

Remedial Investigation Work Plan

BCP Site #C828192

Location:

1777 East Henrietta Road
Henrietta, New York

Prepared for:

Getinge USA, Inc.
1777 East Henrietta Road
Henrietta, New York 14623

LaBella Project No. 2160339

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1.0 Introduction

LaBella Associates, D.P.C. (LaBella) is pleased to submit this Remedial Investigation Work Plan (RIWP) to conduct additional investigation at 1777 East Henrietta Road, Town of Henrietta, Monroe County, New York, herein after referred to as the “Site.” The Site was entered into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) in June 2016 as Site #C828192. A Site Location Map is included as Figure 1. LaBella is submitting this RI Work Plan on behalf of Getinge USA, Inc. to define the nature and extent of contamination at the Site.

Information gathered from previous investigations has identified the primary contaminant of concern at the Site to be chlorinated volatile organic compounds (VOCs). In addition, limited areas of heavy metal and petroleum-related VOC impacts have been identified at the Site. Implementation of this RIWP will support existing information and fill in data gaps to identify the extent to which remediation is warranted. The activities in this RIWP will be carried out in accordance with the NYSDEC’s Department of Environmental Remedial (DER)-10 (*Technical Guidance for Site Investigation and Remediation*) issued May 3, 2010.

2.0 Site Description and History

2.1 Site Description and Surrounding Properties

The Site boundary, herein after referred to as “the Site”, is comprised of an approximately 34.90± acre tax parcel (SBL 162-10-1-1). Attached Figure 2 illustrates the location and surrounding area of the Site. Current Site features include a primarily metal clad masonry building (“Main Building”) of approximately 259,032 square feet partially utilized for manufacturing and office space as well as a masonry building (“Northern Building”) of approximately 27,700 square feet which is partially utilized for office space. The remaining area of the 34.90 acre property is covered by approximately 230,000 square feet of asphalt parking lots and roadways as well as undeveloped wooded and grassy lands situated primarily on the western portion of the Site. In addition, a stormwater detention pond is located in the northeastern corner of the property which receives a majority of the Site stormwater through storm water collection drains and underground drainage conduits located around the facility. This pond does not continuously hold water.

The Site is bounded by East Henrietta Road to the east, commercial properties to the west and north (various automotive repair facilities, hotels, retail, etc.), one (1) residential property to the west and I-390 to the south.

2.2 Site History

The Site appears to have been historically utilized for agricultural and residential purposes prior to 1955 and industrial purposes from approximately 1955 to present day. Based on the review of historical records, the Site has been utilized for the manufacture and distribution of medical supplies and equipment from at least 1955 to present day. These manufacturing operations reportedly included metal plating (refer to Section 3.0 for additional information).

Based on the review of historical records, the majority of the Main Building was constructed in the 1950's with a small office addition constructed on the northeastern portion of the building in the 1960's. The eastern portion of the Northern Building appears to have been constructed in the 1950's and was reportedly utilized as a wastewater treatment plant from approximately 1955 to approximately 1960, when the Site was connected to the municipal sewer system (refer to Section 3.0 for additional information). The remainder of the current extent of the Northern Building appears to have been constructed in the 1980's.

A hotel has been located east of the Site (beyond East Henrietta Road) since at least 1988. The Interstate Route 390 appears to have been developed in the 1980's and is adjacent to the south of the Site. Material excavated during the construction of the adjacent I-390 on-ramp was reportedly placed on the western portion of the Site at that time (refer to Section 3.0 for additional information). The northern adjacent properties appear to have included a machine drilling company from at least 1960 until at least 1994, Harris Seeds and Plants from at least 1960 until at least 2005, various automobile repair facilities since at least 1966, and a car wash from at least 1976 until at least 1983 and a hotel from approximately 2013 to the present day.

3.0 Previous Investigations

The following environmental reports exist for the Site and were used in developing this RI Work Plan:

- *Phase I Environmental Site Assessment (ESA)*, completed by ENVIRON Corporation, (ENVIRON) April 1996;
- *Limited Phase II ESA*, completed by ENVIRON, April 1996;
- *Phase III ESA*, completed by ENVIRON, May 1996;
- *Detention Pond Investigation*, completed by Stantec, June 2013
- *Phase I ESA*, completed by LaBella Associates, D.P.C. ("LaBella"), February 2014;
- *Phase II ESA*, completed by LaBella, April 2014; and,
- *Supplemental Phase II ESA Interim Data Package*, completed by LaBella, July 2014
- *Supplemental Site Investigation*, completed by LaBella, December 2015

Key findings of the abovementioned reports are summarized as follows. These reports are available upon request.

3.1 Phase I ESA report completed by ENVIRON Corporation dated April 1996

This Phase I ESA identified several potentially significant environmental concerns, as summarized below:

- Environ identified the presence of a plating area from which chlorinated solvents may have been released. *Note: During LaBella's Phase I ESA, facility personnel indicated the former plating area to be located in the north central portion of the Main Building* (refer to Figure 3).
- The presence of a former wastewater treatment system in the Northern Building which reportedly treated wastewater from the facility from 1955 until 1960. Due to plating and degreasing operations completed in the Main Building, Environ identified the potential for chlorinated solvents to have been discharged to the treatment system and potentially to the Site subsurface.

- Secondary containment was recommended by Environ for an exterior hazardous waste storage area proximate the north/ northwestern exterior of the Main Building.
- Facility personnel reported historical disposal of plating/finishing sludge at an area now occupied by Interstate 390, to the south of the Site. This material may have been moved to the western portion of the Site when Interstate 390 was constructed. *Note: The 2014 Phase II ESA investigation included multiple investigation points in these areas of the Site which did not identify impacted material (refer to Sections 3.6 and 3.7).*
- Environ identified potential asbestos containing material within buildings at the Site.

Additional noteworthy issues were identified by Environ, as summarized below:

- Two (2) 10,000-gallon underground storage tanks (USTs) used to store fuel oil were removed in 1988. Confirmatory sampling was not conducted and underground piping was reportedly not removed. Based on mapping provided to LaBella by Getinge, these tanks were reportedly located to the southeast of Building 2 (refer to Figure 3).
- Metals in wastewater discharge to the sewer system in 1995 reportedly resulted in exceedances of NYSDEC standards. A cracked tank in the plating operation reportedly resulted in sludge discharge of nitric acid solution to the sewer. Additional information regarding this incident was not available for review by LaBella.

3.2 Phase II ESA report completed by ENVIRON Corporation dated April 1996

This Phase II ESA was conducted to evaluate the four (4) main areas of potential concern from the Phase I ESA conducted by Environ. The following issues were investigated:

- The former use of a wastewater treatment system from 1955 to approximately 1960 which discharged treated wastewater to an on-Site pond. Sludge disposal methods are unknown.
- Completion of degreasing and metal plating/finishing operations at the Site since the mid-1950's.
- Sludge from the plating/finishing operations was potentially discharged to a location currently occupied by Interstate 390 to the south of the Site.
- An outdoor hazardous waste storage facility with no secondary containment proximate the north/ northwestern exterior of the Main Building.

To evaluate the conditions summarized above, Environ's investigation reportedly included collection and analysis of thirteen (13) soil gas samples, seven (7) groundwater samples, and two (2) soil samples from twelve (12) testing locations (identified on Figure 4A as 1 through 9, and 12 through 14).

Soil Gas

The soil gas samples collected from testing location 7 reportedly detected tetrachloroethene (1.97 ppm) in the location of the former wastewater treatment system. In addition, five (5) soil gas samples across the Site detected low levels of methane (testing locations 2, 3, 7, 12 and 13).

Groundwater

Seven (7) groundwater samples were reportedly collected by Environ and analyzed using an on-Site mobile laboratory. Four (4) of these samples were also analyzed at an off-Site (traditional) laboratory. A summary of this groundwater data is included in attached Table 8. Note that this set of groundwater samples differ from the "MW" series of sampling completed by Environ as part of the Phase III ESA

summarized in Section 3.3. VOCs were reportedly detected in groundwater samples collected from testing locations 1, 3, and 7 as described below:

- Trichloroethene (TCE) (930 micrograms per liter (ug/L) or parts per billion (ppb)) and chloroform (58 ppb) were detected in location 1 (within the stormwater pond in the northeastern portion of the Site) analyzed in the mobile on-Site laboratory. In addition, TCE (1,500 ppb) and cis-1,2-dichloroethene (48 ppb) were detected in the groundwater sample collected from location 1 and analyzed in an off-Site laboratory.
- TCE (14 ppb) was detected in the groundwater sample collected from location 7 (west of the Northern Building) analyzed in the mobile on-Site laboratory. In addition, TCE (16 ppb) and cis-1,2-dichloroethene (63 ppb) were detected in testing location 7, analyzed in an off-Site laboratory.
- Acetone (13 ppb) and total xylene (3 ppb) were detected in location 3 (north of the Main Building) analyzed in an off-Site laboratory.

Constituents detected in groundwater samples collected from locations 1 and 7 exceed New York State Department of Environmental Conservation (NYSDEC) Part 703 Groundwater Quality Standards for Class GA waters (“Groundwater Standards”). It should be noted that the Part 703 Groundwater Standard for TCE is 5 ppb. Groundwater data collected during this investigation is summarized in Table 8.

Soil

Soil samples were reportedly collected by Environ from depths of 18-24 inches below ground surface (bgs) from locations 1, 2 and 7. Environ indicates that VOCs were not detected above laboratory MDLs in these samples with the exception of the sample from location 7, in which acetone (21 ppb) and TCE (2 ppb) were detected above laboratory method detection limits (MDLs). However, it should be noted that these concentrations are below New York State Codes, Rules and Regulations (NYCRR) Part 375 6.8(b) Protection of Groundwater Soil Cleanup Objectives (SCOs).

Refer to Figure 4A for approximate locations tested during Environ’s April 1996 Phase II ESA.

3.3 Phase III Environmental Site Assessment report completed by ENVIRON Corporation dated May 1996

Environ conducted a Phase III ESA to further investigate sources, extent, and significance of the groundwater contamination identified in the April 1996 Phase II ESA. The Phase III ESA included the installation of seven (7) overburden groundwater monitoring wells (MW-01 through MW-07), and analysis of seven (7) groundwater samples and three (3) soil samples at various depth intervals from one (1) location. Additionally, static water level measurements were collected to determine groundwater flow direction. Investigation locations from this assessment are depicted on attached Figure 4.

Terminal depths of groundwater monitoring wells reportedly ranged from 15-feet bgs to 33.4-feet bgs. Environ indicated that VOCs were detected in four (4) of the seven (7) groundwater samples analyzed (MW-01, MW-02, MW-05, and MW-07). These VOCs were identified above Groundwater Standards in two (2) wells. Specifically, TCE (860 ppb) and cis-1,2-dichloroethene (13 ppb) were detected above Groundwater Standards in MW-01, installed immediately hydraulically down-gradient of the stormwater pond in the northeastern corner of the property. In addition, TCE (200 ppb) and cis-1,2-dichloroethene (560 ppb) were detected in MW-07 (west of the Northern Building) above Groundwater Standards.

Soil samples were reportedly collected and analyzed for VOCs from MW-7 at three (3) depth intervals; 6.5-7.5-feet bgs, 8-10-feet bgs, and 12-14-feet bgs. Several VOCs (acetone, TCE, methylene chloride, cis-

1,2-dichloroethene, and chloroform) were detected in these samples at levels below NYCRR Part 375-6.8(b) Protection of Groundwater SCOs (Protection of Groundwater SCOs).

Based on modeling completed by Environ, groundwater flow direction was determined to be towards the northeast. Refer to Figure 4A for approximate locations tested during this investigation. The groundwater flow direction modeling completed by Environ is included in Appendix 1. Groundwater data collected during this investigation is summarized in Table 8 and Figure 5A.

3.4 Detention Pond Investigation Report completed by Stantec dated June 13, 2013

This investigation was conducted to evaluate groundwater impacts identified in MW-01 installed during the May 1996 Phase III ESA by Environ. As depicted on Figure 4A, MW-01 was installed on the northern extent of the stormwater pond located on the northeastern portion of the Site. Eight (8) soil borings (B-8 through B-16) were advanced, in which four (4) groundwater monitoring wells (MW-12 through MW-15) were installed on the northeastern portion of the Site (refer to Figure 4A). Fourteen (14) soil and seven (7) groundwater samples were collected for laboratory analysis as part of this assessment. In addition, three (3) surface water samples were reportedly collected proximate inlets in the detention pond for laboratory analysis. A summary of the results of this laboratory analysis is included below.

Soil

The report indicates that twelve (12) soil samples were collected and analyzed for target compound list (TCL) VOCs and/or Resource Conservation and Recovery Act (RCRA) metals. Detections of metals did not exceed Protection of Groundwater or Industrial Use SCOs. One (1) VOC (acetone) was detected in B-8 at 1-1.3-feet bgs at a concentration above Protection of Groundwater SCOs. VOCs did not exceed Protection of Groundwater or Industrial Use SCOs in any other soil samples. TCE was detected above laboratory MDLs in one soil sample (B-8 from 5.5-6-feet bgs); however, the detected concentration is below Protection of Groundwater and Industrial Use SCOs.

Groundwater

As part of this investigation, Stantec sampled wells MW-12 through MW-15 in addition to previously installed well MW-01. These groundwater samples were analyzed for TCL VOCs. VOCs were reportedly detected in three (3) groundwater samples (MW-01, MW-13, and MW-14) above Groundwater Standards. TCE (2,900 ppb), 1,2-dichloroethene (35.9 ppb) and vinyl chloride (2.2 ppb) were detected above Groundwater Standards in MW-01. Slight exceedances of Groundwater Standards were detected in MW-14 and MW-15 which are both down-gradient of the stormwater pond, based on the groundwater flow direction modeling completed by Environ. Groundwater data collected during this investigation is summarized in Table 8 and on Figure 5A.

Surface Water

VOCs were not detected above laboratory MDLs in the three (3) surface water samples collected by Stantec.

It should be noted that the Stantec report mentions that a 6-inch diameter water line which runs south to north between the two (2) Site buildings reportedly ruptured in December 2012 and again in February 2013. Site personnel indicated that sheets of water were observed flowing down the driveway towards East Henrietta Road during these incidents. This water would have flowed into the stormwater drainage system and subsequently the stormwater pond. Stantec indicates that the large volume of water may have flushed contaminants out of the system and/or the stormwater pond basin and into groundwater,

potentially causing the increase in chlorinated VOC (CVOC) concentrations in groundwater in the vicinity of the stormwater pond between 1996 and 2013. LaBella understands that the use of TCE for operational purposes was ceased in the mid-1990's.

3.5 Phase I ESA completed by LaBella dated February 11, 2014

This Phase I ESA identified Recognized Environmental Conditions (RECs) summarized as follows:

- Elevated levels of CVOCs were identified in groundwater on the northeastern portion of the property, apparently associated with the former discharge of wastewater containing these compounds to the stormwater pond in that area of the Site.
- Based on the review of prior investigations and pertinent records, the potential was identified for additional impacts from manufacturing and industrial wastewater treatment, including electroplating and vapor degreasing operations that utilized CVOCs, to exist at the Site. Low-level TCE and cis-1,2-dichloroethene were detected to the west of the Northern Building in Environ's 1996 Phase III investigation.
- An area of soil where industrial process waste was reportedly historically disposed in a former retention pond to the south of the Main Building (refer to Figure 3) was reportedly excavated from the southeastern portion of the Site during construction associated with Interstate 390 in the 1970s. This soil was reportedly relocated to the western portion of the Site where soil is currently mounded. As such, the potential exists for CVOC impacts associated with this material to have been relocated to the western portion of the Site.

In addition, the following Historic REC was identified:

- Two (2) 10,000 gallon fuel oil USTs were identified in the Environ Corporation Phase I ESA proximate the southeastern exterior of the Northern Building (refer to Figure 3). Though the NYSDEC issued a closure letter associated with these USTs, confirmatory soil samples were not collected. As such, LaBella identified the potential for subsurface petroleum impacts in this area of the Site.

3.6 Phase II ESA completed by LaBella dated March 27, 2014

This investigation included the advancement of ten (10) test pits, eleven (11) soil borings, and installation of seven (7) groundwater monitoring wells. This work also included resampling of pre-existing well MW-01, located immediately down-gradient of the stormwater pond on the northeastern portion of the Site. Soil sample data from this investigation are summarized in attached Tables 6 and 7 and Figure 5B. Groundwater data collected during this investigation is summarized in Table 8 and on Figure 5A.

Test Pitting Study

The test pits were excavated in the western portion of the Site to assess for potential impacts associated with the relocation of this soil when Interstate 390 was constructed. Evidence of impairment was not observed in the test pits. Three (3) soil samples collected from the test pits were analyzed for TCL and NYSDEC Commissioner Policy (CP-51) List VOCs. VOCs were not detected above laboratory MDLs in test pit soils.

Soil Boring Program

Nine (9) soil samples collected from soil borings were analyzed for TCL and CP-51 VOCs. In addition, three (3) of these samples were analyzed for target analyte list (TAL) metals. TCE was detected above

laboratory MDLs in soil samples collected within the Main Building in the vicinity of the former plating area. Specifically, TCE concentrations in three (3) of the four (4) interior soil borings (LBA-GP-09 through LBA-GP-11) were detected below Protection of Groundwater, Commercial Use, and Industrial Use SCOs. TCE was detected in LBA-GP-08 above Protection of Groundwater SCOs, but below Commercial and Industrial Use SCOs. No other VOCs were detected above Protection of Groundwater, Commercial Use or Industrial Use SCOs during this Phase II ESA.

In addition, several metals were detected in soil sample LBA-GP-08 (2-ft. to 4-ft. bgs) at elevated concentrations. Specifically, chromium was detected above Protection of Groundwater SCOs, copper above Commercial Use SCOs, and nickel above Commercial Use and Protection of Groundwater SCOs in this sample.

Soil sample data from LaBella's Phase II ESA is included in Tables 6 and 7 and on Figure 5B.

Groundwater Sampling

Seven (7) groundwater samples were collected and analyzed for TCL and CP-51 VOCs. VOCs were detected in LBA-MW-03, LBA-MW-04, LBA-MW-06, and previously installed MW-01 at levels above Groundwater Standards. It should be noted that TCE was detected at 520,000 ppb in LBA-MW-06 which is several orders of magnitude greater than the Groundwater Standard for TCE of 5 ppb. LBA-MW-06 was installed within the Main Building, within the reported former plating area. It should be noted that LBA-MW-06 was resampled in June 2015 as part of LaBella's Supplemental Investigation and TCE was detected at a concentration of 110,000 ppb in groundwater at that time.

Refer to Figure 4A for approximate locations tested during this investigation.

3.7 Interim Supplemental Phase II ESA completed by LaBella, summarized in a letter dated July 22, 2014

Based on the findings of the Phase II ESA conducted by LaBella, supplemental testing was conducted which included coring seventy (70) 0.5-inch diameter holes (P-1 through P-70) through the concrete floor slab in the Main Building and measuring volatilization with a photoionization detector (PID) to evaluate sub-slab vapor. This sub-slab vapor assessment was utilized as a screening tool to identify any additional potential areas of concern within the footprint of the Main Building. In addition, eight (8) soil borings (GP-12 through GP-19) were advanced, five (5) of which were converted to overburden groundwater monitoring wells (MW-08 through MW-12). Soil sample data from LaBella's Supplemental Phase II ESA is included in Tables 6 and 7 and Figure 5B. Groundwater sample data from LaBella's Supplemental Phase II ESA is included in Table 8 and Figure 5A.

Sub-Slab Vapor Assessment

Coreholes were generally advanced in a grid pattern throughout the manufacturing facility of Main Building. Volatilization was measured using a PID capable of reporting in ppb. Screening data obtained from this assessment was utilized to generate total VOC modeling which was used to target subsequent soil boring and groundwater monitoring well locations. Sub-slab PID readings ranged from background (generally less than 1,000 ppb) to approximately 10,000 parts per million (ppm). The highest PID readings were detected in P-4, proximate LBA-GP-15 and LBA-GP-08/LBA-MW-06. It should be noted that this assessment was completed for screening purposes and may not be representative of soil and groundwater conditions.

Soil Boring Study

Based on the findings of the sub-slab vapor assessment, seven (7) soil samples were analyzed for VOCs, two (2) of which detected TCE above Protection of Groundwater SCOs (GP-15 at 9-10-feet bgs and GP-18 at 11-feet bgs). These samples were both collected in the vicinity of the former plating area in the Main Building. However, detections of VOCs did not exceed Commercial Use SCOs. In addition, five (5) soil samples were analyzed for metals, one (1) of which detected cadmium above Protection of Groundwater and Commercial Use SCOs (GP-15 at 1-2-feet bgs).

Groundwater Sampling

Twelve (12) groundwater samples were analyzed for TCL VOCs as part of this assessment. TCE was detected in seven (7) groundwater samples above Groundwater Standards (Stantec MW-01, LBA-MW-06, LBA-MW-08, LBA-MW-09, LBA-MW-10, LBA-MW-11, and LBA-MW-12). It should be noted that VOCs were not detected above Groundwater Standards in LBA-MW-05, which is located to the west of the Northern Building in an area in which low-level VOCs had been identified in groundwater as part of Environ's 1996 investigation. In addition, from 2013 to 2014, the concentration of TCE in MW-01 (near stormwater pond) appears to have decreased from 2,900 ppb to 580 ppb and the concentration of cis-1,2-dichloroethene in MW-01 appears to have decreased from 35.9 ppb to 14 ppb.

It should be noted that in addition to the significant CVOC impacts identified in the vicinity of the former plating area, TCE was also identified above Groundwater Standards in two (2) discrete areas in the southern portion of the Main Building. Specifically, TCE was detected in wells LBA-MW-08 and LBA-MW-09 at concentrations of 20 ppb and 340 ppb, respectively, at that time.

Refer to Figure 4A for approximate locations tested during this investigation (with the exception of the sub-slab vapor screening points).

3.8 Supplemental Site Investigation completed by LaBella dated December 2015

Based on the results of the 2014 Phase II ESA and the 2014 Interim Report of the Supplemental Phase II ESA, Getinge retained LaBella to complete a Supplemental Site Investigation in 2015. This investigation targeted the following known or potential areas of impact identified based on prior investigation work and information obtained from LaBella's Phase I ESA:

- The former plating area located within the footprint of the Main Building, in which elevated levels of CVOCs had previously been identified in soil and groundwater.
- The southwestern portion of the Main Building in which TCE had been detected at a concentration of 340 ppb in well LBA-GP-14/MW-09 during the 2014 Phase II ESA (refer to Figure 5A). This area was targeted during the 2014 Phase II ESA based on the results of the sub-slab vapor screening evaluation. A potential source of these impacts (e.g., known historical use of solvents in this area) has not been identified. The 2015 Supplemental Investigation focused on this area to provide further delineation of impacts.
- The southeastern manufacturing portion of the Main Building in which TCE had been detected at a concentration of 20 ppb in well LBA-GP-12/MW-08 during the 2014 Phase II ESA (refer to Figure 5A). This area was targeted during the 2014 Phase II ESA based on the results of the sub-slab vapor screening evaluation and the reported presence of previously utilized wastewater piping in this area. The 2015 Supplemental Investigation focused on this area to provide further delineation of impacts.

- Two (2) areas immediately south of the Northern Building in which petroleum USTs had previously been utilized (refer to Figures 3 and 4B). These areas had not been previously investigated; however, historical facility mapping was identified immediately prior to the investigation which identified the locations of these USTs. Based on the review of NYSDEC PBS listing #8-001856, the two (2) USTs located to the southeast of the Northern Building previously contained fuel oil and were removed in May 1988. Additional NYSDEC records indicated that these tanks were located in a concrete vault. Additional information regarding these petroleum USTs was not identified.
- The grass area to the west of the stormwater pond and the east of the Northern Building, in which piping reportedly previously transported wastewater from the Northern Building (previously utilized as a wastewater treatment plant for wastewater generated at the Site) to the stormwater pond. This area was targeted to evaluate the potential for previously unidentified impacts which could have been released to this area from the wastewater piping. Additional investigation in the vicinity of the stormwater pond itself was not completed at this time based on the extensive prior investigation work completed in this area.
- An area in the eastern manufacturing portion of the Main Building was identified as a potential area of impact based on the results of the sub-slab vapor screening evaluation completed in 2014. Based on the results of the 2014 vapor screening, one (1) soil boring was completed in this area as part of the 2014 Phase II ESA. Although impacts were not identified in this area, the soil boring met relatively shallow refusal and thus additional investigation was recommended in this area.

In addition to the potential areas of impacts summarized above, it should be noted that low-level chlorinated VOCs (CVOCs) were identified in groundwater in 1996 immediately west of the former wastewater treatment plan. Sand filter beds are reportedly located in this area of the Site and were reportedly utilized during the operation of the on-site wastewater treatment plan between 1955 and approximately 1960. The highest concentration of CVOCs in groundwater in this area of the Site was 560 ppb cis-1,2-dichloroethene (cis-1,2-DCE) and 200 ppb TCE in 1996 in well Environ MW-07 (refer to Table 8 and Figure 5A). This well was resampled in 2013 at which time 10 ppb cis-1,2-DCE and 44 ppb TCE were identified in groundwater. Additional wells installed in this area of the Site in 2014 and 2015 did not identify VOCs at concentrations above Part 703 Groundwater Standards. Based on the relatively high levels of breakdown product (i.e., cis-1,2-DCE) to TCE in 1996, decreased concentrations in 2013 and the lack of exceedences of groundwater standards in 2014 and 2015, additional investigation was not recommended in this area of the Site in 2015.

The Supplemental Investigation consisted of the advancement of twenty-five (25) soil borings, eleven (11) membrane interface probe (MIP) borings, installation of nineteen (19) shallow overburden groundwater monitoring wells, two (2) deep overburden groundwater monitoring wells and laboratory analysis of soil and groundwater samples. The MIP borings were focused in the former plating area to provide better definition of the CVOC plume associated with former plating operations.

Based on the findings of the 2015 Supplemental Investigation, the following conclusions were made:

- Impacts were not identified at the Site with the exception of the former plating area and the stormwater pond. Low level CVOC concentrations previously identified in groundwater in wells LBA-GP-14/MW-09 and LBA-GP-12/MW-08 (i.e., the southern portion of the Main Building) appear to be limited and isolated.

- VOCs were not identified in soil at concentrations above NYCRR Part 375 SCOs for Commercial Use; however, VOCs were identified in soil at concentrations above NYCRR Part 375 SCOs for Unrestricted Use and/or Restricted Residential Use in several soil samples collected in the former plating area.
- Chlorinated VOCs have been identified in the former plating area and the stormwater pond area on the northeastern portion of the Site at concentrations in groundwater which appear to require remediation. The highest TCE concentration detected in groundwater in the former plating area was 520,000 ppb (well LBA-MW-06 in March 2014) while the highest TCE concentration detected in groundwater in the vicinity of the stormwater pond was 2,900 ppb (well MW-01 in May 2013). It should be noted that the most recent sampling of both LBA-MW-06 and MW-01 identified total VOC concentrations of 110,000 ppb (June 2015) and 580 ppb (March 2014), respectively.
- Results of the MIP study confirmed analytical data collected at the Site and further delineated the vertical extent of VOCs in the former plating area. The worst case impacts appear to be located generally from 10-ft to 20-ft bgs within this area. The decrease in VOC impacts between 20 to 25-ft. bgs may be associated with the top of a dense glacial till layer encountered at this depth in several borings in this area.
- SVOCs, PCBs and pesticides have not been identified in soil samples at concentrations above NYCRR Part 375 SCOs. Calcium and iron were identified at concentrations above their respective NYSDEC CP-51 SSCOs; however, these compounds are relatively immobile in soil and are likely associated with regional background concentrations rather than the result of a release at the Site. In addition, prior subsurface investigations identified select metals at elevated concentrations in shallow soil beneath the concrete floor slab in the former plating area (refer to Sections 3.6 and 3.7).

