3750 Monroe Avenue

MONROE COUNTY

TOWN OF PITTSFORD, NEW YORK

INTERIM SITE MANAGEMENT PLAN:

Sub-Slab Depressurization System

NYSDEC Site Number: C828187

Prepared for:

3750 Monroe Avenue, LLC c/o Norry Management Corp. 1465 Monroe Avenue Rochester, New York 14618

Prepared by:

LaBella Associates, D.P.C. 300 State Street Rochester New York 14614 (585) 454-6110

Revisions to Final Approved Site Management Plan:

Revision	Date		NYSDEC
No.	Submitted	Summary of Revision	Approval Date

CERTIFICATION STATEMENT

I DANTEL P.N. Certify that I am currently a NYS registered professional engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

 $\frac{\mathcal{D}\mathcal{P}\mathcal{P}\mathcal{H}}{(0/1)/7} Daniel P. Noll P.E.$



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P: (585) 226-5353 | F: (585) 226-8139 www.dec.ny.gov

March 25, 2020

Mr. Lewis Norry 3750 Monroe Avenue Associates, LLC c/o the Cabot Group 130 Linden Oaks Rochester, New York 14625

Dear Mr. Norry:

Subject: 3750 Monroe Avenue, Site #C828187 Interim Site Management Plan: Sub-Slab Depressurization System October 2017 Town of Pittsford, Monroe County

The New York State Departments of Environmental Conservation (NYSDEC) and Health, collectively referred to as the Departments, have completed their review of the document entitled *"Interim Site Management Plan: Sub-Slab Depressurization System"* (the Work Plan) dated October 2017 for the 3750 Monroe Avenue site located in the Town of Pittsford. In accordance with 6 NYCRR Part 375-1.6, the Departments have determined that the Work Plan, with modifications, substantially addresses the requirements of the Brownfield Cleanup Agreement. The modifications are outlined as follows:

1. **Executive Summary**: Annual sub-slab vacuum measurements are added under inspections.

2. **Section 2.4, Remedial Action Objectives:** The Remedial Action Objectives (RAOs) in the Work Plan are for this IRM only (not the site). The only ROA that applies to this IRM is to "Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site."

3. **Table 12 – SSDS Monitoring Requirements and Schedule**: Sub-slab vacuum will be measured annually at the following locations shown on the attached figure:

- DCMP-1;
- MXMP-4;
- VTMP-3;
- CXMP-13; and
- CXMP-1.

Results that do not achieve the target value of -0.004 inches of water will be evaluated by the Applicant and the Departments, and appropriate action will be implemented as needed.

4. **Section 5.2.3, Non-Routine Operation and Maintenance:** This section is revised as follows:

• The NYSDEC project manager will be notified within 24 hours of an alarm being



activated.

• The goal is to complete repairs within 7 days. Indoor air will be sampled if a fan system is down for more than 30 days.

5. **Section 7.1, Site Management Reports:** The text is corrected to reference the schedule in Table 13 (not Table 14).

With the understanding that the Departments' modified Work Plan is agreed to, the Work Plan is hereby approved.

This letter shall be attached to the final document and a copy of the approved document is required to be kept in the document repositories located at the Pittsford Community Library and Pittsford Town Court.

If 3750 Monroe Avenue Associates, LLC chooses not to accept the approved modified Work Plan, you are required to notify this office within 20 days after receipt of this letter. In this event, I suggest a meeting be scheduled to discuss your concerns prior to the end of this 20-day period.

Please contact me at 585-226-5357 or via email at frank.sowers@dec.ny.gov if you have questions or concerns on this matter.

Sincerely,

hank Sourcese

Frank Sowers, P.E. Professional Engineer 1

ec: w/attach James Pronti Dudley Loew David Pratt Dan Noll Jennifer Gillen Dan O'Brien

Dan Tucholski Rachel Rosen Michael Cruden Wade Silkworth Justin Deming



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3750 MONROE AVENUE MONROE COUNTY TOWN OF PITTSFORD, NEW YORK

INTERIM SITE MANAGEMENT PLAN: SUB-SLAB DEPRESSURIZATION SYSTEM

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List of Acronyms

ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BGS	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
СР	Commissioner Policy
DER	Division of Environmental Remediation
DPI	Design Phase Investigation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
GHG	Green House Gas
HASP	Health and Safety Plan
IC	Institutional Control
IRM	Interim Remedial Measure
IRM WP	Interim Remedial Measure Work Plan
ISMP	Interim Site Management Plan
MS/MSD	Matrix Spike/Matrix Spike Duplicate
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
PFE	Pressure Field Extension
PID	Photoionization Detector
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	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIWP	Remedial Investigation Work Plan
ROD	Record of Decision
RP	Remedial Party
RPSCOs	Remedial Program Soil Cleanup Objectives

RSO	Remedial System Optimization
SCGs	Standards, Criteria and Guidelines
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSDS	Sub-slab Depressurization System
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

ES EXECUTIVE SUMMARY

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

Site Identification: Site # C828187

3750 Monroe Avenue, Town of Pittsford, Monroe County

Engineering Control:	ontrol: Sub-Slab Depressurization System (SSDS)					
Inspections:		Frequency				
Observation of SSDS	Alarm/Gauge Panel	Monthly				
SSDS Inspection	Annually					
Maintenance:						
SSDS Maintenance	As needed					
Reporting:						
Inspection Report		Annually, or as otherwise determined by the Department				

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

1.0 INTRODUCTION

1.1 General

This Interim Site Management Plan (ISMP) is associated with an Interim Remedial Measure (IRM), the installation of a Sub-Slab Depressurization System (SSDS), for the property located at 3750 Monroe Avenue, Town of Pittsford, Monroe County, New York, hereinafter referred to as the "Site". The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C828187, which is administered by New York State Department of Environmental Conservation (NYSDEC).

3750 Monroe Avenue Associates, LLC entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in March 2014, to investigate and remediate a 9.37-acre portion of the larger Site Tax Parcel (41.90-acres) located in the Town of Pittsford, Monroe County, New York.

This ISMP is intended to address the activities associated with the SSDS installed at the Site until the Remedial Investigation (RI) is completed and additional remedial efforts (if any) are determined to be necessary. At that time, the ISMP activities will be included in the Remedial Action Work Plan and/or the Final Site Management Plan, if required. A Site Location Map is included as Figure 1. Figure 2 illustrates the area requiring site management within the larger Site Tax Parcel and the area surrounding the BCP Site.

This ISMP has been approved by the NYSDEC, and compliance with this plan is required by 3750 Monroe Avenue Associates, LLC and their successors and assigns. This ISMP may only be revised with the approval of the NYSDEC. 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 A of this ISMP.

This ISMP was prepared by LaBella Associates, D.P.C. (LaBella), on behalf of 3750 Monroe Avenue Associates, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 3, 2010, and the guidelines provided by the NYSDEC.

1.2 Revisions

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

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:

• Notice within 48 hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.

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

Table 1: Notifications*

Name	Contact Information
Frank Sowers	(585) 226-5357
Project Manager, NYSDEC Region 8	frank.sowers@dec.ny.gov
Bernette Schilling	(585) 226-5315
Regional HW Engineer, NYSDEC Region 8	bernette.schilling@dec.ny.gov
Kelly Lewandowski	(518) 402-9547
NYSDEC Site Control	kelly.lewandowski@dec.ny.gov

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

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Although remedial actions under the NYSDEC BCP have not yet been performed at the Site and the Remedial Investigation has not yet been completed, several prior investigations have been completed at the Site, as summarized in this section.

2.1 Site Location and Description

The BCP Site is located in the Town of Pittsford, County of Monroe, New York and is identified as a portion of Block 1 and Lot 22 on the County of Monroe Tax Map # 151.13. The BCP Site is a portion of the Site Tax Parcel, which is 41.90 acres; however, the BCP Site is 9.37 acres. Figures 1 and 2 (attached) illustrate the location and surrounding area of the BCP Site.

The BCP Site is located entirely within the Site Tax Parcel, in the central portion of the Site Tax Parcel. The Site Tax Parcel is bounded by Monroe Avenue to the southwest, a Rochester Gas and Electric (RG&E) transmission line to the northeast, by vacant real property and a developed commercial property to the southeast, and by several residential properties developed with apartment complexes to the northwest.

The owner of the site parcel at the time of issuance of this ISMP is 3750 Monroe Avenue Associates LLC.

2.2 Physical Setting

2.2.1 Land Use

Approximately 6.38 acres of the BCP Site is utilized as a commercial office building and the remainder of the BCP Site is utilized as a parking lot (and associated/adjacent landscaped areas). The Site is zoned as Monroe Avenue Transitional Zone Planned Use Development (MATZ PUD) and is currently utilized for commercial and office space uses. Site occupants include the following tenants:

- Concentrix;
- Maximus;
- Town of Pittsford Court;
- Town of Pittsford Senior Center;
- Pittsford Printing;
- International Union of Bricklayers and Allied Craftworkers Local #3;
- Crossfit Rochester; and
- Turf Time.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial and residential properties. The properties immediately south of the Site include residential properties; the properties immediately north of the Site include undeveloped and wooded land with residential properties beyond; the properties immediately east of the Site include commercial properties; and the properties to the west of the Site include residential properties.

2.2.2 Geology

Previous subsurface investigations have identified soils at the Site as primarily sand and silt to depths of up to 10 feet below ground surface (BGS). Terminal depths of the investigative soil borings ranged from 6 to 24 feet BGS. A clay layer has been identified beneath the sand and silt layer in several locations at depths ranging from approximately 1.5 to 16 feet BGS. Fine sand was encountered beneath the clay layer, typically at depths ranging from 10 feet BGS to the terminal depths of these borings.

2.2.3 <u>Hydrogeology</u>

Previous subsurface investigations have found the overburden groundwater table at the Site to be at depths ranging from 7 to 14 feet BGS.

2.3 Investigation and Remedial History

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

The following environmental reports exist for the Site and were used in developing the Remedial Investigation Work Plan (RIWP) for the Site (prepared by LaBella and dated March 2016):

- Phase I Environmental Site Assessment, The Norry Company, prepared by Passero Associates and dated July 1997
- Phase I Environmental Site Assessment, Norry Management Corporation, prepared by LaBella Associates, P.C and dated May 2012
- Building Pressurization Assessment, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated January 2013
- Preliminary Phase II Environmental Site Assessment, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated January 2013
- *Limited Interior Subsurface Evaluation, 3750 Monroe Ave LLC,* prepared by LaBella Associates, D.P.C and dated July 2013
- Interim Remedial Measure Design Phase Investigation: Sub-Slab Depressurization System, Site C828187, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated June 2014
- Interim Remedial Measures Work Plan, Sub-Slab Depressurization System Installation BCP Site C828187 prepared by LaBella Associates, D.P.C. and dated October 2014

Phase I Environmental Site Assessment, The Norry Company, prepared by Passero Associates and dated July 1997

Passero Associates (Passero) conducted a Phase I Environmental Site Assessment (ESA) in 1997 which did not identify any Recognized Environmental Conditions (RECs) and did not recommend additional work at the time. However, Passero recommended the continued observation and monitoring of suspect asbestos areas noted in a previous asbestos report.

Phase I Environmental Site Assessment, Norry Management Corporation, prepared by LaBella Associates, P.C and dated May 2012

A Phase I ESA was completed by LaBella in May 2012 which identified an undated figure of the Site Tax Parcel obtained from the Town Assessor Office that indicated on-site uses included (among other things) 'machine shop', 'press room', and 'heat treat' areas. In addition, a review of assessment records obtained from the Town of Pittsford identified the installation of one (1) 2,000-gallon petroleum underground storage tank (UST) at the Site Tax Parcel in 1960. These records included a map which depicted the UST to be located to the west of the Site buildings. This report identified a REC associated with the 2,000 gallon UST.

Building Pressurization Assessment, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated January 2013

LaBella conducted a building pressurization assessment in 2012-2013 to evaluate the pressure differential in the building in comparison to the sub-slab. The assessment consisted of the installation of seventeen (17) sub-slab monitoring points and measuring pressure on several occasions. After no pressure differential was observed during the first pressure monitoring event, Leo J. Roth Corporation was retained to test the heating, ventilation, and air-conditioning (HVAC) systems in tenant spaces, as follows:

- Maximized fresh air intake
- Minimized air return
- Closed barometric pressure relief dampers (if present) and
- Evaluated the firewall between tenant spaces to confirm there were no penetrations that could allow for significant air flow (and thus impact pressure readings).

The assessment determined that the main building appears to have proper conditions for establishing a sustained positive building pressure; however, establishing positive pressure in the northern building with existing equipment may not be practical.

Preliminary Phase II Environmental Site Assessment, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated January 2013

A Preliminary Phase II ESA of the Site Tax Parcel was completed by LaBella in 2012 to evaluate the REC identified in the Phase I ESA conducted by LaBella. The following summarizes the testing completed at the Site in 2012.

- A geophysical study was completed by AMEC Geomatrix Inc. (AMEC) using a Geonics EM61 in the northwest portion of the Site. Two (2) magnetic anomalies were identified as potential USTs.
- Three (3) test pits were excavated; two (2) in the locations of the anomalies identified from the geophysical survey, and one (1) in the location of the former UST as indicated on the map which depicted the approximate location of the UST in the Phase I ESA conducted by LaBella in 2012. One soil sample from a test pit (sample "TP-01") was sent to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis of the following parameters:
 - United States Environmental Protection Agency (USEPA) Target Compound List (TCL) and NYSDEC *Commissioner Policy 51* (CP-51) list volatile organic compounds (VOCs) by USEPA Method 8260
 - Three (3) for CP-51 list semi-volatile organic compounds (SVOCs) by USEPA method 8270
- Twenty-four (24) soil borings (GP-1 through GP-24) were advanced at the Site on three (3) occasions; sixteen (16) of which were converted to groundwater monitoring wells.

- Soil and groundwater samples collected during this investigation were submitted for laboratory analysis by an ELAP certified laboratory. Soil samples were analyzed for the following parameters:
 - Eight (8) for USEPA TCL and NYSDEC CP-51 list VOCs by USEPA Method 8260
 - Four (4) for SVOCs by USEPA method 8270
 - Two (2) for Resource Conservation and Recovery Act (RCRA) metals by USEPA Method 6010/7470/7471
 - Two (2) for cyanide by USEPA Method 9012
 - o One (1) for pesticides by USEPA Method 8081
 - o One (1) for polychlorinated biphenyls (PCBs) by USEPA Method 8082
- Groundwater samples were analyzed for the following parameters:
 - Eighteen (18) for USEPA TCL and NYSDEC CP-51 list VOCs by USEPA Method 8260
 - One (1) for SVOCs by USEPA Method 8270
 - o One (1) for RCRA metals by USEPA Method 6010/7470/7471
 - One (1) for pesticides by USEPA Method 8081
 - One (1) for PCBs by USEPA Method 8082

The tables on the following pages summarize the laboratory analyses conducted on soil and groundwater samples during the Preliminary Phase II ESA.

