#### 20 WEST CENTENNIAL AVENUE

## NASSAU COUNTY

# **ROOSEVELT, NEW YORK**

# SITE MANAGEMENT PLAN

NYSDEC Site Number: 1-30-154

Order of Consent: W1-1137-09-06

**Prepared for:** 

THEODORE W. FIRETOG, ESQ. LAW OFFICES OF THEODORE W. FIRETOG 111 THOMAS POWELL BOULEVARD FARMINGDALE, NEW YORK 11735-2251 ON BEHALF OF 20 W. CENTENNIAL CORP.

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

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date
1	02/23/2021	Addressed Comments	
2	06/10/2021	Updated Table 2, added signed Environmental Easement and County Record #	

# FEBRUARY 2020

# CERTIFICATION STATEMENT

I SCOTT YANUCK certify that I am currently a Qualified Environmental Professional as in 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).

Sot a your QEP

June 10, 2021 DATE

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# List of Acronyms

AOC	Area of Concern
AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NCDH	Nassau County Department of Health
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
PFAS	Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study

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ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objectives
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
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 Site Management Plan:

Site Identification:	1-30-154, 20 West Centennial Avenue, Roosevelt, NY	
Institutional Controls:	1. The property may be used for co use;	mmercial or industrial
	2. Require the remedial party or S and submit to the Department a perinstitutional and engineering contro Part 375-1.8 (h)(3);	ite owner to complete eriodic certification of bls in accordance with
	3. Allow the use and development property for commercial use or indust Part 375-1.8(g), although land use is st laws;	
	4. Restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Nassau County DOH; and	
	5. Require compliance with the SMP.	Department approved
Engineering Controls:	eering Controls: None	
Inspections:		
1. Inspect monitoring	Annually	
Monitoring:		
1. Groundwater Mc MW-2D and MW-25	Annually	
Reporting:		
1. Periodic Review F	Annually	

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

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#### **1.0 INTRODUCTION**

#### 1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the 20 West Centennial Site located in Roosevelt, New York (hereinafter referred to as the "Site"). See Figure 1 and 2. The Site is currently in the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, Site No. 1-30-154 which is administered by New York State Department of Environmental Conservation (NYSDEC).

20 W. Centennial Corp entered into an Order on Consent in December 2009 with the NYSDEC to remediate the Site. Figures showing the Site location and boundaries of this Site are provided in Figures 1 and 2. The boundaries of the Site are more fully described in the property description that is part of the Environmental Easement provided in Appendix A.

After completion of the remedial work, the only contamination remaining at this Site is within groundwater, which is hereafter referred to as "residual contamination". No Engineering Controls are necessary because no contaminated soil remains at the Site in exceedance of Unrestricted Use SCOs after the execution of the RAWP, and no sub-slab vapors or indoor air concentration in any off-Site or on-Site building exist that warrant any further action when compared to the NYSDOH standards. Institutional Controls (ICs) have been incorporated into the Site Management Plan. An Environmental Easement granted to the NYSDEC and recorded with the Nassau County Clerk (Liber Book D 14084, Page 392), requires compliance with this SMP and all ICs placed on the Site.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement; and
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the Order on Consent (Index #W1-1137-09-06) for the Site, and thereby subject to applicable penalties.

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

This SMP was prepared by Laurel Environmental Geosciences, DPC, on behalf of 20 W. Centennial Corp., in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs that are required by the Environmental Easement for the Site.

#### 1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, a change in groundwater monitoring requirements or other significant change to the Site conditions. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

# 1.3 Notifications

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

• 60-day advance notice of any proposed changes in Site use that are required under the terms of the Order on Consent, 6NYCRR Part 375 and/or Environmental Conservation Law.

Any change in the ownership of the Site or the responsibility for implementing this

SMP will include the following notifications:

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

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

Name, Title	Contact Information	
Chris Heller, NYSDEC Project Manager	(518) 402-0163, chris.heller@dec.ny.gov	
Chris Engelhardt, NYSDEC Regional HW Engineer	(631) 444-0235, chris.engelhardt@dec.ny.gov	
Kelly Lewandowski, NYSDEC Site Control	(518) 402-9553, kelly.lewandowski@dec.ny.gov	
Steven Berninger, NYSDOH Project Manager	(518) 402-7860, steven.berninger@healthy.ny.gov	

# Table 1: Notifications\*

Charlotte Bethoney, NYSDOH Region Chief		(518) 402-7860, charlotte.bethoney@healthy.ny.gov	
Scott Yanuck, La Environmental President	aurel	(631) 673-0612, syanuck@laurelenv.com	
Brian McCabe, La Environmental Senior Geolo	urel ogist	(631) 673-0612, bmccabe@laurelenv.com	

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

# 2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

#### 2.1 Site Location and Description

The Site is located in Roosevelt, Nassau County, New York and is identified as Section 55 Block 415 and Lot 273 on the Town of Hempstead Tax Map #246 (see Figures 1 and 2). The Site is approximately 0.60-acre in area and is bounded by an industrial building to the north, followed by a vacant lot, West Centennial Avenue to the south, St. Paul's Episcopal Church to the east, and a private transportation company's vehicle storage yard to the west. The owner of the Site parcel at the time of issuance of this SMP is:

20 W. Centennial Corp.

#### 2.2 Physical Setting

#### 2.2.1 Land Use

The Site consists of the following: a building, paved driveway, parking lot and a small, landscaped area. The Site is zoned for light manufacturing and warehousing and is currently vacant.

The properties adjoining and in the neighborhood surrounding the Site primarily include industrial, commercial, and residential properties. The properties immediately south of the Site are residential properties; the properties immediately north of the Site include industrial and commercial properties; the properties immediately east of the Site include commercial and religious use properties; and the properties to the west of the Site include industrial and commercial properties as well as the Roosevelt Fire Department that is located at 56 Centennial Ave., Roosevelt, N.Y., which is within 200 feet of the Site.

#### 2.2.2 Geology

The Site is underlain by unconsolidated deposits of sand, clay, and gravel. Soil borings conducted during the initial environmental investigations indicated that shallow soil beneath the Site contains cinders and other materials typical of historic fill material. The historic fill material identified at the Site had a variable thickness of 0.5 to 2 feet across the Site. The historic fill material, while sometimes impacted by Tetrachloroethylene (PCE), was not found to be source of the contamination identified at the Site. A typical geologic cross section is included as Figure 3. Soil boring logs are provided in Appendix C.

#### 2.2.3 Hydrogeology

Local groundwater at the Site is encountered at approximately 20 feet below ground surface, with regional groundwater flowing a southerly direction, see Figure 7.0. Groundwater monitoring well construction logs are provided in Appendix D.

The aquifer of primary concern beneath the Site is the Upper Glacial Aquifer, which lies between the water table and the surface of the Magothy Aquifer, which is estimated to occur at approximately 56 feet below ground surface. The Gardiners Clay a.k.a. "the 20-foot clay" traditionally divides the Upper Glacial Aquifer from the Magothy Aquifer on the south shore of Long Island. However, this clay deposit thins as distance from the south shore increases, and as such, the Gardiners Clay does not seem to be present beneath the Site. The absence of the Gardiners Clay has the potential to allow for the vertical migration of contaminants into the Magothy Aquifer. There are no private drinking water wells in proximity to the Site. The Site is approximately 2,330 feet hydraulically cross-gradient from the nearest public water supply well, located at 160 Prince Avenue, Freeport, New York.

## 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.

Previous environmental studies were described in a *Supplemental Remedial Investigation Report* from Dermody Consulting dated May 8, 2012. The studies included a Phase I Environmental Site Assessment (ESA), a Phase II ESA, a Remedial Investigation, and the Supplement Remedial Investigation, which were performed between 2002 and 2012.

The Phase I Environmental Site Assessment (ESA) conducted at the Site by Sear-Brown in October 2002 identified the former use of the Site for manufacturing and commercial laundry as a recognized environmental concern. Based on the Phase I findings, a Phase II ESA was performed in December 2002 by Sear-Brown to determine if soil and/or groundwater impacts were present on the Site. The soil and groundwater samples collected during the Phase II identified elevated concentrations of tetrachloroethylene (PCE). A summary of the Phase II indicates the highest concentration of PCE in soil was detected at 154 mg/kg in soil sample GP-20-3, which was collected from 0 to 2 feet below the grade in the interior of the Building. A soil sample collected at the same location from 22 to 24 feet below grade had a PCE concentration of 0.0284 mg/kg, which showed PCE impacts were primarily present in shallow soil. During the Phase II, four (4) soil borings were completed as monitoring wells, designated MW-20-3, MW-20-4, MW-20-7, and MW-20-8. The highest concentrations of PCE detected in groundwater were in MW-20-3 at 7,690 µg/L and in MW-20-4 at 7,530 µg/L. Additional analytical data for the groundwater monitoring samples was not provided in the Phase II ESA summary.

A Remedial Investigation was conducted in April and May 2008 by Malcolm Pirnie to further delineate the soil and groundwater impacts observed during the Phase II ESA. Additional soil samples collected beneath the building slab, and groundwater samples collected in the Building vicinity identified elevated concentrations of PCE.

The Supplemental Remedial Investigation Report dated May 8, 2012, from Dermody Consulting detailed the 2012 investigation of soil and groundwater on the Site and off-Site. Soil and groundwater results collected on Site confirmed the presence of elevated PCE concentrations in the vicinity of the Building. Four (4) off-Site monitoring wells, designated MW-1S, MW-1D, MW-2S, and MW-2D, were installed directly to the south of the Site to characterize downgradient groundwater. The analytical results for the groundwater samples collected from each of the off-Site wells indicate PCE concentrations detected ranged from 23 to 150  $\mu$ g/L, which were above the NYSDEC Technical and Operation Guidance Series (TOGs) standards.

Interim Remedial Measures (IRM) took place in accordance with the NYSDEC approved IRM Workplan. The IRM that took place in 2013, 2014 and 2015 removed all contaminated soil in excess of NYS Part 375 Unrestricted Use Soil Cleanup Objectives or Track 1 standards from the Site. An air sparge/soil vapor extraction (AS/SVE) system that ran from 2014 through 2019 successfully reduced soil vapor issues to below NYSDOH guidance concentrations. Testing in 2020 confirmed that groundwater contamination with PCE, the primary Site contaminant, was reduced through source removal and AS/SVE operation to below NYSDEC TOGs standards in all monitoring wells except downgradient well MW-1S and MW-1D, which were significantly reduced, but not quite to standards.

A statewide requirement test all state superfund sites for the emerging contaminants 1,4-dioxane and Per and Polyfluoroalkyl substances (PFAS) resulted in testing for these compounds at the Site in 2019 and 2020. No 1,4-dioxane contamination was detected. Two PFAS compounds (PFOA and PFOS), were detected above current NYSDEC standards in upgradient and downgradient monitoring wells at the Site. Nevertheless, due their chemical nature, these compounds do not affect soil vapor or indoor air at the Site.

# 2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Record of Decision dated September 21, 2016, and revised March 7, 2017 are as follows:

# 2.4.1 Groundwater

RAOs for Public Health Protection were met

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

RAOs for Environmental Protection were met

• Remove the source of groundwater contamination.

RAOs for Environmental Protection

• Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

#### <u>2.4.2 Soil</u>

RAOs for Public Health Protection were met

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

RAOs for Environmental Protection were met

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

#### 2.4.3 Soil Vapor

RAOs for Public Health Protection were met

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at Site or off-Site.

#### 2.5 Remaining Contamination

#### <u>2.5.1 Soil</u>

There is no known contaminated soil remaining at the Site in exceedance of the Unrestricted Use SCOs after the execution of the Remedial Action Work Plan. Table 2 and Figure 4 summarize the results and locations of all endpoint soil samples collected as part of the Remedial Action.

#### 2.5.2 Groundwater

The contaminant of concern remaining in groundwater at the Site is PCE. Prior to the Remedial Actions, PCE was found at concentrations exceeding the NYSDEC Class GA Groundwater Standards in shallow and deep groundwater. As of the most recent groundwater sampling event, conducted October 28, 2020, PCE remains above the NYSDEC Class GA Groundwater Standards in the off-Site hydraulically downgradient monitoring wells designated MW-1D and MW-1S. No on-Site monitoring wells were found to contain PCE over the NYSDEC Class GA Groundwater Standards. Additionally, sampling of these wells for polyfluoroalkyl substances (PFAS) identified the presence of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) above the NYS Drinking Water Maximum Contaminant Level (MCL) of 10 parts per trillion in each of the monitoring wells on and off-Site. Table 3 and Figure 5 summarize the results of all samples of groundwater that exceed the NYSDEC Class GA Groundwater Standards after completion of the remedial action.

