Former Photech Imaging Site

MONROE, NEW YORK

Site Management Plan

NYSDEC Site Number: B00016

Prepared for:
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Division of Environmental Quality
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1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the Former Photech Imaging Site (hereinafter referred to as the "Site") under the New York State (NYS) Environmental Restoration Program (ERP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with State Assistance Contract (SAC) #C303768, Order, which was executed on April 18, 2008.

1.1.1 General

The City of Rochester, Department of Environmental Services (DES), Division of Environmental Quality (DEQ) entered into a SAC, with the NYSDEC to remediate a 12.5 acre property located in the City of Rochester, Monroe County, New York. This SAC in combination with the Record of Decision (ROD) for the Project, required the Remedial Party, City of Rochester, to investigate and remediate contaminated media at the Site. Figure showing the Site location and boundaries of this 12.5-acre site are provided as Figures 1 and 2. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement included as Appendix B.

After completion of the remedial work described in the Remedial Action Work Plans, some contamination was left in the subsurface at this Site, which is hereafter referred to as 'remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. The Maplewood Library in

the City of Rochester, New York is also used as a document repository for this project.

This SMP was prepared by LaBella Associates, P.C., on behalf of the City of Rochester, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

1.1.2 Purpose

The Site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Monroe County Clerk, will require compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This SMP has been approved by the NYSDEC, and compliance with this SMP is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a

Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

This SMP also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the SAC, #C303768 for the Site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this SMP will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Former Photech Imaging Site is located in an M-1 Industrial District in the City of Rochester, Monroe County, New York and is identified on the City of Rochester Tax Map as # 090.630-0001-001.0000000. The Site is situated on an approximately 12.5-acre area parcel bounded by the Monroe Service Corporation to the north, Driving Park Avenue to the south, a local union hall to the west, and several small businesses to the east (see Figures 1 and 2). Directly to the south of Driving Park Avenue is a General

Motors LLC facility, formerly Delphi Auto Systems. (see Figures 1 and 2). The boundaries of the Site are more fully described in the Metes and Bounds included with the Environmental Easement provided as Appendix B.

1.2.2 Site History

The Site was originally developed in 1948 for manufacturing photographic film and paper. Several different companies have owned and operated the facility at the Site for photographic paper and film production since its construction in 1948. The most recent owner, Photech Imaging Systems, Inc., ceased operations and abandoned the facility in 1991. Large amounts of chemicals, wastes, and various supplies and materials were left "as-is" on-Site when the facility was abandoned. In 1994, the NYSDEC and the United States Environmental Protection Agency (USEPA) performed a bulk waste and chemical removal action at the Site. This work successfully removed bulk chemicals from the facility; however, tanks were not certified as "clean"; small containers of chemicals were left in some of the buildings; and residual chemicals remained in some of the process vessels and piping.

Historically a total of 15 former buildings totaling approximately 108,000 square feet of space occupied the Site. The buildings were vandalized following abandonment, with ceilings, walls, piping and equipment severely damaged. As a result, asbestos and chemical residues were distributed throughout many interior areas of the buildings. Additionally, the roofs failed on several of the buildings and there was a fire in 2004 in the former warehouse portion of the facility.

During 2010, the City of Rochester demolished all of the Site buildings including the sub grade tunnels. Prior to demolition, asbestos containing materials and residual chemicals inside the buildings were removed and disposed of. In addition, suspect building materials (e.g. concrete floors) were assessed for chemicals of concern and remediated prior to demolition. The demolition of the Site structures allowed for a comprehensive Design Phase Investigation (DPI) to be completed to delineate the nature and extent of subsurface soil and groundwater contamination. The DPI activities are discussed further in Section 1.3.

During Site building demolition activities remedial actions were performed to remove soils impacted with Polycyclic Aromatic Hydrocarbon (PAH) Semivolatile Organic Compounds (SVOCs) along the eastern side and a drywell along the western side of Building 11 in order to prevent contaminated materials from entering demolition excavations. A total of 601 tons of contaminated soil was removed from AOC 1A and a total of 95 tons of contaminated soil was removed from AOC 1B and transported offsite for disposal, as a regulated solid waste. A source removal action was performed during building demolition to remove source area soils associated with two (2) former sumps in buildings formerly located within AOC 7. A total of 170 tons of cadmium-impacted soil was removed from this area for offsite disposal. All areas of concern are shown on Figure 3 and the former sump locations and source removal areas are shown on Figure 4.

1.2.3 Geologic Conditions

The soils of the Site are classified as urban land and the depth of overburden ranges across the Site from 8 to 20 feet. The Site bedrock consists of Rochester shale and a layer of weathered bedrock exists at the overburden-bedrock interface. Rochester shale consists of light to dark grey dolostone and the formation is approximately 95 to100 feet deep.

Prior to remediation Site groundwater was heavily influenced by Site infrastructure, which included tunnels and deep sumps. A map depicting the post-demolition and remediation groundwater flow can be found as Figure 5.

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

A Design Phase Investigation (DPI) was performed to characterize the nature and extent of contamination at the Site following demolition of the Site structures. The results of the DPI are described in detail in the following report:

- *Design Phase Investigation, Former Photech Imaging Site,* prepared by LaBella, dated July 2011.

Generally, the DPI determined that seven (7) AOCs at the Site contained concentrations of chemicals of concern detected above the Soil Cleanup Objectives

(SCOs), including:

- AOC 1B: West of Former Chemical Building – This area contained an apparent dry well that was investigated via test pitting.
- AOC 2: Silver Recovery Wastewater System – This area was determined to contain Cadmium at concentrations in groundwater that exceeded the NYSDEC TOGS 1.1.1 groundwater standard, and as such the NYS Part 375 SCO for the protection of groundwater was used when evaluating soil Cadmium levels. Soils in this area were reported to contain Cadmium concentrations above the SCO for the protection of groundwater (7.5 mg/kg) at concentrations between 7.9 mg/kg and 6,320 mg/kg.
- AOC 3A: Former Retention Pond/Burn Pit – This area was determined to contain Cadmium concentrations in soil that exceeded the NYS Part 375 SCO for a Commercial site (9.3 mg/kg) at concentrations between 7.9 mg/kg and 218 mg/kg.
- AOC 4B: Former Chemical Storage Sheds – This area was determined to contain Arsenic concentrations in soil that exceeded the NYS Part 375 SCO for a Commercial site (16 mg/kg) at a concentration of 18.1 mg/kg.
- AOC 7: Building 2 and 7 Wastewater – This area was determined to contain Cadmium concentrations in soil that exceeded the NYS Part 375 SCO for a Commercial site (9.3 mg/kg) at concentrations between 10.1 mg/kg and 11,900 mg/kg.
- AOC 13: South Drainage Swale – This area was determined to contain Cadmium concentrations in soil that exceeded the NYS Part 375 SCO for a Commercial site (9.3 mg/kg) at concentrations between 11.4 mg/kg and 132 mg/kg.

Note: Figure 3 includes AOC 14: Petroleum-Impacted Soil. This AOC was discovered during implementation of the Remedial Action. A description of AOC 14 is included below.

- AOC 14: Petroleum-Impacted Soil – This area was determined to contain petroleum impacted soil and groundwater. Stained soils, nuisance petroleum odors, and low PID readings were observed during the removal of a water main

and a former electrical pipe conduit along the eastern portion of the Site.

Site-Related Groundwater

Groundwater containing contaminants of concern above the respective NYSDEC TOGS 1.1.1 groundwater standards was identified within AOC 2. As noted above, a groundwater sample collected from within the AOC 2 footprint was reported to contain Cadmium at a concentration that exceeds the NYSDEC TOGS 1.1.1 groundwater standard of 5 ug/L. The original source of Cadmium in this AOC was the Former Silver Recovery Wastewater system.

Site-Related Soil Vapor Intrusion

No soil vapor intrusion assessment was conducted within former Site buildings prior to demolition and remediation. Soil vapor intrusion assessments will be required for new structures designed for full or part-time occupancy constructed during future redevelopment, as outlined in Section 2.3.2.

Underground Storage Tanks

Several underground structures were present at the Site related to the former silver recovery wastewater system. The locations of these underground structures are shown on Figure 6. A summary of each of these structures is provided in Table 1.

Table 1: Underground Structures

Structure ID	**Historical Use**	**Approximate Capacity**
Tank 1	Silver Recovery Tank	5,000-gallon
Tank 2	Original Water Service Vault	3,000-gallon
Tank 3	Second Generation Water Service Vault	7,000-gallon
Tank 4	Silver Wastewater Concrete Vault	12,000-gallon

Structure ID	Historical Use	Approximate Capacity
Silver Recovery	Original Silver Recovery Vault	Unknown
Condensate Tank	Storage	275-gallon

Historic Infrastructure

All underground piping and other associated historic infrastructure was removed during the remedial actions at the Site. The historic underground piping included wastewater, water, and electric. Five (5) drainage structures outlined in the following table were also removed during this work.

Table 2: Drainage Structures Removed

Structure	Location	Closure Analyses	Laboratory Results
Dry Well	Eastern portion of Site	Cadmium	0.599 M
		TCL VOCs	No detections
Manhole (3'x3'x8')	Northern portion of Site	Cadmium	0.554 U
Manhole (3'x3'x8')	South of Former Building 12	NA	NA
Manhole (3'x3'x3')	West of Former Building 9	NA	NA
Manhole (4'x4'x12')	Adjacent to Driving Park Avenue	Directly on Bedrock; Not Sampled	NA

1.4 SUMMARY OF REMEDIAL ACTIONS

The Site was remediated in accordance with NYSDEC-approved Record of Decision dated March 2006.

The following is a summary of the Remedial Actions performed at the Site:

1. Asbestos abatement, building and equipment decontamination, and building demolition including removal of basements and tunnels;

2. Design Phase Investigation which delineated the extent of soil contamination and confirmed the extent of groundwater contamination;

3. Removal of the silver recovery system including all tanks, vaults, and piping infrastructure;

4. Excavation and offsite disposal of contaminated soils exceeding commercial SCOs listed in Table 3 attached; excavation depths across the Site ranged from 3 feet below ground surface down to competent bedrock (+/- 11-13 feet bgs);

5. Application of Daramend in AOC 2 and AOC 7;

6. Removal of nearly all on-site utilities;

Remedial activities were completed at the Site between 2010 and 2012.

1.4.1 Removal of Contaminated Materials from the Site

Commercial SCOs were utilized as the cleanup objective for each Site AOC. The contaminants of concern differed for each AOC and the volume of soil removed are shown on the following table:

Table 4: Soil Removal Summary

Area of Concern	Amount of Soil Removed (tons)	Contaminant of Concern
AOC 1A	601	Heavy metals and SVOCs
AOC 1B	95	Drywell and Heavy Metals
AOC 2	763	Cadmium and Silver
AOC 3A	3,467	Debris and SVOCs
AOC 4B	19.98	Arsenic
Source Removal Action	170	Cadmium
AOC 7	773	Cadmium
AOC 13	410.46	Cadmium
AOC 14	329.7	Petroleum Constituents

Areas of excavation completed during infrastructure removal and the removal of regulated materials are shown in Figure 7 and 8, respectively. The types of fill materials used to fill the infrastructure and regulated material removal excavations are shown in Figures 9 and 10, respectively.

A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) for this Site is provided in Table 3.

1.4.2 Site-Related Treatment Systems

An immobilization product, Daramend, was placed in the AOC2 and AOC7 excavations prior to backfilling and restoration activities. DARAMEND®-M is a controlled release organic carbon, zero-valent iron (ZVI), and a source of sulfate, offered by Adventus Americas, Inc. (Adventus). This product produces a metal-sulfide compound that precipitates out of the dissolved phase and sorbs strongly to soil particles. This essentially immobilizes the contaminant as it remains fixed to the soil matrix. Adventus' technical summary of DARAMEND®-M is included in Appendix C.

1.4.3 Remaining Contamination

The Site was successfully remediated in accordance with the remedial goals and objectives identified in the Remedial Action Work Plans and the Record of Decision. Confirmatory soil sampling and analysis completed during remediation indicate that no soil contaminants are present at concentrations which exceed commercial SCOs.