Sample ID	Sample Depth (feet BGS)	ASP Category B	VOCs	SVOCs	Metals	Cyanide	PCBs	Pesticides
TP-01	3	No	Х	X				
GP-08	10	No	Х	X				
GP-11	11-12	Yes	Х					
GP-14	10-12	Yes	Х					
GP-16	9-11	Yes	Х					
GP-21	22-23.8	Yes	Х					
GP-23	0-2	Yes			X	X		
GP-24	8-12	Yes	Х	X	X	X	X	Х

 Table 2: Preliminary Phase II ESA Soil Sample Analysis

Sample ID	ASP Category B	VOCs	SVOCs	Metals	Cyanide	PCBs	Pesticides
MW-01	No	Х					
MW-02	No	Х					
MW-03	No	Х					
MW-11	Yes	Х					
MW-12	Yes	Х					
GP-13/MW-13	Yes	Х					
MW-14	Yes	Х					
GP-15/ MW-15	Yes	Х					
MW-16	Yes	Х					
MW-17	Yes	Х					
MW-18	Yes	Х					
MW-19	Yes	Х					
MW-20	Yes	Х					
MW-21	Yes	Х					
MW-22	Yes	Х					
MW-23	Yes	Х					
MW-24	Yes	Х	Х	Х		Х	Х

 Table 3: Preliminary Phase II ESA Groundwater Sample Analysis

The following describes the results of the testing completed in 2012:

- Although two (2) anomalies of the size and shape of a UST were identified by the geophysical survey (TP-01 and TP-02 were advanced in the locations of anomalies), test pitting activities did not identify USTs in any of the three (3) the test pits excavated.
- Fill material consisting primarily of sand and gravel was identified in soil borings advanced in the parking areas and gravel-covered areas of the Site to depths of up to 5 feet BGS. In general, native soils encountered beneath the fill material consisted of sandy silts or silty sands (generally between 1 and 5 feet BGS) atop

clayey silts or silty clays (generally to a depth of 8-12 feet BGS), atop silty fine sand (generally to a depth of 12-16 feet BGS). One (1) soil boring was advanced to depths greater than 16 feet (GP-21) and encountered silty sand to 20 feet BGS and clayey silt from 20 feet to its terminal depth of 23.8 feet. Saturated soils were generally encountered in the deeper silty fine sand interval (12-16 feet BGS).

- Trichloroethene (TCE) was detected in soil samples collected from GP-14 and GP-16, and methylene chloride was detected in soil samples collected from GP-11, GP-14, and GP-16 at concentrations that exceeded NYSDEC Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs). In addition, soil samples collected from GP-23 and GP-24 exceeded NYSDEC Supplemental SCOs for calcium and iron.
- Several VOCs, including TCE, tetrachloroethylene (PCE), cis-1,2-Dichloroethene, and vinyl chloride, were detected in twelve (12) of the eighteen (18) groundwater samples analyzed for VOCs at levels that exceeded NYSDEC Technical Operation and Guidance Series (TOGS) 1.1.1 Groundwater Standards & Guidance Values. In addition, several metals were detected at concentrations exceeding NYSDEC TOGS 1.1.1 Groundwater Standards.
- Groundwater collected from monitoring wells on the eastern (MW-01) and northern (MW-02) edges of the main building did not detect VOCs above laboratory method detection limits (MDLs), with the exception of acetone in MW-02.

Limited Interior Subsurface Evaluation, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated July 2013

Additional subsurface testing was completed in the interior portion of the Site in June 2013 to further evaluate the presence of VOCs detected in groundwater during the Preliminary Phase II ESA. The following summarizes work completed during the interior subsurface evaluation.

Four (4) soil borings were advanced (GPMW-25 through GPMW-28) and converted to groundwater monitoring wells. Groundwater samples from each of the four

(4) groundwater monitoring wells were collected and analyzed for USEPA TCL and NYSDEC CP-51 list VOCs by USEPA Method 8260.

Soil samples were collected and analyzed for the following parameters:

- Six (6) for USEPA TCL and NYSDEC CP-51 list VOCs by USEPA Method 8260
- Three (3) for cyanide by USEPA Method 9012
- One (1) for RCRA metals by USEPA Method 6010/7470/7471
- One (1) for pesticides by USEPA Method 8081
- One (1) for PCBs by USEPA Method 8082

The following table represents the laboratory analysis conducted (note that ASP Category B deliverables were provided for all samples in this investigation):

Sample ID	Sample Depth (feet BGS)	VOCs	SVOCs	Metals	Cyanide	PCBs	Pesticide
GP-25	3.5-4	X					
GP-25	9.5-10.2	X	Х				
GP-25	22-23	Х	Х				
GP-26	7-8	X	Х				
GP-27	6-8	X					
GP-28	6-7.5	Х					

Table 4: Limited Interior Subsurface Evaluation Soil Sample Analysis

Sample ID	VOCs	SVOCs	Metals	Cyanide	PCBs	Pesticides
GPMW-25	Х					
GPMW-26	Х					
GPMW-27	Х					
GPMW-28	X					

 Table 5: Limited Interior Subsurface Evaluation Groundwater Sample Analysis

The following describes the results of the testing completed in June 2013:

- Saturated soils were generally encountered between 8 feet and 10 feet BGS. Borings were advanced to 16 feet BGS, with the exception of GPMW-25, which was advanced to 23.2 feet BGS. Soils beneath the main building's sub-base generally consisted of brown silty sand.
- TCE was detected in five (5) of the six (6) soil samples submitted for analysis of VOCs at levels that exceeded Unrestricted Use SCOs.
- Calcium and iron were detected at levels that exceed NYSDEC Supplemental SCOs in the soil sample analyzed for metals (GPMW-25 at 9.5-10.2 feet).
- TCE and cis-1,2-Dichloroethene in all four (4) groundwater samples, 1,1-Dichloroethene in GPMW-26 and GPMW-28, and trans-1,2-Dichloroethene in GPMW-28 were detected at concentrations that exceed NYSDEC TOGS 1.1.1 Groundwater Standards.

Interim Remedial Measure Design Phase Investigation: Sub-Slab Depressurization System, 3750 Monroe Ave LLC, conducted by LaBella Associates, D.P.C. 2014-2015

As required by the NYSDEC, LaBella conducted communication tests along with sub-slab, indoor, and outdoor air sampling in accordance with a NYSDEC and NYSDOH approved Design Phase Investigation (DPI) Work Plan in July 2014. The DPI was designed to obtain additional data for evaluating and designing an SSDS for the Site buildings. The work included collecting one (1) outdoor air sample and eight (8) indoor air samples for laboratory analysis of a select list of VOCs by USEPA Method TO-15. VOCs analyzed were selected based on known contaminants of concern (COCs) at the Site and are listed below:

- 1,1,1-trichloroethane;
- 1,1-dichloroethane;
- 1,1-dichloroethene;
- 1,2-dichloroethane;
- Chloroethane;
- Cis-1,2-dichloroehtene;
- PCE;
- Trans-1,2-dichloroethene;
- TCE; and
- Vinyl chloride.

Interim Remedial Measure: Sub-Slab Depressurization System Installation, 3750 Monroe Ave LLC, conducted by LaBella Associates, D.P.C. December 2014 – June 2015

LaBella conducted an Interim Remedial Measure (IRM) that included the installation of an SSDS within the Site building. Construction of the SSDS began in December 2014. Additional details concerning the SSDS are provided in the Construction Completion Report (CCR) associated with the IRM.

During the IRM, additional interior subsurface soil and groundwater samples were collected. A total of ten (10) soil borings (GPMW-29 through GPMW-38) were advanced within the Site building from which twenty-two (22) soil samples and thirteen (13) groundwater samples were collected. The following laboratory analyses were conducted (note that ASP Category B deliverables were provided for all samples in this investigation):

Sample ID	Sample Depth		S		e		es
	(feet BGS)	OCs	/OC	letals	anid	CBs	ticid
		>	S	Σ	Cy	Ч	Pes
GP-29	0.5-2	Х	Х	Х	Х	Х	X
GP-29	19-20	Х					
Duplicate (GP-29)	19-20	Х					
GP-30	9-10	Х	X	Х	Х	Х	Х
GP-30	17-18	Х	X	Х	Х	Х	Х
Duplicate (GP-30)	17-18	Х	X	Х	Х	Х	Х
GP-31	3-4	Х	X	Х	Х		
GP-31	6-7	Х	X	Х	Х		
GP-31	17-18	Х	X	Х	Х		
GP-32	6-7	Х	X	Х	Х		
GP-33	7-8	Х	X	Х	Х		
GP-33	18-19	Х	X	Х	Х		
GP-33	19-20	X					
GP-34	7-8	Х	X	Х	Х		
GP-34	15-16	Х	X				
GP-35	2-3	Х	X	Х	Х		
GP-35	7-8	Х					
GP-35	20-21	X					
GP-36	1-3	X	X	Х	Х		
GP-36	14-15	X					
GP-37	7-8	Х	X	Х	Х		
GP-37	14-15	X					
GP-38	5-6	X					
GP-38	14-16	Х					
Total		22	14	13	14	3	3

Table 6: Soil Sample Analysis

Sample ID	Approximate Sample Depth (feet BGS)	VOCs	SVOCs	Metals	Cyanide	PCBs	Pesticides
GRAB GP-29	5-15	Х	X	Х	X	X	X
Duplicate (GRAB GP-	5-15	Х	X	X	X	X	X
29)							
GRAB GP-30	14	X					
GRAB GP-30	22	Х					
GRAB GP-31	9-10	Х					
Duplicate (GRAB GP-	9-10	Х					
31)							
GRAB GP-32	10	Х					
GRAB GP-33	10	Х					
GRAB GP-33	14	X					
GRAB GP-34	5-12	Х					
GRAB GP-35	9	Х					
GRAB GP-35	15	Х					
GRAB GP-36	2-12	X	X	Х	Х	Х	Х
GRAB GP-37	7-11	Х					
GRAB GP-38	8-12	X					
Total		13	2	2	2	2	2

Table 7: Groundwater Sample Analysis

Notes:

• Totals do not include duplicate samples.

Analytical methods samples listed above are as follows:

- USEPA TCL and NYSDEC CP-51 list VOCs by USEPA Method 8260
- USEPA TCL and NYSDEC CP-51 list SVOCs by USEPA Method 8270
- Target analyte list (TAL) metals by USEPA Method 6010/7470/7471
- Cyanide by USEPA Method 9012
- PCBs by USEPA Method 8082
- Pesticides by USEPA Method 8081

The following summarizes the soil sample analytical results:

- TCE was detected above NYSDEC Protection of Groundwater and Unrestricted Use SCOs in three (3) of the twenty-two (22) soil samples analyzed for VOCs (GP-31 at 3-4 feet, GP-31 at 6-7 feet and GP-32 at 6-7 feet). In addition, cis-1,2dichloroethene was detected above Protection of Groundwater and Unrestricted Use SCOs in two (2) of the three (3) samples in which TCE exceeded Protection of Groundwater SCOs (GP-31 at 6-7 feet and GP-32 at 6-7 feet). No other VOCs were detected above NYSDEC Protection of Groundwater or Unrestricted Use SCOs. None of the soil samples analyzed for VOCs exceeded NYSDEC Commercial Use SCOs.
- Chromium was detected in one (1) soil sample (GP-36 at 1 to 3 feet) above NYSDEC Protection of Groundwater and Unrestricted Use SCOs. Several other metals were reported in soil samples at concentrations below Protection of Groundwater and Unrestricted Use SCOs.
- Cyanide, PCBs, and pesticides were not detected above laboratory MDLs in all soil samples.

The following summarizes the groundwater sample analytical results:

• TCE was detected in six (6) of the thirteen (13) groundwater samples above NYSDEC TOGS 1.1.1 Groundwater Standards (GRAB GP-31, GRAB GP-32, GRAB GP-35 at 9 feet, GRAB GP-35 at 15 feet, GRAB GP-36, and GRAB GP-38). In addition, several other VOCs were detected above NYSDEC TOGS 1.1.1 Groundwater Standards in five (5) of the six (6) groundwater samples that were reported to contain TCE. VOCs were not detected or were reported at concentrations below NYSDEC TOGS 1.1.1 Groundwater Standards in seven (7) of the thirteen (13) groundwater samples. Each of the two (2) groundwater samples (GRAB GP-29 and GRAB GP-36) analyzed for metals resulted in concentrations of iron, manganese, and sodium at levels that exceed NYSDEC TOGS 1.1.1 Groundwater Standards. In addition, one (1) of these samples (GRAB GP-29) also detected magnesium exceeding NYSDEC TOGS 1.1.1 Groundwater Standards. GRAB GP-29 was advanced in the location of the

TCI/Graflex plating area and GRAB GP-36 was advanced in the location of the Graflex degreasing and oil storage area (see Figure 3 for the locations of these soil borings and associated groundwater monitoring wells).

• SVOCs, cyanide, PCBs, and pesticides were not detected above laboratory MDLs in both of the groundwater samples analyzed for "full-suite" analytical parameters.

Data summary tables for soil and groundwater samples collected by LaBella from 2013 to 2015 are included as Table 1 through Table 6 of the RIWP. Laboratory reports for these investigations are included as Appendix 5 of the RIWP. ASP Category B data deliverables were completed for all soil and groundwater samples after GP-10 (GP-11 through GP-38). Data Usability Summary Reports (DUSRs) for data collected in 2014-2015 will be completed and included in the RI Report.

2.4 Remedial Action Objectives

The primary objective of this IRM was to mitigate chlorinated VOC impacts identified in indoor air samples collected in July 2014. This objective was accomplished via the installation of a SSDS within portions of the Site building. The Site is currently utilized for commercial purposes and is nearly fully occupied. As such, the completion of intrusive work such as installation of the SSDS and collection of subsurface samples had the potential to create significant disturbances to the occupants of the Site building. In an attempt to limit such disturbances, a secondary objective of this IRM was to collect soil and groundwater samples from beneath the Site building during the installation of the SSDS. The findings regarding the collection and analysis of these soil and groundwater samples are discussed in Section 2.3. The overall objective for the Site is its continued use for commercial purposes.

Based on the results of the July 2014 indoor air quality sampling and the DPI, the following Remedial Action Objectives (RAOs) were identified for this site.

2.4.1 Groundwater RAOs

NYSDEC Part 703 Groundwater Standards.

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to predisposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

2.4.2 Soil RAOs

NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (RPSCOs) for the Protection of Public Health/Commercial Use.

2.4.3 Sub-Slab Soil Vapor and Indoor Air RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

2.4.4 Surface Water RAOs

RAOs for Public Health Protection

- Prevent ingestion of contaminated water.
- Prevent contact or inhalation of contaminants from impacted water bodies.
- Prevent surface water contamination that may result in fish advisories.

RAOs for Environmental Protection

- Restore surface water to ambient water quality standards for each contaminant of concern.
- Prevent impacts to biota due to ingestion/direct contact with contaminated surface water that would cause toxicity or bioaccumulation through the marine or aquatic food chain.

2.4.5 Sediment RAOs

RAOs for Public Health Protection

- Prevent direct contact with contaminated sediments.
- Prevent surface water contamination that may result in fish advisories.

RAOs for Environmental Protection

- Prevent release(s) of contaminant(s) from sediments that would result in surface water levels in excess of (ambient water quality criteria).
- Prevent impacts to biota due to ingestion/direct contact with contaminated sediments that would cause toxicity or bioaccumulation through the marine or aquatic food chain.

2.5 Existing Contamination

Remedial actions under the NYSDEC BCP have not yet been performed at the Site, however subsurface contamination has been documented at the Site during prior investigations. Section 2.3 provides additional information regarding the findings of these prior investigations (also see Figure 3). This section discusses air sampling activities performed prior to and after the IRM addressed by this ISMP (i.e., the installation of an SSDS within the Site building).

2.5.1 Soil Vapor

Indoor air samples were collected in the southern portion of the Site building by CanAm Environmental Safety, Inc. (CanAm) (note that the testing by CanAm was not completed under the BCP program). CanAm was retained by Maximus Federal Services, Inc. (Maximus) in August 2013 to conduct indoor air testing in the space leased by Maximus from 3750 Monroe Avenue Associates, LLC. The locations of indoor air samples collected by CanAm are included on Figure 2A of the RIWP.

Indoor air quality sampling was completed by LaBella at the Site in July 2014 and validated analytical results were received in September 2014. Figure 2 of the Interim Remedial Measures Work Plan (IRM WP), prepared by LaBella and dated October 2014, depicts the indoor air sample locations, and Table 2A of the IRM WP summarizes the indoor air quality data associated with these samples. Additional information associated with this indoor air sampling event is included in Section 4.0 of the IRM WP. In addition, LaBella completed a Design Phase Investigation (DPI) at the Site in August 2014, to obtain additional data for evaluating and designing a SSDS. The IRM WP was developed based on the results of the July 2014 indoor air quality testing and the DPI.