#### 2.5.3 Soil Vapor

Soil Vapor Investigation sampling conducted off-Site in April 2018, and on-Site in August 2019, after the completion of the Remedial Actions, found that PCE is not present in sub-slab vapors or in indoor air at concentrations in any off-Site or on-Site buildings that warrant any further action when compared to the NYSDOH standards. Table 4 and Figure 6 summarize the results and locations of all samples of soil vapor samples collected after completion of the remedial action.

# 3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

#### 3.1 General

Since there is no remaining soil or soil vapor contamination at the Site and groundwater contamination is limited to one shallow/deep groundwater nested monitoring well located directly off-Site, Institutional Controls (ICs) and an IC Plan is nonetheless required to protect human health and the environment with respect to the current condition of the groundwater quality. The IC Plan part of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all ICs on the Site;
- The basic implementation and intended role of each IC;
- A description of the key components of the ICs set forth in the Environmental Easement; and
- A description of the controls to be evaluated during each required inspection and periodic review.

# **3.2** Institutional Controls

A series of ICs is required by the ROD to: (1) prevent future exposure to remaining contamination; and; (2) limit the use and development of the Site to commercial or industrial uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. The IC boundaries are the entire Site. These ICs are:

- The property may be used for: commercial or industrial use;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP (not applicable on this Site, as there are no remedial systems in place);
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP (not applicable on this Site, as there are no remedial systems in place);
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any 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 (not applicable since there are no remaining soil vapor issues); and
- Vegetable gardens and farming on the Site are prohibited.

### 3.3 Engineering Controls

As noted above, the source of the contamination has been removed and no contaminated soil remains at the Site in exceedance of the Unrestricted Use SCOs. Furthermore, PCE is not present in the sub-slab vapors or in the indoor air at concentrations in any off -Site or on-Site buildings that warrant any further action according to NYSDOH standards. The contamination remaining in the groundwater (including PFAS) does not present a risk for soil vapor issues with respect to the on-Site or off-Site buildings. Therefore, no ECs are needed at the Site.

## 4.0 MONITORING AND SAMPLING PLAN

## 4.1 General

The Monitoring and Sampling Plan describes the measures for evaluating whether or not groundwater quality meets NYSDEC standards, asymptotic conditions, or can be left to natural attenuation. Details regarding the sampling procedures, data quality usability objectives, analytical methods, *etc.*, for all samples collected as part of site management for the Site are included in the Quality Assurance Project Plan provided in Appendix G.

The Groundwater Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of groundwater;
- Assessing compliance with applicable groundwater NYSDEC standards, criteria and guidance (SCGs); and
- Evaluating the continued need or requirement for the Groundwater Monitoring and Sampling Plan.

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

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;

- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- 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 at a frequency of once per year. These periodic 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. During these inspections, an inspection form will be completed as provided in Appendix G – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- General Site conditions at the time of the inspection;
- Whether stormwater management systems, such as basins and outfalls, are working as designed;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that Site records are up to date.

The 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:

- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria (not applicable at this Site, as no remedial systems are present); and
- If Site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

# 4.3 **Post-Remediation Groundwater Monitoring and Sampling**

Samples shall be collected from the monitoring wells on an annual basis. Sampling locations, required analytical parameters, and schedule are provided in Table 5 – Post Remedial Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

	Analytica	al Parameters	
Sampling	VOCs (EPA	PFAS (EPA	
Location	Method 8260)	Method 537M)	
Location			Schedule
MW-1D	Х	Х	Annual
MW-1S	Х	Х	Annual
MW-2D	Х	Х	Annual
MW-2S	Х	Х	Annual
MW-20-4	Х	Х	Annual
MW-20-7	X	Х	Annual
MW-20-8	Х	Х	Annual

 Table 5 – Post Remediation Sampling Requirements and Schedule

All groundwater samples will be collected utilizing low-flow sampling procedures in accordance with the standard NYSDEC procedures for collection of representative groundwater samples. A minimum of three (3) casing volumes of purge water will be removed from each well prior to collection of the sample. Detailed sample collection and analytical procedures and protocols are provided in Appendix G – Quality Assurance Project Plan.

#### 4.3.1 Groundwater Sampling

Groundwater monitoring will be performed on an annual basis to assess whether or not groundwater quality meets NYSDEC standards, has met asymptotic conditions or is subject to natural attenuation. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

The network of monitoring wells has been installed to monitor upgradient, on-Site and downgradient groundwater conditions at the Site. The network of on-Site and off-Site wells has been designed based on the following criteria:

- Provide representative groundwater quality readings of groundwater flowing onto the Site (*i.e.*, from MW-20-7 and MW-20-8); and
- Provide representative groundwater quality readings of groundwater leaving the Site (*i.e.*, from MW-20-4, MW-1D, MW-1S, MW-2D, and MW-2S).

Table 6 summarizes the wells identification number, as well as the purpose, location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, two (2) upgradient wells, and five (5) downgradient wells are sampled to evaluate current groundwater conditions at the Site.

				Elevation (above mean sea level)						
Monitoring Well ID	Well Location	Coordinates (longitude/ latitude)	Well Diameter (inches)	Casing	Surface	Screen Top	Screen Bottom			
MW-1D	Downgradient	40.67784° N, -73.58939° W	1	38	38	-9	-14			
MW-1S	Downgradient	40.67784° N, -73.58939° W	1	38	38	23	13			
MW-2D	Downgradient	40.67685° N, -73.58924° W	1	38	38	-9	-14			
MW-2S	Downgradient	40.67685° N, -73.58924° W	1	38	38	23	13			
MW-20-4	Downgradient	40.67689° N, -73.58929° W	1	38	38	20	10			
MW-20-7	Upgradient	40.67735° N, -73.58942° W	1	38	38	20	10			
MW-20-8	Upgradient	40.67731° N, -73.58957° W	1	39	39	21	11			

**Table 6 – Monitoring Well Construction Details** 

Monitoring well locations are shown on Figure 5 of the SMP. Monitoring well construction logs are included in Appendix E of this document.

If biofouling or silt accumulation occurs in the monitoring wells, the affected 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 wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of 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. 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.

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

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

#### 4.3.2 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix H - Site Management Forms. Other observations (*e.g.*., groundwater monitoring well integrity, *etc.*) 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 Quality Assurance Project Plan provided as Appendix G of this document.

#### 5.0 OPERATION AND MAINTENANCE PLAN

#### 5.1 General

The Site requires no mechanical systems, such as groundwater treatment systems, sub-slab depressurization systems or air sparge/soil vapor extraction systems to protect public health and the environment. Therefore, no remedial system or components are required and, consequently, the operation and maintenance of such a system or components is not included in this SMP.

#### 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, may have the potential to significantly impact the performance, effectiveness and protectiveness of a given site that has remedial systems, in which case a vulnerability assessment would be prepared.

A vulnerability assessment has not been prepared for this Site because no remedial systems exist. Furthermore, all groundwater monitoring wells flush mounted and as such are not able to be impacted by severe storms. Additionally, the Site is not located within or near a 100-year floor zone.

#### 6.2 Green Remediation Evaluation

Not required at Site since no remedial system is required.

#### 6.2.1 Timing of Green Remediation Evaluations

Not required at Site since no remedial system is required.

#### 6.2.2 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to conduct system checks and or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner a manner that does not impact on-going groundwater sampling and monitoring activities, but which reduces expenditure of energy or resources. Consideration shall be given to:

- Reduced sampling frequencies;
- Reduced Site visits;
- Coordination/consolidation of activities to maximize foreman/labor time; and
- Use of mass transit for Site visits, where available.

# 6.3 Remedial System Optimization

Not required at the Site since no remedial system is required.

# 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 G. 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 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 groundwater sampling data generated for the Site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 7 and summarized in the Periodic Review Report.

# Table 7: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Periodic Review Report	Annual

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

All periodic review reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected;
- Copies of all field forms completed (*e.g.*., well sampling logs, chain-of-custody documentation, *etc.*);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

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

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;

- Any modifications to monitoring wells;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of 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:

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

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

# 7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning fifteen (15) months after the approval of the Site Management Plan. After submittal of the initial Periodic Review Report, 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 Periodic Review Report will be prepared that addresses the Site described in the 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.

Groundwater sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ICs required by the SMP.
- Results of the required annual inspections, if applicable.
- All applicable site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Data summary tables and graphical representations of contaminants of concern groundwater, which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS<sup>TM</sup> database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A site evaluation, which includes the following:
  - Any new conclusions or observations regarding groundwater contamination based upon inspection or data generated by Groundwater Monitoring and Sampling Plan; and,
  - Recommendations regarding any necessary changes to the Groundwater Monitoring and Sampling Plan;

# 7.2.1 Certification of Institutional Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice 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 control identified for the Site, I certify that all of the following statements are true:* 

- The inspection of the Site to confirm the effectiveness of the institutional controls required by this SMP was performed under my direction;
- The institutional control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the groundwater monitoring and sampling;
- Use of the Site is compliant with the environmental easement;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the SMP and generally accepted engineering practices; and
- 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, Edward S. Wong. P.E., of [75 Hillwood Drive, Huntington Sta, NY 11746], am certifying as Remedial Party's Designated Site Representative.

"I certify that the New York State Education Department has granted a Certificate of Authorization to provide Professional Engineering services to the firm that prepared this Periodic Review Report."

At the end of each certifying period, as determined by the NYSDEC project manager, the following certification will be provided to the NYSDEC project manager:

"For each institutional identified for the Site, I certify that all of the following statements are true:

- The institutional control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the Site as needed;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the environmental easement.
- The 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, Edward S. Wong, of [75 Hillwood Drive, Huntington Sta, NY 11746], am certifying as the Remedial Party's Designated Site Representative.

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

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

## 7.3 Corrective Measures Work Plan

Not required at Site since no remedial system is required.

## 7.4 Remedial Site Optimization Report

Not required at Site since no remedial system is required.

## 8.0 **REFERENCES**

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

Construction Completion Report, Laurel Environmental Associates, August 2018

Driveway Sampling Program, Laurel Environmental Associates, March 2018

Groundwater Sampling Event Report, Laurel Environmental Geosciences, November 2020

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).