4.0 Standards, Criteria and Guidelines

This section identifies the Standards, Criteria and Guidelines (SCGs) for the Site. The SCGs identified are used in order to quantify the extent of contamination at the Site that require remedial work based on the cleanup goal. The SCGs to be utilized as part of the implementation of this RI Work Plan are identified below:

Soil SCGs: The following SCGs for soil were used in developing this RI Work Plan:

- NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (RPSCOs) for the Protection of Groundwater;
- NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (RPSCOs) for Unrestricted Use;
- NYCRR Subpart 375-6 RPSCOs for the Protection of Public Health/Restricted Residential Use; and,
- NYCRR Subpart 375-6 RPSCOs for the Protection of Public Health/Commercial Use.

Groundwater SCGs: The following SCGs for groundwater were used in developing this RI Work Plan:

- NYSDEC Part 703 Groundwater Standards; and,

- Technical and Operational Guidance Series (TOGS) 1.1.1 Water Quality Standards and Guidance Values.

Sub-Slab Vapor and Indoor Air SCGs: The NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 (including the USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile)) and subsequent amendments is utilized for the SCG for soil vapor and indoor air.

5.0 Objectives and Rationale

The objective of this RI is to determine the nature and extent of contamination at the BCP Site and provide a qualitative risk assessment for any contaminants migrating off-site. In addition, the BCP general requirements (e.g., “full suite” testing, quality assurance/quality control (QA/QC), etc.) will also be fulfilled.

Areas of Concern

Based on the completion of investigation activities completed between 1996 and 2015 (refer to Section 3.0), there appear to be two (2) areas of known significant subsurface impairment at the Project Site. Specifically, these areas are located in the former plating area within the footprint of the Main Building and on the northeastern portion of the property, in the vicinity of the stormwater retention pond. The AOCs are described further below and depicted on Figures 6A and 6B.

Former Plating Area (AOC #1): Based on field conditions and analytical data, impacts identified in this portion of the Project Site appear associated with former degreasing operations related to metal plating previously performed at the Site. Reportedly, degreasing operations were discontinued at the Site in 1995. Trenches associated with plating and degreasing were reportedly previously located in this area of the Main Building but have been filled with concrete. It should be noted that AOC #1 is located entirely within the footprint of the Main Building.

Chlorinated volatile organic compounds (CVOCs) have been identified in soil and groundwater at concentrations exceeding Site SCGs in this area. Specifically, TCE has been identified in groundwater as high as 520,000 ppb in well LBA-GP-08/MW-06 (although it should be noted that resampling of this well identified TCE at a concentration of 110,000 ppb). TCE were previously identified in soil in AOC #1 as high as 170 ppm (SB2015-23; 18-ft to 19-ft bgs), although it should be noted that this concentration is below the 200 ppm SCO for Commercial Use for TCE. “Worst-case” CVOC impacts in AOC #1 were generally identified between 10-ft and 20-ft bgs. A decrease in CVOC impacts between 20 to 25-ft. bgs may be associated with the top of a dense glacial till layer encountered at this depth in several borings in this area.

In addition, several heavy metals have also been identified in shallow soils (located beneath the concrete floor slab) which exceed Site SCGs in AOC #1. Specifically, copper, nickel, chromium, calcium and iron have been identified in soil above Site SCGs. Copper and nickel were identified above NYCRR Part 375 Commercial Use SCOs in boring LBA-GP-08 from 2-ft to 4-ft bgs.

Extensive investigation in AOC #1 including the completion of a membrane interface probe study has identified the approximate horizontal and vertical limits of CVOC impacts. Impacts do not appear to extend beyond the footprint of the main building.

Stormwater Pond (“AOC 2”): Contaminants on this portion of the Site appear associated with historical wastewater discharge, specifically, the discharge of wastewater containing chlorinated solvents to the existing stormwater pond. Treatment of on-site wastewater reportedly took place in the Northern Building between the mid-1950’s and 1960 and the Site was reportedly connected to the municipal sewer system in the early 1960’s. Effluent which currently enters the pond is reportedly limited to stormwater.

Groundwater sampling in this area was first completed in 1996 by ENVIRON. The “worst-case” well in this area of the Site is MW-01, located immediately north of the stormwater pond. TCE was detected in groundwater in well MW-01 at 1.5 ppm in 1996, 5.1 ppm in January 2013, 2.9 ppm in May 2013, and 0.58 ppm in 2014. The apparent “spike” in TCE concentrations in groundwater in 2013 may be attributed to two (2) ruptures of a water main at the Site at the end of 2012 and beginning of 2013, respectively (refer to Section 3.4). During these incidents, a large volume of water was introduced to the Site’s stormwater system, which may have caused any residual TCE-containing material in this system to be flushed to the stormwater pond. Additional wells were installed between well MW-01 and the northern and eastern property lines in AOC #2 in 2013. Groundwater samples collected from these wells either did not identify VOCs above Part 703 Groundwater Standards or identified very low levels of VOCs (the highest concentration of TCE detected in groundwater from these additional wells was 14 ppb in well Stantec MW-13). Groundwater impacts have been identified in AOC #2 up to 20-ft bgs. VOCs have not been detected above laboratory MDLs in soils in this area.

6.0 Remedial Investigation Scope

The proposed remedial investigation field activities to be completed as part of the work plan have been separated into tasks and are presented in this section. A list with contact information for the anticipated personnel involved with the project is included in Appendix 2. Qualifications for the personnel are also included.

During all ground intrusive work conducted at the Site, air monitoring will be conducted in accordance with the NYSDOH Generic Community Air Monitoring Plan (CAMP). A copy of this plan is included as Appendix 3.

6.1 Remedial Investigation Tasks

The RI Field Plan is detailed below:

Task 1: Surface and Subsurface Soil Sampling- Task 1 will be completed to evaluate the potential for human exposure as well as the suitability of the soil cover for compliance with the Soil Cleanup Objectives. In addition, Task 1 will further assess subsurface conditions in fill material historically placed on the western portion of the Site.

Task 2: Soil Vapor Intrusion Evaluation- This evaluation is to be completed in the Site’s Northern Building to assess for potential soil vapor intrusion in that building. This task will consist of the collection of three (3) sets of soil vapor intrusion samples in the Northern Building as well as the collection of an ambient (exterior) air sample. Soil vapor intrusion testing in the

Main Building is anticipated to be completed following the installation of a sub-slab depressurization system as part of the proposed Interim Remedial Measure and is outlined in the Interim Remedial Measures Work Plan under separate cover.

Task 3: Off-Site Overburden Monitoring Well Installation – This task will consist of the installation of two (2) off-site wells in the right-of-ways to the north and east of the northeastern portion of the Site (i.e., down-gradient of AOC #2) to assess for potential off-site migration of CVOC impacts from AOC #2.

Task 4: Groundwater Sampling– This task will consist of the sampling of the off-site wells to be installed as part of Task 3 as well as resampling of select wells at the Site to provide an additional set of groundwater data for confirmatory and remedial design purposes. In addition, this task is intended to complete the testing required of each AOC (i.e., analysis of “full suite” parameters) per DER-10 requirements.

Task 5: Fish and Wildlife Resources Impact Analysis (FWRIA) Part 1: Resource Characterization- A Site characterization will be conducted to identify all fish and wildlife resources in accordance with DER-10 Section 3.10.1. If the results of the characterization indicate the need for further assessment, a FWRIA Part 2: Ecological Impact Assessment will be conducted in accordance with DER-10 Section 3.10.2.

Sampling procedures that require full suite parameters will include the following analyses:

- USEPA Target Compound List (TCL) VOCs including tentatively identified compounds (TICs) using United States Environmental Protection Agency (USEPA) Method 8260;
- 1,4-dioxane (*for groundwater samples only*) using USEPA Method 8260C SIM;
- USEPA TCL SVOCs including TICs using USEPA Method 8270;
- Target Analyte List (TAL) metals using USEPA Methods 6010/7470/7471;
- Cyanide using USEPA Method 9012;
- PCBs using USEPA Method 8082; and
- Pesticides using USEPA Method 8081.

Groundwater samples analyzed for 1,4-dioxane will be reported to the laboratory Method Detection Limit (MDL) of 0.597 ug/L for this compound. QA/QC samples will also be collected and analyzed (e.g., trip blank, duplicate sample, matrix spike/ matrix spike duplicate (MS/MSD)). The specific QA/QC program is detailed in Section 6.4. The soil samples will be delivered under chain of custody procedures to an ELAP-certified laboratory. The laboratory will provide a NYSDEC Analytical Services Protocol (ASP) Category B Deliverables data package and a Data Usability Summary Report (DUSR) will be completed.

Tasks will be conducted in accordance with the QCP (refer to Section 6.4 and Appendix 4).

6.1.1 Task 1: Surface and Subsurface Soil Sampling

Surface Soil

Surface soil samples will be collected to evaluate the potential for human exposure as well as the suitability of the soil cover for compliance with the Soil Cleanup Objectives. Based on the current and anticipated future use of the Site for commercial and/or industrial purposes, the top 1-ft of Site soils will be assessed as part of Task 1. Based on the prior investigation completed at the Site, the main

contaminants of concern have been identified at depth and appear to be associated with former degreasing operations; potential sources of surface soil impacts have not been identified.

The scope of Task 1 is based on Draft NYSDOH guidance obtained from the NYSDEC in December 2016. As depicted on attached Figure 7B, surface soil samples will be collected from vegetated areas throughout the Site. Vegetated areas comprise approximately 16-acres of the approximately 34.9-acre property. Based on this area and DRAFT NYSDOH guidance, a total of approximately 22 discrete and 11 composite sample locations have been identified. Discrete samples will be collected from two (2) depth intervals in each location, for a total of 44 discrete samples. The targeted depth intervals are 0-2-in. below any sod/vegetative material and from 2-in. to 12-in. below any sod/vegetative material. The 44 discrete samples (not including QA/QC samples; refer to Section 6.4) will be analyzed for USEPA TCL VOCs and up to 20 tentatively identified compounds (TICs) using USEPA Method 8260.

A total of 22 composite samples (not including QA/QC samples; refer to Section 6.4) will be collected from the approximate areas of the 11 locations depicted on Figure 7B. These samples will also be collected from the two (2) depth intervals identified above. Based on typical shallow soil contaminants of concern and per the Draft NYSDOH guidance, all of the composite samples will be analyzed for USEPA TCL SVOCs and up to 20 TICs as well as USEPA TAL Metals. In addition, 20% of the composite samples (i.e., 5 of the 22 samples) will be analyzed for the following parameters in addition to SVOCs and Metals:

- PCBs using USEPA Method 8082;
- Pesticides using USEPA Method 8081; and,
- Cyanide using USEPA Method 9012.

Each composite sample will be comprised of 3-5 discrete samples collected from the selected grid spaces identified on Figure 7B.

In addition to those discussed above, the following methods will be used to collect surface soil samples:

- Any sod/vegetative material will be removed with a clean shovel/trowel. Samples will be collected from 0 to 2-in. below any sod/vegetative material and from 2-in. to 1-ft. below any sod/vegetative material.
- The samples will be collected using new sterile sampling spoons or a clean shovel/trowel to prevent cross-contamination. The soil will then be screened using a PID and the readings will be recorded. Additionally, olfactory indications of impairment will be observed during surface soil sampling.
- The VOC samples will be collected utilizing USEPA Method 5035 (i.e., closed-system purge-and-trap).
- If additional sampling is required for delineation purposes pending the findings of the initial sample data, additional sample parameters may be limited to any contaminants of concern identified in the initial surface soil samples, pending approval from the NYSDEC and NYSDOH.

Subsurface Soil

Subsurface soil samples will be collected from the apparent fill material on the western portion of the Site. As noted in Section 3.0, this fill material was reportedly placed on the Site during the construction

of the adjacent Interstate 390, but facility personnel also reported the historical disposal of plating/finishing sludge in the area now occupied Interstate 390. The 2014 Phase II ESA included multiple investigation points in this area of the Site; however, laboratory analysis of samples from the fill material was limited to VOCs. As such, this task will include the collection of four (4) samples of apparent fill material from this area of the Site. The samples will be collected from at least 12-inches bgs but above native material. The proposed sample locations are depicted on Figure 7A.

The following methods will be followed to complete this task:

- A Dig Safely New York stakeout will be conducted at the Site to locate any subsurface utilities in the areas where the subsurface assessment and delineation will take place. In addition, any available utility drawings provided by the owner will be reviewed to identify any subsurface utilities located within the footprint of the Site buildings. In the event that utilities appear to represent a subsurface issue, compressed air may be utilized to remove subsurface material up to approximately 4-ft. bgs. Boring locations may vary slightly based on field conditions (e.g., accessibility, utilities, etc.).
- Borings will be advanced with a “Geoprobe” direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a 4-ft. or 5-ft. macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in 4-ft. or 5-ft. sections, and can be easily cut from the polyethylene sleeves for observation and sampling.
- Based on the objective of this task to assess fill material beneath 12-inches bgs, borings will be advanced through the fill material and into native material, or to equipment refusal (whichever is shallower). Samples will be collected from fill material for laboratory analysis but the apparent depth to native soils will be documented.
- Drilling equipment will be decontaminated prior to use and between boring locations, using an Alconox and potable water solution. Refer to Section 12 of the QCP included as Appendix 4 for additional details regarding decontamination procedures.
- Soils from the borings will be continuously screened in the field for visible impairment, olfactory indications of impairment, evidence of NAPLs, and/or indication of detectable VOCs with a PID collectively referred to as “evidence of impairment.” Field screening findings will be recorded in soil boring logs and included in the RI Report.
- Soil generated during soil sampling activities will be containerized in 55-gallon drums, characterized, and disposed of off-Site in accordance with applicable regulations. *It should be noted that soil cuttings collected as part of the installation of these off-site wells will be brought onto the Site for characterization, staging and subsequent disposal.* Refer to Section 9 of the QCP included as Appendix 4 for additional details regarding the management of investigation-derived waste.
- Soil samples will be analyzed for the full suite soil parameters listed in Section 6.1.

6.1.2 Task 2: Soil Vapor Intrusion Evaluation

It should be noted that SVI samples are not proposed to be collected from the Main Building as part of the implementation of this RIWP. As described in the Interim Remedial Measures (IRM) Work Plan submitted to the NYSDEC and NYSDOH in December 2016, indoor air quality samples will be collected from within the Main Building as part of the installation of a sub-slab depressurization system (SSDS) in a portion of this building.

Three (3) sets of soil vapor intrusion (SVI) samples will be collected from the Northern Building, as depicted on attached Figure 7C. Sample locations were selected to represent different areas of the building which are routinely occupied or may be routinely occupied in the future (i.e., office space). Each SVI sampling location will include the collection of one (1) sub-slab vapor and one (1) indoor air sample. In addition, one (1) ambient (i.e., exterior) air sample will also be collected for control purposes. The ambient air sample will be collected from an upwind location of the building and as such this sample location will be selected on the day of sampling.

Sub-slab vapor samples will be collected from beneath the concrete floor slab by coring an approximately 1.5" diameter hole approximately 2" into the floor in each sampling location. Subsequently, a 5/8" diameter hole will be drilled through the slab to approximately 1-2 inches beneath the floor slab. A 5/8" diameter polyethylene tube and barbed fitting will be inserted into the corehole. Tubing will connect a Summa® canister with a pre-set regulator to the barbed fitting for sub-slab soil vapor collection. Helium testing will be conducted in each sub-slab vapor location to ensure the integrity of the seal between the sub-slab and indoor air prior to sampling.

Concurrently, an indoor air sample will be set-up for collection within the immediate vicinity (i.e., approximately 15-ft.) of each sub-slab vapor sample. Indoor air samples will also be collected using a Summa® canister with a pre-set regulator for sample collection. Indoor air samples will be collected from approximately 3-ft to 5-ft above the floor surface.

Each sample will have a collection time of approximately 8-hours. The ambient air sample will be collected concurrently with the sub-slab vapor and indoor air samples. Following the collection period, the sub-slab vapor sampling location will be capped.

Samples will be sent under standard chain of custody procedures to a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory for VOC analysis using United States Environmental Protection Agency (USEPA) Method TO-15 for standard laboratory turnaround time (approximately 5 business days) with a minimum detection limit of 1 µg/m³ with 0.25 µg/m³ for TCE and vinyl chloride.

In addition, a NYSDOH Indoor Air Quality Questionnaire and Building Inventory will be completed in each building as part of the SVI study. Materials containing potential contaminants of concern (e.g., cleaning chemicals, etc.) will be listed to identify any potential indoor air sources of impacts.

6.1.3 Task 3: Off-Site Overburden Monitoring Well Installation

Although on-site wells immediately north and east of the stormwater pond located in AOC #2 have shown diminishing levels of CVOCs in groundwater hydraulically down-gradient of the pond, two (2) off-site overburden monitoring wells will be installed further down-gradient of AOC #2 to assess for potential off-site migration of CVOC impacts.

As depicted on attached Figure 7A, each of the two (2) wells are planned to be installed in right-of-ways (i.e., sidewalks) down-gradient of the Site. One (1) well will be installed at the southeastern corner of the intersection of Jefferson Road and East Henrietta Road (i.e., north of AOC #2) and the second well will be installed in the sidewalk to the east of AOC #2, across East Henrietta Road. The eastern well will be installed in the immediate vicinity of apparent stormwater piping which discharges into a pond on the

eastern adjacent property. The origin of this piping (i.e., if it extends under the Site or in the vicinity of the Site) is unknown.

The following methods will be followed to complete this task:

- A permit will be obtained from the Town of Henrietta to drill in the right-of-ways. Task 3 will not be completed prior to obtaining this permit.
- A Dig Safely New York stakeout will be conducted at the Site to locate any subsurface utilities in the areas where the subsurface assessment and delineation will take place. In addition, any available utility drawings provided by the owner will be reviewed to identify any subsurface utilities located within the footprint of the Site buildings. In the event that utilities appear to represent a subsurface issue, compressed air may be utilized to remove subsurface material up to approximately 4-ft. bgs. Well locations may vary slightly based on field conditions (e.g., accessibility, utilities, etc.).
- Borings will be advanced with a “Geoprobe” direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a 4-ft. or 5-ft. macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in 4-ft. or 5-ft. sections, and can be easily cut from the polyethylene sleeves for observation and sampling.
- Based on the geology at the Site and the prior identification of an apparent confining layer at approximately 20-ft to 25-ft bgs, the borings will be advanced to approximately 25-ft bgs and/or several feet into the dense glacial till layer. Based on surface elevations, the dense glacial till layer may be encountered at a depth shallower than 20-ft bgs.
- Drilling equipment will be decontaminated prior to use and between boring locations, using an Alconox and potable water solution. Refer to Section 12 of the QCP included as Appendix 4 for additional details regarding decontamination procedures.
- Soils from the borings will be continuously screened in the field for visible impairment, olfactory indications of impairment, evidence of NAPLs, and/or indication of detectable VOCs with a PID collectively referred to as “evidence of impairment.” Field screening findings will be recorded in soil boring logs and included in the RI Report.
- Soil generated during soil sampling activities will be containerized in 55-gallon drums, characterized, and disposed of off-Site in accordance with applicable regulations. *It should be noted that soil cuttings collected as part of the installation of these off-site wells will be brought onto the Site for characterization, staging and subsequent disposal.* Refer to Section 9 of the QCP included as Appendix 4 for additional details regarding the management of investigation-derived waste.
- The off-site monitoring wells will be completed with 2-in diameter PVC wells. Monitoring wells will be constructed using a 5-ft. to 10-ft. long 0.010-inch slotted PVC well screen finished with a PVC riser to the ground surface. The screened section will be placed to intersect the water table as observed in the boring. In the event that groundwater is not observed, the screened section will be placed at the same depth as the nearest well in which groundwater was encountered. The annulus will be filled with sand to approximately 1-ft above the top of the screen, and filled with bentonite to approximately 6-in. bgs. Each well will be completed with a flush-mounted curb box.
- Wells will be developed until dry or until at least three (3) well volumes have been removed using a dedicated bailer or peristaltic pump. Development water will be containerized in 55-gallon drums, characterized, and disposed of off-Site in accordance with applicable

regulations. *It should be noted that development and purge water collected as part of the installation and sampling of these off-site wells will be brought onto the Site for characterization, staging and subsequent disposal.* Refer to Section 9 of the QCP included as Appendix 4 for additional details regarding the management of investigation-derived waste.

- Following development, the wells will be allowed to recharge for a minimum of 48-hours prior to sampling. Refer to Task 4 for additional information regarding groundwater sampling.
- Following installation, the two (2) off-site wells as well as additional existing and accessible wells will be surveyed (latitude, longitude, and elevation). Subsequently, one (1) year of quarterly static water level measurements will be collected and recorded to determine groundwater flow direction seasonally. Static water level measurements will be recorded from all existing accessible wells and groundwater flow direction maps will be produced.

6.1.4 Task 4: Groundwater Sampling

Task 4 will consist of sampling of the two (2) off-site wells to be installed as part of Task 3 as well as resampling of select pre-existing wells to provide another set of groundwater sample data. Based on the primary contaminants of concern at the Site (i.e., CVOCs), the majority of wells will be sampled for VOCs. As summarized in the below table, 23 existing wells as well as the two (2) off-site wells to be installed as part of Task 3 will be sampled for USEPA Target Compound List VOCs and TICs using USEPA Method 8260. An additional five (5) existing wells will be sampled for the full suite parameters listed in Section 6.1.

Well ID	Location	Planned Laboratory Analysis
LBA-MW-06	AOC #1	Full Suite*
DW2015-02	“Deep well” in AOC #1	Full Suite* PFCs***
LBA-MW-10	AOC #1	TCL VOCs**
LBA-MW-11	AOC #1	TCL VOCs**
LBA-MW-12	AOC #1	TCL VOCs**
DW2015-01	“Deep well” down-gradient of AOC #1	TCL VOCs**
SBMW2015-19	AOC #1	TCL VOCs**
SBMW2015-20	AOC #1	TCL VOCs**
SBMW2015-21	AOC #1	TCL VOCs**
SBMW2015-22	AOC #1	TCL VOCs**
MW-1	AOC #2	Full Suite* PFCs***
MW-13	AOC #2	TCL VOCs**
MW-14	AOC #2	TCL VOCs**
MW-15	AOC #2	TCL VOCs**
LBA-MW-04	Lawn area southwest of AOC #2	Full Suite**
LBA-MW-08	Southern portion of Main Building near former wastewater piping (low-level CVOCs previously identified in groundwater)	Full Suite* PFCs***
SBMW2015-16	Southern portion of Main Building near former wastewater piping	TCL VOCs**
SBMW2015-17	Southern portion of Main Building near former wastewater piping	TCL VOCs**
LBA-MW-09	Southern portion of Main Building in warehouse area (low-level CVOCs previously identified in groundwater)	Full Suite* PFCs***

Well ID	Location	Planned Laboratory Analysis
SBMW2015-07	Southern portion of Main Building in warehouse area	TCL VOCs**
SBMW2015-08	Southern portion of Main Building in warehouse area	TCL VOCs**
SBMW2015-09	Southern portion of Main Building in warehouse area	TCL VOCs**
SBMW2015-11	Southern portion of Main Building in warehouse area	TCL VOCs**
LBA-MW-02	West of Main Building	Full Suite*
SBMW2015-02	Exterior southwestern corner of Northern Building	Full Suite*

*Refer to Section 6.1 for a listing of full suite laboratory parameters.

**Including TICs and 1,4-dioxane

***PFCs refers to perfluorinated compounds using USEPA Method 537.

Groundwater sampling procedures are as follows:

Low-Flow Groundwater Sampling

Groundwater samples to be analyzed for the full suite parameters listed in Section 6.1 will be collected via low-flow methods using a bladder pump. Groundwater sampling equipment will be decontaminated between each well.

- During sampling, the following parameters will be measured and recorded at three (3) to five (5) minute intervals from exterior wells:
 - Water level drawdown (<0.3')
 - Temperature (+/- 3%)
 - pH (+/- 0.1 unit)
 - Dissolved oxygen (+/- 10%)
 - Specific conductance (+/- 3%)
 - Oxidation reduction potential (+/- 10 millivolts)
 - Turbidity (+/- 10%, <50 NTU for metals)
- Samples will be collected when the parameters have stabilized within the specified range for at least three (3) consecutive intervals.
- In the event of insufficient sample volume for full suite parameters, samples will be analyzed for as many of the listed parameters as possible, in the below listed order:
 - USEPA TCL VOCs including TICs using USEPA Method 8260;
 - USEPA TCL SVOCs including TICs using USEPA Method 8270;
 - TAL metals using USEPA Methods 6010/7470/7471;
 - PCBs using USEPA Method 8082;
 - Pesticides using USEPA Method 8081; and,
 - Cyanide using USEPA Method 9012.

Passive Groundwater Sampling

Groundwater samples to be analyzed for VOCs will be collected using passive diffusion bag (PDB) samplers. PDB samplers are made of low-density polyethylene plastic tubing, filled with laboratory grade (ASTM Type II) deionized water and sealed at both ends. This passive method will be employed to

conserve volumes of purge water which will have to be disposed of off-site as well as for budgetary purposes.

PDB samplers will be deployed by hanging each sampler in the targeted well at the middle of the well screen unless a low water table, need to deploy multiple samplers or the targeting of a specific depth interval is identified. The PDB samplers will be deployed using a Teflon® coated string or synthetic rope. The PDB samplers will be deployed at least 14 days prior to sampling. When transferring water from the PDB to sample containers during sampling, care will be taken to avoid agitating the sample, since agitation promotes the loss of volatile constituents. Any observable physical characteristics of the groundwater (e.g., color, sheen, odor, turbidity) at the time of sampling will be recorded.

Additional information regarding passive groundwater sampling procedures are included in Section 8.0 of the QCP included as Appendix 4.

6.1.5 Task 5: Fish and Wildlife Resources Impact Analysis (FWRIA) Part 1: Resource Characterization

Site characterization will be conducted to identify all fish and wildlife resources within 0.25 miles of the Site in accordance with DER-10 Section 3.10.1. If there are no resources identified, no further assessment will be conducted in regards to the FWRIA. If resources are identified, they will be depicted on a map to be included in the Remedial Investigation Report. In addition, contaminant migration pathways and contaminants of ecological concern will be identified, and conclusions will be made as to the potential adverse effects to fish and wildlife.

If the results of the characterization indicate the need for further assessment, a FWRIA Part 2: Ecological Impact Assessment will be conducted in accordance with DER-10 Section 3.10.2.

6.2 Health and Safety and Community Air Monitoring

LaBella's Health and Safety Plan (HASP) for this project is included in Appendix 3. The NYSDOH Generic Community Air Monitoring Plan (CAMP) and Fugitive Dust and Particulate Monitoring will be utilized for this RI and is included in Appendix 3.

6.3 Housekeeping and Investigation Derived Waste

Good housekeeping practices will be followed to prevent leaving contaminated material on the ground or floor surface (e.g., precautions will be taken to prevent impacts to the ground surface due to material spilled during soil sampling, etc.). Any material that does spill on to the ground/floor surface will be promptly picked up and placed in an appropriate location and the ground/floor surface will be cleaned.

Waste materials anticipated to be generated during the implementation of this RI Work Plan include soil generated from soil borings and groundwater generated from development and sampling of the wells. These waste materials will be containerized in 55-gallon drums and stored at the Site for characterization and future disposal.

It should be noted that investigation derived waste collected as part of the installation and sampling of off-site wells will be brought onto the Site for characterization, staging and subsequent disposal.

Additional information regarding Investigation Derived Waste is included in Section 9 of the QCP, included in Appendix 4.

6.4 Quality Assurance/Quality Control Plan

Activities completed at the Site will be managed under LaBella's Quality Control Program, which is included in Appendix 4. Laboratory QA/QC sampling will include analysis of one (1) trip blank and one (1) duplicate sample for each matrix type (i.e., soil, air/vapor and groundwater) at a rate of one per 20 samples collected for each parameter group, or one per shipment, whichever is greater. Additionally, one (1) Matrix Spike/Matrix Spike Duplicate (MS/MSD) will be collected and analyzed for each twenty samples collected for each parameter group, or one per shipment, whichever is greater. The MS/MSD will be analyzed for the same parameters as that of the field samples. The samples will be delivered under Chain of Custody procedures to an ELAP-certified laboratory. The laboratory will provide a NYSDEC ASP Category B Deliverables data package for all samples except the TO-15 samples (indoor air, outdoor air, sub-slab soil vapor). For the TO-15 samples, the laboratory will provide a data package using the ASP Category B format. A data usability summary report (DUSR) will be completed for all ASP-B and ASP-B format laboratory data packages per DER-10. The DUSRs will include the laboratory data summary pages showing corrections made by the data validator and each page will be initialed by the data validator. The laboratory data summary pages will be included even if no changes were made.

