INTERIM REMEDIAL MEASURES WORK PLAN FOR MITIGATION OF POTENTIAL SOIL VAPOR INTRUSION

FORMER PARKWAY CLEANERS
EASTERN BOULEVARD
PARKWAY PLAZA
CITY OF CANANDAIGUA, ONTARIO COUNTY, NEW YORK
BCP SITE NUMBER: C835028

Prepared For: Park Grove Realty LLC
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Rochester, New York 14607

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Project No.: 5188R-15

Date: February 5, 2019

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I, Nathan E. Simon certify that I am currently a NYS registered professional engineer and that this Interim Remedial Measures Work Plan for Mitigation of Potential Soil Vapor Intrusion was prepared in accordance with applicable statutes and regulations and in substantial conformance with DER Technical Guidance for Site Investigation and Remediation (DER-10).

Nathan E Simon, P.E.
NYS P.E. License #087172
Project Engineer
Day Engineering, P.C.
February 5, 2019

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1.0 INTRODUCTION

This Interim Remedial Measures (IRM) Work Plan prepared by Day Engineering, P.C. (DAY) describes measures proposed to mitigate potential vapor intrusion into the building located at the former Parkway Cleaners site, a 0.2-acre portion of the 12.78-acre Parkway Plaza, which is located on the south side of Routes 5 & 20 (85 Eastern Boulevard) in the City of Canandaigua, Ontario County, New York (hereinafter referred to as the "Site"). The Site was evaluated and some remediation was completed under the Voluntary Cleanup Program (VCP Site No. 00238-8). On September 26, 2018, the Site was transitioned into the Brownfield Cleanup Program (BCP Site No. C835028)**.** A Project Locus map is included as Figure 1 and a Site Plan is included as Figure 2.

The former Parkway Cleaners operated in a tenant space within the Parkway Plaza between about 1968 and 1991. The tenant space that was occupied by the former Parkway Cleaners is currently vacant, but it most-recently contained a coin-operated laundromat (i.e., Parkway Laundry). It is anticipated that this tenant space will resume use for commercial purposes (i.e., likely a laundromat) in the near future and remain a commercial property for the foreseeable future.

The Site is bound to the north by the Parkway Plaza parking lot with Eastern Boulevard (New York State Routes 5 & 20) and commercial property beyond. The property to the south of the Site was formerly occupied by a mobile home park until 2008 when it was re-developed as a multi-tenant residential/commercial property under the BCP. The Site is bound to the east by Parkway Plaza, to the west by commercial property. The tenant spaces immediately to the east and west of the former Parkway Cleaners tenant space are currently occupied by Sakura (Japanese Restaurant) and The Great Wall Restaurant, respectively.

1.1 Background

The Parkway Plaza commercial development, which includes, but is not limited to the Site, was originally constructed in approximately 1957. Prior to construction of Parkway Plaza, the property consisted of vacant undeveloped land. Reportedly, dry cleaning was conducted on-site between about the 1960's and 1991. A Phase I Environmental Site Assessment (ESA) report prepared by IVI Environmental Inc. in 1998 indicates that perchloroethene (a/k/a tetrachloroethene, or PCE) was used as a dry cleaning solvent at this location until approximately 1991. The PCE used at the Site was stored in an approximate 100-gallon aboveground storage tank (AST), which was mounted on the roof of the former Parkway Cleaners building. This AST was removed as part of an Interim Remedial Measure (IRM) conducted in 2001 as part of the the VCP.

As part of the work completed under the VCP, a vapor mitigation system was installed within the 'alcove portion' of the former Parkway Cleaners building in 2004 (refer to Section 1.2). With the exception of a short period of time in 2014 when the alcove was demolished and the vapor mitigation system was temporarily shut down, this system operated continuously since its

installation. As described in Section 1.3, while the 'alcove' vapor mitigation system was operational, sub-slab and indoor air samples were collected from locations within the former Parkway Cleaners tenant space and the adjacent tenant spaces located to the east and the west (i.e., currently occupied by Sakura and The Great Wall Restaurant) in 2007. These samples were collected in accordance with the provisions outlined in the document titled *Vapor Intrusion Evaluation Work Plan, Former Parkway Cleaners, Parkway Plaza, Canandaigua, New York, NYSDEC Site #00238-8* dated January 30, 2007 prepared by Day Environmental, Inc. and approved by the NYSDEC and New York State Department of Health (NYSDOH). The samples collected were tested for VOCs [including the contaminants of concern identified for the Site, which include PCE and trichloroethene (TCE), and their breakdown products cis-1,2-dichloroethene (DCE) and vinyl chloride (VC)]. The results did not identify concentrations that exceeded air guidance values established by the NYSDOH for VOCs including TCE and PCE.

Following the demolition of the alcove, soil and groundwater samples were collected from locations within the former footprint of the structure. The results of this testing indicated elevated concentrations of contaminants of concern. Specifically, a maximum PCE concentration of 2,830 parts per million (ppm) and TCE concentration of 38.2 ppm were measured in a soil sample collected from beneath the former alcove. A groundwater sample collected on October 29, 2015 from a monitoring well installed beneath the former alcove contained concentrations of PCE [6,910 parts per billion (ppb)], TCE (3,450 ppb), DCE (6,820 ppb), and VC (610 ppb).

1.2 Existing Vapor Mitigation Controls

The vapor mitigation system installed in 2004 within the former alcove portion of the former Parkway Cleaners building consists of an extraction point placed within a suction void that is connected to a 4-inch diameter PVC riser vent pipe that extends through the concrete floor terminating above the roof line of the current building. The SSDS extraction point in-line fan (i.e., Fantech model FR 160) is rated at approximately 45 cubic feet per minute (CFM) at a static pressure of 2-inches of water column. Post mitigation system testing was conducted in April 2007 as described in the next subsection.