Seven (7) of the eight (8) indoor air samples collected by LaBella in July 2014 and three (3) of the five (5) indoor air samples collected by CanAm in August 2013 had detections of the select list of targeted VOCs at concentrations above laboratory MDLs. Samples from four (4) of the eight (8) indoor air sample locations had detections of a VOC above its respective Indoor Air SCG applicable at the time of sampling (refer to Section 4.0 of the IRM WP). Specifically, TCE was detected above its Indoor Air SCG in the following samples:

- Town Court;
- Volt 1;
- Volt 2; and
- Concentrix 2.

June 2015 Indoor Air, Outdoor Air, and Sub-Slab Vapor Sampling

On June 28, 29, and 30, 2015 (more than forty-five days after the installation and full startup of the three-fan SSDS, per the IRM WP), indoor air samples were collected from the same locations in which previous indoor air samples were collected within the SSDS mitigation area. Specifically, sample locations "Town Court", "Volt 1", "Volt 2" and "Concentrix 2" were retested. Six (6) additional indoor air samples and six (6) associated sub-slab vapor samples were also collected from locations selected outside of the SSDS mitigation area. A total of three (3) outdoor air samples (one for each day of sampling) were also collected as part of this sampling event. QA/QC samples (i.e., blind duplicate and MS/MSD) were also collected. The June 2015 sampling locations are included on Figure 4.

The installation and sampling of the temporary sub-slab vapor points was completed in accordance with the procedures provided in the NYSDOH's *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006, as outlined in the IRM WP.

The samples were sent under standard chain of custody procedures to Centek for analysis of VOCs using USEPA Method TO-15, with a minimum detection limit of 1 $\mu g/m^3$ with 0.25 $\mu g/m^3$ for TCE and vinyl chloride, respectively. The results of the June 2015 sampling event are summarized in the attached Table 8. The laboratory analytical results from Centek for this sampling event indicated that:

• the retesting of the previous indoor air sample locations (i.e., "Town Court",

"Volt 1", "Volt 2" and "Concentrix 2") found concentrations of chlorinated VOCs, most notably TCE, to be below NYSDOH criteria (5 μ g/m³ for TCE in June 2015); and

comparison of the results of the six (6) associated indoor air and sub-slab vapor samples to NYSDOH criteria found only one (1) sampling location ("Concentrix 3") that required mitigation.

Rather than conduct a re-sampling of the June 2015 sampling in the vicinity of the "Concentrix 3" interior sampling location, the property owner elected to upgrade the SSDS system to obtain influence over the northern portion of the Site building. Between October 19 and October 26, 2015, eight (8) additional SSDS depressurization points (P-48 through P-55) were added along the northeastern exterior wall of the Site building, within Concentrix's older call center and in the vicinity of the "Concentrix 3" interior sampling location.

March 2016 (Heating Season) Indoor Air, Outdoor Air, and Sub-Slab Vapor Sampling

Subsequent to completion of the installation of the additional SSDS extraction points in the northern portion of the Site building, as outlined in the IRM WP Amendment, on March 28 and 29, 2016 (more than forty-five days after the installation and full startup of the four-fan SSDS) indoor air and sub-slab vapor samples were collected from the same locations as was performed in June 2015, with the following exceptions:

- "Concentrix-3 SVI-6_2015" and "Concentrix-4 SVI-6_2015", sub-slab vapor samples were not repeated, as these sampling locations are now within the area mitigated by the four-fan SSDS (i.e., within the expanded area of influence of the SSDS created by the implementation of the IRM WP Amendment).
- the small-diameter hole in the concrete floor slab previously used to collect sample "Concentrix-3 SVI-6_2015" was permanently caulked/abandoned, due to its close proximity to new SSDS Extraction Point P-51; and
• Sampling location nomenclature for "Volt 1..." and "Volt 2..." was changed to "Volt/Concentrix 1..." and "Volt/Concentrix 2...", respectively, due to a change in tenant floor plans (i.e., Concentrix now occupies these areas of the Site building, which had previously been occupied by Volt Delta).

Two (2) outdoor air samples (one for each day of sampling) were also collected as part of the March 2016 sampling event. QA/QC samples (i.e., blind duplicate and MS/MSD) were also collected. The March 2016 sampling locations are included on Figure 5.

The installation and sampling of the temporary sub-slab vapor points was completed in accordance with the procedures provided in the NYSDOH's *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006, as outlined in the IRM WP.

The March 2016 samples were sent under standard chain of custody procedures to Centek for analysis of VOCs using USEPA Method TO-15, with a minimum detection limit of 1 μ g/m³ with 0.25 μ g/m³ for TCE and vinyl chloride, respectively. The results of the June 2015 and March 2016 sampling events are summarized in the attached Table 8. It should be noted that, in an August 2015 Fact Sheet, the NYSDOH reduced its air guideline for TCE from 5 μ g/m³ to 2 μ g/m³. The laboratory analytical results from Centek for the March 2016 sampling event indicated that:

- March 2016 indoor air sample locations found concentrations of TCE to be below NYSDOH criteria (2 μ g/m³ for TCE); and
- comparison of the results for the four (4) associated March 2016 indoor air and sub-slab vapor samples to NYSDOH criteria found that none of these sampling locations required mitigation.

3.0 ENGINEERING CONTROL PLAN

This section discusses the Engineering Control (EC) installed within the Site building (i.e., an SSDS) as part of an IRM.

3.1 General

Since remedial actions have not yet been completed at the Site under the NYSDEC BCP (i.e., contamination exists at the Site), an SSDS was installed within the Site building as an EC to protect human health and the environment. As of the date of this ISMP, no Institutional Controls (ICs) have been enacted for the Site. This EC Plan describes the procedures for the management of the SSDS operating at the Site. The EC Plan is one component of the ISMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of the EC (i.e., the SSDS) currently on the Site;
- The basic implementation and intended role of the EC (i.e., the SSDS) currently on the Site;
- A description of the controls to be evaluated during each required inspection and periodic review; and
- Any other provisions necessary to identify or establish methods for implementing the EC (i.e., the SSDS) currently on the Site, as determined by the NYSDEC.

3.2 Engineering Control

A Health and Safety Plan (HASP) is included as Appendix C, and a Community Air Monitoring Plan (CAMP) is included as Appendix D (as both required for all sites with ECs).

3.2.1 Sub-Slab Depressurization System

Procedures for operating and maintaining the SSDS are documented in the Operation and Maintenance Plan (Section 5.0 of this ISMP). As-built drawings, signed and sealed by a professional engineer, are included in Appendix B – Operations and Maintenance Manual. The location of the SSDS is shown on the as-built drawings.

The installation of the SSDS at the Site was conducted in accordance with the NYSDEC-approved IRM WP for the 3750 Monroe Avenue, Pittsford site (prepared by LaBella and dated October 2014). In addition, this IRM was also subject to the IRM WP Amendment (prepared by LaBella and dated August 7, 2015), which was approved by the NYSDEC on September 18, 2015. The overall objective for the Site is its continued use for commercial purposes.

The Remedial Goals in the IRM WP were as follows:

- Install a SSDS to create negative sub-slab pressure in select areas of the Site building, thus mitigating soil vapor intrusion issues within these areas of the Site building.
- Install gauges and alarms associated with the SSDS as well as pressure field extension (PFE) points to monitor the operation of the system.
- Collect soil and groundwater samples in select locations at which depressurization points associated with the SSDS are planned to be installed. These locations correspond with areas of historical operations and intend to delineate the nature and extent of contaminants at the Site. As noted previously, the findings regarding the collection and analysis of these soil and groundwater samples are summarized in Section 2.3 and discussed more fully under separate cover (i.e., in the RIWP for the Site, prepared by LaBella and dated March 2016).

- Containerize, characterize and properly dispose of any solid material (e.g., soil, fill, groundwater, concrete, etc.) generated during the IRM.
- Containerize, treat (if necessary), and dispose of any liquid materials generated during the IRM. Impacted soils and liquid materials shall be addressed in accordance with applicable local, state, and federal regulations.
- SSDS designs for the Site building were submitted to the NYSDEC and NYSDOH in the IRM WP dated October 2014 (approved by NYSDEC in a letter dated November 5, 2014) and in the subsequent IRM WP Amendment dated August 7, 2015 (approved by NYSDEC in a letter dated September 18, 2015).

The SSDS was installed in accordance with the NYSDOH's *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006. The majority of the SSDS was constructed of Schedule 40 polyvinyl chloride (PVC) piping and fittings.

Between December 23, 2014 and April 3, 2015, 48 depressurization points and three (3) rooftop fans were installed within the Site building, creating three (3) sub-slab systems (or "sub-systems"). Each of these sub-systems consisted of 16 SSDS depressurization points, manifolded together and connected to a rooftop fan (system components are depicted in Appendix B). PFE monitoring points were installed in the Site building's floor slab during and subsequent to the installation of the SSDS. Three (3) sets of audible/visual alarms and analog pressure gauges, a set for each rooftop fan, were installed in April 2015. As part of each alarm system, 0.25-inch diameter tubing was connected and sealed into each sub-system. The tubing was run and connected to the audible/visual alarm panel, located in the southwestern portion of the Site building, at the end of the L-shaped hallway that serves as entrances to the Town Senior Center, MAXIMUS, and Concentrix tenant spaces (see Appendix B).

SSDS effluent screening was completed for these three (3) sub-systems between April 3rd and April 10th, 2015 (except for Sunday April 5th, which was a holiday). Refer to Section 4.4.1 of the Construction Completion Report (CCR) associated with the SSDS

for a discussion of the SSDS Effluent Screening conducted in connection with the threefan SSDS.

Based upon PFE measurements, on May 13, 2015, two (2) additional SSDS depressurization points (T-1 and P-47) were added to the Town Court tenant space to create negative pressure beneath this space. During this work, it was noted that air handlers inside the adjacent VoltDelta computer server room were creating positive sub-slab pressure readings in this area of the Site building. VoltDelta's computer server room has a raised floor and a climate-control system with blowers. On June 3, 2015 accessible floor cracks and joints in the concrete floor slab below this raised computer server room floor were sealed. Photos of this work are included in the Photo Log as Appendix B of the CCR associated with the SSDS.

On May 13, 2015, a non-airtight cover on a sump located in the electrical transformer room in the southwestern portion of the Site building was sealed with a more airtight plastic cover fitted with a check valve assembly (see Appendix B of the CCR associated with the SSDS).

Per the IRM WP, indoor air sampling and soil vapor intrusion (SVI) sampling were required post SSDS start-up. Due to the timing of the installation being completed, it was agreed that an initial round of sampling would be completed outside of the heating season and a follow up round of sampling, within the heating season, would be completed at a later date. The initial round of indoor air and sub-slab sampling was performed in late June 2015, and the associated laboratory analytical results indicated that the indoor air in the northern portion of the Site building appeared to require further mitigation Refer to Section 2.5.1 of this report for a discussion of the June 2015 Indoor Air, Outdoor Air, and Sub-Slab Vapor Sampling event. June 2015 SVI sampling locations are depicted on Figure 4.

As noted previously (see Section 2.5.1), rather than conduct a re-sampling of the June 2015 sampling in this area during the heating season, the property owner elected to upgrade the SSDS system to obtain influence over the northern portion of the Site building. As outlined in the IRM WP Amendment dated August 7, 2015 (approved by

the NYSDEC on September 18, 2015), between October 19 and October 26, 2015, eight (8) additional SSDS depressurization points (P-48 through P-55) were added along the northeastern exterior wall of the Site building. These eight (8) SSDS depressurization points were manifolded together and connected to a fourth rooftop fan ("Fan #4"), which was installed and started on December 22, 2015. A fourth set of audible/visual alarm and analog pressure gauge, associated with Fan #4, was installed in January 2016 (see Appendix B).

The approximate locations of the 58 SSDS depressurization points are summarized in the attached Table 9 and depicted on the as-built drawings included in Appendix B. As anticipated, due to building conditions, tenant requirements, and vacuum requirements, the installed locations of some SSDS depressurization points varied slightly from the locations proposed in the IRM WP and the IRM WP Amendment dated August 7, 2015. However, the final locations of the SSDS components have still resulted in mitigation of IAQ impacts within the Site building.

Each SSDS depressurization point was constructed by coring a hole in the Site building's concrete floor slab and removing sub-slab fill material to create an approximately one (1) cubic foot void space directly under the core hole. The concrete cores and removed sub-slab material were containerized on-site in 55-gallon drums for subsequent waste characterization and appropriate disposal. Each SSDS depressurization point was subsequently completed with a 2-inch diameter Schedule 40 PVC pipe, which was lowered into its respective core hole, so that the bottom of the pipe was flush with the bottom of the floor slab. Then, each 2-inch diameter PVC pipe was sealed into the concrete floor slab using backer rod and urethane caulk to create an airtight seal between the PVC pipe and the concrete floor slab.

Depending upon the location within the Site building, as well as a tenant's use of the area and concerns, SSDS depressurization points were generally installed as follows:

• mounted within an existing or future finished (drywall) wall cavity; or

- mounted on the exterior, exposed surface of an interior wall (i.e., "a surface mount"); or
- mounted against an existing structural steel column, so that the steel column can be utilized to support the vertical PVC piping. As anticipated, due to the presence of column footers that extend approximately three (3) feet horizontally from the center of each column, "trenching" of the concrete floor slab was necessary as part of these "column" installations. The "trenching" (i.e., removal of additional floor slab so horizontal piping could be run across the top of each column footer) was necessary to ensure that the SSDS depressurization point comes in contact with the sub-slab space and not with the concrete footer, which would restrict air flow. All material removed as part of the "trenching" was containerized on-site in 55-gallon drums for characterization and appropriate disposal.

Each 2-inch PVC riser pipe was run vertically to the area above the suspended ceiling tiles or to nearly the underside of the roof deck in unfinished areas of the Site building, where it was continued horizontally across the interior of the Site building and connected to a 3-inch or 4-inch diameter PVC "header" pipe. A 2-inch PVC ball valve was mounted between each riser pipe and header pipe, so air flow to each SSDS depressurization point can be adjusted, if needed. Each header pipe was eventually connected to a 4-inch diameter PVC header pipe, which penetrated the Site building's steel roof deck and roofing materials to connect to the rooftop exhaust fans.

Information regarding the four (4) rooftop exhaust fans, including electrical information, is summarized in the attached Table 10 and the approximate locations of system components are depicted on Figure 6 and on the as-built drawings included in Appendix B.

The location of each SSDS rooftop exhaust fan was selected so that effluent from the fans would be discharged: at least ten (10) feet from any air intakes; at least twelve (12) inches above the surface of the roof; and at least ten (10) feet from any opening that was less than two (2) feet below the rooftop exhaust point. It is understood the Site building's various heating, ventilation, and airconditioning (HVAC) systems are located on the roof. Figure 6 depicts the rooftop locations of the SSDS exhaust fans and the locations of rooftop HVAC units that have air intakes. "As-built" drawings for the SSDS are included in Appendix B.

Numerous PFE monitoring points (see Table 11 and depicted on Figure 7) were created prior to and during the installation of the SSDS to confirm the creation of a pressure differential, sub-slab to ambient air pressure. Each PFE monitoring point consisted of a small-diameter (0.5-inch or less) hole drilled in the floor slab, through which a digital micromanometer was utilized to measure the pressure differential between the indoor space and the sub-slab space. These PFE monitoring points were temporarily sealed with backer rod and/or caulk subsequent to their use. Selected PFE points will be converted into permanent installations, and the remaining PFE points will be sealed subsequent to confirmation of the radius of influence and approval of permanent locations by NYSDEC and the tenants of the Site building.