7.0 RI Schedule and Reporting – Deliverables

The information and laboratory analytical data obtained during the RI will be included in a RI Report, completed in accordance with DER-10.

Implementation of the RI Work Plan will begin within 60 days after NYSDEC approval of this work plan and the standard three-day Dig Safely New York waiting period. The field work is anticipated to require approximately 30 days to complete subsequent to implementation of the RIWP (*Note: this timeframe does not include laboratory analysis or data validation*). The RI Report will be submitted within two (2) months of receipt of DUSRs. It should be noted that, based on timing, the RI Report may not include all quarterly static water level data; this data will be submitted in a separate letter once completed.

The above schedule assumes that an addendum to the RI Work Plan will not be required. If an RI Work Plan addendum is required, it will be submitted as the need is identified and it will include a revised schedule.

All data will also be submitted in the NYSDEC-approved EDD format. The data will be submitted on a continuous basis immediately after data validation occurs.

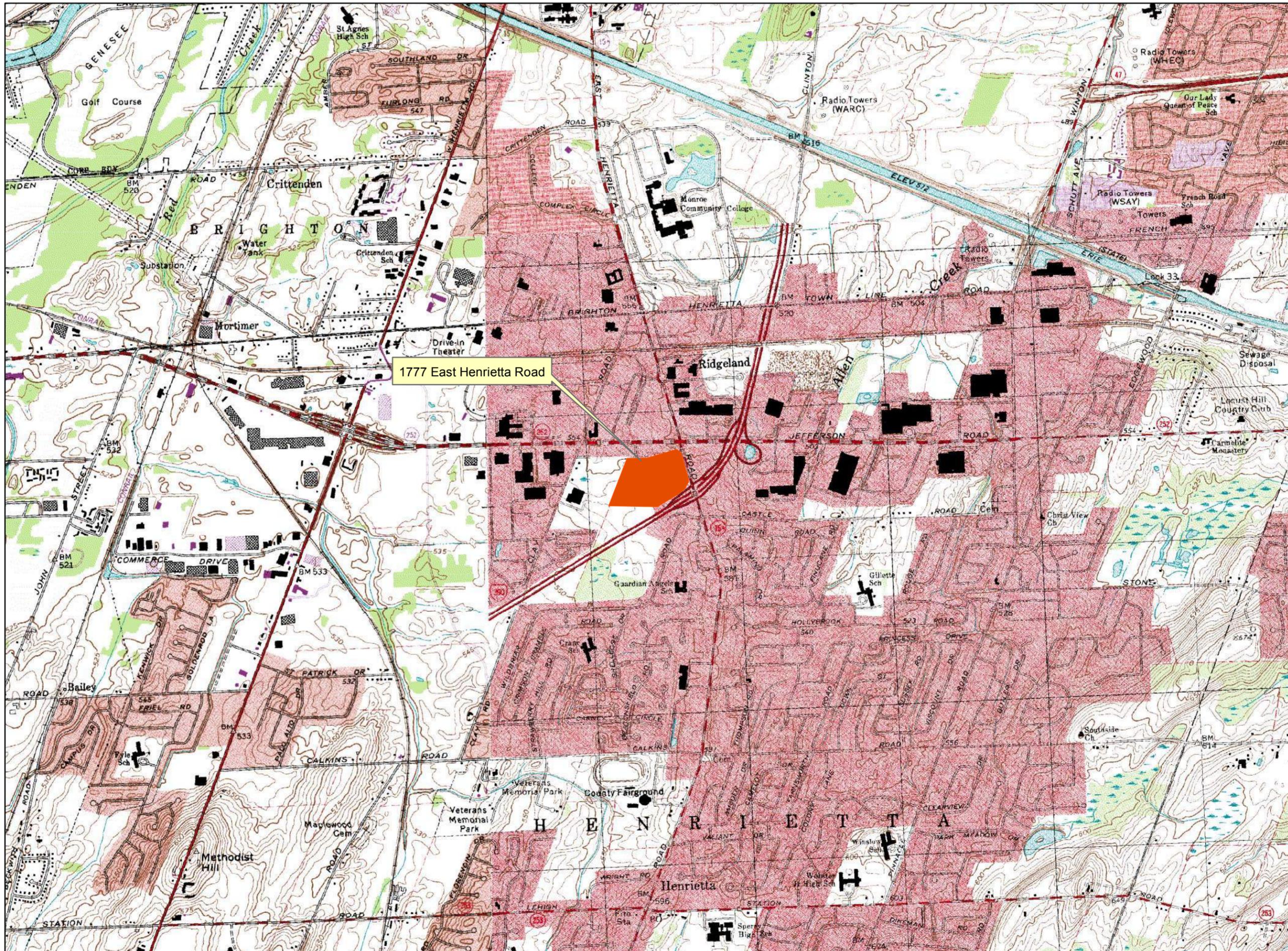
I:\GETINGE SOURCING, LLC\2160339 - 1777 E HENRIETTA RD BCP APP DEV\REPORTS\RIWP\REVISED 12.29.16 - ADDRESS NYSDEC COMMENTS\REVISED 4.2017\RIWP 04.18.2017.1777 EHR REVISED.DOCX

FIGURES

**REMEDIAL INVESTIGATION
WORK PLAN**

**1777 EAST HENRIETTA ROAD
NYSDEC BCP #C828192**

PROJECT LOCUS MAP



0 1,000 2,000
Feet
1 inch = 2,000 feet

intended to print as 11" x 17".

[2160339]
[FIGURE 1]

Legend

- Site Boundary
- Office Space (Approx.)

Notes:
 1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
 2. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhss.ny.gov/>).

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 CDP150472003

REMEDIAL INVESTIGATION WORK PLAN

1777 EAST HENRIETTA ROAD
 NYSDEC BCP #C828192

SITE MAP



0 50 100 200

1 inch = 200 feet

Intended to print as 11" x 17".

[2160339]

[FIGURE 2]

Path: I:\Getinge Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RIWP\Figure 2 - Site Map.mxd



Legend

 Site Boundary	 Former 500-Gallon USTs (from 10/1980 Mapping)
 Current Stormwater Pond	 Former 10,000-Gallon USTs (from 10/1980 Mapping)
 Historical Retention Pond (Approx.)	 Mounded Area (Reported Fill from I-390 Construction)

Notes:
 1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
 2. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhss.ny.gov/>).

**REMEDIAL INVESTIGATION
 WORK PLAN**

**1777 EAST HENRIETTA ROAD
 NYSDEC BCP #C828192**

**CURRENT AND HISTORICAL
 SITE FEATURES**



0 50 100 200

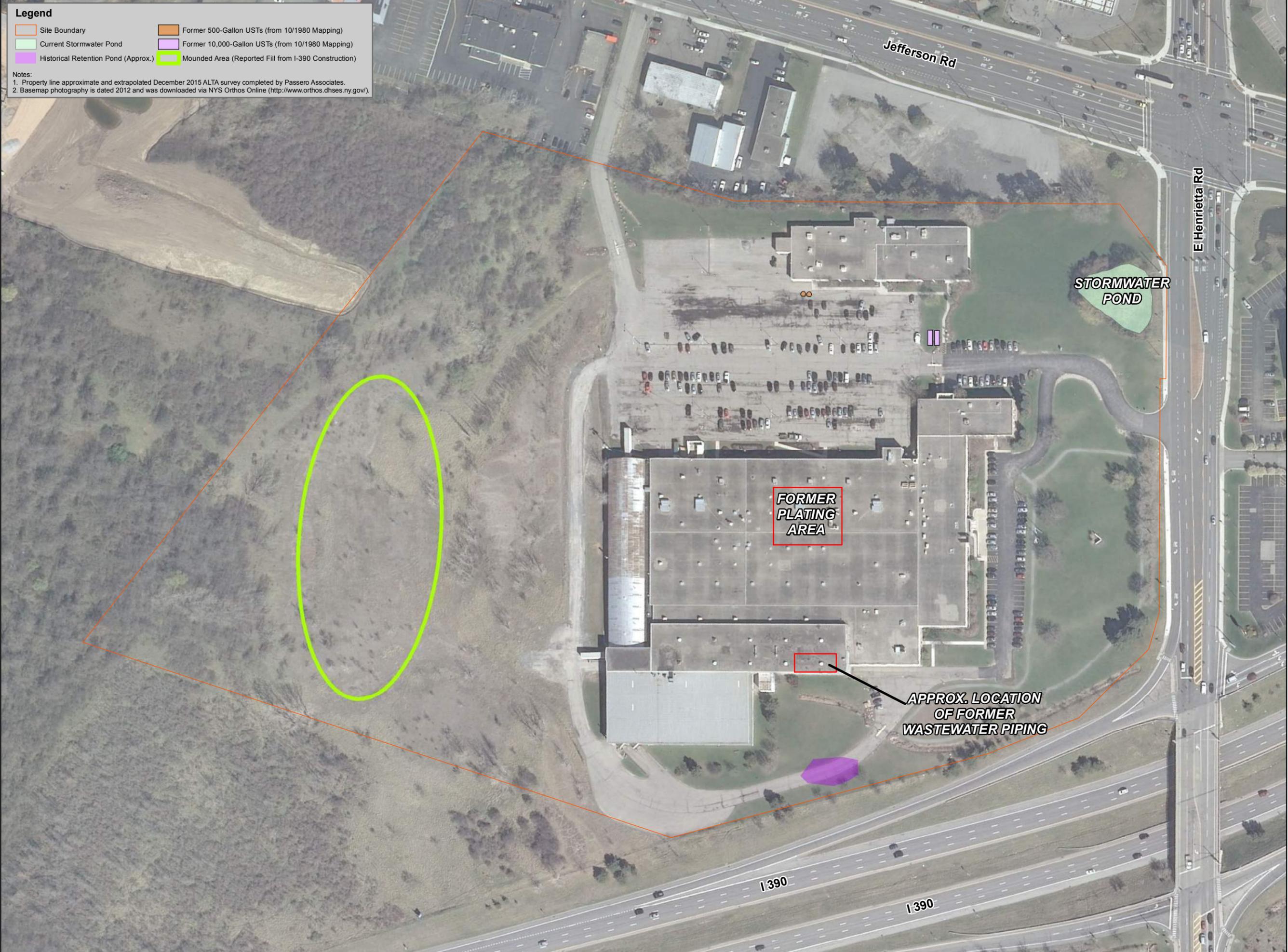
1 inch = 150 feet

Intended to print as 11" x 17".

[2160339]

[FIGURE 3]

Path: I:\Getings Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RIWP\Figure 3 - Site Features.mxd



- Legend**
- Site Boundary
 - Office Space (Approx.)
 - Environ Soil Gas Sample (1996)
 - Environ Soil Gas & Groundwater Sample (1996)
 - Environ Groundwater Monitoring Well (1996)
 - Stantec Boring (2013)
 - Stantec Monitoring Well (2013)
 - Completed LaBella Test Pit Location (2014)
 - Existing LaBella Monitoring Well Location (2014)
 - Existing LaBella Soil Boring Location (2014)



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 CORP000001

REMEDIAL INVESTIGATION WORK PLAN

1777 EAST HENRIETTA ROAD
 NYSDEC BCP #C828192

PRE-2015
 TESTING LOCATIONS



0 50 100

1 inch = 125 feet
 Intended to print as 11x17

- Notes:**
1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
 2. LaBella testing locations located by measuring from existing site features or using GPS.
 3. Testing locations completed by others were georeferenced from previous reports and are considered approximate.
 4. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhss.ny.gov/>).

[2160339]
 [FIGURE 4A]

Path: I:\Geringe Sourcing, LLC\121603339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RIWP\Figure 4A - Pre-2015 Investigation.mxd

REMEDIAL INVESTIGATION WORK PLAN

1777 EAST HENRIETTA ROAD
NYSDEC BCP #C828192

2015 Testing Locations



0 65 130

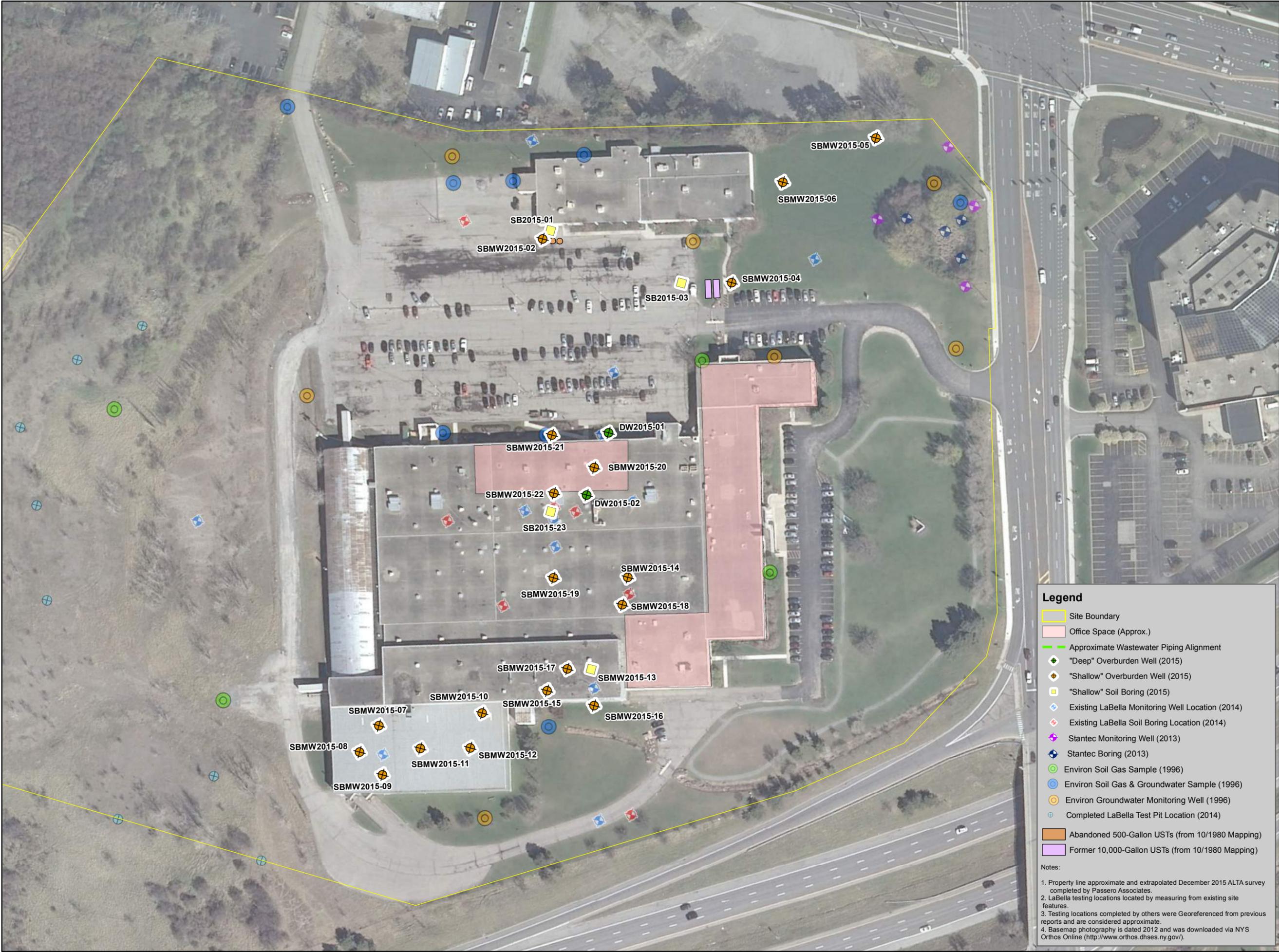
1 inch = 125 feet

Intended to print on 11x17

2160339

FIGURE 4B

Path: I:\Getings Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RW\PI\Figure 4B - 2015 testing.mxd



Legend

- Site Boundary
- Office Space (Approx.)
- Approximate Wastewater Piping Alignment
- "Deep" Overburden Well (2015)
- "Shallow" Overburden Well (2015)
- "Shallow" Soil Boring (2015)
- Existing LaBella Monitoring Well Location (2014)
- Existing LaBella Soil Boring Location (2014)
- Stantec Monitoring Well (2013)
- Stantec Boring (2013)
- Environ Soil Gas Sample (1996)
- Environ Soil Gas & Groundwater Sample (1996)
- Environ Groundwater Monitoring Well (1996)
- Completed LaBella Test Pit Location (2014)
- Abandoned 500-Gallon USTs (from 10/1980 Mapping)
- Former 10,000-Gallon USTs (from 10/1980 Mapping)

Notes:

- Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
- LaBella testing locations located by measuring from existing site features.
- Testing locations completed by others were Georeferenced from previous reports and are considered approximate.
- Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhser.ny.gov/>).

REMEDIAL INVESTIGATION WORK PLAN

1777 EAST HENRIETTA ROAD
NYSDEC BCP #C828192

Summary of Prior Groundwater Results



0 75 150

1 inch = 75 feet

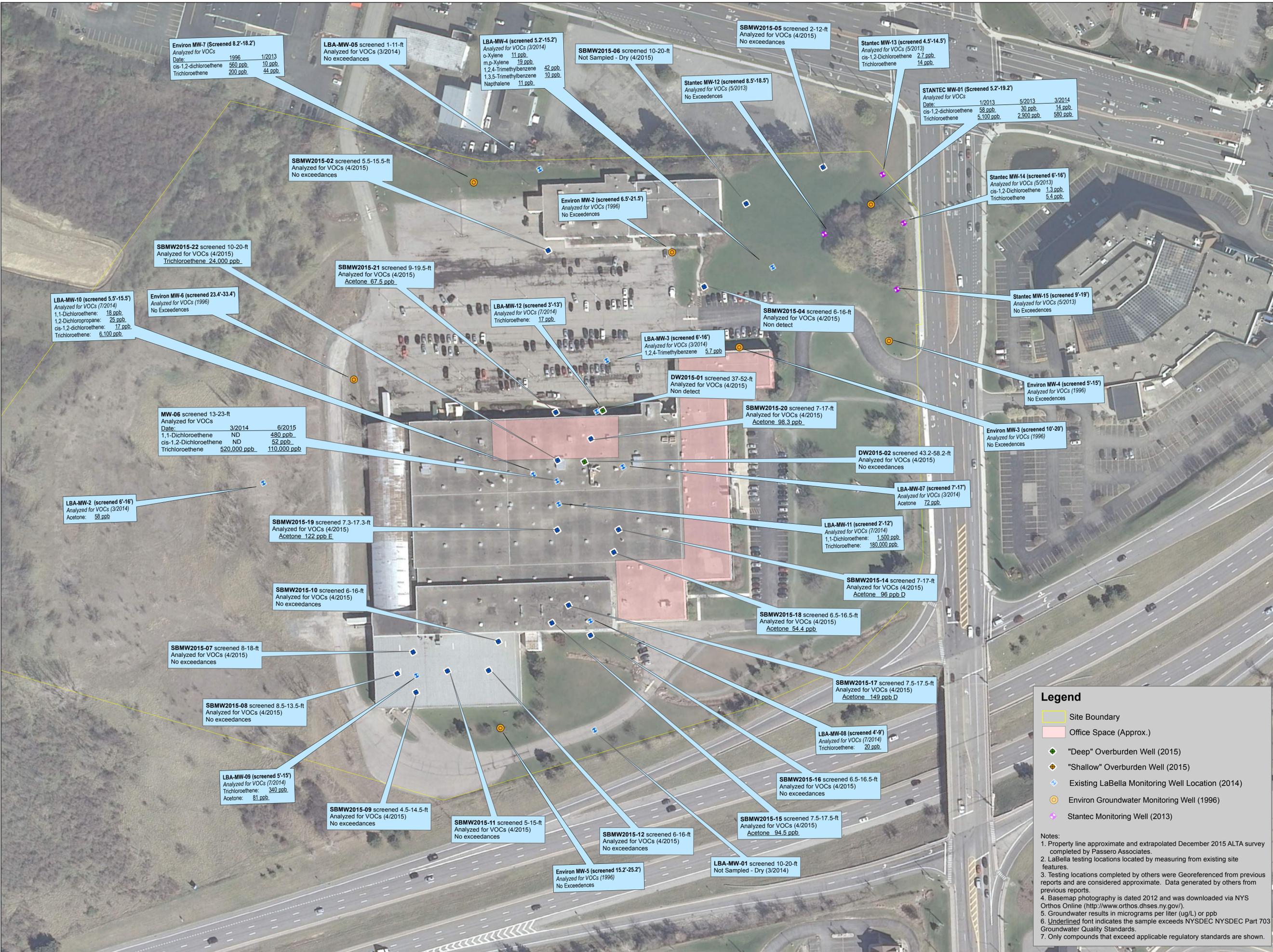
Intended to print in ANSI D size (22"x 34").

Legend

- Site Boundary
- Office Space (Approx.)
- ◆ "Deep" Overburden Well (2015)
- ◆ "Shallow" Overburden Well (2015)
- ◆ Existing LaBella Monitoring Well Location (2014)
- Environ Groundwater Monitoring Well (1996)
- ◆ Stantec Monitoring Well (2013)

Notes:

1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
2. LaBella testing locations located by measuring from existing site features.
3. Testing locations completed by others were Georeferenced from previous reports and are considered approximate. Data generated by others from previous reports.
4. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhSES.ny.gov/>).
5. Groundwater results in micrograms per liter (ug/L) or ppb
6. Underlined font indicates the sample exceeds NYSDEC Part 703 Groundwater Quality Standards.
7. Only compounds that exceed applicable regulatory standards are shown.



2160339

FIGURE 5A

REMEDIAL INVESTIGATION WORK PLAN

1777 EAST HENRIETTA ROAD
NYSDEC BCP #C828192

Summary of Prior Soil Results



0 75 150

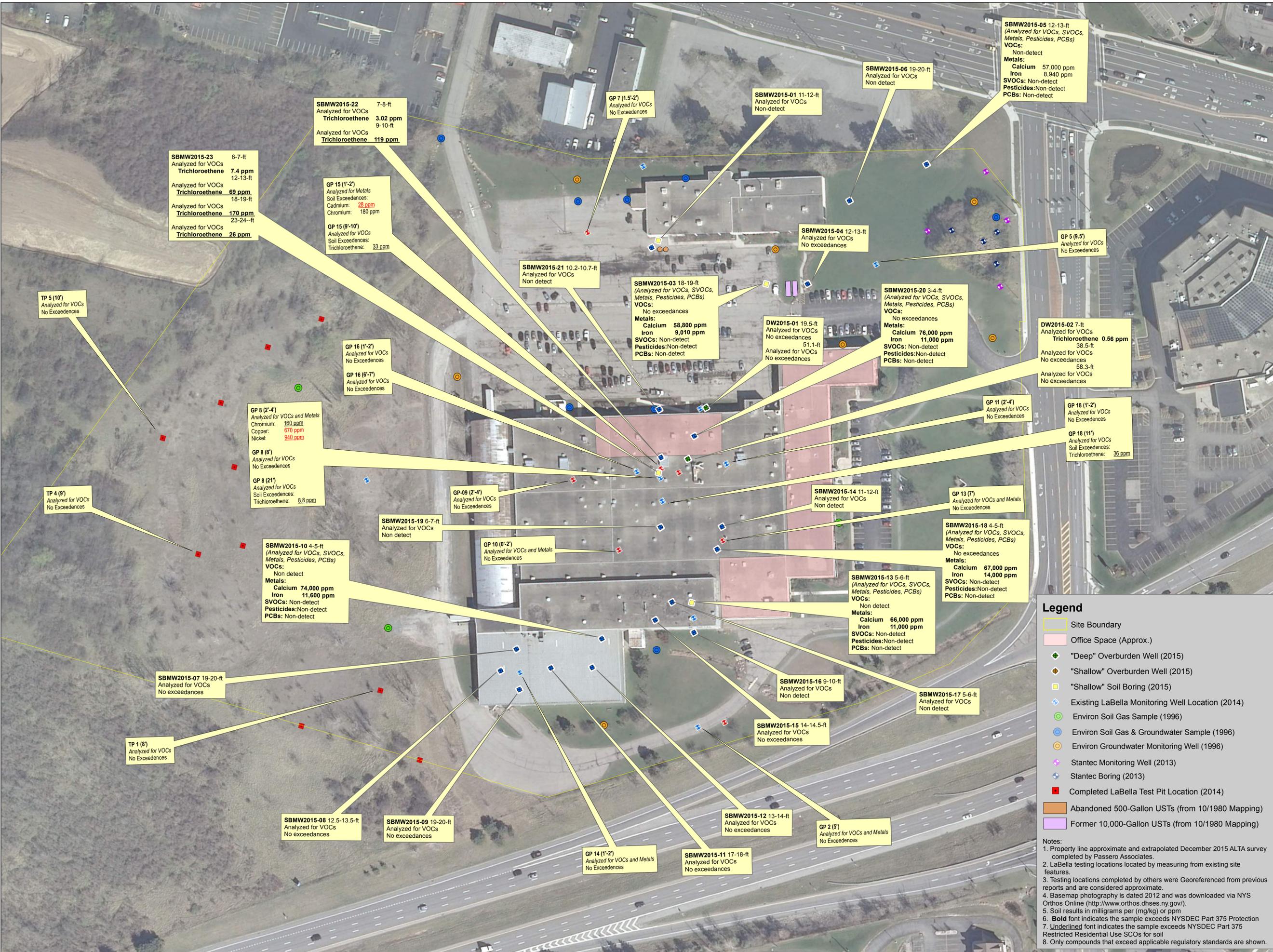
1 inch = 75 feet

Intended to print in ANSI D size (22"x 34").

2160339

FIGURE 5B

Path: I:\Settings Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RIWP\Fig 5B - Soil Callouts.mxd



Legend

- Site Boundary
- Office Space (Approx.)
- "Deep" Overburden Well (2015)
- "Shallow" Overburden Well (2015)
- "Shallow" Soil Boring (2015)
- Existing LaBella Monitoring Well Location (2014)
- Environ Soil Gas Sample (1996)
- Environ Soil Gas & Groundwater Sample (1996)
- Environ Groundwater Monitoring Well (1996)
- Stantec Monitoring Well (2013)
- Stantec Boring (2013)
- Completed LaBella Test Pit Location (2014)
- Abandoned 500-Gallon USTs (from 10/1980 Mapping)
- Former 10,000-Gallon USTs (from 10/1980 Mapping)

- Notes:
1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
 2. LaBella testing locations located by measuring from existing site features.
 3. Testing locations completed by others were Georeferenced from previous reports and are considered approximate.
 4. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhss.ny.gov/>).
 5. Soil results in milligrams per (mg/kg) or ppm
 6. **Bold** font indicates the sample exceeds NYSDEC Part 375 Protection
 7. Underlined font indicates the sample exceeds NYSDEC Part 375 Restricted Residential Use SCOs for soil
 8. Only compounds that exceed applicable regulatory standards are shown.

