg)			
Acetone	<	<	500,000
Benzene	<	<	44,000
Chloroform	<	<	350,000
cis-1,2-Dichloroethene	<	<	500,000
trans-1,2-Dichloroethene	<	<	500,000
Tetrachloroethene	310,000	170,000	150,000
Toluene	<	<	500,000
Trichloroethene	1,600	250 J	200,000

Commercial Use SCOs = New York State Department of Environmental Conservation (NYSDEC) Part 375 Commercial Use Soil Cleanup Objectives (SCOs), Table 375-6.8(b) (December, 2006)

< = Not detected

NL = Not listed

NA = Not analyzed

N/A = Not applicable

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

ft bgs = Feet below ground surface

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

* 400/1,500= Hexavalent chromium/Trivalent chromium

Table 2
11075 Walden Avenue
Alden, New York
Groundwater Samples Exhbiting Exceedances
(Detected Analytes Only)

Sample ID	MW-12	MW-12	MW-12	MW-12	MW-15	NYSDEC TOGS
Sample Date	3/1/2019	7/9/2019	5/4/2020	8/4/2020	8/4/2020	
Volatile Organic Compounds (µg/L)						
Acetone	58	<	<	63	43	50
1,1-Dichloroethene	<	<	<	2	<	5
Benzene	<	<	<	<	3.2	1
Carbon Disulfide	<	<	<	<	<	NL
Cyclohexane	<	<	<	<	<	NL
cis-1,2-Dichloroethene	<	470	930	420	<	5
2-Hexanone	<	<	<	<	<	50
Methyl Acetate	<	<	<	<	1.2 J	NL
Methylcyclohexane	<	<	<	<	<	NL
Methyl ethyl ketone (2-Butanone)	<	<	<	100	170	50
Tetrachloroethene	1,000	2,500	1,200	370	<	5
Toluene	<	<	<	<	<	5
Trans1-2,-Dichloroethene	<	<	7.3 J	<	<	5
Trichloroethene	19	950	480	52	<	5
Vinyl Chloride	2.3 J	12 J	25	22	<	2
Semi-Volatile Organic Compounds (µg/L)						
Acetophenone	2.2 J	NA	NA	NA	NA	NL
Anthracene	0.02 J	NA	NA	NA	NA	50
Benzo(b)fluoranthene	<	NA	NA	NA	NA	0.002
Benzo(k)fluoranthene	0.01 J	NA	NA	NA	NA	0.002
Benzo(g,h,i)perylene	<	NA	NA	NA	NA	NL
Benzo(a)pyrene	<	NA	NA	NA	NA	NL
Benzaldehyde	1.4 J	NA	NA	NA	NA	NL
Di-n-butylphthalate	<	NA	NA	NA	NA	50
Bis(2-ethylhexyl)phthalate	<	NA	NA	NA	NA	5
Fluoranthene	<	NA	NA	NA	NA	50
Fluorene	0.3	NA	NA	NA	NA	50
Indeno(1,2,3-cd)pyrene	<	NA	NA	NA	NA	0.002
3-Methylphenol/4-Methylphenol	0.95 J	NA	NA	NA	NA	NL
2-Methylnaphthalene	0.51	NA	NA	NA	NA	NL
Naphthalene	0.19	NA	NA	NA	NA	10
Phenanthrene	0.74	NA	NA	NA	NA	50
Phenol	3 J	NA	NA	NA	NA	1
Pyrene	<	NA	NA	NA	NA	50

NYSDEC TOGS = New York State Department of Environmental Conservation (NYSDEC), Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

< = Not detected

NL = Not listed

NA = Not analyzed

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

µg/L = Micrograms per liter

Concentrations in gray exceed NYSDEC TOGS

Table 3
11075 Walden Avenue
Alden, New York
Vapor Intrusion Analytical Results
(Detected Analytes Only)

Sample ID	SS1	ID1	ID1-A	SS2	ID2	ID2-A	ID2-B	SS3	ID3	ID3-A	ID3-B	SS4	ID4	ID4-A	ID4B	SS5	SS5-C	ID5	ID5-A	ID5-C	ID6-C	0D1	0D2	0D3	0D4	NYSDOH Table 3.1 Air Guidance Value [1]
Sampling Date	8/3/2017	8/3/2017	9/14/2020	8/3/2017	8/3/2017	9/14/2020	1/12/2022	10/4/2017	10/4/2017	9/14/2020	1/12/2022	10/4/2017	10/4/2017	9/14/2020	1/12/2022	10/4/2017	3/26/2023	10/4/2017	9/14/2020	3/26/2023	3/26/2023	8/3/2017	10/4/2017	9/14/2020	1/12/2022	
Location	Sub-Slab	Indoor Air	Indoor Air	Sub-Slab	Indoor Air	Indoor Air	Indoor Air	Sub-Slab	Indoor Air	Indoor Air	Indoor Air	Sub-Slab	Indoor Air	Indoor Air	Indoor Air	Sub-Slab	Sub-Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air	
Volatile Organic Compounds (µg/m3)																										
Dichlorodifluoromethane	<	2.4 J	2.27	<	2.2 J	2.26	NA	2.8 J	2.4 J	2.3	NA	2.5 J	2.5	2.25	NA	<	2.13	2.4 J	2.37	2.67	2.64	2.1 J	2.3 J	2.11	NA	NL
Ethanol	<	<	10.7	<	<	10.5	NA	<	<	26.2	NA	<	<	18	NA	<	47.9	<	13.6	19.6	21.5	<	<	<	NA	NL
Tetrahydrofuran	<	<	<	<	<	<	NA	<	<	<	NA	<	<	1.52	NA	<	2.17	<	2.42	<	<	<	<	<	NA	NL
Freon 22	<	9.9	<	<	6.7	<	NA	3.7	2.9	<	NA	3.7	3.2	<	NA	<	<	7.9	<	<	<	1 J	0.97 J	<	NA	NL
Chloromethane	<	1.1	1.09	<	1 J	1.08	NA	1.1 J	0.92 J	1.11	NA	0.97 J	1 J	1.32	NA	<	1.07	0.99 J	1.14	1.10	1.07	1.2	1.1	1.05	NA	NL
n-Butane	<	49	<	320 J	36	<	NA	110	32	<	NA	100	35	<	NA	3,400	<	63	<	<	<	1.1 J	1.4	<	NA	NL
Trichlorofluoromethane	<	1.3	1.46	<	1.2	1.43	NA	1.5 J	1.4	1.46	NA	1.3 J	1.4	<	NA	<	1.14	1.3	1.52	1.38	1.40	1 J	1.3	1.37	NA	NL
Freon TF	<	0.39 J	<	<	0.4 J	<	NA	0.65 J	0.58 J	<	NA	0.58 J	0.6 J	<	NA	<	<	0.58 J	<	<	<	0.36 J	0.56 J	<	NA	NL
Acetone	<	15	<	<	12	<	NA	100	9.78 J	<	NA	87	18	29	NA	170 J	18.4	10 J	<	15.2	15.4	12	26	4.35	NA	NL
Isopropyl alcohol	<	0.94 J	<	<	0.77 J	<	NA	7.8 J	1.2 J	<	NA	2.4 J	0.76 J	<	NA	<	5.85	0.85 J	<	1.60	1.77	0.64 J	0.94 J	1.88	NA	NL
Carbon disulfide	< *	0.24 J	<	180 J	0.22 J	<	NA	3 J	0.41 J	<	NA	3.5	0.4 J	1.02	NA	19 J	<	0.089 J	<	<	<	<	0.11 J	<	NA	NL
Methylene chloride	<	0.47 J	<	<	0.36 J	<	NA	0.55 J	0.37 J	<	NA	0.57 J	0.31 J	<	NA	<	16.2	0.61 J	<	2.40	2.25	0.36 J	0.34 J	<	NA	60
n-Hexane	<	1.9	1.36	<	1.5	1.56	NA	37	1.7	2.99	NA	38	1.8	2.65	NA	1,900	4.37	3.4	2.77	4.02	3.39	<	<	<	NA	NL
Methyl Ethyl Ketone (2-Butanone)	<	1.9	<	<	1.1 J	<	NA	17	1.4 J	<	NA	18	3.5	2.04	NA	23 J	3.78	1.5	<	3.60	4.07	1.8	5.7	<	NA	NL
cis-1,2-Dichloroethene	91,000	2.2	<	6,700	1.2	<	NA	4.2	5.6	<	NA	3.5	5.6	<	NA	<	<	3.6	<	<	0.095	<	<	<	NA	NL
1,2-Dichloroethene, Total	91,000	2.2	<	6,700	1.2 J	<	NA	4.4	5.6	<	NA	3.4	5.6	<	NA	<	<	3.6	<	<	<	<	<	<	NA	NL
Chloroform	<	<	<	<	<	<	NA	0.52 J	<	<	NA	0.8 J	<	<	NA	<	<	<	<	<	<	<	<	<	NA	NL
1,1,1-Trichloroethane	<	<	<	<	<	<	NA	0.43 J	<	<	NA	0.48 J	0.14 J	<	NA	<	<	<	<	<	<	<	<	<	NA	NL
Cyclohexane	<	0.22 J	<	<	0.17 J	<	NA	11	0.17 J	<	NA	16	0.2 J	<	NA	2,200	2.21	0.44 J	<	1.56	1.40	<	<	<	NA	NL
Carbon tetrachloride	<	0.39 J	0.447	<	0.39 J	0.396	NA	0.45 J	0.41 J	0.447	NA	0.34 J	0.45 J	0.434	NA	<	<	0.4 J	0.491	0.491	0.497	0.39 J	0.4 J	0.415	NA	NL
2,2,4-Trimethylpentane	<	0.24 J	<	<	<	<	NA	1.2 J	0.24 J	<	NA	1.5 J	0.22 J	<	NA	23 J	1.55	0.33 J	<	1.86	1.72	<	<	<	NA	NL
Benzene	<	0.32 J	<	<	0.26 J	<	NA	7.2	0.31 J	<	NA	7.5	0.34 J	<	NA	71	1.65	0.35 J	<	1.76	1.69	0.23 J	0.28 J	<	NA	NL
n-Heptane	<	0.63 J	<	<	0.48 J	<	NA	29	0.53 J	1.05	NA	28	0.58 J	0.955	NA	1,500	3.78	1	1.03	3.64	3.22	<	<	<	NA	NL
Trichloroethene	13,000	3.5	1.84	5,600	3.1	3.27	<	3.2	3.2	2.56	<	3.3	3.5	2.81	<	4.5 J	<	2.4	0.849	2.00	0.489	<	<	<	<	2
Methyl isobutyl ketone	<	<	<	<	3.6	<	NA	7.3	<	<	NA	7.9	0.59 J	<	NA	<	5.94	<	<	4.92	3.85	<	0.32 J	<	NA	NL
Toluene	<	0.55 J	<	620	0.55 J	<	NA	17	1.1	<	NA	23	1.3	<	NA	310	12.3	0.95	2.6	12.8	11.3	0.51 J	0.54 J	<	NA	NL
Tetrachloroethene	480,000	19	0.19	52,000	12	0.19	NA	72	22	0.217	NA	30	25	0.217	NA	54 J	152	15	0.251	132	94.9	0.14 J	0.11 J	<	NA	30
Methyl Butyl Ketone (2-Hexanone)	<	0.48 J	<	<	<	<	NA	5.3	<	<	NA	5.2	0.64 J	<	NA	<	<	<	<	<	<	<	1.3 J	<	NA	NL
Ethylbenzene	<	<	<	210 J	<	<	NA	2.1	0.19 J	<	NA	2.6	0.32 J	<	NA	71	3.71	0.19 J	<	3.07	2.72	0.15 J	<	<	NA	NL
m,p-Xylene	<	0.4 J	<	520 J	0.41 J	<	NA	11	0.67 J	<	NA	10	1.4 J	<	NA	340	12.6	0.66 J	<	11.6	10.0	0.49 J	0.41 J	<	NA	NL
o- Xylene	<	0.19 J	<	220 J	0.19 J	<	NA	3.6	0.3 J	<	NA	3.5	0.59 J	<	NA	100	5.26	0.29 J	<	4.29	3.75	0.19 J	<	<	NA	NL
Xylene (total)	<	0.59 J	<	740 J	0.6 J	<	NA	15	0.96 J	<	NA	13	2 J	<	NA	440	17.9	0.94 J	<	<	<	0.66 J	0.4 J	<	NA	NL
Styrene	<	<	<	<	<	<	NA	0.72 J	<	<	NA	0.68 J	<	<	NA	<	<	<	<	<	<	0.18 J	<	<	NA	NL
Cumene	<	<	<	<	<	<	NA	0.83 J	<	<	NA	1 J	<	<	NA	20 J	<	<	<	<	<	<	<	<	NA	NL
n-Propylbenzene	<	<	<	<	<	<	NA	1.1 J	<	<	NA	0.89 J	<	<	NA	16 J	<	<	<	<	<	<	<	<	NA	NL
4-Ethyltoluene	<	<	<	<	<	<	NA	1.5 J	<	<	NA	1.3 J	0.31 J	<	NA	9.1 J	1.88	<	<	1.52	1.34	<	<	<	NA	NL
1,3,5-Trimethylbenzene	<	<	<	<	<	<	NA	1.7 J	<	<	NA	1.3 J	0.26 J	<	NA	20 J	2.59	0.2 J	<	1.90	1.47	<	<	<	NA	NL
2-Chlorotoluene	<	<	<	<	<	<	NA	<	<	<	NA	<	0.39 J	<	NA	<	<	<	<	<	<	<	<	<	NA	NL
1,2,4-Trimethylbenzene	<	0.46 J	<	<	<	<	NA	3.8	0.35 J	<	NA	3.7	1.2	<	NA	18 J	10.2	0.6 J.	<	6.78	5.56	<	<	<	NA	NL
4-Isopropyltoluene	<	<	<	<	<	<	NA	<	<	<	NA	<	0.39 J	<	NA	<	<	<	<	<	<	<	<	<	NA	NL
1,4-Dichlorobenzene	<	1.5	<	<	0.71 J	<	NA	<	0.57 J	<	NA	<	0.52 J	<	NA	<	<	<	<	<	<	<	<	<	NA	NL
Naphthalene	<	<	<	<	<	<	NA	1.1	<	<	NA	<	<	<	NA	<	<	<	<	<	<	<	<	<	NA	NL

Analytical method for air samples = United States Environmental Protection Agency (USEPA) Method TO-15

(1) New York State Department of Health (NYSDOH), Guidance for Evlauating Soil Vapor Intrusion in the State of New York, October 2006 and subsequent updates Table 3.1

< = Analyte detected at concentration below laboratory method detection limit

ug/m3 = Micrograms per cubic meter

NL = Not listed

NA = Not Analyzed

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

Shaded = Analyte detected within indoor air sample at a concentration above NYSDOH Table 3.1 Value

FIGURES

Path: J:\Walden Realty\2180605 - 11075 Walden Ave BCP\GIS\Maps\MXD\IRMWP\2020_03\1_Site_Location.mxd

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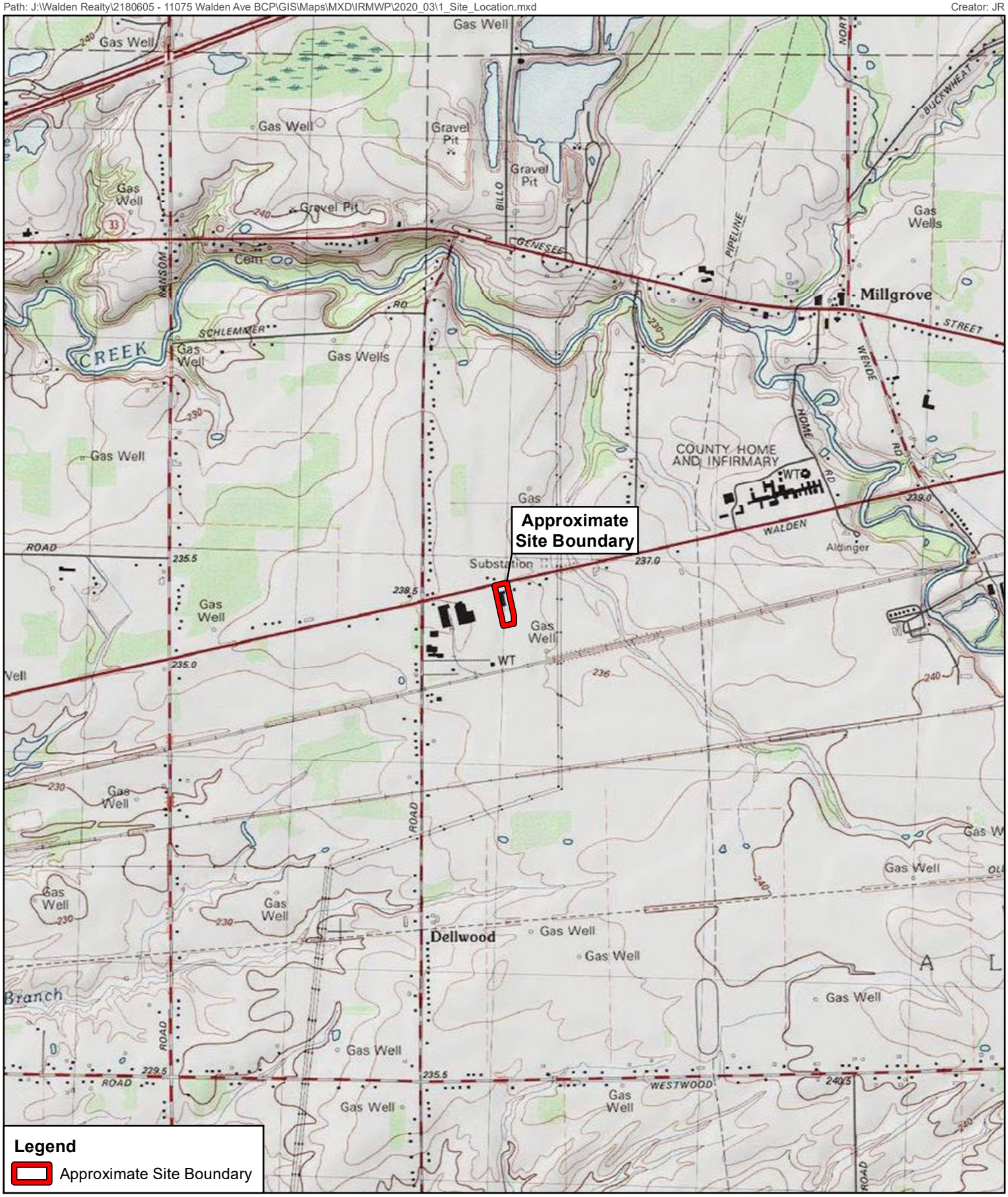


PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:
2180605 **Figure 1** 3/27/2020	Site Location Map	11075 Walden Avenue Alden, New York

N

0 1,000 2,000 Feet

LaBella
Powered by partnership.

Data Source: LaBella 2020; National Geographic Society, i-cubed 2013.

Path: J:\Walden Realty\2180605 - 11075 Walden Ave BCP\GIS\Maps\MXD\IRMWP\2020_03\2_Site_Base_Map.mxd

Creator: JR

PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:
2180605 **Figure 2** 10/23/2023	Site Base Map	11075 Walden Avenue Alden, New York

N

0 50 100 Feet

LaBella
Powered by partnership.

Data Source: Erie County 2019; LaBella 2020; Pictometry 2017.

PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:
2180605 **Figure 3A** 11/20/2023	Groundwater Contour Map (February 28, 2019 Sampling)	11075 Walden Avenue Alden, New York

N

0 40 80 Feet

LaBella
Powered by partnership.

Data Source: LaBella 2019, 2020; Pictometry 2017.

Path: J:\Walden Realty\2180605 - 11075 Walden Ave BCP\GIS\Maps\MXD\IRM_and_RI_Combined\2023_11_NewGWMaps\6B_Groundwater_Contour_Map_20190228_Samples.mxd Creator: EG

PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:
2180605 **Figure 3B** 11/20/2023	Groundwater Contour Map (May 04, 2020 Sampling)	11075 Walden Avenue Alden, New York

N

0 40 80 Feet

LaBella
Powered by partnership.

Data Source: LaBella 2019, 2020; Pictometry 2017.

PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:
2180605 **Figure 3C** 11/27/2023	Groundwater Contour Map (August 4, 2020 Sampling)	11075 Walden Avenue Alden, New York

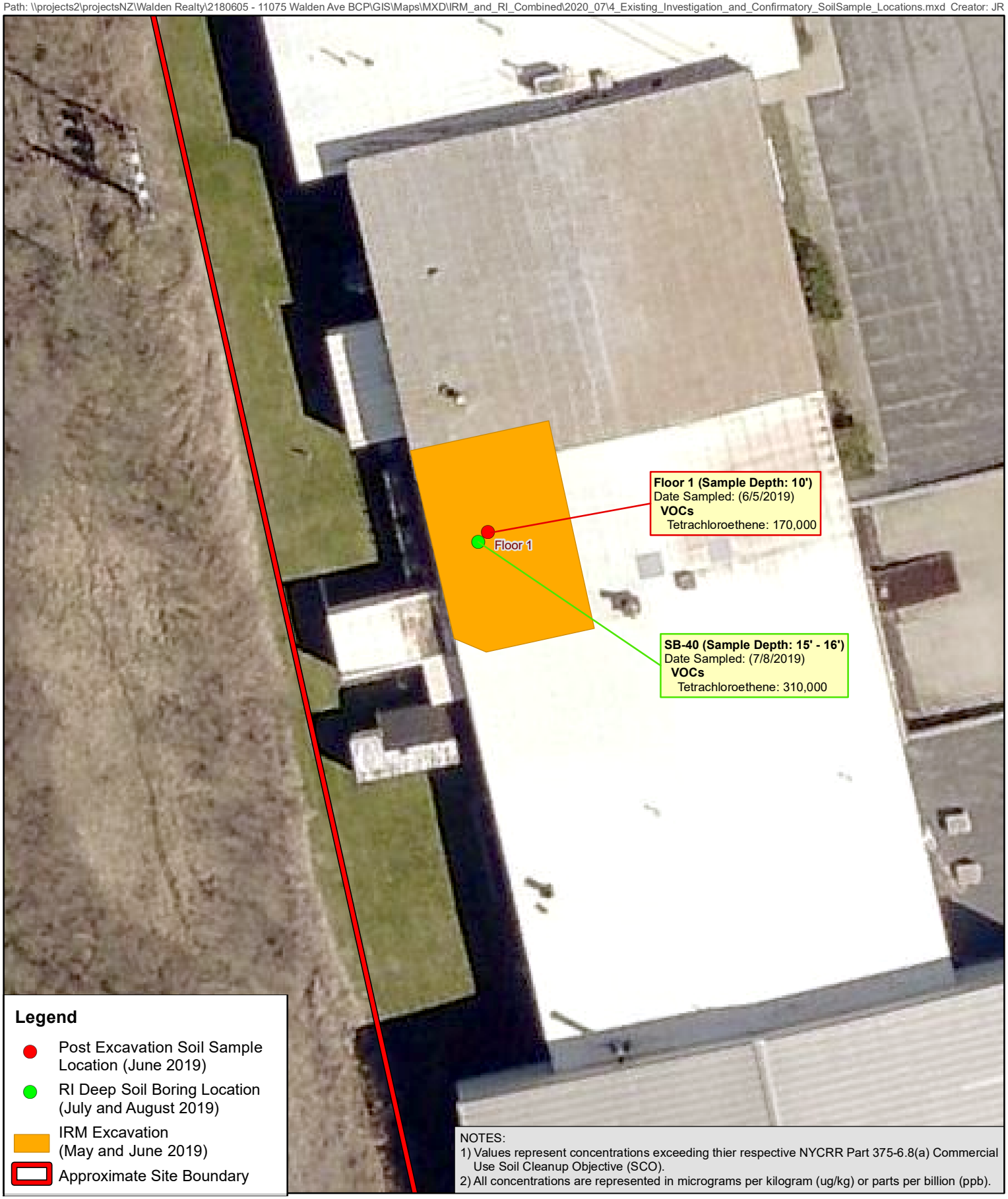
N

0 40 80 Feet

LaBella
Powered by partnership.

Data Source: LaBella 2019, 2020; Pictometry 2017.