Figure 11 summarize the results of all soil samples remaining at the Site after completion of Remedial Actions that exceed the Track 1 (unrestricted) SCOs, the tabulated exceedances can be found in Appendix L.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Although the soil remaining at the Site does not exceed the Commercial SCOs, exceedances of the Unrestricted SCOs are present within localized locations. Similarly, groundwater data associated with the majority of the Site indicate that contaminant concentrations are below the NYS Part 703 Groundwater Standards. Only localized areas of groundwater exceed the NYS Part 703 Groundwater Standard. Therefore potential groundwater/soil vapor impacts exist beneath only a portion of the Site. Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the Site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and

- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the Site remedy, as determined by the NYSDEC.

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Sub-slab Depressurization Systems

A sub-slab depressurization system is required during the construction of any new buildings at the Site which are constructed within an identified area of concern and are designed for full or part-time occupancy. Building-specific SSDS's will be designed once final design drawings are available for proposed buildings. The following general information for SSDS's are provided below:

- A 15-mil polyethylene flexible sheeting material shall be installed as a vapor barrier under the building's concrete floor slab and sub-base.
- SSDS's should be installed in accordance with New York State Department of Health guidance. SSDS's consist of perforated and fabric wrapped pipes buried in a 12-inch layer of #3 crushed stone and connected via solid PVC header and riser piping to in-line fans located on the exterior of the buildings. The systems are designed to achieve a negative pressure differential beneath the entire floor slab. The SSDS's will remain passive (fans off) pending post-construction testing. The systems will be activated if the post-construction testing indicates it is necessary.
- The SSDS perforated piping connects to solid pipe and is then routed to the exterior of the building and solid piping runs vertically to above the roofline of the building. Radon in-line exhaust fans should be installed approximately 5-ft. above the ground surface on the vertical piping run or at an accessible location above the roof.

- In the event that the systems need to be activated, the suction (vacuum) side of each vertical piping run (i.e., below the fan) is tapped with ¼-inch tubing that connects to an alarm (audible and visual). In the event that the vacuum is lost (e.g., fan failure), the alarm will be tripped indicating that the system is down.
- A U-Tube Manometer should also be located on the suction side of each vertical pipe for confirming the vacuum reading.

Procedures for operating and maintaining the sub-slab depressurizaion systems are documented in the Operation and Maintenance Plan (Section 4 of this SMP). Procedures for monitoring the systems are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

2.2.2.1 Sub-slab Depressurization System (SSDS)]

The active SSD systems will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the ROD to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to commercial and industrial uses only. Adherence to these Institutional Controls on the Site is required by the Environmental

Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;
- Inclusion in the City of Rochester Building Information System flagging system as a local governmental institutional control.

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted commercial and industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted and restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;

- The potential for vapor intrusion must be evaluated for any buildings, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The Site has been remediated for restricted commercial and industrial use; however, limited areas of soil exceeding the Unrestricted SCOs are present. Any future intrusive work that will encounter or disturb the remaining contamination will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix A to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and Federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the EWP. Any intrusive construction work that will impact the areas where excavation screening is required as depicted on Figure A-1 included in the EWP will be performed in compliance with the

EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site owner will ensure that Site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures which are constructed within an identified area of concern and are designed for full or part-time occupancy at the Site an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as component of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Monitoring Plan schedule by the Site owner or qualified environmental professional. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the State Assistance Contract (SAC), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective

purchaser has been provided with a copy of the State Assistance Contract (SAC), ROD, and all approved work plans and reports, including this SMP.

- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to LaBella Associates. These emergency contact lists must be maintained in an easily accessible location at the Site.

Table 5: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 6: Contact Numbers

City of Rochester, Department of Environmental Services	585-428-6855
LaBella Associates, P.C.	585-454-6110

** Note: Contact numbers subject to change and should be updated as necessary*

2.5.2 Map and Directions to Nearest Health Facility

See Figure 12.

2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 5). The list will also posted prominently at the Site and made readily available to all personnel at all times.

3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site , and all affected site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;
- Preparing the necessary reports for the various monitoring activities.

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

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;

- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures;
- Annual inspection and periodic certification.

Annual monitoring of the performance of the remedy and overall reduction in contamination on-Site will be conducted for the first two (2) years. The frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 7 and outlined in detail in Sections 3.2 and 3.3 below.

Table 7: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Groundwater	Annually for two (2) years	Liquid	TCL VOCs & RCRA Metals

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

3.2 MEDIA MONITORING PROGRAM

3.2.1 Groundwater Monitoring

Groundwater monitoring will be performed on a periodic basis to assess the performance of the remedy.

The network of monitoring wells has been installed to monitor both up-gradient and down-gradient groundwater conditions at the Site as shown on Figure 5. The network of on-Site wells has been designed based on the following criteria:

- Bedrock interface monitoring wells were installed up to five feet into competent bedrock with 10-foot screened intervals. A typical groundwater monitoring well cross-section is included as Appendix E.
- Groundwater is present approximately 5 to 16.5-feet bgs and groundwater contours indicate that general groundwater flow at the Site is from the north to the south as shown on Figure 5.
- The significant findings of the 2012 post-remediation groundwater monitoring are summarized below:
    - Metals were not detected above the NYSDEC TOGS 1.1.1 Ambient Groundwater Standards in any of the monitoring wells at the Site.
    - VOC were detected above the NYSDEC TOGS 1.1.1 Ambient Groundwater Standards in wells RMW-3, RMW-4, RMW-7, RMW-8, RMW-9, and Well-09 as shown on Figure 13.

Monitoring well construction logs are included in Appendix F. It is suspected that, at a minimum, the VOCs detected on-site at the location of RMW-9 are a result of off-site impact migration onto the Site from the property to the west which was historically utilized by the former Delphi Auto Systems and is currently occupied by General Motors Component Holding, LLC. This property is a Hazardous Waste Site due in part to documented groundwater contamination. Analytical groundwater data from the Delphi facility indicates similar VOC impacts to groundwater associated with the Delphi spills.

All of the twelve (12) monitoring wells at the Site will be sampled during annual monitoring events and each sample will be submitted for RCRA Metals and TCL VOCs. The sampling frequency may be modified with the approval NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

Deliverables for the groundwater monitoring program are specified below.

3.2.1.1 Sampling Protocol

All monitoring well sampling activities will be recorded in a field book and a groundwater-sampling log presented in Appendix G. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network.

Low flow groundwater sampling methodologies will be implemented in order to obtain a representative sample of current groundwater conditions at the Site. In order to accomplish this task, the following steps will be taken:

- Initially, static water levels will be collected using a water level measuring device(s) capable of measuring to 0.01 foot accuracy for evaluating the groundwater contours at the Site.
- Subsequent to collecting groundwater elevations, low flow purging of the monitoring wells will include the collection of water quality indicator parameters. Water quality indicator parameters will be recorded at five (5)-minute intervals during the purging of the well. These water quality indicator parameters will include:
  - Water Level Drawdown
  - Temperature
  - pH
  - Dissolved Oxygen
  - Specific Conductance
  - Oxidation Reduction Potential
  - Turbidity
- Groundwater sampling will commence once the groundwater quality indicator parameters have stabilized for at least three (3) consecutive readings for the following parameters:

- Water Level Drawdown: <0.3′
- Temperature: +/- 3%
- pH:+/- 0.1unit
- Dissolved Oxygen: +/-10%
- Specific Conductance: +/-3%
- Oxidation Reduction Potential: +/-10 millivolts
- Turbidity: +/-10% for values greater than 1 NTU

- After chemical indicator and drawdown parameters have stabilized sampling can begin.
- Each sample collected will be properly labeled.
- After collection of the samples, the pump tubing can be dedicated to the well for re-sampling (by hanging the tubing inside the well), decontaminated, or properly discarded.
- The monitoring well will be secured.
- Any reusable low flow groundwater sampling equipment will be decontaminated after each monitoring well prior to sampling additional wells at the Site.
- The samples will be submitted to a NYSDOH ELAP certified laboratory for the parameters tested under chain of custody. Groundwater samples will be analyzed for RCRA Metals using United States Environmental Protection Agency (USEPA) Method 6010 and 7471 (mercury), and TCL VOCs using USEPA Method 8260.
- The groundwater results will be provided in an ASP Category B deliverables data package and a DUSR will be completed to evaluate the usability of the data in accordance with DER-10 Appendix 2B.

3.2.1.2 Monitoring Well Repairs, Replacement And Decommissioning

If biofouling or silt accumulation occurs in an on-site monitoring well, the well will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

3.3 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix H). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling;

- Compliance with permits and schedules included in the Operation and Maintenance Plan;
- Confirm that Site records are up to date.

3.4 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the Site (Appendix I). Main Components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program;
    - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
    - Sample holding times will be in accordance with the NYSDEC ASP requirements.
    - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures;
    - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
    - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.

- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method;
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

3.5 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-Site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, groundwater, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;

- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled will be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations;
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 8 below.

Table 8: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Groundwater Sampling	Annually for two (2) years
Sitewide Inspection	Annually

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

4.0 OPERATION AND MAINTENANCE PLAN

4.1 INTRODUCTION

This Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the Site. This Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the Site to operate and maintain the SSD systems;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSD systems are operated and maintained.

Information on non-mechanical Engineering Controls (i.e. fencing) is provided in Section 3 - Engineering and Institutional Control Plan. A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

4.2 ENGINEERING CONTROL SYSTEM OPERATION AND MAINTENANCE

4.2.1 Sub-Slab Depressurization System

An SVI mitigation system will be installed as a component of all building foundations without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system. SSDS design will be completed in accordance with the 2006 NYSDOH SVI Guidance

4.2.2 System Start-Up and Testing

Following the installation of each SSDS, testing should be conducted to preliminarily evaluate the effectiveness and to confirm that there is adequate negative pressure beneath the entire foundation of the building and determine if the system needs to be activated. The following post start-up testing should be completed:

- **Pressure Field Extension Testing** - After the system installation is complete pressure testing point (shown on the generic SSDS drawing in Appendix K) should be tested to confirm that the system is adequately depressurizing the entire sub-slab area by the Site owner or qualified environmental professional. The testing should consist of connecting a digital micro-manometer (TPI Model 621) to each location and recording the vacuum reading. In addition, the U-Tube Manometer readings on the fans should be recorded so that the U-Tube Manometer readings can be correlated to the sub-slab measurements for future confirmation of system influence. Following the initial monitoring the building owner will be responsible to monitor the systems alarm and manometer and alert the City of Rochester DEQ and the NYSDEC if there are indications that the system is malfunctioning.

- **Alarm Test** – If a SSDS is activated, the alarms should be tested to confirm proper operation of the alarms. The alarm test consists of disconnecting the fan power and confirming both the light and audible alarm are triggered.

It should be noted that the United States Environmental Protection Agency (USEPA) indicates in their Engineering Issue: Indoor Vapor Intrusion Mitigation Approaches: "*As a practical matter SSD systems are normally designed to achieve a pressure differential of at least 0.02 inch of water (5 Pascal), during the worst case season, to provide an adequate safety factor for long-term variations.*"

Generic drawings of a typical SSDS are included in Appendix K of this report.

The system testing described above will be conducted if, in the course of the SSD system lifetime, significant changes are made to the system, and the system must be restarted.

4.3 ENGINEERING CONTROL SYSTEM PERFORMANCE MONITORING

4.3.1 Sub-slab Depressurization Monitoring

Sub-slab depressurization systems will be installed to mitigate possible soil vapor intrusion into occupied buildings.

4.3.2 Monitoring Schedule

The SSDS will be monitored seasonally (4 quarters) for the initial year of operation. After the initial inspection period the building owner will be responsible for the inspection of the SSDS.

Inspection frequency is subject to change with the approval of the NYSDEC. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Monitoring deliverables for the SSD system are specified later in this Plan.

4.3.3 General Equipment Monitoring

A visual inspection of the complete system will be conducted during the quarterly monitoring events. SSD system components to be monitored include, but are not limited to, the following:

- pressure testing point;
- alarm; and,
- fan, if activated.