Legend

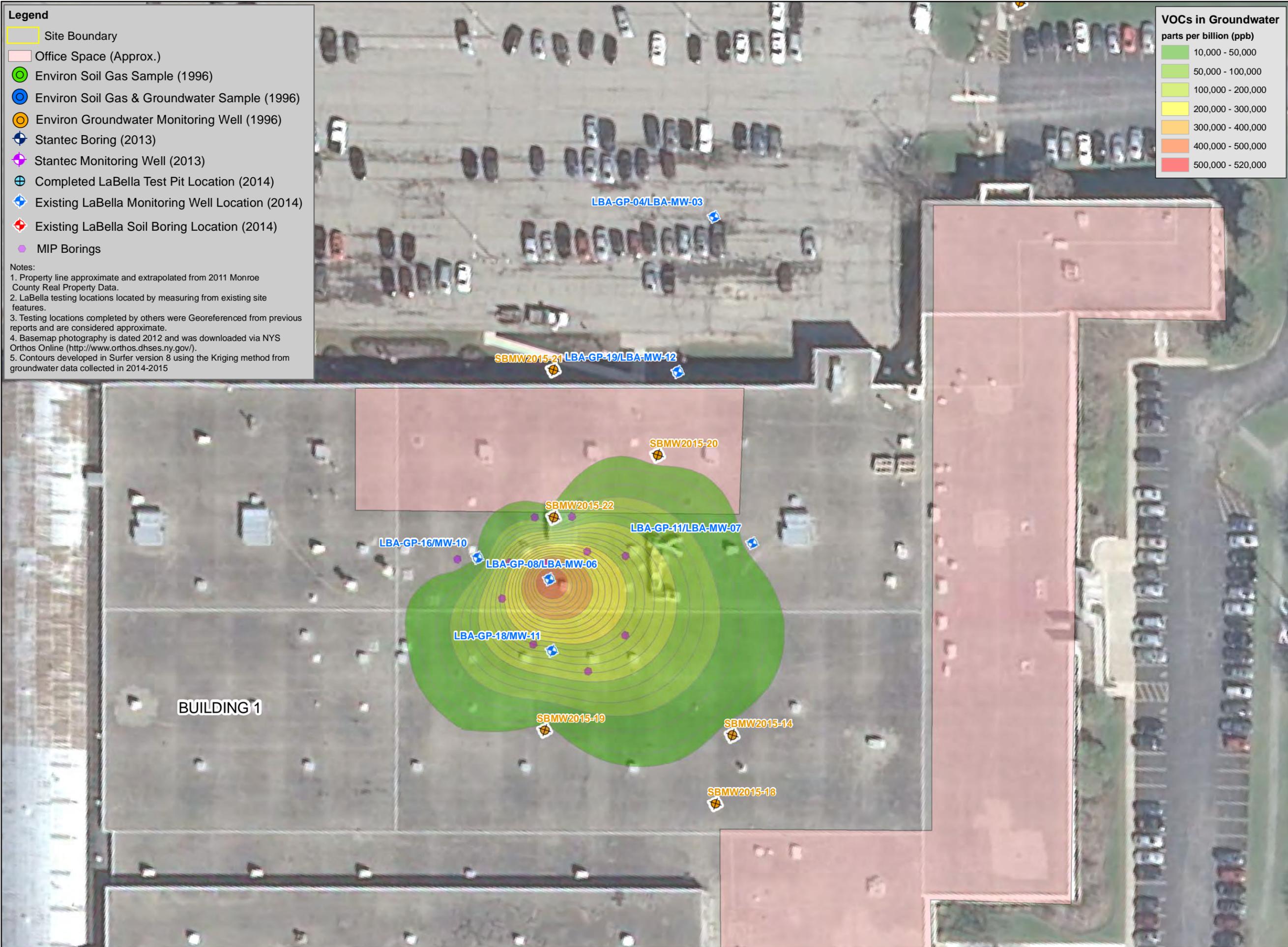
-  Site Boundary
-  Office Space (Approx.)
-  Environ Soil Gas Sample (1996)
-  Environ Soil Gas & Groundwater Sample (1996)
-  Environ Groundwater Monitoring Well (1996)
-  Stantec Boring (2013)
-  Stantec Monitoring Well (2013)
-  Completed LaBella Test Pit Location (2014)
-  Existing LaBella Monitoring Well Location (2014)
-  Existing LaBella Soil Boring Location (2014)
-  MIP Borings

Notes:

1. Property line approximate and extrapolated from 2011 Monroe County Real Property Data.
2. LaBella testing locations located by measuring from existing site features.
3. Testing locations completed by others were Georeferenced from previous reports and are considered approximate.
4. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhse.ny.gov/>).
5. Contours developed in Surfer version 8 using the Kriging method from groundwater data collected in 2014-2015

VOCs in Groundwater
parts per billion (ppb)

-  10,000 - 50,000
-  50,000 - 100,000
-  100,000 - 200,000
-  200,000 - 300,000
-  300,000 - 400,000
-  400,000 - 500,000
-  500,000 - 520,000



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REMEDIAL INVESTIGATION
WORK PLAN

1777 EAST HENRIETTA ROAD
NYSDEC BCP #C828192

AOC #1 - FORMER PLATING AREA
TOTAL VOLATILE
ORGANIC COMPOUNDS (VOCs)
IN GROUNDWATER



0 25 50
1 inch = 50 feet
Intended to print as 11x17

[2160339]
[FIGURE 6A]

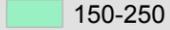
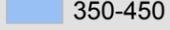
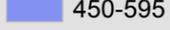
Legend

-  Site Boundary
-  Office Space (Approx.)
-  Environ Soil Gas Sample (1996)
-  Environ Soil Gas & Groundwater Sample (1996)
-  Environ Groundwater Monitoring Well (1996)
-  Stantec Boring (2013)
-  Stantec Monitoring Well (2013)
-  Completed LaBella Test Pit Location (2014)
-  Existing LaBella Monitoring Well Location (2014)
-  Existing LaBella Soil Boring Location (2014)

Notes:

1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
2. LaBella testing locations located by measuring from existing site features.
3. Testing locations completed by others were Georeferenced from previous reports and are considered approximate.
4. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhss.ny.gov/>).
5. Contours developed in Surfer version 8 using the Kriging method from groundwater data collected in 2013-2014.

**VOCs in Groundwater
parts per billion (ppb)**

-  100-150
-  150-250
-  250-350
-  350-450
-  450-595



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REMEDIAL INVESTIGATION
WORK PLAN

1777 EAST HENRIETTA ROAD
NYSDEC BCP #C828192

AOC #2 - STORMWATER
POND AREA
TOTAL VOLATILE
ORGANIC COMPOUNDS (VOCs)
IN GROUNDWATER



0 25 50

1 inch = 50 feet
Intended to print as 11x17

[2160339]

[FIGURE 6B]

Path: I:\Getinge Sourcing, LLC\12160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RWPF\Figure 6B - VOCs in GW Stormwater Pond Area.mxd

Legend

Site Boundary
 Office Space (Approx.)
 Approx. Footprint of Adjacent Hotel

EXISTING INVESTIGATION LOCATIONS:

- "Deep" Overburden Well (2015)
- "Shallow" Overburden Well (2015)
- "Shallow" Soil Boring (2015)
- Existing LaBella Monitoring Well Location (2014)
- Existing LaBella Soil Boring Location (2014)
- Completed LaBella Test Pit Location (2014)
- Stantec Monitoring Well (2013)
- Stantec Boring (2013)
- Environ Soil Gas Sample (1996)
- Environ Soil Gas & Groundwater Sample (1996)
- Environ Groundwater Monitoring Well (1996)

PROPOSED INVESTIGATION LOCATIONS:

- Yellow Highlight Indicates Resampling for Full Suite Parameters
- Blue Highlight Indicates Resampling for TCL VOCs Only
- Proposed Off-Site Well (to be installed)
- Proposed On-Site Subsurface Soil Location

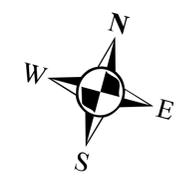
Notes:

- Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
- LaBella testing locations located by measuring from existing site features.
- Testing locations completed by others were Georeferenced from previous reports and are considered approximate.
- Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dnss.ny.gov/>).

REMEDIAL INVESTIGATION
 WORK PLAN

1777 EAST HENRIETTA ROAD
 NYSDEC BCP #C828192

Proposed
 Remedial Investigation:
 Subsurface Locations

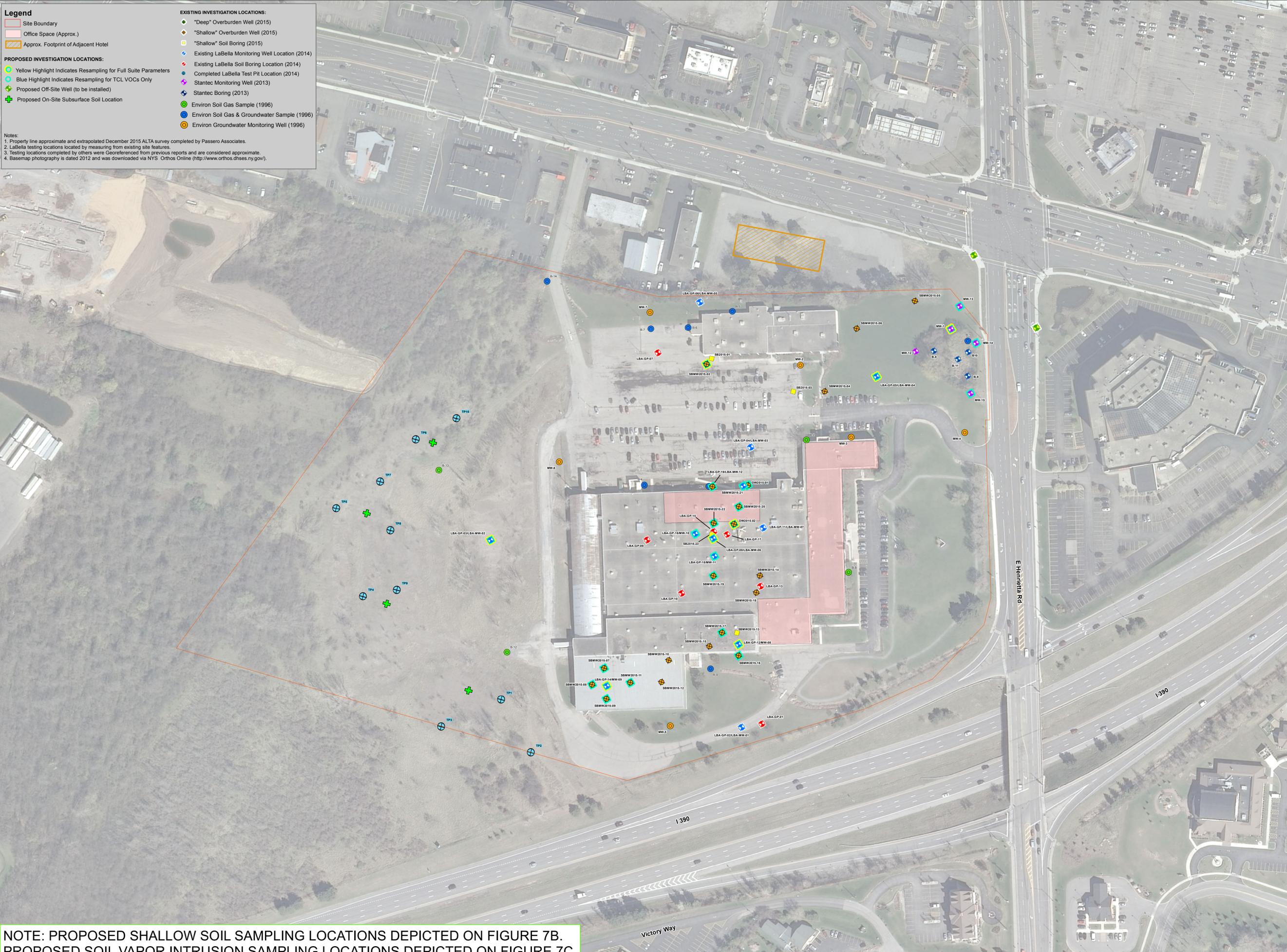


0 100 200
 1 inch = 100 feet
 Intended to print as ANSI D.

2160339
 FIGURE 7A

Path: I:\Gettings Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RWP\Figure 7A - Proposed RWP revised.mxd

NOTE: PROPOSED SHALLOW SOIL SAMPLING LOCATIONS DEPICTED ON FIGURE 7B.
 PROPOSED SOIL VAPOR INTRUSION SAMPLING LOCATIONS DEPICTED ON FIGURE 7C.



Legend

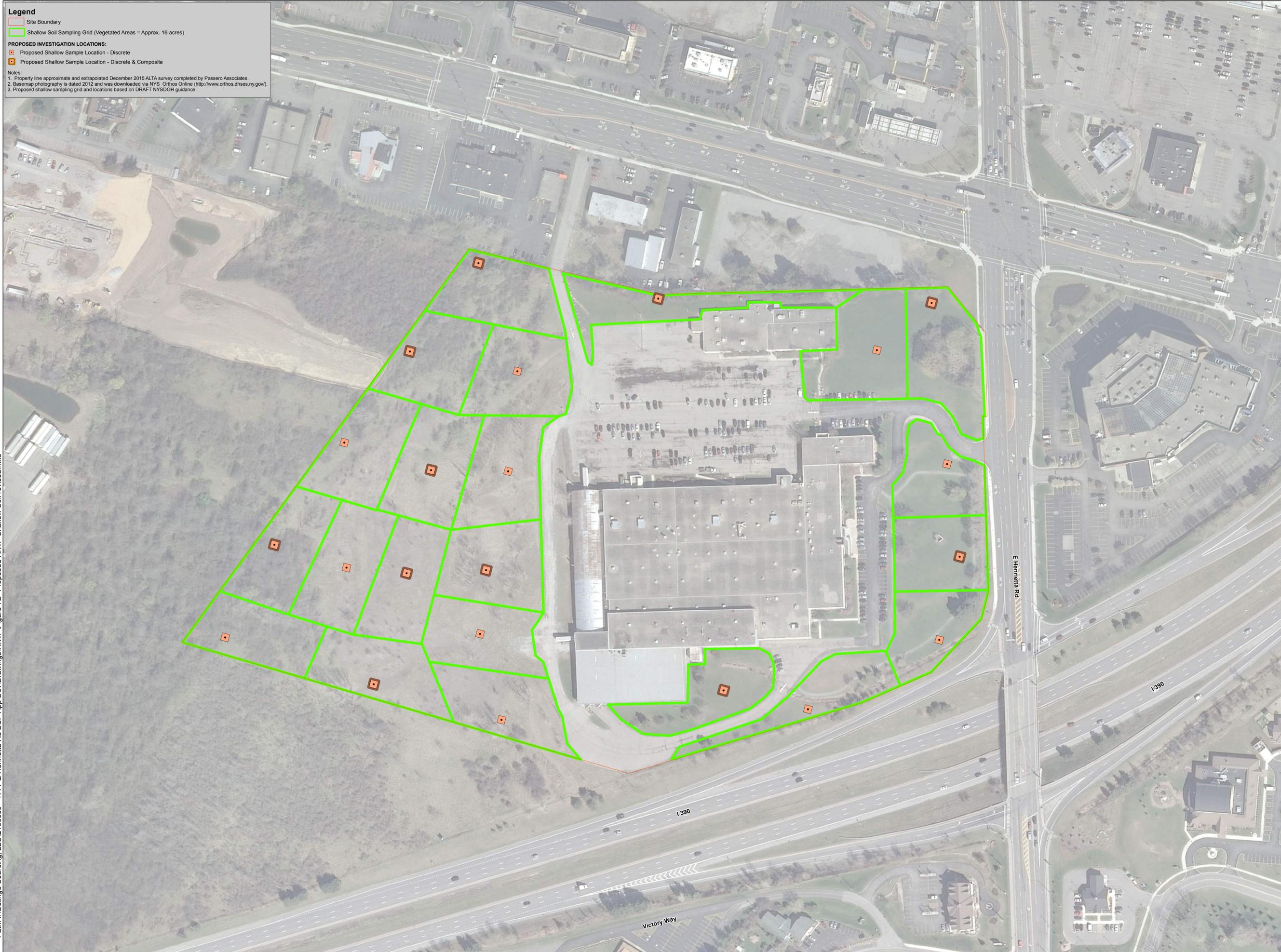
- Site Boundary
- Shallow Soil Sampling Grid (Vegetated Areas = Approx. 16 acres)

PROPOSED INVESTIGATION LOCATIONS:

- Proposed Shallow Sample Location - Discrete
- Proposed Shallow Sample Location - Discrete & Composite

Notes:

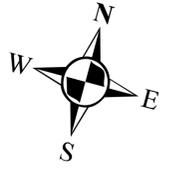
1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
2. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhser.ny.gov>).
3. Proposed shallow sampling grid and locations based on DRAFT NYSDOH guidance.



REMEDIAL INVESTIGATION
 WORK PLAN

1777 EAST HENRIETTA ROAD
 NYSDEC BCP #C828192

Proposed
 Remedial Investigation:
 Shallow Soil Locations



0 105 210

1 inch = 100 feet

Intended to print as ANSI D.

[2160339]

[FIGURE 7B]

Path: I:\Getings Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RWP\Figure 7B - Proposed RWP Shallow Soil revised.mxd

Legend

- Site Boundary
- + Proposed Sub-Slab Vapor Sample
- + Proposed Indoor Air Sample

Notes:

1. Property line approximate and extrapolated December 2015 ALTA survey completed by Passero Associates.
2. Northern Building layout provided by property owner April 2017. Occupants of individual office spaces have been removed for privacy reasons.
3. Basemap photography is dated 2012 and was downloaded via NYS Orthos Online (<http://www.orthos.dhases.ny.gov/>).
4. Proposed ambient air quality sample location will be based on wind direction on the day of sampling.

REMEDIAL INVESTIGATION
 WORK PLAN

1777 EAST HENRIETTA ROAD
 NYSDEC BCP #C828192

Proposed
 Remedial Investigation:
 SVI Sample Locations



0 15 30
 1 inch = 15 feet
 Intended to print as ANSI D.

[2160339]

[FIGURE 7C]



Path: I:\Getings Sourcing, LLC\2160339 - 1777 E Henrietta Rd BCP App Dev\Drawings\RWP\Figure 7C - Proposed RWP SVI.mxd

TABLES

1777 East Henrietta Road
Supplemental Investigation

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples											NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)
	SB2015-01	SBMW2015-01 (Blind Duplicate)	SBMW2015-04	SB2015-03	SBMW2015-05	SBMW2015-05 (Blind Duplicate 2)	SBMW2015-06	SBMW2015-7	DW2015-01	DW2015-01	SBMW2015-10			
Sample Depth (ft)	11-12	11-12	12-13	18-19	12-13	12-13	19-20	19-20	19.5	51.1	4-5			
Area of Concern	AOC 4	AOC 4	AOC 4	AOC 4	AOC 5	AOC 5	AOC 5	AOC 2	AOC 1	AOC 1	AOC 2			
Sample Collection Date	4/7/2015	4/7/2015	4/7/2015	4/7/2015	4/7/2015	4/7/2015	4/7/2015	4/7/2015	4/13/2015	4/13/2015	4/9/2015			
Volatile Organic Compounds														
Chloromethane	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	Not Listed	Not Listed	Not Listed
Vinyl chloride	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.020	0.020	13.0
1,1-Dichloroethene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.33	0.33	500
Acetone	ND<0.0041	0.0047	0.0022	0.0038	ND<0.0032	0.0037	ND<0.0034	0.0054	0.0026	ND<0.0031	ND<0.0028	0.50	0.50	500
Carbon disulfide	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	2.7 ³	Not Listed	Not Listed
Methylene chloride	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	0.0014	ND<0.0028	0.50	0.50	500
trans-1,2-dichloroethene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.19	0.19	500
Methyl tert-butyl ether	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.93	0.93	500
1,1-Dichloroethane	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.27	0.27	240
2-Butanone	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.3 ³	Not Listed	Not Listed
cis-1,2-dichloroethene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.25	0.25	500
Chloroform	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.37	0.37	350
1,2-Dichloroethane	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.02	0.02	30.0
Benzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.0018	ND<0.0031	ND<0.0028	0.06	0.06	44.0
Trichloroethene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.47	0.47	200
Toluene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	0.7	0.7	500
1,1,2-Trichloroethane	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	Not Listed	Not Listed	Not Listed
Tetrachloroethene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	1.3	1.3	150
Ethylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.0004	ND<0.0031	ND<0.0028	1	1	390
m,p-Xylene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.003	ND<0.0031	ND<0.0028	Not Listed	Not Listed	Not Listed
o-Xylene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.00091	ND<0.0031	ND<0.0028	Not Listed	Not Listed	Not Listed
Xylene (total)	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.0039	ND<0.0031	ND<0.0028	1.6	0.26	500
Isopropylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	2.3 ³	Not Listed	Not Listed
n-Propylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	3.9	3.9	500
1,3,5-Trimethylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.00061	ND<0.0031	ND<0.0028	8.4	8.4	190
tert-Butylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	5.9	5.9	500
1,2,4-Trimethylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	0.0012	ND<0.0031	ND<0.0028	3.6	3.6	190
sec-Butylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	11	11	500
4-Isopropyltoluene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	Not Listed	Not Listed	Not Listed
n-Butylbenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	Not Listed	12	Not Listed
1,2-Dichlorobenzene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	1.1	1.1	500
Naphthalene	ND<0.0041	ND<0.0044	ND<0.0032	ND<0.003	ND<0.0032	ND<0.0025	ND<0.0034	ND<0.0036	ND<0.0037	ND<0.0031	ND<0.0028	12	12	500
Total VOCs	0.0	0.0047	0.0022	0.0038	0.0	0.0037	0.0	0.0054	0.0144	0.0014	0.0			
Total VOC TICs	None	None	None	None	None	None	None	None	0.0434	None	0.2300	NJ		
Total VOCs & VOC TICs	0.0	0.0047	0.0022	0.0038	0.0	0.0037	0.0	0.0054	0.0578	0.0014	0.23			

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

ND - Indicates compound was not detected above the reported laboratory method detection limit (MDL).

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

N - indicates presumptive evidence of a compound. This flag is used only for TICs, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

E - Value is above quantitation range

NA = Not Applicable or Not Available

PPM = Parts Per Million = mg/kg

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use

¹Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Ecological Resources value shown

²Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Commercial value shown

³Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples											NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)
	SBMW2015-09	SBMW2015-08	SBMW2015-11	SBMW2015-12	DW2015-02	DW2015-02	SBMW2015-13	SBMW2015-14	SBMW2015-15	DW2015-02	SBMW2015-16			
Sample Depth (ft)	19-20	12.5-13.5	17-18	13-14	7	38.5	5-6	11-12	14-14.5	58.3	9-10			
Area of Concern	AOC 2	AOC 2	AOC 2	AOC 2	AOC 1	AOC 1	AOC 3	AOC 6	AOC 6	AOC 1	AOC 1			
Sample Collection Date	4/9/2015	4/9/2015	4/9/2015	4/9/2015	4/14/2015	4/15/2015	4/13/2015	4/13/2015	4/13/2015	4/16/2015	4/16/2015			
Volatiles Organic Compounds														
Chloromethane	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	Not Listed	Not Listed	Not Listed
Vinyl chloride	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.020	0.020	13.0
1,1-Dichloroethene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	0.0091	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.33	0.33	500
Acetone	0.0069	0.012	0.0047	0.004	ND<0.0026	0.003	ND<0.0034	ND<0.0038	0.0029	0.0034	ND<0.0045	0.50	0.50	500
Carbon disulfide	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	2.7 ³	Not Listed	Not Listed
Methylene chloride	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	0.00085 J	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	0.0011 J	ND<0.0045	0.50	0.50	500
trans-1,2-dichloroethene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.19	0.19	500
Methyl tert-butyl ether	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.93	0.93	500
1,1-Dichloroethane	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	0.0013 J	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.27	0.27	240
2-Butanone	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.3 ³	Not Listed	Not Listed
cis-1,2-dichloroethene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	0.0009 J	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.25	0.25	500
Chloroform	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	0.00048 J	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.37	0.37	350
1,2-Dichloroethane	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.02	0.02	30.0
Benzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.06	0.06	44.0
Trichloroethene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	0.56 E	0.00062 J	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.47	0.47	200
Toluene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	0.7	0.7	500
1,1,2-Trichloroethane	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	Not Listed	Not Listed	Not Listed
Tetrachloroethene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	1.3	1.3	150
Ethylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	1	1	390
m,p-Xylene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	Not Listed	Not Listed	Not Listed
o-Xylene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	Not Listed	Not Listed	Not Listed
Xylene (total)	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	1.6	0.26	500
Isopropylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	2.3 ³	Not Listed	Not Listed
n-Propylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	3.9	3.9	500
1,3,5-Trimethylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	8.4	8.4	190
tert-Butylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	5.9	5.9	500
1,2,4-Trimethylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	3.6	3.6	190
sec-Butylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	11	11	500
4-Isopropyltoluene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	Not Listed	Not Listed	Not Listed
n-Butylbenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	Not Listed	12	Not Listed
1,2-Dichlorobenzene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	1.1	1.1	500
Naphthalene	ND<0.0027	ND<0.0036	ND<0.0036	ND<0.003	ND<0.0026	ND<0.0027	ND<0.0034	ND<0.0038	ND<0.0028	ND<0.0031	ND<0.0045	12	12	500
Total VOCs	0.0069	0.0120	0.0047	0.0040	0.57263	0.00362	0.0	0.0	0.0029	0.0045	0.0			
Total VOC TICs	None	None	None	None	None	None	None	None	None	None	None			
Total VOCs & VOC TICs	0.0069	0.012	0.005	0.004	0.57263	0.00362	0.000	0.000	0.003	0.005	0.000			

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

ND - Indicates compound was not detected above the reported laboratory method detection limit (MDL).

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

N - indicates presumptive evidence of a compound. This flag is used only for TICs, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

E - Value is above quantitation range

NA = Not Applicable or Not Available

PPM = Parts Per Million = mg/kg

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Restricted Residential Use.

¹Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Ecological Resources value shown

²Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Commercial value shown

³Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples												NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)			
	SBMW2015-17	SBMW2015-18	SBMW2015-19	SBMW2015-20	SBMW2015-21	SBMW2015-22	SBMW2015-22	SB2015-23	SB2015-23 (Blind Duplicate)	SB2015-23	SB2015-23	SB2015-23						
Sample Depth (ft)	5-6	4-5	6-7	3-4	10.2-10.7	7-8	9-10	6-7	6-7	12-13	18-19	23-24						
Area of Concern	AOC 3	AOC 6	AOC 1	AOC 1	AOC 1	AOC 1	AOC 1	AOC 1										
Sample Collection Date	4/16/2015	4/16/2015	4/16/2015	4/18/2015	4/21/2015	4/21/2015	4/21/2015	6/11/2015	6/11/2015	6/11/2015	6/11/2015	6/11/2015						
Volatile Organic Compounds																		
Chloromethane	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0088	ND<0.0851	ND<0.155	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	Not Listed	Not Listed	Not Listed
Vinyl chloride	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.020	0.020	13.0
1,1-Dichloroethene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.33	0.33	500
Acetone	ND<0.004	0.0029	ND<0.0038	ND<0.0438	ND<0.425	ND<0.776	ND<20.100	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.50	0.50	500
Carbon disulfide	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0088	ND<0.0851	ND<0.155	ND<4.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	2.7 ³	Not Listed	Not Listed
Methylene chloride	ND<0.004	ND<0.0039	ND<0.0038	0.0013	ND<0.0851	ND<0.155	ND<4.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.50	0.50	500
trans-1,2-dichloroethene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.19	0.19	500
Methyl tert-butyl ether	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.93	0.93	500
1,1-Dichloroethane	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.27	0.27	240
2-Butanone	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0438	ND<0.425	ND<0.776	ND<20.100	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.3 ³	Not Listed	Not Listed
cis-1,2-dichloroethene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.25	0.25	500
Chloroform	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.37	0.37	350
1,2-Dichloroethane	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.02	0.02	30.0
Benzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.06	0.06	44.0
Trichloroethene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	3.02	119	7.4	20	69	170	26				0.47	0.47	200
Toluene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	0.7	0.7	500
1,1,2-Trichloroethane	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	Not Listed	Not Listed	Not Listed
Tetrachloroethene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	1.3	1.3	150
Ethylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	1	1	390
m,p-Xylene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0088	ND<0.0851	ND<0.155	ND<4.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	Not Listed	Not Listed	Not Listed
o-Xylene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	Not Listed	Not Listed	Not Listed
Xylene (total)	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0132	ND<0.1276	ND<0.2326	ND<6.020	ND	UJL	ND	UJL	ND	UJL	ND	UJL	1.6	0.26	500
Isopropylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	2.3 ³	Not Listed	Not Listed
n-Propylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	3.9	3.9	500
1,3,5-Trimethylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	8.4	8.4	190
tert-Butylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	5.9	5.9	500
1,2,4-Trimethylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	3.6	3.6	190
sec-Butylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	11	11	500
4-Isopropyltoluene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	Not Listed	Not Listed	Not Listed
n-Butylbenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	Not Listed	12	Not Listed
1,2-Dichlorobenzene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	1.1	1.1	500
Naphthalene	ND<0.004	ND<0.0039	ND<0.0038	ND<0.0044	ND<0.0425	ND<0.0776	ND<2.010	ND	UJL	ND	UJL	ND	UJL	ND	UJL	12	12	500
Total VOCs	0.0	0.0029	0.0	0.0013	0.0	3.02	119	7.4	20	69	170	26						
Total VOC TICs	None	None	None	None	0.001314	None	None	None	None	None	None	None						
Total VOCs & VOC TICs	0.000	0.003	0.000	0.001	0.001314	3.020	119	7.4	20	69	170	26				Not Available	Not Available	Not Available

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

ND - Indicates compound was not detected above the reported laboratory method detection limit (MDL).