Path: \\projects2\projectsNZ\Walden Realty\2180605 - 11075 Walden Ave BCP\GIS\Maps\MXD\IRM_and_RI_Combined\2020_07\4_Existing_Investigation_and_Confirmatory_SoilSample_Locations.mxd Creator: JR



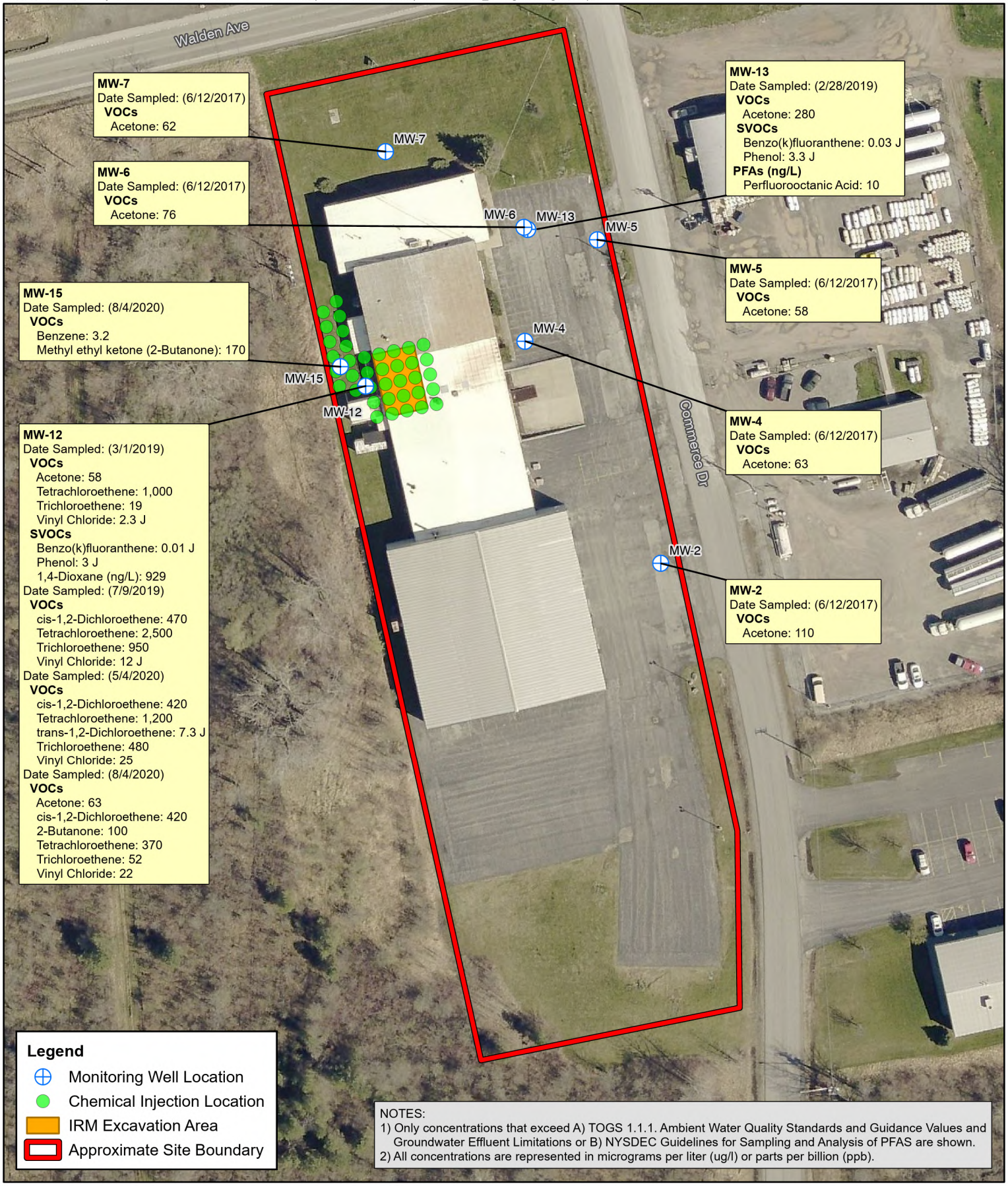
Legend

- Post Excavation Soil Sample Location (June 2019)
- RI Deep Soil Boring Location (July and August 2019)
- IRM Excavation (May and June 2019)
- Approximate Site Boundary

NOTES:
1) Values represent concentrations exceeding thier respective NYCRR Part 375-6.8(a) Commercial Use Soil Cleanup Objective (SCO).
2) All concentrations are represented in micrograms per kilogram (ug/kg) or parts per billion (ppb).

PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:	
2180605 **Figure 4** 3/27/2024	IRM Excavation and Soil Exceedance Map	11075 Walden Avenue Alden, New York	N 0 10 20 Feet LaBella Powered by partnership.

Data Source: LaBella 2017 - 2020; Pictometry 2017.



PROJECT # / DRAWING # / DATE:
2180605
Figure 5
4/22/2024

DRAWING NAME:
Groundwater Monitoring Wells & In-Situ Treatment Locations

PROJECT:
11075 Walden Avenue
Alden, New York

N
0 40 80
Feet

LaBella
Powered by partnership.

Data Source: LaBella 2019-2024; Pictometry, 2017.

Path: \\projects2\projectsNZ\Walden Realty\2180605 - 11075 Walden Ave BCP\GIS\Maps\MXD\IRM_and_RI_Combined\2025_06\6_Chemical_Injection_and_MW_Locations\6_Chemical_Injection_and_MW_Locations.aprx

Creator: JR

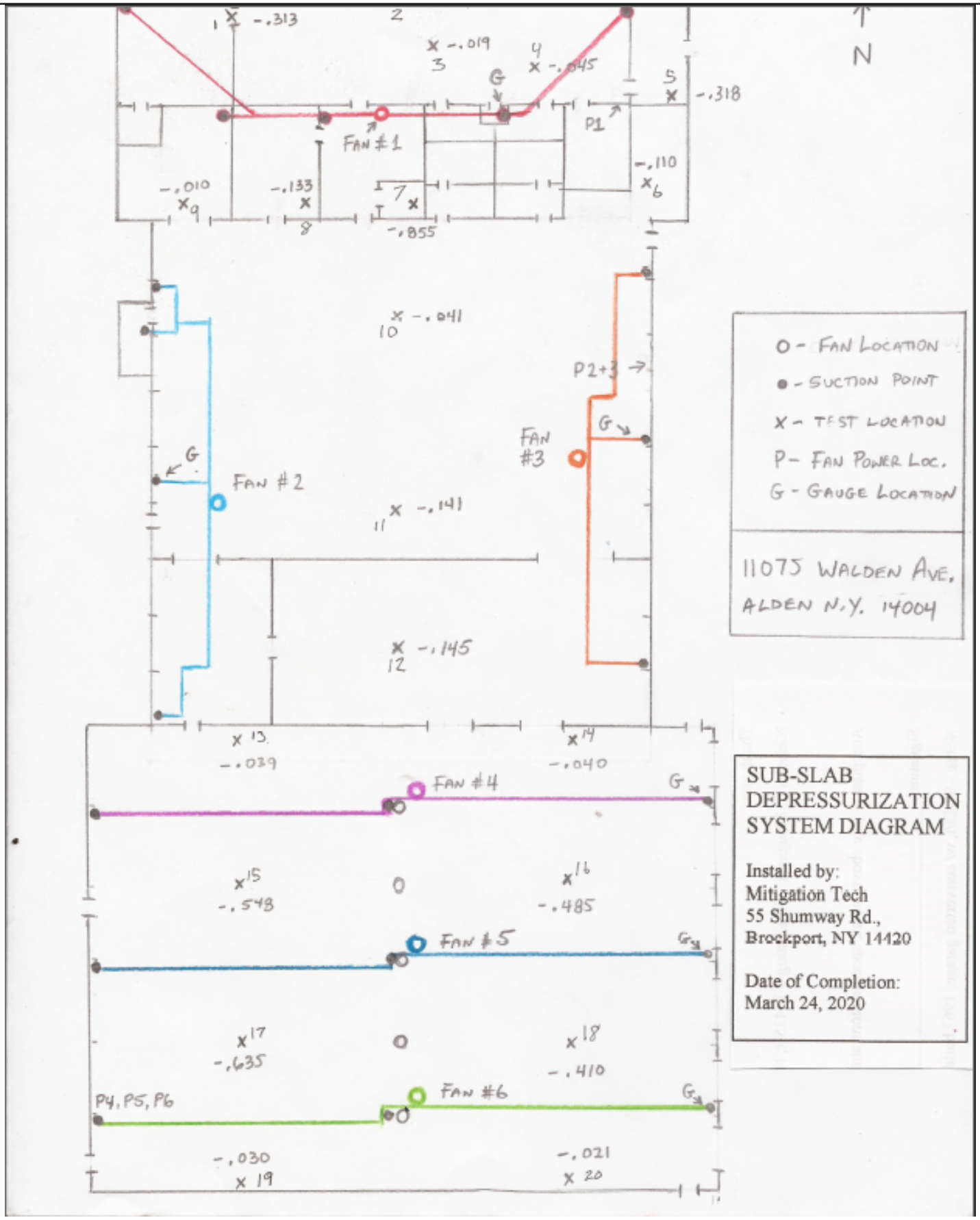
PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:
2180605 **Figure 6** 6/20/2025	Cover System	11075 Walden Avenue Alden, New York

N

0 40 80 Feet

LaBella
Powered by partnership.

Data Source: LaBella 2020; Pictometry 2017.



PROJECT # / DRAWING # / DATE:	DRAWING NAME:	PROJECT:	
2180605 **Figure 7** 10/23/2023	SSD System Location	11075 Walden Avenue Alden, New York	N Not to Scale LaBella Powered by partnership.

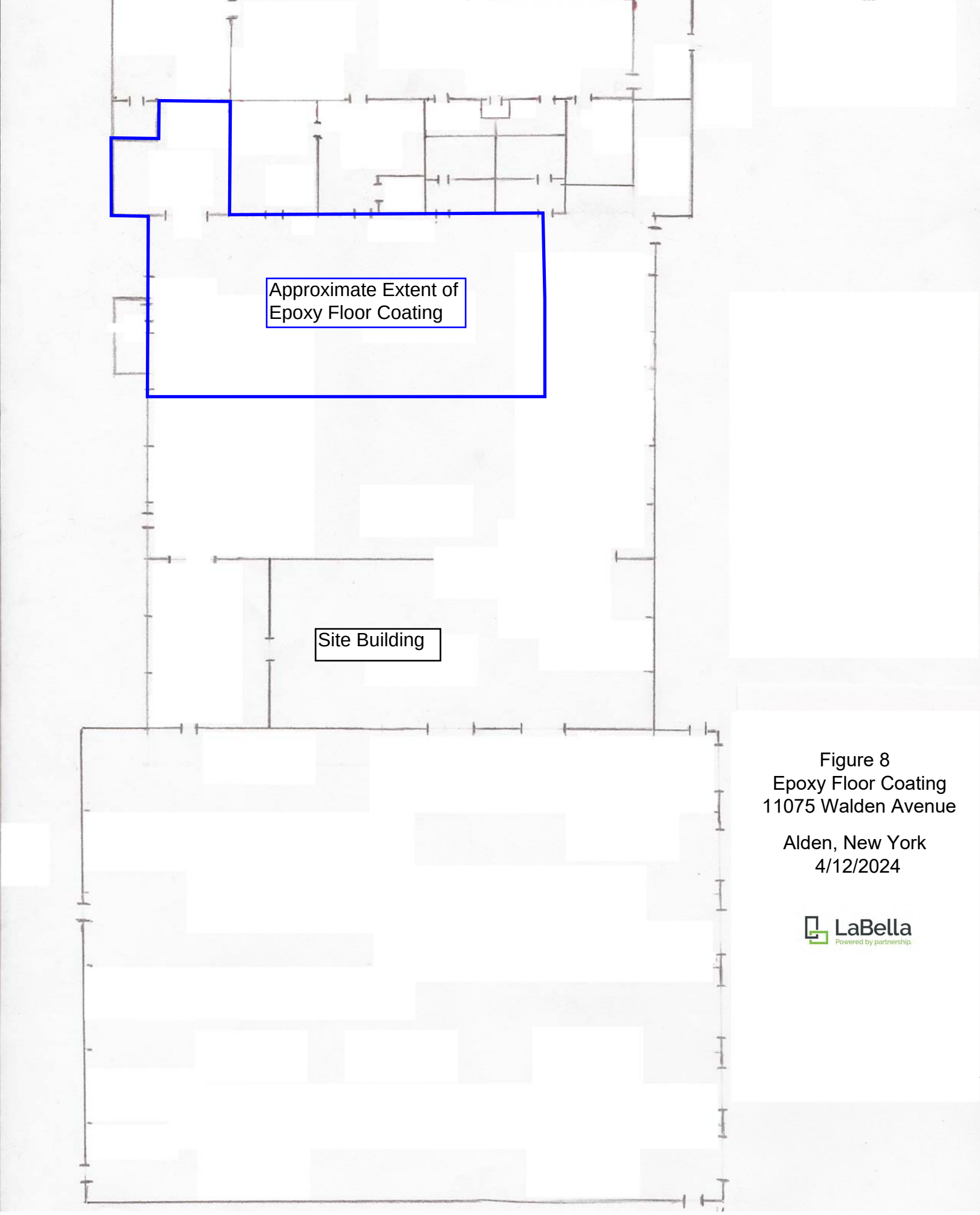


Figure 8
Epoxy Floor Coating
11075 Walden Avenue

Alden, New York
4/12/2024

LaBella
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APPENDIX 1 – LIST OF SITE CONTACTS

Name	Phone/Email Address
Mr. Jim Doro (Site Owner)	716-684-6600 jim.doro@gmail.com
Adam Zebrowski (Env. Consultant)	716-840-2548 azebrowski@labellapc.com
Mr. Matthew King (NYSDEC PM)	716-851-7000 matthew.king@dec.ny.gov
Ms. Andrea Caprio (NYSDEC DER Manager)	716-851-7000 andrea.caprio@dec.ny.gov
Mr. Stan Radon (NYSDEC Supervisor)	716-851-7000 stanley.radon@dec.ny.gov
Ms. Harolyn Hood (NYSDOH PM)	518-402-7860 harolyn.hood@health.ny.gov
Thomas Walsh (Remedial Party's Attorney)	585-295-4414 twalsh@barclaydamon.com

APPENDIX 2 – EXCAVATION WORK PLAN (EWP)

2-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination or breach or alter the site's cover system, the site owner or their representative will notify the NYSDEC contacts listed in the table below. Table A 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 1.

Table A: Notifications*

Mr. Matthew King	716-851-7000 matthew.king@dec.ny.gov
Ms. Andrea Caprio	716-851-7000 andrea.caprio@dec.ny.gov
Mr. Stan Radon	716-851-7000 stanley.radon@dec.ny.gov

* 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 excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated, any modifications of truck routes, 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, and submittals (e.g., reports) to the NYSDEC documenting the completed intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP, 29 CFR 1910.120 and 29 CFR 1926 Subpart P;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix 8 of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with the required request to import form and all supporting documentation including, but not limited to, chemical testing results.

The NYSDEC project manager will review the notification and may impose additional requirements for the excavation that are not listed in this EWP. The alteration, restoration and modification of engineering controls must conform with Article 145 Section 7209 of the Education Law regarding the application professional seals and alterations.

2-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed during all excavations into known or potentially contaminated material (remaining contamination) or a breach of the cover system. A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will perform the screening. 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 as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section 2-4 through 2-7 of this Appendix.

2-3 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.

2-4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State 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. A site

utility stakeout will be completed for all utilities prior to any ground intrusive activities at 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 all other applicable transportation requirements). Trucks transporting contaminated soil must have either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides.

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. 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. Material accumulated from the street cleaning and egress cleaning activities will be disposed off-site at a permitted landfill facility in accordance with all applicable local, State, and Federal regulations.

2-5 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 either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides. 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 are as follows: Commerce Drive north to Walden Avenue then west to the Interstate-90. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport;

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

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

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

2-6 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 off-site in a permitted facility in accordance with all local, State 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 project

manager. Unregulated off-site management of materials from this site will not occur without formal NYSDEC project manager 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, (e.g. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C&D debris recovery facility). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include, but will not be limited to: 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 consistent with 6 NYCRR Parts 360, 361, 362, 363, 364 and 365. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 360-15 registered or permitted facility).

2-7 MATERIALS REUSE ON-SITE

The qualified environmental professional, as defined in 6 NYCRR Part 375, will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material (i.e. contaminated) 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 the cover system or within landscaping berms. Contaminated on-site material may only be used beneath the site cover as backfill for subsurface utility lines with prior approval from the DEC project manager.

Proposed materials for reuse on-site must be sampled for full suite analytical parameters including per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. The sampling frequency will be in accordance with DER-10 Table 5.4(e)10 unless prior approval is obtained from the NYSDEC project manager for modification of the sampling frequency. The analytical results of soil/fill material testing must meet the site use criteria

presented in NYSDEC DER-10 Appendix 5 – Allowable Constituent Levels for Imported Fill or Soil for all constituents listed, and the NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances November 2022 guidance values. Approvals for modifications to the analytical parameters must be obtained from the NYSDEC project manager prior to the sampling event.

Soil/fill material for reuse on-site will be segregated and staged as described in Sections X-2 and X-3 of this EWP. The anticipated size and location of stockpiles will be provided in the 15-day notification to the NYSDEC project manager. Stockpile locations will be based on the location of site excavation activities and proximity to nearby site features. Material reuse on-site will comply with requirements of NYSDEC DER-10 Section 5.4(e)4. Any modifications to the requirements of DER-10 Section 5.4(e)4 must be approved by the NYSDEC project manager.

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

2-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering and decontamination waters will be handled, transported and disposed off-site at a permitted facility in accordance with applicable local, State, and Federal regulations. Monitoring well purge waters not exhibiting signs of impact (e.g. sheen, discoloration) can be discharged to the ground surface in the area of the monitoring well. Dewatering 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.

2-9 COVER SYSTEM RESTORATION

The cover system existing on the Site in the area of the IRM excavation consists of 4 to 9 feet of crushed stone and a concrete slab. Although it is unlikely any intrusive activities will be happening in that area, if the concrete slab or crushed stone should be disturbed in this area, the cover system will be restored to conditions stated in the IRM, RI & AA Report. If the type of cover system changes from that which exists prior to the excavation (i.e., a concrete slab is replaced by soil cover), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP. The alteration, restoration and modification of engineering controls must conform with Article 145 Section 7209 of the Education Law regarding the application professional seals and alterations.

2-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional, as defined in 6 NYCRR Part 375, 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. A copy of the form is presented in Appendix 9 of this SMP.

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

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d) and DER-10 Appendix 5 for commercial use. Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards should meet the commercial soil cleanup objectives. Soils that meet 'general' fill requirements under 6 NYCRR Part 360.13, but do

not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC project manager. Soil material will be sampled for the full suite of analytical parameters, including PFAS and 1, 4-dioxane. 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.

2-11 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.

2-12 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. The NYSDEC project manager will be promptly notified of the discovery.

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 (including 1,4-dioxane), TCL pesticides and PCBs, and PFAS], unless the site history and previous sampling results provide sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC project manager for approval prior to sampling. Any tanks will be closed as per NYSDEC regulations and guidance.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone within two hours 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.

2-13 COMMUNITY AIR MONITORING PLAN

A figure showing the location of air sampling stations based on generally prevailing wind conditions will be provided at the time of the intrusive work. 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. If a sensitive receptor, such as a school, day care or residential area is adjacent to the site, a fixed monitoring station should be located at that site perimeter, regardless of wind direction, and discussed in the text.

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

2-13A: Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 part-per-million, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 micrograms per cubic meter, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 micrograms per cubic meter or less at the monitoring point.

- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

2-13B: Special Requirements for Indoor Work with Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures" except that in this instance

"nearby/occupied structures" would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

2-14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. 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.

2-15 DUST CONTROL PLAN

Particulate monitoring must be conducted according to the Community Air Monitoring Plan (CAMP) provided in Section 2-13. If particulate levels at the site exceed the thresholds listed in the CAMP or if airborne dust is observed on the site or leaving the site, the dust suppression techniques listed below will be employed. The remedial party will also take measures listed below to prevent dust production on the site.

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

2-16 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

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

APPENDIX 3
RESPONSIBILITIES of
OWNER and REMEDIAL PARTY

Responsibilities

The responsibilities for implementing the Site Management Plan ("SMP") for the 11075 Walden Avenue site (the "site"), number C915333, are divided between the site owner(s) and a Remedial Party, as defined below. The owner(s) is/are currently listed as:
Walden Realty Limited Partnership, 112 Halston Parkway, East Amherst, New York (the "owner").

Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out, the term Remedial Party ("RP") refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation ("NYSDEC") is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP is: Walden Realty Limited Partnership, 112 Halston Parkway, East Amherst, New York.

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.

Site Owner's Responsibilities:

1) The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.

2) In accordance with a periodic time frame determined by the NYSDEC, the owner shall periodically certify, in writing, that all Institutional Controls set forth in a(n) Environmental Easement remain in place and continue to be complied with. The owner shall provide a written certification to the RP, upon the RP's request, in order to allow the RP to include the certification in the site's Periodic Review Report (PRR) certification to the NYSDEC.

3) In the event the site is delisted, the owner remains bound by the Environmental Easement and shall submit, upon request by the NYSDEC, a written certification that the Environmental Easement is still in place and has been complied with.

4) The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.

5) The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. If damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section 1.3 - Notifications.

6) If some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in 1.3 - Notifications and coordinate the performance of necessary corrective actions with the RP.

7) The owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site property. 6 NYCRR Part contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 1.3 of the SMP. A change of use includes, but is not limited to, any activity that may increase direct human or environmental exposure (e.g., day care, school or park). A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html.

8) Until such time as the NYSDEC deems the vapor mitigation system unnecessary, the owner shall operate the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and the NYSDEC.

9) In accordance with the tenant notification law, within 15 days of receipt, the owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the site, whether produced by the NYSDEC, RP, or owner, to the tenants on the property. The owner must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

Remedial Party Responsibilities

1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.

2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.

3) Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.

4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the owner(s).

5) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html .

6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section 1.3 - Notifications of the SMP.

7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the site, as required in Section 5.0 or Appendix 10 (Operation, Monitoring and Maintenance Manual) of the SMP.

8) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.

9) Any change in use, change in ownership, change in site classification (*e.g.*, delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the

SMP and/or updated legal documents. The RP shall contact the NYSDEC project manager to discuss the need to update such documents.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

APPENDIX 4 – ENVIRONMENTAL EASEMENT

Box 104
Barclay Damon LLP
M. Murphy

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

THIS INDENTURE made this 5th day of December, 2019, between Owner, Walden Realty Limited Partnership, having an office at 11980 Walden Avenue, Alden, New York 14004-9709, County of Erie, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

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

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

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

WHEREAS, Grantor, is the owner of real property located at the address of 11075 Walden Avenue in the Town of Alden, 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 96.00 Block 4 Lot 6.2, being the same as that property conveyed to Grantor by deed dated August 5, 1998 and recorded in the Erie County Clerk's Office in Liber and Page 10936/8771. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 2.96 +/- acres, and is hereinafter more fully described in the Land Title Survey dated June 17, 2019 prepared by Richard Nathan Johnson, L.L.S. of Wendel WD Architecture, Engineering, Surveying and Landscape Architecture 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

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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: C915333-08-20, 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;

(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: C915333
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.

11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

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

Walden Realty Limited Partnership:

By: Sovereign Asset Management, LLC

By: James J. Doro

Print Name: James J. Doro

Title: President/Manager of the General Partner Date: 11/1/19

Grantor's Acknowledgment

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

On the 1st day of November, in the year 2019, before me, the undersigned, personally appeared James J. Doro, 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.

Herbert J. Glose
Notary Public - State of New York

HERBERT J. GLOSE
NOTARY PUBLIC, State of New York
Qualified in Erie County
My Commission Expires Sept. 30, 2020

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: _____
Michael J. Ryan, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 5th day of December, in the year 2019 before me, the undersigned, personally appeared Michael J. Ryan, 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, 2022

SCHEDULE "A" PROPERTY DESCRIPTION

LEGAL DESCRIPTION OF ENVIRONMENTAL EASEMENT AREA NYSDEC INDEX NO. C915333-08-20 FROM THE INSTRUMENT SURVEY DATED MAY 2019

All that tract or parcel of land, situate in the Town of Alden, county of Erie and state of New York, being part of Lot No. 50, Township 11, Range 5, of the Holland land company's survey, described as follows:

Beginning at a point in the south line of Walden Avenue; said line also being the north line of lot no. 50, distant 1380.05 feet easterly from its intersection with the westerly line of Lot No. 50; running thence southeasterly at right angles, 534.10 feet; continuing thence southerly and forming an interior angle of 167°-27'-30" with the last described course, 121.29 feet; running thence westerly and at an interior angle of 102°-32'-30", 173.66 feet; running thence northerly at right angles, 652.50 feet to a point in the south line of Walden Avenue; running thence easterly at right angles, 200 feet to the principal point or place of beginning. Containing 2.96 acres, more or less.