If any equipment readings are not within their typical range, any equipment is observed to be malfunctioning, or the system is not performing within specifications, maintenance and repair as per the Operation and Maintenance Plan are required immediately, and the SSD system restarted.

4.3.4 System Monitoring Devices and Alarms

The active SSD systems have a warning device to indicate that the system is not operating properly. In the event that the warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSD system restarted. Operational problems will be noted in the subsequent Periodic Review Report.

4.4 MAINTENANCE AND PERFORMANCE MONITORING REPORTING REQUIREMENTS

Maintenance reports and any other information generated during regular operations at the Site will be kept on-file on-Site. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and submitted as part of the Periodic Review Report, as specified in the Section 5 of this SMP.

4.4.1 Routine Maintenance Reports

Checklists or forms (see Appendices [x, x]) will be completed during each routine maintenance event. Checklists/forms will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Any modifications to the system;

- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

4.4.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

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

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate form which is contained in Appendix J. Additionally, a general site-wide inspection form will be completed during the site-wide inspection (see Appendix H). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,

- The Site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certification:

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

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;

- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program and generally accepted engineering practices;
- The information presented in this report is accurate and complete;
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] for the Site.

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

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every year by the Site owner or qualified environmental professional, beginning eighteen months after the Certificate of Completion is issued. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix B (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;

- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. If applicable, these will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the Site-specific RAWP, ROD or Decision Document;
    - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
    - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan;
    - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office (Region 8) in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

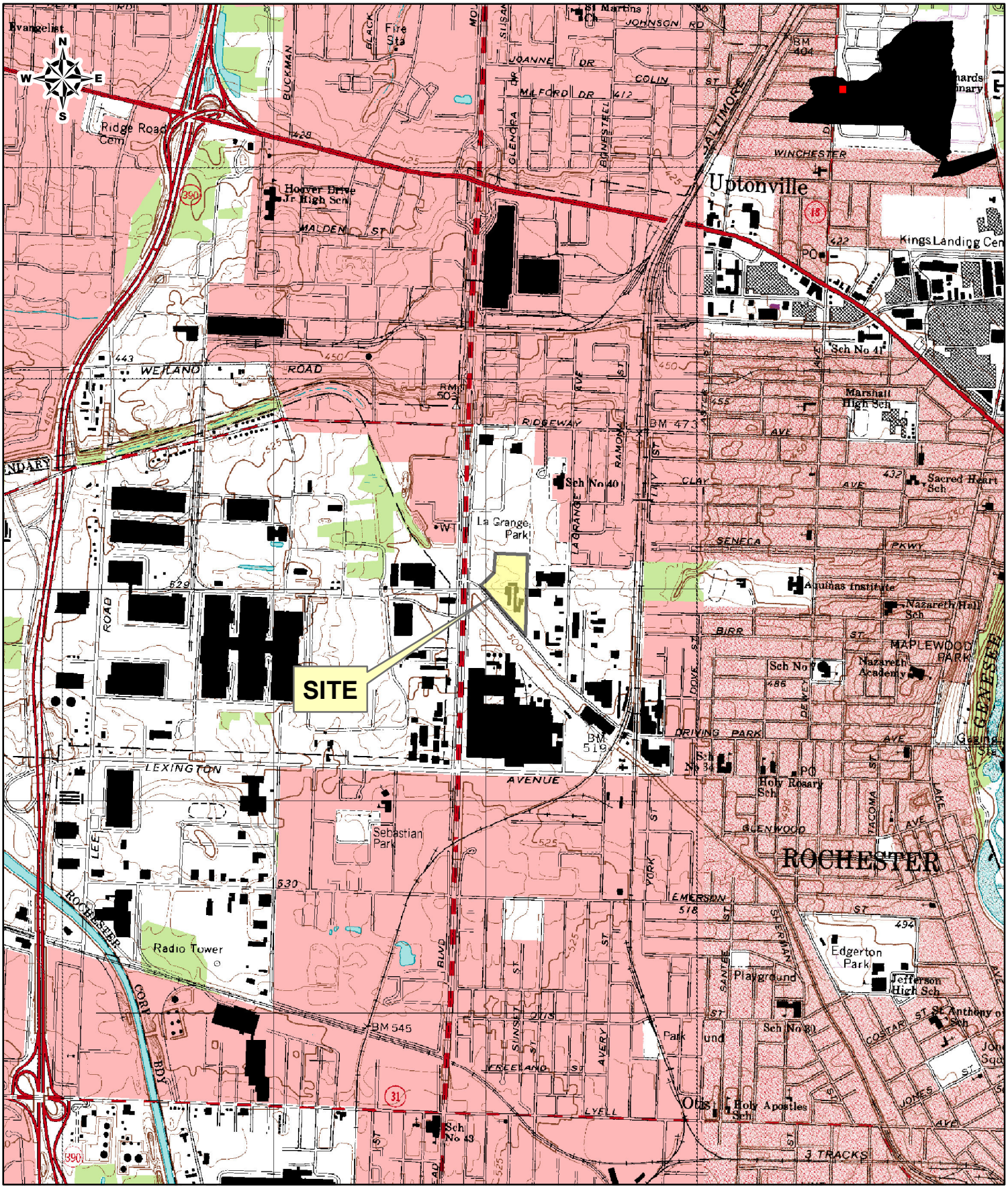
5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

Attachment 1

Former Photech Imaging Site, 1000 Driving Park Avenue, Rochester, New York
Soil Cleanup Objectives

Constituent	NYS Part 375-6.8(b) Restricted Commercial Use (mg/Kg)
Heavy Metals	
Cadmium	9
Silver	1,500
Arsenic	16
Semivolatile Organic Compounds	
Acenaphthene	500
Acenaphthylene	500
Anthracene	500
Benzo(a)anthracene	5.6
Benzo(a)pyrene	1
Benzo(b)fluoranthene	5.6
Benzo(g,h,i)perylene	500
Benzo(k)fluoranthene	56
Chrysene	56
Dibenz(a,h)anthracene	0.56
Fluoranthene	500
Fluorene	500
Indeno(1,2,3-cd)pyrene	5.6
Naphthalene	500
Phenanthrene	500
Pyrene	500



PROJECT/DRAWING NUMBER

209288

FIGURE 1

DRAWING TITLE

SITE LOCATION WITH USGS 7.5 MINUTE TOPO MAP
ROCHESTER WEST QUAD
1:24,000

PROJECT/CLIENT

CITY OF ROCHESTER

SITE MANAGEMENT PLAN

FORMER PHOTECH IMAGING FACILITY
1000 DRIVING PARK AVENUE
ROCHESTER, NY

LABELLA Associates, P.C.
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ROCHESTER, NY 14614
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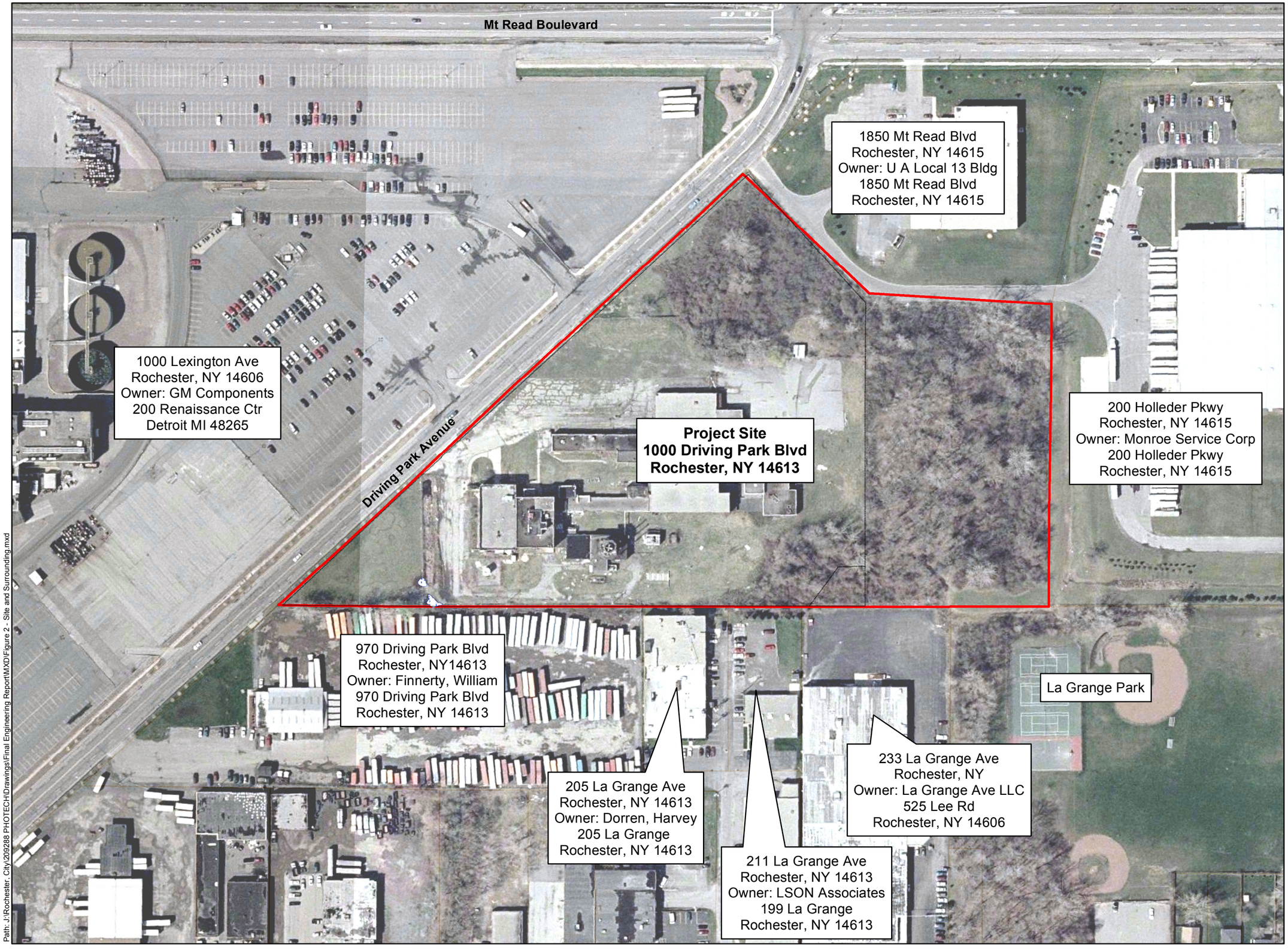

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 2 - Site and Surrounding.mxd