Phase I Environmental Site Assessment, Sear-Brown, October 2002

Phase II Environmental Site Assessment, Sear-Brown, December 2002

Remedial Investigation Report, Malcom Pirnie, May 2008

Supplemental Remedial Investigation Report, Dermody Consulting, May 8, 2012

# ADDITIONAL TABLES

Sample ID		NYSDEC	EP-1 1.5'		EP-2 2'		EP-3 2'		EP-4 2.5'		EP-5 2.5'	
York ID		Part 375 Unrestricted	18C0312-01		18C0312-02		18C0312-03		18C0312-04		18C0312-05	
Sampling Date		Use SCOs	3/6/2018		3/6/2018		3/6/2018		3/6/2018		3/6/2018	
Client Matrix			Soil		Soil		Soil		Soil		Soil	
Compound	CAS Number		Result	Q								
Volatile Organics, 8260		mg/Kg	mg/Kg									
Dilution Factor			1		100		1		1		1	
1,2,4-Trimethylbenzene	95-63-6	3.6	ND	U	ND	υ	ND	U	ND	U	ND	U
2-Butanone	78-93-3	0.12	ND	U	0.00830		ND	U	ND	U	ND	U
Acetone	67-64-1	0.05	ND	U	0.0420		ND	U	0.00580	J	ND	U
cis-1,2-Dichloroethylene	156-59-2	0.25	ND	U								
Methylene chloride	75-09-2	0.05	ND	U								
tert-Butyl alcohol (TBA)	75-65-0	~	ND	U								
Tetrachloroethylene	127-18-4	1.3	0.130		2	D	0.0310		0.190	Е	0.190	Е
trans-1,2-	156-60-5	0.19	ND	U	ND	U	ND	U	ND	U	ND	
Dichloroethylene												0
Trichloroethylene	79-01-6	0.47	ND	U								
Total Solids			%		%		%		%		%	
Dilution Factor	solids	~	1		1		1		1		1	
% Solids	solius		89.100		92.300		94.700		88.200		92.500	

# Table 2: Endpoint Sample Analysis (Initial Sampling)

Note: Highlighted results exceed Unrestricted Use SCOs
Sample ID			EP-6 <b>3'</b>		EP-7 <b>3'</b>		EP-8 2.5'		EP-9 <b>3</b> '		EP-10 3'	
York ID		NYSDEC Part 375	18C0312	-06	18C0312	-07	18C0312-	-08	18C0312-	09	18C0312-10	
Sampling Date		Unrestricted	3/6/20	18	3/6/20	18	3/6/20	18	3/6/2	018	8 3/6/2018 Soil	
Client Matrix		Use SCOs	Soil		Soil		Soil		Soil			
Compound	CAS Number		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260		mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			1		1		1		100		1	
1,2,4-Trimethylbenzene	95-63-6	3.6	ND	U	ND	U	ND	U	ND	U	ND	U
2-Butanone	78-93-3	0.12	0.00760		0.00920		0.00480	J	ND	J	ND	U
Acetone	67-64-1	0.05	0.0360		0.0340		0.0290		0.0260		0.0130	
cis-1,2-Dichloroethylene	156-59-2	0.25	ND	U	ND	U	ND	U	ND	U	ND	U
Methylene chloride	75-09-2	0.05	ND	U	ND	U	ND	U	ND	U	ND	U
tert-Butyl alcohol (TBA)	75-65-0	~	ND	U	ND	U	ND	U	ND	U	ND	U
Tetrachloroethylene	127-18-4	1.3	0.270	Е	0.220		0.0810		8.200	D	0.160	
trans-1,2-Dichloroethylene	156-60-5	0.19	ND	U	ND	U	ND	U	ND	U	ND	U
Trichloroethylene	79-01-6	0.47	ND	U	ND	U	ND	U	ND	U	ND	U
Total Solids			%		%		%		%		%	
Dilution Factor	solids	~	1		1		1		1		1	
% Solids	501105		89.500		85.900		90.300		87.100		91.500	

# Table 2: Initial Endpoint Sample Analysis (Initial Sampling, Continued)

Note: Highlighted results exceed Unrestricted Use SCOs

# Table 2: Initial Endpoint Sample Analysis (Initial Sampling, Continued)

Sample ID York ID		NYSDEC Part 375	EP-11 3' 18C0312-11	L	EP-12 2.5' 18C0312-12		EP-13 2.5' 18C0312-1	13	EP-14 2.5' 18C0312-	14	EP-15 2.5' 18C0312-15	
Sampling Date		Unrestricted Use Soil	3/6/201	8	3/6/2018	3	3/6/201	8	3/6/201	8	3/6/201	8
Client Matrix		Cleanup	Soil Soil				Soil		Soil	-	Soil	
Compound	CAS Number	Objectives	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260		mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			100		100		1		100		100	
1,2,4-Trimethylbenzene	95-63-6	3.6	ND	U	ND	U	ND	U	0.0030	J	ND	U
2-Butanone	78-93-3	0.12	0.00470	J	ND	U	ND	U	ND	U	ND	U
Acetone	67-64-1	0.05	0.0190		0.00670	J	ND		0.0160		0.0120	
cis-1,2-Dichloroethylene	156-59-2	0.25	ND	U	0.0760		ND	U	0.500	Е	0.120	
Methylene chloride	75-09-2	0.05	ND		ND		0 0071		0.0056		0.0066	1
		0.05					0.0071		0.0050	,	0.0000	
tert-Butyl alcohol (TBA)	/5-65-0	~	ND	U	ND	U	ND	U	0.0160		ND	U
Tetrachloroethylene	127-18-4	1.3	27	DE	10	D	0.140		18	D	4.900	D
trans-1,2-Dichloroethylene	156-60-5	0.19	ND	U	0.00290	J	ND	U	0.0160		0.0037	J
											0	
Trichloroethylene	79-01-6	0.47	0.00300	J	0.0220		ND	U	1	D	0.0110	
Total Solids			%		%		%		%		%	
Dilution Factor			1		1		1		1		1	
% Solids	solids	~	87.200		84.500		88.600		85.800		86.300	

Note: Highlighted results exceed Unrestricted Use SCOs

Sample ID	Sample ID				EP-17 5'		EP-18 3.5'		DUP		
York ID		NYSDEC Part 375	18C0312	-16	18C0312	2-17	18C0312	-18	18C031	.2-19	
Sampling Date		Unrestricted	3/6/20	18	3/6/20	018	3/6/20	)18	3/6/2	2018	
Client Matrix		Use Soil	Soil		Soil		Soil		Soil		
Compound	CAS Number	Objectives	Result	Q	Result	Q	Result	Q	Result	Q	
Volatile Organics, 8260		mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		
Dilution Factor			1		1		100		100		
1,2,4-Trimethylbenzene	95-63-6	3.6	ND	U	0.00340	J	ND	U	ND	U	
2-Butanone	78-93-3	0.12	ND	U	ND	U	ND	U	ND	U	
Acetone	67-64-1	0.05	ND	U	0.00720	J	0.0190		0.0130		
cis-1,2-Dichloroethylene	156-59-2	0.25	0.0160		0.00220	J	0.0120		ND	U	
Methylene chloride	75-09-2	0.05	0.00750	J	0.00710	J	0.00720	J	0.0100	J	
tert-Butyl alcohol (TBA)	75-65-0	~	ND	U	ND	U	0.00220	U	ND	U	
Tetrachloroethylene	127-18-4	1.3	0.210	E	1.300	E	3.700	D	3.800	D	
trans-1,2-Dichloroethylene	156-60-5	0.19	ND	U	ND	U	ND	U	ND	U	
Trichloroethylene	79-01-6	0.47	0.00540	J	0.00440		0.00640		ND	U	
Total Solids			%		%		%		%		
Dilution Factor	solids	~	1		1		1		1		
% Solids			88.100		98.600		87		86.100		

# Table 2: Endpoint Sample Analysis (Initial Sampling, Continued)

Note: Highlighted results exceed Unrestricted Use SCOs

# Table 2: Endpoint Sample Analysis (Final Sampling, Continued)

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Unrestricted Use SCOs	EP-2 4' 18C0752- 3/20/201 Soil	01 8	EP-9 4' 18C0752- 3/20/201 Soil	02 8	EP-11 4.5 18C0752 3/20/201 Soil	;' -03 .8	EP-12 3.5' 18C0752-04 3/20/2018 Soil		
Compound	CAS Number		Res ul t	Q	Res ul t	Q	Res ul t	Q	Res ul t	Q
Volatile Organics, 8260 - Comp	orehensive	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			1		1		1		1	
1,1,2-Trichloroethane	79-00-5	~	0.00260	U	0.00400	J	0.00240	U	0.00280	U
2-Butanone	78-93-3	0.12	0.00260	U	0.00230	U	0.00240	U	0.00280	U
Acetone	67-64-1	0.05	0.00520	U	0.00470	U	0.00480	U	0.00570	U
cis-1,2-Dichloroethylene	156-59-2	0.25	0.00260	U	0.00230	U	0.00240	U	0.00280	U
Tetrachloroethylene	127-18-4	1.3	0.00400	J	0.100		0.0130		0.0110	
Trichloroethylene	79-01-6	0.47	0.00260	U	0.00230	U	0.00240	U	0.00280	U
Total Solids			%		%		%		%	
Dilution Factor			1		1		1		1	
% Solids	solids	~	80.700		87.400		99.100		88.300	

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Unrestricted Use SCOs	EP-14 5' 18C0752- 3/20/201 Soil	05 .8	EP-15 4' 18C0752- 3/20/201 Soil	EP-18 4.5 18C0752 3/20/201 Soil	,' 07 .8	DUP 18C0752-08 3/20/2018 Soil			
Compound	AS Number		Res ul t	Q	Res ul t	Q	Res ul t	Q	Res ul t	Q
Volatile Organics, 8260 - Com	prehensive	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			100		1		1		1	
1,1,2-Trichloroethane	79-00-5	~	0.00220	U	0.00230	U	0.00320	U	0.00250	U
2-Butanone	78-93-3	0.12	0.00220	U	0.0190		0.00320	U	0.00250	U
Acetone	67-64-1	0.05	0.00530	J	0.0370		0.00640	U	0.0370	
cis-1,2-Dichloroethylene	156-59-2	0.25	0.0200		0.00230	U	0.00320	U	0.00250	U
Tetrachloroethylene	127-18-4	1.3	1.200	D	0.0230		0.0480		0.110	
Trichloroethylene	79-01-6	0.47	0.0210		0.00230	U	0.00320	U	0.00250	U
Total Solids			%		%		%		%	
Dilution Factor			1		1		1		1	
% Solids	solids	~	92.200		94.800		89.700		81.900	

# Table 2: Endpoint Sample Analysis (Final Sampling, Continued)

Sample ID	NYSDEC	MW-18 MW-1D		MW-2S		MW-2D		MW-20-4		MW-20-7		MW-20-8			
York ID	TOGS	20J1352-0	1	20J1352-0	2	20J1352-0	3	20J1352-0	4	20J1352-0	5	20J1352-0	6	20J1352-07	
Sampling Date	Standards	10/28/202	0	10/28/202	0	10/28/202	0	10/28/202	D	10/28/202	0	10/28/202	0	10/28/2020	
Client Matrix	and Guidance	Water		Water		Water		Water		Water		Water		Water	
Compound	Values - GA	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
VOA, 8260 LOW MASTER	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor		1		1		1		1		1		1		1	
Chloroform	7	0.200	U	0.260	J	0.200	U	0.210	J	0.200	U	0.200	U	0.200	U
cis-1,2-Dichloroethylene	5	0.580		0.200	U	0.200	U	0.200	U	0.200	U	0.470	J	0.200	U
Tetrachloroethylene	5	20.600		75		4.660		0.450	J	1.710		2.350		4.180	
Trichloroethylene	5	0.950		0.340	J	0.200	U	0.200	U	0.200	U	0.230	J	0.400	J
PFAS, NYSDEC Target List		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor		1		1		1		1		1		1		1	
Perfluoro-1-heptanesulfonic acid (PFHpS)	~	0.00200	J	0.00200	J	0.00200	J	0.00200	U	0.00200	U	0.00200	U	0.00200	J
Perfluoro-1-octanesulfonamide (FOSA)	~	0.00200	U	0.00200	U	0.00200	J	0.00200	U	0.00200	J	0.00200	U	0.00200	U
Perfluorobutanesulfonic acid (PFBS)	~	0.00200	J	0.00453		0.00200	J	0.00417		0.00200	J	0.00214		0.00200	J
Perfluorodecanoic acid (PFDA)	~	0.00200	J	0.00200	U	0.00200	J	0.00200	U	0.00200	J	0.00200	U	0.00200	J
Perfluoroheptanoic acid (PFHpA)	~	0.00200	J	0.00481		0.00390		0.00408		0.00200	J	0.00299		0.00526	
Perfluorohexanesulfonic acid (PFHxS)	~	0.00200	J	0.00475		0.00200	J	0.00371		0.00200	J	0.00200	J	0.00215	
Perfluorohexanoic acid (PFHxA)	~	0.00200	J	0.00836		0.0125		0.00770		0.00200	J	0.00656		0.00685	
Perfluoro-n-butanoic acid (PFBA)	~	0.00263		0.00487		0.00664		0.00425		0.00203		0.00445		0.00397	
Perfluorononanoic acid (PFNA)	~	0.00200	J	0.00200	J	0.00200	J	0.00200	J	0.00200	J	0.00200	J	0.00213	
Perfluorooctanesulfonic acid (PFOS)	0.01	0.109		0.0154		0.165		0.0136		0.0171		0.0135		0.0562	
Perfluorooctanoic acid (PFOA)	0.01	0.00706		0.0204		0.0201		0.0156		0.00431		0.00962		0.0163	
Perfluoropentanoic acid (PFPeA)	~	0.00200	J	0.00812		0.0122		0.00731		0.00200	J	0.00484		0.00729	
Perfluorotetradecanoic acid (PFTA)	~	0.00200	U	0.00200	U	0.00200	J	0.00200	U	0.00200	J	0.00200	U	0.00200	U
Perfluoroundecanoic acid (PFUnA)	~	0.00200	U	0.00200	U	0.00200	U	0.00200	U	0.00200	J	0.00200	U	0.00200	U