NOTES:

-ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAP MARKED WITH THE SIGNATURE AND AN ORIGINAL OF THE LAND SURVEYOR'S SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

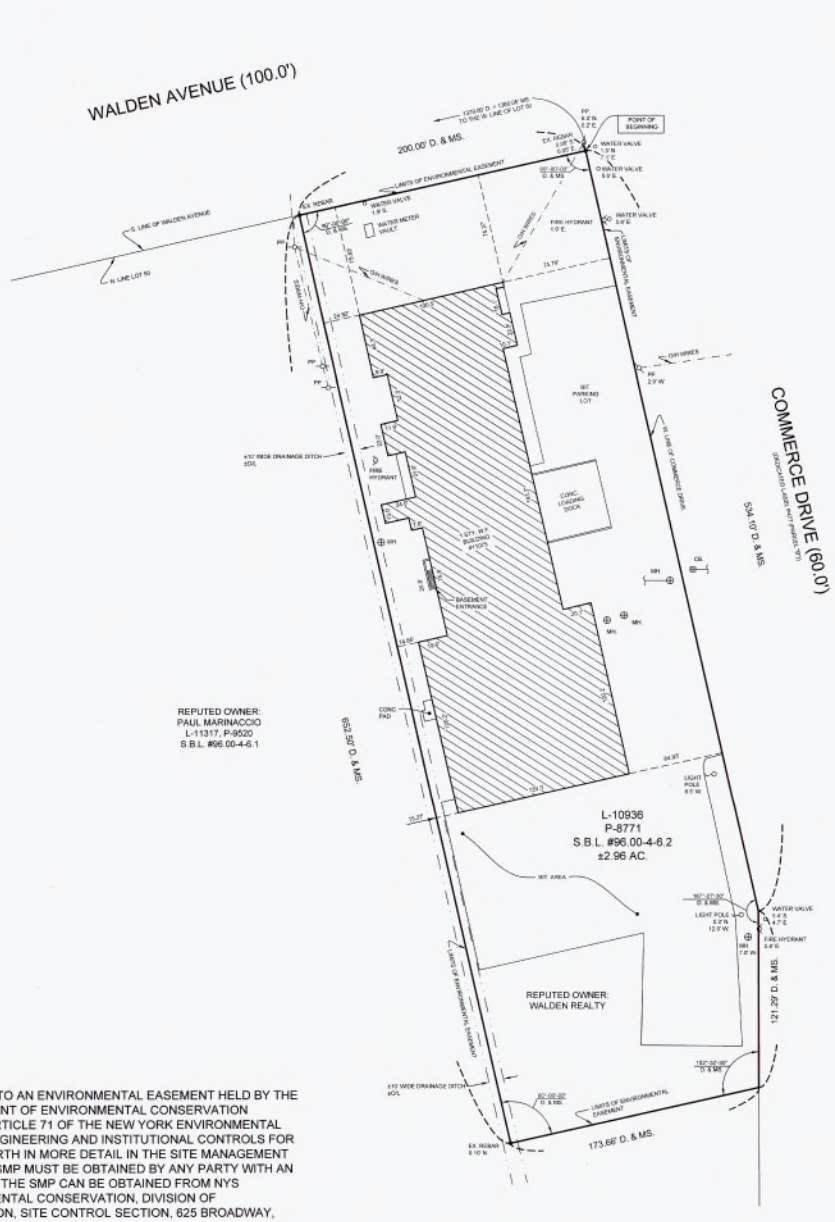
-UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY DRAWING, DESIGN, SPECIFICATION, PLAN OR REPORT IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

ENVIRONMENTAL EASEMENT AREA ACCESS

THE ENVIRONMENTAL EASEMENT AREA MAY BE ACCESSED AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT

PROJECT LOCATION MAP

NOT TO SCALE



REPUTED OWNER:
PAUL MARINACCIO
L-11317, P-9520
S.B.L. #96.00-4-6.1

LEGEND:

AC. = ACRES	MH = MANHOLE
APPROX. = APPROXIMATE	MP. = MAP
AVE. = AVENUE	MS. = MEASURED
BIT. = BITUMINOUS	N = NORTH
CB = CATCH BASIN	OH = OVERHEAD
CH. = CHAIN	OIL = ON LINE
CONC. = CONCRETE	PO. = PORCH
COR. = CORNER	PP = POWER POLE
C.T.V. = CABLE TV BOX	P = PAGE
℄ = CENTERLINE	ℙ = PROPERTY LINE
D. = DEED	PAVT = PAVEMENT
DIA. = DIAMETER	RD. = ROAD
DIST. = DISTANCE	S = SOUTH
E = EAST	ST. = STREET
EJB = ELECTRICAL JUNCTION BOX	STY. = STORY
ENC. = ENCROACHMENT	TJB = TELEPHONE JUNCTION BOX
ESMT. = EASEMENT	TYP. = TYPICAL
EX. = EXISTING	W = WEST
FNC. = FENCE	W/ = WITH
GAR. = GARAGE	WD. = WOOD
IP. = IRON PIPE	W.F. = WOODFRAME
L = LIBER	
⊕ = MANHOLE	✱ = EXISTING REBAR
⊞ = CATCH BASIN	o = WATER VALVE
☼ = LIGHT POLE	⩓ = FIRE HYDRANT
-o- = POWER POLE	
● = EXISTING IRON PIPE	

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. THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN MORE DETAIL IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@DEC.NY.GOV

WENDEL PROJECT NUMBER: 2963-19-05/030
DRAWING NAME: 05.030
ENVIRONMENTAL EASEMENT SURVEY

METES AND BOUNDS DESCRIPTION OF PROPERTY (DEED L-10936, P-8771) FOR TAX ID No. 96.00-4-6.2 TOWN OF ALDEN, ERIE COUNTY, STATE OF NEW YORK

ALL THAT TRACT OR PARCEL OF LAND, SITUATE IN THE TOWN OF ALDEN, COUNTY OF ERIE AND STATE OF NEW YORK, BEING PART OF LOT No. 50, TOWNSHIP 11, RANGE 5, OF THE HOLLAND LAND COMPANY'S SURVEY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTH LINE OF WALDEN AVENUE; SAID LINE ALSO BEING THE NORTH LINE OF LOT No. 50, DISTANT 1379 FEET EASTERLY FROM ITS INTERSECTION WITH THE WESTERLY LINE OF LOT No. 50; RUNNING THENCE SOUTHEASTERLY AT RIGHT ANGLES, 534.10 FEET; CONTINUING THENCE SOUTHERLY AND FORMING AN INTERIOR ANGLE OF 167°-27'-30" WITH THE LAST DESCRIBED COURSE, 121.29 FEET; RUNNING THENCE WESTERLY AND AT AN INTERIOR ANGLE OF 102°-32'-30", 173.66 FEET; RUNNING THENCE NORTHERLY AT RIGHT ANGLES, 652.50 FEET TO A POINT IN THE SOUTH LINE OF WALDEN AVENUE; RUNNING THENCE EASTERLY AT RIGHT ANGLES, 200 FEET TO THE PRINCIPAL POINT OR PLACE OF BEGINNING.

METES AND BOUNDS DESCRIPTION OF PROPERTY (AS MEASURED) FOR TAX ID No. 96.00-4-6.2 TOWN OF ALDEN, ERIE COUNTY, STATE OF NEW YORK

ALL THAT TRACT OR PARCEL OF LAND, SITUATE IN THE TOWN OF ALDEN, COUNTY OF ERIE AND STATE OF NEW YORK, BEING PART OF LOT No. 50, TOWNSHIP 11, RANGE 5, OF THE HOLLAND LAND COMPANY'S SURVEY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTH LINE OF WALDEN AVENUE; SAID LINE ALSO BEING THE NORTH LINE OF LOT No. 50, DISTANT 1380.05 FEET EASTERLY FROM ITS INTERSECTION WITH THE WESTERLY LINE OF LOT No. 50; RUNNING THENCE SOUTHEASTERLY AT RIGHT ANGLES, 534.10 FEET; CONTINUING THENCE SOUTHERLY AND FORMING AN INTERIOR ANGLE OF 167°-27'-30" WITH THE LAST DESCRIBED COURSE, 121.29 FEET; RUNNING THENCE WESTERLY AND AT AN INTERIOR ANGLE OF 102°-32'-30", 173.66 FEET; RUNNING THENCE NORTHERLY AT RIGHT ANGLES, 652.50 FEET TO A POINT IN THE SOUTH LINE OF WALDEN AVENUE; RUNNING THENCE EASTERLY AT RIGHT ANGLES, 200 FEET TO THE PRINCIPAL POINT OR PLACE OF BEGINNING. CONTAINING 2.96 ACRES, MORE OR LESS.

ALTERATION OF THIS DOCUMENT, EXCEPT BY A LICENSED LAND SURVEYOR, IS ILLEGAL

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SITE NUMBER C915333

PREPARED BY THE CONSULTANT

wendel

Centerpointe Corporate Park * 375 Essjay Road, Suite 200
Williamsville, New York 14221
PHONE: 716.688.0766 FAX: 716.625.6825
WEBSITE: www.wendelcompanies.com
Wendel WD Architecture, Engineering, Surveying and Landscape Architecture P.C.

MAP OF LANDS OF
WALDEN REALTY LIMITED PARTNERSHIP
SITUATE IN TOWN OF ALDEN, COUNTY OF ERIE, STATE OF NEW YORK
LOT 50, TOWNSHIP 11, RANGE 5 OF THE HOLLAND LAND COMPANY'S SURVEY,
TAX MAP NO.: 96.00-4-6.2
11075 WALDEN AVENUE

0 20 40 80 (FEET)
0 6.096 12.192 24.384 (METERS)

SCALE: 1" = 40'
SCALE: 2.5 cm = 12.192 m
1:500

WE: WENDEL, AND RICHARD N. JOHNSON P.L.S., HEREBY CERTIFY TO WALDEN REALTY LIMITED PARTNERSHIP AND THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION THAT THIS MAP WAS PREPARED MAY 15, 2019 FROM NOTES OF AN INSTRUMENT SURVEY COMPLETED BY US ON MAY 13, 2019, AND THAT IN OUR PROFESSIONAL OPINION THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE CURRENT CODE OF PRACTICE FOR LAND TITLE SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. THIS SURVEY IS CERTIFIED TO THOSE NAMED ABOVE AND DOES NOT EXTEND TO SUBSEQUENT OWNERS, MORTGAGEES OR TITLE INSURERS, UNLESS THIS SURVEY HAS BEEN RESURVEYED FOR THIS PURPOSE BY THE SURVEYOR. THIS MAP IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES THAT AN ABSTRACT OF TITLE MAY SHOW.

STATE OF NEW YORK · RICHARD NATHAN JOHNSON · 051043 · LICENSED LAND SURVEYOR

RICHARD N. JOHNSON, LAND SURVEYOR #051043 — DATE 6/17/2019

SHEET 1 of 1

CHECKED BY: RNJ

APPENDIX 5 – MONITORING WELL BORING AND CONSTRUCTION LOGS

LaBella
Powered by partnership
300 Pearl Street, Suite 130

TEST BORING LOG
Phase II ESA
11075 Walden Avenue
Alden, New York

BORING: SB-39
Sheet 1 of 1
JOB: 2180605

CONTRACTOR: LaBella Envir. LLC
DRILLER: Dylan Hitchcock
LABELLA REPRESENTITIVE: S. Dalton
START DATE: 1/24/19
END DATE:
TIME: 1310 to
DATUM:

TYPE OF DRILL RIG: 1
AUGER SIZE AND TYPE: 1
OVERBURDEN SAMPLING METHOD:
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: -
OTHER:

DEPTH (Feet)	BLOW COUNT	SAMPLE RECOVERY (Inches)	PID FIELD SCREEN (Parts per million)	STRATA CHANGE	REMARKS	VISUAL CLASSIFICATION
0-1		10				0-2 dark brown clay silt (moist)
1-2		10				
2-3		10				2-9 brown red silt clay (loose, stiff, moist)
3-4		10				
4-5		10				
5-6		12				
6-7		12				
7-8		12				
8-9		12				
9-10		12				9-11 brown red silt clay (loose, stiff, wet)
10-11		12				
11-12		12				
12-13		12				
13-14		12				
14-15		12				

GROUNDWATER ENCOUNTERED

DATE	DEPTH	WELL INSTALLED	WELL ID

NOTES: DUP here

BORING:

LaBella
Powered by partnership
300 Pearl Street, Suite 130

TEST BORING LOG
Phase II ESA
11075 Walden Avenue
Alden, New York

BORING: SB-43
Sheet 1 of
JOB: 2180605

CONTRACTOR: Nothnagle
DRILLER:
LABELLA REPRESENTITIVE: S. Dalton
START DATE: 8/15/19
TIME: 835 to
DATUM:
END DATE:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD:
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: -
OTHER:

DEPTH (Feet)	BLOW COUNT	SAMPLE: SAMPLE RECOVERY (Inches)	SAMPLE: PID FIELD SCREEN (Parts per million)	SAMPLE: STRATA CHANGE	REMARKS	VISUAL CLASSIFICATION
0-1		10	0		no odor/ staining	0-0.5 dark brown clay silt (CL, m)
1-2		10	0			0.5-4 brown red silt clay (CL, stiff, m)
2-3		10	0			
3-4		10	0			
4-5		12	0			4-6 " "
5-6		12	0			
6-7		12	0			6-8 brown red silt clay trace gravel (CL, stiff, m)
7-8		12	0			
8-9		12	0			8-12 " "
9-10		12	0			
10-11		12	0			
11-12		12	0			
12-13		12	0			12-15 brown red silt clay (CL, stiff, m)
13-14		12	0			
14-15		12	0			15-19 brown red silt clay (CL, m, m)
15-16		12	0			
16-17		12	0			19-20 " "
17-18		12	0			
18-19		12	0			20-21 brown red silt clay (CL, soft, w)
19-20		12	0			
20-21		12	0			21-23 " "
21-22		12	0			

GROUNDWATER ENCOUNTERED

DATE	DEPTH	WELL INSTALLED	WELL ID
8/15/19		YES	MW-5

NOTES:

BORING: SB-43

LaBella
Powered by partnership
300 Pearl Street, Suite 130

TEST BORING LOG
Phase II ESA
11075 Walden Avenue
Alden, New York

BORING: SB-43
Sheet 1 of
JOB: 2180605

CONTRACTOR:
DRILLER:
LABELLA REPRESENTITIVE: S. Dalton
START DATE: 8/15/19
END DATE:
TIME: 835 to
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD:
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~
OTHER:

DEPTH (Feet)	BLOW COUNT	SAMPLE			REMARKS	VISUAL CLASSIFICATION
		SAMPLE RECOVERY (Inches)	PID FIELD SCREEN (Parts per million)	STRATA CHANGE		
22-23		12	0		no odors/ Staining	
23-24		12	0			23-25 brown red clay (m,m,m)
24-25		12	0			
25-26		12	0			25-27 " "
26-27		12	0			27-29 " "
27-28		12	0			
28-29		12	0			29-31 brown red silt clay (m,m,w)
29-30		12	0			
30-31		12	0			31-33 " "
31-32		12	0			33-35 " "
32-33		12	0			
33-34		12	0			
34-35		12	0			

GROUNDWATER ENCOUNTERED

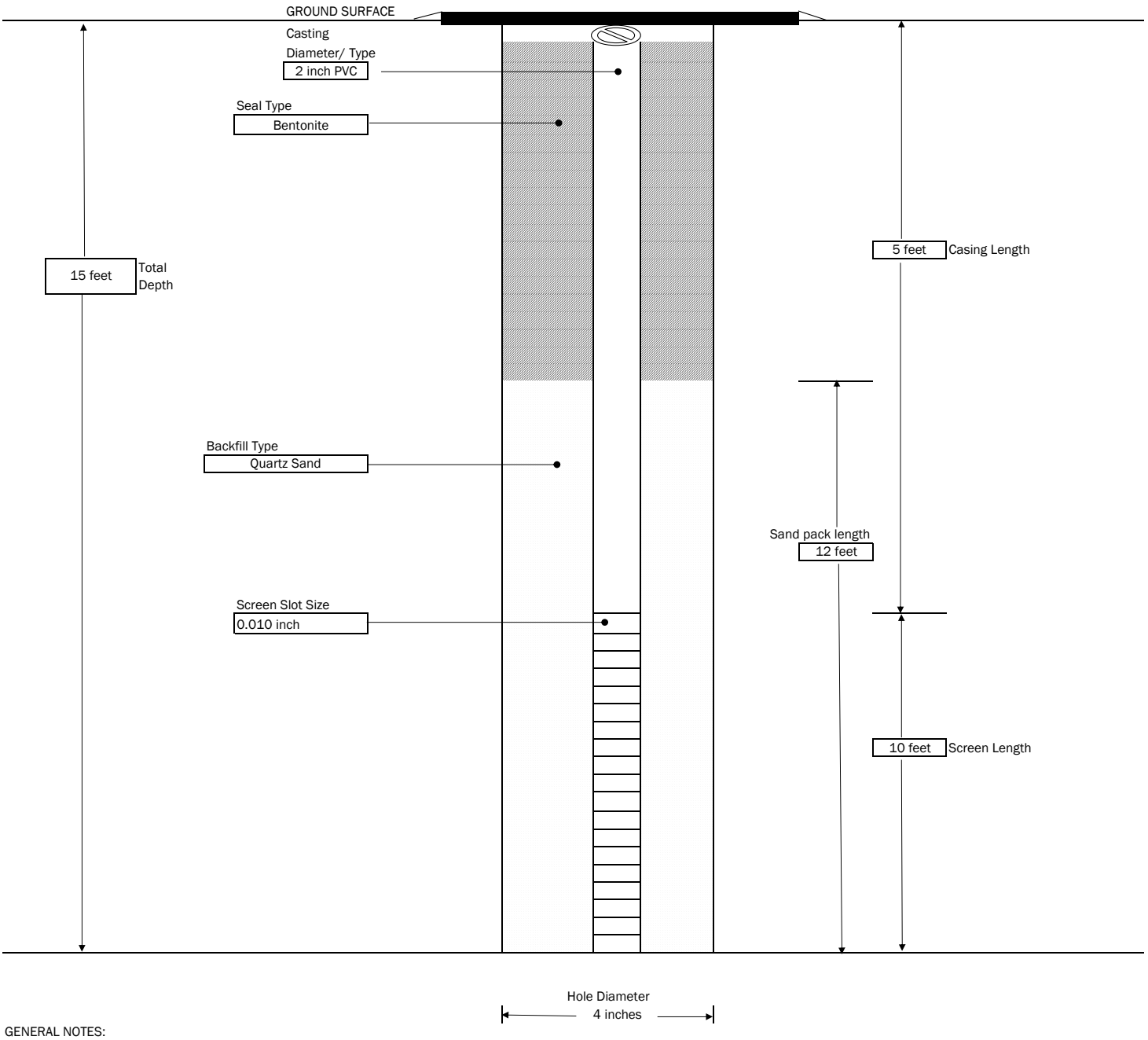
DATE	DEPTH	WELL INSTALLED	WELL ID

NOTES:
Sample @
24-25ft 34-35

BORING: SB-43

LaBella Powered by partnership. 300 PEARL STREET, BUFFALO, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** 11075 Walden Ave - Remedial Investigation	**MONITORING WELL :** MW-10 **BORING LOCATION :** SB-39 **SHEET** 1 OF 1 **JOB #** 2180605

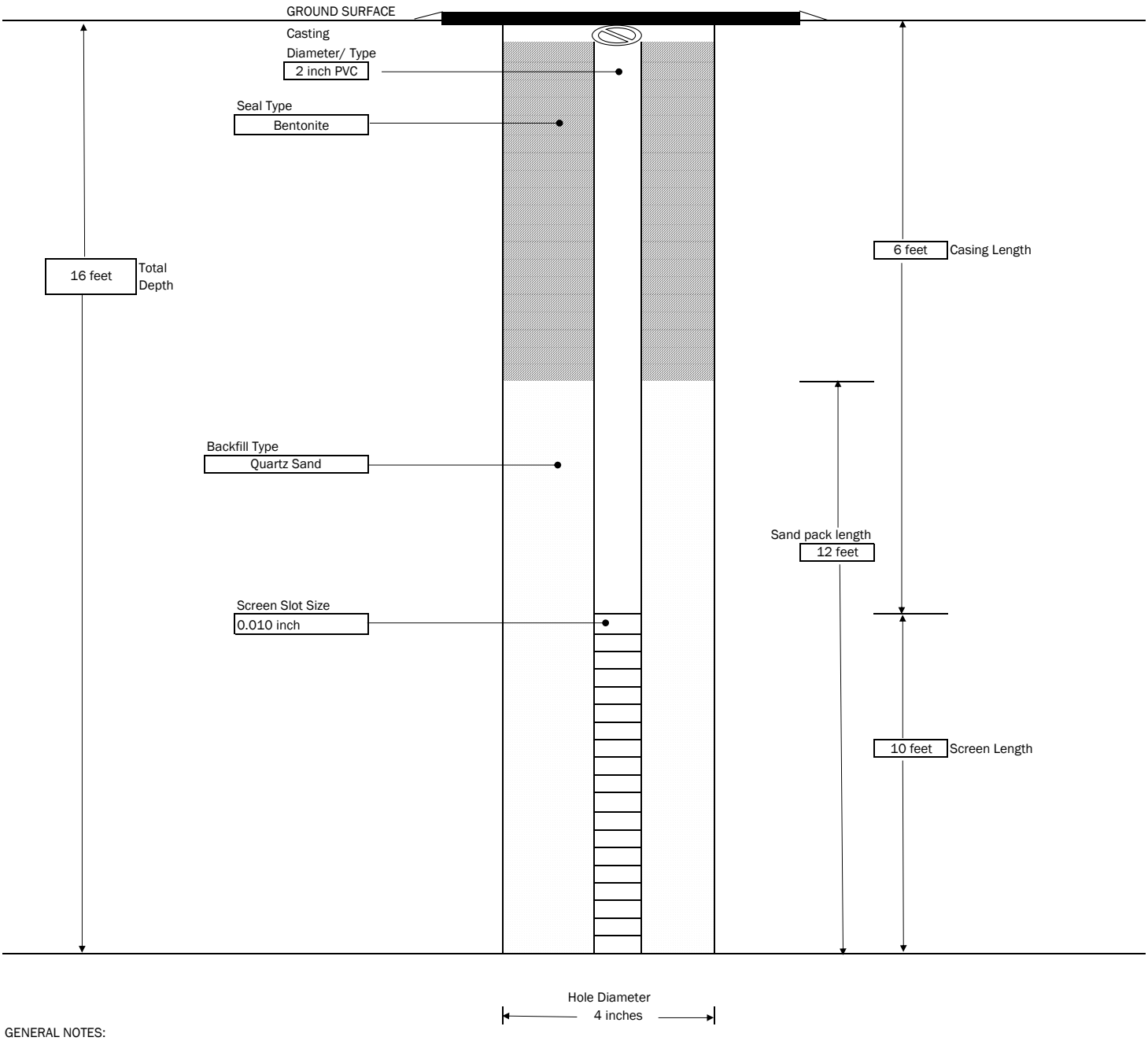
CONTRACTOR:	LaBella Environmental LLC			TYPE OF DRILL RIG:	Geoprobe
DRILLER:	D. Hitchcock	START TIME:	END TIME:	AUGER SIZE AND TYPE:	NA
LABELLA REPRESENTATIVE:	S. Dalton	GROUND SURFACE ELEVATION:	DATUM:	OVERBURDEN SAMPLING METHOD:	Macrocore



GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE

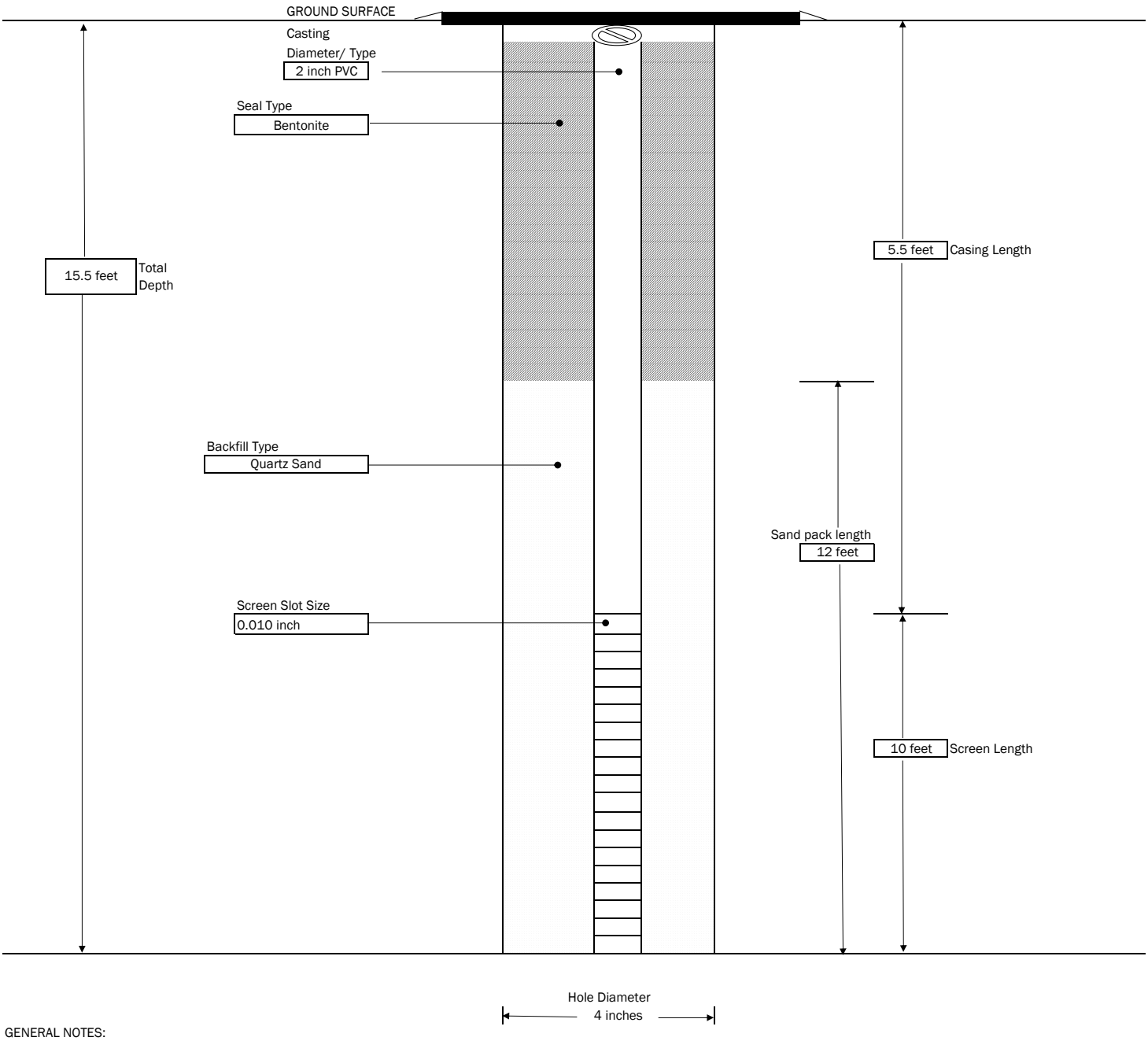
LaBella Powered by partnership. 300 PEARL STREET, BUFFALO, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** 11075 Walden Ave - Remedial Investigation	**MONITORING WELL :** MW-11 **BORING LOCATION :** N/A **SHEET** 1 OF 1 **JOB #** 2180605
CONTRACTOR: LaBella Environmental LLC DRILLER: D. Hitchcock LABELLA REPRESENTATIVE: S. Dalton	START TIME: END TIME: GROUND SURFACE ELEVATION: DATUM:	TYPE OF DRILL RIG: Geoprobe AUGER SIZE AND TYPE: NA OVERBURDEN SAMPLING METHOD: Macrocore



GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE

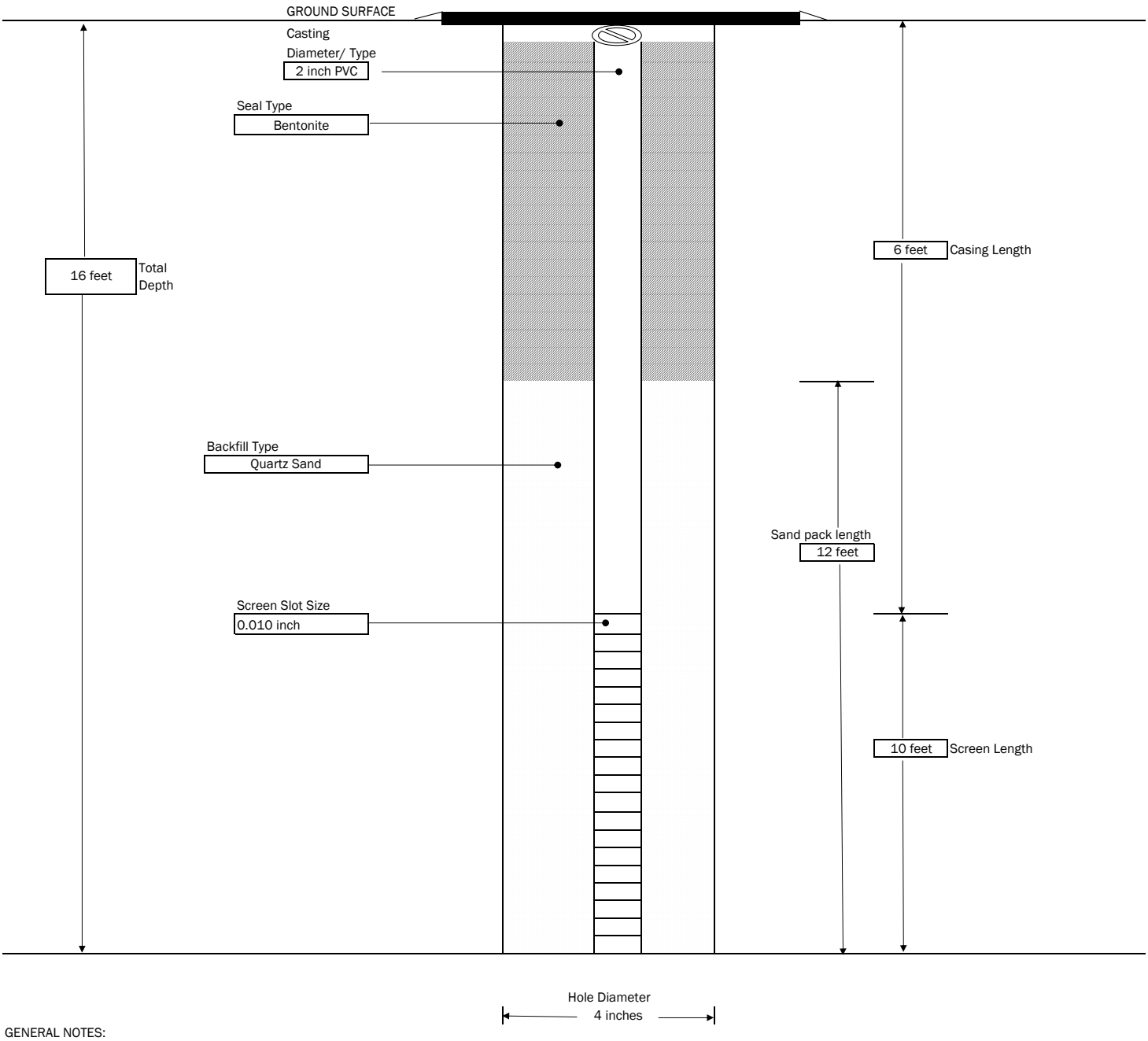
LaBella Powered by partnership. 300 PEARL STREET, BUFFALO, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** 11075 Walden Ave - Remedial Investigation	**MONITORING WELL :** MW-12 **BORING LOCATION :** N/A **SHEET** 1 OF 1 **JOB #** 2180605
CONTRACTOR: LaBella Environmental LLC DRILLER: D. Hitchcock LABELLA REPRESENTATIVE: S. Dalton	START TIME: END TIME: GROUND SURFACE ELEVATION: DATUM:	TYPE OF DRILL RIG: Geoprobe AUGER SIZE AND TYPE: NA OVERBURDEN SAMPLING METHOD: Macrocore



GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE

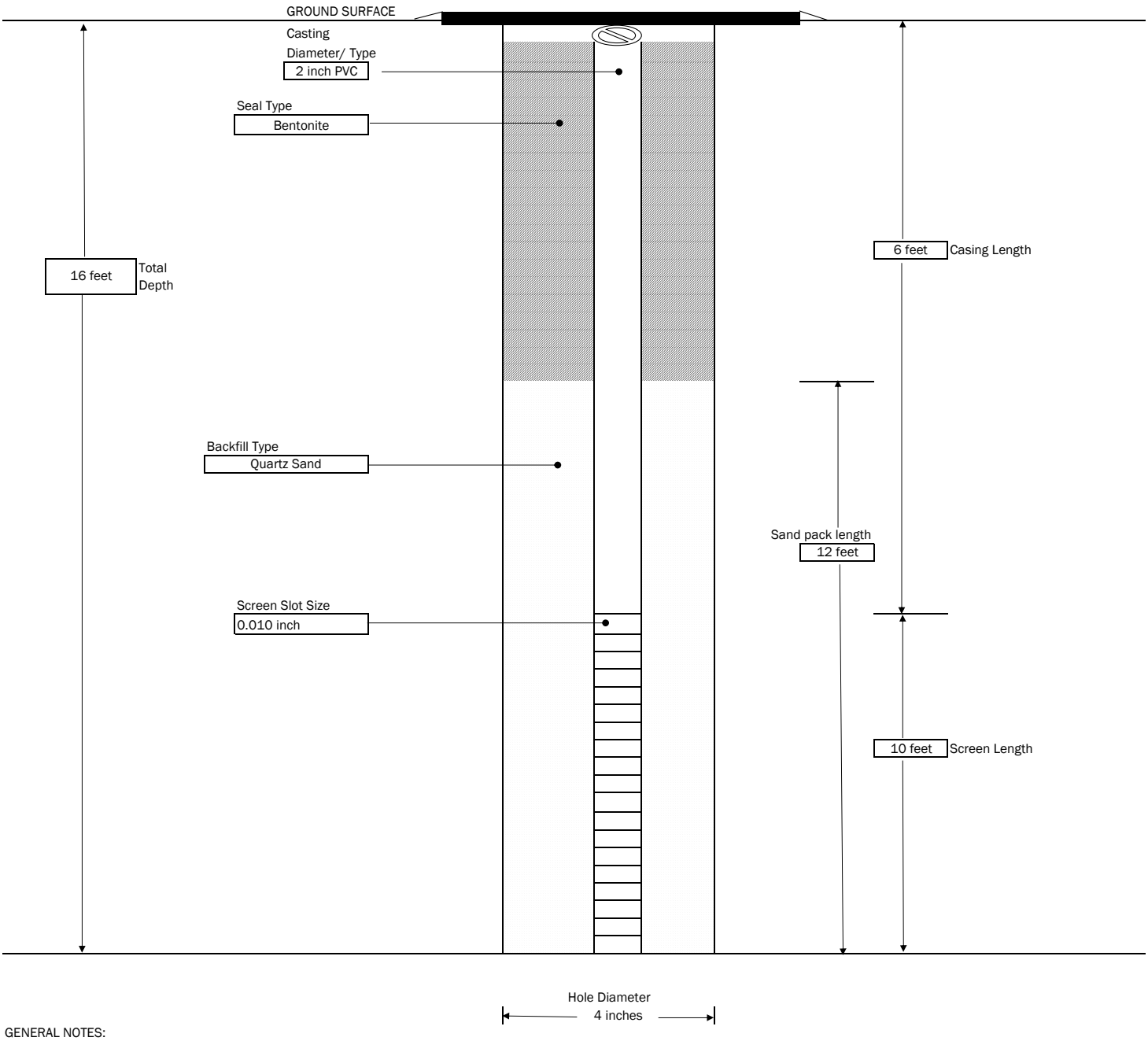
LaBella Powered by partnership. 300 PEARL STREET, BUFFALO, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** 11075 Walden Ave - Remedial Investigation	**MONITORING WELL :** MW-13 **BORING LOCATION :** N/A **SHEET** 1 OF 1 **JOB #** 2180605
CONTRACTOR: LaBella Environmental LLC DRILLER: D. Hitchcock LABELLA REPRESENTATIVE: S. Dalton	START TIME: END TIME: GROUND SURFACE ELEVATION: DATUM:	TYPE OF DRILL RIG: Geoprobe AUGER SIZE AND TYPE: NA OVERBURDEN SAMPLING METHOD: Macrocore



GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE

LaBella Powered by partnership. 300 PEARL STREET, BUFFALO, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** 11075 Walden Ave - Remedial Investigation	**MONITORING WELL :** MW-14 **BORING LOCATION :** N/A **SHEET** 1 OF 1 **JOB #** 2180605
CONTRACTOR: LaBella Environmental LLC DRILLER: D. Hitchcock LABELLA REPRESENTATIVE: S. Dalton	START TIME: END TIME: GROUND SURFACE ELEVATION: DATUM:	TYPE OF DRILL RIG: Geoprobe AUGER SIZE AND TYPE: NA OVERBURDEN SAMPLING METHOD: Macrocore

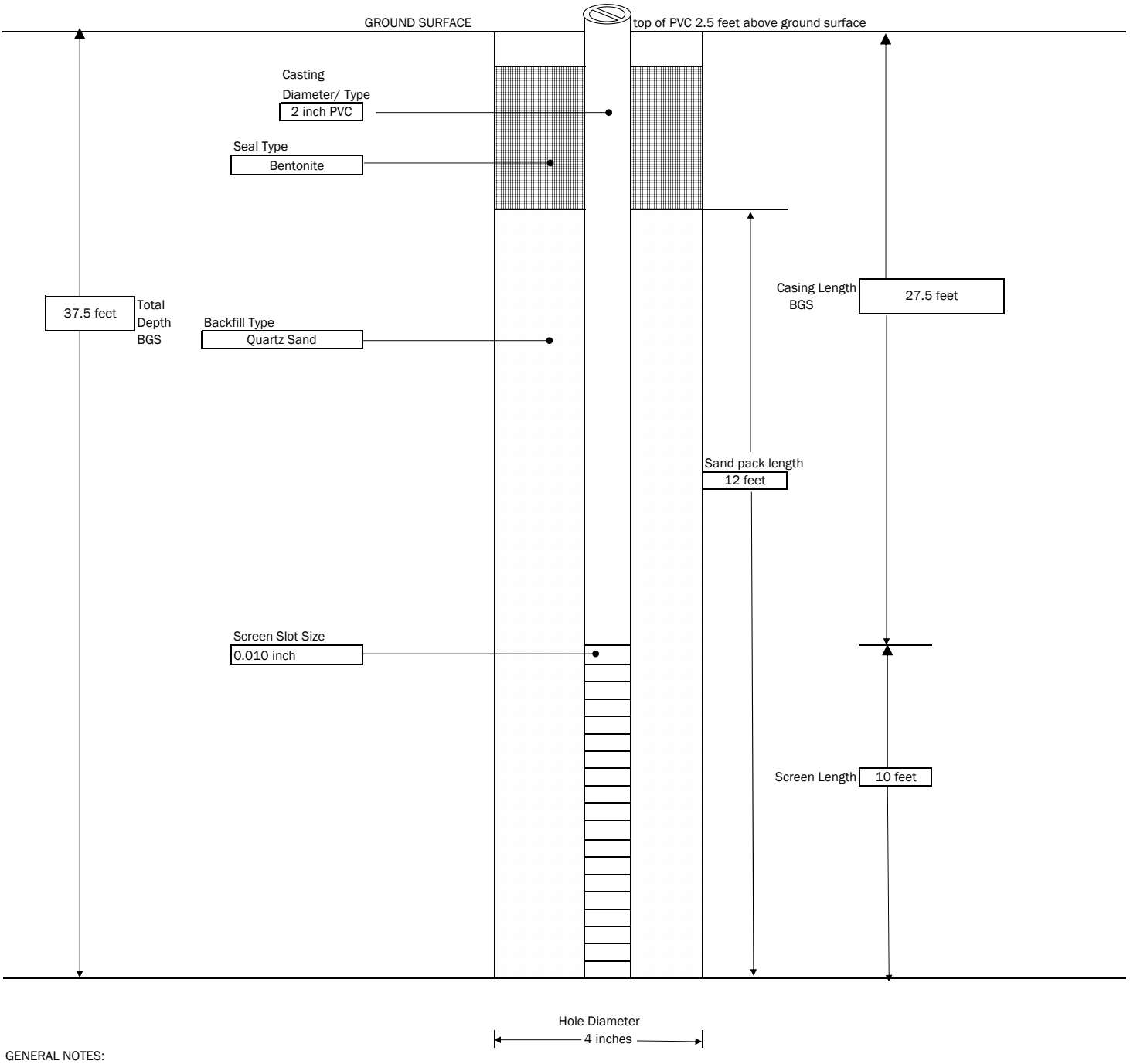


GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE

LaBella Powered by partnership. 300 PEARL STREET, BUFFALO, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** 11075 Walden Ave - Remedial Investigation	**MONITORING WELL :** MW-15 **BORING LOCATION :** SB-43 **SHEET** 1 OF 1 **JOB #** 2180605

CONTRACTOR:	Nothnagle			TYPE OF DRILL RIG:	CME 55
DRILLER:		START TIME:	END TIME:	AUGER SIZE AND TYPE:	4 1/4"
LABELLA REPRESENTATIVE:	S. Dalton	GROUND SURFACE ELEVATION:	DATUM:	OVERBURDEN SAMPLING METHOD:	SPT



GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE

APPENDIX 6 – FIELD SAMPLING PLAN

Field Sampling Plan
11075 Walden Avenue
NYSDEC Site #C915333

Location:
11075 Walden Avenue
Alden, New York

October 2023

LaBella
Powered by partnership.

300 Pearl Street | Buffalo, NY 14202 | p 716-551-6281

Table of Contents

1.0 INTRODUCTION

LaBella Associates, D.P.C. ("LaBella") has developed this Field Sampling Plan (FSP) for the property located at 11075 Walden Avenue hereinafter referred to as "the Site". This Work Plan has been developed in accordance with Order on Consent and NYSDEC Division of Environmental Remediation (DER)-10 *Technical Guidance for Site Investigation and Remediation* Issued May 3, 2010.

2.0 OBJECTIVE

The objective of this FSP is to outline protocols for sampling groundwater and indoor air to evaluate the engineering controls implemented at the Site.

3.0 SCOPE OF WORK

The following subtasks are planned. Tasks will be completed in the order listed.

1. Groundwater Sampling- Existing Wells
2. Indoor Air Sampling

The sampling activities will be conducted in accordance with NYSDEC's *DER-10/ Technical Guidance for Site Investigation and Remediation* Issued May 3, 2010.

3.1 Groundwater Sampling- Existing Monitoring Wells

This task will include sampling of previously installed monitoring wells. Wells will be sampled for volatile organic compounds (VOCs).

Quality assurance/ quality control (QA/QC) samples for VOC sampling will include one (1) field duplicate, one (1) matrix spike / matrix spike duplicates (MS/MSD) and one (1) trip blank. The procedures and rationale for collecting these samples are described below.

- Field duplicate – Sample will be used to assess the variability in concentrations of samples from the same well due to the combined effects of sample processing in the field and laboratory as well as chemical analysis.
- Matrix spike/matrix spike duplicate – Sample will be used to provide information about the effect of the sample matrix on the design and measurement methodology used by the laboratory.
- Trip blank – Sample will be collected to help identify possible contamination from transport (i.e., shipping). One trip blank will be provided by the laboratory with certified analyte-free deionized water and submitted with the groundwater samples.

VOCs (low-flow sampling)

Each of the wells in the sampling program will be sampled using low-flow methodology for VOC analysis as follows:

- Wells will be checked for NAPL immediately prior to groundwater sampling and static water levels will be collected.
- Groundwater will be purged from each well using a peristaltic pump. The top of pump will be

placed approximately 2-ft from the bottom of the well.

- Water quality parameters including turbidity, pH, temperature, specific conductivity, dissolved oxygen, and depth to water will be recorded at five (5) minute intervals during sampling until the parameters have stabilized for three (3) consecutive intervals within the specified ranges below, at which time the samples will be collected:
    - Water level drawdown (<0.3')
    - Turbidity (+/- 10%)
    - pH (+/-0.1)
    - Temperature (+/- 3%)
    - Specific conductivity (+/- 3%)
    - Dissolved Oxygen (+/- 10%)
    - Oxidation reduction potential (+/- 10 millivolts)

Samples will be submitted to a NYSDOH ELAP laboratory for analysis of USEPA Target Compound List (TCL) Volatile Organic Compounds (VOCs) USEPA Method 8260. A copy of a low flow sampling log is included in Appendix A.

3.2 Indoor Air Sampling

Results of SVI sampling conducted at the Site indicated that mitigation is warranted in this building. A sub-slab depressurization (SSD) system was installed throughout the Site Building. Indoor air sampling will be performed should any unoccupied space become occupied.

Sampling will be conducted in substantial accordance with the *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006. Additionally, due to interfering conditions (i.e. operations, chemical storage, etc.), ventilation may be appropriate prior to sampling to minimize residual contamination in the indoor air. If ventilation is appropriate, it should be completed 24 hours or more prior to the scheduled sampling time. Indoor air sampling will include the following:

- One indoor air sample will be set-up for collection within the newly occupied space. Indoor air samples will be collected using a Summa® canister with a pre-set regulator for sample collection over an approximately 8-hour period. The indoor air samples will be placed approximately 3-ft. to 5-ft. above the floor surface.
- One (1) outdoor air sample will be collected using a Summa® canister with a pre-set regulator for sample collection over an approximate 24-hour period to evaluate background conditions.
- A NYSDOH Indoor Air Quality Questionnaire and Building Inventory will be completed. Materials containing potential contaminants of concern (e.g., cleaning chemicals, etc.) will be listed to identify any potential indoor air sources of impacts.
- Samples will be sent under standard chain of custody procedures to an ELAP certified laboratory for analysis of VOCs by USEPA Method TO-15.

A copy of the air sampling logs is included in Appendix A.

4.0 HEALTH AND SAFETY

The Health and Safety Plan (HASP) provided in the SMP will be followed for all activities performed on-Site.

5.0 QUALITY CONTROL

Activities completed at the Site will be managed under the Quality Assurance Project Plan provided in the SMP. Quality assurance/quality control (QA/QC) sampling for groundwater samples will include analysis of one matrix spike/matrix spike duplicate (MS/MSD), one (1) blind duplicate sample, and one (1) trip blank will be included in each shipment of groundwater samples for VOC analysis. QA/QC sampling will not be conducted for indoor air samples.

All samples will be delivered under Chain of Custody procedures to a NYSDOH ELAP-certified laboratory. The laboratory will provide NYSDEC ASP Category B Deliverables and NYSDEC EQUIS Electronic Data Deliverables (EDDs) for all samples. A data usability summary report (DUSR) will be completed for all ASP Category B format laboratory data packages per DER-10.

6.0 SCHEDULE AND DELIVERABLES

At the conclusion of the monitoring, a report will be developed including investigation methods, results, findings, and conclusions. The report will contain data tables with results compared to applicable regulatory criteria and mapping depicting testing locations.