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ROCHESTER, NEW YORK

FINAL ENGINEERING REPORT

PROJECT SITE MAP
AND
SURROUNDING PROPERTIES

N
W E
S

0 50 100 200
Feet

1 inch = 150 feet

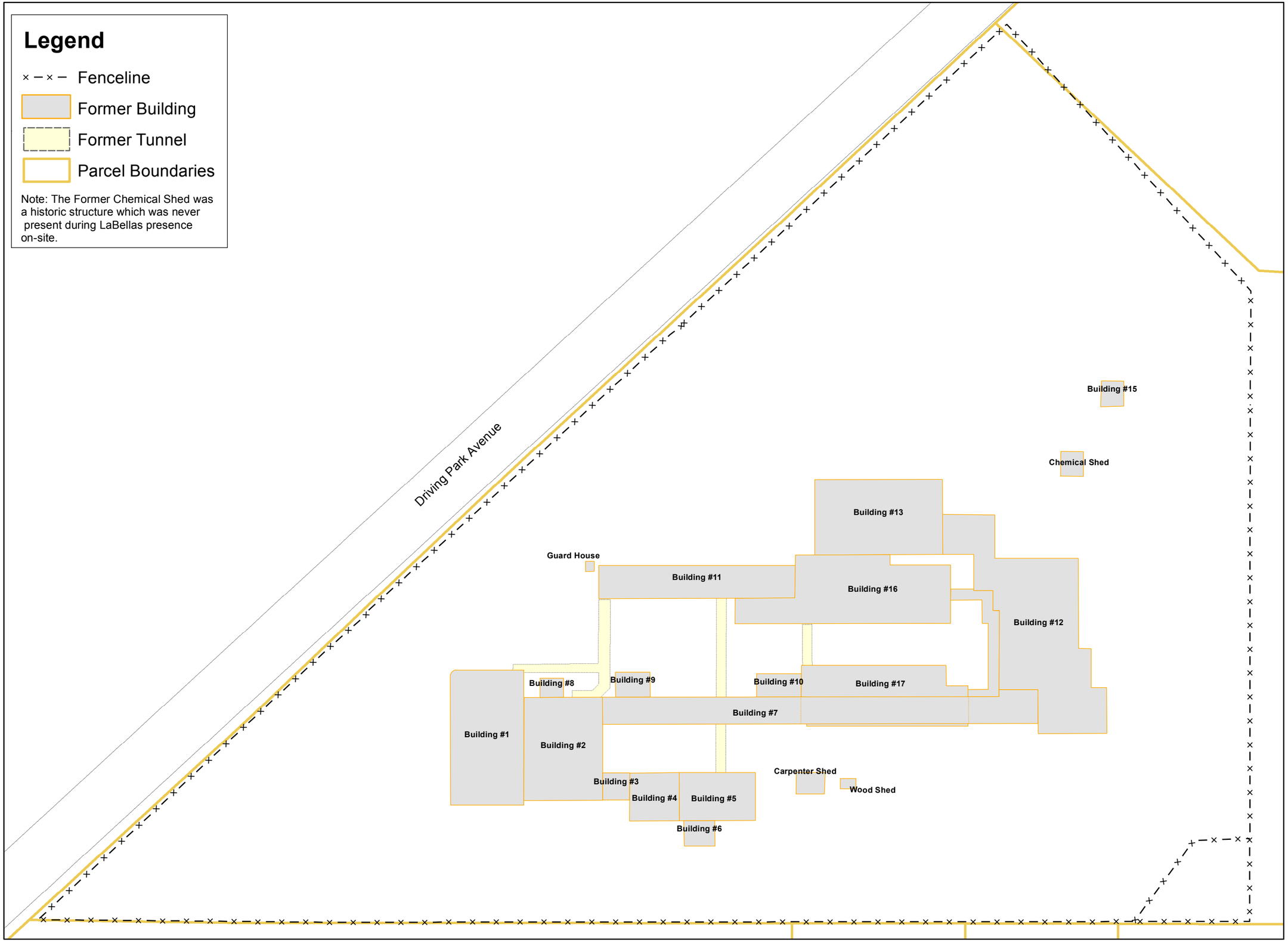
209288

FIGURE 2

Legend

- Fenceline
- Former Building
- Former Tunnel
- Parcel Boundaries

Note: The Former Chemical Shed was a historic structure which was never present during LaBellas presence on-site.



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FORMER SITE BUILDINGS

0 40 80
Feet

1 inch = 72 feet

209288

FIGURE 3

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 3 - Former Buildings.mxd

Legend

- Fenceline
- AOC Excavations
- Former Building
- Swale
- Wetland Area
- Parcel Boundary
- Former Tunnel

Driving Park Avenue

AOC 4B

AOC 1B

AOC 2

AOC 7

AOC 13

AOC 1A

AOC 14

AOC 3A

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 4 - AOC Map.mxd

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SITE WIDE:
AREA OF CONCERN
EXCAVATIONS

W S N E

0 20 40 80
Feet

1 inch = 55 feet

209288

FIGURE 4

Legend

- Bottom Confirmation Soil Samples
- Sidewall Confirmation Soil Samples
- AOC 1A and 1B Remedial Excavation (Sept, 2010)
- AOC 1A Remedial Excavation (Jan, 2012)
- Former Building

Note: 1) AOC 1A was excavated to a depth of 3 feet below ground surface.
2) AOC 1B was excavated to a depth of 8 feet below ground surface.
3) All confirmation samples were analyzed for PAH SVOCs, no exceedences were reported.

AOC1B-CS-3 Depth = 8'
AOC1B-CS-2 Depth = 8'
AOC1B-CS-1 Depth = 8'
AOC 1B

Building #11

AOC1A-CS-11 Depth = 3'
AOC1A-CS-8 Depth = 3'
AOC1A-CS-6 Depth = 2'
AOC1A-CS-12 Depth = 3'
AOC1A-CS-10 Depth = 3'
AOC 1A
AOC1A-CS-9 Depth = 3'
AOC1A-CS-5 Depth = 2'
AOC1A-CS-4 Depth = 2'
AOC1A-CS-3 Depth = 2'
AOC1A-CS-2 Depth = 2'

Building #16

AOC1A-CS-1 Depth = 2'
AOC1A-CS-1' Depth = 4'
AOC1A-CS-3R' Depth = 3'
AOC1A-CS-7 Depth = 2'
AOC1A-CS-2' Depth = 3'

Building #9

Building #10

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 5 - AOC1.mxd

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AREA OF CONCERN 1A AND 1B: LIMIT OF REMEDIAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS

0 10 20
Feet

1 inch = 12 feet

209288

FIGURE 5

B2 IRM/CSWSW-1
Cd = 2.78
Depth = 2'

B2 IRM/CSSSW-1
Cd = 0.22
Depth = 2'

B2 IRM/CSNSW-1
Cd = 0.45
Depth = 2'

B2 IRM/CSESW-1
Cd = 4317
Depth = 2'

B7 IRM/CSWSW-1
Cd = 0.47
Depth = 2'

B7 IRM/CSSSW-1
Cd = 40
Depth = 2'

B7 IRM/CSNSW-1
Cd = 114
Depth = 2'

B7 IRM/CSESW-1
Cd = 38.7
Depth = 2'

Building #1

Building #2

Building #3

Building #4

Building #7

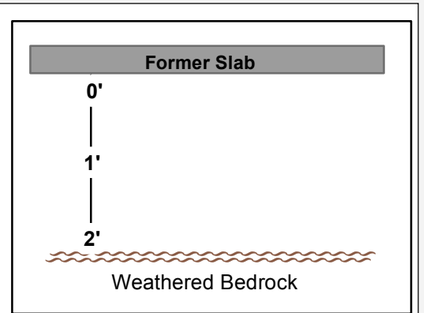
Building #8

Building #9

Legend

- Sidewall Soil Sample
- Source Removal Excavation
- Former Building
- Former Sump

Note: 1) Concentrations are reported in ppm.
2) These removals were not intended to be a final remedial measure.
3) Depths reported are relative to the former basement floor elevation.



Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 6 - IRM.mxd

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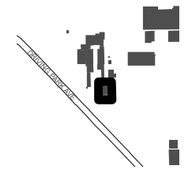
FINAL ENGINEERING REPORT

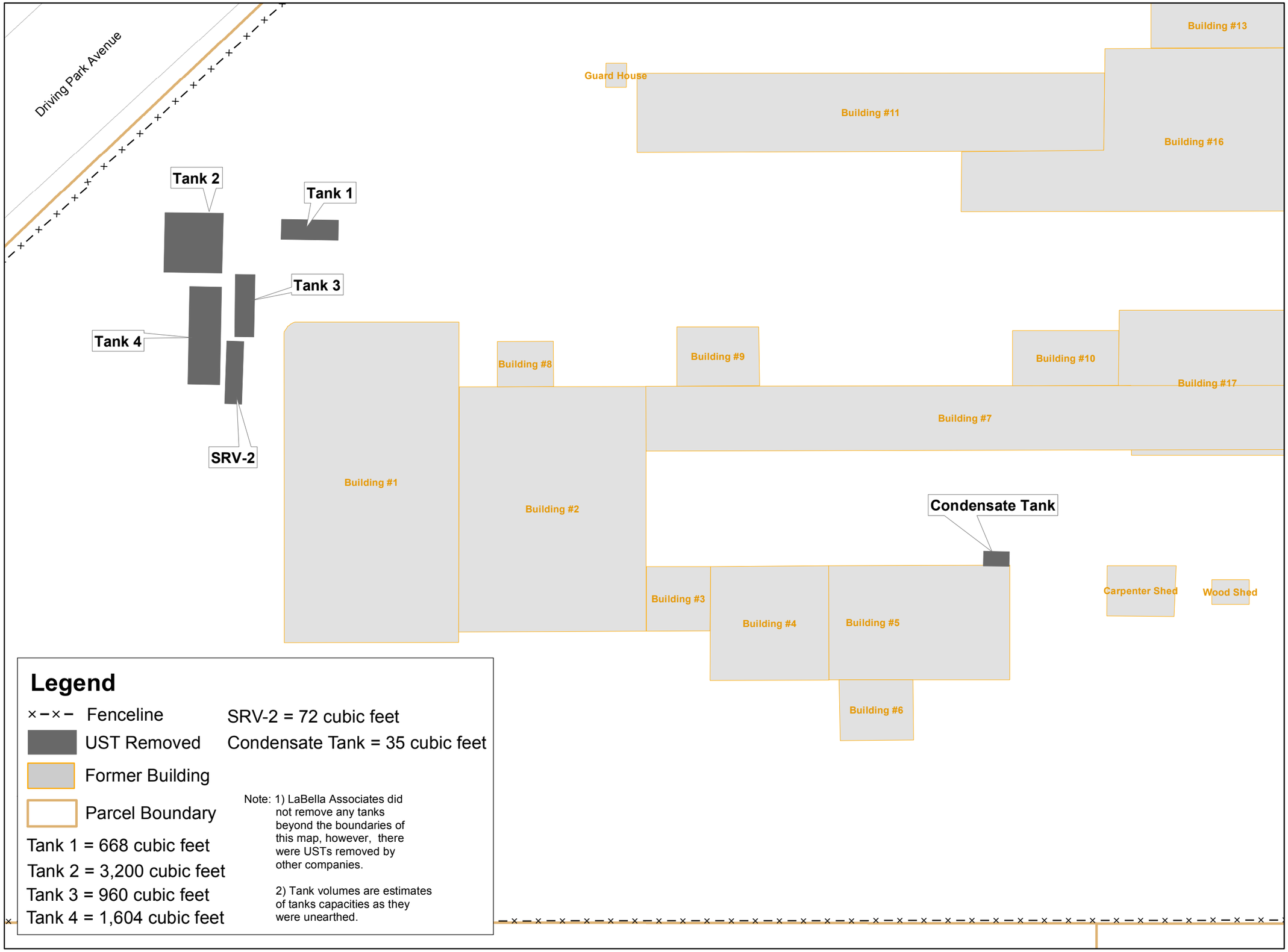
SOURCE REMOVAL ACTION:
LIMIT OF REMEDIAL EXCAVATION AND SAMPLE LOCATIONS

0 5 10
Feet
1 inch = 10 feet



209288

FIGURE 6



Legend

- Fenceline
- UST Removed
- Former Building
- Parcel Boundary

Tank 1 = 668 cubic feet
Tank 2 = 3,200 cubic feet
Tank 3 = 960 cubic feet
Tank 4 = 1,604 cubic feet

SRV-2 = 72 cubic feet
Condensate Tank = 35 cubic feet

Note: 1) LaBella Associates did not remove any tanks beyond the boundaries of this map, however, there were USTs removed by other companies.

2) Tank volumes are estimates of tanks capacities as they were unearthed.