Table 3: Post Remediation Groundwater Analysis - October 2020

#### NOTES:

Any Regulatory Exceedences are color coded by Regulation

#### Q is the Qualifier Column with definitions as follows:

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

~=this indicates that no regulatory limit has been established for this analyte

 TABLE 4

 Post-Remediation Off-Site Soil VaporSampling Table – 2018

Sample ID	18 W Centennial SS	V	18 W. Centennial Indoo	or	18 W Centennial Outdoo	or	21 W Centennial SS	V	21 W. Centennial Indoor	25 W Cente	nnial SSV	/ 2	25 W. Centennial Inde	oor	25 W Centennial Outd	oor
York ID	18D0539-01		18D0539-02		18D0539-03		18D0539-04		18D0539-05	18D05	39-06		18D0539-07		18D0539-08	
Sampling Date	4/10/2018 3:00:00 P	м	4/10/2018 3:00:00 PM	1	4/10/2018 3:00:00 PM		4/10/2018 3:00:00 P	м	4/10/2018 3:00:00 PM	4/10/2018 3	:00:00 PN	Л	4/10/2018 3:00:00 P	м	4/10/2018 3:00:00 P	м
Client Matrix	Soil Vapor		Indoor Ambient Air		Outdoor Ambient Air		Soil Vapor		Indoor Ambient Air	Soil V	apor		Indoor Ambient Ai	r	Outdoor Ambient A	ir
Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result Q	Resu	t C	Q	Result	Q	Result	Q
Volatile Organics, EPA TO15 Full List	ug/m3		ug/m3		ug/m3		ug/m3		ug/m3	ug/m	3		ug/m3		ug/m3	
Dilution Factor	1.34		0.533		0.533		1.923		0.533	21.0	5		0.533		0.533	
Trichloroethylene	0.180	U	0.0720	U	0.0720	υ	0.260	U	0.0720 U	0.340	) [	D	0.0720	U	0.0720	U
Carbon tetrachloride	0.210	U	0.270	D	0.370	D	0.360	D	0.340 D	0.330	) (	U	0.130	D	0.370	D
NYSDOH Matrix A Decision			No Further Action	Ē			No Fu	rth	er Action			-	No Further Actio	n		Ē.,
Methylene chloride	32	D	0.850	D	0.570	D	9.600	D	24 D	9.900	) [	D	5.500	D	5.500	D
Tetrachloroethylene	11	D	4.600	D	5.700	D	6.700	D	2.300 D	13	C	D	1.800	D	1.800	D
NYSDOH Matrix B Decision	-	-	No Further Action				No Fu	rth	er Action				No Further Actio	n		-
						-										

NOTES:

Any Regulatory Exceedences are color coded by Regulation

#### Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

U=analyte not detected at or above the level indicated

TABLE 4Post-Remediation On-Site Soil Vapor Sampling Table – 2019

Sample ID		Sub-Slab Vapor SSV-2	L	Indoor Air Al-1		Outdoor Air AO-1	
York ID		19H0985-01		19H0985-02		19H0985-03	
Sampling Date		8/20/2019 12:00:00 A	М	8/20/2019 12:00:00 A	Μ	8/20/2019 12:00:00 A	M
Client Matrix		Soil Vapor		Soil Vapor		Soil Vapor	
Compound	CAS Number	Result	Q	Result	Q	Result	Q
Volatile Organics, EPA TO15 Full List		ug/m3		ug/m3		ug/m3	
Dilution Factor		14.92		1.85		0.735	
Matrix A compounds							
Trichloroethylene (TCE)	79-01-6	0.640	D	0.250	U	0.120	
cis-1,2-Dichloroethylene	156-59-2	0.710	D	0.180	U	0.0730	U
1,1-Dichloroethene	75-35-4	0.300	U	0.180	U	0.0730	U
Carbon tetrachloride	56-23-5	0.470	U	0.470	D	0.460	D
NYDOH Matrix A Decision		No Further Action	whe	n <6 ug/m3 in sub slab			-
Matrix B compounds							
Tetrachloroethylene (PCE)	127-18-4	3	D	1.900	D	0.150	D
1,1,1-Trichloroethane	71-55-6	1.600	U	1	U	0.400	U
Methylene Chloride	75-09-2	2.100	U	1.300	U	0.510	U
NYDOH Matrix B Decision		No Further Action w	vhen	<100 ug/m3 in sub slab			
Matrix C compound							
Vinyl Chloride	75-01-4	0.190	U	1.800	D	0.0470	U
NVDOH Matrix C Decision		Identify Source(s) and Re	esam	ple or Mitigate when ind	oor		
		air 0.2 u	g/m	3 and above			

#### NOTES:

Any Regulatory Exceedences are color coded by Regulation

#### Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution U=analyte not detected at or above the level indicated **FIGURES** 







# Figure 2

Site Perimeter Map 20 West Centennial Avenue Town of Hempstead, Nassau Site No. 130154



0 (0') Fill (2') Silty SAND (SM); brown (4') Well-graded SAND (SW); brown -5 \_ 10 10 ΩUΩ (10') Well-graded GRAVEL (GW); brown D 0 0 0 0 0 0 0 0 0 0.0 -15 15 (15') Well-graded SAND (SW); brown 20 20 FIGURE 3 PROJECT #: 12-260 53 West Hills Road, Suite 1 TYPICAL GEOLOGIC CROSS DRAWING DATE: 12-16-20 Huntington Station, NY 11746 SECTION DRAWN BY: JB PHONE: 631-673-0612 20 West Centennial Avenue FAX: 631-427-5323 CHECKED BY: SY Roosevelt, New York Laure REVISIONS: NA ENVIRONMENTAL GEOSCIENCES DPC WWW.LAURELENV.COM









Laurel Environmental 53 West Hills Road Huntington Station, NY 11746

PHONE: 631-673-0612 FAX: 631-427-5323

PROJECT #: 12-260 SAMPLE LOCATION MAP DRAWING DATE: 10-24-17 DRAWN BY: KW CHECKED BY: SY

OFF-SITE SOIL VAPOR

20 West Centennial Drive

Roosevelt, New York

APRIL 10, 2018

LEA makes no guarantees as to the accuracy of this drawing and it should only be used for informational purposes.





PHONE: 631-673-0612 FAX: 631-427-5323 WWW.LAURELENV.COM DRAWING DATE DRAWN BY: JB CHECKED BY: S

20 W. Centennial Ave,

Roosevelt, New York

DRAWN BY: JB CHECKED BY: SY REVISIONS: NA КЕҮ

Regional groundwater flow\*
 Site boundary

## APPENDICES

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

THIS INDENTURE made this  $4^{H}$  day of  $4^{H}$ ,  $20^{H}$ , between Owner, 20 W. Centennial Corp., having an office at 209 Nassau Road, Roosevelt, New York 11575, County of Nassau, 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 20 West Centennial Avenue in the City of Roosevelt, County of Nassau and State of New York, known and designated on the tax map of the County Clerk of Nassau as tax map parcel numbers: Section 55 Block 415 Lot 273, being the same as that property conveyed to Grantor by the following deeds:

- deed dated March 8, 2004 and recorded in the Nassau County Clerk's Office in Liber and Page D11776/916, and
- correction deed dated November 5, 2009 and recorded in the Nassau County Clerk's Office in Liber and Page D12563/767.

The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.6139 +/- acres, and is hereinafter more fully described in the Land Title Survey dated June 8, 2020 prepared by John J. Toscano PLS, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

Environmental Easement Page 1

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

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: W1-11137-09-06, 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. <u>Purposes</u>. 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. <u>Institutional and Engineering Controls</u>. 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 Nassau 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

Environmental Easement Page 2

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

\* County: Nassau Site No: 130154 Order on Consent Index : W1-11137-09-06

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. <u>Right to Enter and Inspect</u>. 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. <u>Reserved Grantor's Rights</u>. 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. <u>Enforcement</u>

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. <u>Notice</u>. 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: 130154 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

Environmental Easement Page 5

communicating notices and responses to requests for approval.

7. <u>Recordation</u>. 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. <u>Amendment</u>. 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. <u>Extinguishment.</u> 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. <u>Joint Obligation</u>. 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. <u>Consistency with the SMP</u>. 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.

**Remainder of Page Intentionally Left Blank** 

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

20 W. Centennial Corp.:
By Auf Fren
Print Name: PAUL BACK
Title: <u>AusiDate</u> Date: <u>3/29/20</u> 24

**Grantor's Acknowledgment** 

STATE OF NEW YORK ) COUNTY OF Nassau ) ss:

On the  $29^{\text{th}}_{\text{personally appeared Paul Baer}}$ , in the year 20 21, before me, the undersigned, personally appeared Paul Baer}, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York



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 <u>G</u> day of <u>April</u>, in the year 20, before me, the undersigned,</u> 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

Dale Thiel Dale Thiel Notary Public, State of New York NO. OITHLOUY 394 Qualifie Din Columbia County Commission Expires 2/22/2025

### SCHEDULE "A" PROPERTY DESCRIPTION

BEGINNING at a point on the northerly side of Centennial Avenue, distant 160.39 feet westerly from the corner formed by the intersection of the northerly side of Centennial Avenue and the westerly side of North Main Street (Nassau Road);

THENCE North 86 degrees 49 minutes 00 seconds West along the northerly side of Centennial Avenue, 84.97 feet;

RUNNING THENCE North 2 degrees 39 minutes 00 seconds East, 206.59 feet;

THENCE South 84 degrees 02 minutes 00 seconds West, 19.10 feet;

THENCE North 6 degrees 08 minutes 40 seconds West, 91.80 feet;

THENCE North 83 degrees 47 minutes 00 seconds East, 92.51 feet;

THENCE South 6 degrees 08 minutes 40 seconds East, 91.80 feet;

THENCE South 88 degrees 37 minutes 20 seconds East, 15.37 feet;

THENCE South 3 degrees 01 minutes 30 seconds West, 215.14 feet to the northerly side of Centennial Avenue being the point or place of BEGINNING.

Containing 0.6139 more or less acres.

Section: 55 Block: 415 Lot: 273

# \*\*\*\* Electronically Filed Document \*\*\*\*

Instrument Number	: 2021-69255							
Recorded As:	EX-D06 - DEED AG	REEM						
Recorded On:	May 21, 2021							
Recorded At:	02:21:37 pm		Receipt Nu	ımber:	22787	26		
Number of Pages:	10		Processed	By:	001 M	NC		
Book-VI/Pg:	Bk-D VI-14084 F	g-392						
Total Rec Fee(s):	\$395.00							
** Examined and Ch	harged as Follows	**						
06 - DEED AGREEMEN	T \$ 90.0	0 EX-6	Blocks - Deeds	- \$300		\$ 300.00	EX-TP-584 Affidavit Fee	\$ 5.00
		Tax Amount	Consid Amt	RS#/CS	#			
Tax-Transfer HEMPSTEAD		\$0	\$0	RE 2383	33	Basic Local NY CITY	\$ 0.00 \$ 0.00	
						Additional MTA	\$ 0.00	
						Spec ASST	\$ 0.00	
						Transfer	\$ 0.00 \$ 0.00	
Tax Charge:		\$ O						
Property Information:								
Section Block	Lot Unit	Town Nam	1e ******					

## 

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.



aureen O'Commell N

County Clerk Maureen O'Conneil

## **APPENDIX B – LIST OF SITE CONTACTS**

#### Name, Title

20 W. Centennial Corp., Site Owner Ted Firetog, Site Owner's Attorney Scott Yanuck, Laurel Environmental President Brian McCabe, Laurel Environmental Project Manager Chris Heller, NYSDEC Project Manager Chris Engelhardt, NYSDEC Regional HW Engineer Kelly Lewandowski, NYSDEC Site Control Steven Berninger, NYSDOH Project Manager Charlotte Bethoney, NYSDOH Region Chief

#### **Phone/Email Address**

(516) 379-4477, autotaglabel@aol.com (516) 845-8087, tfiretog@eniinternet.com (631) 673-0612, synauck@laurelenv.com