APPENDIX A – FIELD LOGS

Site Name: _____

Location: _____

Project No.: _____

Sampled By: _____

Date: _____

WELL I.D.: _____ Weather: _____

WELL SAMPLING INFORMATION

Well Diameter: _____ Static Water Level: _____

Depth of Well: _____ Length of Well Screen: _____

Measuring Point: _____ Depth to Top of Pump: _____

Pump Type: _____ Tubing Type: _____

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (mL/min)	Gallons Purged	Temp °C	Conductivity (mS/cm) +/- 3%	pH +/- 0.1	Redox (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/L) +/- 10%	Depth to water ft bgs	Comments

Total _____ Gallons Purged

Purge Time Start: _____ Purge Time End: _____ Final Static Water Level: _____

OBSERVATIONS

11075 Walden Avenue	**AIR SAMPLING FIELD REPORT**	**AIR SAMPLING POINT**

Project: _____ Project No.: _____
Site Location: _____ Representative: _____
Client: _____ Weather: _____

General Information

Sample Canister Location: _____

Sample Source: _____ Indoor Air _____ Sub-Slab _____ Exterior Ambient Air _____ Exterior Soil Gas

_____ Other

Shipping Date: _____ Laboratory: _____

Canister Type: _____ 1.0 L Summa Canister _____ 6.0 L Summa Canister Other (specify): _____

Canister Serial No.: _____ Flow Controller Serial No.: _____

Time	Vacuum Reading (inHg)	Notes

Sampling Information

Sample Date: _____ Sampler: _____

Sample Height / Depth: _____

	Start	Stop
Canister Pressure Gauge Reading:		
Sample Time:		

Comments:

APPENDIX 7 – QUALITY ASSURANCE PROJECT PLAN

Quality Assurance Project Plan
11075 Walden Avenue

Location:

11075 Walden Avenue
Alden, New York

LaBella Project No. 2180605

October 19, 2023

LaBella
Powered by partnership.

300 State Street, Suite 201 | Rochester, NY 14614 | p 585-454-6110 | f 585-454-3066

Table of Contents

1.0 INTRODUCTION

LaBella's Quality Assurance Project Plan (QAPP) is an integral part of its approach to environmental investigations. By maintaining a rigorous Quality Control (QC) program, our firm is able to provide accurate and reliable data. This QAPP should be followed during implementation of environmental investigation and remediation projects and should serve as a basis for quality control methods to be implemented during field programs. Project-specific requirements may apply.

The QC program contains procedures which allow for the proper collection and evaluation of data and documents that QC procedures have been followed during field investigations. The QC program presents the methodology and measurement procedures used in collecting quality field data. This methodology includes the proper use of equipment, documentation of sample collection, and sample handling procedures.

Procedures used in the firm's QC program are compatible with federal, state, and local regulations, as well as, appropriate professional and technical standards.

This QC program includes the following:

- QC Objectives and Checks
- Field Equipment, Handling, and Calibration
- Sampling and Logging Techniques
- Sample Handling, Packaging, and Shipping
- Laboratory Requirements and Deliverables

It should be noted that project-specific work plans (e.g., Remedial Investigation Work Plans) may have project specific details that will differ from the procedures in this QC program. In such cases, the project-specific work plan should be followed (subsequent to regulatory approval).

The characteristics of major importance for the assessment of generated data are accuracy, precision, completeness, representativeness, and comparability. Application of these characteristics to specific projects is addressed later in this document. The characteristics are defined below.

1.1 Accuracy

Accuracy is the degree of agreement of a measurement or average of measurements with an accepted reference or "true" value and is a measure of bias in the system.

1.2 Precision

Precision is the degree of mutual agreement among individual measurements of a given parameter.

1.3 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under correct normal conditions.

1.4 Representativeness

Representativeness expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition

Careful choice and use of appropriate methods in the field will ensure that samples are representative. This is relatively easy with water or air samples since these components are homogeneously dispersed. In soil and sediment, contaminants are unlikely to be evenly distributed, and thus it is important for the sampler and analyst to exercise good judgment when removing a sample.

1.5 Comparability

Comparability expresses the confidence with which one data set can be compared to another. The data sets may be inter- or intra- laboratory.

2.0 MEASUREMENT OF DATA QUALITY

2.1 Accuracy

Accuracy of a particular analysis is measured by assessing its performance with "known" samples. These "knowns" take the form of EPA standard reference materials, or laboratory prepared solutions of target analytes spiked into a pure water or sample matrix. In the case of gas chromatography (GC) or GC/MS (mass spectrometry) analyses, solutions of surrogate compounds are used. These solutions can be spiked into every sample and are designed to mimic the behavior of target analytes without interfering with their determination.

In each case the recovery of the analyte is measured as a percentage, correcting for analytes known to be present in the original sample if necessary, as in the case of a matrix spike analysis. For EPA supplied known solutions, this recovery is compared to the published data that accompany the solution.

For the firm's prepared solutions, the recovery is compared to EPA-developed data or the firm's historical data as available. For surrogate compounds, recoveries are compared to EPA CLP acceptable recovery tables.

If recoveries do not meet required criteria, then the analytical data for the batch (or, in the case of surrogate compounds, for the individual sample) are considered potentially inaccurate. The analyst or his supervisor must initiate an investigation of the cause of the problem and take corrective action. This can include recalibration of the instrument, reanalysis of the QC sample, reanalysis of the samples in the batch, or flagging the data as suspect if the problems cannot be resolved. For highly contaminated samples, recovery of the matrix spike may depend on sample homogeneity. As a rule, analyses are not corrected for recovery of matrix spike or surrogate compounds.

2.2 Precision

Precision of a particular analysis is measured by assessing its performance with duplicate or replicate samples. Duplicate samples are pairs of samples taken in the field and transported to the laboratory as distinct samples. Their identity as duplicates is typically not known to the laboratory. For most purposes, precision is determined by the analysis of replicate pairs (i.e., two samples

prepared at the laboratory from one original sample). Often in replicate analysis the sample chosen for replication does not contain target analytes so that quantitation of precision is impossible. For EPA CLP analyses, replicate pairs of spiked samples, known as matrix spike/matrix spike duplicate samples, are used for precision studies. This has the advantage that two real positive values for a target analyte can be compared.

Precision is calculated in terms of Relative Percent Difference (RPD).

- Where X_1 and X_2 represent the individual values found for the target analyte in the two replicate analyses or in the matrix spike/matrix spike duplicate analyses.
- RPDs must be compared to the method RPD for the analysis. The analyst or his supervisor must investigate the cause of RPDs outside stated acceptance limits. This may include a visual inspection of the sample for non-homogeneity, analysis of check samples, etc. Follow-up action may include sample reanalysis or flagging of the data as suspect if problems cannot be resolved.
- During the data review and validation process, field duplicate RPDs are assessed as a measure of the total variability of both field sampling and laboratory analysis.

2.3 Completeness

Completeness for each parameter is calculated as follows:

- The firm's target value for completeness for all parameters is 100%. A completeness value of 95% will be considered acceptable. Incomplete results will be reported to the site managers. In planning the field sample collection, the site manager will plan to collect field duplicates from identified critical areas. This procedure should assure 100% completeness for these areas.

2.4 Representativeness

The characteristic of representativeness is not quantifiable. Subjective factors to be taken into account are as follows:

- The degree of homogeneity of a site;
- The degree of homogeneity of a sample taken from one point in a site; and
- The available information on which a sampling plan is based.

To maximize representativeness of results, sampling techniques and sample locations will be carefully chosen so that they provide laboratory samples representative of the site and the specific area. Within the laboratory, precautions are taken to extract from the sample bottle an aliquot representative of the whole sample. This includes premixing the sample and discarding pebbles from soil samples.

2.5 Comparability

Comparability of laboratory tests is ensured by utilizing only New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)- certified laboratories. This certification is the basis for demonstrating proficiency in testing requirements. Using ELAP certified laboratories will result in consistency amongst analytical data within a specific project and across projects.

3.0 QUALITY CONTROL TARGETS

Target values for detection limit, percent spike recovery and percent "true" value of known check standards, and RPD of duplicates/replicates are included in the QCP, Analytical Procedures. Note that tabulated values are not always attainable. Instances may arise where high sample concentrations, non-homogeneity of samples, or matrix interferences preclude achievement of target detection limits or other quality control criteria. In such instances, the firm will report reasons for deviations from these detection limits or noncompliance with quality control criteria.

4.0 SOIL BORING ADVANCEMENT & MONITORING WELL INSTALLATION PROCEDURES

Soil and groundwater sampling shall be conducted in accordance with NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation dated May 3, 2010 and any Site-specific work plans.

Prior to drilling, all drill sites will be cleared with appropriate utility companies to avoid potential accidents relating to underground utilities. Utility drawings will be reviewed, if available.

4.1 Drilling Equipment and Techniques

Direct Push Geoprobe Advanced Borings:

Soil borings and monitoring wells will be advanced with a Geoprobe direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a four to five-foot macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in four or five-foot sections, and can be easily cut from the polyethylene sleeves for observation and sampling. The macrocore sampler will be decontaminated between boring locations using an alconox and water solution.

Prior to initiating drilling activities, the Macrocores, drive rods, and pertinent equipment, will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used.

Test borings will be advanced with 2-inch (or larger) inside diameter (ID) direct push Macrocore through overburden soils. Drilling fluids, other than potable water will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

During the drilling, a properly calibrated photoionization detector (PID) will be used to screen soil cores retrieved from the Macrocores.

Direct Push Geoprobe advanced groundwater-monitoring wells typically utilize minimum 1.25-inch threaded flush joint PVC pipe with 0.010-in. slotted screen or pre-packed well screens. PVC piping used for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe.. All

materials used to construct the wells will be NSF/ASTM approved. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well. Stainless steel wells or pre-packed PVC wells may be used if specified in the work plan and approved by the NYSDEC.

Hollow-Stem Auger Advanced Borings:

The drilling and installation of soil borings and monitoring wells will be performed using a rotary drill rig which will have sufficient capacity to perform 4 1/4-inch inside diameter (ID) hollow-stem auger drilling in the overburden, retrieve Macrocore or split-spoon samples, and perform necessary rock coring using NX, NQ, HQ or core barrel size as specified in the project-specific work plan. The borehole may be reamed up to 5 1/2-inch diameter prior to monitoring well installation as cased hole in the bedrock, or may be left as open bedrock hole, with regulatory concurrence. Equipment sizes and diameters may vary based on project-specific criteria. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

Prior to initiating drilling activities, the augers, rods, Macrocore, split spoons, and other pertinent equipment will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. Steam cleaning activities will be performed in a designated on-site decontamination area. During and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used.
Test borings will be advanced with 4 1/4-inch (ID) hollow stem augers through overburden, and cored with a NX, NQ, HQ or core barrel size as specified in the project-specific work plan sized diamond core barrels in competent rock, driven by truck-, track-, or trailer-mounted drilling equipment. Alternative methods of drilling or equipment may be allowed or requested for project-specific criteria, but must be approved by the NYSDEC. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

During the drilling, a (PID) will be used to screen soils retrieved from the split spoons or Macrocores. In the event that headspace field screening is required to determine the presence of VOCs in soil samples, the following procedure will be utilized:

- Soils from core will be inserted into an airtight glass jar and/or disposable polyethylene bag, and the container will be sealed immediately
- After sealing the container, the soils will be shaken or kneaded for 10-15 seconds to release volatiles into the headspace of the sealed container
- The PID inlet will be inserted into the headspace of the airtight container to screen soil samples for VOCs

During the drilling, visual screening will be utilized to identify any Non-Aqueous Phase Liquid (NAPL) in the soil cores.

Where bedrock wells are required, test borings shall be advanced into rock with NX, NQ, HR (or similar) coring tools. Only water from an approved source shall be used in rock coring. The consultant shall monitor and record the petrology, core recovery, fractures, rate of advance, and water lost or produced in each test boring. The Rock Quality Determination (RQD) value shall be calculated for each 5-foot core. Each core shall be screened with a PID upon extraction. All core samples shall be retained and stored by the consultant in an approved wooden core box for a period

of not less than one year.

The method selected may be percussion or rotary drilling. The method and equipment selected must be capable of penetrating the bedrock at each well location to a depth required by the work plan.

Bedrock well installation will involve construction of a rock socket in the weathered bedrock. The socket will be drilled into the top of rock (typically 1-ft. to 5-ft. into the top of rock) at each bedrock well location to allow a permanent steel casing to be grouted securely in place prior to completion of the well. The purpose for this is to provide a seal at the overburden/bedrock interface and into the upper bedrock surface, to prevent the entrance of overburden water into the bedrock. After the grout and casing have set up for a minimum of 12 hours, the remaining bedrock can be NX (or similar) cored through the steel casing to a depth determined by the project-specific work plan.

Bedrock wells will either be open coreholes in the rock or consist of threaded, flush-joint PVC piping. Construction will vary depending on the project and as such, specific construction of the wells will be detailed in the project-specific work plan. Bedrock wells which do utilized PVC piping for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe. All materials used to construct the wells will be NSF/ASTM approved.

Screen and riser sections shall be joined by flush-threaded coupling to form watertight unions that retain 100% of the strength of the casing. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well.

4.1.1 Artificial Sand Pack

When utilized, granular backfill will be chemically and texturally clean, inert, siliceous, and of appropriate grain size for the screen slot size and the host environment The sand pack will be installed using a tremie pipe, when possible (i.e., a tremie pipe may not fit into smaller, 2-in. diameter boreholes). When utilized, the well screen and casing will be installed, and the sand pack placed around the screen and casing to a depth extending at least 2-ft.. A pre-packed well screen may be used if pre-approved by the NYSDEC.

An artificial sand pack will not be utilized in bedrock wells without screens (i.e., open borehole wells).

4.1.2 Bentonite Seal

A minimum 2-ft. thick seal will be placed directly on top of the sand pack, and care will be taken to avoid bridging. In the event that Site geology does not allow for a 2-ft. seal (e.g., only 1-ft. of space remains between the top of the sand pack and ground surface), the remaining space in the annulus will be filled with bentonite.

4.1.3 Grout Mixture

Upon completion of the bentonite seal, the well may be grouted with a non-shrinking cement grout (e.g., Volclay^{R}) mix to be placed from the top of the bentonite seal to the ground surface. The cement grout shall consist of a mixture of Portland cement (ASTM C 150) and water, in the proportion of not more than 7 gallons of clean water per bag of cement (1 cubic foot or 94 pounds). Additionally, 3% by weight of bentonite powder may be added.

4.1.4 Surface Protection

At all times during the progress of the work, precautions shall be used to prevent tampering with or

the entrance of foreign material into the well. Upon completion of the well, a suitable cap shall be installed to prevent material from entering the well. Where permanent wells are to be installed, the well riser shall be protected by a flush mounted road box set into a concrete pad or locking well cap for stick-up wells. A concrete pad, sloped away from the well, shall be constructed around the flush mount road box or stick-up casing at ground level.

Any well that is to be temporarily removed from service or left incomplete due to delay in construction shall be capped with a watertight cap.

4.2 Surveying

Coordinates and elevations will be established for each monitoring well and sampling location. Elevations to the closest 0.01 foot shall be used for the survey. These elevations shall be referenced to a regional, local, or project-specific datum. The location, identification, coordinates, and elevations of the wells will be plotted on maps with a scale large enough to show their location with reference to other structures at each site.

4.3 Well Development

After completion of the well, but not sooner than 24 hours after grouting is completed, development will be accomplished using pumping, bailing, or surge blocking. No dispersing agents, acids, disinfectants, or other additives will be used during development or introduced into the well at any other time. During development, water will be removed throughout the entire water column by periodically lowering and raising the pump intake (or bailer stopping point).

Development water will be either properly contained and treated as waste until the results of chemical analysis of samples are obtained or discharged on Site as determined by the Site-specific work plans and/or consultation with the NYSDEC representatives on Site.

The development process will continue until removal of a minimum of 110% of the water lost during drilling, three well volumes; whichever is greater, or as specified in the work plan. In the event that limited recharge does not allow for the recovery of all drilling water lost in the well or three (3) well volumes, the well will be allowed to stabilize to conditions deemed representative of groundwater conditions. Stabilization periods will vary by project but will be confirmed with the NYSDEC prior to sampling.

4.4 PFAS Soil Sampling Procedure

PFAS sampling will be conducted in accordance with current NYSDEC PFAS Guidance. Soil samples for PFAS analysis will be collected using PFAS-Free equipment. Samples will be collected in bottleware provided by the laboratory. Because PFAS are found in numerous everyday items, the following special precautions will be taken during sampling activities:

- No use of Teflon®-containing materials (e.g., Teflon® tubing, bailers, tape, sample jar lid liners, plumbing paste).
- No use of low density polyethylene (LDPE)-containing materials.
- No Tyvek® clothing will be worn by samplers.
- Clothes treated with stain-resistant or rain-resistant coatings (e.g., Gortex®) will be not be worn by samplers.
- All clothing worn by sampling personnel must have been laundered multiple times.
- No fast food wrappers, disposable cups or microwave popcorn will be within the vicinity of the wells/ samples.

- There will be no use of chemical (blue) ice packs, aluminum foil, or Sharpies® within the vicinity of the wells/ samples.
- No use of sunscreen, insect repellants, cosmetic, lotions or moisturizers will be allowed by sampling personnel the day of sampling.
- If any of the above items are handled by the field personnel prior to sampling activities, field personnel will wash their hands thoroughly with soap and water prior to any sampling activities.
- Powder-free nitrile gloves will be worn during all sample collection activities.

Quality assurance/ quality control (QA/QC) samples for PFAS sampling will include one (1) field duplicate, one (1) matrix spike / matrix spike duplicates (MS/MSD) and one (1) equipment blank. The procedures and rationale for collecting these samples are described below.

- **Field duplicate** – Sample will be used to assess the variability in concentrations of samples from the same well due to the combined effects of sample processing in the field and laboratory as well as chemical analysis.

- **Matrix spike/matrix spike duplicate** – Sample will be used to provide information about the effect of the sample matrix on the design and measurement methodology used by the laboratory.

- **Equipment blank** – Sample will be collected to help identify possible contamination from sampling equipment (i.e., shovel, soil core, etc.).

PFAS samples will be submitted to an Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis of the full PFAS target analyte list (21 compounds listed in the NYSDEC Guidance) via modified USEPA Method 537 with a method detection limit not to exceed 1 ug/kg. Note, the laboratory utilized will be ELAP certified for PFOA and PFOS in drinking water by EPA method 537 or ISO 25101 as ELAP does not currently offer certification for PFAS compounds in matrices other than finished drinking water.

5.0 GEOLOGIC LOGGING AND SAMPLING

At each investigative location, borings will be advanced through overburden using either a drill rig and hollow-stem auger or direct push technology (split spoons or Macrocore). Soils will be evaluated for visual and olfactory evidence of impairment (i.e., staining, odors, and elevated PID readings) by a qualified individual. Sampling devices will be decontaminated according to procedures outlined in the Decontamination section of this document. When utilized, split-spoon samplers will be driven into the soil using a minimum 140-pound safety hammer and allowed to free-fall 30-inches, in accordance with ASTM-D 1586-84 specifications. The number of blows required to drive the sampler each 6-inches of penetration will be recorded. When required, samples will be stored in the appropriate bottleware (refer to Section 10) until analysis or deemed unnecessary.

In the event that maximum design depth of investigation is reached and hydrogeologic conditions are not suitable for well installation, the maximum drilling depth may be revised.

Boulders and bedrock encountered during well installation may be cored by standard diamond-core drilling methods using an NX, NQ, HQ size core barrel or other if specified in the project-specific work plan. All rock cores recovered will be logged by a qualified individual, and stored in labeled wooden core boxes. The cores will be stored by the firm until the project is completed or for at least one year. Drilling logs will be prepared by a qualified individual who will be present during drilling operations.

One copy of each field boring and well construction log and groundwater data, will typically be submitted as part of the investigation summary report (e.g., Remedial Investigation Report). The RQD value shall be calculated for each 5-foot section. Information provided in the logs shall include, but not be limited to, the following:

- Date(s), test hole identification, and project identification;
- Name of individual developing the log;
- Name of driller and assistant(s);
- Drill, make and model, auger size;
- Identification of alternative drilling methods used and justification thereof (e.g., rotary drilling with a specific bit type to remove material from within the hollow stem augers);
- Standard penetration test (ASTM D-1586) blow counts;
- Field diagram of each monitoring well installed with the depth to bottom of well/ screen, top of screen, length of riser, depth of steel casing, depths of sand pack, bentonite seal, grout, type of well completion etc.;
- Depth of each change of stratum;
- Identification of the material of which each stratum is composed, according to the USCS system or standard rock nomenclature, as appropriate;
- Depth interval from which each sample was taken, sample identification, and sample time;
- Depth at which hole diameters (bit sizes) change;
- Depth at which groundwater is encountered;
- Drilling fluid and quantity of water lost during drilling;
- Depth or location of any loss of tools or equipment;
- Depths of any fractures, joints, faults, cavities, or weathered zones

6.0 GROUNDWATER SAMPLING PROCEDURES

The groundwater in all new monitoring wells will be allowed to stabilize for at least 1week following development prior to sampling. Water levels will be measured to within 0.01 feet prior to purging and sampling. Sampling of each well will typically be accomplished in one of two ways; active or passive.

Active Sampling:

Active sampling includes bailing or pumping. Purging will be completed prior to active sampling if specified in the project-specific work plan. During purging, the following will be recorded in field books or groundwater sampling logs:

- date
- purge start time
- weather conditions
- presence of NAPL, if any, and approximate thickness
- pump rate
- pH
- dissolved oxygen
- temperature
- conductivity
- redox
- turbidity
- depth of well

- depth to water
- depth to pump intake
- purge end time
- volume of water purged

During low flow sampling, the water quality parameters including pH, conductivity, temperature, dissolved oxygen, redox, water level drawdown, and turbidity will be recorded at five (5) minute intervals. Samples will be collected after the parameters have stabilized for three (3) consecutive 5-minute intervals to within the specified ranges below:

- Water level drawdown (<0.3')
- Turbidity (+/- 10%, < 50-NTU for Metals Samples)
- pH (+/-0.1)
- Temperature (+/- 3%)
- Specific conductivity (+/- 3%)
- Dissolved Oxygen (+/- 10%)
- Oxidation reduction potential (+/- 10 millivolts)

Passive Sampling:

Groundwater samples will be collected via passive methods (i.e., no-purge) according to the following procedures and in the volumes specified in Table 10-1:

Samples will be collected via passive diffusion bag (PDB) samplers. PDB samplers are made of low-density polyethylene plastic tubing (typically 4 mil), filled with laboratory grade (ASTM Type II) deionized water and sealed at both ends.

- Pre-filled PDBs will not be stored for longer than 30 days and will be kept stored at room temperature in a sealed plastic bag until ready to use.
- PDBs filled in the field will be used immediately and not stored for future use.
- PDB samplers will only be used to collect groundwater samples which will be analyzed for VOCs.
- Mesh covers will be utilized for open rock holes as to not puncture the PDB and will be secured to the bag using zip-ties.
- PDB samplers will be deployed by hanging in the well at the depth(s) specified in the project-specific work plan. The depth at which the PDB is deployed will be recorded on the groundwater sampling form. The PDB samplers will be deployed at least 14 days prior to sampling;
- When transferring water from the PDB to sample containers, care will be taken to avoid agitating the sample, since agitation promotes the loss of volatile constituents;
- Gloves will be changed between collection of each PDB and tools used to open the PDB will be decontaminated with an alconox and potable water solution between each PDB;
- Any volume not used will be treated as investigation derived waste;
- Any observable physical characteristics of the groundwater (e.g., color, sheen, odor, turbidity) at the time of sampling will be recorded; and
- Weather conditions (i.e., air temperature, sky condition, recent heavy rainfall, drought conditions) at the time of sampling will be recorded.

6.1 PFAS Groundwater Sampling Procedure

PFAS sampling will be conducted in accordance with current NYSDEC PFAS Guidance. Samples for PFAS analysis will be collected using PFAS-Free equipment, specifically a dedicated disposable high density polyethylene (HDPE) or PVC bailers, and/or low-flow sampling equipment with PFAS-Free components. Samples will be collected in bottleware provided by the laboratory. Because PFAS are found in numerous everyday items, the following special precautions will be taken during sampling activities:

- No use of Teflon®-containing materials (e.g., Teflon® tubing, bailers, tape, sample jar lid liners, plumbing paste).
- No use of low density polyethylene (LDPE)-containing materials.
- No Tyvek® clothing will be worn by samplers.
- Clothes treated with stain-resistant or rain-resistant coatings (e.g., Gortex®) will be not be worn by samplers.
- All clothing worn by sampling personnel must have been laundered multiple times.
- No fast food wrappers, disposable cups or microwave popcorn will be within the vicinity of the wells/ samples.
- There will be no use of chemical (blue) ice packs, aluminum foil, or Sharpies® within the vicinity of the wells/ samples.
- No use of sunscreen, insect repellants, cosmetic, lotions or moisturizers will be allowed by sampling personnel the day of sampling.
- If any of the above items are handled by the field personnel prior to sampling activities, field personnel will wash their hands thoroughly with soap and water prior to any sampling activities.
- Powder-free nitrile gloves will be worn during all sample collection activities.