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 7 - Removed USTs.mxd

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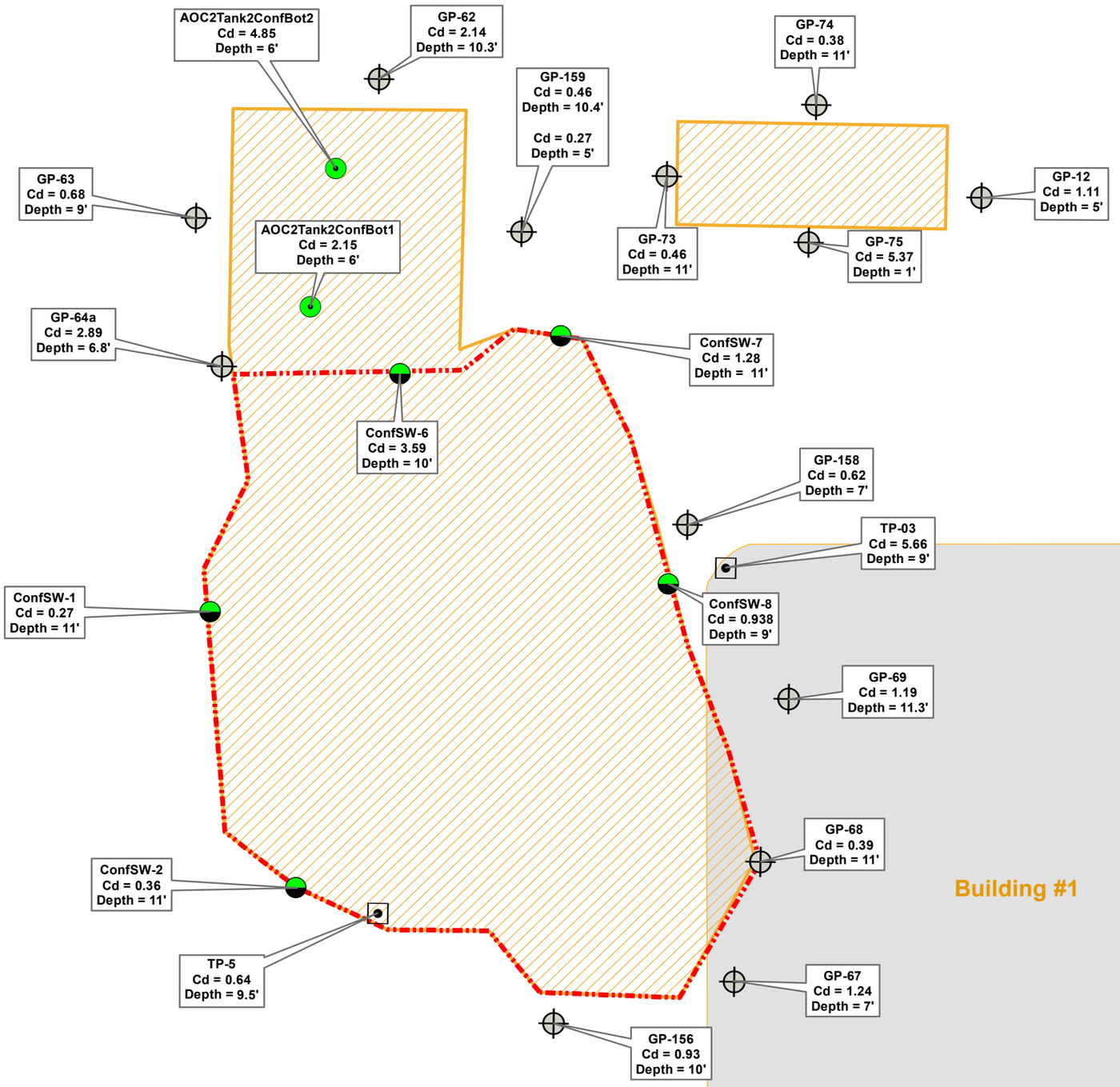
REMOVED UNDERGROUND STORAGE TANKS AND VAULTS

0 10 20 40
Feet

1 inch = 30 feet

209288

FIGURE 7



Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 8 - AOC2.mxd

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AREA OF CONCERN 2:
EXCAVATION LIMITS
AND
CONFIMATORY SAMPLE
LOCATIONS

0 5 10
Feet

1 inch = 10 feet

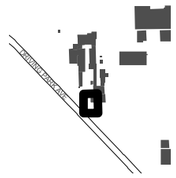

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FIGURE 8

Legend

- Design Phase Investigation Boring
- Bottom Confirmation Soil Samples
- Sidewall Confirmation Soil Samples
- "Over" Excavation Based on Observed Debris
- AOC 3A Remedial Excavation
- Fenceline/Property Line

Note: 1) Reported concentrations are in ppm
2) See Figure 9B for excavation depths.

AOC 3A CS-32
Cd = 0.550 U
Depth = 3'

AOC 3A CS-31
Cd = 0.741
Depth = 2.5'

AOC 3A-CS-30
Cd = 0.573 U
Depth = 2.5'

AOC 3A-CS-36
Cd = 0.678 U
Depth = 3'

AOC 3A-CS-37
Cd = 0.589
Depth = 3'

AOC 3A-CS-38
Cd = 6.15 DM
Depth = 3'

GP-174
Cd = 0.06 U
Depth = 3'

GP-176
Cd = 4.95
Depth = 3'

AOC 3A CS-35
Cd = 0.55 U
Depth = 4.5'

GP-139
Cd = 0.06 U
Depth = 3'

AOC 3A CS-29
Cd = 0.588 U
Depth = 4'

AOC 3A CS-34
Cd = 0.518 U
Depth = 4'

AOC 3A CS-33
Cd = 0.505 U
Depth = 4'

AOC 3A CS-28
Cd = 0.295 J
Depth = 4'

AOC 3A CS-27
Cd = 0.586 U
Depth = 4'

AOC 3A CS -23
Cd = 0.495 U
Depth = 5'

AOC 3A CS-22
Cd = 0.56
Depth = 4'

AOC 3A CS-20
Cd = 0.541 J
Depth = 3.5'

GP-122
Cd = 0.78
Depth = 5'

GP-171
Cd = 0.06 U
Depth = 1'

Cd = 0.06 U
Depth = 3'

GP-172
Cd = 0.06 U
Depth = 3'

AOC 3A-CS-7
Cd = 0.522 U
Depth = 4'

AOC 3A CS-25
Cd = 0.612 U
Depth = 4'

AOC 3A-CS-19
Cd = 0.592 U
Depth = 4'

AOC 3A-CS-8
Cd = 0.581 U
Depth = 2'

AOC 3A CS-18
Cd = 0.578 U
Depth = 5'

AOC 3A-CS-6
Cd = 0.537 J
Depth = 2'

GP-200
Cd = 0.08 U
Depth = 5'

GP-123
Cd = 0.06 U
Depth = 5'

AOC 3A-CS-11
Cd = 0.577 U
Depth = 3'

AOC 3A CS-13
Cd = 0.564 U
Depth = 4'

AOC 3A-CS-12
Cd = 0.603 U
Depth = 5'

GP-173
Cd = 0.06 U
Depth = 3'

GP-141
Cd = 0.06 U
Depth = 5'

AOC 3A-CS-17
Cd = 0.591 U
Depth = 5'

GP-202
Cd = 1.35
Depth = 3'

Cd = 0.07 U
Depth = 5'

AOC 3A-CS-4
Cd = 0.554 U
Depth = 3'

AOC 3A CS-24
Cd = 0.563 U
Depth = 6'

AOC 3A CS-16
Cd = 0.64 U
Depth = 4'

AOC 3A-CS-5
Cd = 0.551
Depth = 3'

GP-205
Cd = 0.09 J
Depth = 5'

GP-211
Cd = 0.36 U
Depth = 1'

Cd = 0.719
Depth = 3'

Cd = 0.37 U
Depth = 5'

AOC 3A CS -15
Cd = 0.602
Depth = 4'

AOC 3A-CS-14
Cd = 0.576 U
Depth = 4'

GP-210
Cd = 0.76
Depth = 1'

Cd = 0.37 U
Depth = 5'

AOC 3A-CS-1
Cd = 0.536 U
Depth = 2'

AOC 3A-CS-2
Cd = 0.557 U
Depth = 2'

AOC 3A-CS-3
Cd = 0.55 U
Depth = 2'

AOC 3A-CS-10
Cd = 0.537 U
Depth = 3.5'

GP-209
Cd = 4.26
Depth = 1'

GP-206
Cd = 0.06 U
Depth = 5'

PL PL PL PL

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 9A - AOC3A.mxd

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**AREA OF CONCERN 3A:
LIMIT OF REMEDIAL EXCAVATION AND CONFIRMATORY SAMPLE LOCATIONS**

W N S E

0 5 10 20
Feet

1 inch = 15 feet

209288

FIGURE 9A

Legend

- AOC 3A Excavation Depth Area
- AOC 3A Remedial Excavation
- Fenceline/Property Line

Excavated to a depth of 3 feet

Excavated to a depth of 4 feet

Excavated to a depth of 5 feet

Excavated to a depth of 4 feet

Excavated to a depth of 8 feet

Excavated to a depth of 4 feet

Excavated to a depth of 5 feet

Excavated to a depth of 7 feet

Excavated to a depth of 3 feet

PL PL PL PL

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 9B - AOC3A-Depth.mxd

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AREA OF CONCERN 3A: REMEDIAL EXCAVATION DEPTHS

0 10 20
Feet
1 inch = 13 feet

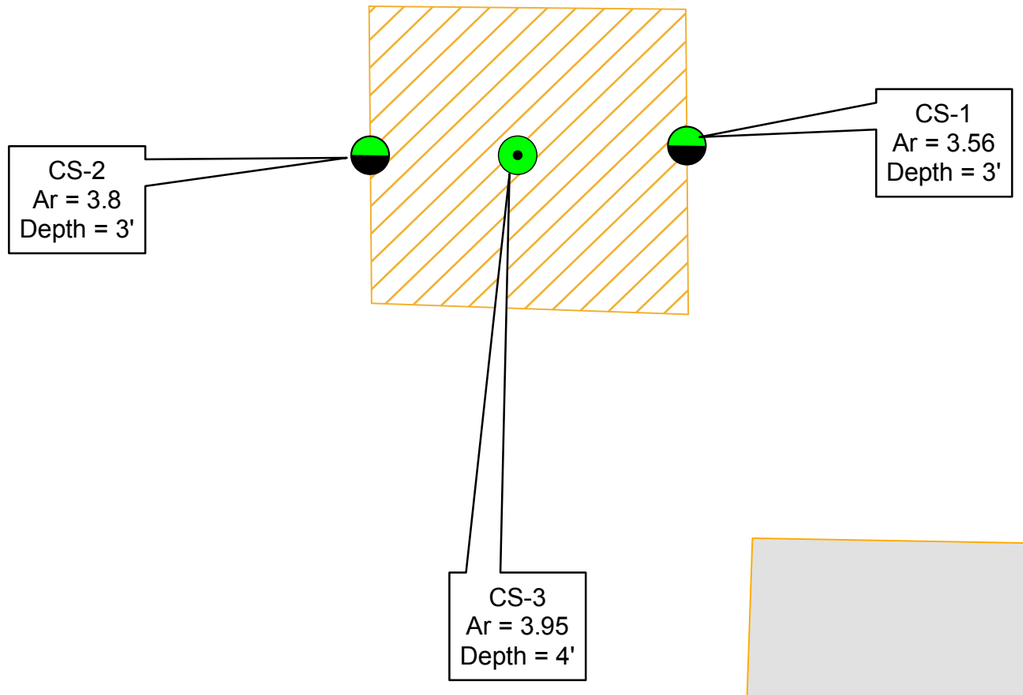
209288

FIGURE 9B

Legend

- Bottom Confirmation Soil Sample
- Sidewall Confirmation Soil Samples
- AOC 4B Excavation
- Former Building

Note: 1) All confirmation samples were analyzed for Arsenic.
2) Reported concentrations are in ppm.



Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 10 - AOC4B.mxd

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AREA OF CONCERN4B: LIMIT OF REMEDIAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS

0 4 8
Feet

1 inch = 5 feet

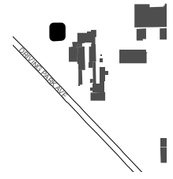

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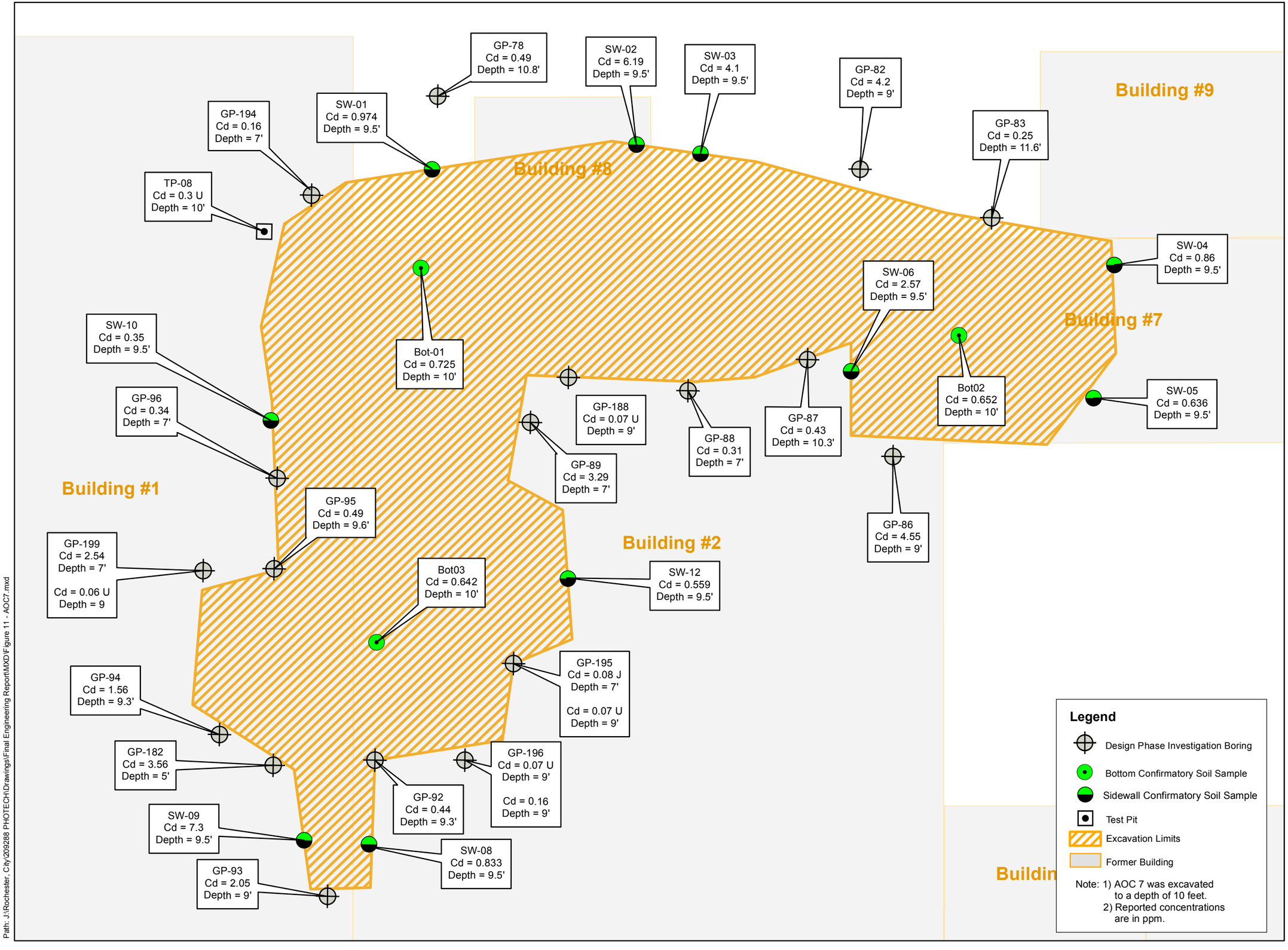
FIGURE 10



Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 11 - AOC7.mxd

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AREA OF CONCERN 7:
LIMIT OF REMEDIAL EXCAVATION AND CONFIRMATORY SAMPLE LOCATIONS

0 5 10
Feet

1 inch = 10 feet

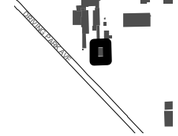

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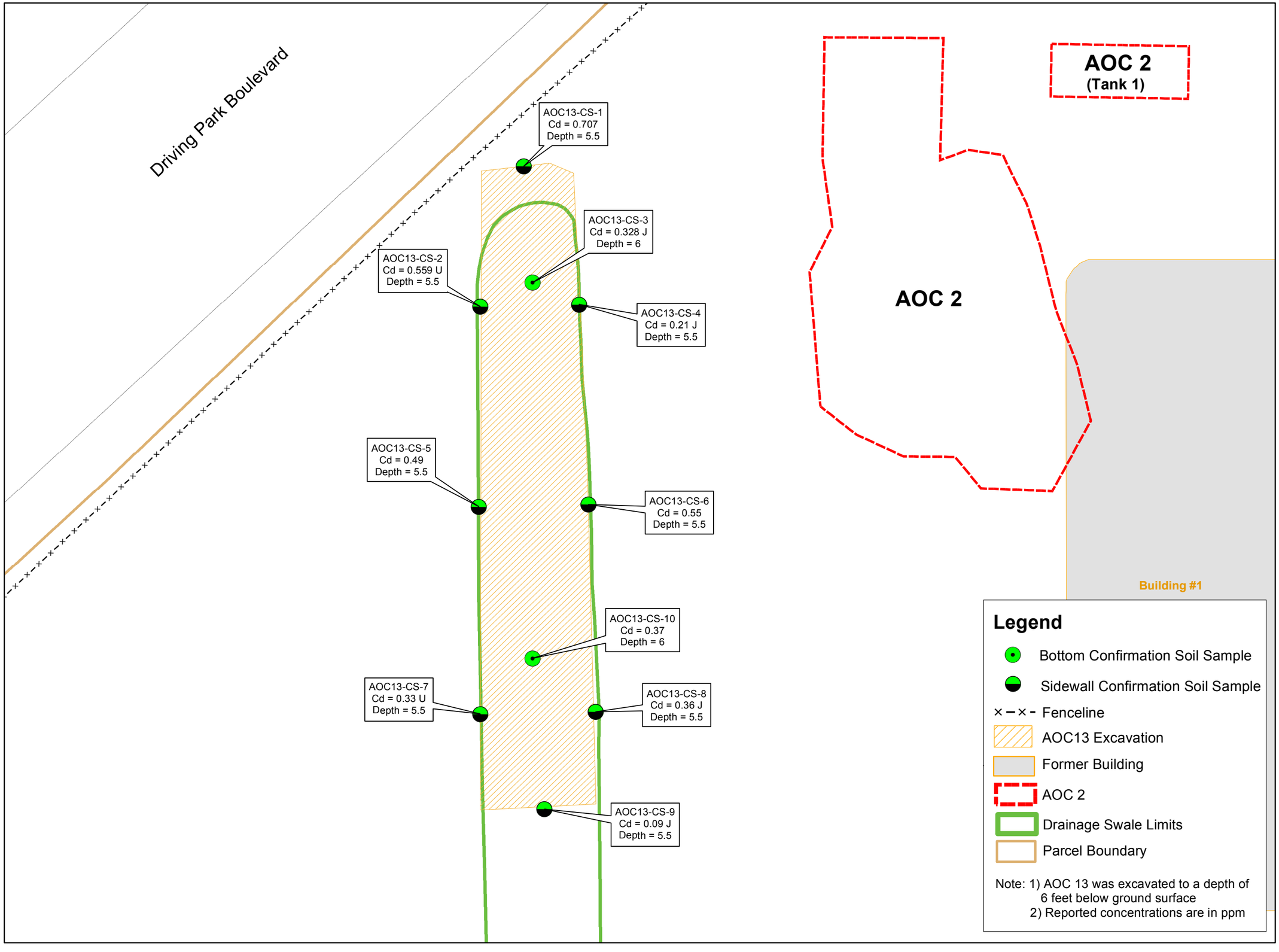
FIGURE 11



Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 12 - AOC13.mxd

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AREA OF CONCERN 13: LIMIT OF REMEDIAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS

0 10 20
Feet

1 inch = 15 feet

209288

FIGURE 12

Legend

- Manhole Structure
- Hydraulic Lift
- Asbestos Wastewater Pipe
- Pipe Conduit
- Electric Conduit
- Gas Main
- Water Main
- Silver Recovery and Wastewater Pipe
- Former Building
- Fenceline
- Former Tunnel
- Parcel Boundaries

Driving Park Avenue

Building #15
Chemical Storage Shed
Building #13
Guard House
Building #11
Building #16
Building #12
Building #8
Building #9
Building #10
Building #17
Building #7
Building #1
Building #2
Building #3
Building #4
Building #5
Carpenter Shed
Wood Shed
Building #6

Two sections of former water main remain in place due to their proximity to telephone poles.

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 13 - Infrastructure Removal.mxd

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SITE WIDE:
HISTORIC INFRASTRUCTURE REMOVAL

0 50 100
Feet
1 inch = 75 feet

209288

FIGURE 13

Legend

- New Infrastructure (Not to Scale)
- New Pipe Infrastructure
- Historic Infrastructure Remaining
- Existing Fence
- New Fence
- Utilized Historic Infrastructure
- Former Building
- Swale
- Parcel Boundary

Driving Park Avenue

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 14 - NewStructures.mxd

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SITE WIDE:
NEW AND REMAINING
INFRASTRUCTURE

W S N E

0 45 90
Feet
1 inch = 70 feet

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FIGURE 14

Building #4

Building #5

Building #6

Carpenter Shed

Wood Shed

AOC14-SW-2
Depth = 11ft

AOC14-SW-3
Depth = 11 ft

AOC14-SW-1
Depth = 11 ft

AOC14-Bot-1
Depth = 11.5 ft

AOC14-SW-4
Depth = 10 ft

AOC14-SW-14
Depth = 6 ft

AOC14-SW-7
Depth = 7.5 ft

AOC14-SW-6
Depth = 7.5 ft

AOC14-SW-5
Depth = 10 ft

AOC14-SW-13
Depth = 6 ft

AOC14-Bot-4
Depth = 6.5 ft

AOC14-SW-12
Depth = 6 ft

AOC14-Bot-2
Depth = 8 ft

AOC14-SW-8
Depth = 7.5 ft

AOC14-SW-10
Depth = 7.5 ft

AOC14-SW-9
Depth = 4 ft

Legend

- Sidewall Confirmation Sample
- Bottom Confirmation Sample
- UtilityPoles
- AOC14 Excavation Limits
- Former Building
- AOC 3A Excavation
- Fenceline
- Former Electric Conduit
- Former Gas Main
- Former Water Main

Note: Excavation depths are given on Figure 14B

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 15A - AOC14.mxd

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AREA OF CONCERN 14: EXCAVATION LIMITS AND CONFIRMATORY SAMPLE LOCATIONS

N W E S

0 5 10
Feet
1 inch = 12 feet

209288

FIGURE 15A

Building #4

Building #5

Building #6

Carpenter Shed

Wood Shed

Excavated to a depth of 11.5 feet

Excavated to a depth of 10.5 feet

Excavated to a depth of 6.5 feet

Excavated to a depth of 8 feet

Legend

- AOC 14 Excavation Limits
- Former Building
- Parcel Boundary
- AOC 3A Excavation Limits
- UtilityPoles
- Fenceline
- Water Main
- Former Electric Conduit
- Former Gas Main