1.3 Previous Vapor Intrusion Testing

On April 5, 2007, three coupled samples (i.e., sub-slab vapor samples designated as SSV-1, SSV-2, SSV-3 and adjacent indoor air samples designated as samples IA-1, IA-2 and IA-3), and one outdoor background (ambient) air sample (designated as sample BG-1) were collected using batch-certified clean, 1-liter Summa® canisters equipped with calibrated regulators. Samples SSV-1 and IA-1 were collected from within the tenant space that was occupied by the former Parkway Cleaners. Samples SSV-2 and IA-2 were collected from the tenant space currently occupied by The Great Wall Restaurant. Samples SSV-3 and IA-3 were collected from the tenant space currently occupied by Sakura. The sub-slab and indoor air sample locations were determined in the field based on a pre-sampling inspection and with the concurrence of the NYSDOH on-site representative. The BG-1 sample location was determined in the field based on prevailing wind

direction (from the west), and with the concurrence of the NYSDOH on-site representative. The above sample locations are shown on Figure 2.

The Summa® canisters used for BG-1, SSV-1, SSV-3, IA-1, IA-2 and IA-3 had four-hour regulators (i.e., the samples were collected over four hours) and the Summa® canister used for SSV-2 had a two-hour regulator (i.e., the sample was collected over two hours). Airflow into the canisters was monitored throughout the test, and the flow rate did not exceed 0.2 liters per minute.

The samples collected were submitted to a NYSDOH Environmental Laboratory Approval Program (ELAP) certified analytical laboratory under chain-of-custody control for testing of TO-15 list VOCs. Detectable concentrations of PCE (i.e., ranging between 3.85 ug/m^3 and 47.7 ug/m^3) were reported in the sub-slab samples tested, and the sample from the sub-slab beneath the Parkway Laundry (i.e., sample SSV-1) also contained detectable concentrations of TCE (9.57 ug/m^3), DCE (4.55 ug/m^3) and VC (0.938 ug/m^3). The indoor air samples tested contained detectable concentrations of PCE (i.e., ranging between 1.06 ug/m^3 and 9.39 ug/m^3) and the indoor air sample collected from the Great Wall Restaurant (i.e., sample location IA-2) also contained a detectable concentration of TCE (i.e., 0.253 ug/m^3). The ambient outdoor air (i.e., background sample) did not contain detectable concentrations of contaminants of concern. The concentrations measured in the sub-slab, indoor air and background samples collected on April 5, 2007 are presented in Table 1. [Note: None of the indoor air samples collected on April 5, 2007 contained concentrations of PCE or TCE that exceeded the current air guidance values established by the NYSDOH of 30 ug/m^3 and 2 ug/m^3, respectively.]

To evaluate the 2007 test results and the need for mitigation, the analytical laboratory data were compared to the Soil Vapor/Indoor Air Matrix A (TCE), Soil Vapor/Indoor Air Matrix B (PCE) and Soil Vapor/Indoor Air Matrix C (VC) presented in the NYSDOH document titled *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 as amended by the Soil Vapor Intrusion Updated dated May 2017 (NYSDOH Guidance Document) . The results of this comparison for each of the tenant spaces evaluated are summarized below.

- Former Parkway Cleaners: The TCE concentrations measured indicated that “no further action” was required. The PCE concentrations measured indicate that “monitor” was required. The VC concentrations indicated that “no further action” was required.

- Great Wall Restaurant: The TCE concentrations measured indicated that “no further action” were required. The PCE concentrations measured indicated that “no further action” were required. The VC concentrations indicated that “no further action” was required.

- Sakura Restaurant: TCE was not measured in either the sub-slab or indoor air samples. The PCE concentrations measured indicated that “no further action” was required. The VC concentrations indicated that “no further action” was required.

1.4 Applicable Project Standards, Criteria, Guidance and Reference Documents

The requirements, applicable standards, criteria, guidance and reference documents that will be used for this soil vapor intrusion study of on-site structures are outlined below.

- Guidelines referenced in NYSDEC document titled "DER-10 Technical Guidance for Site Investigation and Remediation", dated May 2010 (DER-10)

- Guidelines referenced in the New York State Department of Health (NYSDOH) document titled *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 (NYSDOH Guidance Document) as amended by the Soil Vapor Intrusion Updates dated May 2017.

- Bureau of Toxic Substance Assessment NYSDOH Tetrachloroethene (PERC) In Indoor and Outdoor Air, September 2013 Fact Sheet (i.e., also included in the Soil Vapor Intrusion Updates dated May 2017).

- Bureau of Toxic Substance Assessment NYSDOH Trichloroethene (TCE) In Indoor and Outdoor Air, August 2015 Fact Sheet (i.e., also included in the Soil Vapor Intrusion Updates dated May 2017).

- Phase I Environmental Site Assessment, dated June 29, 1998 prepared by IVI Environmental, Inc.

- Phase II Environmental Site Assessment, dated August 6, 1998 prepared by IVI Environmental Inc.

- Vapor Intrusion Evaluation Work Plan, Former Parkway Cleaners, Parkway Plaza, Canandaigua, New York, NYSDEC Site #00238-8 dated January 30, 2007 prepared by Day Environmental, Inc.

- Vapor Intrusion Evaluation, Former Parkway Cleaners, Parkway Plaza, Canandaigua, New York, NYSDEC VCP Site #VCP-00238-8, dated May 3, 2007 Prepared by Day Environmental, Inc.

- Remedial Investigation/Recommended Remedial Alternative Report, Former Parkway Cleaners, Eastern Boulevard, Parkway Plaza, City of Canandaigua, Ontario County, New York, NYSDEC Site Number: V00238-8, dated March 2010 (Revised August 2012 and August 2014) prepared by Day Environmental, Inc.

- Health and Safety Plan, Former Parkway Cleaners, Eastern Boulevard, Parkway Plaza, City of Canandaigua, Ontario County, New York, NYSDEC Site Number: V00238-8, dated September 2013.

1.5 Purpose

This Work Plan describes methods proposed to complete additional vapor intrusion evaluation to assess the effectiveness of the existing SSDS installed within the former alcove and to evaluate sub-slab conditions as they relate to SSDS design parameters. The goal of this evaluation is to design and install a SSDS that creates a vacuum under the former Parkway Cleaners floor slab where the potential for soil vapor migration exists. In addition, the SSDS will be designed to provide, to the extent possible, vacuum influence under the slabs of the adjacent spaces located east and west of the former Parkway Cleaners where potential vapor migration may be occurring.