Quality assurance/ quality control (QA/QC) samples for PFAS sampling will include one (1) field duplicate, one (1) matrix spike / matrix spike duplicates (MS/MSD) and one (1) equipment blank. The procedures and rationale for collecting these samples are described below.

- Field duplicate – Sample will be used to assess the variability in concentrations of samples from the same well due to the combined effects of sample processing in the field and laboratory as well as chemical analysis.

- Matrix spike/matrix spike duplicate – Sample will be used to provide information about the effect of the sample matrix on the design and measurement methodology used by the laboratory.

- Equipment blank – Sample will be collected to help identify possible contamination from sampling equipment (i.e., bailer). One equipment blank will be collected by pouring laboratory certified analyte-free deionized water over a bailer into the sample container.

PFAS samples will be submitted to an Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis of the full PFAS target analyte list (21 compounds listed in the NYSDEC Guidance) via modified USEPA Method 537 with a method detection limit not to exceed 2 ng/L. Note, the laboratory utilized will be ELAP certified for PFOA and PFOS in drinking water by EPA method 537 or ISO 25101 as ELAP does not currently offer certification for PFAS compounds in matrices other than finished drinking water.

7.0 SOIL VAPOR INTRUSION SAMPLING PROCEDURES

Soil vapor intrusion (SVI) sampling is to be conducted in accordance with the *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 and subsequent updates. Tracer gas testing is to be conducted for sub-slab sampling points to ensure concentrations of the tracer gas are not detected in the sub-slab at greater than 10% of the concentration detected in the atmosphere. An outdoor air sample is to be collected at an upwind direction as a control. A building inventory should be completed to document building construction information and identify products that may be contributing to the levels in indoor air.

8.0 FIELD DOCUMENTATION

8.1 Daily Logs/ Field Notebook

Daily logs are necessary to provide sufficient data and observations to enable participants to reconstruct events that occurred during the project and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings. Daily logs may be kept in a project-specific notebook labelled with the project name/ number and contact information.

The daily log is the responsibility of the field personnel and will include:

- Name of person making entry;
- Start and end time of work;
- Names of team members on-site;
- Changes in required levels of personnel protection:
  - Level of protection originally used;
  - Changes in protection, if required; and
  - Reasons for changes.
- Air monitoring locations, start and end times, and equipment identification numbers;
- Summary of tasks completed;
- Summary of samples collected including location, matrix, etc.;
- Field observations and remarks;
- Weather conditions, wind direction, etc.;
- Any deviations from the work plan;
- Initials/ signature of person recording the information.

As with any data logbooks, no pages will be removed for any reason. If corrections are necessary, these must be made by drawing a single line through the original entry (so that the original entry can still be read) and writing the corrected entry alongside. The correction must be initialed and dated. Corrected errors may require a footnote explaining the correction.

Sample documents, forms, or field notebooks are not to be destroyed or thrown away, even if they are illegible or contain inaccuracies that require a replacement document. If an error is made on a document assigned to one individual, that individual may make corrections simply by crossing a line through the error and entering the corrected information. The incorrect information should not be obliterated. Any subsequent error discovered on a document should be corrected by the person who made the entry. All corrections must be initialed and dated.

8.2 *Photographs*

Photographs will be taken to document the work. Documentation of a photograph is crucial to its validity as a representation of an existing situation. Photographs should be documented with date, location, and description of the photograph.

9.0 INVESTIGATION DERIVED WASTE

Purpose:

The purposes of these guidelines are to ensure the proper holding, storage, transportation, and disposal of materials that may contain hazardous wastes. Investigation-derived waste (IDW) included the following:

- Drill cuttings, drilling mud solids;
- Water produced during drilling;
- Well development and purge waters, unused PDB waters;
- Decontamination waters and associated solids;

IDW will be managed in substantial accordance with DER-10 and all applicable local, State and Federal regulations.

Procedure:

1. Contain all investigation-derived wastes in Department of Transportation (DOT)-approved 55-gallon drums, roll-off boxes, or other containers suitable for the wastes.
2. Place different media in separate drums (i.e., do not combine solids and liquids).
3. To the extent practicable, separate solids from drilling muds, decontamination waters, and similar liquids. Place solids within separate containers.
4. Transfer all waste containers to a staging area. Access to this area will be controlled. Waste containers must be transferred to the staging area as soon as practicable after the generating activity is complete.
5. Label all containers with regard to contents, origin, and date of generation. Use indelible ink for all labeling.
6. Collect samples for waste characterization purposes, use boring/well sample analytical data for characterization.
7. For wastes determined to be hazardous in character, be aware on accumulation time limitations. Coordinate the disposal of these wastes with the Owner and NYSDEC.
8. Dispose of investigation-derived wastes as follows;
    - Soil, water, and other environmental media for which analysis does not detect organic constituents, and for which inorganic constituents are at levels consistent with background, may be spread on-site (pending NYSDEC approval) or otherwise treated as a non-waste material.
    - Soils, water, and other environmental media in which organic compounds are detected or metals are present above background will be disposed as industrial waste or hazardous waste, as appropriate. Alternate disposition must be

consistent with applicable State and Federal laws.

- Personal protective equipment, disposable bailers, and similar equipment may be disposed as municipal waste, unless waste characterization results mandate disposal as industrial wastes

9. If waste is determined to be listed hazardous waste, it must be handled as hazardous waste as described above, unless a contained-in determination is accepted by the NYSDEC.

10.0 DECONTAMINATION PROCEDURES

Sampling methods and equipment have been chosen to minimize decontamination requirements and to prevent the possibility of cross-contamination. Decontamination of equipment will be performed between discrete sampling locations. Equipment used to collect samples between composite sample locations will not require decontamination between collection of samples. All drilling equipment will be decontaminated after the completion of each drilling location. Special attention will be given to the drilling assembly and augers.

Split spoons and other non-disposable equipment will be decontaminated between each sampling location. The sampler will be cleaned prior to each use, by one of the following procedures:

- Initially cleaned of all foreign matter;
- Sanitized with a steam cleaner;

OR

- Initially cleaned of all foreign matter;
- Scrubbed with brushes in alconox solution;
- Triple rinsed; and
- Allowed to air dry.

Other sampling equipment including but not limited to low-flow sampling pumps, surface soil sampling trowel, water level meters, etc. will be decontaminated between sample location using an alconox solution. Consumables including gloves, tubing, bailers, string, etc. will be dedicated to one sample location and will not be reused.

11.0 SAMPLE CONTAINERS

The containers required for sampling activities are pre-washed and ordered directly from a laboratory, which has the containers prepared in accordance with USEPA bottle washing procedures. The following tables detail sample volumes, containers, preservation and holding time for typical analytes.

Table 11-1
Groundwater Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Holding Time Until Extraction/ Analysis
VOCs	40-ml glass vial with Teflon-backed septum	Two (2); fill completely, no headspace	Cool to 4° C (ice in cooler), Hydrochloric acid to pH <2	14 days
Semi-volatile Organic Compounds (SVOCs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Polychlorinated biphenyls (PCBs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Metals	250-ml HDPE	One (1); fill completely	Cool to 4° C (ice in cooler) Nitric acid to pH <2	180 days (28 for mercury)
Cyanide	1,000-mL HDPE		Cool to 4° C (ice in cooler) Nitric acid to pH <2	14 days
1,4-Dioxane	40-ml glass vial with Teflon-backed septum	Three (3); fill completely, no headspace	Cool to 4° C (ice in cooler), Hydrochloric acid to pH <2	14 days
PFAS	250-mL HDPE, no Teflon	Two (2); fill completely	Cool to 4° C (ice in cooler), Trizma	14 days

Note:
All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as bottleware may vary by laboratory.
Holding time begins at the time of sample collection.

TABLE 11-2
Soil Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Holding Time Until Extraction/ Analysis
VOCs	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	14 days
VOCs via EPA 5035	40 mL vials with sodium bisulfate, methanol, and/or DI water	Three (3), 5 grams each	Cool to 4° C (ice in cooler)	2 days*
SVOCs	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	7/40 days
PCBs	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	14/40 days
Metals	4-oz. glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	180 days (28 for mercury)
Cyanide	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	14 days
1,4-Dioxane	40 mL vials with sodium bisulfate, methanol, and/or DI water	Three (3), 5 grams each	Cool to 4° C (ice in cooler)	2 days*
PFAS	8-oz HDPE, no Teflon	One (1); fill as completely as possible	Cool to 4° C (ice in cooler)	28 days

Note:
**Or freeze within holding time.*
All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as bottleware may vary by laboratory.
Holding time begins at the time of sample collection.

Table 11-3
Air Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Holding Time Until Extraction/ Analysis
VOCs	1 – Liter Summa® Canister	One (1) 1-Liter 1.4- Liter for MS/MSD	N/A	14 days

Note:
All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as bottleware may vary by laboratory.
Holding time begins at the time of sample collection.

12.0 SAMPLE CUSTODY AND SHIPMENT

12.1 Sample Identification

All containers of samples collected from the project will be identified using the following format on a label or tag fixed to the sample container:

AA-BB-CC-DD-EE

AA: This set of initials indicates an abbreviation for the Site from which the sample was collected.
BB This set of initials represents the type of sample (e.g., SB for soil boring and MW for monitoring well)
CC: These initials identify the unique sample location number.
DD: These initials identify the sample start depth (if soil sample)
EE These initials identify the sample end depth (if soil sample)

Each sample will be labeled, chemically preserved (if required) and sealed immediately after collection. To minimize handling of sample containers, labels will be filled out prior to sample collection when possible. The sample label will be filled out using waterproof ink and will be firmly affixed to the sample containers. The sample label will give the following information:

- Date and time of collection
- Sample identification
- Analysis required
- Project name/number
- Preservation

Sample tags attached to or affixed around the sample container must be used to properly identify all samples collected in the field. The sample tags are to be placed on the bottles so as not to obscure any QC lot numbers on the bottles; sample information must be printed in a legible manner using waterproof ink. Field identification must be sufficient to enable cross-reference with the logbook. For chain-of-custody purposes, all QC samples are subject to exactly the same custodial procedures and documentation as "real" samples.

12.2 Chain of Custody

This section describes standard operating procedures for sample identification and chain-of-custody to be utilized for all field activities. The purpose of these procedures is to ensure that the quality of the samples is maintained during their collection, transportation, and storage through analysis. All chain-of-custody requirements comply with standard operating procedures indicated in USEPA sample handling protocol.

Sample identification documents must be carefully prepared so that sample identification and chain-of-custody can be maintained and sample disposition controlled. Sample identification documents include:

- Field notebooks;
- Sample label; and
- Chain-of-custody records.

The primary objective of the chain-of-custody procedures is to provide an accurate written or computerized record that can be used to trace the possession and handling of a sample from collection to completion of all required analyses. A sample is in custody if it is:

- In someone's physical possession;
- In someone's view;
- Locked up; or
- Kept in a secured area that is restricted to authorized personnel.

As few persons as possible should handle samples. Sample bottles will be obtained pre-cleaned from the a laboratory. Sample containers should only be opened immediately prior to sample collection. The sample collector is personally responsible for the care and custody of samples collected until they are transferred to another person or dispatched properly under chain-of-custody rules. The sample collector will record sample data in the field notebook and/or field logs.

The chain-of-custody record must be fully completed in duplicate, using black carbon paper where possible, by the field technician who has been designated by the project manager as responsible for sample shipment to the appropriate laboratory for analysis. In addition, if samples are known to require rapid turnaround in the laboratory because of project time constraints or analytical concerns (e.g., extraction time or sample retention period limitations, etc.), the person completing the chain-of-custody record should note these constraints on the chain of custody.

12.3 Transfer of Custody and Shipment

The coolers in which the samples are packed must be accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them must sign, date, and note the time on the chain-of-custody record. This record documents sample custody transfer.

Shipping containers must be sealed with custody seals for shipment to the laboratory. The method of shipment, name of courier, and other pertinent information are entered on the chain-of-custody.

All shipments must be accompanied by the chain-of-custody record identifying their contents. The original record accompanies the shipment. The other copies are distributed appropriately to the site manager.

12.4 Custody Seals

Custody seals are preprinted adhesive-backed seals. Sample shipping containers (coolers, cardboard boxes, etc., as appropriate) are sealed in as many places as necessary to ensure security.

Seals must be signed and dated before shipment. On receipt at the laboratory, the custodian must check (and certify, by completing the package receipt log and LABMIS entries) that seals on boxes and bottles are intact. Strapping tape should be placed over the seals to ensure that seals are not accidentally broken during shipment.

12.5 Sample Packaging

Samples must be packaged carefully to avoid breakage or contamination and must be shipped to the laboratory at proper temperatures. The following sample packaging requirements will be followed:

- Sample bottle lids must never be mixed. All sample lids must stay with the original containers.
- The label should not cover any bottle preparation QC lot numbers.
- All sample bottles are placed in a plastic bag and/or individual bubble wrap sleeves to minimize the potential for cross-contamination and breaking.
- Shipping coolers must be partially filled with packing materials and ice when required, to prevent the bottles from moving during shipment.
- The sample bottles must be placed in the cooler in such a way as to ensure that they do not directly come in contact with other samples. Ice will be added to the cooler to ensure that the samples reach the laboratory at temperatures no greater than 4°C.
- Any remaining space in the cooler should be filled with inert packing material. Under no circumstances should material such as sawdust, sand, etc., be used.
- A chain of custody record must be placed in a plastic bag inside the cooler. Custody seals must be affixed to the sample cooler.

12.6 Sample Shipment

Shipping containers are to be custody-sealed for shipment as appropriate. The container custody seal will consist of tape wrapped around the package and custody seals affixed in such a way that access to the container can be gained only by cutting the filament tape and breaking the seal. Chain of custody seals shall be placed on the container, signed, and dated prior to taping the container to ensure the chain of custody seals will not be destroyed during shipment. In addition, the coolers must also be labeled and placarded in accordance with DOT regulations if shipping medium and high hazard samples.

Field personnel will make arrangements for transportation of samples to the lab. The lab must be notified as early as possible regarding samples intended for Saturday delivery. The transportation and handling of samples must be accomplished in a manner that not only protects the integrity of the sample, but also prevents any detrimental effects due to the possible hazardous nature of samples. Regulations for packaging, marking, labeling, and shipping hazardous materials are promulgated by the United States DOT in the Code of Federal Regulation, 49 CFR 171 through 177. All samples will be delivered to the laboratory and analyzed within the holding times specified by the analytical method for that particular analyte.

All chain-of-custody requirements must comply with standard operating procedures in the USEPA sample handling protocol.

12.7 Laboratory Custody Procedures

A designated sample custodian accepts custody of the shipped samples and verifies that the sample identification number matches that on the chain-of-custody record and traffic reports, if required. Pertinent information as to shipment, pickup, and courier is entered on the chain of custody or attached forms.

13.0 DELIVERABLES

This section will describe laboratory requirement and procedures to be followed for laboratory analysis. Samples collected in New York State will be analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory. When required, analyses will be conducted in accordance with the most current NYSDEC Analytical Services Protocol (ASP). For example, ASP Category B reports will be completed by the laboratory for samples representing the final delineation of the Remedial Investigation, confirmation samples, samples to determine closure of a system, and correlation samples taken using field testing technologies analyzed by an ELAP-certified laboratory to determine correlation to field results. Data Usability Summary Reports will be completed by a third party for samples requiring ASP Category B format reports. Electronic data deliverables (EDDs) will also be generated by the laboratory in EQUIS format for samples requiring ASP Category B format reports.

NYSDEC DER-10 DUSR requirements are as follows:

a) Background. The Data Usability Summary Report (DUSR) provides a thorough evaluation of analytical data with the primary objective to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use.

    1. The development of the DUSR must be carried out by an experienced environmental scientists, such as the project Quality Assurance Officer, who is fully capable of conducting a full data validation. The DUSR is developed from:

        i. A DEC ASP Category B Data Deliverable; or
        ii. The *USEPA Contract Laboratory Program National Functional Data Validation Standard Operating Procedures for Data Evaluation and Validation.*

    2. The DUSR and the data deliverables package will be reviewed by DER staff. If full third party data validation is found to be necessary (e.g. pending litigation) this can be carried out at a later data on the same data package used for the development of the DUSR.

b) Personnel Requirements. The person preparing the DUSR must be pre-approved by DER. The person must submit their qualifications to DER documenting experience in analysis and data validation. Data validator qualifications are available on DEC's website identified in the table of contents.
c) Preparation of a DUSR. The DUSR is developed by reviewing and evaluating the analytical data package. In order for the DUSR to be acceptable, during the course of this review the following questions applicable to the analysis being reviewed must be answered in the affirmative.

        1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?

2. Have all holding times been met?
3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?
4. Have all of the data been generated using established and agreed upon analytical protocols?
5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?
6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?
7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?

d) Documenting the validation process in the DUSR. Once the data package has been reviewed and the above questions asked and answered the DUSR proceeds to describe the samples and the analytical parameters, including data deficiencies, analytical protocol deviations and quality control problems are identified and their effect on the data is discussed.

14.0 EQUIPMENT CALIBRATION

All instruments and equipment used during sampling and analysis will be operated, calibrated, and maintained according to the manufacturer's guidelines and recommendations as well as criteria set forth in the applicable analytical methodology references. Operation, calibration, and maintenance will be performed by personnel properly trained in these procedures. Section 11 lists the major instruments to be used for sampling and analysis. In addition, brief descriptions of calibration procedures for major field and laboratory instruments follow.

14.1 Photovac/MiniRae Photoionization Detector (PID)

Standard operating procedures for the PID require that routine maintenance and calibration be performed every six months. Field calibration will be performed on a daily basis. The packages used for calibration are non-toxic analyzed gas mixtures available in pressurized containers. All calibration procedures will follow the manufacturer recommendations.

14.2 Conductance, Temperature, and pH Tester

Temperature and conductance instruments are factory calibrated. Temperature accuracy can be checked against an NBS certified thermometer prior to field use if necessary. Conductance accuracy may be checked with a solution of known conductance and recalibration can be instituted, if necessary.

14.3 O_2/Explosimeter

The specific meter used at the time of work shall be calibrated in accordance with manufacturer recommendations. The model 260 O_2/ Explosimeter is described below.

The primary maintenance item of the Model 260 is the rechargeable 2.4 volt (V) nickel cadmium battery. The battery is recharged by removing the screw cap covering receptacle and connecting one end of the charging cable to the instrument and the other end to a 115V AC outlet.

The battery can also be recharged using a 12V DC source. An accessory battery charging cable is available, one end of which plugs into the Model 260 while the other end is fitted with an automobile cigarette lighter plug.

Recommended charging time is 16 hours.

Before the calibration of the combustible gas indicator can be checked, the Model 260 must be in operating condition. Calibration check-adjustment is made as follows:

1. Attach the flow control to the recommended calibration gas tank.
2. Connect the adapter-hose to the flow control.
3. Open flow control valve.
4. Connect the adapter-hose fitting to the inlet of the instrument; after about 15 seconds the LEL meter pointer should be stable and within the range specified on the calibration sheet accompanying the calibration equipment. If the meter pointer is not in the correct range, stop the flow; remove the right hand side cover. Turn on the flow and adjust the "S" control with a small screwdriver to obtain a reading as specified on the calibration sheet.
5. Disconnect the adapter-hose fitting from the instrument.
6. Close the flow control valve.
7. Remove the adapter-hose from the flow control.
8. Remove the flow control from the calibration gas tank.
9. Replace the side cover on the Model 260.

CAUTION: Calibration gas tank contents are under pressure. Use no oil, grease, or flammable solvents on the flow control or the calibration gas tank. Do not store calibration gas tank near heat or fire or in rooms used for habitation. Do not throw in fire, incinerate, or puncture. Keep out of reach of children. It is illegal and hazardous to refill this tank. Do not attach the calibration gas tank to any other apparatus than described above. Do not attach any gas tank other than MSA calibration tanks to the regulator.

14.4 Nephelometer (Turbidity Meter)

LaMotte 2020WE Turbidity Meter is calibrated before each use. The default units are set to NTU and the default calibration curve is formazin. A 0 NTU Standard (Code 1480) is included with the meter. To calibrate, rinse a clean tube three times with the blank. Fill the tube to the fill line with the blank. Insert the tube into the chamber, close the lid, and select “scan blank”.

TABLE 14-4
List of Major Instruments
for Sampling and Analysis

- MSA 360 0_2 /Explosimeter
- Geotech Geopump II AC/DC Peristaltic Pump
- QED MP50 Controller and QED Sample Pro MicroPurge Bladder Pimp
- Horiba U-53 Multi-Parameter Water Quality Meter
- LaMotte 2020WE Turbidity Meter
- EM-31 Geomics Electromagnetic Induction Device
- Mini Rae Photoionization Detectors (3,000, ppbRAE, etc.)

15.0 INTERNAL QUALITY CONTROL CHECKS

QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of field equipment. Field-based QC will comprise at least 10% of each data set generated and will consist of standards, replicates, spikes, and blanks. Field duplicates and field blanks will be analyzed by the laboratory as samples and will not necessarily be identified to the laboratory as duplicates or blanks. For each matrix, field duplicates will be provided at a rate of one per 10 samples collected or one per shipment, whichever is greater. Field blanks which may consist of trip, routine field, and/or rinsate blanks will be provided at a rate of one per 20 samples collected for each media, or one per shipment, whichever is greater. Frequency of QC data may vary from project to project; refer to the project-specific work plan for QC requirements.

Calculations will be performed for recoveries and standard deviations along with review of retention times, response factors, chromatograms, calibration, tuning, and all other QC information generated. All QC data, including split samples, will be documented in the site logbook and/or appropriate field logs. QC records will be retained and results reported with sample data.

15.1 Field Blanks

Various types of blanks are used to check the cleanliness of field handling methods. The following types of blanks may be used: the trip blank, the routine field blank, and the field equipment blank. They are analyzed in the laboratory as samples, and their purpose is to assess the sampling and transport procedures as possible sources of sample contamination. Field staff may add blanks if field circumstances are such that they consider normal procedures are not sufficient to prevent or control sample contamination, or at the direction of the project manager. Rigorous documentation of all blanks in the site logbooks is mandatory.

- **Routine Field Blanks** or bottle blanks are blank samples prepared in the field to access ambient field conditions. They will be prepared by filling empty sample containers with deionized water and any necessary preservatives. They will be handled like a sample

and shipped to the laboratory for analysis.

- **Trip Blanks** are similar to routine field blanks with the exception that they are **not** exposed to field conditions. Their analytical results give the overall level of contamination from everything except ambient field conditions. For the RI/FS, one trip blank will be collected with every shipment of water samples for VOC analysis. Each trip blank will be prepared by filling a 40-ml vial with deionized water prior to the sampling trip, transported to the site, handled like a sample, and returned to the laboratory for analysis without being opened in the field. Trip blanks may be provided by the laboratory, shipped with the bottleware, and kept with the sampling containers until analysis.
- **Field Equipment Blanks** are blank samples (sometimes called transfer blanks or rinsate blanks) designed to demonstrate that sampling equipment has been properly prepared and cleaned before field use, and that cleaning procedures between samples are sufficient to minimize cross contamination. If a sampling team is familiar with a particular site, they may be able to predict which areas or samples are likely to have the highest concentration of contaminants. Unless other constraints apply, these samples should be taken last to avoid excessive contamination of sampling equipment.

15.2 Duplicates

Duplicate samples are collected to check the consistency of sampling and analysis procedures. The following types of duplicates may be collected.

- **Blind duplicate** samples consist of a set of two samples collected independently at a sampling location during a single sampling event. Blind duplicates are designed to assess the consistency of the overall sampling and analytical system. Blind duplicate samples should not be distinguishable by the person performing the analysis.
- **Matrix Spike and Matrix Spike Duplicates (MS/MSDs)** consist of a set of three samples collected independently at a sampling location during a single sampling event. These samples are for laboratory quality control checks.