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 15B - AOC14-Depth.mxd

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AREA OF CONCERN 14: REMEDIAL EXCAVATION DEPTHS

W S N E

0 5 10
Feet
1 inch = 10 feet

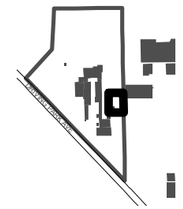

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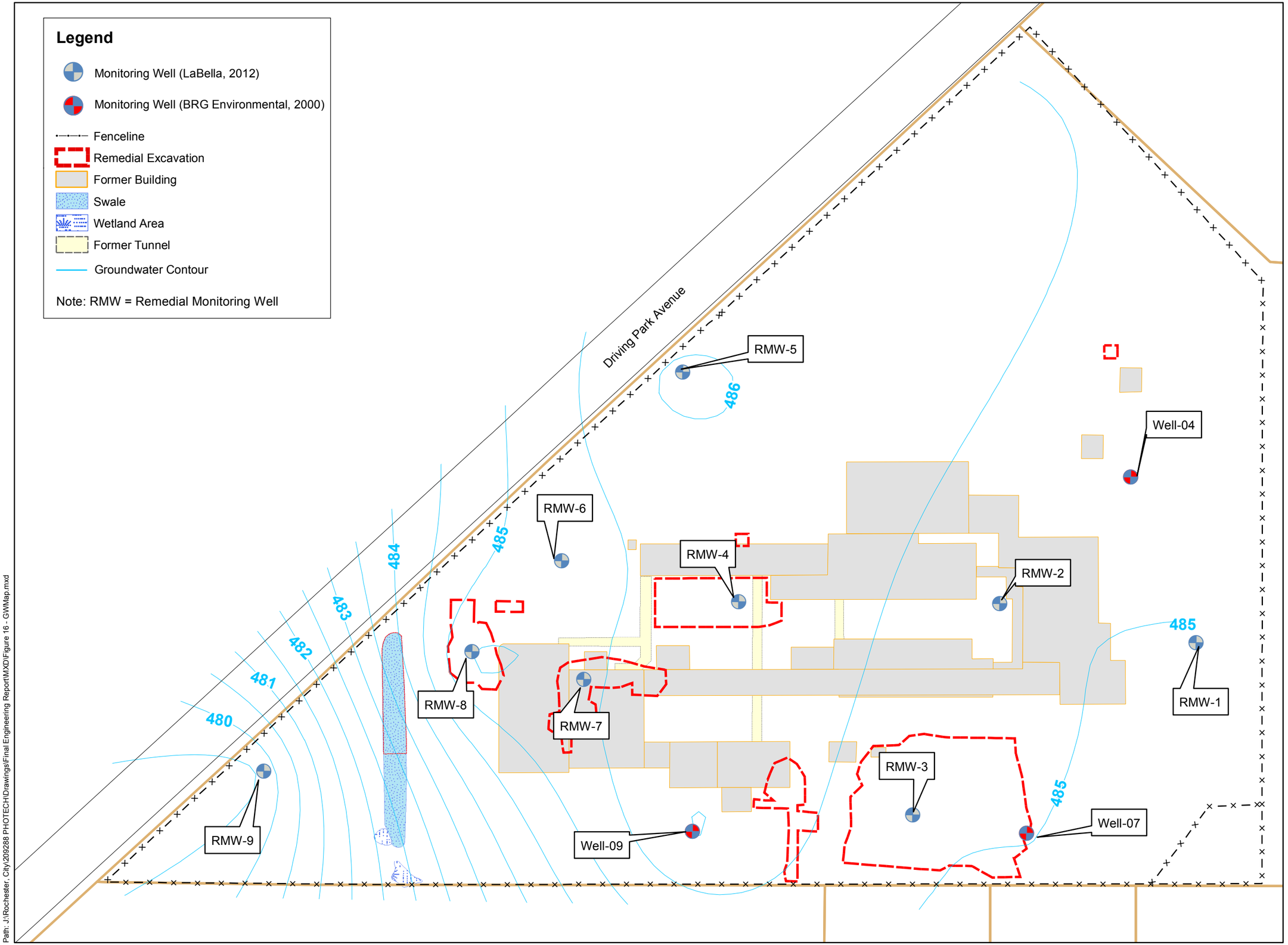
FIGURE 15B

Legend

- Monitoring Well (LaBella, 2012)
- Monitoring Well (BRG Environmental, 2000)
- Fenceline
- Remedial Excavation
- Former Building
- Swale
- Wetland Area
- Former Tunnel
- Groundwater Contour

Note: RMW = Remedial Monitoring Well



Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 16 - GWMap.mxd

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WELL LOCATIONS AND GROUNDWATER CONTOURS

0 25 50 100
Feet

1 inch = 75 feet

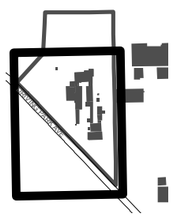

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FIGURE 16

Legend

- Monitoring Well (LaBella, 2012)
- Monitoring Well (BRG Environmental, 2000)
- Fenceline
- Remedial Excavation
- Former Building
- Swale
- Wetland Area
- Former Tunnel

Note: RMW = Remedial Monitoring Well

Driving Park Avenue

RMW-5
June 2012
No Exceedances

September 2012
No Exceedances

RMW-6
June 2012
No Exceedances

September 2012
No Exceedances

RMW-4
June 2012
Acetone = 59

September 2012
No Exceedances

RMW-2
June 2012
No Exceedances

September 2012
No Exceedances

Well-04
June 2012
1,1 Dichloroethane = 2.2 J
1,1 Dichloroethene = 0.8 J

September 2012
No Exceedances

RMW-1
June 2012
No Exceedances

September 2012
No Exceedances

RMW-9
June 2012
1,1 Dichloroethane = 17
cis-1,2-Dichloroethene = 31
Vinyl Chloride = 79

September 2012
1,1 Dichloroethane = 19
cis-1,2-Dichloroethene = 30
Vinyl Chloride = 110

RMW-8
June 2012
Benzene = 1.7 J

September 2012
Benzene = 2.2 J

RMW-7
June 2012
Toluene = 26

September 2012
No Exceedances

RMW-3
June 2012
Trichloroethene = 14

September 2012
Trichloroethene = 14

Well-07
June 2012
No Exceedances

September 2012
No Exceedances

Well-09
June 2012
1,1 Dichloroethane = 6.3

September 2012
1,1 Dichloroethane = 12

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 17 - GWresults.mxd

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GROUNDWATER SAMPLE EXCEEDANCES

0 30 60 120
Feet

1 inch = 75 feet

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FIGURE 17

Legend

- Parcel Boundary
- Proposed Building
- Proposed and Existing Asphalt
- Green Space

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PROPOSED SITE PLAN

W
S
N
E

0 40 80 160
Feet

1 inch = 95 feet

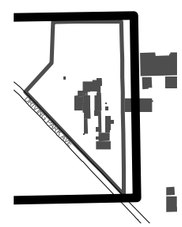

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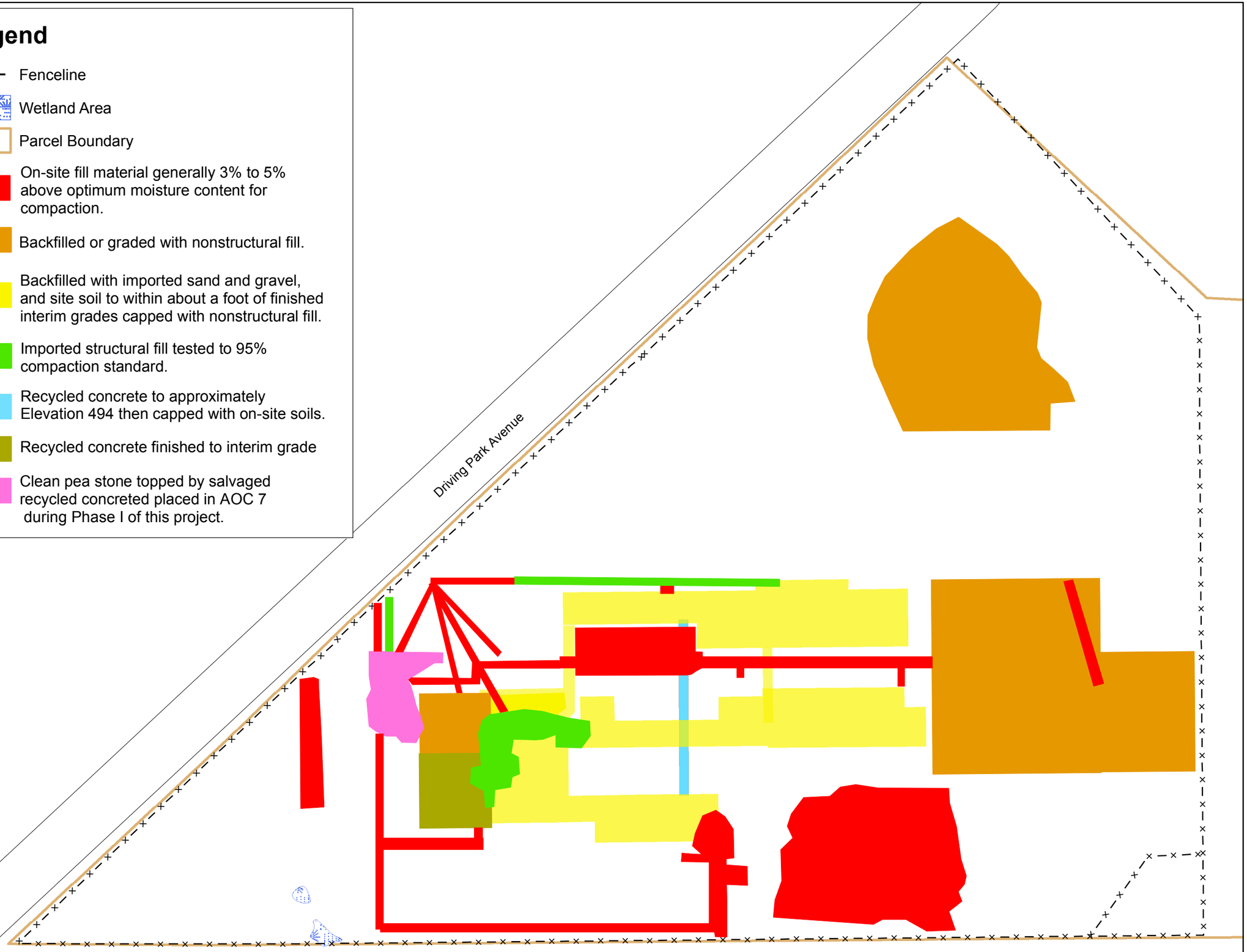
FIGURE 18

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 18 - ProposedLayout.mxd

Legend

- Fenceline
- Wetland Area
- Parcel Boundary
- On-site fill material generally 3% to 5% above optimum moisture content for compaction.
- Backfilled or graded with nonstructural fill.
- Backfilled with imported sand and gravel, and site soil to within about a foot of finished interim grades capped with nonstructural fill.
- Imported structural fill tested to 95% compaction standard.
- Recycled concrete to approximately Elevation 494 then capped with on-site soils.
- Recycled concrete finished to interim grade
- Clean pea stone topped by salvaged recycled concreted placed in AOC 7 during Phase I of this project.



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SITE WIDE:
FILL MATERIAL

0 55 110
Feet

1 inch = 75 feet

209288

FIGURE 19

Path: J:\Rochester, City\209288 PHOTECH\Drawings\Final Engineering Report\MXD\Figure 19 - Fill Material.mxd

APPENDIX A – EXCAVATION WORK PLAN

A-1 NOTIFICATION

Although the soil remaining at the Site does not exceed the Commercial SCOs, exceedances of the Unrestricted SCOs are present within localized locations. Therefore the requirements of this Excavation Work Plan (EWP) only apply to the location where 'Excavation Management Required' as depicted on Figure A-1.

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the Department.

Currently, this notification will be made to:

Mr. Todd Caffoe, P.E.

Division of Environmental Remediation

NYSDEC, Region 8 Office

6247 East Avon Lima Road

Avon, New York 14414

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below grade, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix D of the Site SMP,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

A-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into areas designated "Excavation Management Required". Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC. Figure A-1 shows the location of the "Excavation Management Required" area which encompasses the Unrestricted SCO exceedences identified during previous work, and therefore must be screened during excavation.

Soils excavated from areas designated "Excavation Management Required" as depicted on Figure A-1 will be segregated if the reuse of the soil will require standards which are lower than the Commercial SCOs. Analytical testing should be used to identify material appropriate for these uses. Based on the successful site remediation to Commercial SCOs, the need for off-site disposal of soils is not anticipated.