2.0 SCOPE OF WORK

The following scope of work will be completed to evaluate the effectiveness of the existing vapor mitigation controls and to provide design data required to assess construction requirements for a SSDS to be installed within the former Parkway Cleaners tenant space. In addition, measures to assess the effectiveness of this SSDS, in conjunction with the SSDS currently in-place, at addressing vapor intrusion into the former Parkway Cleaners tenant space and the tenant spaces currently occupied by The Great Wall Restaurant and Sakura are also discussed in this section.

2.1 Pre-Design Evaluation

DAY will obtain and review available building drawings (if any) for information pertaining to underground utilities, drainage systems, foundation systems, and other documentation deemed potentially relevant to the assessment of sub-slab soil vapor conditions. Subsequently, DAY representatives will visit the Site to complete the following tasks.

- The interior and exterior portions of the former Parkway Cleaners tenant space and the adjacent tenant spaces to the east and west (i.e., currently occupied by Sakura and The Great Wall Restaurant, respectively) will be visually observed to assess/document the area, finished ceiling details (i.e., drop ceiling, tiles, etc.) and location and condition of floor sumps, floor drains and other penetrations (including evidence of historic penetrations [i.e., potential subsurface entry points], which may include former locations of equipment, new or patched concrete, bolts or piping/conduit extending through the concrete, etc.); the condition of the floor slab and walls (including floor cracks, floor-to-wall interfaces, and wall penetrations); concrete floor expansion joints; and, other features that could potentially contribute to soil vapor intrusion into the building. In conjunction with this work, a photoionization detector (PID) capable of detecting VOCs in the ppb range (i.e., a ppbRAE meter) will be used to screen the indoor air space to establish background conditions. The PID will also be used to screen the air space above/within floor sumps, floor drains, penetrations, and other features that could contribute to vapor intrusion that are identified during the site visit. PID readings measured in excess of background conditions will be identified as potential vapor intrusion pathways.

- The current system will be evaluated. This will include a visual inspection and ppbRAE screening over the entire length of the above grade piping. Identified air leaks will be repaired and the leak area retested to verify that the repair was successful. Repairs may include the installation of a new discharge pipe and relocating the in-line fan, sealing of penetrations, replacing the ducting with new material, etc.

- DAY will evaluate the influence of the existing SSDS operating within the former alcove. This will include drilling small holes (1/4 to 1/2 inch in diameter) through the floor at select locations within the former Parkway Cleaners tenant space at varying distances

from the extraction point within the former alcove to serve as vacuum test points. It is anticipated that a minimum of 4 vacuum test points will be installed, with additional points being completed to the extent practical to delineate the vacuum field equal to, or greater than, 0.002 inches of water. A vacuum gauge will be used to measure vacuum pressure at the extraction point, and a TSI 9565 VelociCalc multi-function air velocity meter, or similar, will be used to measure air flow/velocity from the extraction point and differential (vacuum) pressure at the vacuum monitoring points. Once the radius of influence for the existing SSDS point is determined, additional suction points may be installed within the former Parkway Cleaners tenant space. It is anticipated that additional air communication testing and sub-slab characterization will be completed as necessary within the former Parkway Cleaners tenant space and possibly the tenant spaces to the east and west (i.e., currently occupied by Sakura and The Great Wall Restaurant, respectively) to collect data required to design the SSDS. This will include establishing one or more test suction points and measuring the influence of an applied vacuum to the test suction point(s) at varying distances and directions from the test suction point. The intent of this study will be to characterize the sub-slab conditions as they relate to vacuum and air flow. Refer to Figure 3 for the tentative locations of the test suction and vacuum monitoring points.

The proposed vacuum monitoring activities do not require disturbance of subsurface soils beyond de-minimis amounts, and thus exposure concerns are limited to possible adverse impacts upon indoor air quality. These potential impacts will be mitigated as follows:

- Drilling activities: Vacuum filed test point holes will be covered and sealed air-tight with duct tape immediately following drilling penetration through the concrete slab, and will remain covered and sealed except as necessary for testing purposes.

- Closure: Once the vacuum field testing activities are completed, the test point holes will be filled and sealed. It is anticipated that the majority of these test points will not be used again following completion of the testing activities, and these holes will be permanently sealed with non-shrink mortar or grout. Select locations that may potentially be used again as a part of the final SSDS re-design will be temporarily sealed (air-tight) with plumbers putty or equal to facilitate future reuse of these holes. If it becomes apparent that select sample locations would be ideal long-term sampling locations, permanent sampling ports may be installed for the purpose of collecting representative sub-slab vapor samples in the future.

2.2 Vapor Mitigation System Design and Installation

Based on the information obtained during the air communication test, a SSDS to be installed in the former Parkway Cleaners tenant space will be designed, and subsequently installed. Currently it is anticipated that each depressurization unit will consist of a sub-slab suction void, large diameter (4-6 inch) smooth walled ducting (with air-tight seal at the slab interface) running from the slab to above the roof, a high-pressure in-line centrifugal fan and a monitoring point in

the ducting between the soil gas extraction points and the in-line fans to be used for monitoring the systems operation. To the extent possible, the SSDS will be designed to provide sub-slab vacuum below the adjacent tenant spaces (The Great Wall Restaurant and Sakura) by the suction point layout and fan selection. In addition, care will taken to:

- Avoid the creation of other health, safety or environmental hazards to building occupants (e.g., backdrafting of natural draft combustion appliances);

- extend the vent pipes at least 12 inches above the roof, 10 ft. above ground level, and at least 10 feet away from any adjoining or adjacent buildings, HVAC intakes, and/or supply registers;

- clearly label the depressurization system to inform future contractors of its function and purpose; and

- install a warning device or indicator to alert building occupants if the system stops working properly (i.e., a liquid gauge manometer).

DAY will complete engineering calculations, specify equipment and materials, and develop/provide schematic construction drawings in electronic (PDF) format. The construction drawings will include details that can be used to procure the necessary equipment and materials, and to construct the SSDS. Equipment and material needs and construction notes shall be specified on the drawing.

2.3 Soil Vapor Intrusion Testing

After the work described in 2.2 is completed, DAY will collect sub-slab vapor and/or indoor air samples and an outdoor air sample for subsequent analytical laboratory testing in accordance with procedures outlined in the NYSDOH Guidance Document to assess the effectiveness of the SSDS currently operating in the former alcove and the SSDS to be installed in the former Parkway Cleaners.