3.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

The active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSDS may no longer be required, a proposal to discontinue the SSDS will be submitted by the remedial party to the NYSDEC and NYSDOH.

4.0 MONITORING PLAN

4.1 General

This Monitoring Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring Plan applies solely to the SSDS installed as an IRM and may only be revised with the approval of the NYSDEC.

This Monitoring Plan describes the methods to be used for evaluating information periodically to confirm that the EC (i.e., the SSDS) currently on the Site continues to be effective in protecting public health and the environment.

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

- Information on all designed monitoring systems;
- Inspection and maintenance requirements for the EC (i.e., the SSDS) currently on the Site; and
- Annual inspections.

Reporting requirements are provided in Section 7.0 of this ISMP.

4.2 Site–Wide Inspection

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

The form will compile sufficient information to assess the following:

- An evaluation of the condition and continued effectiveness the SSDS; and
- General site conditions at the time of the inspection.

Inspections of the EC currently on the Site (i.e., the SSDS) will be conducted to determine and document the following:

- Whether the EC currently on the Site (i.e., the SSDS) continues to perform as designed;
- If the EC (i.e., the SSDS) currently on the Site continues to be protective of human health and the environment; and
- Compliance with requirements of this ISMP.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of the SSDS occurs that reduces or has the potential to reduce the effectiveness of this EC, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the Site will be conducted within five (5) days of the event. Written confirmation must be provided to the NYSDEC within seven (7) days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 SSDS Monitoring

4.3.1 <u>SSDS Monitoring</u>

Monitoring of the SSDS will be performed on a routine basis, as identified in the following Table 12, SSDS Monitoring Requirements and Schedule. Modification to the frequency or sampling requirements will require approval from the NYSDEC. A visual inspection of accessible portions (i.e., not covered by drop ceilings, drywall, or other

interior finishes) of the SSDS will be conducted during each annual inspection. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The SSDS components to be monitored include, but are not limited to, the components included in the following Table 12.

SSDS Component	Monitoring Parameter	Monitoring Schedule
SSDS Exhaust Fan Operation,	Standard Operation of Fans	Monthly
observed via the	and Flow Rates	
audible/visual alarm panel.		
SSDS	Standard Operation of Fans	Annually
	and Flow Rates; Visual	
	Inspection of Accessible	
	Portions (i.e., not covered by	
	drop ceilings, drywall, or	
	other interior finishes) of the	
	SSDS; and Rooftop Visit to	
	Inspect Exhaust Fans and Test	
	Alarms.	

 Table 12 – SSDS Monitoring Requirements and Schedule

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

4.3.2 Monitoring Protocol

All monitoring activities will be recorded in a field book and associated monitoring log, as provided in Appendix E - Site Management Forms.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

This section describes the measures necessary to operate, monitor and maintain (OM&M) the mechanical components of the SSDS at the Site, including the following:

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

Further details regarding the Operation and Maintenance of the SSDS are provided in Appendix B - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete ISMP, is to be maintained at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this ISMP.

The BCP applicant will be responsible for ensuring the system is operating (if activated) and that maintenance personnel are trained on the system components and operation. Agency reporting requirements are provided in Section 7.0.

5.2 Operation and Maintenance of SSDS

The following sections provide a description of the operations and maintenance of the SSDS. Cut-sheets and as-built drawings for the SSDS are provided in Appendix B - Operations and Maintenance Manual.

5.2.1 System Start-Up

Confirm, via a rooftop site visit, that the four (4) SSDS exhaust fans on the roof of the Site building are operating. Observe the SSDS Alarm/Gauge panel to ensure that:

- Each of the four (4) alarms is plugged into a nearby electrical outlet;
- Green lights are lit on each of the four (4) alarms; and
- Each of the four (4) pressure gauges shows a typical operating pressure reading, as follows:
 - Fan #1, Fan #2, and Fan #3 between 5 and 10 inches of water; and
 - Fan #4 ± 2 inches of water.

The system start-up procedure described above will be conducted if, in the course of the SSDS system lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

5.2.2 Routine SSDS Operation and Maintenance

The SSDS layout and components are described in Section 4.0 and Appendix B. The system was designed and installed to operate with minimal maintenance.

Monthly Observation of SSDS Alarm Panel

Personnel of The Cabot Group, the owner of the Site building's real estate management firm, will visit and observe the SSDS alarm panel (located in the southwestern portion of the Site building, at the end of the L-shaped hallway that serves as entrances to the Town Senior Center, MAXIMUS, and Concentrix tenant spaces) to confirm that all four (4) sets of audible/visual alarms and analog pressure gauges indicate the SSDS is operating.

Annual Monitoring of the SSDS

Unless it becomes evident that more frequent monitoring is necessary, annual monitoring of the Site's SSDS will be performed to ensure that the system is operating properly. A visual inspection of the accessible portions of the system will be conducted during each annual monitoring event as well as the collection of pressure field extension measurements. SSDS components to be visually inspected include: the vent fans, visible system piping, and system alarms. A complete list of components to be checked is provided in the Inspection Checklist, included as Appendix 5. In the event that a vent fan appears to be malfunctioning, or if piping or wiring appears damaged, the component(s) in question will be promptly repaired or replaced, following the manufacturer's recommendations and instructions.

In the event that maintenance is required of the system, reports and any other information generated during regular operations at the Site will be kept on-file. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC, NYSDOH, Monroe County Department of Health (MCDOH), and the current tenants. Maintenance events must be documented and documentation must include the following information:

- Date;
- Condition of SSDS upon arrival;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Any modifications to the system;
- Other documentation such as copies of invoices or work orders for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form); and
- Condition of SSDS when finished.

Annual monitoring of the Site's SSDS will be performed to ensure that it is operating properly. A visual inspection of the accessible portions of the SSDS will be conducted during each annual monitoring event. SSDS system components to be visually inspected include: the SSDS exhaust fans, system piping, system wiring, and system alarms/gauges.

In the event that a vent fan appears to be malfunctioning, or if piping or wiring appears damaged, the component(s) in question should be promptly repaired or replaced, following the manufacturer's recommendations and instructions. SSDS exhaust fan failure(s), repair(s), replacement(s), and/or operational problems should be documented and included with the annual certification.

5.2.3 <u>Non-Routine Operation and Maintenance</u>

The SSDS has warning devices to indicate that the system is not operating properly. Four (4) sets of audible/visual alarms and analog pressure gauges, a set for each rooftop SSDS exhaust fan, were installed on an audible/visual alarm panel, located in the southwestern portion of the Site building, at the end of the L-shaped hallway that serves as entrances to the Town Senior Center, MAXIMUS, and Concentrix tenant spaces (refer to Appendix B).

In the event that the alarm system is activated, applicable maintenance and repairs will be conducted as specified in the Operation and Maintenance Plan. Any interruptions to operation of the SSD system and any repairs made will be noted in the PRR.

In the event that warning device (i.e., and alarm) is activated, **please notify the owner of the Site building via email, at:**

maintenance@thecabotgroup.com

In the event of an alarm situation or a situation where repairs may be needed, The Cabot Group personnel should notify the following LaBella personnel:

- Kyle Miller cell phone (585) 216-7635 or kmiller@labellapc.com
- Dan Noll, PE cell phone (585) 301-8458 or <u>dnoll@labellapc.com</u>

- Jennifer Gillen cell phone (315) 402-6480 or jgillen@labellapc.com
- LaBella Associates main switchboard (585) 454-6110

Note: in the case of an audible alarm, after notification to The Cabot Group and LaBella has occurred, it is OK to instruct the tenant to unplug the electric cord for the alarm in question, in order to stop the audible alarm until repairs can be arranged.

All applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS will be restarted. All non-routine maintenance of the SSDS will be documented and these documents will be kept on-file.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the Site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a summary of vulnerability assessments that will be conducted for the Site during periodic assessments, and briefly summarizes the vulnerability of the Site and/or engineering controls to severe storms/weather events and associated flooding.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the Site during site management, and as reported in the Periodic Review Report (PRR).

6.2.1 <u>Timing of Green Remediation Evaluations</u>

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

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

6.2.2. <u>Remedial Systems</u>

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

6.2.3 Building Operations

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

6.2.4 Frequency of System Checks, Sampling and Other Periodic Activities

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

6.2.5 <u>Metrics and Reporting</u>

As discussed in Section 7.0 and as shown in Appendix E – Site Management Forms, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits; a set of metrics has been developed.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

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

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 14 and summarized in the Periodic Review Report.

Table 13: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*					
Inspection Peport	Annually, or as otherwise determined by					
inspection Report	the Department					

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

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

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Copies of all field forms completed (e.g., well sampling logs, chain-ofcustody documentation, etc.); and

• Any observations, conclusions, or recommendations.

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

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of 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 EQuISTM database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.

8.0 **REFERENCES**

- NYSDEC DER-10 "Technical Guidance for Site Investigation and Remediation"
- NYSDOH's Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006
- *Phase I Environmental Site Assessment, The Norry Company,* prepared by Passero Associates and dated July 1997
- *Phase I Environmental Site Assessment, Norry Management Corporation,* prepared by LaBella Associates, P.C and dated May 2012
- *Building Pressurization Assessment, 3750 Monroe Ave LLC*, prepared by LaBella Associates, D.P.C and dated January 2013
- Preliminary Phase II Environmental Site Assessment, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated January 2013
- *Limited Interior Subsurface Evaluation, 3750 Monroe Ave LLC*, prepared by LaBella Associates, D.P.C and dated July 2013
- Interim Remedial Measure Design Phase Investigation: Sub-Slab Depressurization System, Site C828187, 3750 Monroe Ave LLC, prepared by LaBella Associates, D.P.C and dated June 2014
- Interim Remedial Measures Work Plan, Sub-Slab Depressurization System Installation BCP Site C828187 prepared by LaBella Associates, D.P.C. and dated October 2014

J:\NORRY MANAGEMENT CORP\213131 - BCP APPLICATION 3750 MONROE AVE\REPORTS\INTERIM SITE MANAGEMENT PLAN - SSDS\RPT_2017_10_19_C828187 DRAFT ISMP 3750 MONROE AVE.DOCX



FIGURES





FIGURE 1 SITE LOCATION MAP Interim Site Management Plan C828187 3750 Monroe Avenue Pittsford, New York



Path: J:\Norry Management Corp\213131 - BCP Application 3750 Monroe Ave\Drawings\ISMP\Figure 1 USGS.mxd





Interim Site Management Plan

3750 Monroe Avenue Pittsford, New York

3750 Monroe Avenue Associates, LLC

BCP Site Boundary





1 inch = 200 feet Intended to print on 11" x 17".



FIGURE 2



- Revised Proposed BCP Boundary
- LaBella 2015 Soil Boring/ Groundwater Grab Sample
- + LaBella 2013 Soil Boring
- LaBella 2013 Soil Boring/ Groundwater Monitoring Well

Notes:

- (1) All testing locations are approximate.
 (2) Aerial image obtained from Monroe County GIS 2009
 (3) Contours developed using Surfer Version 8, kriging method and represent the greatest concentration of total VOCs detected in soil samples collected from soil boring locations in 2013 and 2015

Total VOCs in Soil

parts per billion

500 - 2,000 2,000 - 5,000

5,000 - 9,000

9,000 - 12,000

12,000 - 17,000

ELEF





ww.labellapc.com COPYRIGHT 2003

Interim Site Management Plan

3750 Monroe Avenue Pittsford, New York

3750 Monroe Avenue Associates, LLC

VOCs in Soil Contour Map (Source: Remedial Investigation Work Plan, Figure 5)





1 inch = 100 feet Intended to print on 11" x 17".



FIGURE 3



Sub-slab & Outdoor Sample Locations (6-2015)	
on Points	P (1658) 445-4110 F (1565) 454-3006 www.lahafuq.com comvear.200
em 1	
	BCP #C828187
	3750 Monroe Avenue
_	Pittsford, New York
-	Sub Slab
>	Layout and Indoor/ Sub-slab & Outdoor Air
_	Sampling Locations
	June 2015
	ш "о
	2
	9
-	
	0 60 Ft.
	1 Inch = 60 feet Intended to print as 11" x 17".
	213131
DING FLOOR PLAN	







300 STATE STREET ROCHESTER, NY1461 P: (585) 454-6110 F: (585)454-3066 www.labelapc.com copyrecht.288

3750 Monroe Avenue Pittsford, New York

3750 Monroe Avenue Associates, LLC

Rooftop Exhaust Fans and HVAC Air Intake Locations





1 inch = 75 feet Intended to print on 11" x 17".





: J. Norry Management Corp'213131 - BCP Application 3750 Monroe AvelDrawings/CCR SSDS/Figure 5 - SSDS Contours January 2016.mx



Interim Site Managment Plan

3750 Monroe Avenue Pittsford, New York

3750 Monroe Avenue Associates, LLC

Interior Layout w/ Sub Slab Depressurization System Pressure Field Extension Testing Radius of Influence

January 2016





1 inch = 50 feet Intended to print as 11" x 17".





TABLES

Table 8 – Summary of Post-Startup Air Sampling Results (Page 1 of 4) Summary of Volatile Organic Compounds (Select List) in Sub-Slab Soil Vapor and Corresponding Indoor Air Samples Collected In June 2015 and March 2016 Results in Micrograms per Cubic Meter (µg/m³)

NYSDEC BCP Site #C828187 3750 Monroe Avenue Pittsford, New York LaBella Project No. 213131

Sample ID	Concentrix-3 SVI- 6_2015	Concentrix-4 SVI- 6_2015	NYSDOH Sub-Slab Vapor	NYSDOH Sub-Slab Vapor	NYSDOH Sub-Slab Vapor	NYSDOH Sub-Slab Vapor	NYSDOH Sub-Slab Vapor	NYSDOH Sub-Slab Vapor	Concentrix-3 IAQ-6_2015	Concentrix-3 3_2016	Concentrix-4 IAQ-6_2015	Concentrix-4 3_2016	Volt-1-6_2015	Volt/Concentrix 1 3_2016	Volt-2-6_2015	Duplicate-6_2015 (Same as Indoor Air Sample "Volt-2- 6_2015")	Volt/Concentrix 2 3_2016	Concentrix-2-6_2015	Concentrix-2 3_2016	NYSDOH Indoor Air	USEPA (2001) (BASE)
Type of Sample	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	Matrix (minimum action	Indoor Air	Indoor Air	Blind Duplicate	Indoor Air	Indoor Air	Indoor Air	Concentration (minimum Datab action level) ⁽¹⁾	Database - 90th Percentile (2)										
Date of Sample Collection	June 28, 2015	June 28, 2015	level)	June 28, 2015	March 28, 2016	June 28, 2015	March 28, 2016	June 28, 2015	March 28, 2016	I	June 28, 2015	March 28, 2016	June 28, 2015	March 28, 2016							
1,1,1-Trichloroethane	2.9	6.7	<100***	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	<3***	20.6					
1,1-Dichloroethane	< 0.61	< 0.61	NL	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NL	9.5					
1,1-Dichloroethene	< 0.59	< 0.59	<5 **	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	<0.25**	< 0.7					
1,2-Dichloroethane	0.61	< 0.61	NL	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NL	< 1.4					
Chloroethane	< 0.40	< 0.40	NL	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	NL	< 1.2					
cis-1,2-Dichloroethene	1.3	1.2	<100***	4.8	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	0.55 J	< 0.59	<3***	3.7					
Tetrachloroethylene	< 1.0 J	2.2 J	<100***	9.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	R	< 1.0	< 1.0	< 1.0	<3***/30*	98.9					
trans-1,2-Dichloroethene	< 0.59	< 0.59	NL	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	NL	9.4					
Trichloroethene	8.5	8.7	<5 **	5.4	< 0.21	0.48	0.21	0.59	< 0.21	0.59	0.64	< 0.21	0.70	< 0.21	<0.25** / 2*	< 1.1					
Vinyl chloride	< 0.10	< 0.10	<5 **	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.25**	1.1					

NOTES:

VOC analysis by United States Environmental Protection Agency (USEPA) Method TO-15.