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

N - indicates presumptive evidence of a compound. This flag is used only for TICs, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

E - Value is above quantitation range

NA = Not Applicable or Not Available

PPM = Parts Per Million = mg/kg

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Restricted Residential Use.

¹Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Ecological Resources value shown

²Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Commercial value shown

³Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

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Supplemental Investigation

Table 2
Summary of Detected Semi-Volatile Organic Compounds (SVOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples							NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)
	SB2015-03	SBMW2015-05	Blind Duplicate 2	SBMW2015-13	SBMW2015-10	SBMW2015-18	SBMW2015-20			
Sample Depth (ft)	18-19	12-13	12-13	5-6	4-5	4-5	3-4			
Area of Concern	AOC 4	AOC 5	AOC 5	AOC 3	AOC 4	AOC 6	AOC 1			
Sample Collection Date	4/7/15	4/7/2015	4/7/15	4/13/2015	4/9/2015	4/16/2015	4/18/2015			
Semi-Volatile Organic Compounds										
Naphthalene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	12	12	500
2-Methylnaphthalene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	36.4 ³	Not Listed	Not Listed
Acenaphthylene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	107	100	500
Acenaphthene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	98	20	500
Dibenzofuran	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	210	7	350
Fluorene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	386	30	500
Phenanthrene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1,000	100	500
Anthracene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1,000	100	500
Carbazole	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	Not Listed	Not Listed	Not Listed
Fluoranthene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1,000	100	500
Pyrene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1,000	100	500
Benzo(a)anthracene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1	1	5.6
Chrysene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1	1	56
Bis(2-ethylhexyl)phthalate	ND<0.350	ND<0.380	0.08 J	ND<0.360	ND<0.370	ND<0.380	ND<0.370	435 ³	239 ¹	Not Listed
Benzo(b)fluoranthene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1.7	1	5.6
Benzo(k)fluoranthene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1.7	0.8	56
Benzo(a)pyrene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	22	1	1
Indeno(1,2,3-cd)pyrene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	8.2	0.5	5.6
Dibenzo(a,h)anthracene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1,000	0.33	0.56
Benzo(g,h,i)perylene	ND<0.350	ND<0.380	ND<0.360	ND<0.360	ND<0.370	ND<0.380	ND<0.370	1,000	100	500
Total SVOCs	0.0	0.0	0.080	0.0	0.0	0.0	0.0			
Total SVOC TICs	1.240 NJ	1.570 NJ	1.500 NJ	0.800	0.960	0.000	0.000			
Total SVOCs & SVOC TICs	1.240	1.570	1.580	0.800	0.960	0.0	0.0	Not Available	Not Available	Not Available

Notes:

SVOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8270.

ND - Indicates compound was not detected above the reported laboratory method detection limit (MDL).

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

N - indicates presumptive evidence of a compound. This flag is used only for TICs, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

NA = Not Applicable or Not Available

PPM = Parts Per Million = mg/kg

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use

¹Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Ecological Resources value shown

²Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Commercial value shown

³Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

**1777 East Henrietta Road
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Table 3
Summary of Detected Metals in Soil
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples							NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)
	SB2015-03	SBMW2015-05	SBMW2015-05 (Blind Duplicate 2)	SBMW2015-10	SBMW2015-13	SBMW2015-18	SBMW2015-20			
Sample Depth (ft)	18-19	12-13	12-13	4-5	5-6	4-5	3-4			
Area of Concern	AOC 4	AOC 5	AOC 5	AOC 2	AOC 3	AOC 6	AOC 1			
Sample Collection Date	4/7/15	4/7/2015	4/7/15	4/9/2015	4/13/2015	4/16/2015	4/18/2015			
TAL Metals										
Aluminum	3,390	3,690	4,170	4,760	4,900	6,100	4,900	10,000 ¹		Not Listed
Antimony	ND<0.34	ND<0.32	ND<0.32	ND<0.42	ND<0.97	ND<1.0	ND<0.98	12 ¹		Not Listed
Arsenic	1.5	2.7	2.5	2.8	3.1	3.4	3.1	16	13	16
Barium	21.4	31.8	29	47	41	49	39	820	350	400
Beryllium	0.21 B	0.18 B	0.22	0.24 B	0.22 J	0.29	0.25	47	7.2	590
Cadmium	0.11 B	0.17 B	0.18 B	0.23 B	0.12 J	0.16 J	0.24 J	7.5	2.5	9.3
Calcium	58,800	57,000	66,400	74,000	66,000	67,000	76,000	10,000 ¹		Not Listed
Chromium	5.9	6.4	7.3	7.9	7.8	15	7.4	Not Listed	30	1,500
Cobalt	3.3	3.4	4.3	4.6	5.7	5.7	4.1	30 ²	20 ¹	Not Listed
Copper	7.1	14.7	10.9	28.5	12	15	11	1,720	50	270
Iron	9,010	8,940	10,000	11,600	11,000	14,000	11,000	2,000 ²		Not Listed
Lead	5.8	7.1	7.4	14.8	7.7	9.5	6.6	450	63	1,000
Magnesium	24,600	23,700	24,100	21,100	26,000	25,000	22,000		Not Listed	
Manganese	335	360	373	372	390	450	330	2,000	1,600	10,000
Mercury	0.011 B	0.13	0.028 B	ND<0.0025	0.0035 J	ND<0.04	0.0054 J	0.73	0.18	2.80
Nickel	7.2	7.4	8.3	9.6	9.1	12	8.4	130	30	310
Potassium	846	674	834	937	960	1,100	760 B		Not Listed	
Selenium	ND<0.58	ND<0.54	ND<0.54	ND<0.70	ND<1.5	ND<1.5	ND<1.5	4	3.9	1,500
Silver	ND<0.058	ND<0.054	ND<0.054	ND<0.070	ND<1.5	ND<1.5	ND<1.5	8.3	2.0	1,500
Sodium	156	155	144	247	230 B	150 B	130 B		Not Listed	
Thallium	ND<0.20	ND<0.19	ND<0.18	0.25 B	ND<0.97	ND<1.0	0.86 J	5 ¹		Not Listed
Vanadium	8.9	9.5	10.3	13.1	12	14	11	100 ²	39 ¹	Not Listed
Zinc	22	41.1	36	52.8	52	63	63	2,480	109	10,000

Notes:

TAL Metals analysis by United States Environmental Protection Agency (USEPA) SW846 Methods 6010 (TAL Metals) and 7471 (Mercury)

J – Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

B = Denotes that a “trace” concentration was detected below the reporting limit and equal to or above the detection limit.

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use

Underlined type indicates a concentration above NYSDEC CP-51 SSCO for indicated objective.

PPM = Parts per Million

¹Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Ecological Resources value shown

²Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Residential value shown

³Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

**1777 East Henrietta Road
Supplemental Investigation**

Table 4
Summary of Detected Pesticides in Soil
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples							NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)
	SB2015-03	SBMW2015-05	SB2015-03 (Blind Duplicate 2)	SBMW2015-10	SBMW2015-13	SBMW2015-18	SBMW2015-20			
Sample Depth (ft)	18-19	12-13	18-19	4-5	5-6	4-5	3-4			
Area of Concern	AOC 4	AOC 5	AOC 4	AOC 2	AOC 3	AOC 6	AOC 1			
Sample Collection Date	4/7/15	4/7/15	4/7/15	4/9/15	4/13/15	4/16/15	4/18/15			
Pesticides										
alpha-BHC	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.02	0.02	3.4
beta-BHC	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.09	0.036	3
delta-BHC	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.25	0.040	500
gamma-BHC (Lindane)	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.1	0.1	9.2
Heptachlor	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.38	0.042	15.0
Aldrin	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.19	0.005	0.680
Heptachlor Epoxide	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	0.02 ³	0.077 ²	Not Listed
Endosulfan I	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	102	2.4	200
Dieldrin	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	0.1	0.005	1.4
4,4'-DDE	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	17	0.0033	62
Endrin	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	0.06	0.014	89
Endosulfan II	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	102	2.4	200
4,4'-DDD	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	14	0.0033	92
Endosulfan Sulfate	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	1,000	2.4	200
4,4'-DDT	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	136	0.0033	47.0
Methoxychlor	ND<0.018	ND<0.019	ND<0.019	ND<0.019	ND<0.019	ND<0.019	ND<0.019	900 ³	1.2 ¹	Not Listed
Endrin Ketone	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	Not Listed	Not Listed	Not Listed
Endrin Aldehyde	ND<0.0036	ND<0.0038	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0038	ND<0.0036	Not Listed	Not Listed	Not Listed
alpha-Chlordane	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	2.9	0.094	24
gamma-Chlordane	ND<0.0018	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	ND<0.0019	14 ³	0.54 ²	Not Listed
Toxaphene	ND<0.180	ND<0.190	ND<0.190	ND<0.190	ND<0.190	ND<0.190	ND<0.190	Not Listed	Not Listed	Not Listed
Total Pesticides	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000		Not Listed	

Notes:

Pesticide analysis by United States Environmental Protection Agency (USEPA) Method SW846 8081.

ND indicates that the compound was analyzed for, but not detected at or above the Contract Required Quantitation Limit (CRQL), or the compound was not detected due to qualification through the method or field blank.

NA = Not Applicable or Not Available

PPM = Parts Per Million = mg/kg

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use

¹Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Ecological Resources value shown

²Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Residential value shown

³Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

**1777 East Henrietta Road
Supplemental Investigation**

Table 5
Summary of Detected PCBs in Soil
Results in Milligrams per Kilogram (mg/kg) or PPM

Sample ID	Soil Samples							NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use (ppm)	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use (ppm)
	SB2015-03	SBMW2015-05	SB2015-03 (Blind Duplicate 2)	SBMW2015-10	SBMW2015-13	SBMW2015-18	SBMW2015-20			
Sample Depth (ft)	18-19	12-13	18-19	4-5	5-6	4-5	3-4			
Area of Concern	AOC 4	AOC 5	AOC 4	AOC 2	AOC 3	AOC 6	AOC 1			
Sample Collection Date	4/7/15	4/7/15	4/7/15	4/9/15	4/13/15	4/16/15	4/18/15			
PCBs										
Aroclor 1016	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Aroclor 1221	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Aroclor 1232	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Aroclor 1242	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Aroclor 1248	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Aroclor 1254	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Aroclor 1260	ND<0.036	ND<0.038	ND<0.037	ND<0.037	ND<0.037	ND<0.038	ND<0.036	N/A	N/A	N/A
Total PCBs	None Detected	None Detected	None Detected	None Detected	None Detected	None Detected	None Detected	3.2	0.1	1

Notes:

PCB analysis by United States Environmental Protection Agency (USEPA) Method SW846 8082.

Italicized type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Groundwater.

Highlighted type indicates that the constituent was detected at a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use

Bold type indicates a concentration above the NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Commercial Use

Table 6
Phase II Environmental Site Assessment
1777 East Henrietta Road
Henrietta, New York

Summary of Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or Parts Per Million (ppm)

Sample ID	SOIL SAMPLES													NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives	NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Restricted Residential	NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Groundwater
	Test Pits			Soil Borings												
	TP #1	TP #4	TP #5	GP-02	GP-05	GP-07	GP-08	GP-08	GP-08	GP-09	GP-10	GP-11	GP-13			
Depth	8'	9'	10'	5'	9.5'	1.5'-2'	2'-4'	8'	21'	2'-4'	0'-2'	2'-4'	7'			
Sample Collection Date	2/27/14	2/27/14	2/27/14	3/6/14	3/6/14	3/6/14	3/8/14	3/8/14	3/8/14	3/8/14	3/8/14	3/8/14	6/28/14			
Volatile Organic Compounds																
Chloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
Vinyl chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.02	0.90	0.02
1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.33	100	0.33
Acetone	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	100	0.05
Carbon disulfide	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.7**	100*	2.7**
Methylene chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	100	0.05
Methyl acetate	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
Methyl cyclohexane	BDL	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
trans-1,2-dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.19	100	0.19
Methyl tert-butyl ether	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.93	100	0.93
1,1-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.27	26	0.27
2-Butanone	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3**	100*	0.3**
cis-1,2-dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.009	BDL	BDL	BDL	BDL	0.25	100	0.25
Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.37	49	0.37
Chloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.02	3.1	0.02
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.06	4.8	0.06
Trichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	0.32	0.14	8.8	0.02	0.011	0.014	BDL	0.47	21	0.47
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.7	100	0.7
1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.68	100	0.68
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
Tetrachloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.3	19	1.3
Ethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	41	1
m,p-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.26	100	1.6
o-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.26	100	1.6
Isopropylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.3**	100*	2.3**
n-Propylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.9	100	3.9
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	BDL	BDL	8.4	52	8.4
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.019	BDL	BDL	BDL	BDL	BDL	3.6	52	3.6
tert-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5.9**	NA	5.9**
sec-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	11	100	11
4-Isopropyltoluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	10**	NA	10**
n-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	12	NA	NA
1,2-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.1	100	1.1
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	12	100	12

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.

BDL type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives

Highlighted indicates that the constituent was above the NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Restricted Residential

Italicized indicates that the constituent was above the NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Groundwater

BDL - Indicates that the constituent was not detected above the laboratory's method detection limit

Table 6
Phase II Environmental Site Assessment
1777 East Henrietta Road
Henrietta, New York

Summary of Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or Parts Per Million (ppm)

Sample ID	SOIL SAMPLES						NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives	NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Restricted Residential	NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Groundwater
	Soil Borings								
	GP-14	GP-15	GP-16		GP-18				
Depth	1-2'	9-10'	1-2'	6-7'	1-2'	11'			
Sample Collection Date	6/28/14	6/29/14	6/29/14	6/29/14	6/29/14	6/29/14			
Volatile Organic Compounds									
Chloromethane	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
Vinyl chloride	BDL	BDL	BDL	BDL	BDL	BDL	0.02	0.90	0.02
1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	0.33	100	0.33
Acetone	BDL	BDL	BDL	BDL	BDL	BDL	0.05	100	0.05
Carbon disulfide	BDL	BDL	BDL	BDL	BDL	BDL	2.7**	100*	2.7**
Methylene chloride	BDL	BDL	BDL	BDL	BDL	BDL	0.05	100	0.05
Methyl acetate	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
Methyl cyclohexane	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
trans-1,2-dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	0.19	100	0.19
Methyl tert-butyl ether	BDL	BDL	BDL	BDL	BDL	BDL	0.93	100	0.93
1,1-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	0.27	26	0.27
2-Butanone	BDL	BDL	BDL	BDL	BDL	BDL	0.3**	100*	0.3**
cis-1,2-dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	0.25	100	0.25
Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	0.37	49	0.37
Chloroethane	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	0.02	3.1	0.02
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	0.06	4.8	0.06
Trichloroethene	0.0059	33	0.037	0.069	0.089	36	0.47	21	0.47
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	0.7	100	0.7
1,1,1-Trichloroethane	BDL	0.063	BDL	BDL	BDL	BDL	0.68	100	0.68
1,1,2-Trichloroethane	BDL	BDL	0.037	BDL	BDL	BDL	NA	NA	NA
Tetrachloroethene	BDL	BDL	BDL	BDL	BDL	BDL	1.3	19	1.3
Ethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	1	41	1
m,p-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	0.26	100	1.6
o-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	0.26	100	1.6
Isopropylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	2.3**	100*	2.3**
n-Propylbenzene	NA	NA	NA	NA	NA	NA	3.9	100	3.9
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	8.4	52	8.4
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	3.6	52	3.6
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	5.9**	NA	5.9**
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	11	100	11
4-Isopropyltoluene	NA	NA	NA	NA	NA	NA	10**	NA	10**
n-Butylbenzene	NA	NA	NA	NA	NA	NA	12	NA	NA
1,2-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	1.1	100	1.1
Naphthalene	NA	NA	NA	NA	NA	NA	12	100	12

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.

Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives

Highlighted indicates that the constituent was above the NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Restricted Residential

Italicized indicates that the constituent was above the NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Groundwater

BDL - Indicates that the constituent was not detected above the laboratory's method detection limit

NA denotes "not applicable" or "not analyzed".

*Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Residential value shown

**Indicates no Part 375 value for indicated compound; NYSDEC CP-51 SSCO Protection of Groundwater value shown

Table 7
Phase II Environmental Site Assessment
1777 East Henrietta Road
Henrietta, New York

Summary of Metals in Soil Samples
Results in Milligrams per Kilogram (mg/kg) or Parts Per Million (ppm)

Sample ID	Soil Samples						NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Industrial	NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Commercial	NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Groundwater
	GP-02	GP-08	GP-10	GP-13	GP-14	GP-15			
Depth	5'	2'-4'	0'-2'	1'	1-2'	1-4'			
Sample Collection Date	3/6/14	3/8/14	3/8/14	6/28/14	6/28/14	6/29/14			
Metals									
Arsenic	3.3	1.4	3.3	4.3	BDL	BDL	16	16	16
Barium	49	40	51	47	49	80	10,000	400	820
Beryllium	0.29	0.26	0.35	NA	NA	NA	2,700	590	47
Cadmium	0.34	0.37	0.37	BDL	BDL	28	60	9.3	7.5
Chromium	9.0	160	9.7	12	11	180	6,800	1,500	19
Copper	11	670	12	NA	NA	NA	10,000	270	1720
Lead	9.4	7.3	8.8	10	7.5	16	3,900	1,000	450
Manganese	450	350	360	NA	NA	NA	10,000	10,000	2000
Mercury	BDL	BDL	BDL	NA	NA	NA	5.7	3	0.73
Nickel	12	940	10	NA	NA	NA	10,000	310	130
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	6,800	1,500	4
Silver	BDL	BDL	BDL	BDL	BDL	BDL	6,800	1,500	8.3
Zinc	59	51	60	NA	NA	NA	10,000	10,000	2480

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.

Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Industrial

Highlighted indicates that the constituent was detected above the NYCRR Part 375-6.8(B) Restricted Use Soil Cleanup Objectives: Protection of Public Health: Commercial

Italicized indicates that the constituent was detected above the NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives: Protection of Groundwater

BDL - Indicates that the constituent was not detected above the laboratory's method detection limit

NA denotes "not applicable" or "not analyzed".

Table 8
Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater
Results in micrograms per liter (ug/L) or PPB

Sample ID	ENVIRON (On-Site Laboratory Analysis)							ENVIRON (Off-Site Laboratory Analysis)				NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
	1	3	4	5	6	7	9	1	3	6	7	
Sample Depth	19	25.5	23	21.5	22	21.5	25	19	25.5	22	21.5	
Area of Concern	NA	AOC 1	NA	NA	NA	NA	NA	NA	AOC 1	NA	NA	
Sample Collection Date	4/4/1996	4/4/1996	4/4/1996	4/5/1996	4/5/1996	4/5/1996	4/5/1996	4/6/1996	4/4/1996	4/5/1996	4/5/1996	
Volatile Organic Compounds												
Chloroform	58	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	7
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-methyl-2-pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
1,2-dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Acetone	NA	NA	NA	NA	NA	NA	NA	ND	13 J	ND	ND	50
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	60
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50
cis-1,2-dichloroethene	NA	NA	NA	NA	NA	NA	NA	48	ND	ND	63	5
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Trichloroethene	930	ND	ND	ND	ND	14	ND	1,500	ND	ND	16	5
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
xylenes (total)	NA	NA	NA	NA	NA	NA	NA	ND	3 J	ND	ND	5
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
p-isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
n-butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
sec-butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
n-propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
1,3,5-trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
trans-1,2-dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Total VOCs	988	ND	ND	ND	ND	14	ND	1,548	16	ND	79	
Total VOC TICs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	96	30	6	Not Available
Total VOCs & VOC TICs	988	ND	ND	ND	ND	14	ND	1548	112	30	85	

Notes:

Concentrations reported in micrograms per liter (ug/L) or parts per billion (ppb)
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
U - Indicates that the constituent was not detected.
E - Value above quantitation range
D - The compound concentration was obtained from a secondary dilution analysis
NA = Not Applicable or Not Available

Highlighted type indicates that the constituent was detected at a concentration above the NYSDEC Part 703 Groundwater Standards or TOGS 1.1.1.

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.
ND indicates the compound was not detected
NA = Not Applicable or Not Available

Table 8
Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater
Results in micrograms per liter (ug/L) or PPB

Sample ID	ENVIRON							NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
	MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07	
Screened Interval (feet below ground surface)	5.2-19.2	6.5-21.5	10-20	5-15	15.2-25.2	23.4-33.4	8.2-18.2	
Area of Concern	NA							
Sample Collection Date	4/26/1996	4/25/1996	4/25/1996	4/26/1996	4/25/1996	4/25/1996	4/26/1996	
Volatile Organic Compounds								
Chloroform	NA	7						
Chloromethane	NA	5						
2-Hexanone	NA							
4-methyl-2-pentanone	NA							
1,1-Dichloroethene	NA	5						
1,2-dichloropropane	NA	5						
Acetone	860	ND	ND	ND	39	ND	ND	50
Carbon disulfide	NA	60						
2-Butanone	NA	50						
cis-1,2-dichloroethene	13	ND	ND	ND	ND	ND	560	5
Benzene	NA	1						
Trichloroethene	ND	2 J	ND	ND	ND	ND	200	5
Toluene	NA	5						
xylenes (total)	NA	5						
Naphthalene	NA	10						
p-isopropyltoluene	NA	5						
Ethylbenzene	NA	5						
n-butylbenzene	NA	5						
sec-butylbenzene	NA	5						
n-propylbenzene	NA	5						
Isopropylbenzene	NA	5						
1,2,4-Trimethylbenzene	NA	5						
1,3,5-trimethylbenzene	NA	5						
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	2 J	5
Total VOCs	873	2	ND	ND	39	ND	760	
Total VOC TICs	NA	Not Available						
Total VOCs & VOC TICs	873	2	ND	ND	39	ND	760	

Notes:

Concentrations reported in micrograms per liter (ug/L) or parts per billion (ppb)

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

U - Indicates that the constituent was not detected.

E - Value above quantitation range

D - The compound concentration was obtained from a secondary dilution analysis

NA = Not Applicable or Not Available

Highlighted type indicates that the constituent was detected at a concentration above the NYSDEC Part 703 Groundwater Standards or TOGS 1.1.1.

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

ND indicates the compound was not detected

NA = Not Applicable or Not Available

Table 8
Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater
Results in micrograms per liter (ug/L) or PPB

Sample ID	STANTEC					NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
	MW-01	MW-12	MW-13	MW-14	MW-15	
Screen Depth	5.2-19.2	8.5-18.5	4.5-14.5	6-16	9-19	
Area of Concern	NA	NA	AOC 5	NA	NA	
Sample Collection Date	5/21/2013	5/21/2013	5/21/2013	5/22/2013	5/21/2013	
Volatile Organic Compounds						
Chloroform	1.0 U	7				
Chloromethane	1.0 U	5				
2-Hexanone	50 U	50.0 U	50.0 U	50.0 U	50.0 U	NA
4-methyl-2-pentanone	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	1.0 U	5				
1,2-dichloropropane	1.0 U	5				
Acetone	10 U	50				
Carbon disulfide	1.0 U	60				
2-Butanone	1.0 U	10 U	10 U	10 U	10 U	50
cis-1,2-dichloroethene	1.0 U	1.0 U	1.0 U	1.3	1.0 U	5
Benzene	1.0 U	1				
Trichloroethene	2,900	10 U	14.0	5.4	10 U	5
Toluene	1.0 U	5				
xylenes (total)	2.0 U	5				
Naphthalene	NA	NA	NA	NA	NA	10
p-isopropyltoluene	NA	NA	NA	NA	NA	5
Ethylbenzene	1.0 U	5				
n-butylbenzene	NA	NA	NA	NA	NA	5
sec-butylbenzene	NA	NA	NA	NA	NA	5
n-propylbenzene	NA	NA	NA	NA	NA	5
Isopropylbenzene	NA	NA	NA	NA	NA	5
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	5
1,3,5-trimethylbenzene	NA	NA	NA	NA	NA	5
trans-1,2-dichloroethene	NA	NA	NA	NA	NA	5
Total VOCs	2,900	ND	ND	6.7	ND	
Total VOC TICs	ND	ND	ND	ND	ND	Not Available
Total VOCs & VOC TICs	2,900	ND	ND	6.7	ND	

Notes:

Concentrations reported in micrograms per liter (ug/L) or parts per billion (ppb)

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

U - Indicates that the constituent was not detected.

E - Value above quantitation range

D - The compound concentration was obtained from a secondary dilution analysis

NA = Not Applicable or Not Available

Highlighted type indicates that the constituent was detected at a concentration above the NYSDEC Part 703 Groundwater Standards or TOGS 1.1.1.

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

ND indicates the compound was not detected

NA = Not Applicable or Not Available

Table 8
Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater
Results in micrograms per liter (ug/L) or PPB

Sample ID	LaBella												NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
	LBA-MW-02	LBA-MW-03	LBA-MW-04	LBA-MW-05	LBA-MW-06	LBA-MW-07	STANTEC MW-01	LBA-MW-08	LBA-MW-09	LBA-MW-10	LBA-MW-11	LBA-MW-12	
Screened Interval (feet below ground surface)	6-16	6-16	5.2-15.2	6-11	13-23	7-17	5.2-19.2	4-9	5-15	3-13	2-12	3-13	
Area of Concern	NA	NA	NA	NA	AOC 1	AOC 1	NA	AOC 3	AOC 2	AOC 1	AOC 1	AOC 1	
Sample Collection Date	3/7/2014	3/7/2014	3/7/2014	3/7/2014	3/8/2014	3/14/2014	3/8/2014	7/9/2014	7/9/2014	7/9/2014	7/9/2014	7/9/2014	
Volatile Organic Compounds													
Chloroform	5 U	5 U	5 U	5 U	25,000 U	5 U	5 U	3 U	3 U	25 U	2,500 U	3 U	7
Chloromethane	3 U	3 U	3 U	3 U	12,000 U	3 U	3 U	3 U	3 U	12 U	12,000 U	3 U	5
2-Hexanone	10 U	10 U	10 U	10 U	5,000 U	10 U	10 U	10 U	10 U	50 U	5,000 U	10 U	NA
4-methyl-2-pentanone	10 U	10 U	10 U	10 U	5,000 U	10 U	10 U	10 U	10 U	50 U	5,000 U	10 U	NA
1,1-Dichloroethene	1 U	1 U	1 U	1 U	5,000 U	1 U	1 U	1 U	1 U	18	1,500	1 U	5
1,2-dichloropropane	1 U	1 U	1 U	1 U	5,000 U	1 U	1 U	1 U	1 U	25	500 U	1 U	5
Acetone	58	50 U	50 U	50 U	250,000 U	72	50 U	50 U	81	5 U	25,000 U	50 U	50
Carbon disulfide	1 U	1 U	1 U	1 U	5,000 U	1 U	1 U	1 U	1 U	5 U	500 U	1 U	60
2-Butanone	10 U	10 U	11	10 U	5,000 U	10 U	10 U	10 U	10 U	50 U	5,000 U	10 U	50
cis-1,2-dichloroethene	1 U	1 U	1 U	1 U	5,000 U	1 U	14	1 U	1 U	17	500 U	1 U	5
Benzene	1 U	1 U	1 U	1 U	5,000 U	1 U	1 U	1 U	1 U	5 U	500 U	1 U	1
Trichloroethene	1 U	1 U	1 U	1 U	520,000	1 U	580	20	340	6,100	180,000	17	5
Toluene	5 U	5 U	5 U	5 U	25,000 U	5 U	5 U	5 U	5 U	25 U	2,500 U	5 U	5
xylenes (total)	1 U	5	30	1 U	5,000 U	1 U	1 U	3 U	3 U	15 U	1,500 U	3 U	5
Naphthalene	5 U	5 U	11	5 U	25,000 U	5 U	5 U	NA	NA	NA	NA	NA	10
p-isopropyltoluene	1 U	1 U	2	1 U	5,000 U	1 U	1 U	NA	NA	NA	NA	NA	5
Ethylbenzene	1 U	1 U	4	1 U	5,000 U	1 U	1 U	1 U	1 U	5 U	500 U	500 U	5
n-butylbenzene	1 U	1 U	2	1 U	5,000 U	1 U	1 U	1 U	1 U	NA	NA	NA	5
sec-butylbenzene	1 U	1 U	2	1 U	5,000 U	1 U	1 U	1 U	1 U	NA	NA	NA	5
n-propylbenzene	1 U	1 U	4	1 U	5,000 U	1 U	1 U	1 U	1 U	NA	NA	NA	5
Isopropylbenzene	1 U	1 U	2	1 U	5,000 U	1 U	1 U	1 U	1 U	5 U	500 U	500 U	5
1,2,4-Trimethylbenzene	1 U	6	42	1 U	5,000 U	1 U	1 U	NA	NA	NA	NA	NA	5
1,3,5-trimethylbenzene	1 U	2	10	1 U	5,000 U	1 U	1 U	NA	NA	NA	NA	NA	5
trans-1,2-dichloroethene	1 U	1 U	1 U	1 U	5,000 U	1 U	1	1 U	1 U	5 U	500 U	1 U	5
Total VOCs	58	12	120	ND	520,000	72	595	20	421	6,160	181,500	17	
Total VOC TICs	ND	ND	ND	ND	ND	ND	Not Available						
Total VOCs & VOC TICs	58	12	120	ND	520,000	72	595	20	421	6,160	181,500	17	

Notes:

Concentrations reported in micrograms per liter (ug/L) or parts per billion (ppb)

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

U - Indicates that the constituent was not detected.