Prior to completing testing, a product inventory will be completed within the former Parkway Cleaners tenant space, and the adjacent tenant spaces to the east and west (currently occupied by Sakura and The Great Wall Restaurant, respectively). This inventory will be completed in general accordance with the NYSDOH guidance document. Specifically, this task will include the completion of the NYSDOH Indoor Air Quality Questionnaire and Building Inventory including a chemical inventory of the indoor areas of the building. A ppbRAE meter will be used to scan chemical containers for volatile emissions. Should materials be identified during the inventory that contain PCE or TCE (or other chlorinated VOCs) that would potentially be detected during testing, they will be removed from the building, to the extent practical, and stored in a secure location during the testing.

Tentative sample locations are indicated on Figure 2 and described in the table below

Sample Designation	Sample Location Description
1	Near the former source area
2	West of the former source area
3	Central portion of former Parkway Cleaners tenant space
4	General Site coverage in the northwest direction of the current Parkway Laundry building; resample previous test location
5	Southern portion of the Great Wall Restaurant
6	Within the tenant space occupied by Sakura (i.e., east of the former source area)
7	Within the tenant space occupied by Sakura (i.e., north of former source area)

The final locations may vary due to factors identified following the completion of the work described in 2.1 and 2.2 including the presence of preferential pathways (i.e., underground utilities, sumps, etc.), tenant equipment, etc. The NYSDEC/NYSDOH will be made aware of the changes to sample location prior to collecting the sample. The final sample locations will be located using a GPS unit with sub-meter accuracy, tape measurements from permanent building features (i.e., support columns, load bearing wall intersections, etc.) or by a licensed surveyor. The sample locations will be located using the coordinate system (i.e., World Geodetic System of 1984 datum (WGS84) or NAD83) and reference datum (i.e., mean sea level) required by EQuIS.

The sub-slab vapor samples will be collected from a temporary probe installed through the slab-on-grade floors and into the subsurface. Specifically, a small diameter hole (approximately 0.25-inches in diameter) will be advanced through the building slab and approximately 2-inches into the subsurface. After drilling through the slab, the slab thickness will be measured and recorded. Thereafter food grade quality tubing (i.e., polyethylene, Teflon, nylon, etc.) slotted at the bottom, will be placed into the hole and extending above the floor surface. The annulus around the slotted tubing will be backfilled with sand and a bentonite seal will be installed above the sand pack extending to the floor surface.

Prior to collecting sub-slab vapor samples, a tracer gas evaluation will be conducted at each sub-slab vapor probe location to serve as a quality assurance/quality control measure verifying the integrity of each soil vapor probe seal. Laboratory grade helium will be used as the tracer gas. The methodology used to conduct the tracer test is described below.

- A helium enriched atmosphere will be created above each sub-slab vapor point.
- The soil vapor probe will be purged by removing one to three sub-slab vapor probe volumes at rate not to exceed 0.2 liters per minute.
- Following purging, the helium enriched atmosphere immediately above and within the sub-slab vapor probe will be measured. Sub-slab vapor probes with a helium

concentration less than 10% of the helium enriched atmosphere will be considered a viable sample location. Sample locations which do not meet the tracer gas criteria will be modified (e.g., re-hydration of seal, additional/alternative sealer, etc.) and re-tested until an acceptable helium tracer test is completed.

Indoor air samples will be collected approximately three to five feet above the floor surface. In locations where sub-slab vapor samples are collected, the indoor air samples will be collected from adjacent locations.

The outdoor air sample will be collected approximately three to five feet above the ground surface from an upwind exterior location, as determined at the time of sample collection. The outdoor air sample will be collected simultaneously with indoor air samples and the sub-slab vapor samples to evaluate the potential influence, if any, of outdoor air on indoor air quality. [Note: If rooftop units that draw fresh air into the building are identified and accessible, the background air sample will be collected from the rooftop unit intake.] To aid in the interpretation of the sampling results, pertinent information that may interfere or affect the sampling event will be documented. Such information may include but, is not limited to, wind direction, the location of potential interferences (e.g., gasoline stations, factories, small engine use, etc.), weather conditions (e.g., precipitation and outdoor temperature), odors, readings from field instrumentation (e.g., PID), and significant activities in the vicinity (e.g., operation of heavy equipment).

Sub-slab vapor, indoor and the outdoor air samples will be collected using laboratory-certified "clean" 6-liter Summa Canisters. The Summa Canister air flow-rate will be controlled with pre-calibrated 8-hr regulators supplied by the laboratory. Vacuum gauges on the regulators will be monitored during sample collection to check for proper operation of the Summa Canister (i.e., slow changes in vacuum), and to verify that the sample collection rate does not exceed 0.2 liters per minute. The vacuum reading will be recorded at the start of the test and monitored throughout the test. Additionally, a PID will be used to screen the air space above the Summa Canisters to establish background conditions prior to sampling and during the sampling event to identify VOC fluctuations that may occur during the sampling interval.

The sub-slab vapor samples and the indoor/outdoor air samples will be submitted under chain-of-custody documentation to a NYSDOH ELAP-certified analytical laboratory for analysis of VOCs via USEPA Method TO-15 using applicable ASP protocol (refer to section 2.4). At the conclusion of the sampling, the tubing associated with the sub-slab vapor probes will be removed and the resulting annulus will be backfilled and capped with concrete.

2.4 Analytical Laboratory Quality Assurance/Quality Control

A NYSDOH ELAP certified laboratory (currently anticipated to be Eurofins Air Toxics in Folsom, California) will be retained to complete the analytical laboratory testing. The analytical laboratory results will be provided in an ASP Category B data package. The analytical laboratory will be requested to meet the minimum reporting limit of 0.25 $\mu g/m^3$ for TCE, carbon tetrachloride, and

vinyl chloride, and 1 µg/m^3 for PCE and the remaining TO-15 list VOCs for the indoor/outdoor air samples. The analytical laboratory will be requested to meet the standard method detection limits for the sub-slab vapor samples. It is anticipated that Vali-Data of WNY, LLC will be retained to complete a DUSR on the Category B deliverables analytical laboratory data generated. The DUSR will be conducted in accordance with the provisions set forth in Appendix 2B of DER-10. The validated analytical laboratory data will be input into EQuIS upon receipt of the DUSR. [Note: Preliminary analytical laboratory results will be submitted to the NYSDEC and NYSDOH in the monthly progress report subsequent to receipt from the laboratory, and review by DAY.]