(631) 673-0612, bmccabe@laurelenv.com

(518) 402-0163, chris.heller@dec.ny.gov

(631) 444-0235, chris.engelhardt@dec.ny.gov

(518) 402-9553, kelly.lewandowski@dec.ny.gov

(518) 402-7860, steven.berninger@health.ny.gov

(518) 402-7860, charlotte.bethoney@health.ny.gov

)

)

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	B	oring Log	
Boring Location:	SB-22		Notes:
Date:	11/09/10		Three feet of recovery was
Total Depth:	20 feet	Diameter:	noted for each five foot sleeve.
Sample Interval Length:	5 feet		Soil samples were collected
Drilling Company:	Eastern Environm	ental Solutions, Inc.	at 0'-2' and 15'-17' feet below
Consultant:	P. Dermody		grade.
Depth	PID Readings	Graphics	Soil Characteristics
0	23.7		0' - 1' - Black sand with wood
2	5.3		fragments.
4			1' - 3' Brown, fine-grained sand
6	5.7		with clay.
8			5' - 8' - Brown, medium-grained
10			sand with gravel.
12	4.8		10' - 13' - Brown, medium-grained
14			sand.
16	3.8		15' - 17' - Brown, medium-grained
18			sand with gravel.
20			

	В	oring Log	
Boring Location:	SB-23		Notes:
Date:	11/09/10		Three feet of recovery was
Total Depth:	20 feet	Diameter:	noted for each five foot sleeve.
Sample Interval Length:	5 feet		Soil samples were collected
Drilling Company:	Eastern Environm	ental Solutions, Inc.	at 0'-2' and 15'-18' feet below
Consultant:	P. Dermody		grade.
Depth	PID	Graphics	Soil
	Readings		Characteristics
0	135.0		0' - 1' - Black sand with wood
2	23.7		fragments.
4			1' - 3' Brown, fine-grained sand
6	3.0		with clay.
8			5 - 8 - Brown, medium-grained
10	4.0		Sand with gravel.
12	4.0		10 - 13 - Brown, medium-grained
14	8.8		15' - 18' - Brown medium-grained
18	0.0		sand
20			Sand.
20			

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	B	oring Log					
Boring Location:	SB-24		Notes:				
Date:	11/09/10		Three feet of recovery was				
Total Depth:	20 feet	Diameter:	noted for each five foot sleeve				
Sample Interval Length:	5 feet		with the exception of the 0' - 5'				
Drilling Company:	Eastern Environm	ental Solutions, Inc.	sleeve which had 18" of recovery.				
Consultant:	P. Dermody						
Denth	PID	Granhics	Soil				
Deptil	Readings	Oraphico	Characteristics				
0	0.0		0' - 1.5' - Black, medium-grained				
2	0.0		sand with gravel.				
4			1.5' - 2.5' - Brown, fine-grained				
6	0.0		sand with clay and gravel.				
8			5' - 8' - Brown, medium-grained				
10			sand.				
12	0.0		10' - 13' - Brown, medium-grained				
14			sand with gravel.				
16	0.4		15' - 18' - Brown, medium-grained				
18			sand with gravel.				
20			Cail complete were collected at				
			Soll samples were collected at				
			0 - 2 and 15 - 10 leet below				
			grade.				

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	В	oring Log					
Boring Location:	SB-25		Notes:				
Date:	11/09/10		Three feet of recovery was				
Total Depth:	20 feet	Diameter:	noted for each five foot sleeve.				
Sample Interval Length:	5 feet		A soil sample was collected				
Drilling Company:	Eastern Environm	ental Solutions, Inc.	at 1' - 3' feet below grade.				
Consultant:	P. Dermody						
Depth	PID	Graphics	Soil				
	Readings		Characteristics				
0	0.0		0' - 1' - Black, medium-grained				
2	0.0		sand with gravel.				
4			1' - 3' - Brown, medium-grained				
6	0.0		sand.				
8			5° - 8° Brown, medium-grained				
10	0.0		sand.				
12	0.0		10 - 13 - Brown, medium-grained				
14	0.0		5dilu. 15' 19' Brown modium grained				
10	0.0		15 - 16 - Drown, medium-grained				
			Sanu.				
20							

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							Client:	Paul Baer		E	30RING	LOG	3	
							Project:	12-260		Boring No.	AD-1			
							Address:	20 West Cei Roosevelt,	ntennial Avenue, NY	Page:	1 of 1			
Drilling Drilling Drilling Drilling Driller: Logged	Start Da End Da Compa Method Equipm By:	ate: ( ny:   :   eent: (	)2/21/ <sup>/</sup> )2/21/ <sup>/</sup> Laurel Direct Geopr Kendr Patricl	18 18 Enviro Push obe 54( a Arms k Somn	nmer )0 tead, ner	ntal As Alberi	ssociates Ltd. t Kim		Boring Depth (ft):10.0Boring Diameter (in):2.00Sampling Method(s):DTW During Drilling (ft):DTW After Drilling (ft):DTW After Drilling (ft):Ground Surface Elev. (ft):38.0Location (X,Y):-73.1	0 589534, 40.67721	13			
COLLECT											MEAS	SURE		
DEPTH (ft)	ГІТНОГОСУ	WATER LEVE	COMPLETION Sample Type Blow Counts Recovery (ft)									PID (ppm)	Lab Sample	DEPTH (ft)
0			7888	<del></del>		<del>, ,</del>							<b></b>	<sup>0</sup>
		22	2000				(0.5') Concrete	}	_			0.0		L
							(1') SILT (ML);	some clay, wet, li	ight brown			0.0		
	(2') SILT (ML); little fine-coarse gravel, little silt, moist, light brown												AD-1	
							(4') Silty SAND	) (SM); dry, light b	prown, No Odor			0.0		
5—														-5
_							(6') Silty SAND	) (SM); dry, light b	prown, No Odor			0.0		_
														-
							(8') Silty SAND	) (SM); dry, tan to	white, No Odor		·	0.0		
10—							(10') Boring ter	rminated						
												1		-
														F
_														Ļ
														L
												1		
15														
													┝	
														┝
														F
												1		L
20														20
N	OTES:													

								Client:	Paul Baer		E	<b>30RING</b>	LOG	3		
								Project:	12-260		Boring No.	AD-2				
								Address:	20 West Cer Roosevelt,	ntennial Avenue, NY	Page:	1 of 1				
Drilling Start Date:02/21/18Boring Depth (ft):12.0Drilling End Date:02/21/18Boring Diameter (in):2.00Drilling Company:Laurel Environmental Associates Ltd.Sampling Method(s):Drilling Method:Direct PushDTW During Drilling (ft):Drilling Equipment:Geoprobe 5400DTW After Drilling (ft):Driller:Kendra Armstead, Albert KimGround Surface Elev. (ft):Logged By:Patrick SommerLocation (X,Y):												45				
												MEAS	SURE			
DEPTH (ft)	LITHOLOG	WATER LEVE	BORING COMPLETIC	Sample Type	Time	Blow Counts	Recovery (ft)		SOIL/ROCK VISUAL DESCRIPTION							
0	r					<del></del>	·							·	0	
(0.3') Concrete (0.5') Silty GRAVEL (GM); very dense, moist, brown to black, Odor											0.0		_			
(2') Lean CLAY (CL); some silt, medium plasticity, stiff, light brown												0.0				
5								(4') Well-graded SAND with gravel (SW); mostly fine grained sand, little fine gravel, moist, light brown								
-								(6') Silty SAND	) (SM); mostly find	e grained sand, dry, tan			0.0		  -  -	
-								(8') Silty SAND	) (SM); mostly find	e grained sand, dry, tan, No Odor	r		0.0			
10								(10') Silty SAN	ID (SM); dry, tan t	o white, No Odor			0.0		— 10 —	
-								(12') Boring ter	rminated						-  -	
 15—																
													_			
20																
NOTES:																

								Client:	Paul Baer		В	ORING		3	
								Project:	12-260		Boring No.	AD-3			
								Address:	20 West Cei Roosevelt, I	ntennial Avenue, NY	Page:	1 of 1			
Drilling Drilling Drilling Drilling Driller: Logged	Start Di End Da Compa Method Equipm	ate: ny: l: nent:	02/2 02/2 Lau Dire Geo Ken Patr	21/18 21/18 Irel E ect Pr oprob Idra <i>J</i> rick S	nviroi ush de 540 Armst Somm	nmer 0 ead, er	ital Ass Albert	sociates Ltd. Kim		Boring Depth (ft):12.0Boring Diameter (in):2.00Sampling Method(s):7.00DTW During Drilling (ft):7.00DTW After Drilling (ft):7.00Ground Surface Elev. (ft):39.0Location (X,Y):73.5	0 589479, 40.67691	5			
	×	Ц	N		COLL	ECT							MEAS	SURE	
DEPTH (ft)	<b>LITHOLOG</b>	WATER LEVI	BORING COMPLETIC	Sample Type	Time	Blow Counts	Recovery (ft)		SOIL/		PID (ppm)	Lab Sample	DEPTH (ft)		
0			00000										0.0		0
(0.5') Fat CLAY (CH); high plasticity, very stiff, black to brown												0.0			
(2') Fat CLAY (CH); high plasticity, tan										0.0		_			
-								(4') Well-grade	d SAND with silt	and gravel (SW-SM); some fine g	gravel		0.0		_
5—															—5
-								(6') Silty SAND composition inc	(SM); few fine-co creases with dep	oarse gravel, poorly graded, very th	loose, dry, gravel		0.0		_
-								(8') Silty SAND to orange	) with gravel (SM)	; some fine-coarse gravel, well-g	raded, very loose,	tan	0.0		_
10								(10') Silty SAN	D (SM); poorly gr	aded, very loose, tan to white					10
-	b <sup>o</sup> b <sup>o</sup> c						_	(12') Boring ter	minated						-
15															—15
20														20	
Ν	IOTES														

								Client:	&\$`K "7 Ybh	/bb]Ưʿ7 cfd‴		BORING		3			
			Project:12-260Boring No."@95!%Address:20 West Centennial Avenue, Page:Page:1 of 1														
								Address:	Roosevelt,	NY	Page:	1 of 1					
Drilling Drilling Drilling Drilling Driller: Logged	Start Da End Da Compa Method Equipm By:	ate: te: ny: : ent:	02/2 02/2 Lau Dire Geo Ken Patr	21/18 21/18 rel E ect Pr oprob odra <i>I</i> rick S	nviro ush be 540 Armst Somm	nmen 10 :ead, 1er	ital Ass Albert	sociates Ltd. Kim		Boring Depth (ft):10.0Boring Diameter (in):2.00Sampling Method(s):7.00DTW During Drilling (ft):7.00DTW After Drilling (ft):8.00Ground Surface Elev. (ft):38.00Location (X,Y):-73.00	) ) )0 589534, 40.67	7213					
											MEAS	SURE	-				
DEPTH (ft)	CILHOLOG	WATER LEVI	COMPLETIC	Sample Type	Time	Blow Counts	Recovery (ft)		SOIL/	ROCK VISUAL DESCRIPTION			PID (ppm)	Lab Sample	DEPTH (ft)		
0														0			
-	(0.5') Concrete (1') SILT (ML); some clay, wet, light brown, some gravel/road base, no odor (2') SILT (ML); little fine-coarse gravel, little silt, moist, light brown, no odor												0.0 0.0		-		
								(4') Silty SAND	) Silty SAND (SM); dry, light brown, no odor								
_								(6') Silty SAND	) (SM); dry, light b	prown, no odor			0.0		_		
_								(8') Silty SAND	) (SM); dry, tan to	white, no odor			0.0		_		
10 (10') Boring terminated												— 10 — — —					
														— 15 — —			
20 N	20 NOTES: Sample collected for analysis from 2'-4'														20		
1																	