E - Value above quantitation range

D - The compound concentration was obtained from a secondary dilution analysis

NA = Not Applicable or Not Available

Highlighted type indicates that the constituent was detected at a concentration above the NYSDEC Part 703 Groundwater Standards or TOGS 1.1.1.

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

ND indicates the compound was not detected

NA = Not Applicable or Not Available

Table 8
Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater
Results in micrograms per liter (ug/L) or PPB

Sample ID	LaBella										NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values	
	SBMW2015-02	SBMW2015-04	SBMW2015-05	SBMW2015-07	SBMW2015-08	SBMW2015-09	SBMW2015-10	SBMW2015-11	SBMW2015-12	SBMW2015-14		
Screened Interval (feet below ground surface)	5.5-15.5	6-16	2-12	8-18	8.5-13.5	4.5-14.5	6-16	5-15	6-16	7-17		
Area of Concern	AOC 4	AOC 4	AOC 5	AOC 2	AOC 6							
Sample Collection Date	4/7/2015	4/7/2015	4/7/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/18/2015		
Volatile Organic Compounds												
Chloroform	1.0 U	7										
Chloromethane	1.0 U	5										
2-Hexanone	5.0 U	NA										
4-methyl-2-pentanone	1.0 U	NA										
1,1-Dichloroethene	1.0 U	5										
1,2-dichloropropane	1.0 U	5										
Acetone	5.6	5.0 U	5.5	17	42	34	19	26	22	96	D	50
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.0 U	2.2	1.0	1.9	J	60
2-Butanone	5.0 U	4.4	J	50								
cis-1,2-dichloroethene	1.0 U	0.5	U	5								
Benzene	1.0 U	1										
Trichloroethene	1.0 U	5										
Toluene	1.0 U	0.3	J	5								
xylenes (total)	1.0 U	0.4	J	5								
Naphthalene	1.0 U	10										
p-isopropyltoluene	1.0 U	5										
Ethylbenzene	1.0 U	5										
n-butylbenzene	1.0 U	5										
sec-butylbenzene	1.0 U	5										
n-propylbenzene	1.0 U	5										
Isopropylbenzene	1.0 U	5										
1,2,4-Trimethylbenzene	1.0 U	0.5	J	5								
1,3,5-trimethylbenzene	1.0 U	5										
trans-1,2-dichloroethene	1.0 U	5										
Total VOCs	5.6	ND	5.5	17	43.7	34	19	28.2	23.0	103.5		
Total VOC TICs	ND		Not Available									
Total VOCs & VOC TICs	5.6	ND	5.5	17	43.7	34	19	28.2	23.0	103.5		

Notes:

Concentrations reported in micrograms per liter (ug/L) or parts per billion (ppb)

VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.

U - Indicates that the constituent was not detected.

E - Value above quantitation range

D - The compound concentration was obtained from a secondary dilution analysis

NA = Not Applicable or Not Available

Highlighted type indicates that the constituent was detected at a concentration above the NYSDEC Part 703 Groundwater Standards or TOGS 1.1.1.

J - Indicates that the constituent was positively identified; but the associated numerical value is the approximate concentration of the constituent in the sample.

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Summary of Detected Volatile Organic Compounds (VOCs) in Groundwater
Results in micrograms per liter (ug/L) or PPB

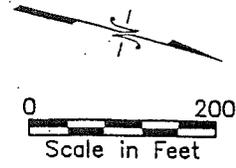
LaBella															NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
	SBMW2015-15	SBMW2015-15 (Blind Duplicate 3)	SBMW2015-16	SBMW2015-17	SBMW2015-18	SBMW2015-19	SBMW2015-20	DW2015-01	DW2015-02	SBMW2015-21	SBMW2015-22	Trip Blank	Trip Blank	MW-06	
Screened Interval (feet below ground surface)	7.5-17.5	7.5-17.5	6.5-16.5	7.5-17.5	6.5-16.5	7.3-17.3	7-17	37-52	43.2-58.2	9.5-19.5	10-20	NA	NA	13-23	
Area of Concern	AOC 3	AOC 3	AOC 3	AOC 3	AOC 6	AOC 1	AOC 1	AOC 1	AOC 1	AOC 1	AOC 1	NA	NA	AOC 1	
Sample Collection Date	4/18/2015	4/18/2015	4/18/2015	4/18/2015	4/18/2015	4/18/2015	4/20/2015	4/20/2015	4/20/2015	4/21/2015	4/21/2015	4/7/2015	4/16/2015	6/11/2015	
Volatile Organic Compounds															
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	7
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 J	2.0 U	2.0 U	2.0 U	2.0 U	1,000 U	1.0 U	1.0 U	50 U	5
2-Hexanone	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	7.8 J	5,000 U	10.0 U	250 U	NA
4-methyl-2-pentanone	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	7 J	5,000 U	10.0 U	10.0 U	50 U	NA
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	480	5
1,2-dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
Acetone	94.5	113 E	20.7	149 D	54.4	122 E	98.3	10.0 U	9.3 J	67.5	5,000 U	5.0 U	1.0 U	250 U	50
Carbon disulfide	0.9 J	0.5 J	2.0 U	0.4 J	0.9 J	2.1	0.3 J	2.0 U	2.0 U	2.0 U	1,000 U	1.0 U	1.0 U	50 U	60
2-Butanone	5.1 J	7.0 J	1.9 J	5.0 J	5.8 J	19.6	10.3	10.0 U	1.3 J	24.5	5,000 U	5.0 U	5.0 U	250 U	50
cis-1,2-dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	500 U	1.0 U	1.0 U	52	5
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 J	500 U	1.0 U	1.0 U	50 U	1
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	24,000	1.0 U	1.0 U	110,000 E	5
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J	500 U	1.0 U	1.0 U	50 U	5
xylenes (total)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1,000 U	1.0 U	1.0 U	50 U	5
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8	500 U	1.0 U	1.0 U	50 U	10
p-isopropyltoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
n-butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
sec-butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
n-propylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
1,2,4-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
1,3,5-trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
trans-1,2-dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500 U	1.0 U	1.0 U	50 U	5
Total VOCs	100.5	120.5	22.6	154.4	62.1	149.7	108.9	ND	10.6	108.6	24,000	ND	ND	110,532.0	Not Available
Total VOC TICs	ND	ND	ND	ND	3.3	ND	ND	ND	ND	25.2	ND	ND	ND	805.2	
Total VOCs & VOC TICs	100.5	120.5	22.6	154.4	65.4	149.7	108.9	ND	10.6	133.8	24000.0	ND	ND	111,337.2	

Notes:

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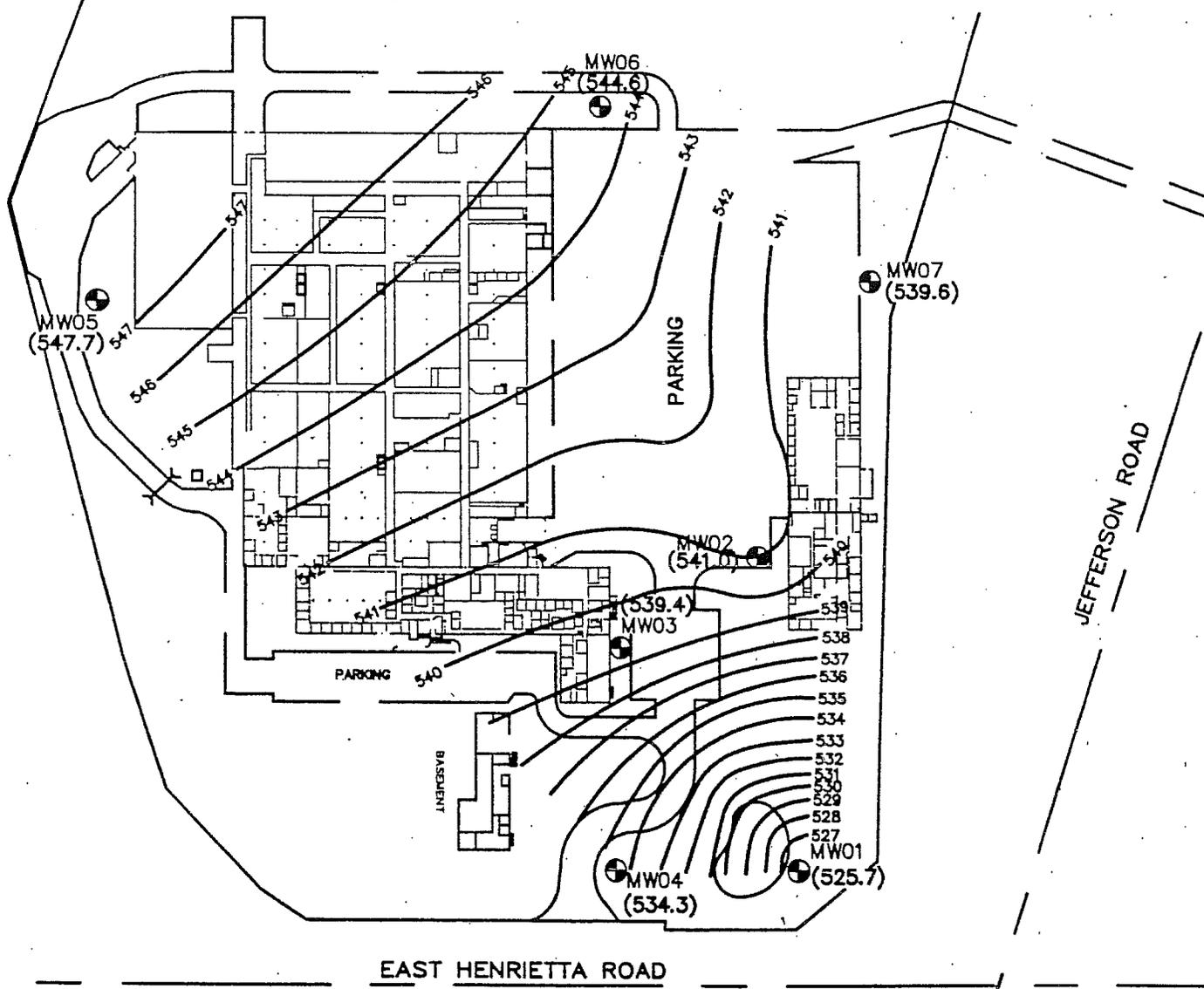
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APPENDIX 1
ENVIRON GROUNDWATER FLOW MAPPING



LEGEND

- OVERBURDEN MONITORING WELL
- MW05 WELL NUMBER
- (539.4) GROUND WATER ELEVATION (IN FEET ABOVE MEAN SEA LEVEL)
- GROUND WATER ELEVATION CONTOUR



ENVIRON

GROUND WATER ELEVATION CONTOURS - APRIL 24, 1996
 MDT BIOLOGIC COMPANY
 1777 E. HENRIETTA ROAD; HENRIETTA, NY

FIGURE
 III-3

DRAFTED BY: TJF/HFZ DATE: 5/10/96

5090CW1A

APPENDIX 2

ANTICIPATED PROJECT PERSONNEL

LaBella Project Personnel

LaBella Staff Member	Title	Phone Number
Greg Senecal	Environmental Director	585-295-6243
Daniel Noll	Senior Environmental Engineer	585-295-6611
Jennifer Gillen	Remediation Program Manager	585-295-6648
Ann Aquilina	Environmental Engineer	585-295-6289
Nicholas Inzinna	Project Geologist	518-694-1037
Steve Rife	Project Geologist	585-295-7004
Ira Poplar-Jeffers	GIS Specialist	585-295-6213

Greg Senecal, CHMM

Greg is Director of Environmental Services and is a Certified Hazardous Materials Manager and is responsible for the direction of all environmental investigation related projects undertaken by the firm. He has more than 23 years experience in designing, managing, and conducting numerous site assessments, remedial projects, brownfield redevelopment projects, groundwater monitoring well installations, test pit excavations, and underground petroleum storage tank removals and spill cleanups.

Greg coordinates staffing and client relationships for many of the firm's environmental clients. This effort includes working closely with the client, and forming the best technical project teams for the diverse array of environmental consulting and engineering services offered by the firm.

PHASE I/II INTRO:

As Director of Environmental Services, Greg is responsible for the direction of all environmental investigation related projects undertaken by the firm. Greg has more than 24 years experience scoping, scheduling, and reviewing Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, and remedial efforts undertaken by the firm.

Greg is a Certified Hazardous Materials Manager (CHMM) and has extensive experience in the field of Environmental Management relating to Phase I and Phase II Environmental Site Assessments, remediation, and environmental compliance evaluations. Greg has conducted or supervised over 3,000 Phase I Environmental Site Assessments and over 1,500 Phase II Environmental Site Assessments, as the firm has averaged performing 300-340 assessments per year.

Project Experience

Monoco Oil Brownfield Cleanup Pittsford, NY

Greg is responsible for directing all environmental services associated with the NYSDEC Brownfield Cleanup Program for this project. This complex environmental project involves the cleanup and demolition of a 20-acre blighted vacant oil refinery. The redevelopment plan for the project includes redevelopment of an upscale waterfront apartment and town home complex along the Canal.



Director, Environmental Division

- State University of New York at Syracuse, School of Environmental Science and Forestry: BS, Environmental Science
- State University of New York at Cobleskill: AAS, Fisheries and Wildlife Technology

Certification / Registration

- Certified Hazardous Materials Manager
- Certified Hazardous Waste Operations & Emergency Response (40-Hour OSHA Health and Safety Training 29)

935 West Broad Street Rochester, NY

Greg is Client Manager for the Remedial Investigation, Remedial Alternatives Analysis, Site Re-use Concept Plan and a Corrective Action Plan. This project is funded under the NYSDEC 1996 Clean Water/Clean Air Bond Act. Projects tasks completed to date include: geophysical site assessment; comprehensive soil and groundwater characterization; computer model contaminant plume migration trends; GIS mapping to depict site features, analytical data, contaminant plumes; developed reuse concept site plan.

Monroe County Environmental Testing Term Agreement Monroe County, NY

As Director of Environmental Services, Greg has been responsible for the successful completion of over 12 years of term agreements (with annual renewals) for hazardous materials inspection and abatement design with Monroe County. Assignments typically involve

Greg Senecal, CHMM

asbestos and lead inspections, but have also included other Regulated Building Materials and mold. Projects have ranged in size from small utility spaces to large multi-story office/housing complexes. A recently completed project involved the inspection of 160,000 sq ft of the Public Safety Building.

Environmental Term Agreement | City of Rochester Rochester, NY

Client Manager who directs all of the projects under the term. Projects range from Phase I Environmental Site Assessments to Site Characterizations, Remedial Cost Estimates, and Brownfield Cleanups.

690 St. Paul Street | NYSDEC Brownfield Cleanup Project Rochester, NY

Greg is serving as the project director for this multi-faceted Brownfield investigation and cleanup project. Greg acts as the liaison between the building owners, the former owner (Bausch & Lomb), the Building tenant (City of Rochester School District), and the numerous regulatory agencies involved in the project. This project includes a large SVI investigation, design and installation of a SVI mitigation system, monthly performance monitoring of indoor, sub slab, and exterior air, and communication of the above results to the agencies, tenants, and various stakeholder groups this project also included several IRM's for the removal of orphan tanks and petroleum impacted soils. The RI is currently focusing on the identification and delineation of suspected TCE plumes on the property and under the building structures.

Buffalo Avenue Industrial Corridor Brownfield Opportunity Area | Pre-Nomination Study Niagara Falls, NY

Greg served as the project director for this 1500 acre, 2500 industrial parcel Brownfield Opportunity Area Project. Greg coordinated the effort between LaBella's Planning and environmental division. He also oversaw the schedule and public outreach components of the project.

Vacuum Oil/South Genesee Brownfield Opportunity Area | Pre-Nomination Study Rochester, NY

Director of the Project Team for the City of to prepare a pre-nomination study for the proposed Vacuum Oil-South Genesee River Corridor Brownfield Opportunity Area.

LaBella developed mapping that allowed for the Brownfield Opportunity Area boundaries to be established in a logical manner at the 56 acre 1.2 mile long corridor along the Genesee River. LaBella conducted economic and demographic research for the project site and gathered zoning, occupancy, and environmental information for potential underutilized Brownfield properties within the BOA.

Port of Rochester Redevelopment Project | Phase II Site Characterization Rochester, NY

Project Manager for complete Phase II Site Characterization, which involved sub surface characterization of approximately 38 acres. Greg directed the environmental team who received a beneficial re-use determination to re use 80,000 cubic yards of iron foundry slag as on site fill.

Bureau of Water, Lighting, & Parking Meter Operations Rochester, NY

Greg served as Client Manager to remediate the Water Bureau site to obtain regulatory closure or inactivation. The project scope includes the redevelopment of the current site for reuse as a new facility for the operations center.

CSXT Train Derailment & Hazardous Materials Spill Rochester, NY

Project Manager responsible for review of all delineation reports, implementation of additional delineation studies, review of remedial work plans, and oversight of all facets of the execution of IRM as it related to achieving a cleanup that would limit long term liability for the City and allow for the planned redevelopment to occur.

Rochester Rhinos Stadium Brownfield Redevelopment Rochester, NY

Greg served as Project Manager of the NYSDEC Voluntary Cleanup of this prominent urban redevelopment site. The voluntary clean was based around a soils management plan approach that included the re-use of approximately sixty thousand yards of low level petroleum contaminated soils as on site fill under parking lots and in landscaped berm areas of the property.

Daniel Noll, PE

Dan has over 15 years of experience with environmental projects at industrial/manufacturing facilities and environmental investigation projects for a variety of clients including developers, financial institutions, industrial clients, and municipalities. Dan has managed numerous Phase II Environmental Site Assessments and remediation projects such as groundwater monitoring programs, soil vapor investigations, test pit investigations, geo-probe investigations, underground storage tank removals, soil removals, bio-cell remediations, and in-situ groundwater remediation. He also has experience with the design and installation oversight of mitigation systems. In addition, Dan has assisted industrial, municipal and agricultural clients with permitting and annual reporting for State Pollution Discharge Elimination System (SPDES) permits, Part 360 Land Application permits, Composting permits, and Petroleum Bulk Storage (PBS) registrations.

Project Experience

Carriage Cleaners BCP Site | Springs Land Company Rochester, NY

As Project Manager, Dan completed a Brownfield Cleanup Program (BCP) Application & Work Plan to conduct a Remedial Investigation at a former dry cleaning facility. A soil, groundwater, and soil gas study was undertaken to develop remedial costs and assist with redeveloping the property. Subsequently, an Interim Remedial Measure was completed to remove the source area of impacts from the Site. Dan completed a remedial alternatives analysis for selecting a treatment approach for the residual groundwater plume. Dan also attended Town Board Meetings regarding this project.

Former Manufacturing Facility - BCP Site | Stern Family Limited Partnership Rochester, NY

Dan was the Project Engineer for this BCP Site, which underwent a Remedial Investigation, Interim Remedial Measures, and installation of a sub-slab depressurization system. Dan completed and stamped the Final Engineering Report required to obtain the Certificate of Completion for the property owner, allowing them to obtain their tax credits.

Former Bausch & Lomb Facility BCP Site | Genesee Valley Real Estate Rochester, NY

Dan is Project Manager for this Brownfield site that served



Brownfield Program Manager

- Clarkson University: BS, Chemical Engineering

Certification / Registration

- Professional Engineer, NY
- OSHA 40-Hour Certified Hazardous Waste Site Worker Training
- OSHA 8-Hour Certified Hazardous Waste Site Worker Refresher Training

as a manufacturing facility from the 1930s to the 1970s. The project includes a Remedial Investigation (RI) of a four-acre parcel with ten areas of concern identified based on historic information. The RI identified four areas requiring remedial actions and Interim Remedial Measures have been completed in three of the locations. The areas of remediation included petroleum impacted soil and groundwater with free floating petroleum product, and chlorinated solvent contamination including bedrock impacts at depth. A remedial alternatives analysis is being completed to determine a final remedy for the site.

Vacuum Oil – BCP Site | One Flint Street Associates Rochester, NY

Dan was the Project Manager for this Brownfield site that is the oldest oil refinery in the United States. The current project includes developing a remedial investigation plan for two parcels that have had a history of oil refining since the 1800s. The remedial investigation was designed to fill data gaps from previous studies in order to minimize cost to the Client.

Daniel Noll, PE

Petroleum Soil Removal & Oxygen Injection System | City of Rochester

Rochester, NY

As Project Engineer, Dan developed a soil and groundwater study to investigate former underground storage tanks at a former gasoline/auto repair facility. A remedial alternatives analysis was conducted to evaluate several options for remediating soil and groundwater at the site including light non-aqueous phase liquid. Dan followed this project through remediation which consisted of removing about 1,500 cy of soil and designing/installing an oxygen injection system to remediate groundwater over time.

Former Emerson Power Transmission Facility

Ithaca, NY

Dan completed a detailed review of this 100-acre site with 800,000 sq. ft. of manufacturing space. The site is in the NYSDEC Inactive Hazardous Waste Disposal Site registry and was a heavy industrial facility for over 100 years. The facility closed in 2009 and Dan is the project manager for environmental due diligence activities for a potential buyer. The facility has known issues with chlorinated solvents in bedrock and with significant off-site impacts. The overall project will include a detailed and in-depth environmental site assessment with sampling for soil, bedrock, groundwater, soil gas, sediments, and surface waters in order to document any impacts above NYSDEC criteria and thus limit liability for the purchaser.

Genesee River Dredging Project | City of Rochester

Rochester, NY

Dan managed a project to permit three areas for dredging near the mouth of the Genesee River. The project included evaluating the previous dredging operations in the area, the existing sediment sampling data, sediment levels, discharge points in the area to be dredged and 3-D modeling of the sediments for accurate volume calculations. This information was summarized in a presentation to NYSDEC and the Army Corp of Engineers in order to streamline the permitting process and determine any additional requirements for obtaining a permit. Subsequent to the presentation, Dan developed the permit and submitted them to the Client for signature, and then approval by regulatory agencies.

Port Marina | City of Rochester

Rochester NY

Dan assisted with the environmental investigation of the City of Rochester Port Marina. This project included

evaluating the extent of slag fill materials that would require proper management during any redevelopment work. The extent of slag was evaluated by implementing a grid pattern of soil borings and using the resulting data to develop a 3-dimensional model of the subsurface at the Site. This model was used to generate volumes of material to be disturbed during redevelopment and estimate the cost burden of the environmental portion of the project. This project also included evaluating the magnitude and permitting of a massive dewatering program to allow the mass excavation to be completed.

NYSDEC Legacy Site Soil Vapor Intrusion Project | City of Rochester

Rochester, NY

Dan is Project Manager for this project which includes evaluating soil vapor intrusion from a former 230-acre municipal landfill with methane gas and chlorinated solvent impacts. The landfill was converted into an industrial park after closure in 1971 and is now developed with 45 separate parcels and over 2,000,000 square feet of building space. This challenging project included obtaining access from 27 different property owners and conducting site assessments at each facility and separately evaluating groundwater impacts over approximately 20-acre area. The results of this work determined the cost burden and liability of the City for addressing soil vapor intrusion. LaBella utilized all of the following mitigation approaches for minimizing this significant cost burden to the City: sealing of floors, vapor barriers, sub-slab depressurization systems and building pressurization depending on building conditions/uses.

Fill Relocation and Sub-Slab Mitigation System | City of Rochester

Rochester, NY

Dan was project manager for this project which relocated approximately 3,000 cubic yards of fill material from a development site that is located on a former landfill operated by the City of Rochester. This work was conducted for the City but on private property. The fill was relocated and placed in a soil berm on City property with NYSDEC approval. In addition, Dan designed and oversaw construction of a sub-slab depressurization system for the new 8,000 square foot building.

Jennifer Gillen, MS

Jennifer is a Project Geologist responsible for the coordination and successful completion of Phase II Environmental Site Assessments (ESAs) and several Sites in the NYSDEC Brownfield/Voluntary Cleanup Programs. Jennifer has also worked on several Brownfield Opportunity Area (BOA) studies. Jennifer was previously the Phase I ESA Program Manager at LaBella and has completed hundreds of Phase I ESAs, numerous Phase II ESAs, and has experience with many Sites with chlorinated solvent impacts as well as NYSDEC Spill Sites.

Project Experience

Canal Corridor Brownfield Opportunity Area Study | Oswego, NY

Jennifer was responsible for the compilation, analysis and dissemination of data associated with the BOA project, which spans 1,344 acres along the Oswego Canal and shore of Lake Ontario, within in the City of Oswego.

Tonawanda Brownfield Opportunity Area Study | Tonawanda, NY

Jennifer was responsible for the compilation, mapping and analysis of data associated with this 1,000 acre BOA on the Niagara River, which included properties used for radiological waste disposal associated with the Manhattan Project.

NYSDEC BCP Site #C828159, 690 Saint Paul Street | Rochester, NY

Jennifer assisted with the development of two Interim Remedial Measure Work Plans, the Remedial Investigation Report and Remedial Alternatives Analysis/Remedial Action Work Plan for the remediation of a NYSDEC Brownfield Cleanup Program site formerly utilized as an industrial manufacturing facility. Implemented the two Interim Remedial Measures and portions of the Remedial Investigation at the Site which included the excavation of contaminated soil and bedrock, the advancement of soil borings, and the installation and sampling of groundwater monitoring wells. Also, included in this work was the installation of bedrock monitoring wells using conventional rock coring methods and installation of infrastructure for *in situ* chemical treatment. This process involved coordination with the NYSDEC, the NYSDOH, and the City of Rochester School District.

Penn Yan Marine | Penn Yan, NY

Currently completing a groundwater delineation investigation and BCP application as well as a work plan for *in situ* treatment of groundwater contaminated with chlorinated volatile organic compounds. The implementation of the groundwater delineation investigation has included the installation and sampling of nineteen groundwater monitoring wells.