2.5 Health and Safety

The implementation of this soil vapor intrusion evaluation work plan will follow the site-specific Health and Safety Plan (HASP) and Community Air Monitoring Program (CAMP) dated September 2013. The CAMP will be implemented during intrusive soil vapor intrusion evaluation activities (i.e., during sampling port installation, vacuum monitoring test point installation, etc.). The HASP and CAMP will be reviewed by DAY employees assigned to this project before starting work.

2.6 Deliverables

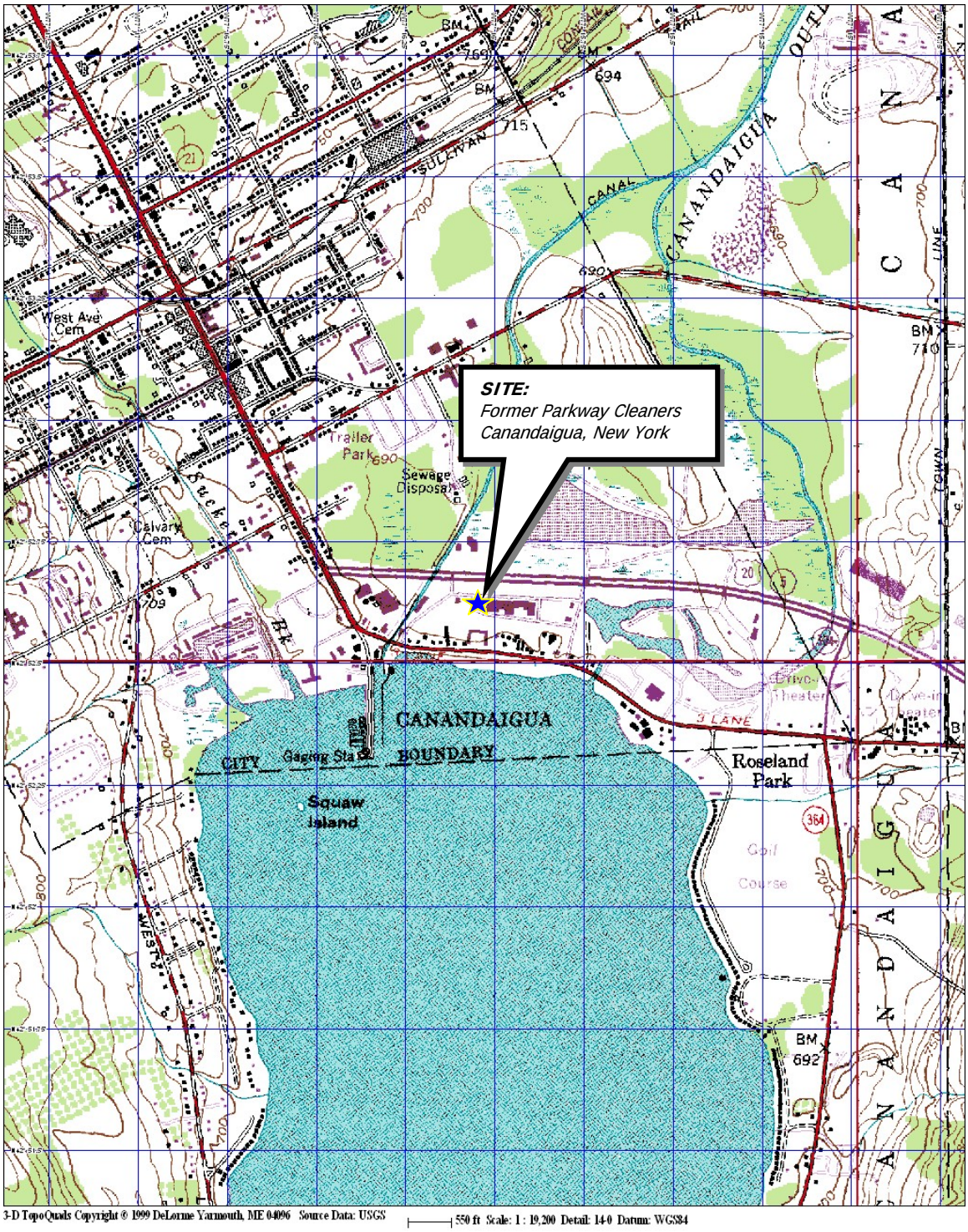
Relative data (e.g., air communication test results, construction progress diagrams, etc.) and laboratory test results will be presented in monthly progress reports. Upon completion of the SSDS in the former Parkway Cleaners tenant space, a Construction Completion Report will be submitted. This report will include a discussion of the installation of the SSDS and confirmatory test procedures and an operation and maintenance plan. In addition the report will include, as-built diagrams, analytical laboratory results and other documentation deemed appropriate.

3.0 SCHEDULE

Refer to Table 2 for a tentative project schedule for this IRM Work Plan. The inspection of existing vapor extraction point will be performed in conjunction with, or prior to, the SSDS vacuum field evaluation to confirm that the vapor extraction point is functioning properly at time of the vacuum field evaluation. Once the complete SSDS is operational, per NYSDOH requirements post-mitigation sampling will be conducted no sooner than 30 days after installing the depressurization system. If post-mitigation testing falls outside of the heating season, post-mitigation sampling may be postponed until the heating season, unless otherwise approved by the Departments. Indoor, outdoor and sub-slab vapor samples will be submitted to the analytical laboratory using standard turn-around (i.e., typically 10 to 15 business days) following sample collection. Unvalidated results will be provided with a monthly project report. A Data Usability Summary Report (DUSR) will be prepared by a third party and will be provided to the Department within 60 days of analytical laboratory results receipt. A draft construction completion report containing the SSDS Operational and Maintenance Plan, will be submitted following receipt of the DUSR.