APPENDIX 8 – HEALTH AND SAFETY PLAN

Site Health and Safety Plan

Location:

11075 Walden Avenue
Alden, New York 14004

Prepared For:

Mr. Jim Doro
Walden Realty Limited Partnership/ Doritex Corp.
11980 Walden Avenue
Alden, New York

LaBella Project No. 2180605

April 2018

Olympic Towers, 300 Pearl Street, Suite 130 | Buffalo, NY 14202 | p 716-551-6281 | f 716-551-6282
www.labellapc.com

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SITE HEALTH AND SAFETY PLAN

Project Title:	11075 Walden Avenue - Brownfield Cleanup Program
Project Number:	2180605
Project Location (Site):	11075 Walden Avenue, Alden, New York 14004
Environmental Director:	Rob Napieralski
Project Manager:	Adam Zebrowski
Plan Review Date:	_____
Plan Approval Date:	_____
Plan Approved By:	_____ Mr. Richard Rote, CIH
Site Safety Supervisor:	Chris Kibler
Site Contact:	Jim Doro, Doritex Corp.
Safety Director:	Rick Rote, CIH
Proposed Date(s) of Field Activities:	To Be Determined
Site Conditions:	2.6± acres; Current Site features include green space to the north, west and south of the Site Building and asphalt-paved parking areas to the east and south of the Site Building.
Site Environmental Information Provided By:	❑ Limited Environmental Due Diligence: Transaction Screen report, 11075 Walden Avenue, Alden, New York, prepared by Lender Consulting Services, Inc. dated May 4, 2017 ❑ Supplemental Phase II Environmental Site Assessment report, 11075 Walden Avenue, Alden, New York, prepared by LaBella Associates, D.P.C. dated December 4, 2017
Air Monitoring Provided By:	LaBella Associates, D.P.C.
Site Control Provided By:	LaBella Environmental, LLC

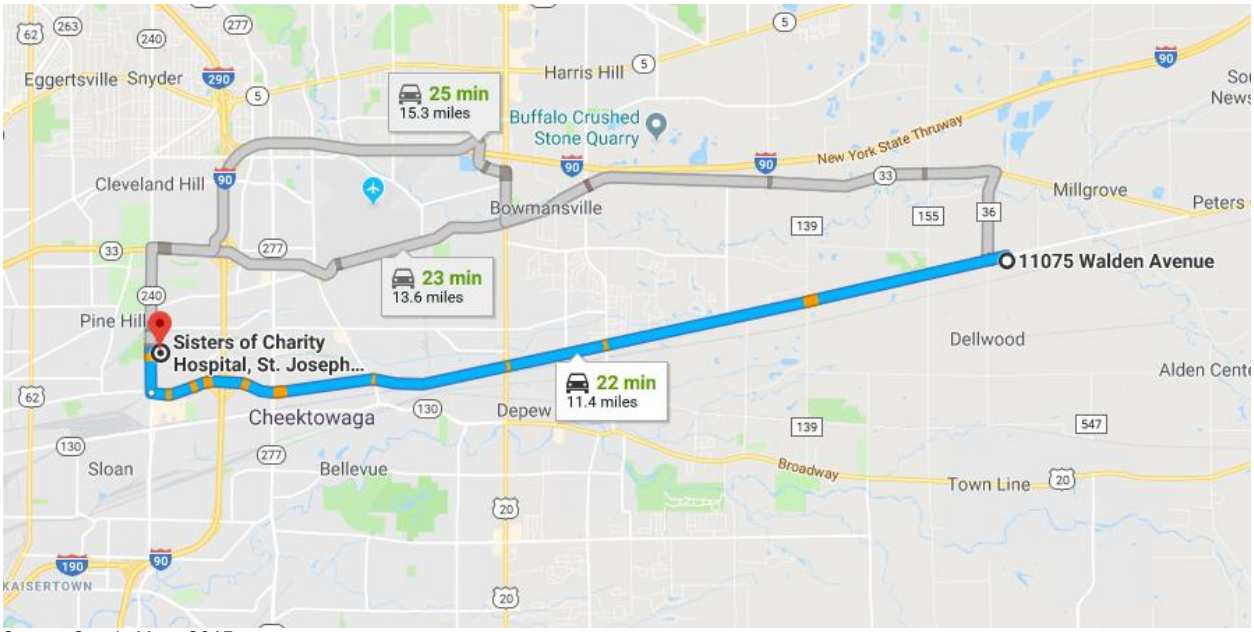
EMERGENCY CONTACTS

	Name	Phone Number
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	St. Joseph's Hospital	716-891-2606
Poison Control Center:	National Poison Control Center (serving Buffalo Area)	800-222-1222
Police (local, state):	Erie County Sheriff's Department	716-937-7675
Fire Department:	Alden Village Fire Department	716-937-9319
Site Contact:	Jim Doro, Doritex Corp.	716-684-6600
Agency Contact:	NYSDEC – Anthony Lopes NYSDOH – To Be Determined	716-851-7220 To Be Determined
Environmental Director:	Rob Napieralski	Direct: 716-551-6283
Project Manager:	Adam Zebrowski	Direct: 716-840-2548
Site Safety Supervisor:	Shannon Dalton or Bonnie Gambrel	Direct: 716-551-6281
Safety Director	Rick Rote, CIH (LaBella)	Direct: 704-941-2123

MAP AND DIRECTIONS TO THE MEDICAL FACILITY
- ST. JOSEPH'S HOSPITAL

11075 Walden Ave
Alden, NY 14004

1. Head west on Walden Ave toward Town Line Rd
   Pass by AutoZone (on the left in 6.4 mi)
   10.9 mi
2. Turn right onto Harlem Rd
   0.5 mi



Source: Google Maps 2015

1.0 INTRODUCTION

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered during the Interim Remedial Measure (IRM) at 11075 Walden Avenue in the Town of Alden, Erie County, New York (Site). This HASP only reflects the policies of LaBella Associates, D.P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work Site. This document's project specifications, and the Community Air Monitoring Plan (CAMP), are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the United States Environmental Protection Agency, New York State Department of Environmental Conservation, Occupational Safety and Health Administration or other regulatory bodies.

2.0 RESPONSIBILITIES

This HASP presents guidelines to minimize the risk of injury to project personnel, and to provide rapid response in the event of injury. The HASP is applicable only to activities of approved LaBella personnel and their authorized visitors. The Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of LaBella employees to follow the requirements of this HASP, and all applicable company safety procedures.

3.0 ACTIVITIES COVERED

The activities covered under this HASP are limited to the following:

- Management of environmental investigation and remediation activities
- Environmental Monitoring
- Collection of samples
- Management of excavated soil and liquid waste (groundwater)

4.0 WORK AREA ACCESS AND SITE CONTROL

The contractor(s) will have primary responsibility for work area access and Site control.

5.0 POTENTIAL HEALTH AND SAFETY HAZARDS

This section lists some potential health and safety hazards that project personnel may encounter at the project Site and some actions to be implemented by approved personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as Site environmental and Site work conditions change. The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times, the Site Safety Officer has responsibility for Site safety and his instructions must be followed.

5.1 *Hazards Due to Heavy Machinery*

Potential Hazard:

Heavy machinery including drilling rigs, excavators, trailers, etc. will be in operation at the Site. The presence of such equipment presents the danger of being struck or crushed and can also create noise pollution. Use caution when working near heavy machinery.

Protective Action:

Make sure that operators are aware of your activities, and heed operator's instructions and warnings. Wear bright colored clothing and walk safe distances from heavy equipment. A hard hat, safety glasses, steel toe shoes and ear protection are required.

5.2 *Excavation Hazards*

Potential Hazard:

Excavations and trenches can collapse, causing injury or death. Edges of excavations can be unstable and collapse. Toxic and asphyxiant gases can accumulate in confined spaces and trenches. Excavations that require working within the excavation will require air monitoring in the breathing zone (refer to Section 9.0).

Excavations left open create a fall hazard which can cause injury or death.

Protective Action:

Personnel must receive approval from the Project Manager to enter an excavation for any reason. Subsequently, approved personnel are to receive authorization for entry from the Site Safety Officer. Approved personnel are not to enter excavations over 4 feet in depth unless excavations are adequately sloped. Additional personal protective equipment may be required based on the air monitoring.

While shoring is planned for the proposed excavation, personnel should exercise caution near all excavations at the Site as excavation sidewalls may become unstable. Do not proceed closer than 3 feet to an unsupported or non-sloped excavation side wall. The contractor will be responsible to ensure that all excavations are left in a safe condition.

Excavations shall be backfilled immediately following completion. If this is not possible, fencing and/or barriers accompanied by "no trespassing" signs should be placed around all excavations when left open for any period of time when work is not being conducted.

5.3 *Cuts, Punctures and Other Injuries*

Potential Hazard:

In any excavation and construction work Site there is the potential for the presence of sharp or jagged edges on rock, metal materials, and other sharp objects. Serious cuts and punctures can result in loss of blood and infection.

Protective Action:

The Project Manager is responsible for making First Aid supplies available at the work Site to treat minor injuries. The Site Safety Officer is responsible for arranging the transportation of authorized on-site personnel to medical facilities when First Aid treatment in not sufficient. Do not move seriously injured workers. All injuries requiring treatment are to be reported to

the Project Manager. Serious injuries are to be reported immediately to the Site Safety Officer.

5.4 Injury Due to Exposure of Chemical Hazards

Potential Hazards:

Contaminants identified in testing locations at the Site include various chlorinated solvent volatile organic compounds (VOCs). Volatile organic vapors, chlorinated solvents or other chemicals may be encountered during subsurface activities at the project work Site. Inhalation of high concentrations of volatile organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis. In addition, as subsurface activities will take place within the Site Building, there is the potential for carbon monoxide build-up to occur as a result of machinery operation. Inhalation of high concentrations of carbon monoxide can cause headache, stupor, drowsiness, confusion and other health effects including death.

Protective Action:

The use of properly selected Personal Protective Equipment (PPE), adherence to standard health and safety pre-cautions (e.g., no smoking or eating within work area or prior to personal decontamination), and implementation of routine dust suppression methods will effectively minimize exposure to the known contaminants on-site.

The presence of organic vapors may be detected by their odor and by monitoring instrumentation. Approved employees will not work in environments where hazardous concentrations of organic vapors are present. Air monitoring (refer to Section 9.0) of the work area will be performed at least every 60 minutes or more often using a Photoionization Detector (PID). Personnel are to leave the work area whenever PID measurements of ambient air exceed 25 parts per million (ppm) consistently for a 5 minute period. In the event that sustained total volatile organic compound (VOC) readings of 25 ppm are encountered personnel should upgrade personal protective equipment to Level C (refer to Section 8.0) and an Exclusion Zone should be established around the work area to limit and monitor access to this area (refer to Section 6.0).

As the potential for Carbon monoxide build-up exists during subsurface activities, the work area will be properly ventilated in real-time. Carbon monoxide concentrations will also be evaluated at least every 60 minutes or more often using a Carbon Monoxide detector. If concentrations of carbon monoxide are identified in exceedance of 10 ppm during subsurface activities, additional ventilation of the work area will be required prior to commencing with such.

5.5 Injuries due to extreme hot or cold weather conditions

Potential Hazards:

Extreme hot weather conditions can cause heat exhaustion, heat stress and heat stroke or extreme cold weather conditions can cause hypothermia.

Protective Action:

Precaution measures should be taken such as dress appropriately for the weather conditions and drink plenty of fluid. If personnel should suffer from any of the above conditions, proper techniques should be taken to cool down or heat up the body and taken to the nearest hospital if needed.

5.6 Injuries due to Saw Cutting of Concrete Surfaces

Potential Hazards:

As saw cutting of the interior concrete slab will be required in order to proceed with the excavation of chlorinated solvent VOC-impacted soils beneath the Site Building, there is the potential for worker exposure to silica dust.

Protective Action:

It is recommended that approved personnel conducting saw cutting activities wear at a minimum a ½ face respirator with organic vapor cartridges. On-site personnel not associated with saw cutting activities should remain a safe distance and (if applicable) upwind from the work area during such to avoid exposure to potential silica dust.

6.0 WORK ZONES

In the event that conditions warrant establishing various work zones (i.e., based on hazards - Section 5.0), the following work zones should be established:

Exclusion Zone (EZ):

The EZ will be established in the immediate vicinity and adjacent downwind direction of Site activities that elevate breathing zone VOC concentrations to unacceptable levels based on field screening. These Site activities include contaminated soil excavation and soil sampling activities. If access to the Site is required to accommodate non-project related personnel then an EZ will be established by constructing a barrier around the work area (yellow caution tape and/or construction fencing). The EZ barrier shall encompass the work area and any equipment staging/soil staging areas necessary to perform the associated work. The contractor(s) will be responsible for establishing the EZ and limiting access to approved personnel. Depending on the condition for establishing the EZ, access to the EZ may require adequate PPE (e.g., Level C).

Contaminant Reduction Zone (CRZ):

The CRZ will be the area where personnel entering the EZ will don proper PPE prior to entering the EZ and the area where PPE may be removed. The CRZ will also be the area where decontamination of equipment and personnel will be conducted as necessary.

7.0 DECONTAMINATION PROCEDURES

Upon leaving the work area, approved personnel shall decontaminate footwear as needed. Under normal work conditions, detailed personal decontamination procedures will not be necessary. Work clothing may become contaminated in the event of an unexpected splash or spill or contact with a contaminated substance. Minor splashes on clothing and footwear can be rinsed with clean water. Heavily contaminated clothing should be removed if it cannot be rinsed with water. Personnel assigned to this project should be prepared with a change of clothing whenever on Site.

Personnel will use the contractor's disposal container for disposal of PPE.

8.0 PERSONAL PROTECTIVE EQUIPMENT

Generally, Site conditions at this work Site require level of protection of Level D or modified Level D; however, air monitoring will be conducted to determine if up-grading to Level C PPE is required (refer to Section 9.0). Descriptions of the typical safety equipment associated with Level D and Level C are provided below:

Level D:

Hard hat, safety glasses, rubber nitrile sampling gloves, steel toe construction grade boots, etc.

Level C:

Level D PPE and full or ½-face respirator and tyvek suit (if necessary). [*Note: Organic vapor cartridges are to be changed after each 8-hours of use or more frequently.*]

9.0 AIR MONITORING

According to 29 CFR 1910.120(h), air monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection required for personnel working onsite. Air monitoring will consist at a minimum of the procedure listed below. Air monitoring instruments will be calibrated and maintained in accordance with the manufacturer's specifications.

The Air Monitor will utilize a PID to screen the ambient air in the work areas (drilling, excavation, soil staging, and soil grading areas) for total VOCs, DustTrak tm Model 8520 aerosol monitors or equivalent for measuring particulates and a carbon monoxide detector for total carbon monoxide concentrations. Work area ambient air will generally be monitored in the work area and downwind of the work area. Air monitoring of the work areas and downwind of the work areas will be performed at least every 60 minutes using a PID, the DustTrak meter and a carbon monoxide detector.

If sustained PID readings of greater than 25 ppm are recorded in the breathing zone, either personnel are to leave the work area until satisfactory readings are obtained or approved personnel may re-enter the work areas wearing at a minimum a ½ face respirator with organic vapor cartridges for an 8-hour duration (i.e., upgrade to Level C PPE). Organic vapor cartridges are to be changed after each 8-hour use or more frequently, if necessary. If PID readings are sustained, in the work area, at levels above 50 ppm for a 5 minute average, work will be stopped immediately until safe levels of VOCs are encountered or additional PPE will be required (i.e., Level B).

As the potential for Carbon monoxide build-up exists during subsurface activities, the work area will be properly ventilated in real-time. If concentrations of carbon monoxide are identified in exceedance of 10 ppm during subsurface activities, additional ventilation of the work area will be required prior to commencing with such.

10.0 EMERGENCY ACTION PLAN

In the event of an emergency, employees are to turn off and shut down all powered equipment and leave the work areas immediately. Employees are to walk or drive out of the Site as quickly as possible, wait at the assigned "safe area" and follow the instructions of the Site Safety Officer.

Employees are not authorized or trained to provide rescue and medical efforts. Rescue and medical efforts will be provided by local authorities.

11.0 MEDICAL SURVEILLANCE

Medical surveillance will be provided to all employees who are injured due to overexposure from an emergency incident involving hazardous substances at this Site.

12.0 EMPLOYEE TRAINING

Personnel who are not familiar with this Site plan will receive training on its entire content and organization before working at the Site.

Individuals involved with the remedial investigation must be 40-hour OSHA HAZWOPER trained with current 8-hour refresher certification.

Table 1
Exposure Limits and Recognition Qualities

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	STEL (ppm)(b)	LEL (%)(e)	UEL (%)(f)	IDLH (ppm)(g)(d)	Odor	Odor Threshold (ppm)	Ionization Potential
Acetone	750	500	NA	2.15	13.2	20,000	Sweet	4.58	9.69
Anthracene	.2	.2	NA	NA	NA	NA	Faint aromatic	NA	NA
Benzene	1	0.5	5	1.3	7.9	3000	Pleasant	8.65	9.24
Benzo (a) pyrene (coal tar pitch volatiles)	0.2	0.1	NA	NA	NA	700	NA	NA	NA
Benzo (a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (b) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (k) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	10.88
Carbon Disulfide	20	1	NA	1.3	50	500	Odorless or strong garlic type	.096	10.07
Chlorobenzene	75	10	NA	1.3	9.6	2,400	Faint almond	0.741	9.07
Chloroform	50	2	NA	NA	NA	1,000	ethereal odor	11.7	11.42
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethylene	200	200	NA	9.7	12.8	400	Acrid	NA	9.65
1,2-Dichlorobenzene	50	25	NA	2.2	9.2		Pleasant		9.07
Ethyl Alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100	100	NA	1.0	6.7	2,000	Ether	2.3	8.76
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropyl Alcohol	400	200	500	2.0	12.7	2,000	Rubbing alcohol	3	10.10
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	50	NA	12	23	5,000	Chloroform-like	10.2	11.35
Naphthalene	10, Skin	10	NA	0.9	5.9	250	Moth Balls	0.3	8.12
n-propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphoric Acid	1	1	3	NA	NA	10,000	NA	NA	NA
Polychlorinated Biphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium Hydroxide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethane	NA	NA	NA	NA	NA	NA	Sweet	NA	NA
Toluene	100	100	NA	0.9	9.5	2,000	Sweet	2.1	8.82
Trichloroethylene	100	50	NA	8	12.5	1,000	Chloroform	1.36	9.45
1,2,4-Trimethylbenzene	NA	25	NA	0.9	6.4	NA	Distinct	2.4	NA
1,3,5-Trimethylbenzene	NA	25	NA	NA	NA	NA	Distinct	2.4	NA
Vinyl Chloride	1	1	NA	NA	NA	NA	NA	NA	NA
Xylenes (o,m,p)	100	100	NA	1	7	1,000	Sweet	1.1	8.56
Metals									
Arsenic	0.01	0.2	NA	NA	NA	100, Ca	NA	NA	NA
Cadmium	0.2	0.5	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	1	0.5	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.05	0.15	NA	NA	NA	700	NA	NA	NA
Mercury	0.05	0.05	NA	NA	NA	28	NA	NA	NA
Selenium	0.2	0.02	NA	NA	NA	Unknown	NA	NA	NA

(a) Skin = Skin Absorption
(b) OSHA-PEL Permissible Exposure Limit (flame weighted average, 8-hour): NIOSH Guide, June 1990
(c) ACGIH – 8 hour time weighted average from Threshold Limit Values and Biological Exposure Indices for 2003.
(d) Metal compounds in mg/m3
(e) Lower Exposure Limit (%)
(f) Upper Exposure Limit (%)
(g) Immediately Dangerous to Life or Health Level: NIOSH Guide, June 1990.

Notes:
1. All values are given in parts per million (PPM) unless otherwise indicated.
2. Ca = Possible Human Carcinogen, no IDLH information.

APPENDIX 9

SITE MANAGEMENT FORMS

SITE INSPECTION FORM

11075 Walden Avenue

Property Name: 11075 Walden Avenue Inspection Date:

Property Address: 11075 Walden Avenue

City: Alden State: New York Zip Code: 14004

Total Acreage: 2.9 acres

Weather (during inspection): Temperature_____˚F

Conditions:

SIGNATURE:

The findings of this inspection were discussed with appropriate personnel, corrective actions were identified and implementation was mutually agreed upon:

Inspector_____ Date:_____

Next Scheduled Inspection Date: _____

COVER AND SLAB

	Yes	No
1. Concrete slab in acceptable condition?	_____	_____
2. Is there evidence of cracks or spauling?	_____	_____
3. Is there evidence of floor covering deterioration?	_____	_____
4. Are any cracks visible penetrations in concrete?	_____	_____

SSDS SYSTEM

	Yes	No
5. Is the system on and appropriate vacuum pressure achieved?	_____	_____
6. Are the vent pipes in good condition (do not appear damaged)?	_____	_____

INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS & ENVIRONMENTAL EASEMENT

7. Are the IC/ECs established for the Site being implemented appropriately? _____ _____

8. Is the Site in compliance with the Environmental Easement? _____ _____

ADDITIONAL FACILITY CONDITIONS

Is there development on or near the Site? (specify size and type of development)

COMMENTS

_____

_____

_____

_____

_____

_____

ATTATCHMENTS

1. Site Sketch
2. Photographs

Summary of Green Remediation Metrics for Site Management

Site Name: _____ Site Code: _____
Address: _____ City: _____
State: _____ Zip Code: _____ County: _____

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: _____

Current Reporting Period
Reporting Period From: _____ To: _____

Contact Information
Preparer's Name: _____ Phone No.: _____
Preparer's Affiliation: _____

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	**Total to Date**
Fuel Type 1 (e.g. natural gas (cf))		
Fuel Type 2 (e.g. fuel oil, propane (gals))		
Electricity (kWh)		
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)		
Other energy sources (e.g. geothermal, solar thermal (Btu))		

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	**Total to Date (tons)**
Total waste generated on-site		
OM&M generated waste		
Of that total amount, provide quantity:		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		
Reused on-site		

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	**Total to Date (miles)**
Standby Engineer/Contractor		
Laboratory Courier/Delivery Service		
Waste Removal/Hauling		

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site		
Of that total amount, provide quantity:		
Public potable water supply usage		
Surface water usage		
On-site groundwater usage		
Collected or diverted storm water usage		

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres)**
Land disturbed		
Land restored		

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Other:

CONTRACTOR CERTIFICATION
I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of _____ (**Contractor Name**), which is responsible for the work documented on this form. According to my knowledge and belief, all of the information provided in this form is accurate and the site management program complies with the DER-10, DER-31, and CP-49 policies. _____ **Date** **Contractor**

APPENDIX 10

O&M MANUAL (FOR EACH ACTIVE EC)

June 17, 2020

Mr. Adam Zebrowski
Project Manager
LABELLA ASSOCIATES, D.P.C.
300 Pearl Street
Buffalo, NY 14202
Via email: azebrowski@labellapc.com

Re: 11075 Walden Ave., Alden, NY - Former Doritex Plant
BCP C915333
Sub-Slab Depressurization System Construction Completion Report

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 system (SSDS) installed by *Mitigation Tech* at 11075 Walden Ave., Alden, NY as commissioned March 24, 2020.

Following an SSD construction plan (dated October 10, 2019) informed by a preliminary building assessment, a multi-suction point SSD System was installed using principles and equipment typically used for soil vapor intrusion mitigation in buildings. The primary objective of implementing this preemptive measure was to mitigate potential intrusion of vapors that could migrate into occupied space from beneath the slab. This would be achieved by maintaining a negative pressure of 0.004 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 SYSTEM CONSTRUCTION

Sub-slab air communication testing was performed October 3, 2019, 2019. The test procedure included drilling small diameter vacuum holes and large core borings into the concrete slab at likely suction point locations. We applied a known vacuum to potential suction points recorded differential pressure measurements (using a digital manometer) at various neighboring test points to estimate the expected radius of influence for typical suction points. We observed that 3.0 wci of vacuum at the suction points yielded at least -.004 wci pressure differential at radius of 40', each of (4) compass directions.

We performed volumetric airflow analysis to determine the number of suction points supportable by particular blower types. We drilled small diameter test holes at other representative areas of the slab to determine that sub-slab material was consistent. All test holes were repaired with urethane caulk (MSDS available) applied over a closed cell backer rod. The assessment concluded with an analysis of appropriate locations for fan, suction cavities and other SSD system components.

Mitigation tech performed and supervised all aspects of construction. Both for physical protection and minimum impact on active use areas, riser pipes were surface mounted on columns or interior walls; horizontal pipe was installed as close to ceiling and established raceways as possible. Work was coordinated with client and tenants to minimize disturbance of work areas, relocate obstacles and control dust. Special effort was furnished to work around large structural spans and floor reconstruction Vacuum and airflow 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.

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 objectives and relevant aspects of the Health & Safety Plan. No accidents or incidents occurred during the construction.