Project Geologist

- SUNY Albany: BS, Geological Sciences
- SUNY Albany: MS, Geological Sciences
- Certified Hazardous Waste Operations & Emergency Response (40 Hour OSHA Health and Safety Training 29)
- OSHA 8 Hour Hazardous Waste Operations and Emergency Response Course

NYSDEC VCP Site #V00585-6, Lake Ontario Mariners Marina | Henderson Harbor, NY

Developed a Remedial Alternatives Analysis/Remedial Action Work Plan for this NYSDEC Voluntary Cleanup Site. This work included the design of a sub-slab depressurization system within a building under which a plume of petroleum-contaminated groundwater is located and the design of a pilot test for an air sparging system.

Former Emerson Power Transmission Facility | Ithaca, NY

Jennifer assisted with a detailed review of this 100-acre site with 800,000 sq. ft. of manufacturing space. The facility was a heavy industrial facility for over 100 years and has known issues with chlorinated solvents in bedrock and with significant off-site impacts. The project included a detailed and in-depth environmental site assessment in order to document any impacts above NYSDEC criteria and thus limit liability for the purchaser.

NYSDEC Spill Site #0906903, 185 Scio Street | Rochester, NY

Oversaw the installation of dedicated bedrock groundwater monitoring wells at the Site using conventional rock coring methods.

City of Rochester Department of Environmental Services, Division of Environmental Quality, Pump Test Report, Port of Rochester | Rochester, NY

Jennifer Gillen, MS

which included geotechnical sampling. Implementation of the pump test included the pumping of over 650,000-gallons of water and the analysis of drawdown effects on observation wells. This process involved coordination with the New York State Department of Environmental Conservation, Monroe County Pure Waters, and the City of Rochester Division of Environmental Quality.

NYSDEC Spill Site #0906903, 185 Scio Street | Rochester, NY

Oversaw the installation of dedicated bedrock groundwater monitoring wells at the Site using conventional rock coring methods. Completed sampling of these wells using standard low-flow methods.

NYSDEC Spill #0911669, Phase II Environmental Site Assessment and Remediation, Wemco Corp., Saltonstall Street | Canandaigua, NY

Conducted geoprobe soil boring sampling and groundwater sampling to evaluate for potential subsurface effects related to historic fuel distribution operations. Following the subsurface investigation, assisted with the implementation of remedial excavations at the Site and coordinated with the NYSDEC for the closure of the Spill.

NYSDEC Site #C738046, Former Breneman Site | Oswego, NY

Developed Remedial Investigation Work Plan and Citizen Participation Work Plan in anticipation of the upcoming Remedial Investigation at the Site.

Brownfield Cleanup Program Project, Greenport Crossings LLC., 181 Union Turnpike | Greenport, NY

Phase I Environment Site Assessments | Northeastern United States

Performed numerous Phase I ESAs and Transaction Screens on a wide variety of residential, commercial, industrial, and manufacturing facilities including gasoline stations, repair shops, apartment complexes, office buildings, and restaurants for the following groups:

Financial Institutions

- Bank of Castile
- Canandaigua National Bank

- ESL Federal Credit Union
- First Niagara Bank
- Genesee Regional Bank
- Northwest Savings Bank
- Steuben Trust Company

Municipal and Government Clients

- City of Rochester
- City of Oswego
- New York State Department of Transportation
- Town of Victor
- Yates County

Development and Construction Companies

- Urban Housing League of Rochester
- Edgemere Development
- Chrisanntha, Inc.
- Buckingham Properties
- Morgan Management
- Rochester Cornerstone Group

Ann Aquilina, EIT

Ann is an Engineer in Training responsible for assisting with Phase II Environmental Site Assessments (ESAs) and environmental remediation projects. Project experience includes conducting Phase I ESAs, Phase II ESAs including soil and groundwater sampling and reporting, data management and analysis, and creating site maps and conceptual site models using geographic information system (GIS). Ann is 40 hour OSHA HAZWOPER certified.



Project Experience

Former Emerson Street Landfill, City of Rochester, Rochester, New York

Developed and implemented remedial investigation work plans for a former landfill including soil and groundwater sampling, reporting, and GIS data management. Developed a Delisting Petition for a portion of the NYSDEC Listed Inactive Hazardous Waste Disposal Site.

Phase II Environmental Site Assessment, 177 University Avenue, City of Rochester, Rochester, New York

Conducted a Phase II ESA to delineate subsurface contamination in soil and groundwater. Conducted soil boring logging, soil and groundwater sampling, reporting, and GIS data management.

Institutional Control Program, City of Rochester Rochester, New York

Collected and developed Site Management Plans and site maps for over 175 properties in the City of Rochester with previous environmental investigations and/or remediation. Created a database for properties with environmental related institutional controls consisting of property information and Site Management Plans for use on the City of Rochester's website.

Canandaigua Multi-Brownfield Site, Canandaigua, New York

Conducted a design phase investigation to define interim remedial measures for an approximate 15 acre site in the NYSDEC Brownfield Cleanup Program. Was responsible for soil boring logging, soil sampling, GIS data management, and developing a, interim remedial measures work plan addendum.

Engineer In Training

- Stevens Institute of Technology:
B.Eng., Environmental Engineering,
Minors in Green Engineering and Science
Communication

Certification / Registration

- Engineer In Training; National Council of Examiners for Engineering and Surveying
- 40-hour OSHA HAZWOPER Certified

Professional Affiliations

- American Academy of Environmental Engineers and Scientists (AAEES)

Waste Minimization Plan, MTA New York, New York

Developed a waste minimization plan report for a large quantity generator by analyzing quantities and types of waste streams. Compared annual data from previous years and compiled tables to display data in a detailed report.

Pump and Treat Groundwater Treatment System, City of Rochester, Rochester, New York

Compiled annual reports for a groundwater treatment system in order to meet regulatory agency requirements. Compiled and interpreted over a decade worth of analytical data to create graphs and identify emission and concentration trends over time. Compiled graphs and summarized findings into detailed reports.

Ann Aquilina, EIT

Phase II Environmental Site Assessment, 131 Water Street, Penn Yan, New York

Completed a Phase II ESA at a former automobile repair shop. Ann was responsible for soil boring logging, soil and groundwater sampling, GIS data management, and reporting.

Pre-Development Site Assessment, Kodak Park South, Rochester, New York

Conducted a pre-development site assessment for an approximate 122 acre former industrial site. Was responsible for soil and groundwater sampling and GIS data management. Organized the findings of this study and previous environmental studies conducted at the site in a detailed report.

Phase II Environmental Site Assessment, 310 Lyell Avenue, Rochester, New York

Completed a Phase II ESA at a portion of the former Rochester Subway and Canal. Researched historic documentation in order to select soil boring and test pit locations. Conducted soil boring logging, soil and groundwater sampling, GIS data management, and reporting.

Nick Inzinna

Nick has over six years of experience in the environmental industry with a focus on site assessment and remediation. He has a track record of success with project reporting, supervising personnel at remote and urban sites, communicating regularly with clients and vendors, and meeting field work deadlines. His field experience includes soil and groundwater sampling, global positioning system (GPS) surveys, geophysical mapping, and implementation of remediation systems. Nick works closely with project management to construct working plans, contribute to budgeting needs, and solve operational problems.

Project Experience

NYSDEC BCP Site #C828159: 690 Saint Paul Street - Rochester, NY

Nick is currently serving as an Environmental Geologist for this Brownfield Cleanup Program Project. His responsibilities include conducting groundwater well development, waste characterization sampling, and project support.

Iberdrola USA: Ginna Retirement Transmission Alternative Transmission Line - Rochester, NY

Nick was the Environmental Geologist for soil boring and waste characterization sampling for a proposed transmission line. He oversaw direct-push soil borings and contributed to the selection of sampling locations and utility locates.

Contaminated Soil Removal - Honeoye, NY

Nick was the Site Geologist for test pitting and soil sampling to delineate a fuel oil contaminated site. He worked directly with contractors during excavation for delineation and post-excavation confirmation sampling.

Annual Groundwater Monitoring and Site Inspections

American Siepmann Corporation - Henrietta, NY

Nick is currently the Site Geologist for annual groundwater sampling and sub-slab system monitoring for this project. Additionally he is writing the annual monitoring report and periodic review report for the NYSDEC.

R.J. Dorschel Corporation - Rochester, NY

Nick served as Site Geologist and performed annual



Environmental Geologist

- SUNY Geneseo: B.A., Geology and Environmental Studies
- SUNY Environmental Science and Forestry: M.P.S. Candidate, Environmental Remediation
- OSHA 40–Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)
- OSHA 8–Hour Site Supervisor
- OSHA 30–Hour Construction Safety
- Certified Professional in Erosion & Sediment Control—In Training (CPESC-IT)

groundwater sampling and sub-slab system monitoring for this project.

Phase II Environmental Site Assessments

Nick contributed as Site Geologist during overburden soil sampling for several clients at 12 sites located in the greater Rochester area. He oversaw direct-push soil sampling, groundwater well installation and sampling. Additional responsibilities included interpretation of sampling data, production of field maps and writing Phase II reports.

US Army Corps of Engineers: Phase I, Phase II and Remedial Action projects - Site Management

Eielson AFB, Environmental Site Assessment Phase I/II-Fairbanks, AK

Nick oversaw field activities for the site investigation including site surveys and soil sampling. Nick was responsible for coordinating with site personnel for access

Nick Inzinna

and permitting, provided field status updates to project team members and clients, conducted data analysis and quality control, and contributed to the work plan and project reports.

MacDill AFB, Environmental Site Assessment Phase II and Soil Removal –Tampa, FL

Nick oversaw field activities including GPS site surveys, groundwater well installation, soil and groundwater sampling, and the removal of contaminated soil. In addition Nick coordinated with site personnel for access and permitting, provided field status updates to project team members and clients, conducted data analysis and quality control, and contributed to the work plan and project reports.

Hill Utah Test and Training Range, Environmental Site Assessment Phase I/II - Utah

Nick was responsible for management of field activities including soil sampling and GPS site surveys in remote locations. In addition Nick coordinated with site personnel for access and permitting, provided field status updates to project team members and clients, conducted data analysis and quality control, and contributed to the project work plan and reports.

San Diego AF Station, Environmental Site Assessment Phase II and Soil Removal - Utah

Nick was responsible for management of field activities including soil sampling, GPS site surveys and the removal of contaminated soil. In addition Nick coordinated with site personnel for access and permitting, provided field status updates to project team members and clients, conducted data analysis and quality control, and contributed to the project reports.

Mountain Home AFB, Environmental Site Assessment Phase I/II - Idaho

Nick was responsible for management of field activities including soil sampling, GPS site surveys and subsurface geophysical surveys in remote locations. In addition Nick coordinated with site personnel for access and permitting, provided field status updates to project team members and clients, conducted data quality control, and contributed to the project reports.

US Army Corps of Engineers: Phase I and Phase II projects - Environmental Scientist

Memphis Defense Depot, Environmental Site Assessment - Tennessee

Nick served as an Environmental Scientist team member collecting groundwater samples, injecting for advanced bioremediation treatment and providing project support.

US AFB Multi Sites Phase II

Nick served as an Environmental Scientist team member at 11 sites on US Air Force installations. His responsibilities included collecting soil and groundwater samples, conducting GPS and geophysical site surveys, contributing to data analysis, report writing and providing project support.

Steven Rife

Steven is a Project Geologist with LaBella's Environmental Division and is primarily involved with field operations for Phase II Environmental Site Assessments. He has more than 2 years of geology experience in related field work including shallow overburden soil sampling, bedrock mapping, basic surveying, and well logging on deep natural gas wells. When in-house, he also assists with GIS mapping, laboratory sample logistics, and report synthesis.

Steven coordinates with senior Project Managers, Engineers and Geologists to implement site-tailored remediation plans pursuant to the objectives of the client. Working closely with environmental construction personnel, he is most commonly involved with DPT soil core sampling and screening using a Geoprobe 54-LT unit and PID.

Project Experience

Phase II Environmental Site Assessments

1777 East Henrietta Road | Getinge, USA | Henrietta, NY
Member of the Environmental Geology team responsible for planning and field investigation on this large industrial site with multiple REC's. Oversaw implementation of soil borings that were advanced on the interior and exterior of the facility and overburden monitoring wells installed to characterize potential impacts. Coordinated with project manager to give best data coverage representation for our client, the buyer.

1821 Monroe Avenue | Monroe Hollywood Collision | Brighton, NY

Worked closely with Senior Environmental Geologist on a DEC mandated bedrock interface well installation operation. On-site work consisted of: property owner coordination, drilling contractor oversight, soil contamination screening, RQD rock core determination, well installation, SWL measurement, well location surveying, and low-flow peristaltic groundwater sampling. Used ArcGIS to map previous report well locations and model groundwater flow based on SWL readings.

182 Avenue D | Urban League of Rochester | Rochester, NY

Advanced borings in a direct push study to characterize the extent of SVOC contamination detected in a previous LaBella Phase II. Coordinated aspects of site utility stakeout with the Monroe County Water Authority.



Project Geologist, Environmental Division

- State University of New York at Fredonia: BS, Geology

Certification / Registration

- Certified Hazardous Waste Operations & Emergency Response (40 Hour OSHA Health and Safety Training (29 CFR 1910.120)
- PEC Safe Land USA Oilfield Training
- PEC Globally Harmonized System HazCom Training
- Professional Member: GSA, AAAS

7185 West Main Road | Client Proposed ATM Site | LeRoy, NY

Sole project geologist tasked with a soil boring investigation designed to detect a potential groundwater VOC plume that may have resulted from an automotive facility to the south of the parcel. Handled all aspects of the project from preliminary GIS mapping, securing equipment, and proper sample collection.

UST Contamination Investigations

120 Main Street | Historical UST Location | Geneseo, NY
Supervised a UST Geoprobe soil investigation to characterize the nature and extent of a VOC plume from a historical automobile refueling station. Predicted groundwater flow direction against adjacent structure and collected supporting quantitative evidence.

Steven Rife

Horizon Well Logging, (9 Months: 2013)

Steve worked as a Self-Supervising Logging Geologist, providing real time well-site lithologic identification, well logging, and hydrocarbon monitoring with a gas chromatograph. After four months, Steve was promoted to lead logger, and worked to train two staff members under him.

Field Soil Sampling | Cornell University (4 Months: 2012)

Steve used a 0-30 cm basic DPT probe to sample soil cores at select commercial agricultural sites in Tompkins County as part of a USDA funded soil carbon inventory project. Steve updated the Cornell Climate Change website by interviewing faculty about their current research.

APPENDIX 3
HEALTH & SAFETY PLAN
COMMUNITY AIR MONITORING PLAN

Site Health and Safety Plan

Location:

1777 East Henrietta Road
Henrietta, New York

Prepared For:

Getinge USA, Inc.
1777 East Henrietta Road
Henrietta, New York 14623

LaBella Project No. 2160339

June 2016

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Tables

Table 1	Exposure Limits and Recognition Qualities
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SITE HEALTH AND SAFETY PLAN

Project Title:	1777 East Henrietta Road - Brownfield Cleanup Program
Project Number:	2160339
Project Location (Site):	1777 East Henrietta Road, Henrietta, New York 14623
Environmental Director:	To Be Determined
Project Manager:	To Be Determined
Site Safety Supervisor:	To Be Determined
Site Contact:	Mr. Chris Dorsey, Getinge USA
Safety Director:	To Be Determined
Proposed Date(s) of Field Activities:	To Be Determined
Site Conditions:	34.90 acres; Current Site features include a 259,032 square feet primarily metal clad masonry building and a 27,700 square feet. The remaining area of the 34.90 acre property is covered by approximately 230,000 square feet of asphalt parking lots and roadways as well as undeveloped wooded and grassy lands situated primarily on the western portion of the Site.
Site Environmental Information Provided By:	<ul style="list-style-type: none">▪ <i>Phase I Environmental Site Assessment (ESA)</i>, completed by ENVIRON Corporation, (ENVIRON) April 1996;▪ <i>Limited Phase II ESA</i>, completed by ENVIRON, April 1996;▪ <i>Phase III ESA</i>, completed by ENVIRON, May 1996;▪ <i>Laboratory Analysis Report</i>, completed by Life Science Laboratories, June 2005▪ <i>Analytical Report</i>, completed by Paradigm Environmental Services, January 2013▪ <i>Detention Pond Investigation</i>, completed by Stantec, June 2013▪ <i>Phase I ESA</i>, completed by LaBella Associates, D.P.C. (“LaBella”), February 2014;▪ <i>Phase II ESA</i>, completed by LaBella, April 2014; and,▪ <i>Supplemental Phase II ESA Interim Data Package</i>, completed by LaBella, July 2014▪ <i>Supplemental Site Investigation</i>, completed by LaBella, December 2015
Air Monitoring Provided By:	To Be Determined
Site Control Provided By:	Contractor(s)

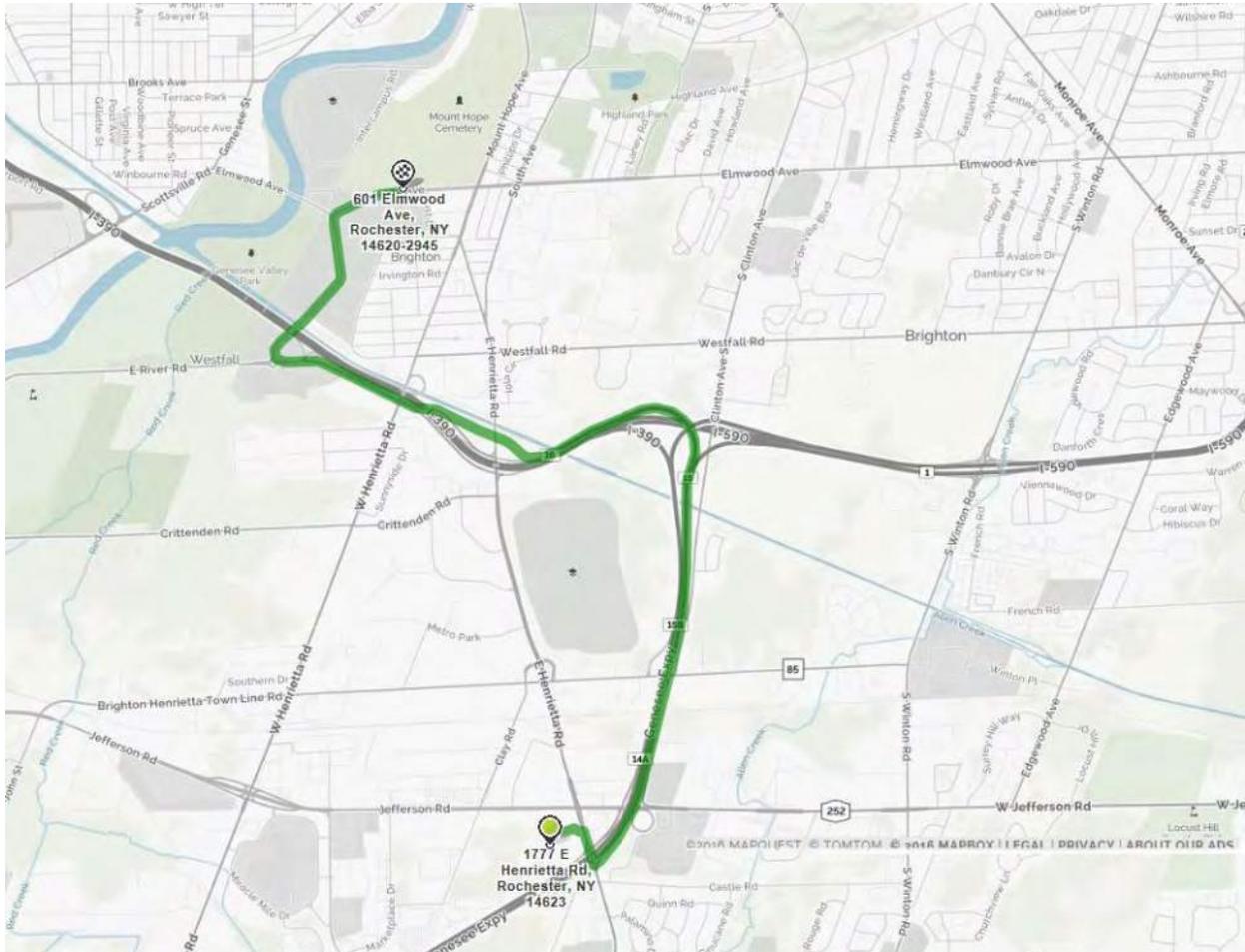
EMERGENCY CONTACTS

	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:	Henrietta Fire District	911
Site Contact:	Mr. Chris Dorsey	585-272-5333
Agency Contact:	NYSDEC – Todd Caffoe NYSDOH – To Be Determined	585-226-5350 To Be Determined
Environmental Director:	To Be Determined	To Be Determined
Project Manager:	To Be Determined	To Be Determined
Site Safety Supervisor:	To Be Determined	To Be Determined
Safety Director	To Be Determined	To Be Determined

MAP AND DIRECTIONS TO THE MEDICAL FACILITY - STRONG MEMORIAL HOSPITAL

Total Est. Time: 8 minutes Total Est. Distance: 5.1 miles

- 1:** Turn **RIGHT** onto **EAST HENRIETTA ROAD/NY-15A** 0.15 miles
- 2:** Merge onto **I-390 N** via ramp on the left 2.57 miles
- 3:** Take the **NY-15A/E Henrietta Rd** Exit 16 0.69 miles
- 4:** Stay **STRAIGHT** to go onto **E River Road** 0.52 miles
- 5:** Turn **RIGHT** onto **Kendrick Road** 0.74 miles
- 6:** Turn **RIGHT** onto **Elmwood Avenue** 0.33 miles
- 5:** End at **601 Elmwood Avenue**
Rochester, NY 14642



Source: MAPQUEST 2016

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 1777 East Henrietta Road in the Town of Henrietta, Monroe County, New York (Site). This HASP only reflects the policies of LaBella Associates D.P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work site. This document's project specifications, and the Community Air Monitoring Plan (CAMP), are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the 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, drilling rigs, trailers, 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 is 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 petroleum-related volatile organic compounds (VOCs). Volatile organic vapors, chlorinated solvents or other chemicals may be encountered during subsurface activities at the project work site. Inhalation of high concentrations of volatile organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis.

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 5.0), the following work zones should be established:

Exclusion Zone (EZ):

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

Contaminant Reduction Zone (CRZ):

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

7.0 Decontamination Procedures

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

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

8.0 Personal Protective Equipment

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

Level D:

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

Level C:

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

9.0 Air Monitoring

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

The Air Monitor will utilize a photoionization detector (PID) to screen the ambient air in the work areas (drilling, excavation, soil staging, and soil grading areas) for total Volatile Organic Compounds (VOCs) and a DustTrak™ 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. It should be noted that the site buildings are currently vacant.

10.0 Emergency Action Plan

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

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

11.0 Medical Surveillance

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

12.0 Employee Training

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

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

Table 1
Exposure Limits and Recognition Qualities

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

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

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

APPENDIX 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 ground intrusive 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 non-intrusive 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/m^3) 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/m^3 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/m^3 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/m^3 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.

APPENDIX 4
QUALITY CONTROL PLAN

Quality Control (QC) Program

Location:

1777 East Henrietta Road
Henrietta, New York

Prepared For:

Getinge USA, Inc.
1777 East Henrietta Road
Henrietta, New York 14623

LaBella Project No. 2160339

June 2016

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1.0 Introduction

LaBella's Quality Control (QC) Program is an integral part of its approach to environmental investigations. By maintaining a rigorous QC program, our firm is able to provide accurate and reliable data. QC also provides safe working conditions for all on-Site workers.

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

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

This QC program has been organized into the following areas:

- QC Objectives and Checks
- Field Equipment, Handling, and Calibration
- Sampling Techniques
- Sample Handling and Packaging

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

2.0 Quality Control Objectives

The United States Environmental Protection Agency (EPA) has identified five general levels of analytical data quality as being potentially applicable to site investigations conducted under CERCLA. These levels are summarized below:

- **Level I** - Field screening. This level is characterized by the use of portable instruments, which can provide real-time data to assist in the optimization of sampling point locations and for health and safety support. Data can be generated regarding the presence or absence of certain contaminants (especially volatiles) at sampling locations.
- **Level II** - Field analysis. This level is characterized by the use of portable analytical instruments, which can be used on site or in mobile laboratories stationed near a site (close-support labs). Depending upon the types of contaminants, sample matrix, and personnel skills, qualitative and quantitative data can be obtained.
- **Level III** - Laboratory analysis using methods other than the Contract Laboratory Program (CLP) Routine Analytical Services (RAS). This level is used primarily in support of engineering studies using standard EPA-approved procedures. Some procedures may be equivalent to CLP RAS, without the CLP requirements for documentation.
- **Level IV** - CLP Routine Analytical Services. This level is characterized by rigorous QC protocols and documentation and provides qualitative and quantitative analytical data. Some regions have obtained similar support via their own regional laboratories, university

laboratories, or other commercial laboratories.

- **Level V** - Non-standard methods. Analyses, which may require method modification and/or development. CLP Special Analytical Services (SAS) are considered Level V.

Unless stated otherwise, all data will be generated in accordance with Level IV. When CLP methodology is not available, federal and state approved methods will be utilized. Level III will be utilized, as necessary, for non-CLP RAS work which may include ignitability, corrosivity, reactivity, EP toxicity, and other state approved parameters for characterization. Level I will be used throughout the RI for health and safety monitoring activities.

All measurements will be made to provide that analytical results are representative of the media and conditions measured. Unless otherwise specified, all data will be calculated and reported in units consistent with other organizations reporting similar data to allow comparability of data bases among organizations. Data will be reported in micrograms per liter ($\mu\text{g/L}$) and milligrams (mg)/L for aqueous samples, and μg / kilogram (kg) and mg/kg (dry weight) for soils, or otherwise as applicable.

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

2.1 Accuracy

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

2.2 Precision

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

2.3 Completeness

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

2.4 Representativeness

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

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

2.5 Comparability

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

3.0 Measurement of Data Quality

3.1 Accuracy

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

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

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

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

3.2 Precision

Precision of a particular analysis is measured by assessing its performance with duplicate or replicate samples. Duplicate samples are pairs of samples taken in the field and transported to the laboratory as distinct samples. Their identity as duplicates is typically not known to the laboratory. For most purposes, precision is determined by the analysis of replicate pairs (i.e., two samples prepared at the laboratory from one original sample). Often in replicate analysis the sample chosen for replication does not contain target analytes so that quantitation of precision is impossible. For EPA CLP analyses, replicate pairs of spiked samples, known as matrix spike/matrix spike duplicate samples, are used for precision studies. This has the advantage that two real positive values for a target analyte can be compared.

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

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

measure of the total variability of both field sampling and laboratory analysis.

3.3 Completeness

Completeness for each parameter is calculated as follows:

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

3.4 Representativeness

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

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

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

4.0 Quality Control Targets

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

5.0 Sampling Procedures

This section describes the sampling procedures to be utilized for each environmental medium that will be collected and analyzed in accordance with appropriate state and federal requirements. All procedures described are consistent with EPA sampling procedures as described in SW-846, third edition, September 1986, and subsequent updates. All samples will be delivered to the laboratory and analyzed within the holding times specified by the analytical method.

6.0 Soil & Groundwater Investigation

The groundwater sampling plan outlined in this subsection has been prepared in general accordance with RCRA Groundwater Monitoring Technical Enforcement Guidance Document 9950.1 (September 1986), Office of Solid Waste and Emergency Response.

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

6.1 Test Borings and Well Installation

6.1.1 Drilling Equipment

Direct Push Geoprobe Soil Borings:

Soil borings and monitoring wells may be advanced with a Geoprobe direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a four-foot or five-foot Macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in four-foot or five-foot sections, and can be easily cut from the polyethylene sleeves for observation and sampling. The Macrocore sampler will be decontaminated between samples and borings using analconox and water solution. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

Hollow-Stem Auger Advanced Soil Borings:

The drilling and installation of soil borings and monitoring wells may be performed using a rotary drill rig which will have sufficient capacity to perform 4 1/2-inch inside diameter (ID) hollow-stem auger drilling in the overburden, retrieve Macrocore or split-spoon samples, and perform necessary rock coring to provide a minimum 3-inch diameter core, known in the industry as "NX." The borehole may be reamed to 5 1/2-inch diameter prior to monitoring well installation as cased hole in the bedrock, or may be left as open hole, with regulatory concurrence. Equipment sizes and diameters may vary based on project-specific criteria. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

6.1.2 Drilling Techniques

Direct Push Geoprobe Advanced Borings:

Prior to initiating drilling activities, the Geoprobe, Macrocores, drive rods and/or other pertinent equipment will be steam cleaned or washed with analconox and water solution. This cleaning procedure will also be used between each boring. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used. All sampling equipment will be steam cleaned or washed with analconox and water solution upon completion of the investigation and prior to leaving the Site.