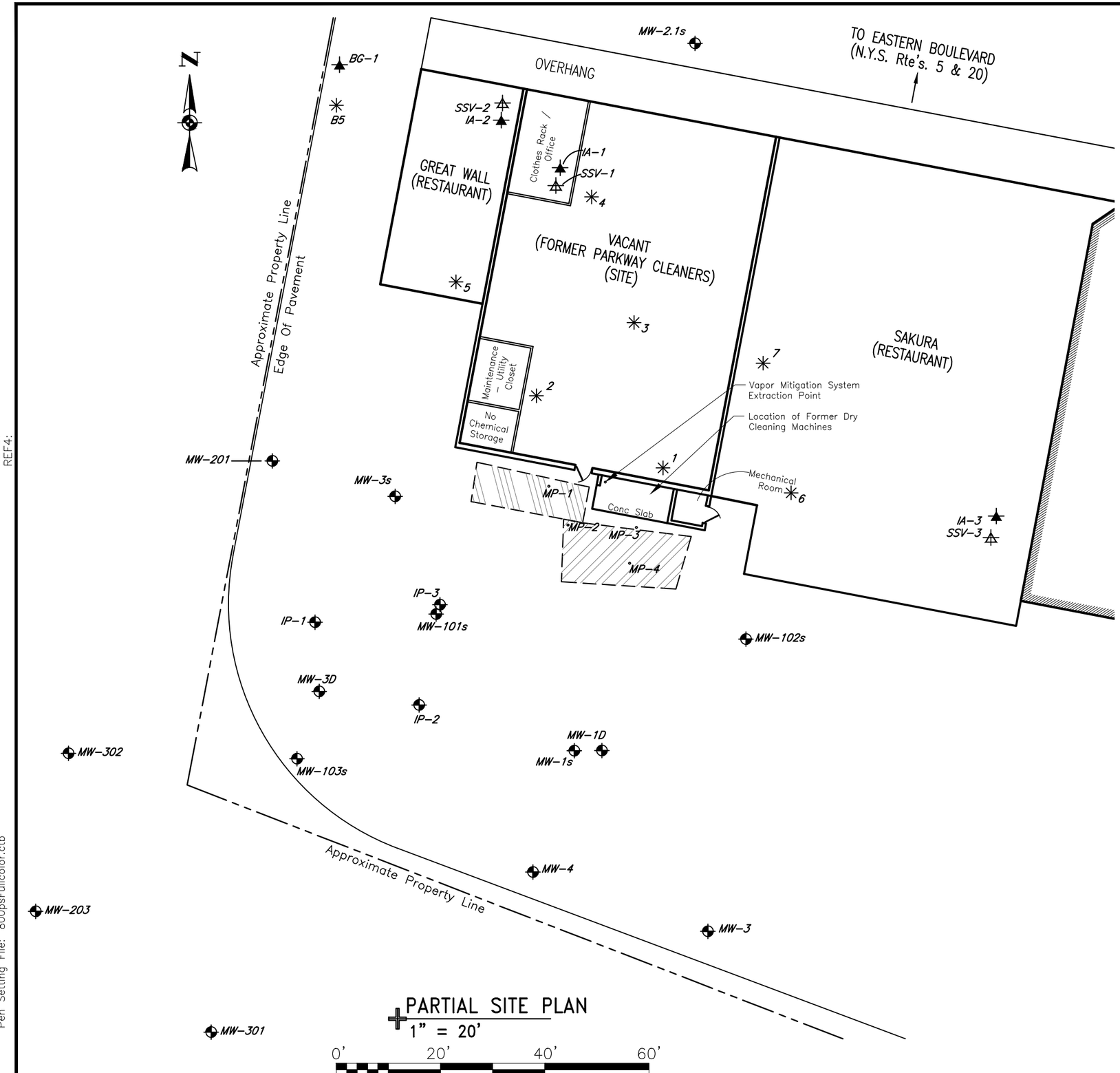
DAY will coordinate and communicate with the NYSDEC and NYSDOH project managers and its staff regarding implementation of the various aspects of this project as work progresses. In the event that data collected during the work described herein indicates that additional work is necessary (i.e., repair/sealing of floor slab and/or utilities, contractor availability, SSDS installation is required in the tenant spaces currently occupied by The Great Wall Restaurant and/or Sakura, etc.), the NYSDEC/NYSDOH will be advised of changes in the deliverables and schedule described above and presented on Table 2.

FIGURES



Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad maps Canandaigua (NY) 1978 and Canandaigua Lake (NY) 1978. Site Lat/Long: N42° 52.6' – W77° 16.0'

DATE **2/4/2019** DRAWN BY **RJM** SCALE **1" = 2000'**	**day** **DAY Engineering, P.C.** ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14614-1008 NEW YORK, NEW YORK 10165-1617	PROJECT TITLE **FORMER PARKWAY CLEANERS** **BCP SITE NO. C835028** **CANANDAIGUA, NEW YORK** DRAWING TITLE **PROJECT LOCUS MAP**	PROJECT NO. **5188R-15** **FIGURE 1**



NOTES:

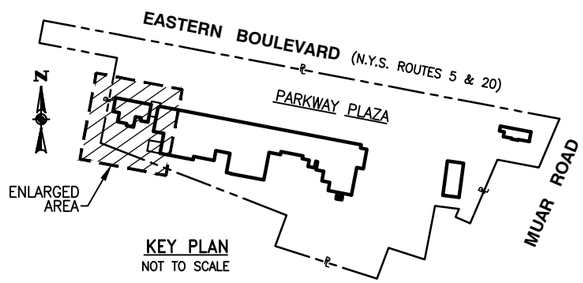
1. Partial Plan Adapted From A Drawing By IVI Environmental, Inc, Entitled "Sample Location Map", Dated August 3, 1998 And By A Site Sketch Made By DAY Environmental, Inc. On November 5 & 6, 1998.
2. Groundwater Monitoring Well/Injection Point Locations Were Tape Measured Or Observed From Existing Site Structures And Should Be Considered Accurate To The Degree Implied By The Method Used.
3. Property Lines Shown Are From A Map Of An Instrument Survey By MRB Group, Entitled "Plan Of Land Owned By Parkway Plaza Limited Partnership In The City Of Canandaigua, Town Of Canandaigua, Ontario County, NY, Boundary Map", Dated June 22, 1988 And last Revised On December 6, 1988.