1. New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York. [Note: This Guidance uses a combination of indoor air and sub-slab soil vapor when comparing to the matrices. In addition, for compounds not listed in the matrices an overall site approach is employed which utilizes the USEPA BASE Database (see 2. below) as typical background for commercial buildings and also uses the outdoor air sample, refer to Guidance document for details.]

2. USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (Refer to Footnote "1") this database is referenced for the indoor air sampling results. This database is also referenced to provide initial benchmarks for comparison to the air sampling data and does not represent regulatory standards or compliance values. 3. "Select" VOCs determined based on the DPI Work Plan approved by the NYSDOH in July 2014.

* = Air Guideline Values obtained from Table 3.1, NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York as updated by a September 2013 Fact Sheet for PCE and an August 2015 Fact Sheet for TCE.

** = Guideline Value obtained from Soil Vapor/Indoor Air Matrix 1 (minimum action level), NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

*** = Guidance Value obtained from Soil Vapor/Indoor Air Matrix 2 (minimum action level), NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Bold type denotes that the compound was detected at a concentration that was found to exceed its respective NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level).

Highlighted values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates).

Italicized values are above USEPA (2001) BASE Database - 90th Percentile Values.

< XXX Indicates constituent not detected above the laboratory detection limit shown.

"J" or "UJ" - Denotes an estimated value based upon the laboratory analytical report (detection below quantitation limits) or subsequent data validation.

R - Denotes a rejected value based upon data validation.

Table 8 – Summary of Post-Startup Air Sampling Results (Page 2 of 4)

Summary of Volatile Organic Compounds (Select List) in Sub-Slab Soil Vapor and Corresponding Indoor Air Samples

Collected In June 2015 and March 2016

Results in Micrograms per Cubic Meter (µg/m³)

NYSDEC BCP Site #C828187 3750 Monroe Avenue Pittsford, New York LaBella Project No. 213131

Sample ID	Turftime-SVI-6_2015	Turftime-SVI-3_2016	Bricklayers-SVI- 6_2015	Bricklayers SVI 3_2016	NYSDOH Sub-Slab Vapor Concentration Decision	Turftime-IAQ-6_2015 Turftime-IAQA&B-3_2016		Bricklayers-IAQ- 6_2015	Bricklayers IAQ-3_2016	NYSDOH Indoor Air	USEPA (2001) (BASE)	
Type of Sample	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	Matrix (minimum action level) ⁽¹⁾	Indoor Air	Indoor Air	Indoor Air	Indoor Air	action level) ⁽¹⁾	(2)	
Date of Sample Collection	June 29, 2015	March 28, 2016	June 30, 2015	March 28, 2016		June 29, 2015	March 28, 2016	June 30, 2015	March 28, 2016			
1,1,1-Trichloroethane	130	79 J	2.5 J	0.55 J	<100***	< 0.82 UJ	< 0.82	< 0.82	< 0.82	<3***	20.6	
1,1-Dichloroethane	< 0.61	< 0.61	< 0.61 UJ	< 0.61	NL	<0.61 UJ	< 0.61	< 0.61	< 0.61	NL	9.5	
1,1-Dichloroethene	< 0.59	< 0.59	< 0.59 UJ	< 0.59	<5 **	< 0.59 UJ	< 0.59	< 0.59	< 0.59	<0.25**	< 0.7	
1,2-Dichloroethane	< 0.61	2.5	< 0.61 UJ	< 0.61	NL	< 0.61 UJ	< 0.61	< 0.61	< 0.61	NL	< 1.4	
Chloroethane	0.55	2.0	1.3 J	1.3 J	NL	< 0.40 UJ	< 0.40	< 0.40	< 0.40	NL	< 1.2	
cis-1,2-Dichloroethene	0.75	< 0.59	< 0.59 UJ	< 0.59	<100***	< 0.59 UJ	< 0.59	< 0.59	< 0.59	<3***	3.7	
Tetrachloroethylene	10	<1.0	6.6 J	<1.0	<100***	1.8 J	<1.0	R	<1.0	<3***/30*	98.9	
trans-1,2-Dichloroethene	< 0.59	< 0.59	< 0.59 UJ	< 0.59	NL	< 0.59 UJ	< 0.59	< 0.59	< 0.59	NL	9.4	
Trichloroethene	2.5	< 0.81	1.9 J	1.8 J	<5 **	< 0.21 UJ	< 0.21	0.38	< 0.21	<0.25** / 2*	< 1.1	
Vinyl chloride	< 0.10	< 0.38	< 0.10 UJ	<0.38	<5 **	< 0.10 UJ	< 0.10	< 0.10	< 0.10	<0.25**	1.1	

NOTES:

VOC analysis by United States Environmental Protection Agency (USEPA) Method TO-15.

1. New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York. [Note: This Guidance uses a combination of indoor air and sub-slab soil vapor when comparing to the matrices. In addition, for compounds not listed in the matrices an overall site approach is employed which utilizes the USEPA BASE Database (see 2. below) as typical background for commercial buildings and also uses the outdoor air sample, refer to Guidance document for details.]

2. USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (Refer to Footnote "1") this database is referenced for the indoor air sampling results. This database is also referenced to provide initial benchmarks for comparison to the air sampling data and does not represent regulatory standards or compliance values.

3. "Select" VOCs determined based on the DPI Work Plan approved by the NYSDEC and NYSDOH in July 2014.

* = Air Guideline Values obtained from Table 3.1, NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York as updated by a September 2013 Fact Sheet for PCE and an August 2015 Fact Sheet for TCE.

** = Guideline Value obtained from Soil Vapor/Indoor Air Matrix 1 (minimum action level), NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

*** = Guidance Value obtained from Soil Vapor/Indoor Air Matrix 2 (minimum action level), NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Bold type denotes that the compound was detected at a concentration that was found to exceed its respective NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level).

Highlighted values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates).

Italicized values are above USEPA (2001) BASE Database - 90th Percentile Values.

< XXX Indicates constituent not detected above the laboratory detection limit shown.

"J" or "UJ" - Denotes an estimated value based upon the laboratory analytical report (detection below quantitation limits) or subsequent data validation.

R - Denotes a rejected value based upon data validation.

Table 8 – Summary of Post-Startup Air Sampling Results (Page 3 of 4)

Summary of Volatile Organic Compounds (Select List) in Sub-Slab Soil Vapor and Corresponding Indoor Air Samples

Collected In June 2015 and March 2016

Results in Micrograms per Cubic Meter (µg/m³)

NYSDEC BCP Site #C828187 3750 Monroe Avenue Pittsford, New York LaBella Project No. 213131

Sample ID	Maximus-SVI- 6_2015	Maximus SVI- 3_2016	Senior Center-SVI- 6_2015	Senior Center SVI- 3_2016	NYSDOH Sub-Slab Vapor	Maximus-IAQ- 6_2015	Maximus IAQ-3_2016	Senior Center-IAQ- 6_2015	Senior Center IAQ-3_2016	Town Court-6_2015	Town Court IAQ 3_2016	Duplicate 3_2016 (Same as Indoor Air Sample "Town Court IAQ 3_2016")	NYSDOH Indoor Air	USEPA (2001) (BASE)
Type of Sample	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	Sub-Slab Soil Vapor	(minimum action level) ⁽¹⁾	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Blind Duplicate	action level) ⁽¹⁾	
Date of Sample Collection	June 29, 2015	March 29, 2016	June 30, 2015	March 29, 2016		June 29, 2015	March 29, 2016	June 30, 2015	March 29, 2016	June 29, 2015	Μ	larch 28, 2016		
1,1,1-Trichloroethane	3.1 J	< 0.82	0.55 J	1.4 J	<100***	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	<3***	20.6
1,1-Dichloroethane	34 J	< 0.61	< 0.61 UJ	< 0.61	NL	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NL	9.5
1,1-Dichloroethene	< 0.59 UJ	< 0.59	< 0.59 UJ	< 0.59	<5 **	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	<0.25**	< 0.7
1,2-Dichloroethane	6.1 J	< 0.61	<0.61 UJ	< 0.61	NL	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NL	< 1.4
Chloroethane	120 J	110	0.63 J	2.5	NL	< 0.40	0.63	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	NL	< 1.2
cis-1,2-Dichloroethene	< 0.59 UJ	< 0.59	0.67 J	< 0.59	<100***	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	<3***	3.7
Tetrachloroethylene	3.1 J	< 1.0	3.7 J	2.0	<100***	0.88 J	< 1.0	1.6	< 1.0	< 1.0	< 1.0	< 1.0	<3***/30*	98.9
trans-1,2-Dichloroethene	< 0.59 UJ	< 0.59	< 0.59 UJ	< 0.59	NL	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	NL	9.4
Trichloroethene	2.8 J	0.86	4.8 J	1.7	<5 **	< 0.21	< 0.21	0.38	< 0.21	1.9	0.43 J	0.38	<0.25** / 2*	< 1.1
Vinyl chloride	< 0.10 UJ	< 0.38	< 0.10 UJ	< 0.38	<5 **	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.25**	1.1

NOTES:

VOC analysis by United States Environmental Protection Agency (USEPA) Method TO-15.

1. New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York. [Note: This Guidance uses a combination of indoor air and sub-slab soil vapor when comparing to the matrices. In addition, for compounds not listed in the matrices an overall site approach is employed which utilizes the USEPA BASE Database (see 2. below) as typical background for commercial buildings and also uses the outdoor air sample, refer to Guidance document for details.]

2. USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (Refer to Footnote "1") this database is also referenced to provide initial benchmarks for comparison to the air sampling data and does not represent regulatory standards or compliance values.

3. "Select" VOCs determined based on the DPI Work Plan approved by the NYSDEC and NYSDOH in July 2014.

* = Air Guideline Values obtained from Table 3.1, NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York as updated by a September 2013 Fact Sheet for PCE and an August 2015 Fact Sheet for TCE.

** = Guideline Value obtained from Soil Vapor/Indoor Air Matrix 1 (minimum action level), NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

*** = Guidance Value obtained from Soil Vapor/Indoor Air Matrix 2 (minimum action level), NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Bold type denotes that the compound was detected at a concentration that was found to exceed its respective NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level).

Highlighted values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates).

Italicized values are above USEPA (2001) BASE Database - 90th Percentile Values.

< XXX Indicates constituent not detected above the laboratory detection limit shown.

"J" or "UJ" - Denotes an estimated value based upon the laboratory analytical report (detection below quantitation limits) or subsequent data validation.

R - Denotes a rejected value based upon data validation.

Table 8 – Summary of Post-Startup Air Sampling Results (Page 4 of 4) Summary of Volatile Organic Compounds (Select List) in Outdoor Air Samples Collected In June 2015 and March 2016 Results in Micrograms per Cubic Meter (μg/m³)

NYSDEC BCP Site #C828187 3750 Monroe Avenue Pittsford, New York LaBella Project No. 213131

Sample ID	Outdoor Air - 6_28_2015	Outdoor Air - 6_29_2015	Outdoor Air - 6_30_2015	Outdoor Air - 3_28_2016	Outdoor Air - 3_29_2016	NYSDOH Indoor Air	USEPA (2001) (BASE)	
Type of Sample	Outdoor Air	Concentration (minimum action level) ⁽¹⁾	Database - 90th Percentile (2)					
Date of Sample Collection	June 28, 2015	June 29, 2015	June 30, 2015	March 28, 2016	March 29, 2016			
1,1,1-Trichloroethane	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	<3***	20.6	
1,1-Dichloroethane	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NL	9.5	
1,1-Dichloroethene	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	<0.25**	< 0.7	
1,2-Dichloroethane	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NL	< 1.4	
Chloroethane	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	NL	< 1.2	
cis-1,2-Dichloroethene	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	<3***	3.7	
Tetrachloroethylene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<3*** / 30*	98.9	
trans-1.2-Dichloroethene	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	NL	9.4	
Trichloroethene	< 0.21	< 0.21	< 0.21	< 0.21	0.86	<0.25** / 2*	< 1.1	
Vinyl chloride	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.25**	1.1	

NOTES:

VOC analysis by United States Environmental Protection Agency (USEPA) Method TO-15.

1. New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York. [Note: This Guidance uses a combination of indoor air and sub-slab soil vapor when comparing to the matrices. In addition, for compounds not listed in the matrices an overall site approach is employed which utilizes the USEPA BASE Database (see 2. below) as typical background for commercial buildings and also uses the outdoor air sample, refer to Guidance document for details.]

2. USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (Refer to Footnote "1") this database is referenced for the indoor air sampling results. This database is also referenced to provide initial benchmarks for comparison to the air sampling data and does not represent regulatory standards or compliance values. 3. "Select" VOCs determined based on the DPI Work Plan approved by the NYSDEC and NYSDOH in July 2014.

* = Air Guideline Values obtained from Table 3.1, NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York as updated by a September 2013 Fact Sheet for PCE and an August 2015 Fact

** = Guideline Value obtained from Soil Vapor/Indoor Air Matrix 1 (minimum action level), NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

*** = Guidance Value obtained from Soil Vapor/Indoor Air Matrix 2 (minimum action level), NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Bold type denotes that the compound was detected at a concentration that was found to exceed its respective NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level). Highlighted values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates). Italicized values are above USEPA (2001) BASE Database - 90th Percentile Values.

< XXX Indicates constituent not detected above the laboratory detection limit shown.

"J" or "UJ" - Denotes an estimated value based upon the laboratory analytical report (detection below quantitation limits) or subsequent data validation.