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

It will be the responsibility of the consultant to arrange for the appropriate drilling equipment to be present at the Site. Standby time to arrange for additional equipment or a water supply will not be allowed unless caused by unexpected Site conditions.

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

retrieved from the Macrocores.

Direct Push Geoprobe advanced groundwater-monitoring wells typically utilize 1.25-inch threaded flush joint PVC pipe with 0.010-in. slotted screen. However, well construction will vary by project and will be specified in the project-specific work plan. PVC piping used for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe, and shall bear markings that will identify the material as that which is specified. All materials used to construct the wells will be NSF/ASTM approved. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well. All risers and screens shall be set round, plumb, and true to line.

Hollow-Stem Auger Advanced Borings:

Prior to initiating drilling activities, the drill rig, augers, rods, Macrocore, split spoons and/or other pertinent equipment will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. These activities will be performed in a designated on-site decontamination area. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used. The drilling rig and all equipment will be steam cleaned or washed with an alconox and water solution upon completion of the investigation and prior to leaving the site.

Test borings completed with the hollow-stem auger will be advanced with 4 1/2-inch (ID) hollow stem augers through overburden, and NX-sized diamond core barrels in competent rock, driven by truck-, track-, or trailer-mounted drilling equipment. Alternative methods of drilling or equipment may be allowed or requested for project-specific criteria, but must be approved by the NYSDEC. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

It will be the responsibility of the consultant to arrange for the appropriate drilling equipment to be present at the site. Standby time to arrange for additional equipment or a water supply will not be allowed unless caused by unexpected site conditions.

During the drilling, a (PID) will be used to screen soils retrieved from the split spoons or Macrocores.

If bedrock wells are required, test borings shall be advanced into rock with NX (or similar) coring tools. Only water from an approved source shall be used in rock coring. The consultant shall monitor and record the petrology, core recovery, fractures, rate of advance, water levels, and water lost or produced in each test boring. The Rock Quality Determination (RQD) value shall be calculated for each 5-foot core. Each core shall be screened with a PID upon extraction to determine proper handling procedure. All core samples shall be retained and stored by the consultant in an approved wooden core box for a period of not less than one year. It should be noted that the installation of bedrock wells is not currently planned for this Site.

The method selected may be percussion or rotary drilling at the option of the subcontractor. The method and equipment selected must be capable of penetrating the bedrock at each well location to a depth required by the work plan and will be selected based on the results of the rock coring performed.

Bedrock well installation will involve construction of a rock socket in the weathered bedrock. The

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

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

The well screen slot size will be selected based on the filter pack grain size and the ability to hold back 85 percent or more of the filter pack materials. Screen and riser sections shall be joined by flush-threaded coupling to form watertight unions that retain 100% of the strength of the casing. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well. All risers and screens shall be set round, plumb, and true to line.

6.1.3 Artificial Sand Pack

When utilized, granular backfill will be chemically and texturally clean, inert, siliceous, and of appropriate grain size for the screen slot size and the host environment. The sand pack will be installed using a tremie pipe, when possible (i.e., a tremie pipe may not fit into smaller, 2-in. diameter boreholes). When utilized, the well screen and casing will be installed, and the sand pack placed around the screen and casing to a depth extending 2-ft. or at least 25 percent of the screen length above the top of the screen.

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

6.1.4 Bentonite Seal

A minimum 2-ft. thick seal of tamped bentonite pellets will be placed directly on top of the sand pack, and care will be taken to avoid bridging. In the event that Site geology does not allow for a 2-ft. seal (e.g., only 1-ft. of space remains between the top of the sand pack and ground surface), the remaining space in the annulus will be filled with bentonite. The seal will be measured immediately after placement, without allowance for swelling.

6.1.5 Grout Mixture

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

6.1.6 Surface Protection

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

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

Any well that is to be temporarily removed from service or left incomplete due to delay in construction shall be capped with a watertight cap and equipped with a "vandal-proof" cover, satisfying applicable NYSDEC regulations or recommendations.

6.1.7 Surveying

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

6.1.8 Well Development

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

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

The development process will continue until a stabilization of pH, specific conductance, temperature, and turbidity (goal of <50 NTUs) of the discharge is achieved for three consecutive intervals following the removal of a minimum of 110% of the water lost during drilling, or three well volumes; whichever is greater. In the event that limited recharge does not allow for the recovery of all drilling water lost in the well or three (3) well volumes, the well will be allowed to stabilize to conditions deemed representative of groundwater conditions. Stabilization periods will vary by project but will be confirmed with the NYSDEC prior to sampling.

7.0 Geologic Logging and Sampling

At each investigative location, borings will be advanced through overburden using either a drill rig and hollow-stem auger or direct push technology. Soils will be evaluated for visual and olfactory evidence of impairment (i.e., staining, odors, and elevated PID readings) by a geologist, engineer or qualified Environmental Professional. Sampling devices will be decontaminated according to procedures outlined in the Decontamination section of this document. When utilized, split-spoon samplers will be driven into the soil using a minimum 140-pound safety hammer and allowed to free-fall 30-inches, in accordance with ASTM-D 1586-84 specifications. The number of blows required to drive the sampler each 6-inches of penetration will be recorded. When required, samples will be stored in glass jars until they are needed for testing or the project is complete.

If hard boulders or bedrock result in auger refusal, rock coring will be used to advance the hole to design

depth. If hydrogeologic conditions are favorable for well installation at a depth less than design, the well may be installed at the boring or coring termination depth. In the event that maximum design depth is reached and hydrogeologic conditions are not suitable for well installation, the maximum drilling depth may be revised. Hydrogeologic suitability for well placement will be determined by the supervising geologist, engineer or qualified Environmental Professional in consultation with NYSDEC, based on thickness and estimated hydraulic conductivity of the saturated zone encountered. If necessary, the borehole will be advanced to water or abandoned.

Boulders and bedrock encountered during well installation may be cored by standard diamond-core drilling methods using an "NX" size core barrel. All rock cores recovered will be logged by a geologist, labeled and stored in wooden core boxes. The cores will be stored by the firm until the project is completed or for at least one year. Drilling logs will be prepared by an experienced geologist or engineer, who will be present during all drilling operations. One copy of each field boring and well construction log and groundwater data, will typically be submitted as part of the investigation summary report (e.g., Remedial Investigation Report). The RQD value shall be calculated for each 5-foot section. Information provided in the logs shall include, but not be limited to, the following:

- Date, test hole identification, and project identification;
- Name of individual developing the log;
- Name of driller and assistant(s);
- Drill, make and model, auger size;
- Identification of alternative drilling methods used and justification thereof (e.g., rotary drilling with a specific bit type to remove material from within the hollow stem augers);
- Standard penetration test (ASTM D-1586) blow counts;
- Field diagram of each monitoring well installed with the depth to bottom of screen, top of screen, and pack, bentonite seal, etc.;
- Reference elevation for all depth measurements;
- Depth of each change of stratum;
- Thickness of each stratum;
- Identification of the material of which each stratum is composed, according to the USCS system or standard rock nomenclature, as appropriate;
- Depth interval from which each sample was taken;
- Depth at which hole diameters (bit sizes) change;
- Depth at which groundwater is encountered;
- Depth to static water level and changes in static water level with well depth;
- Total depth of completed well;
- Depth or location of any loss of tools or equipment;
- Location of any fractures, joints, faults, cavities, or weathered zones;
- Depth of any grouting or sealing;
- Nominal hole diameters;
- Amount of cement used for grouting or sealing;
- Depth and type of well casing;
- Description of well screen (to include depth, length, location, diameter, slot sizes, material, and manufacturer);
- Any sealing-off of water-bearing strata;
- Static water level upon completion of the well and after development;
- Drilling date or dates;
- Construction details of well; and
- An explanation of any variations from the work plan.

8.0 Groundwater Sampling Procedures

The groundwater in all new monitoring wells will be allowed to stabilize for at least 24-hours following development. Water levels will be measured to within 0.01 feet prior to purging and sampling. Sampling of each well will typically be accomplished in one of two ways; active or passive.

Active Sampling:

Purging will be completed prior to active sampling. During purging, the following will be recorded in field books or groundwater sampling logs:

- date
- purge start time
- weather conditions
- PID reading immediately after the well cap is removed
- presence of NAPL, if any, and approximate thickness
- pH
- dissolved oxygen
- temperature
- specific conductance
- depth of well
- depth to water
- estimated water volume
- purge end time
- volume of water purged

In general, wells will be purged until the pH, conductivity, temperature, and turbidity of the water being pumped from the well have stabilized with a turbidity goal of 50 NTU. All wells will be purged of at least three well volumes or to dryness.

Passive Sampling:

Groundwater samples will be collected via passive methods (i.e., no-purge) according to the following procedures and in the volumes specified in Table 11-1:

- Samples will be collected via passive diffusion bag (PDB) samplers. PDB samplers are made of low-density polyethylene plastic tubing (typically 4 mil), filled with laboratory grade (ASTM Type II) deionized water and sealed at both ends.
- PDB samplers will only be used to collect groundwater samples which will be analyzed for VOCs.
- PDB samplers will be deployed by hanging in the well at the middle of the well screen unless a low water table, need to deploy multiple samplers or the targeting of a specific depth interval is identified. The PDB samplers will be deployed at least 14 days prior to sampling.
- The PDB samplers will be deployed using a Teflon® coated string or synthetic rope.
- When transferring water from the PDB to sample containers, care will be taken to avoid agitating the sample, since agitation promotes the loss of volatile constituents;
- Any observable physical characteristics of the groundwater (e.g., color, sheen, odor, turbidity) at the time of sampling will be recorded; and
- Weather conditions (i.e., air temperature, sky condition, recent heavy rainfall, drought conditions) at the time of sampling will be recorded.

All groundwater samples and their accompanying QC samples will be run for volatile organic compounds (VOCs) using NYSDEC Analytical Services Protocol (ASP; revised July 2005 and subsequent amendments or revisions).

9.0 Management of Investigative-Derived Waste

Purpose:

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

- Drill cuttings, discarded soil samples, drilling mud solids, and used sample containers;
- Well development and purge waters and discarded groundwater samples;
- Decontamination waters and associated solids;
- Soiled disposable personal protective equipment (PPE);
- Used disposable sampling equipment;
- Used plastic sheeting and aluminum foil;
- Other equipment or materials that either contain or have been in contact with potentially-impacted environmental media.
- Because these materials may contain regulated chemical constituents, they must be managed as a solid waste. This management may be terminated if characterization analytical results indicate the absence of these constituents.

Procedure:

1. Contain all investigation-derived wastes in Department of Transportation (DOT)-approved 55-gallon drums, roll-off boxes, or other containers suitable for the wastes.
2. Containerize wastes from separate borings or wells in separate containers (i.e. do not combine wastes from several borings/wells in a single container, unless it is a container used specifically for transfer purposes, or unless specific permission to do so has been provided by the LaBella Project Manager. Unused samples from surface sample locations within a given area may be combined.
3. To the extent practicable, separate solids from drilling muds, decontamination waters, and similar liquids. Place solids within separate containers.
4. Transfer all waste containers to a staging area. Access to this area will be controlled. Waste containers must be transferred to the staging area as soon as practicable after the generating activity is complete.
5. Pending transfer, all containers will be covered and secured when not immediately attended,
6. Label all containers with regard to contents, origin, and date of generation. Use indelible ink for all labeling.
7. Collect samples for waste characterization purposes, use boring/well sample analytical data for characterization.
8. For wastes determined to be hazardous in character, be aware on accumulation time limitations. Coordinate the disposal of these wastes with the Owner and NYSDEC.

9. Dispose of investigation-derived wastes as follows;
- Soil, water, and other environmental media for which analysis does not detect organic constituents, and for which inorganic constituents are at levels consistent with background, may be spread on-site (pending NYSDEC approval) or otherwise treated as a non-waste material.
 - Soils, water, and other environmental media in which organic compounds are detected or metals are present above background will be disposed as industrial waste or hazardous waste, as appropriate. Alternate disposition must be consistent with applicable State and Federal laws.
 - Personal protective equipment, disposable bailers, and similar equipment may be disposed as municipal waste, unless waste characterization results mandate disposal as industrial wastes
10. If waste is determined to be listed hazardous waste, it must be handled as hazardous waste as described above, unless a contained-in determination is accepted by the NYSDEC.

10.0 Decontamination

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

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

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

OR

- Initially cleaned of all foreign matter;
- Scrubbed with brushes inalconox solution;
- Rinsed; and
- Allowed to air dry.

11.0 Sample Containers

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

**Table 11-1
Water Samples**

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
VOCs	40-ml glass vial with Teflon-backed septum	Two (2); fill completely, no air space	Cool to 4° C (ice in cooler), Hydrochloric acid to pH <2	7 days
Semivolatile Organic Compounds (SVOCs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Polychlorinated biphenyls (PCBs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Metals	500-ml polyethylene	One (1); fill completely	Cool to 4° C (Nitric acid to pH <2)	6 months
Cyanide	500-ml polyethylene	One (1); fill completely	Cool to 4° C (Sodium hydroxide to pH >12, plus 0.6 grams ascorbic acid)	14 days

*Holding time is based on verified time of sample collection.

Note: All sample bottles will be prepared in accordance with USEPA bottle washing procedures.

**TABLE 11-2
Soil Samples**

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
VOCs, SVOCs, PCBs, and Pesticides	8-oz. glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	7 days
VOCs by USEPA Method 5035 (if specified in work plan) Closed-system Purge and Trap Method	40-ml glass vial with Teflon-backed septum	Three (3), fill with 5 grams of soil using soil syringe	Cool to 4° C (ice in cooler). Two (2) with 10 mL DI water or 5 mL sodium bisulfate, one (1) with 5 mL methanol.	14 days
RCRA/TAL Metals, and cyanide	8-oz. glass jar with Teflon-lined cap	One (1); fill completely	Cool to 4° C (ice in cooler)	Must be extracted within 10 days; analyzed with 30 days

* Holding time is based on the times from verified time of sample collection.

Note: All sample bottles will be prepared in accordance with USEPA bottle washing procedures.

**TABLE 11-3
List of Major Instruments
for Sampling and Analysis**

<ul style="list-style-type: none"> • MSA 360 O₂ /Explosimeter • Hollige Series 963 Nephelometer (turbidity meter) • EM-31 Geomics Electromagnetic Induction Device • pH/Temperature/Conductivity Meter - Portable • Hewlett Packard (HP) 1000 computer with RTE-6 operating system; and HP 9144 computer with RTE-4 operating system equipped with Aquarius software for control and data acquisition from gas chromatograph/mass spectrometer (GC/MS) systems; combined wiley and National Bureau of Standards (NBS) mass spectral library; and data archiving on magnetic tape • Viriam 6000 and 37000 gas chromatographs equipped with flame ionization, electron capture, photoionization and wall detectors as appropriate for various analyses,, and interfaced to Variam DS604 or D5634 data systems for processing data. • Spectra-Physics Model SP 4100 and SP 4270 and Variam 4270 cam puting integrators • Perkin Eimer (PE) 3000% and 3030% fully Automated Atomic Absorption Spectrophotometers (AAS) with Furnace Atomizer and background correction system • PE Plasma II Inductively Coupled Argon Plasma (ICAP) Spectre meter with PE7500 laboratory computer • Dionex 20001 ion chromatograph with conductivity detector for anion analysis, with integrating recorder

12.0 Sample Custody

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

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

- Field notebooks,
- Sample label,
- Custody seals, and
- Chain-of-custody records.

12.1 Chain-of-Custody

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

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

12.2 Field Custody Procedures

- As few persons as possible should handle samples.
- Sample bottles will be obtained pre-cleaned from a source such as I-Chem. Coolers or boxes containing cleaned bottles should be sealed with a custody tape seal during transport to the field or while in storage prior to use.
- The sample collector is personally responsible for the care and custody of samples collected until they are transferred to another person or dispatched properly under chain-of-custody rules.
- The sample collector will record sample data in the notebook.
- The site manager will determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

12.3 Sample Tags

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

12.4 Transfer of Custody and Shipment

- The coolers in which the samples are packed must be accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them must sign, date, and note the time on the chain-of-custody record. This record documents sample custody transfer
- Shipping containers must be sealed with custody seals for shipment to the laboratory. The method of shipment, name of courier, and other pertinent information are entered in the "Remarks" section of the chain-of-custody record and traffic reports.
- All shipments must be accompanied by the chain-of-custody record identifying their contents. The original record accompanies the shipment. The other copies are distributed appropriately to the site manager.
- If sent by mail, the package is registered with return receipt requested. If sent by common carrier, a bill of lading is used. Freight bills, Postal Service receipts, and bill of lading are retained as part of the permanent documentation.

12.5 Chain-of-Custody Record

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

12.6 Laboratory Custody Procedures

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

12.7 Custody Seals

Custody seals are preprinted adhesive-backed seals with security slots designed to break if the seals are disturbed. Sample shipping containers (coolers, cardboard boxes, etc., as appropriate) are sealed in as many places as necessary to ensure security. Seals must be signed and dated before use. On receipt at the laboratory, the custodian must check (and certify, by completing the package receipt log and LABMIS entries) that seals on boxes and bottles are intact. Strapping tape should be placed over the seals to ensure that seals are not accidentally broken during shipment.

13.0 Laboratory Requirements and Deliverables

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

will be completed by a third party for samples requiring ASP Category B format reports. Electronic data deliverables (EDDs) will also be generated by the laboratory in EQUIS format for samples requiring ASP Category B format reports.

14.0 Documentation

14.1 Sample Identification

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

XX-ZZ-O/D-DDMMYYYY

- XX: This set of initials indicates the Site from which the sample was collected.
- ZZ: These initials identify the sample location. Actual sample locations will be recorded in the task log.
- O/D: An "O" designates an original sample; "D" identifies it as a duplicate.
- DDMMYYYY: This set of initials indicates the date the sample was collected

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

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

14.2 Daily Logs

Daily logs and data forms are necessary to provide sufficient data and observations to enable participants to reconstruct events that occurred during the project and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings.

The site log is the responsibility of the site manager and will include a complete summary of the day's activity at the site.

The **Task Log** will include:

- Name of person making entry (signature).
- Names of team members on-site.
- Levels of personnel protection:
 - Level of protection originally used;
 - Changes in protection, if required; and
 - Reasons for changes.
- Documentation on samples taken, including:
 - Sampling location and depth station numbers;
 - Sampling date and time, sampling personnel;
 - Type of sample (grab, composite, etc.); and
 - Sample matrix.

- On-site measurement data.
- Field observations and remarks.
- Weather conditions, wind direction, etc.
- Unusual circumstances or difficulties.
- Initials of person recording the information.

15.0 Corrections to Documentation

15.1 Notebook

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

15.2 Sampling Forms

As previously stated, all sample identification tags, chain-of-custody records, and other forms must be written in waterproof ink. None of these documents are to be destroyed or thrown away, even if they are illegible or contain inaccuracies that require a replacement document.

If an error is made on a document assigned to one individual, that individual may make corrections simply by crossing a line through the error and entering the corrected information. The incorrect information should not be obliterated. Any subsequent error discovered on a document should be corrected by the person who made the entry. All corrections must be initialed and dated.

15.3 Photographs

Photographs will be taken as directed by the site manager. Documentation of a photograph is crucial to its validity as a representation of an existing situation. The following information will be noted in the task log concerning photographs:

- Date, time, location photograph was taken;
- Photographer
- Description of photograph taken;

16.0 Sample Handling, Packaging, and Shipping

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

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

16.1 Sample Packaging

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

- Sample bottle lids must never be mixed. All sample lids must stay with the original containers.
- The sample volume level can be marked by placing the top of the label at the appropriate sample height, or with a grease pencil. This procedure will help the laboratory to determine if any leakage occurred during shipment. The label should not cover any bottle preparation QC lot numbers.
- All sample bottles are placed in a plastic bag to minimize the potential for cross-contamination.
- Shipping coolers must be partially filled with packing materials and ice when required, to prevent the bottles from moving during shipment.
- The sample bottles must be placed in the cooler in such a way as to ensure that they do not touch one another. Ice will be added to the cooler to ensure that the samples reach the laboratory at temperatures no greater than 4°C.
- The environmental samples are to be placed in plastic bags. Ice is not to be used as a substitute for packing materials.
- Any remaining space in the cooler should be filled with inert packing material. Under no circumstances should material such as sawdust, sand, etc., be used.
- A duplicate custody record and traffic reports, if required must be placed in a plastic bag and taped to the bottom of the cooler lid. Custody seals are affixed to the sample cooler.

16.2 Shipping Containers

Shipping containers are to be custody-sealed for shipment as appropriate. The container custody seal will consist of filament tape wrapped around the package and custody seals affixed in such a way that access to the container can be gained only by cutting the filament tape and breaking a seal.

Field personnel will make arrangements for transportation of samples to the lab. The lab must be notified as early in the week as possible regarding samples intended for Saturday delivery.

16.3 Marking and Labeling

- Chain of custody seals shall be placed on the container, signed, and dated prior to taping the container to ensure the chain of custody seals will not be destroyed during shipment.
- If samples are designated as medium or high hazard, they must be sealed in metal paint cans, placed in the cooler with vermiculite and labeled and placarded in accordance with DOT regulations.
- In addition, the coolers must also be labeled and placarded in accordance with DOT regulations if shipping medium and high hazard samples.

17.0 Calibration Procedures and Frequency

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

18.0 Field Instrumentation

18.1 Photovac/MiniRae Photoionization Detector (PID)

Standard operating procedures for the PID require that routine maintenance and calibration be performed every six months. The packages used for calibration are non-toxic analyzed gas mixtures available in pressurized containers.

18.2 Organic Vapor Analyzer

Organic vapor analyzers (OVAs) are calibrated and routine maintenance performed every six months when the units are not in use. Calibration is performed and the major system checks are performed prior to the instrument being released for field use.

Calibration of the OVA 128 GC must be performed by a factory-authorized service representative. The instrument is removed from its protective case and the probe is connected to the base unit. After checking for an airtight seal in the sample line (plugging the sample inlet to stop the pump), the hydrogen supply is turned on and the pressure is set to 10 psi. The electronics are turned on and the instrument is allowed to warm up for at least 5 minutes. After warm up, the instrument is zeroed on the "X10" scale using the adjust knob. The flame is then lit and a gas-tight sample bag is filled with a mixture of 100 ppm methane in air. The sample bag is then attached to the probe inlet and the internal pump is allowed to draw in as much sample as is needed. R32 on the control board is adjusted to read 100 ppm on the "X10" scale and then the hydrogen supply is shut down. The pump can now be turned off and the sample bag removed. Using the adjust knob, the meter is set to read 4 ppm on the "X1" scale. Switching back to the "X10" scale the adjust knob is again used to set the meter to 40 ppm. The scale is then set to "X100" and R33 is adjusted until the meter reads 40 ppm on the "X100" scale.

The OVA has a detection limit of 0.1 ppm in methane equivalents and a working range of 0 to 1,000 ppm. During daily field use, system checks are performed which involve calibration and maintenance of the pump systems, gases, and filters. Care is taken to check for and prevent clogging or leaks. Quad rings and the burner chamber are examined on a weekly basis. Routine biannual maintenance includes a thorough cleaning as well as a re-examination of the pump system for leaks and wear. Parts are replaced as necessary. Instrument operation is verified by calibrating and running the OVA for 4 to 6 hours. An instrument specific logbook is maintained with the OVA to document its use and maintenance.

18.3 Conductance, Temperature, and pH Tester

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

18.4 Turbidity Meter

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

19.0 Internal Quality Control Checks

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

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

19.1 Blank Samples

Blank samples are analyzed in order to assess possible contamination from the field and/or laboratory so that corrective measures may be taken, if necessary. Field samples are discussed in the following subsection:

19.2 Field Blanks

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

- **Routine Field Blanks** or bottle blanks are blank samples prepared in the field to assess ambient field conditions. They will be prepared by filling empty sample containers with deionized water and any necessary preservatives. They will be handled like a sample and shipped to the laboratory for analysis.
- **Trip Blanks** are similar to routine field blanks with the exception that they are **not** exposed to field conditions. Their analytical results give the overall level of contamination from everything except ambient field conditions. For the RI/FS, one trip blank will be collected with every batch of water samples for VOC analysis. Each trip blank will be prepared by filling a 40-ml vial with deionized water prior to the sampling trip, transported to the site, handled like a sample, and returned to the laboratory for analysis without being opened in the field.

- **Field Equipment Blanks** are blank samples (sometimes called transfer blanks or rinsate blanks) designed to demonstrate that sampling equipment has been properly prepared and cleaned before field use, and that cleaning procedures between samples are sufficient to minimize cross contamination. If a sampling team is familiar with a particular site, they may be able to predict which areas or samples are likely to have the highest concentration of contaminants. Unless other constraints apply, these samples should be taken last to avoid excessive contamination of sampling equipment.

19.3 Field Duplicates

Field duplicate samples consist of a set of two samples collected independently at a sampling location during a single sampling event. In some instances the field duplicate can be a blind duplicate, i.e., indistinguishable from other analytical samples so that personnel performing the analyses are not able to determine which samples are field duplicates. Field duplicates are designed to assess the consistency of the overall sampling and analytical system.

19.4 Quality Control Check Samples

Inorganic and organic control check samples are available from EPA free of charge and are used as a means of evaluating analytical techniques of the analyst. Control check samples are subjected to the entire sample procedure, including extraction, digestion, etc., as appropriate for the analytical method utilized.

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APPENDIX 5
SITE CONTACT LIST

Site Contact List

<u>Local Officials</u>	
Jack W. Moore Town of Henrietta Supervisor 475 Calkins Road PO Box 999 Henrietta, NY 14467	Peter Minotti Chairman, Town of Henrietta Planning Committee 475 Calkins Road PO Box 999 Henrietta, NY 14467
Monroe County Planning Manager Attn: Thomas Goodwin 8100 City Place 50 West Main Street Rochester, NY 14614	Monroe County Executive Attn: Cheryl Dinolfo 110 County Office Building 39 W. Main St. Rochester, NY 14614

<u>Public Water Supplier</u>
Monroe County Water Authority 475 Norris Drive Rochester, NY 14610 (585) 442-2000

<u>Document Repository</u>
Henrietta Public Library 455 Calkins Road Henrietta, NY 14623 585-334-3401

<u>Local News Media</u>
Democrat and Chronicle Attn: Michael G. Kane 55 Exchange Boulevard Rochester, NY 14614

<u>Site Owner</u>
Getinge, USA Attn: Mr. Chris Dorsey 1777 East Henrietta Road Henrietta, New York 14623

<u>Nearby Schools and/or Daycares</u>		
Suzanne Rounding, Director Expressive Beginnings Child Care 875 Commons Way Henrietta, NY 14623 Distance ~ 0.25 miles, northeast	Frank Nicchi New York Chiropractic College Health Center 1200 Jefferson Road Henrietta, NY 14623 Distance ~ 0.5 miles, northeast	Jeff Tredo, Director of Rochester Campuses Bryant & Stratton College 1225 Jefferson Road Henrietta, NY 14623 Distance ~ 0.5 miles, east

<u>Adjacent Property Owners</u>		
Jefferson Hotel Associates 382 East Second St Corning, New York 14830	975 Jefferson Road, LLC 975 Jefferson Road Rochester, New York 14623	Monroe Muffler Brake LLC 200 Holleder Parkway Rochester, New York 14615
Wilbak Auto Car Wash Corp. PO Box 14000 Lexington, Kentucky 40512	Reed Property Company PO Box 3808 Ithaca, New York 14852	Linda Stabins 354 Avalon Drive Rochester, New York 14618
Neil Hall 300 Clay Road Rochester, New York 14623	Seneca Gaming Corporation 310 Fourth Road Niagara Falls, New York 14303	