LEGEND:

MW-1s / MP-3	Groundwater Monitoring Well (MW), Monitoring Point (MP), or Injection Point (IP) Location And Designation
	IRM Soil Removal Area

Sub-Slab, Indoor Air and Background Air Sample, Collected on April 5, 2007

SSV-1	Sub-Slab Vapor Sample Location
IA-1	Indoor Air Sample Location
BG-1	Ambient Air Sample Location
2	Tentative "Confirmatory" Indoor Air or Combined Indoor Air / Sub-Slab Soil Vapor Sample Location
B5	Tentative "Confirmatory" Outdoor Air Sample Location



DATE	2-2019
FIELD VERIFIED BY	RLK
DRAWN BY	RJM/Tw
DATE DRAWN	2-4-2019
SCALE	As Noted
DATE ISSUED	2-4-2019

DAY ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERING CONSULTANTS
ROCHESTER, NEW YORK 14606
NEW YORK, NEW YORK 10170

PROJECT TITLE
FORMER PARKWAY CLEANERS
BCP SITE NO. C835028
CANANDAIGUA, NEW YORK

DRAWING TITLE
Layout Of Former Parkway Cleaners

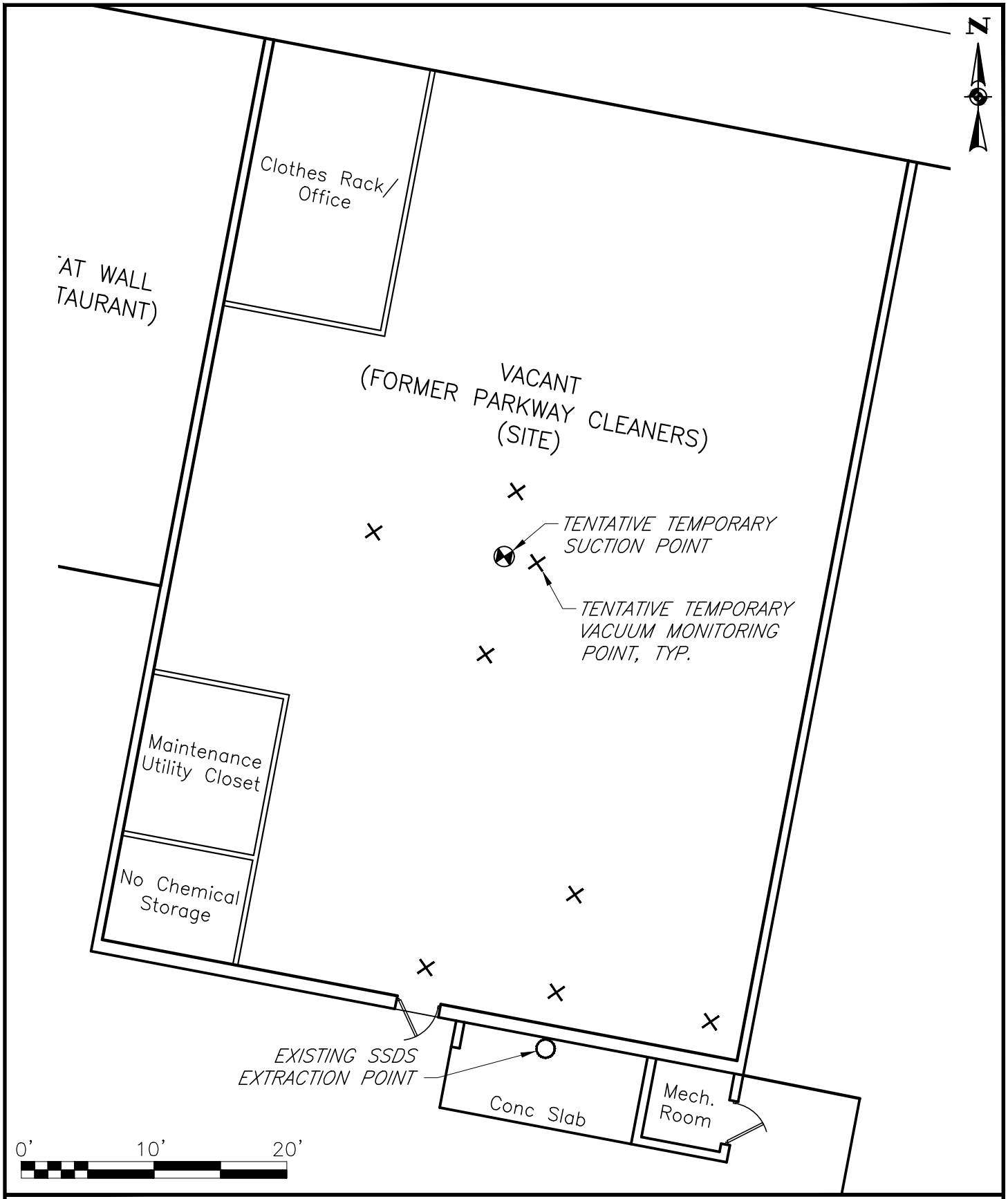
PROJECT NO.
5188R-15

FIGURE 2

Reference Files Attached:
REF1:
REF2:
REF3:
REF4:

File Name: P:\Drawings\Park 5188R-15\5188R-15 Site Plan Base 11-2018.dwg
Layout Name: Day Eng
Time Plotted: Monday, February 04, 2019 10:46:35 AM
Pen Setting File: 800psFullcolor.ctb

ANSI "B" 11x17
DayEng_AnsiB2



DATE: 2-4-2019 DRAWN BY: RJM SCALE: 1" = 10'	DAY ENGINEERING, P.C. ENVIRONMENTAL ENGINEERING CONSULTANTS ROCHESTER, NEW YORK 14606 NEW YORK, NEW YORK 10170	PROJECT TITLE FORMER PARKWAY CLEANERS BCP SITE NO. C835028 CANANDAIGUA, NEW YORK DRAWING TITLE Vacuum Monitoring Point Locations	PROJECT NO. 5188R-15 **FIGURE 3**

TABLES

TABLE 1

PARKWAY PLAZA
CANANDAIGUA, NEW YORK

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCs) IN UG/M^3
VAPOR INTRUSION AIR SAMPLE RESULTS