R - Denotes a rejected value based upon data validation.
Table 9 Summary of SSDS Extraction Points BCP #C828187 3750 Monroe Avenue, Pittsford, New York

Floor Slab Penetration ID	General Location/Associated with Fan No.
C-1	Concentrix Warehouse North Side near double doors/connected to Fan #1. Extraction point created during July 2014 Pilot Test. ±6 feet NE of structural steel column.
T-1	Town Court Rear Storage Room/connected to Fan #2. Extraction point created during July 2014 Pilot Test.
V-1	VoltDelta @ Exit to Maximus/Town Sr. Ctr. Hallway/connected to Fan #2. Extraction point created during July 2014 Pilot Test.
P-1	Town Courtroom Behind Fake Column, North side/connected to Fan #2. ±20 feet NW of structural steel column in public seating area.
P-2	Town Courtroom Behind Fake Column, South side/connected to Fan #2. ±20 feet S of structural steel column in front of Judge's Bench.
P-3	Town Courtroom, West corner of Large Storage Closet, ±11 feet WNW of structural steel column, wall surface mount/connected to Fan #2
P-4	Pittsford Printing North Side, ±10 feet NNW of structural steel column near rear delivery door, wall surface mount/connected to Fan #2
P-5	Pittsford Printing near entrance to Break Room, ±12 feet W of structural steel column in Break Room, wall surface mount/connected to Fan #2
P-6	Town Senior Center Storage Room near Hot Water Heater, ±20 feet NNE of structural steel column in coat room, in wall cavity/connected to Fan #3
P-7	Town Senior Center Storage Room at rear of Lunch Room, ±25 feet NNE (then ±6 feet NNW) of structural steel column at entrance to Lunch Room, in wall cavity/connected to Fan #3
P-8	Maximus South Side behind Guard Desk, ±16 feet NE of structural steel column in guard desk room, wall surface mount/connected to Fan #2
P-9	Maximus Mail Room near Double Doors to Office Space, ±19 feet West of structural steel column in center of mail room, wall surface mount/connected to Fan #2
P-10	Maximus Production Room, inside cavity of structural steel column and plumbing drywall box-in, riser pipe runs up NNW side of structural steel column/connected to Fan #2
P-11	Concentrix Warehouse @ Column "Q-16", riser pipe runs up structural steel column/connected to Fan #1
P-12	Concentrix Warehouse @ Column "S-16", riser pipe runs up structural steel column/connected to Fan #1
P-13	Concentrix Warehouse @ Column "S-18", riser pipe runs up structural steel column/connected to Fan #1
P-14	Concentrix Warehouse @ Column to NW of P-13, riser pipe runs up structural steel column/connected to Fan #1
P-15	Concentrix Warehouse Near Overhead Door, ±4 feet SW of structural steel column near overhead door, wall surface mount/connected to Fan #1
P-16	Maximus call center office space off L-shaped hallway in SW portion of building, ±4 feet NNW of structural steel column, in wall cavity/connected to Fan #2
P-17	Maximus call center office space off L-shaped hallway in SW portion of building, ±4 feet NNW of structural steel column, wall surface mount/connected to Fan #2
P-18	Concentrix, NE corner of Loading Dock, ±6 feet West of structural steel column, wall surface mount/connected to Fan #1
P-19	Concentrix, southern hallway between Production Area and Loading Dock, ±5 feet SE of structural steel column, wall surface mount/connected to Fan #1
P-20	"Vacant Space", SE wall, ±4 feet SW of structural steel column, in wall cavity/connected to Fan #3
P-21	Concentrix, North of "Print and Production" sign, ±10 feet SE, then ±9 feet SW of structural steel column to North of column "I16", wall surface mount/connected to Fan #1
P-22	Concentrix, South of "Print and Production" sign, ±9 feet SW of structural steel column "I16", wall surface mount/connected to Fan #1
P-23	Concentrix, Production Area in Women's Locker Room, ±4 feet NNW of structural steel column, wall surface mount/connected to Fan #1
P-24	Concentrix/VoltDelta 2015 dividing wall, in wall cavity, where 2015 dividing wall meets Southwestern pre-existing wall, ±4 feet WSW of structural steel column/connected to Fan #3
P-25	VoltDelta, outside men's bathroom, ±6 feet NNW of "corner" structural steel column, in wall cavity/connected to Fan #2
P-26	VoltDelta, outside ladies bathroom, ±4 feet WSW of structural steel column, in wall cavity/connected to Fan #2
P-27	New Concentrix Call Center (former VoltDelta office space) Southwestern wall, ±4 feet WSW of structural steel column, in wall cavity/ connected to Fan #3
P-28	VoltDelta office space, SE wall, ±7 feet NE of structural steel column, in wall cavity/connected to Fan #2
P-29	Inside Concentrix/VoltDelta 2015 dividing wall, ±3 feet NE of structural steel column, in wall cavity/connected to Fan #3
P-30	New Concentrix Call Center (former VoltDelta office space), Northwestern wall, near electrical panel box, ±4 feet WSW of structural steel column, in wall cavity/connected to Fan #3
P-31	New Concentrix Call Center (former VoltDelta office space) break room, ±4 feet WSW of structural steel column, in wall cavity/connected to Fan #3
P-32	New Concentrix Call Center (former VoltDelta office space) outside conference room, ±8 feet NNW of structural steel column, in wall cavity/connected to Fan #3
P-33	New Concentrix Call Center (former VoltDeita office space), inside cavity of structural steel column and plumbing drywall box-in, riser pipe runs up NNW side of structural steel column/conne
P-34	New Concentrix Call Center (former VoltDeita office space), inside cavity of structural steel column drywall box-in, riser pipe runs up NNE side of structural steel column/connected to Fan #3
P-35	VoltDelta Classroom, in wali between rooms 158 & 159, benind wali-mounted electrical service (wire molding), ±8 feet west of structural steel column in computer server room, in wali cavity
P-36	VoltDelta Computer Lab, in room 157 PA3, in wall near dry-erase board, ±8 feet NNW of structural steel column in computer server room, in wall cavity/connected to Fan #2
P-37	Concentrix (formerly volibeita) office space, in wall cavity outside office, in short dead end hallway, ±8 feet wsw of structural steel column between offices, in wall cavity/connected to Fan #
P-38	Concentrix Production Area, hormern portion, hear employee entrance, ±15 leet NE of structural steel column G18, wall surface mount/connected to Fan #1
P-39	Concentrix Production Area, to SE of P-38, hear former overhead door, ±9 feet NE of structural steel column, wall surface mount/connected to Fan #1
P-40	Concentrix Office Space, southeastern wall +8 feet NE of structural steel column, in wall suity/connected to Fan #1
P-41	Concentrix Office Space, +4 feet SW of structural steel column in subicle, well surface mount/connected to Fan #2
P-42	Concentrix Drace space, 14 reet SW of structural steel column in cubicle, wan surface mounty connected to Fan #3
P-43	Concentrix Production Area w Column - 10, riser pipe runs up structural steel column to the SE of column "K-16"/connected to Fan #1
P-44	Concentrix Production Area, riser pipe runs up structural steer column to the SE of column in wall cavity/connected to Fan #1
P-45	In "Vacant Space" former extraction point for Dilot Test, riser pipe runs up structural steel column in center of "Vacant Space"/connected to Ean #2
P-40	Town Court and of hallway between Judge's bench & Hearing Room, in wall cavity/connected to Fan #2
P-47	Old Concentrix Call Center in the Northwestern former passageway between the Site Building and L-Shaped building (TurfTime/CrossEit) hallway/connected to Ean #4
P-40	Old Concentrix Call Center, in the Northeastern former passageway between the Site Building and L-Shaped building (TurfTime/CrossFit) hallway/connected to Ean #4
P-49 D E0	Old Concentrix Call Center, in the Northeastern former passageway between the Site building did L-Sitaped building (10111111e/CrossFill) Italiway/connected to Fan #4
P-30	Old Concentrix Call Center, generally to the SE of F-40 and 14 rect to the NW of Structural Steel Columni, in wail Cavity/CollineCleu to Fall #4
P-31 D-52	Old Concentrix Call Center, bennu upor in America Conference room, generally in two corner or the site bunuing, 14 red to the NW of result of the NW of tructural steel column, in wall cavity/connected to Ean #4
P-32	Old Concentrix Call Center, generally to the SE of P-50 and ±4 feet to the NW of the Concentrix "fat head" wall covering to the NW of structural steel column, in wall covity/connected to San
P-35	Old Concentrix Call Center, generally to the SE of P-52 and to the SE of the Concentrix "fat head" wall covering, ±4 feet to the NE of structural steel column, in wall cavity/connected to Fan #4
P-54	Old Concentrix Call Center, generally to the SE of the Site building to the SE of D 40, ± 4 feet to the NE of structural steel column, in wall cavity/connected to Fan #4
P-55	Join concentrix can center, generally in the corner of the shie building, to the SE of P-49, ±4 feet to the NE of structural Steel Column, in Wall Cavity/connected to Fan #4

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/connected to Ean #2
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Table 10 Summary of SSDS Exhaust Fan Specifications BCP #C828187 3750 Monroe Avenue, Pittsford, New York

Rooftop Exhaust Fan	General Location	Make/Model	Electrical Information		
Fan #1	Atop Concentrix's Production Space, just southwest of the mezzanine.		±220V Electrical Service, electrical circuits 24 & 26 in electrical panel in Concentrix Production Space near men's restroom and electrical transformer room.		
Fan #2	Atop VoltDelta tenant space, atop mezzanine above restrooms. Southernmost fan on roof.	Obar Systems Inc. model GBR 89	±220V Electrical Service, tied into electrical panel (circuits 26 & 28 and 30		
Fan #3	Atop Concentrix's New Call Center (former VoltDelta Office Space). Westernmost fan on roof.		storage room).		
Fan #4	Atop Concentrix's Older Call Center. Northeastern side of roof.	RadonAway model HS5000	±110V, wired into a nearby electrical bus duct.		
Alarms/Gauges	In the southwestern portion of the Site building at the end of the L-shaped hallway that serves as entrances to the Town Senior Center, MAXIMUS, and Concentrix tenant spaces.	Alarms: RadonAway model Checkpoint IIa. Gauges: Dwyer Magnehelic Differential Pressure (analog).	Alarms are plugged into ±110V electrical outlets adjacent to the Alarm/Gauge panel. Tied into electrical circuit 34 in nearby electrical panel located in current Concentrix Office Space (former VoltDelta hardware storage room).		

Table 11 (Page 1 of 2) Summary of PFE Monitoring Points and Micromanometer Readings BCP #C828187 3750 Monroe Avenue, Pittsford, New York

Location ID	Location Alias	Location Description	Pressure Readings (inches of H ₂ O)										
Date	Date		8/30/2012 ⁽¹⁾	4/3/2015	4/7/2015	5/6/2015	5/13/2015	6/10/2015	6/16/2015	6/24/2015	6/28/2015	1/29/2016	
Concentrix-1	CXMP-1	Older Concentrix Call Center Utility closet with hot water heater; right front corner	0.000	-0.015		-0.026							
Concentrix-2	CXMP-2	Women's Locker Room/Cleaning Supply Storage area between bathrooms; in corner behind utility rack	0.000		-0.016								
C1T4	CXMP-3	Concentrix Warehouse		-0.070									
Concentrix-4	CXMP-4	Concentrix Warehouse 2nd aisle; right side; beneath the "S31-E-1A" sign	0.000	-0.081		-0.530							
Concentrix-5	CXMP-5	Concentrix Production -space near door to office space			-0.434								
Concentrix-6	CXMP-6	Outside Mike H.'s office			-0.231								-
CITI	CXMP-7	Concentrix Warehouse		-0.002		-0.021							
2015-I17	CXMP-8	Concentrix Production - ±6' SE of Column I17		-0.042	-0.039								
	CXMP-9	Northwestern portion of Older Concentrix Call Center, behind door in corner of Amerks Room						0.000					Per
	CXMP-10	Northeastern portion of Older Concentrix Call Center						-0.006					
Vicinity of C1T1 & C1T3	CXMP-11	Central portion of Concentrix Warehouse		range from -0.008 to 0.000		-0.161							
	CXMP-12	Concentrix Warehouse between P-12 and P-13 ~20' from								0.000			
	CXMP-13	Older Concentrix Call Center Training Room 3, Eastern corner of room									-0.002		
	CXMP-14	Slightly South of middle column line in Older Concentrix Call Center, under cubicle wall										-0.012	
	CXMP-15	Slightly North of middle column line in Older Concentrix Call Center, under recycle bin										-0.021	
	CXMP-16	Within middle column line in Older Concentrix Call Center, under recycle bin										-0.023	
	CXMP-17	Within middle column line in Older Concentrix Call Center, outside eastern door to break room										-0.019	
NEMP	VSMP-1	Vacant Space - northeast corner		-0.300	-0.280								
SEMP	VSMP-2	Vacant Space - southeast corner		-0.135	-0.130								
SWMP	VSMP-3	Vacant Space - southwest corner		-0.024	-0.025								
NWMP	VSMP-4	Vacant Space - southwest corner		-0.065	-0.062								
Volt-1	VTMP-1	Former VoltDelta space, Under counter; workout room	0.000		-0.008 to -0.010								
Volt-2	VTMP-2	Former VoltDelta space Utility Closet with hot water heater	0.000										
Volt-3	VTMP-3	2015 Install - Former VoltDelta space hallway, outside doorway to break room			-0.005	-0.008							

Notes:

1. sub-slab pressure readings in this column were taken years prior to installation of SSDS

Notes	
Permanently Abandoned/Caulked on 10/22/2015, due to close proximity to SSDS Extraction Point P-51.	
	-
Used as sampling location "Concentrix-4 SVI-6_2015"	
	-
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Table 11 (Page 2 of 2) Summary of PFE Monitoring Points and Micromanometer Readings BCP #C828187 3750 Monroe Avenue, Pittsford, New York

Location ID	Location Alias	Location	Pressure Readings (inches of H_Q)										
Date	Date	Description	8/30/2012 ⁽¹⁾	4/3/2015	4/7/2015	5/6/2015	5/13/2015	6/10/2015	6/16/2015	6/24/2015	6/28/2015	1/29/2016	
Volt-4	VTMP-4	2015 Install - Former VoltDelta space cubicle office space,			-0.132								T
Volt-5	VTMP-5	2015 Install - Former VoltDelta space copier room next to quiet room			-0.048								
Volt-6	VTMP-6	2015 Install -Former VoltDelta space vacant office near front entrance, behind office door			-0.007	-0.010							-
Volt-7	VTMP-7	2015 Install - VoltDelta Hallway corner near women's bathroom			-0.043								
V1T4	VTMP-8	VoltDelta Hallway outside women's bathroom			-0.012								
Printing Plus	PPMP-2	Pittsford Printing Break room beneath movable counter/cabinets	0.000	-0.245									
2015 PP	PPMP-1	Pittsford Printing production area, beneath cart			-0.450								
Pittsford Town Court	TCMP-1	Men's bathroom room utility closet; behind left door jam	0.000		-0.024	-0.024				-0.01			
TITI	TCMP-2	Hallway behind Town Court		-0.012	-0.007	-0.003	-0.010			-0.006			
TCMP-3	TCMP-3	Hearing Room, Behind door to Jury Box				-0.009	-0.065			-0.246			
TCMP-4	TCMP-4	Office/Administrative Space, in linoleum floor in sink area				-0.100	-0.080			-0.115			
TCMP-5	TCMP-5	Hallway behind Courtroom, behind door to hearing room at end of hallway				0.000							Th
TCMP-6	TCMP-6	Northern Corner of Hearing Room					+ 0.004			0.000			
2015 Sr Ctr	SCMP-1	Town Senior Center, behind women's bathroom door			+ 0.004								M poin
2015 Sr Ctr - 2	SCMP-2	Town Senior Center, utility/storage room hot water heater, in opposite corner from ice maker			-0.014								
2015 MX1	MXMP-1	Maximus Mail Room, under desk and 2-drawer gray filing cabinet			-1.47								
2015 MX2	MXMP-2	Maximus Print Room, 18' Northwest of thin Column			-0.380								
2015 MX3	MXMP-3	Maximus Print Room, 26'west of Vent Point in Boxed Column			-0.056								
	MXMP-4	Southeastern portion of Maximus, adjacent to long common area hallway, corner of Maximus Break Room							-0.007				
	MXMP-5	Central portion of Maximus, adjacent to long common area hallway, corner of Canesus Conference Room							0.000 to -0.001, trace negative				
	MXMP-6	Southwestern portion of Maximus, adjacent to long common area hallway, corner of Maximus Break Room, near door to file room							varies from -0.003 to +0.003, inconclusive				
Maximus-4	MXMP-7	Maximus Office #167 behind door in corner of room									0.000		Mea pre

Notes:

1. sub-slab pressure readings in this column were taken years prior to installation of SSDS

Notes
This PFE monitorng point was converted to an SSDS Extraction Point (P-47) on 5/13/2015
Much sub-slab gravel observed while creating PFE monitoring point, apparently bedding material for bathroom plumbing, may be causing positive pressure reading
Measured on 6/30/2015. This point was created on 11/9/2012 and pressure readings of 0.004 to 0.015 in. H_2O were reported at that time.