								Client: 20 W. Centennial Corp. BORING LC									
								Project:	Project: 12-260 20 West Centennial Avenue								
								Address:	Address: 20 West Centennial Avenue, Roosevelt, NY Page: 1 of 1								
Drilling Drilling Drilling Drilling Drilling Driller: Logged	Start Da End Da Compa Method Equipm	ate: te: ny: : ent:	02/2 02/2 Lau Dire Geo Ken Patr	21/18 21/18 irel E ect Pi oprob idra <i>i</i> rick S	nviror ush De 540 Armst Somm	nmen 0 ead, er	ital Ass Albert	sociates Ltd. Kim		Boring Depth (ft):12.0Boring Diameter (in):2.00Sampling Method(s):7.00DTW During Drilling (ft):7.00DTW After Drilling (ft):88.0Ground Surface Elev. (ft):38.0Location (X,Y):-73.0	0 589515, 40.67714	5					
	COLLECT												MEASURE				
DEPTH (ft)	LITHOLOGY	WATER LEVE	BORING COMPLETION	Sample Type	Time	Blow Counts	Recovery (ft)		SOIL/ROCK VISUAL DESCRIPTION								
0												0					
(0.3') Concrete (0.5') Silty GRAVEL (GM); very dense, moist, brown to black, slight odor											0.0		_				
-								(2') Lean CLA	Lean CLAY (CL); some silt, medium plasticity, stiff, light brown, no odor								
								(4') Well-grade moist, light bro	<sup>()</sup> ) Well-graded SAND with gravel (SW); mostly fine grained sand, little fine gravel, ioist, light brown, no odor								
-								(6') Silty SAND	) (SM); mostly fin	e grained sand, dry, tan, no odor			0.0		-		
-		-						(8') Silty SAND	) (SM); mostly fin	e grained sand, dry, tan, no odor			0.0		_		
10								(10') Silty SAN	ID (SM); dry, tan t	to white, no odor			0.0		— 10 —		
-							_	(12') Boring ter	rminated						-		
															— — 15		
_																	
												-					
		Sa	nnle		ected	for a	nalveic	s from 2'-1'							20		
	UTEO.	Jai	nhie	JUIR	JUIGU	ioi d	arysis	, iioiii 2 =4									

								Client: 20 W. Centennial Corp. BORING			g log						
								Project:	12-260 20 West Ce	ntennial Avenue	Boring No. LEA-3						
								Address:	Roosevelt,	NY	Page: 1 of 1						
Drilling Drilling Drilling Drilling Driller: Logged	Start Da End Da Compa Method Equipm	ate: te: ny: : ent:	02/2 02/2 Lau Dire Geo Ken Patr	21/18 21/18 irel E ect Pr oprot oprot ndra <i>i</i> rick \$	inviro ush De 540 Armst Somm	nmer 10 :ead, 1er	ıtal Ass Albert	sociates Ltd. Kim		Boring Depth (ft):12.0Boring Diameter (in):2.00Sampling Method(s):7.00DTW During Drilling (ft):7.00DTW After Drilling (ft):9.00Ground Surface Elev. (ft):39.00Location (X,Y):-73.50	0 589479, 40.676915						
											MEAS	SURE	()				
DEPTH (ft	DOTOHLI	WATER LEV	BORING COMPLETIC	Sample Type	Time	Blow Counts	Recovery (ft)		SOIL/ROCK VISUAL DESCRIPTION								
											0.0	1	0				
(0.5') Fat CLAY (CH); high plasticity, very stiff, black to brown, no odor, some gravel/													_				
road base																	
								(2') Fat CLAY	(CH); high plastic	ity, tan, no odor		0.0					
								(4') Well-grade	) Well-graded SAND with silt and gravel (SW-SM); some fine gravel, no odor								
5																	
	<u>, ° 8 ° 8</u> 10 10 1							(6') Silty SAND	) (SM): few fine-c	oarse gravel, poorly graded, very	/ loose, drv. gravel	- 0.0					
_								composition in	creases with dep	th, no odor	, ,,,,			_			
												- 00					
								(8') Silty SAND to orange, no o	) with gravel (SM odor	); some fine-coarse gravel, well-g	jraded, very loose, tan	0.0					
10								(10') Silty SAN	D (SM); poorly g	raded, very loose, tan to white, no	o odor	-					
	10MoMc							(12') Boring ter	rminated			-					
-														_			
	-													_			
15	-																
													_				
-														-			
-														┝			
20																	
N	IOTES.	Sar	nnle		ected	for a	nalveic	s from 2'-4'						-			
		Jai		. 5010		.or d											
# **APPENDIX D – MONITORING WELL CONSTRUCTION DIAGRAMS**

Monitoring	y Well Cons	truction Diagram
Client:	20 W. Cente	ennial Corp
Site	20 West Ce	ntennial
Well ID:	MW-20-4	
Installer:	Sears Brow	'n
Date:	October 200	02
*All measure	ments taken	from top of well
DEPTH (ft)	WELL	WELL MATERIAL
	1	
0		Locking J-Plug
1		2" Sch. 40 Riser
2		2" Sch. 40 Riser
3		2" Sch. 40 Riser
4		2" Sch. 40 Riser
5		2" Sch. 40 Riser
6		2" Sch. 40 Riser
7		2" Sch. 40 Riser
8		2" Sch. 40 Riser
9	-	2" Sch. 40 Riser
10		2" Sch. 40 Riser
11		2" Sch. 40 Riser
12		2" Sch. 40 Riser
13		2" Sch. 40 Riser
14		2" Sch. 40 Riser
15		2" Sch. 40 Riser
16		2" Sch. 40 Riser
17		2" Sch. 40 Riser
18		2" .020" Slot Screen
19		2" .020" Slot Screen
20		2" .020" Slot Screen
21		2" .020" Slot Screen
22		2" .020" Slot Screen
23		2" .020" Slot Screen
24		2" .020" Slot Screen
25		2" .020" Slot Screen
26		2" .020" Slot Screen
27		2" .020" Slot Screen
28		Endcap

Monitoring	g Well Cons	truction Diagram	
Client:	20 W. Cent	ennial Corp	
Site	20 West Ce	entennial	
Well ID:	MW-20-7		
Installer:	Sears Brow	/n	
Date:	October 20	02	
*All measure	ments taker	from top of well	
DEPTH (ft)	WELL	WELL MATERIAL	
0		Locking J-Plug	
1		2" Sch. 40 Riser	
2		2" Sch. 40 Riser	
3		2" Sch. 40 Riser	
4		2" Sch. 40 Riser	
5		2" Sch. 40 Riser	
6		2" Sch. 40 Riser	
7		2" Sch. 40 Riser	
8	2" Sch. 40 Riser		
9		2" Sch. 40 Riser	
10		2" Sch. 40 Riser	
11		2" Sch. 40 Riser	
12		2" Sch. 40 Riser	
13		2" Sch. 40 Riser	
14		2" Sch. 40 Riser	
15		2" Sch. 40 Riser	
16		2" Sch. 40 Riser	
17		2" Sch. 40 Riser	
18		2" .020" Slot Screen	
19		2" .020" Slot Screen	
20		2" .020" Slot Screen	
21		2" .020" Slot Screen	
22		2" .020" Slot Screen	
23		2" .020" Slot Screen	
24		2" .020" Slot Screen	
25		2" .020" Slot Screen	
26		2" .020" Slot Screen	
27		2" .020" Slot Screen	
28		Endcap	

Monitoring	Well Cons	truction Diagram			
Client:	20 W. Cente	ennial Corp			
Site	20 West Ce	ntennial			
Well ID:	MW-20-8				
Installer:	Sears Brow	'n			
Date:	October 200	)2			
*All measure	ments taken	from top of well			
DEPTH (ft)	WELL WELL MATERIAL				
0		Locking J-Plug			
1		2" Sch. 40 Riser			
2		2" Sch. 40 Riser			
3		2" Sch. 40 Riser			
4		2" Sch. 40 Riser			
5		2" Sch. 40 Riser			
6		2" Sch. 40 Riser			
7		2" Sch. 40 Riser			
8		2" Sch. 40 Riser			
9		2" Sch. 40 Riser			
10		2" Sch. 40 Riser			
11		2" Sch. 40 Riser			
12		2" Sch. 40 Riser			
13		2" Sch. 40 Riser			
14		2" Sch. 40 Riser			
15		2" Sch. 40 Riser			
16		2" Sch. 40 Riser			
17		2" Sch. 40 Riser			
18		2" .020" Slot Screen			
19		2" .020" Slot Screen			
20		2" .020" Slot Screen			
21		2" .020" Slot Screen			
22		2" .020" Slot Screen			
23		2" .020" Slot Screen			
24		2" .020" Slot Screen			
25		2" .020" Slot Screen			
26		2" .020" Slot Screen			
27		2" .020" Slot Screen			
28	$\square$	Endcap			

Monitorin	g Well C	ons	truction Diagram	
Client:	20 W. C	ente	ennial Corp	
Site	20 Wes	t Ce	ntennial	
Well ID:	MW-1S			
Installer:	Dermo	dy C	onsulting	
Date:	May 20	12	-	
*All measure	ments ta	aken	from top of well	
DEPTH (ft)	WELL		WELL MATERIAL	
0			Locking J-Plug	
1			2" Sch. 40 Riser	
2			2" Sch. 40 Riser	
3			2" Sch. 40 Riser	
4			2" Sch. 40 Riser	
5			2" Sch. 40 Riser	
6		2" Sch. 40 Riser		
7			2" Sch. 40 Riser	
8			2" Sch. 40 Riser	
9			2" Sch. 40 Riser	
10			2" Sch. 40 Riser	
11			2" Sch. 40 Riser	
12			2" Sch. 40 Riser	
13			2" Sch. 40 Riser	
14			2" Sch. 40 Riser	
15			2" .020" Slot Screen	
16			2" .020" Slot Screen	
17			2" .020" Slot Screen	
18			2" .020" Slot Screen	
19			2" .020" Slot Screen	
20			2" .020" Slot Screen	
21			2" .020" Slot Screen	
22			2" .020" Slot Screen	
23			2" .020" Slot Screen	
24			2" .020" Slot Screen	
25	$1 \ \square$	1	Endcap	

Monitoring Well Construction Diagram				
Client:	20 W C	onto	annial Corn	
Site	20 W. Ct		ntennial	
		Ce	Interinia	
Inotallor:	Dormod		onculting	
Dete:	May 201	y U(	onsulung	
	IVIA y 201	2	frame tam of wall	
^All measure	ments tai	ken	trom top of well	
DEPTH(II)	VVELL			
-				
0			Locking J-Plug	
1			2" Sch. 40 Riser	
2			2" Sch. 40 Riser	
3			2" Sch. 40 Riser	
4			2" Sch. 40 Riser	
5			2" Sch. 40 Riser	
6			2" Sch. 40 Riser	
7			2" Sch. 40 Riser	
8			2" Sch. 40 Riser	
9			2" Sch. 40 Riser	
10			2" Sch. 40 Riser	
11			2" Sch. 40 Riser	
12			2" Sch. 40 Riser	
13			2" Sch. 40 Riser	
14			2" Sch. 40 Riser	
15			2" Sch. 40 Riser	
16			2" Sch. 40 Riser	
17			2" Sch. 40 Riser	
18			2" Sch. 40 Riser	
19			2" Sch. 40 Riser	
20			2" Sch. 40 Riser	
21			2" Sch. 40 Riser	
22			2" Sch 40 Riser	
23			2" Sch 40 Riser	
24			2" Sch 40 Riser	
25			2" Sch. 40 Riser	
26			2" Sch. 40 Riser	
27			2" Sch. 40 Riser	
28			2" Sch 40 Riser	
29			2" Sch 40 Riser	
30			2" Sch 40 Riser	
31			2" Sch. 40 Riser	
32			2" Sch. 40 Riser	
33			2" Sch. 40 Riser	
34			2" Sch 40 Riser	
35			2" Sch 40 Riser	
36			2" Sch 40 Riser	
37			2" Sch 40 Riser	
38			2" Sch 40 Riser	
.39			2" Sch 40 Pieer	
40			2" Sch 40 Pieer	
41			2" Sch 40 Pieer	
42			2" Sch /0 Disor	
42			2" Sch /0 Disor	
44			2" Sch /0 Dieor	
45			2" Sch /0 Disor	
40			2 3011. 40 KISEI	
40			2 3011. 40 KISEI	
47				
48				
49				
50				
51			2 .U2U" Slot Screen	
52	г КИ		Enucap	