APRIL 5, 2007

DETECTED VOCs	SAMPLE LOCATION AND DESIGNATION							NYSDOH AIR GUIDELINE VALUES (UG/M^3) (1)
	Laundromat		restaurant		video store		ambient	
	SSV-I	IA-1	SSV-2	IA-2	SSV-3	IA-3	BG-1	Indoor Air
Vinyl chloride	0.938	ND	ND	ND	ND	ND	ND	NV
cis-1,2 Dichloroethene	4.55	ND	ND	ND	ND	ND	ND	NV
Trichloroethene	9.57	ND	ND	0.253	ND	ND	ND	5
Tetrachloroethene	47.7	9.39	3.85	1.11	5.97	1.06	ND	100

Test results for sub-slab vapor samples, indoor air sample, outdoor air sample, and air guideline values reported in ug/m^3

SSV=sub-slab vapor sample
IA=indoor air sample
BG=background (ambient outdoor air sample)

1=Air guidelines value referneced in Table 3.1 of Section 3.2.5 of the NYSDOH document titled "*Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York"*, October 2006

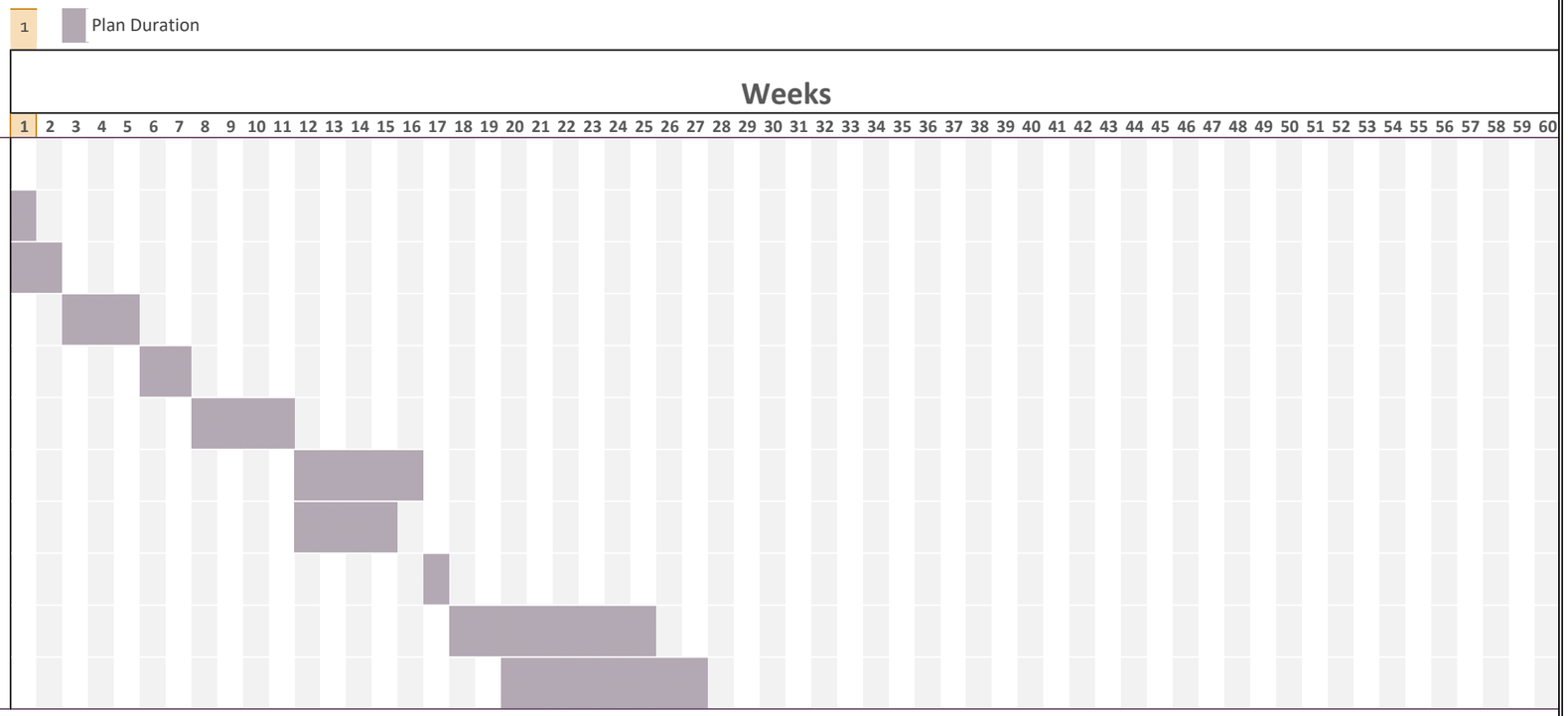
NYSDOH does not have guidelines for sub-slab vapor

ND=Constituent concentration not detected above reported analytical laboratory detection limit; refer to Appendix D for detection limits

NV=No Guideline Value

Table 2
Former Parkway Cleaners
Parkway Plaza
Canandaigua, New York
BCP Site #C835028

Project Schedule - IRM SVI WP



ACTIVITY	PLAN START (Weeks)	PLAN DURATION (Weeks)
Department approval of SVI IRM WP	0	0
Inspection of Existing SSDS Vapor Extraction System and Building condition [1]	1	1
SSDS Vacuum Field Evaluation [2]	1	2
Pre-Design Summary and SSDS Design	3	3
Revise and Finalize SSDS Design Plan [3]	6	2
Order Materials and SSDS Components, Construction of SSDS [4]	8	4
SSDS Startup Period [5]	12	5
Confirm final SVI test point locations with Departments	12	4
Soil Vapor Intrusion Sampling [6]	17	1
Laboratory Testing Data Evaluation, DUSR	18	8
Construction Completion Report with SSDS O&M Plan	20	8

Notes/Assumptions

1 - Significant repairs to concrete floor or sealing of utilities is not necessary

2 - Vacuum field evaluation limited to the former parkway cleaners space

3 - Includes NYSDEC/NYSDOH Review Time

4 - Contractor Availability is immediate

5 - Includes a 30-day operational period in accordance with NYSDOH Guidance Document

6- Assumes all SVI samples are collected concurrently and in a single event