Engineering Architecture Environmental

APPENDIX A

List of Site Contacts

Name	Phone/Email Address
Site Owner: 3750 Monroe Avenue	Contact via The Cabot Group,
Associates LLC, c/o Norry Management	maintenance@thecabotgroup.com
Corp.	(585) 381- 1500
Remedial Party: 3750 Monroe Avenue,	Contact via The Cabot Group,
LLC, c/o Norry Management Corp.	maintenance@thecabotgroup.com
	(585) 381- 1500
Qualified Environmental Professional:	
Mr. Dan Noll, P.E.	
LaBella Associates, D.P.C.	(585) 295-6611
300 State Street	dnoll@labellapc.com
Rochester, New York 14614	
Frank Sowers	(585) 226-5357
Project Manager, NYSDEC Region 8	frank.sowers@dec.ny.gov.
Bernette Schilling	(585) 226-5315
Regional HW Engineer, NYSDEC Region	
8	bernette.schilling@dec.ny.gov
Kelly Lewandowski	(518) 402-9547
NYSDEC Site Control	kelly.lewandowski@dec.ny.gov
Site Owner: 3750 Monroe Avenue	Contact via The Cabot Group,
Associates LLC, c/o Norry Management	maintenance@thecabotgroup.com
Corp.	(585) 381- 1500
Remedial Party Attorney:	
Dan O'Brien, Partner	(585) 987-2810
Woods Oviatt Gilman LLP	dobrien@woodsoviatt.com
700 Crossroads Bldg.	
2 State St. Rochester, NY 14614	

APPENDIX A – LIST OF SITE CONTACTS



Engineering Architecture Environmental

APPENDIX B

SSDS Operation and Maintenance (O&M) Manual

THE OBAR GBR89 COMPACT RADIAL BLOWER



Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.

PERFORMANCE

- GBR89 HA 14" WC at 100CFM max flow 500 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty 40,000 hr sealed bearings.



GBR89 WITH ROOF MOUNT

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 18"x 16"x 10" weighing only 18 lbs.
- 4" schedule 40 inlet and 6" schedule 40 exhaust.

1. COST GBR89 HA

COMPLETE UNIT	\$1695.00
3 YEAR WARRANTY	\$650.00

Enclosure Specifications Rating:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



Nautilair (TM) 8.9" (226mm) Variable Speed Blower

240 Volt AC Input, Single Phase, High Output





			Part/ Model Number	
Specification	Units	150240	150241	150242
Speed Control	-	Mechanical	0-10 VDC	PWM

Notes:

- Input Voltage Range: 216 264 Volts AC RMS, 50/60 Hz, single phase.
- Input Current: 10 amps AC RMS
- Operating Temperature (Ambient Air and Working Air): 0°C to 50°C
- Storage Temperature: -40°C to 85°C
- Dielectric Testing: 1800 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- Speed Control Methods: PWM (Pulse Width Modulation). Speed control input signal of 15 45 VDC @ 500 Hz 10 kHz, and tachometer output (2 Pulses / Revolution).
 Optional tachometer output (3 Pulses / Revolution).
- 0 to 10 VDC with a speed control input current of 5 mA to 20 mA at 10 VDC Input with multi-turn potentiometer set to minimum resistance (fully clockwise).

Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing. 4-20mA speed control available.

- · Approximate Weight: 9.3 Lbs. / 4.2 Kg.
- Option Card available for Customization
- Regulatory Agency Certification: Underwriters Laboratories Inc. UL507 Recognized under File E94403 and CSA C22.2#133 under File LR43448
- Design Features: Designed to provide variable airflow for low NOX & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower bouring assembly constructed for a cast aluminum in peller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower bouring assembly cast for combution applications. Cuttomers is respectively to check for any lockage area the blower is installed into the final sector.
- motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- Miscellaneous: Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
- POWER CONNECTION (3 CAVITY): Blower connector, AMP Universal MATE-N-LOK, part no. 1-480701-0.
- **POWER CONNECTION (5 CAVITY):** Blower connector, AMP Universal MATE-N-LOK, part no. 350810-1.
- SPEED CONNECTION (5 CAVITY): Blower connector, Molex Mini-Fit Jr., part no. 39-01-4057.
- Mating harnesses available upon request.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products.





High Voltage Brushless DC Blowers

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

Nautilair

240 Volt AC Input, Single Phase, High Output

Typical Performance



Flow (m³/hr)

Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft³ (29.92" Hg, Sea Level, 68° F) Vacuum performance available upon request.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.





GBR89 HA tested at full voltage with 8 feet of 4" inlet (Blue Lines) and 6" Inlet (Green lines) Maximum airflow with no exhaust piping and 8' of 6" piping is 529 CFM

GBR89 MA tested with speed control set to half the wattage consumption (Red Line)





The World's Leading Radon Fan Manufacturer



HS Series Installation & Operating Instructions

RadonAway

3 Saber Way | Ward Hill, MA 01835 www.radonaway.com



RadonAway Ward Hill, MA. HS Series Fan Installation & Operating Instructions <u>Please Read and Save These Instructions.</u>

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

- **1. WARNING!** Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible or flammable materials.
- 2. WARNING! Do not use fan to pump explosive or corrosive gases. See Vapor Intrusion Application Note #AN001 for important information on VI applications. <u>RadonAway.com/vapor-intrusion</u>
- 3. WARNING! Check voltage at the fan to insure it corresponds with nameplate.
- **4. WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
- 5. NOTICE! There are no user serviceable parts located inside the fan unit. Do NOT attempt to open. Return unit to the factory for service.
- **6.** All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.
- 7. **WARNING!** In the event that the fan is immersed in water, return unit to factory for service before operating.
- 8. **WARNING!** Do not twist or torque fan inlet or outlet piping as Leakage may result.
- 9. **WARNING!** Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.
- 10. **WARNING!** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.



INSTALLATION & OPERATING INSTRUCTIONS (Rev K) for High Suction Series HS2000 p/n 23004-1 HS3000 p/n 23004-2 HS5000 p/n 23004-3

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The HS Series Fan is intended for use by trained, certified/licensed, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of the HS Series Fan. This instruction should be considered as a supplement to EPA/Radon Industry standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The HS Series Fan is designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the HS Series Fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F. The HS Series Fan is thermally protected such that it will shut off when the internal temperature is above 104 degrees F. Thus if the HS Series Fan is idle in an area where the ambient temperature exceeds this shut off, it will not restart until the internal temperature falls below 104 degrees F.

1.3 ACOUSTICS

The HS Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. There are, however, some considerations to be taken into account in the system design and installation. When installing the HS Series Fan above sleeping areas, select a location for mounting which is as far away as possible from those areas. Avoid mounting near doors, fold-down stairs or other uninsulated structures which may transmit sound. Insure a solid mounting for the HS Series Fan to avoid structure-borne vibration or noise.

The velocity of the outgoing air must also be considered in the overall system design. With small diameter piping, the "rushing" sound of the outlet air can be disturbing. The system design should incorporate a means to slow and quiet the outlet air. The use of the RadonAway Exhaust Muffler, p/n 24002, is strongly recommended.

1.4 GROUND WATER

Under no circumstances should water be allowed to be drawn into the inlet of the HS Series Fan as this may result in damage to the unit. The HS Series Fan should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the HS Series Fan with water in installations with occasional high water tables.

In the event that a temporary high water table results in water at or above slab level, water will be drawn into the riser pipes thus blocking air flow to the HS Series Fan. The lack of cooling air will result in the HS Series Fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the HS Series Fan be disconnected until the water recedes allowing for return to normal operation.

1.5 CONDENSATION & DRAINAGE

(WARNING!: Failure to provide adequate drainage for condensation can result in system failure and damage the HS Series Fan).

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation.

The use of small diameter piping in a system increases the speed at which the air moves. The speed of the air can pull water uphill and at sufficient velocity it can actually move water vertically up the side walls of the pipe. This has the potential of creating a problem in the negative pressure (inlet) side piping. For HS Series Fan inlet piping, the following table provides the minimum recommended pipe diameters as well as minimum pitch under several system conditions. Use this chart to size piping for a system.

Pipe	Minimu	m Rise per Foo	t of Run*		
Diam.					
	@ 25 CFM	@ 50 CFM	@ 100 CFM		Rise
4"	1/32 "	3/32 "	3/8 "		
3"	1/8 "	3/8 "	1 1/2 "	Run	

*Typical operational flow rates:

HS3000, or HS5000	20 - 40 CFM
HS2000	50 - 90 CFM

All exhaust piping should be 2" PVC.

1.6 SYSTEM MONITOR AND LABEL

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A Magnehelic pressure gauge is recommended for this purpose. The indicator should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the gauge with water in installations with occasional high water tables. A System Label (P/N 15022) with instructions for contacting the installing contractor for service and also identifying the necessity for regular radon tests to be conducted by the building occupants, must be conspicuously placed where the occupants frequent and can see the label.

1.7 SLAB COVERAGE

The HS Series Fan can provide coverage of well over 1000 sq. ft. per slab penetration. This will, of course, depend on the sub-slab aggregate in any particular installation and the diagnostic results. In general, sand and gravel are much looser aggregates than dirt and clay. Additional suction points can be added as required. It is recommended that a small pit (2 to 10 gallons in size) be created below the slab at each suction hole.

1.8 ELECTRICAL WIRING

The HS Series Fan plugs into a standard 120V outlet. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.8a ELECTRICAL BOX (optional)

The optional Electrical Box (p/n 20003) provides a weather tight box with switch for outdoor hardwire connection. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.9 SPEED CONTROLS

Electronic speed controls can **NOT** be used on HS Series units.



2.0 INSTALLATION

2.1 MOUNTING

Mount the HS Series Fan to the wall studs, or similar structure, in the selected location with $(4) 1/4" \times 1 1/2"$ lag screws (not provided). Insure the HS Series Fan is both plumb and level.

2.2 DUCTING CONNECTIONS

Make final ducting connection to HS Series Fan with flexible couplings. Insure all connections are tight. Do not twist or torque inlet and outlet piping on HS Series Fan or leaks may result.

2.3 VENT MUFFLER INSTALLATION

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed above the roofline at the end of the vent pipe.

2.5 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

_____ Make final operation checks by verifying all connections are tight and leak-free.

_____ Insure the HS Series Fan and all ducting is secure and vibration-free.

_____ Verify system vacuum pressure with Magnehelic. Insure vacuum pressure is within normal operating range and less than the maximum recommended as shown below:

HS2000	14" WC
HS3000	21" WC
HS5000	40" WC

(Above are based on sea-level operation, at higher altitudes reduce above by about 4% per 1000 Feet.) If these are exceeded, increase number of suction points.

_____ Verify Radon levels by testing to EPA protocol.

PRODUCT SPECIFICATIONS

Model	Maximum	Typical CFM vs Static Suction WC (Recommended Operating Range)				Power* Watts @		
	Static Suction	0"	10"	15"	20"	25"	35"	115 VAC
HS2000	18"	110	72	40	-	-	-	150-270
H\$3000	27"	40	33	30	23	18	_	105-195
HS5000	50"	53	47	42	38	34	24	180-320

*Power consumption varies with actual load conditions

Inlet: 3.0" PVC

Outlet: 2.0" PVC

Mounting: Brackets for vertical mount

Weight: Approximately 18 lbs.

Size: Approximately 15"W x 13"H x 8"D

Minimum recommended inlet ducting (greater diameter may always be used):

HS3000, HS5000 --- 2.0" PVC Pipe

HS2000 --- Main feeder line of 3.0" or greater PVC Pipe

Branch lines (if 3 or more) may be 2.0" PVC Pipe

Outlet ducting: 2.0" PVC

Storage temperature range: 32 - 100 degrees F.

Thermally protected

Locked rotor protection

Internal Condensate Bypass

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the HS Series Fan for shipping damage within 15 days of receipt. Notify **RadonAway® of any damages immediately**. RadonAway® is not responsible for damages incurred during shipping. However, for your benefit, RadonAway® does insure shipments.

There are no user serviceable parts inside the fan. Do not attempt to open. Return unit to factory for service.

Install the HS Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

Provide a copy of this instruction or comparable radon system and testing information to the building occupants after completing system installation.

WARRANTY

RadonAway® warrants that the HS Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of 90 days from the date of purchase (the "Warranty Term").

RadonAway® will replace any Fan which fails due to defects in materials or workmanship during the Warranty Term. The Fan must be returned (at Owner's cost) to the RadonAway® factory. Any Fan returned to the factory will be discarded unless the Owner provides specific instructions along with the Fan when it is returned regardless of whether or not the Fan is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not cover damage in shipment unless the damage is due to the negligence of RadonAway®.

1 YEAR EXTENDED WARRANTY WITH PROFESSIONAL INSTALLATION.

RadonAway® will extend the Warranty Term of the fan to one (1) year from date of purchase or fifteen (15) months from the date of manufacture, whichever is sooner, if the Fan is installed in a professionally designed and professionally installed active soil depressurization system or installed as a replacement fan in a professionally designed and professionally installed active soil depressurization system by a qualified installer. Proof of purchase and/or proof of professional installation may be required for service under this warranty. Outside the Continental United States and Canada the extended Warranty Term is limited to one (1) year from the date of manufacture.

RadonAway® is not responsible for installation, removal or delivery costs associated with this Warranty.

LIMITATION OF WARRANTY

EXCEPT AS STATED ABOVE, THE HS SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs, including insurance, to and from factory.

RadonAway® 3 Saber Way Ward Hill, MA 01835 USA TEL (978) 521-3703 FAX (978) 521-3964 Email to: Returns@RadonAway.com

Record the following information for your records:

Serial No.

Purchase Date

RadonAway

INSTALLATION & OPERATING INSTRUCTIONS Instruction P/N IN015 Rev D FOR THE CHECKPOINT IIa_{TM} P/N 28001-2 RADON SYSTEM ALARM

INSTALLATION INSTRUCTIONS (WALL MOUNTING)

Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. NOTE: The Checkpoint IIa is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.

Drill two 1/4" holes 4" apart horizontally where the unit is to be mounted.

Install the two 1/4" wall anchors provided.

Hang the CHECKPOINT IIa from the two mounting holes located on the mounting bracket. Tighten the mounting screws so the unit

fits snugly and securely against the wall.

Drill a 5/16" hole into the side of the vent pipe about 6" higher than the top of the unit.

Insert the vinyl tubing provided about 1" inside the suction pipe.



Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

CALIBRATION AND OPERATION

The CHECKPOINT IIa is calibrated and sealed at the factory to alarm when the vacuum pressure falls below .25" WC and should not normally require a field calibration.

To verify operation:

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on in about two or three seconds and the green light should go out.

WARRANTY INFORMATION

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective materials and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. All other warranties, expressed or written are not valid. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs to and from factory.

> Manufactured by: RadonAway Ward Hill, MA (978)-521-3703

Bulletin A-27 Magnehelic[®] Differential Pressure Gage

025 (.64) SPACE CREATED BY 3 SPACER PADS WHEN SURFACE MOUNTED. DO NOT OBSTRUCT. (3) 6-32 X 3/16 (4.76) DEEP HOLES EQUALLY SPACED ON A Ø4-1/8 RUBBER PRESSURE RELIEF PLUG WILL UNSEAT ITSELF (104.78) BOLT CIRCLE FOR PANEL MOUNTING PROVIDES PATH FOR RELIEF OF WHEN GAGE IS 1/8 FEMALE NPT OVERPRESSURE. OVERPRESSURIZED 17/32(13.49) IGH PRESSURE CONNECTION /B FEMALE NPT HIGH Ô CONNECTION 1-1/4 1-9/4 (31.75) (44 45) 1/8 FEMALE 0 NPT LOW 04-1/2 PRESSURE 1/2 (12.70) 15/32 1/8 FEMALE NPT 01-3/1 (11,91) OW PRESSU (17.46) (120.65 1-11/16 -(11.11) 17/32 ø4-3/4 (120.65) PANEL CUTOUT 1/8 FEMALE NPT HIGH PRESSUR C CONNECTION O (127) 1-1/4 (44.45)ത 4-47/64 Ø4-1/2 (114.3) 120.27) ø5-1/2 15/32 1/8 FEMALE VPT LOW (11.91)(139.70)(17.46)RESSUR 2-17/32 MOUNTING BING CONNECTION 64_29) -(4.76)

*The blowout plug is not used on models above 180 inches of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm

STANDARD GAGE ACCESSORIES: Two 1/8" NPT plugs for duplicate pressure taps, two 1/8" pipe thread to rubber tubing adapters and three flush mounting adapters with screws,

MP AND HP GAGE ACCESSORIES: Mounting ring and snap ring retainer substituted for 3 adaptors, 1/4" compression fittings replace 1/8" pipe thread to rubber tubing adaptors.