Monitoring	y Well Cons	struction Diagram		
Client:	20 W. Cen	tennial Corp		
Site	20 West C	entennial		
Well ID:	MW-2S			
Installer:	Dermody (	Consulting		
Date:	May 2012			
*All measure	ments take	n from top of well		
DEPTH (ft)	WELL	WELL MATERIAL		
0		Locking J-Plug		
1		2" Sch. 40 Riser		
2		2" Sch. 40 Riser		
3		2" Sch. 40 Riser		
4		2" Sch. 40 Riser		
5		2" Sch. 40 Riser		
6	2" Sch. 40 Riser			
7		2" Sch. 40 Riser		
8		2" Sch. 40 Riser		
9		2" Sch. 40 Riser		
10		2" Sch. 40 Riser		
11		2" Sch. 40 Riser		
12		2" Sch. 40 Riser		
13	2" Sch. 40 Riser			
14		2" Sch. 40 Riser		
15		2" .020" Slot Screen		
16		2" .020" Slot Screen		
17		2" .020" Slot Screen		
18	2" .020" Slot Screen			
19	2" .020" Slot Screen			
20		2" .020" Slot Screen		
21		2" .020" Slot Screen		
22		2" .020" Slot Screen		
23		2" .020" Slot Screen		
24		2" .020" Slot Screen		
25	$\square$	Endcap		

Page 75 Site Management Plan, Site # 1-30-154

Monitoring Well Construction Diagram						
Client:	20 W. Conte	annial Corn				
Cilent.	20 Wester	ntonnial				
Site	20 West Ce	ntenniai				
	IVIVV-ZU	MW-2D				
installer:	Dermody Co	onsulting				
Date:	May 2012					
*All measure	ments taken	from top of well				
DEPTH (ft)	WELL WELL MATERIAL					
0		Locking J-Plug				
1		2" Sch. 40 Riser				
2		2" Sch. 40 Riser				
3		2" Sch. 40 Riser				
4		2" Sch 40 Riser				
5		2" Sch 40 Riser				
5		2 Sch. 40 Riser				
0		2 SUII. 40 RISER				
/		2" Scn. 40 Riser				
8		2" Sch. 40 Riser				
9		2" Sch. 40 Riser				
10		2" Sch. 40 Riser				
11		2" Sch. 40 Riser				
12		2" Sch. 40 Riser				
13		2" Sch. 40 Riser				
14		2" Sch. 40 Riser				
15		2" Sch 40 Riser				
16		2" Sch 40 Riser				
17		2" Sch 40 Pieer				
10		2" Soh 40 Disor				
10	2" Sch. 40 Riser					
19	2" Sch. 40 Riser					
20		2" Sch. 40 Riser				
21		2" Sch. 40 Riser				
22		2" Sch. 40 Riser				
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24		2" Sch. 40 Riser				
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26		2" Sch. 40 Riser				
27		2" Sch. 40 Riser				
28		2" Sch. 40 Riser				
29		2" Sch. 40 Riser				
30		2" Sch 40 Riser				
31		2" Sch 40 Riser				
32		2" Sch /0 Disor				
32		2" Soh 40 Disor				
33		2 JUII. 40 RISER				
34		2" Scn. 40 Riser				
35		2" Sch. 40 Riser				
36		2" Sch. 40 Riser				
37		2" Sch. 40 Riser				
38		2" Sch. 40 Riser				
39		2" Sch. 40 Riser				
40		2" Sch. 40 Riser				
41		2" Sch. 40 Riser				
42		2" Sch. 40 Riser				
43		2" Sch. 40 Riser				
44		2" Sch. 40 Riser				
45		2" Sch 40 Riser				
46		2" Sch 40 Riser				
17		2" 020" Slot Soroon				
+/		2 .020 Slot Screen				
48		2 .U2U" Slot Screen				
49		2" .020" Slot Screen				
50		2" .020" Slot Screen				
51		2" .020" Slot Screen				
52		Endcap				

#### **APPENDIX E – HEALTH AND SAFETY PLAN**

The purpose of this Health and Safety Plan ("HASP") is to assign responsibilities, establish the minimum personnel protection standards and operating procedures, and provide for contingencies that may arise while investigations are being performed at the Site.

This HASP establishes the minimum level of personnel protection. Additional measures will be implemented as necessary to protect personnel involved in the work and the public at large.

Based on currently-known Site conditions, any future Site work is not expected to warrant either Level B or Level C personnel protection. However, should conditions change and an upgraded becomes necessary, all workers present must be familiar with such proper protection procedures.

Given the nature of the contaminants which have the potential of being present on-Site, there is very little, if any, potential of the surrounding community being negatively impacted by activities to be conducted during future Site work.

If an emergency occurs during work at the Site, which in any event may impact the surrounding community, all appropriate emergency resources listed under the Emergency Contingency Plan Section of this plan will be immediately mobilized.

#### E-1 Hazard Evaluation

Elevated levels of volatile organic compounds ("VOCs") in the atmosphere may occur during on-site activities. The presence of VOCs should be evaluated during all intrusive activities using a Photoionization Device ("PID"). PID results will be used to ensure that the appropriate worker protection is maintained for the level of VOCs detected. If air monitoring indicates VOC concentrations pose a risk to workers, the area should be immediately evacuated. Guidelines that Should be followed before continuing are noted in Table F-1. If conditions warrant, Level B and C protection will be implemented.

#### **E-2** Personal Protective Equipment

All on-site workers should be familiar with proper protection procedures and this HASP. Level D personal protective clothing can be worn at the outset.

If conditions warrant it, Level B or C protection should be worn. General descriptions of Level C and B protection are presented in Tables F-2 and F-3, respectively. If it is necessary to wear Level B or C protection, the work area should be separated into three Zones: Exclusion Zone, Contamination Reduction Zone, and Support Zone. Only protected personnel should be allowed into the Exclusion and Contamination Reduction Zones. An entrance and exit point should be designated and monitored to ensure that no unauthorized personnel enter the area. Everyone that enters the area should be logged in the field notebook with the length of time spent in the area and the task performed noted.

All workers should wear gloves when handling soil/sludge and apparatus that come into contact with these media. Gloves should also be worn while cleaning the sampling equipment.

#### E-3 Personnel Safety/Hygiene

The safety practices to be followed by all on-Site personnel include:

1. During intrusive activities, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of materials is prohibited.

2. Hands and face must be thoroughly washed before eating, drinking, or any other activities.

3. No excessive facial hair, which interferes with a satisfactory fit of a respirator to faceseal (in case respirator use is required), is allowed for personnel to wear respiratory protective equipment.

#### **E-4** Personnel Training

At the start of the job before engaging in any work, all personnel should be briefed on the

following:

1. The person in charge as safety officer.

2. Boundaries and entry and exit point locations of the work zones, if established.

3. Use of personnel protection equipment.

4. Principles of personnel hygiene.

5. Location of first-aid equipment.

6. Evacuation procedures to be followed in case of emergencies.

New personnel will be briefed on the same points prior to starting work at the Site.

#### **E-5** Decontamination Procedures

If Level B or C protection is worn, decontamination procedures should be performed in the Contamination Reduction Zone. All disposable garments and spent cartridges/canisters from respiratory equipment will be removed and disposed of in drums.

Potentially contaminated equipment should be cleaned before leaving the Site.

#### E-6 Emergency Contingency Plan

In the event of physical injury, the safety officer or any other qualified person should initiate first aid and, if necessary, call the ambulance. If a chemical exposure is encountered, a physician should be informed, as specifically as possible, of the chemical(s) to which the person had been exposed and the toxicological properties of the chemical(s).

In case of any emergency, the following resources might need to be contacted:

- A. <u>Local Resources</u> Roosevelt Fire Department/Ambulance: 911 Nassau County Police Department: 911
- B. <u>Hazardous Waste Spills</u> New York State Department of Environmental Conservation 1-800-457-7362 Nassau County Department of Health, 516-571-6000 Laurel Environmental Geosciences: Nights and Weekend Emergencies 516-971-6332
- C. <u>Hospital:</u> Winthrop University Hospital 259 1st Street, Mineola, New York 11501 Telephone: (866) 946-8476 or (516) 663-0333 Total Distance: 5.8 Miles Approximate Driving Time: 17 Minutes

	Start: 20 W Centennial Ave, Roosevelt, NY 11575	
1.	Head east on W Centennial Ave toward Nassau Rd	go 253 ft total 253 ft
2.	Turn left onto <b>Nassau Rd</b> About 5 mins	go 1.6 mi total 1.6 mi
3.	Continue onto <b>Greenwich St</b> About 3 mins	go 1.2 mi total 2.9 mi
4.	Turn left onto Front St	go 0.1 mi total 3.0 mi
5.	Take the 1st right onto <b>N Franklin St</b> About 7 mins	go 2.4 mi total 5.4 mi
6.	Continue onto Mineola Blvd About 50 secs	go 0.2 mi total 5.7 mi
7.	Turn left onto <b>1st St</b> Hospital will be on the left About 1 min	go 0.2 mi total 5.8 mi



## E-7 Heat Stress Casualty Prevention Plan

#### A. Identification and Treatment

#### 1) Heat Exhaustion

<u>Symptoms:</u> Usually begins with muscular weakness, dizziness and a staggering gait. Vomiting is frequent. The bowels may move involuntarily. The victim is very pale, his/her skin is clammy and he/she may perspire profusely. The pulse is weak and fast, breathing is shallow. He/she may faint unless he/she lies down. This may pass, but sometimes it remains, and death could occur.

<u>First Aid</u>: Immediately remove the victim to a shady or cool area with good air circulation. Remove all protective outer wear. Call a physician. Treat the victim for shock. (Make patient lie down, raise his feet 6-12 inches, and keep him warm but loosen all clothing). If the victim is conscious, it may be helpful to give him sips of a saltwater solution (1 teaspoon of salt to 1 glass of water). Transport victim to a medical facility.

#### 2) Heat Stroke

<u>Symptoms:</u> This is the most serious of heat casualties, due to the fact that the body excessively overheats. Body temperatures often are between 107-110 F. There is often pain in the head, dizziness, nausea, oppression, and a dryness of the skin and mouth. Unconsciousness follows quickly and death is imminent if exposure continues. The attack will usually occur suddenly.

<u>First-Aid</u>: Immediately evacuate the victim to a cool and shady area. Remove all protective outer wear and all personal clothing. Lay them on their back with the head and shoulders slightly elevated. It is imperative that the body temperature be lowered immediately. This can be accomplished by applying cold wet towels, ice bags, etc., to the head. Sponge off the bare skin with cool water or rubbing alcohol, if available, or even place them in a tub of cool water. The main objective is to cool them without chilling. Give no stimulants. Transport the victim to a medical facility as soon as possible.

- B. Prevention of Heat Stress
  - One of the major causes of heat casualties is the depletion of body fluids. On the Site, there should be plenty of fluids available. Personnel should replace water and salts lost from sweating. Salts can be replaced by either a 0.1% salt solution, more heavily salted foods, or commercial mixes, such as Gatorade. The commercial mixes are advised for personnel on low sodium diets.
  - 2) A work schedule should be established so that the majority of the workday will be during the morning hours of the day before ambient air temperature levels reach their highs if high air temperatures are anticipated.
  - 3) A work/rest guideline should be implemented for personnel required to wear Level B protection, if this situation arises. This guideline is as follows:

Ambient Temperatures	Maximum Wearing Time
Above 90°F	0.5 hour
80 - 90°F	1 hour
70 - 80°F	2 hours
60 - 70°F	3 hours
50 - 60°F	4 hours
40 - 50°F	5 hours
30 - 40°F	6 hours
Below 30°F	8 hours

A sufficient period should be allowed for personnel to "cool down". This may require shifts of workers during operations.