3. SUB-SLAB DEPRESSURIZATION SYSTEM GENERAL DESCRIPTION

3.1. Introduction. The SSDS is maintaining sub-slab vacuum at all subject areas. The system consists of (6) roof or sidewall mounted fans connected by manifold piping to (21) vapor extraction points, groupings shown below. The system was 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 SSDS was installed as permanent, integral addition to the structure. The key components of the SSDS are described below and are shown on an as-built diagram labeled "Sub-Slab System Diagram."

3.2. Suction Points. The suction points consists of a 5" core boring into the slab through which 1- 2 cubic feet of sub-slab material has been removed. Mechanically suspended 3" SCH 40 PVC pipe has been inserted into the boring and sealed with urethane sealant.

3.3. Riser Piping. The riser piping consists of 3" SCH 40 PVC pipe that follows a route from the extraction point to a 4" trunk line, then to exterior mounted vacuum fans. 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". Piping is connected using manufacturer's approved methods. Positioning at or within structural steel columns generally protects riser piping. Horizontal pipe grid is suspended directly to structure and positioned no lower than existing mechanical improvements.

3.4. Exhaust Fans. Exhaust fans have been field selected for specific performance properties based on the requirements of pressure field extension testing. The specific fan model used for all systems is the FANTECH model Rn4-EC, rated power at 172 watts continuous operation, 500 max CFN, 4.4 max wci. Each fan has an exterior disconnect switch. Fans are powered from several panels with labeled breakers. All fans are mounted with rubber Fernco couplings, for simplified replacement. No air intakes are present within 20' of the exhaust points. These fans have an onboard potentiometer allow reduction of fan performance and operation using less electrical current. Owner may wish to consider future adjustment.

3.5. Instrumentation and Control. There is no centralized instrumentation or control for the SSDS. Fans can be switched either from the adjacent positioned disconnect or at the marked breaker. Each exhaust fan system is equipped with, or scheduled to be equipped with once new floor plan is implemented, an audible low vacuum indicator and a vacuum indicator mounted in a visible location on a riser pipe per the attached schematic. The indicator consists of an oil filled U-tube style manometer. The indicator can be inspected by observing the level of colored fluid. The 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. Indicator is marked at level observed on March 24, 2020.

3.7. Sealing measures. Polyurethane sealants have been applied to control joints, floor cracks and slab penetrations to enhance the barrier between sub-slab and ambient air and improve the efficiency of the SSD System. Smoke testing has been employed to guide sealing operations. Materials used include Sika Sikaflex 1c-SLself-leveling joint sealant and Sika 1a Sealant.

3.6. Monitoring Points. Monitoring Points are indicated on the system diagram. These consist of ¾" drill points through the slab into which a digital micromanometer probe can be inserted. They are semi-permanently closed with backer and urethane sealant. These were established to aid in original system design and confirmatory testing, and in some cases are difficult to access. The primary future use would be in recertification of system effectiveness.

3.7 System Configuration (see attached schematic for component locations)

- **Office fan system** (1) FANTECH model Rn4EC, roof mount; w/ (5) suction points
- **East Central fan system** (1) FANTECH model Rn4EC, roof mount; w/ (3) suction points
- **West Central fan system** (1) FANTECH model Rn4EC, roof mount; w/ (4) suction points, including (1) suction point in west discrete footer section
- **North Rear Section fan system** (1) FANTECH model Rn4EC, roof mount; w/ (3) suction points
- **Central Rear Section fan system** (1) FANTECH model Rn4EC, roof mount; w/ (3) suction points
- **South Rear Section fan system** (1) FANTECH model Rn4EC, roof mount; w/ (3) suction points
- Suction points as follows: approximately 1-2 cu. ft. excavated material in sub-slab, with urethane seal connection via 3" Schedule 40 PVC pipe to overhead pipe grid; horizontal pipe at highest practicable height, permanently attached directly to structure
- Proportioning valves or plates for suction risers where required
- All exhaust points minimum 20' from any air intakes
- Exterior switch and *Sealtight* and/or MC conduit from fan housings to electrical panel
- (6) U-tube style vacuum indicators, (1) per system, on vertical pipe run
- (6) RADONAWAY Checkpoint 2 audible indicators, (1) per system, scheduled
- (20) vacuum monitoring points, semi-permanently sealed with urethane caulk per included diagram
- Urethane sealant at floor joints, accessible cracks and penetrations in vicinity of suction points
- Horizontal pipe near ceiling, with metal bracketing direct to structure, sloped as required
- At completion, perform backdraft testing, measure pressure differentials and document; label components and provide system description and operational instructions
- Consult with client to develop operation, maintenance and periodic inspection plan
- Two year warranty; labor and installed components

3.8. PERFORMANCE EVALUATION

Measurement date – March 24, 2020- In order to verify system effectiveness and as a performance evaluation, (20) test points were established at various distances from the suction cavities suitable to verify that the sub-slab of the entire subject area was being depressurized at least to the objective. See schematic for point locations. Point locations were selected to represent farthest distance from suction points so that vacuum influence closer to the suction point can be reasonable inferred.

TP #	Value (negative wci)	Location
1	.313	Office NW
2	.009	Office N
3	.019	Office N interior
4	.045	Office NE
5	.318	Office E
6	.110	Office SE
7	.885	Office S
8	.133	Office SSW
9	.010	Office SW
10	.041	Central Section N
11	.141	Central Section Center
12	.145	Central Section S
13	.029	South Section, NW perimeter
14	.040	South Section, NE perimeter
15	.548	South Section, Central NW
16	.485	South Section, Central NE
17	.635	South Section, Central SW
18	.410	South Section, Central SE
19	.030	South Section, SW perimeter
20	.021	South Section, SE perimeter

4. SUB-SLAB DEPRESSURIZATION SYSTEM OPERATION

4.1. The 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, audible alarm activation, failure to start, physical damage, or repeated circuit breaker trip, turn fan off and call for service. MITIGATION TECH – 800-637-9228

4.4. Regularly inspect fan gauge to verify that value, indicated by a mark on the wall at the gauge, has not changed significantly from the position of the mark. Gauge is inspected by observing the level of colored fluid.

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

4.6. Ensure that a periodic inspection is performed

5. SUB-SLAB DEPRESSURIZATION SYSTEM PERFORMANCE MONITORING

5.1. Monthly Monitoring

5.1.1. Inspect fan vacuum indicator to verify that value, indicated by a mark on the wall at 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 for degraded condition.

5.1.4. For reporting, call MITIGATION TECH at 800-637-9228

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 Interview appropriate building occupants seeking comments and observations regarding the operation of the System

5.2.6 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 should 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.

6.2. 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 vacuum gauge 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.

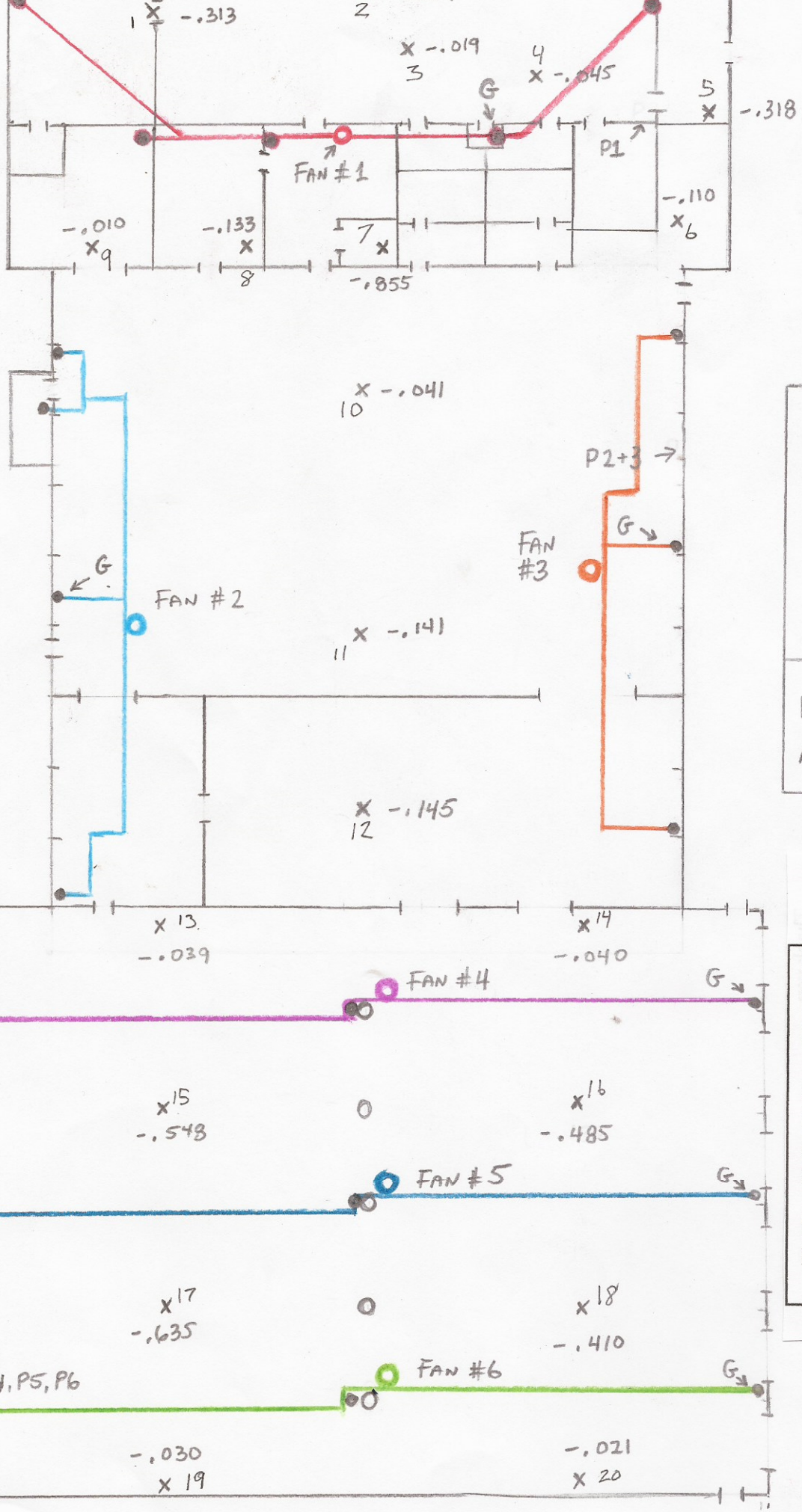
Certification

I hereby certify that the SSD Systems at this location are installed properly and are effective in achieving the above stated objective.

End of Report

Thank you

Nicholas E. Mouganis EPA listing # 15415-I; NEHA ID# 100722



O - FAN LOCATION

● - SUCTION POINT

X - TEST LOCATION

P - FAN POWER LOC.

G - GAUGE LOCATION

11075 WALDEN AVE,
ALDEN N.Y. 14004

SUB-SLAB DEPRESSURIZATION SYSTEM DIAGRAM

Installed by:
Mitigation Tech
55 Shumway Rd.,
Brockport, NY 14420

Date of Completion:
March 24, 2020

Rn 4EC-4 Inline Radon Fan

Item Number: 99923
Variant: 120V 1~ 60Hz

- Use for **High Suction, High Airflow** applications
- Equipped with EC Motor
- Speed Control Included
- LDVI™ Couplings Included
- Airtight Housing Guaranteed
- Large Electrical Box
- Zero Leakage

Active radon mitigation systems employ specialized fans to exhaust radioactive radon gas from underneath building structures via a sealed pipe system. These systems are designed to remove radon gas before it migrates into the building envelope.
As the most powerful model in Fantech's family of Radon Mitigation fans, the **Rn4EC** can create 4.3" of suction while moving 20 cfm, as well as move 490 cfm when operating at only 0.5" of suction. High air flow, high suction.
Rn4EC features an electronically commutated (EC) motor. Inherently efficient and operationally stable at full and reduced speeds, the EC motor arms the radon professional with installation methods not previously practical. Integrated control system allows for "dialling in" the fan speed necessary to achieve either the required sub-slab depressurization or required system air flow rate. For demand-controlled systems, the potentiometer can be removed from the wiring terminal block to accommodate an externally-provided 0-10Vdc speed command.
The **Rn 4-4EC** is constructed with UL certified, UV protected polycarbonate material. The inlet and outlet pieces of the fan's housing are vibration welded for 100% leak-proof housing construction. Totally enclosed motors are designed with extra moisture protection in various radon applications.
Performance certified by **HVI**; safety certified by **UL**.

Technical parameters

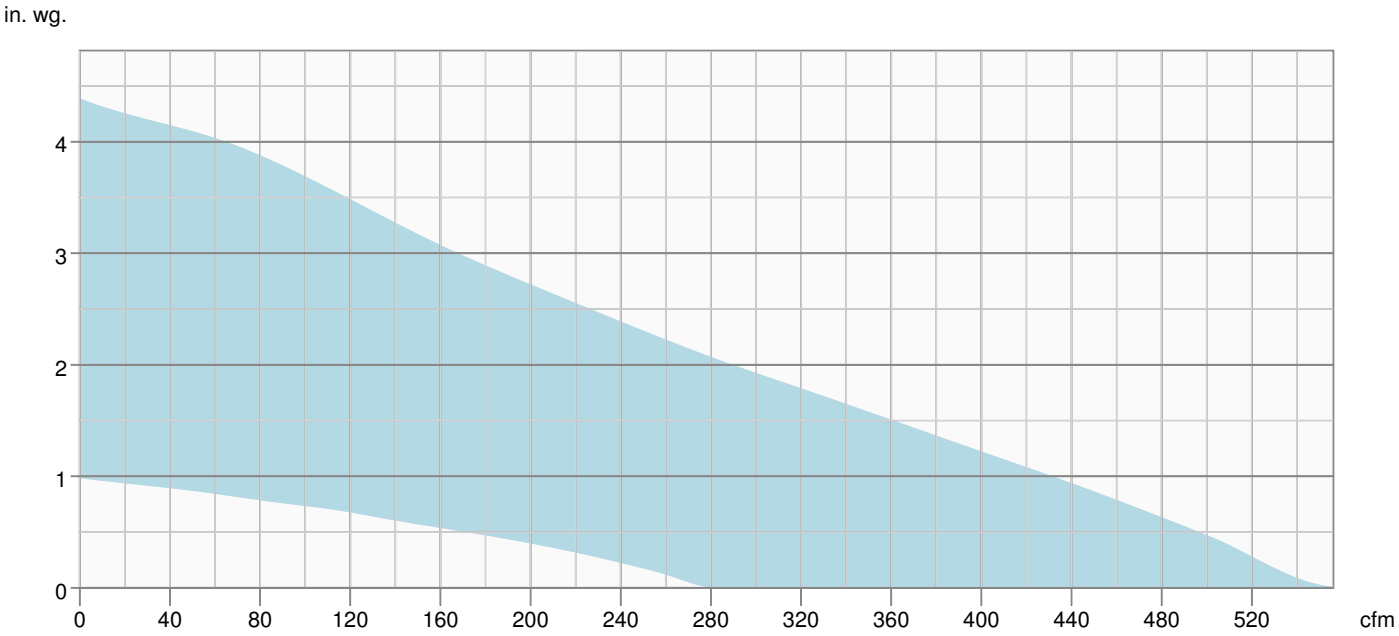
Norminal data		
Voltage (nominal)	120	V
Frequency	60	Hz
Phase(s)	1~	
Input power	169	W
Input current	2.1	A

Impeller speed	4,084	r.p.m.
Air flow	max 555.0	cfm

Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	B	
Certificate	HVI, cULus	

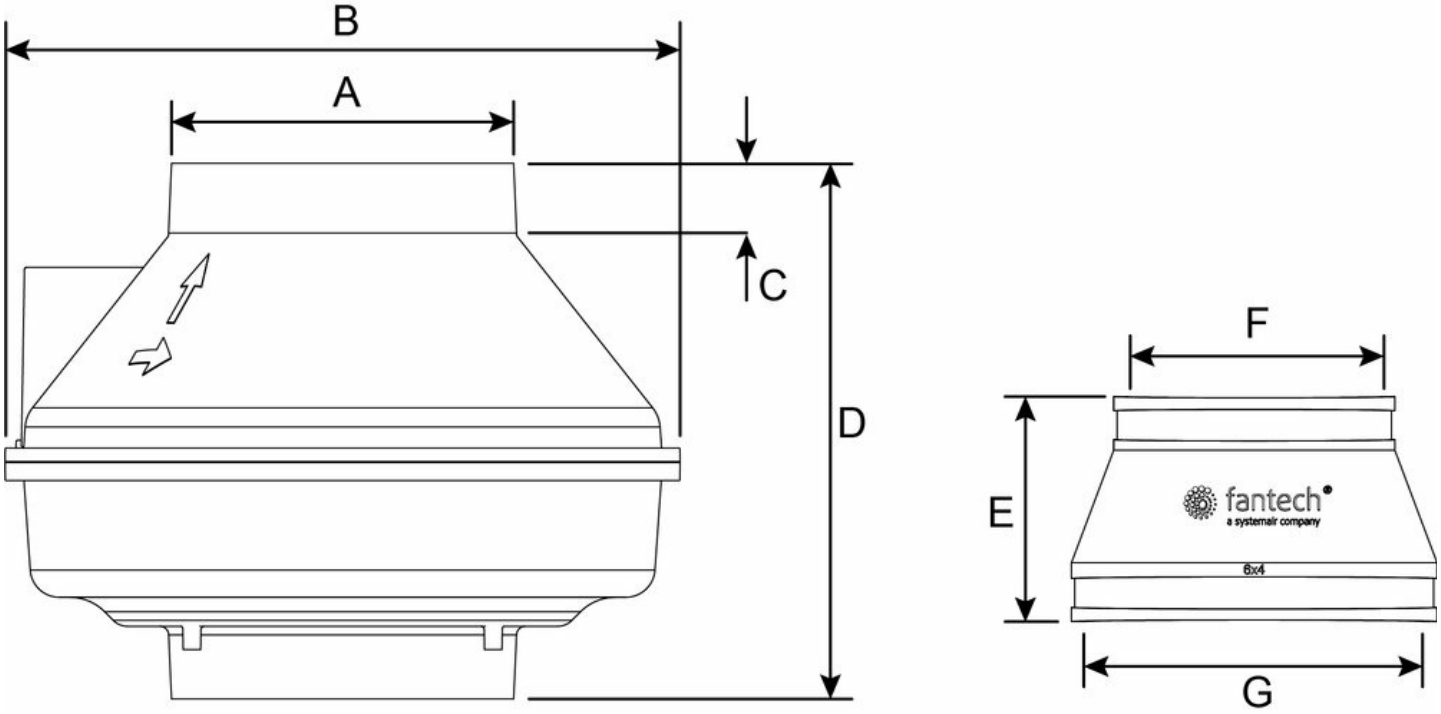
Dimensions and weights		
Weight	7.3	lb

Performance curve



Hydraulic data	
Required air flow	-
Required static pressure	-
Working air flow	-
Working static pressure	-
Air density	0.075 lb/ft³
Power	-
Fan control - RPM	-
Current	-
SFP	-
Control voltage	-
Supply voltage	-

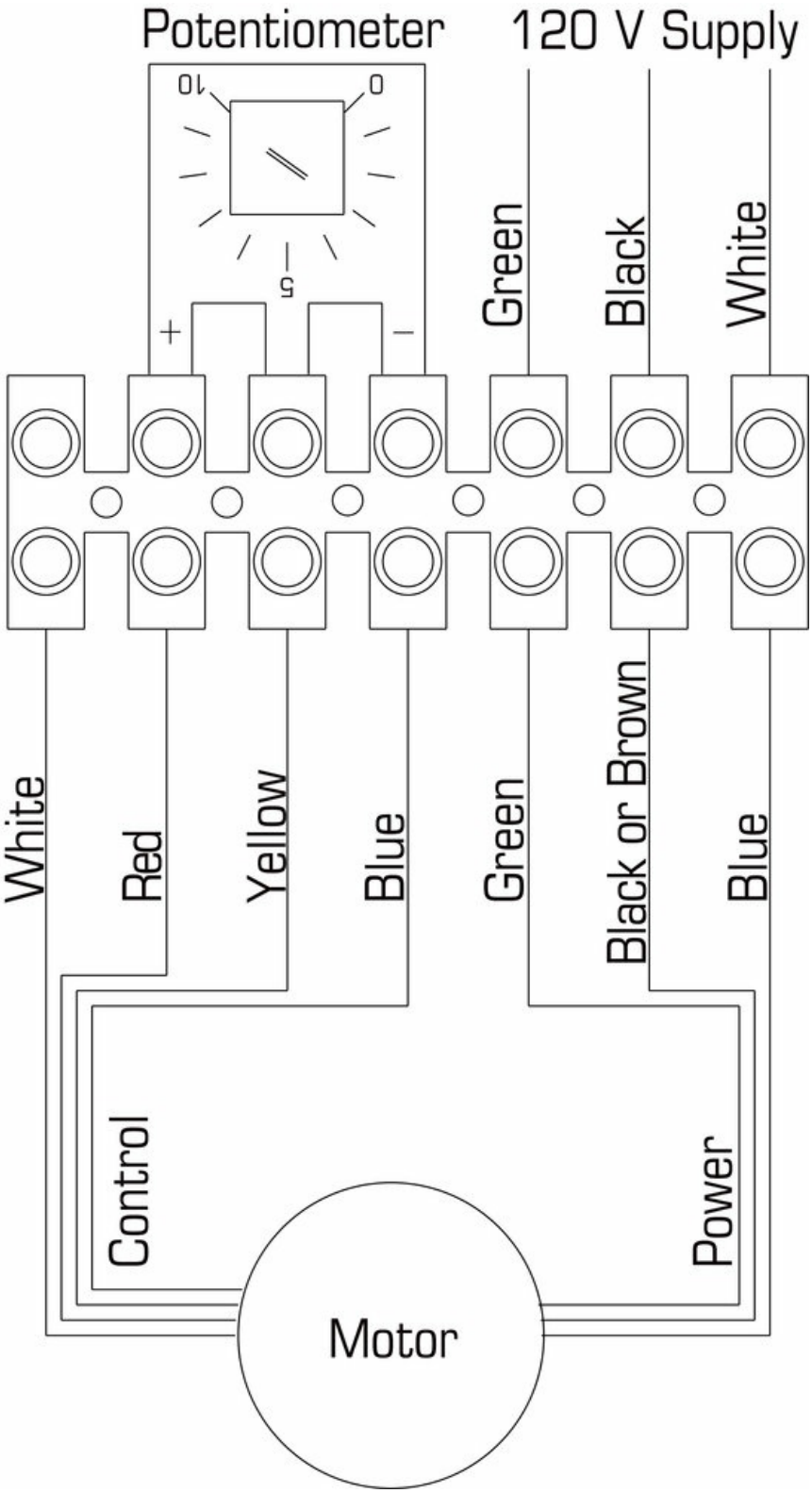
Dimensions



Model	A	B	C	D	E	F	G
Rn2EC	4 15/32 (114)	10 (254)	1 1/4 (32)	9 1/4 (235)	-	-	-
Rn4EC-3	5 7/8 (149)	11 1/2 (292)	1 1/4 (32)	9 1/4 (235)	4 (102)	3 1/2 (89)	6 (152)
Rn4EC-4	5 7/8 (149)	11 1/2 (292)	1 1/4 (32)	9 1/4 (235)	4 (102)	4 1/2 (114)	6 (152)

Dimensions in inches (mm).

Wiring


Potentiometer
120 V Supply
10
0
5
+
−
Green
Black
White
White
Red
Yellow
Blue
Green
Black or Brown
Blue
Control
Power
Motor

Documents

- 142001 Rn2EC-Rn4-EC OIPM EN FR.PDF

APPENDIX 11

REMEDIAL SYSTEM OPTIMIZATION TABLE OF CONTENTS

REMEDIAL SYSTEM OPTIMIZATION FOR 11075 WALDEN AVENUE

TABLE OF CONTENTS

APPENDIX 12

REQUEST TO IMPORT/REUSE FILL MATERIAL FORM

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e) and 6NYCRR Part 360.13. Use of this form is not a substitute for reading the applicable regulations and Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Choose an item

Have Ecological Resources been identified? Choose an item

Is this soil originating from the site? Choose an item

How many cubic yards of soil will be imported/reused? Choose an item

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? Choose an item

Does it contain less than 10%, by weight, material that passes a size 100 sieve? Choose an item

Is this virgin material from a permitted mine or quarry? Choose an item

Is this material recycled concrete or brick from a DEC registered processing facility? Choose an item

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

_____ _____

Signature Date

_____

Print Name

_____

Firm

Revised April 2023