OVERPRESSURE PROTECTION: Standard Magnehelic* Differential Pressure Gages are rated for a maximum pressure of 15 psig and should not be used where that limit could be exceeded. Models employ a rubber plug on the rear which functions as a relief valve by unseating and venting the gage interior when over pressure reaches approximately 25 psig (excludes MP and HP models). To provide a free path for pressure relief, there are four spacer pads which maintain .023" clearance when gage is surface mounted. Do not obstruct the gap created by these pads.

SPECIFICATIONS

Service: Air and non-combustible, compatible gases. (Natural Gas option available.

Wetted Materials: Consult factory.

Housing: Die cast aluminum case and bezel, with acrylic cover. (MP model has polycarbonate cover). Accuracy: ±2% of full scale (±3% on - 0, -100 Pa, -125 Pa, 10MM and ±4% on -00, - 00N, -60 Pa, -6MM ranges), throughout range at 70°F (21.1°C).

Pressure Limits: -20" Hg to 15 psig † (-0.677 bar to 1.034 bar); MP option: 35 psig (2,41 bar), HP option: 80 psig (5.52 bar).

Overpressure: Relief plug opens at approximately 25 psig (1.72 bar), standard gages only. The blowout plug is not used on models above 180 inches of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm. Temperature Limits: 20 to 140°F (-6.67 to 60°C). *Low

temperature models available as special option.

Size: 4" (101,6 mm) diameter dial face,

Mounting Orientation: Diaphragm in vertical position. Consult factory for other position orientations. Process Connections: 1/8" female NPT duplicate high and low pressure taps - one pair side and one pair back. Weight: 1 lb 2 oz (510 g), MP & HP 2 lb 2 oz (963 g). Agency Approvals: RoHS:

+For applications with high cycle rate within gage total pressure rating, next higher rating is recommended. See Medium and High pressure options

Note: May be used with hydrogen when ordering Buna-N diaphragm. Pressure must be less than 35 psl.

INSTALLATION

Select a location free from excessive vibration and where the ambient temperature will not exceed 140°E (60°C); Also, avoid direct sunlight which accelerates discoloration of the clear plastic cover. Sensing lines may be run any necessary distance. Long tubing lengths will not affect accuracy but will increase response time slightly. Do not restrict lines. If pulsating pressures or vibration cause excessive pointer oscillation, consult the factory for ways to provide additional damping.

All standard Magnehelic® Differential Pressure Gages are calibrated with the diaphragm vertical and should be used in that position for maximum accuracy. If gages are to be used in other than vertical position, this should be specified on the order. Many higher range gages will perform within tolerance in other positions with only rezeroing. Low range models of 0.5" w.c. plus 0.25" w.c. and metric equivalents must be used in the vertical position only.

SURFACE MOUNTING



Locate mounting holes, 120° apart on a 4-1/8" dia, circle, Use No. 6-32 machine screws of appropriate length.

FLUSH MOUNTING





ate length, with adapters, firmly secured in place.

PIPE MOUNTING

To mount gage on 1-1/4" - 2" pipe, order optional A-610 pipe mounting kit.

TO ZERO GAGE AFTER INSTALLATION

Set the indicating pointer exactly on the zero mark, using the external zero adjust screw on the cover at the bottom. Note that the zero check or adjustment can only be made with the high and low pressure taps both open to atmosphere.

OPERATION

Positive Pressure: Connect tubing from source of pressure to either of the two high pressure ports. Plug the port not used. Vent one or both low pressure ports to atmosphere.

Negative Pressure: Connect tubing from source of vacuum or negative pressure to either of the two low pressure ports. Plug the port not used. Vent one or both high pressure ports to atmosphere.

Differential Pressure: Connect tubing from the greater of two pressure sources to either high pressure port and the lower to either low pressure port, Plug both unused ports,

When one side of the gage is vented in dirty, dusty atmosphere, we suggest an A-331 Filter Vent Plug be installed in the open port to keep inside of gage clean.

A. For portable use of temporary installation use 1/8" pipe thread to rubber tubing adapter and connect to source of pressure with flexible rubber or vinyl tubing.

B. For permanent installation, 1/4" O.D., or larger, copper or aluminum tubing is recommended.

MAINTENANCE

No lubrication or periodic servicing is required. Keep case exterior and cover clean. Occasionally disconnect pressure lines to vent both sides of gage to atmosphere and re-zero. Optional vent valves should be used in permanent installations. The Series 2000 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping

WARNING

Attempted field repair may void your warranty, Recalibration or repair by the user is not recommended.

TROUBLE SHOOTING TIPS Gage won't indicate or is sluggish.

- Duplicate pressure port not plugged.
- 2 Diaphragm ruptured due to overpressure.
- Fittings or sensing lines blocked, pinched, 3. or leaking.
- Cover loose or "O"ring damaged, missing. 4
- Pressure sensor, (static tips, Pitot tube,
- etc.) improperly located. Ambient temperature too low. For 6.
- operation below 20°F (-7°C), order gage with low temperature, (LT) option.

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Engineering Architecture Environmental

APPENDIX C

Health and Safety Plan (HASP)

Site Health and Safety Plan

Location: 3750 Monroe Avenue Pittsford, New York 14534

Prepared For: 3750 Monroe Avenue Associates c/o Norry Management Corporation 1465 Monroe Avenue Rochester, New York 14618

LaBella Project No. 213131

June 2014

Site Health and Safety Plan

Location:

3750 Monroe Avenue Pittsford, New York 14534

Prepared For:

3750 Monroe Avenue Associates c/o Norry Management Corporation 1465 Monroe Avenue Rochester, New York 14618

LaBella Project No. 213131

June 2014

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Tables

Table 1	Exposure	Limits and	Recognition	Qualities
			0	· ·

SITE HEALTH AND SAFETY PLAN

Project Title:	3750 Monroe Avenue Brownfield Cleanup Program		
Project Number:	213131		
Project Location (Site):	3750 Monroe Avenue, Pittsford, New York 14534		
Environmental Director:	Gregory Senecal, CHMM		
Project Manager:	Dan Noll, P.E.		
Plan Review Date:	June, 6 2014		
Plan Approval Date:	June, 6 2014		
Plan Approved By:	Mr. Richard Rote, CIH		
Site Safety Supervisor:	Steve Rife		
Site Contact:	Kevin Chick		
Safety Director:	Rick Rote, CIH		
Proposed Date(s) of Field Activities:	To Be Determined		
Site Conditions:	9.37 acres; approximately 6.38 of which is utilized as a commercial office building and the remainder of which is utilized as a parking lot		
Site Environmental Information Provided By:	 Phase I Environmental Site Assessment, 3750 Monroe Avenue, Rochester, New York, prepared by Passero Associates, dated September 2004 Phase I Environmental Site Assessment, 3750 Monroe Avenue, Rochester, New York, prepared by LaBella Associates, P.C., dated May 2012 Phase II Environmental Site Assessment, 3750 Monroe Avenue, Rochester, New York, prepared by LaBella Associates, P.C., dated January 2013 Building Pressurization Assessment, 3750 Monroe Avenue, Pittsford, New York, prepared by LaBella Associates, P.C., dated January 2013 Limited Interior Subsurface Evaluation, 3750 Monroe Avenue, Pittsford, New York, prepared by LaBella Associates, P.C., dated July 2013 		

Air Monitoring Provided By: LaBella Associates, P.C.

Site Control Provided By:

Contractor(s)

EMERGENCY CONTACTS

	Name	Phone Number
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	Strong Memorial Hospital	585-275-2100
Poison Control Center:	Finger Lakes Poison Control	716-275-5151
Police (local, state):	Monroe County Sheriff	911
Fire Department:	Pittsford Fire Department	911
Site Contact:	Kevin Chick	Cell: 585-303-9543
Agency Contact:	NYSDEC – Frank Sowers NYSDOH – Bridget Callahan Finger Lakes Poison Control MCDOH – John Frazer	585-226-5357 518-402-7860 1-800-222-1222 585-274-6904
Environmental Director:	Greg Senecal, CHMM	Direct: 585-295-6243 Cell: 585-752-6480
Project Manager:	Dan Noll, P.E.	Direct: 585-295-6611 Cell: 585-301-8458
Site Safety Supervisor:	Steve Rife	Cell: 585-755-9244
Safety Director	Rick Rote, CIH	Direct: 585-295-6241

MAP AND DIRECTIONS TO THE MEDICAL FACILITY - STONG MEMORIAL HOSPITAL

Total Est. Time: 15 minutes Total Est. Distance: 6.0 miles

1:	Start out going NORTHWEST on MONROE AVE / NY-31 toward BRITTANY LN.	2.9 miles
2:	Turn LEFT onto ELMWOOD AVE	3.0 miles
3:	Turn LEFT onto THOMAS H. JACKSON DR.	0.1 miles
4:	End at 601 Elmwood Ave	

Rochester, NY 14642



1.0 Introduction

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered during the Remedial Investigation (RI) at 3750 Monroe Avenue in the Town/Village of Pittsford, Monroe County, New York (Site). This HASP only reflects the policies of LaBella Associates P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work site. This document's project specifications, and the Community Air Monitoring Plan (CAMP), are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or other regulatory bodies.

2.0 Responsibilities

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

3.0 Activities Covered

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

- □ Management of environmental investigation and remediation activities
- Environmental Monitoring
- Collection of samples
- □ Management of excavated soil and fill

4.0 Work Area Access and Site Control

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

5.0 Potential Health and Safety Hazards

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

5.1 Hazards Due to Heavy Machinery

Potential Hazard:

Heavy machinery including trucks, excavators, backhoes, etc will be in operation at the site. The presence of such equipment presents the danger of being struck or crushed. Use caution when working near heavy machinery.

Protective Action:

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

5.2 Excavation Hazards

Potential Hazard:

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

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

Protective Action:

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

Personnel should exercise caution near all excavations at the site as it is expected that excavation sidewalls will be unstable. Do not proceed closer than 3 feet to an unsupported or non-sloped excavation side wall.

Fencing and/or barriers accompanied by "no trespassing" signs should be placed around all excavations when left open for any period of time when work is not being conducted.

5.3 Cuts, Punctures and Other Injuries

Potential Hazard:

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

Protective Action:

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



5.4 Injury Due to Exposure of Chemical Hazards

Potential Hazards:

Contaminants identified in testing locations at the Site include various chlorinated solvents including but not limited to trichloroethylene (TCE) and methylene chloride and some metals have also been identified. Volatile organic vapors, chlorinated solvents or other chemicals may be encountered during excavation activities at the project work site. Inhalation of high concentrations of volatile organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis. It should also be noted that historic information (waste manifests) from previous Site operations indicated these chemicals being disposed of from the Site: 1,1,1-trochloroethane, ethanol, tetrachloroethene (PCE), isopropyl alcohol, propylene glycol, methyl ether, waste polychlorinated biphenyl-containing (PCBs) transformer oil, waste paint related material (methylene phosphoric acid), potassium hydroxide ethanol, isopropyl alcohol, waste coal tar pitch, naphthalene, and methylene phosphoric acid.

Protective Action:

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

5.5 Injuries due to extreme hot or cold weather conditions

Potential Hazards:

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

Protective Action:

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

6.0 Work Zones

In the event that conditions warrant establishing various work zones (i.e., based on hazards - Section 5.4), the following work zones should be established:

Exclusion Zone (EZ):

The EZ will be established in the immediate vicinity and adjacent downwind direction of site activities that elevate breathing zone VOC concentrations to unacceptable levels based on field screening. These site activities include contaminated soil excavation and soil sampling activities.



If access to the site is required to accommodate non-project related personnel then an EZ will be established by constructing a barrier around the work area (yellow caution tape and/or construction fencing). The EZ barrier shall encompass the work area and any equipment staging/soil staging areas necessary to perform the associated work. The contractor(s) will be responsible for establishing the EZ and limiting access to approved personnel. Depending on the condition for establishing the EZ, access to the EZ may require adequate PPE (e.g., Level C).

Contaminant Reduction Zone (CRZ):

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

7.0 Decontamination Procedures

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

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

8.0 Personal Protective Equipment

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

Level D:

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

Level C:

Level D PPE and full or ¹/₂-face respirator and tyvek suit (if necessary). [*Note: Organic vapor cartridges are to be changed after each 8-hours of use or more frequently.*]

9.0 Air Monitoring

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

The Air Monitor will utilize a photoionization detector (PID) to screen the ambient air in the work areas (excavation, soil staging, and soil grading areas) for total Volatile Organic Compounds (VOCs) and a



DustTrak tm Model 8520 aerosol monitor or equivalent for measuring particulates. Work area ambient air will generally be monitored in the work area and downwind of the work area. Air monitoring of the work areas and downwind of the work areas will be performed at least every 60 minutes using a PID and the DustTrak meter.

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

If downwind PID measurements reach or exceed 25 ppm consistently for a 5 minute period downwind of the work area, PID readings will be taken within the buildings (if occupied) on Site to ensure that the vapors are not penetrating any occupied building and effecting the personnel working within. If the PID measurements reach or exceed 25 ppm within the nearby buildings, the personnel should be evacuated via a route in which they would not encounter the work area. The building should then be ventilated until the PID measurements within the building are at or below background levels.

10.0 Emergency Action Plan

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

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

11.0 Medical Surveillance

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

12.0 Employee Training

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

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

J:\Norry Management Corp\213131 - BCP Application 3750 Monroe Ave\Reports\HASP
Table 1 **Exposure Limits and Recognition Qualities**

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

(a)

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

Upper Exposure Limit (%) Immediately Dangerous to Life or Health Level: NIOSH Guide, June 1990.

Notes:

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



Engineering Architecture Environmental

APPENDIX D

Community Air Monitoring Plan (CAMP)

APPENDIX 1A

New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.



Engineering Architecture Environmental

APPENDIX E

Site Management Forms

LABELLA	SUB-SLAB DEPRESSURIZATION SYSTEM INSPECTION FORM Project Name: NYSDEC BCP Site No. C828187	
Associates, P.C.	Location: 3750 Monroe Avenue, Pittsford (T), New York	
300 State Street	LaBella Project No.: 213131	
Rochester, New York 14614	Inspected By:	
Phone: (585) 454-6110	Date of Inspection:	
Fax: (585) 454-3066	Weather Conditions:	
INSPECTION FINDINGS:		

Sub-Slab Depressurization System - Fan #1:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

Sub-Slab Depressurization System - Fan #2:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

Sub-Slab Depressurization System - Fan #3:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Alarm Check -	Alarm Sounded?	Alarm Failed?
·		

Sub-Slab Depressurization System - Fan #4:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

Summary of Green Remediation Metrics for Site Management

Site Name:		_Site Code:
Address:		_City:
State:	Zip Code:	County:

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

Current Reporting Period

Reporting Period From: ______To: _____

Contact Information

Preparer's Name:	Phone No.:
Preparer's Affiliation:	

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

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

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

II. Solid Waste Generation: Quantify the management of solid waste generated onsite.

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

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

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

	Current Reporting Period (miles)	Total t (miles)	o Da	ate
Standby Engineer/Contractor				
Laboratory Courier/Delivery Service				
Waste Removal/Hauling				

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

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

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

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

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

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

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

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

CERTIFICATION BY CONTRAC	TOR								
I,	(Name)	do	hereby	certify	that	Ι	am		
(Title) of	the Compa	any/Co	orporation	herein	referen	ced	and		
contractor for the work described in the	he foregoing	g appli	ication fo	r paymei	nt. Acco	ordir	ig to		
my knowledge and belief, all items and amounts shown on the face of this application for									
payment are correct, all work has	been perf	ormed	and/or	material	s suppl	ied,	the		
foregoing is a true and correct stateme	ent of the co	ontrac	t account	up to an	d includ	ling	that		
last day of the period covered by this a	application.								

Date

Contractor