## Table E-1

## **Atmospheric Hazard Guidelines**

TT 1		Monitoring	Measured	A				
Hazard		Equipment	Level	Action				
Explosive Atmosphere		Combustible	<10% LEL <sup>1</sup>	Continue investi Gas Ind	igation. icator 10%-25% I	LEL <sup>1</sup> Continue	on-site monitoring with	
			>25% LEL <sup>1</sup>	Explosion	on hazard. Withdray	w from area im	nmediately.	
Oxygen				Oxygen self-contained	conc. <19.5%	Can contin	nue investigation if wearir	ıg
		meter (CGS-20M or	MSA 261)	breathin are not valid in a	ig apparatus. NOTE atmosphere with oxy	2: Combustible ygen <19.5%.	e gas readings	
			19.5% - 25%	Continu	e investigation with	caution.		
			>25%	safety specialist.	Fire hazard potentia	al. Discontinue	e investigation. Consult a	fire
Organic				PID	Background	d C	continue investigation.	
vapors				investigation if v	5 pj wearing Level C pro	pm total $tection^2$ .	Can continue	
			organics					
			5-500 ppm	Can con	tinue investigation i	if wearing Leve	el B protection <sup>3</sup> .	
Notes:	2.	1. LEL = Level C protect	E Lower Explosive Limit etion outlined in Table 2					

3. Level B protection outlined in Table 3

#### Table E-2

#### **LEVEL C PROTECTION**

- 1. Full-face or half-mask, air purifying, canister equipped respirators (NIOSH approved) for those contaminants present.
- 2. Hooded chemical resistant clothing, including overalls, two-piece chemical-splash-suit, or disposable chemical-resistant overalls.
- 3. Coveralls\*.
- 4. Gloves, outer, chemical-resistant.
- 5. Gloves, inner, chemical-resistant.
- 6. Boots (outer), chemical-resistant, steel toe and shank.
- 7. Boot-covers, outer, chemical-resistant, disposable\*.
- 8. Hard hat.
- 9. Escape mask\*.
- 10. Two-way radios (worn under outside protective clothing).
- 11. Face shield\*.

\*Optional, as applicable

#### Table E-3

#### **LEVEL B PROTECTION**

- 1. Pressure-demand, full-faceplate self-contained breathing apparatus (SCBA), or pressure-demand supplied air respirator with escape SCBA (NIOSH approved).
- 2. Hooded chemical-resistant clothing (overalls and long-sleeved jacket; coveralls; one or two-piece chemical-splash suit; disposable chemical-resistant overalls).
- 3. Coveralls\*.
- 4. Gloves, outer chemical-resistant.
- 5. Gloves, inner, chemical-resistant.
- 6. Boots, outer, chemical resistant steel toe and shank.
- 7. Boot-covers, outer, chemical-resistant (disposable).
- 8. Hard hat.
- 9. Two-way radios (worn inside encapsulating suit).
- 10. Face shield\*.
- \* Optional, as applicable

#### **APPENDIX F – QUALITY ASSURANCE PROJECT PLAN**

This document presents the Quality Assurance Project Plan (QAPP) for continued groundwater monitoring activities for the 20 West Centennial Site. This QAPP has been prepared to be incorporated into the Site Management Plan (SMP) for the Site.

#### F-1 Project Organization

*Laurel Environmental Geosciences, DPC. (Laurel)* will be responsible for implementation of the SMP once it has been approved by the NYSDEC. Mr. Scott Yanuck, the Project Manager, will ensure that there are suitable and verifiable data results from sampling and analysis. To achieve this objective, the quality assurance procedures detailed in this section will be followed for all sampling and laboratory analysis activities. The person responsible for conducting the investigation and/or remediation will consult with NYSDEC during the development of the work plan to determine whether a site Quality Assurance Officer (QAO) will be required.

Mr. Brian McCabe, the Project QAO and Project Health and Safety Officer, will review sampling procedures and certify that the data was collected and analyzed using the appropriate procedures. The QAO may not have any responsibilities specific to the collection and analysis of samples from the site for which they are the QAO. The QAO review the Data Validation and Data Acceptance associated with this project in accordance with the DER-10 DUSR Technical Guidance for Site Investigation and Remediation, Guidance for Data Deliverables and the Development of Data Usability Summary Reports (DUSR) that will be completed by an independent data validation service. The Data Validation and Data Usability process will encompass Completeness, Compliance and Report Submittal.

*Laurel* will utilize subcontractors for laboratory work, and independent data validation services, as described below.

## F-2 Sampling, Analytical, and Quality Assurance Procedures

A detailed description of the procedures to be used during this program for collection of the groundwater samples is provided in **G-2.2** of the QAPP. Samples will be collected using disposable, dedicated sampling equipment where possible. Any non-disposable sampling equipment will be rinsed with a water and Alconox, a laboratory grade detergent, solution to eliminate any crosscontamination between sampling locations.

## F-2.1 Sampling Scope and Analytical Methods

As presented in Table G-1 below, this program includes collection and laboratory analysis of seven (7) groundwater samples for volatile organic compounds (VOCs) by USEPA Method 8260 and polyfluoroalkyl substances (PFAS) by USEPA Method 537.1M (isotope dilution). All samples will be analyzed by York Analytical Laboratories, Inc. (York), which is approved under the NYSDOH Environmental Laboratory Approval Program (ELAP) for the required analyses.

Medium	Number of Samples	Analysis	Analytical Method	Container	Holding Time	Rationale
Groundwater	7	VOCs	8260C	3, 40-mL VOA w/ HCL	14 days to extract	Assessment of VOCs in Groundwater
Groundwater	7	PFAS	537.1M (isotope dilution)	2, 250-mL HDPE	14 days	Assessment of PFAS in Groundwater

Table G-1. Sample Summary and Rationale

All samples will be analyzed using standard laboratory turnaround time of ten business days, and all data will be provided with an Analytical Services Protocol ("ASP") Category B data package. In addition, all data will be uploaded through EQUIS in the NYSDEC in Electronic Data Deliverable ("EDD") format.

#### F-2.2 Sampling Procedures

Prior to collection of the groundwater samples, each well will be purged of at least three (3) casing volumes, using new, dedicated, HDPE tubing and a peristaltic pump. All groundwater quality instruments will be calibrated to manufacturers specifications before each sampling event. Three (3) rounds of groundwater quality readings, spaced approximately 5 minutes apart, including pH, temperature, conductivity, and turbidity (less than 50 NTU), will be recorded to demonstrate that connection the surrounding aquifer has been established and representative groundwater quality samples are collected. Each well will then be sampled using the same tubing used for purging, and the groundwater samples will be directly transferred from the bailer into pre-labeled, laboratory-supplied containers. The sample containers for PFAS will be filled first, followed by those for VOCs.

Immediately after collection, each sample will be placed into an iced cooler for subsequent delivery to the laboratory under Chain of Custody protocols. Samples to be analyzed for PFAS will be kept in a separate cooler on wet ice for sample preservation. All samples will be delivered via laboratory courier under chain of custody procedures and will arrive at the laboratory within 48 hours after collection.

No equipment, supplies, or field clothing containing low-density polyethylene, Teflon<sup>®</sup>, Gore-Tex<sup>®</sup>, or Tyvek<sup>®</sup> will be used during the sampling program, due to the presence of PFAS compounds in these materials. Field personnel will not wear clothes having been laundered using fabric softener, nor will they use cosmetics, moisturizers, hand cream, or other personal care products (sunscreen, insect repellent, etc.) that may contain PFAS compounds. No eating or drinking will be allowed at the Site, except that bottled water and hydration drinks can be consumed, but only in the support area (i.e., away from areas where sample collection is occurring). In addition, notes taken in the field will not be recorded in a notebook with a water-resistant coating, no plastic clipboards or notebooks will be utilized, no aluminum foil or adhesives (e.g., sticky notes) will be used during

sample collection, and sample labels and the Chain of Custody form will be completed using ballpoint pens (i.e., not permanent markers).

## F-2.3 Quality Assurance/Quality Control Samples

In accordance with ASP and NYSDEC requirements, QA/QC samples will include one (1) blind duplicate sample for VOCs and PFAs, and one (1) equipment blank for PFAs only (the equipment blank water will be provided by the laboratory and will be certified as "PFAS-free"). In addition, one (1) trip blank sample will accompany the cooler containing samples to be analyzed for VOCs only.

## F-2.4 Data Validation and Data Usability Summary Report

In accordance with NYSDEC requirements, the ASP Category B data packages generated for this project will be submitted for independent data validation, by a NYSDEC-approved, third-party data validator. The data validation process will include, at a minimum, review of sample custody documentation, instrument calibration results, surrogate and spike recovery data, chromatograms, raw data files, duplicate results, blank results, and internal standards. The results and findings of the data validation process will be documented in a Data Usability Summary Report ("DUSR").

## F-3 Achievement of Remedial Performance Criteria

A comparison of the most recent groundwater analytical results, from the October 2020 groundwater sampling event, to the March 2019 (post remediation system shutdown) groundwater sampling event show that the remedial actions have been successful and that PCE concentrations continue to decrease, as shown in Table G-2 below.

Based on the continued decline in PCE concentrations at the Site, and the absence of any known remaining source areas on the Site, natural attenuation may be allowed to complete the remediation of remaining low-level VOCs present in groundwater. If concentrations of PCE rebounds, additional monitoring and/or remedial actions may become necessary.

Sample ID		MW-20-8 3/20/2019 Water		MW-20-8 10/28/2020 Water	
Sampling Date	NYSDEC Class GA				
Client Matrix	Standards				
Compound		Result	Q	Result	Q
VOCs, USEPA 8260	ug/L	ug/L		ug/L	
Dilution Factor		1		1	
Tetrachloroethylene	5	2.100		4.180	
Trichloroethylene	5	0.310	J	0.400	J

**Table F-2: Recent VOC Analytical Results Comparison** 

Sample ID Sampling Date Client Matrix	NYSDEC Class GA Standards	MW-19 3/20/20 Water	S 19	MW-1S 10/28/2020 Water		MW-1D 3/20/2019 Water		MW-1D 10/28/2020 Water		MW-2S 0 3/20/2019 Water		MW-2S 10/28/202 Water	
Compound		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
VOCs, USEPA 8260	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor		1		1		1		1		1		1	
Chloroform	7	0.200	U	0.200	U	0.390	J	0.260	J	0.200	U	0.200	U
cis-1,2-Dichloroethylene	5	0.710		0.580		0.200	U	0.200	U	0.200	U	0.200	U
Tetrachloroethylene	5	42		20.600		160		75		7		4.660	
Trichloroethylene	5	1.500		0.950		0.790		0.340	J	0.330	J	0.200	U

Sample ID Sampling Date Client Matrix	NYSDEC Class GA Standards	MW-20 3/20/20 Water	) 19	MW-20 10/28/20 Water	) 20	MW-20-4 3/20/2019 Water		MW-20-4 10/28/2020 Water		4 MW-20-7 20 3/20/2019 Water		MW-20-7 10/28/202 Water	
Compound		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
VOCs, USEPA 8260	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor		1		1		1		1		1		1	
Chloroform	7	0.390	J	0.210	J	0.200	U	0.200	U	0.200	U	0.200	U
cis-1,2-Dichloroethylene	5	0.200	U	0.200	U	0.200	U	0.200	U	0.510		0.470	J
Tetrachloroethylene	5	1.600		0.450	J	3.500		1.710		2.200		2.350	
Trichloroethylene	5	0.320	J	0.200	U	0.200	U	0.200	U	0.510		0.230	J

## **F-4** Reporting Requirements

A letter report is required to accompany any future groundwater sampling events conducted at the Site. The letter report should include, at a minimum, the number and location of monitoring wells sampled, depth to water and depth to bottom of the monitoring wells, sampling methodology, discussion of analytical results, summary analytical data tables, comparison of historic concentrations of VOCs, and conclusions and recommendations drawn from the most recent sampling event.

# **APPENDIX G – SITE MANAGEMENT FORMS**

		Site I	Inspection Form	
Date:		Site N	lame: 20 W. Centennial	Inspector:
Task	Performed? ()	(N/Y		Notes
Inspect Concrete Slab				
General Housekeeping				
Other Items of Concern				

# Site Inspection Form

# Monitoring Well Gauging and Water Quality Data Sheet

## 20 West Centennial

Date	e:											
Monitoring Well #	MW-1S			MW-1D			N	IW-2	25	MW-2D		
Test Number	1	2	3	1	2	3	1	2	3	1	2	3
Depth To Water												
Depth To Bottom												
Fotal Water												
Temperature (°C)												
Conductivity (μS/cm)												
рН												
Turbidity												

Monitoring Well #	M	N-2	0-4	M	W-2	0-7	MW-20-8			
Test Number	1	2	3	1	2	3	1	2	3	
Depth To Water										
Depth To Bottom										
Total Water										
Temperature (°C)										
Conductivity (μS/cm)										
рН										
Turbidity										