A-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

A-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee invasive work in areas designated as "Excavation Management Required" as depicted on Figure A-1 and the excavation and load-out of impacted excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under the Site SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

A-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are as follows: enter and exit the Site from Driving Park Avenue, via Mount Read Boulevard and Interstate 490, refer Figure 14. All trucks loaded with site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; [(g) community input [where necessary]]

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

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

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

A-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid material excavated from areas designated as “Excavation Management Required” as depicted on Figure A-1 and removed from the Site will analyzed and transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class

of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

A-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table 3 of the Site SMP. The qualified environmental professional will ensure that procedures defined for materials reuse in the Site SMP are followed and that unacceptable material does not remain on-site. Materials segregated for on-site reuse will be secured in accordance with B-3. The estimated size of the pile will be determined and samples will be collected for contaminants of concern analysis in accordance with NYSDEC DER-10 May 2010 Table 5.4e(10). NYSDEC will be contacted to confirm the appropriate number of samples. The results will be compared to the NYSDEC Part 375-6.8(b) Restricted Commercial Use SCOs. Prior to reuse of any material, NYSDEC will be contacted for approval.

Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

The comprehensive building decommissioning, demolition and removal action (including the removal of all footers, foundations and sub-surface utilities) has been completed at the Site. As such, all known or project generated demolition material and/or former infrastructure has been removed from the Site. If residual demolition material or site infrastructure is identified; it will be characterized for constituents of concern,

potentially including asbestos testing. Results will be reported to the NYSDEC. Depending on the nature of the material identified, the material may potentially be recommended for re-use on-site. Any on-site re-use will not be performed without prior NYSDEC approval. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-site.

A-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a Local, State and Federal Regulations.

A-9 COVER SYSTEM RESTORATION

No cover system was utilized at the Site.

A-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in the Site SMP prior to receipt at the Site.

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

All imported soils will meet DER 10 requirements and the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 3 of the Site SMP. Soils that meet

'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

A-11 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the Site SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

A-12 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction,

excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Initially, previous testing results will be reviewed to evaluate the soil quality in the area where the unidentified contamination was identified, Figure A-2 is a map of previous investigation points. Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the Site SMP.

A-13 COMMUNITY AIR MONITORING PLAN

A copy of the Community Air Monitoring Plan (CAMP) and component of the EWP, obtained from Appendix 1A of NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, is included as Appendix D of the Site SMP. The air monitoring station locations will be based on prevailing wind conditions for that day and will be checked throughout the day and adjusted according to the prevailing wind direction. The provisions of the CAMP will be followed during all ground-intrusive activities performed in areas designated as "Excavation Management Required" as depicted on Figure A-1. Exceedances of action levels listed in the CAMP will be reported to the NYSDEC and NYSDOH Project Managers.

A-14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. If nuisance odors are identified at the Site boundary, or if odor complaints are

received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

A-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved though the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.

- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

A-16 OTHER NUISANCES

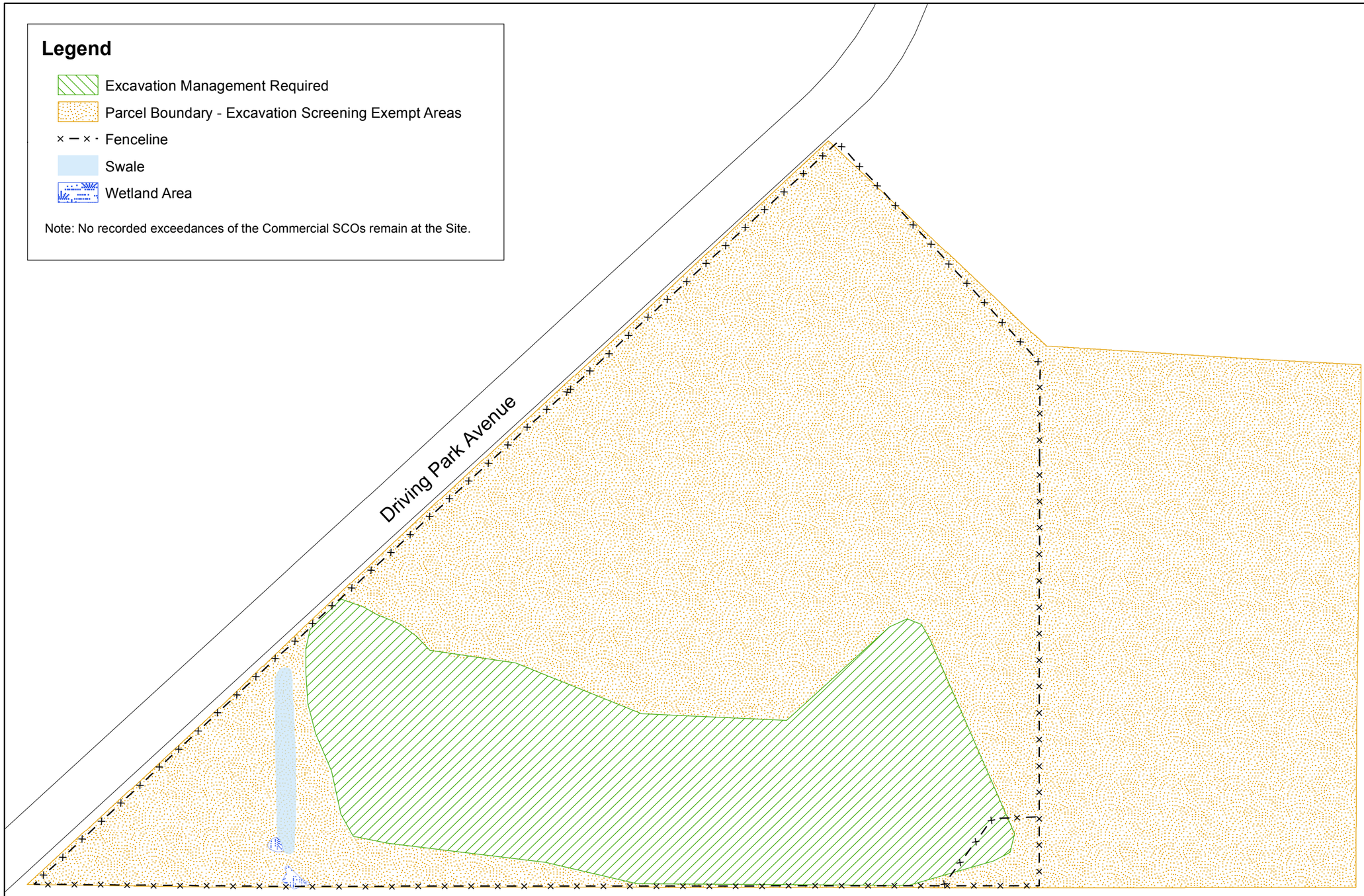
A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

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

Legend

- Excavation Management Required
- Parcel Boundary - Excavation Screening Exempt Areas
- Fenceline
- Swale
- Wetland Area

Note: No recorded exceedances of the Commercial SCOs remain at the Site.



LABELLA Associates, D.P.C.
300 STATE STREET
ROCHESTER, NY 14614
P: (585) 454-6110
F: (585) 454-3066
www.labellapc.com

CITY OF ROCHESTER

FORMER PHOTECH SITE
1000 DRIVING PARK BLVD
ROCHESTER, NEW YORK

EXCAVATION WORK PLAN

UNRESTRICTED EXCEEDANCES AND EXCAVATION SCREENING AREA

W S N E

0 75 150
Feet

1 inch = 96 feet

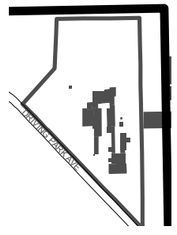


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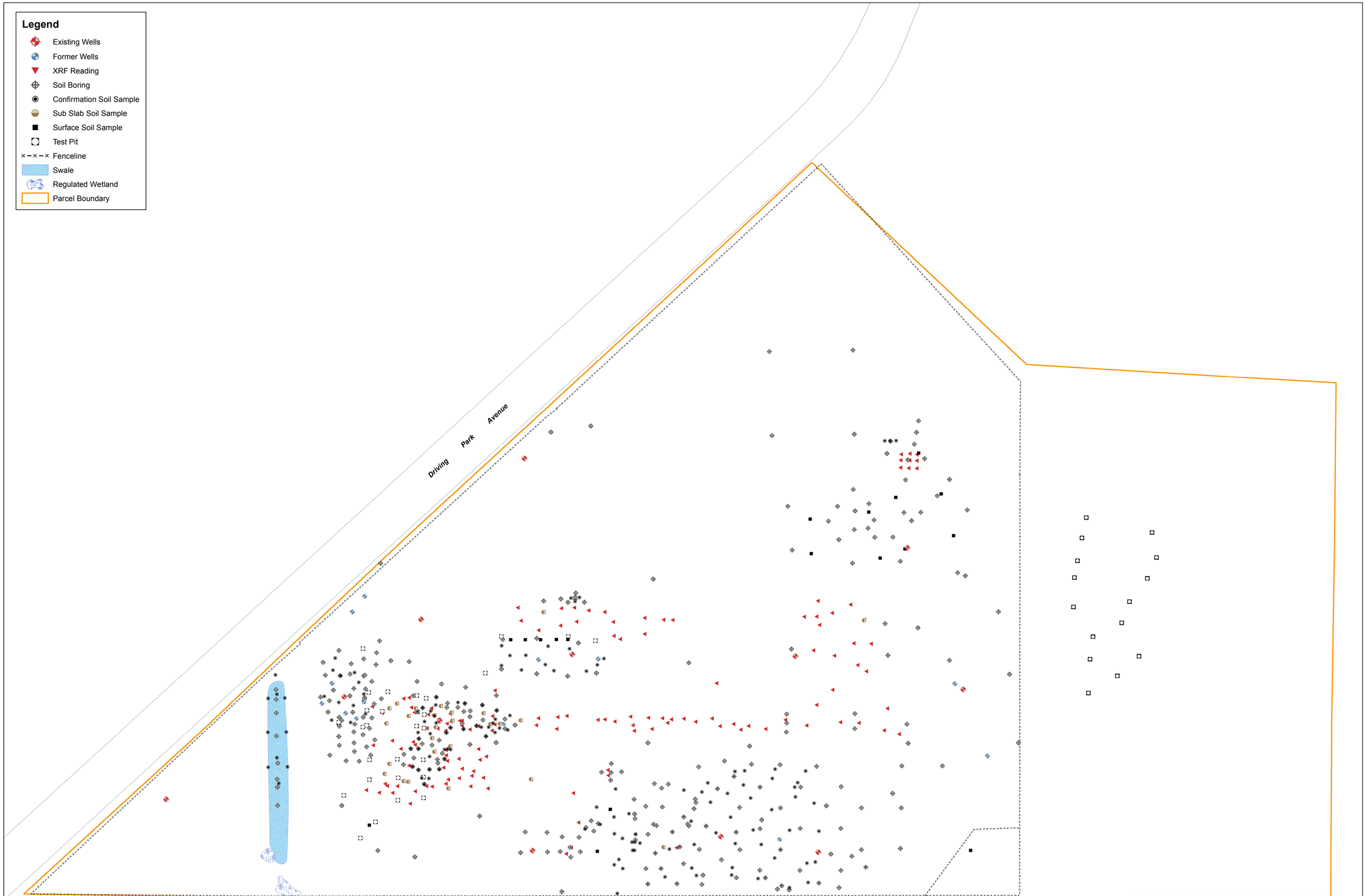
FIGURE A-1

Y:\Rochester, City\209288 PHOTECH\Drawings\RAWP July 2011\Figure5D_ AOC 2 11x17.mxd



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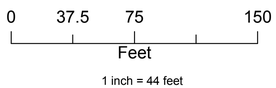
CITY OF ROCHESTER

FORMER PHOTECH SITE
1000 DRIVING PARK AVENUE
ROCHESTER, NEW YORK

EXCAVATION WORK PLAN

INVESTIGATION LOCATIONS



1 inch = 44 feet

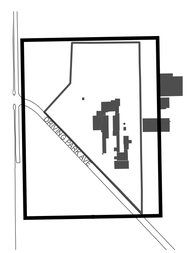


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FIGURE A-2

Y:\Rochester, City\209288 PHOTECH\Drawings\RAWP July 2011\Figure2A_AOC Map 11X17.mxd

ALTA Owner's Policy (6-17-06)

POLICY OF TITLE INSURANCE ISSUED BY

stewart
title insurance company

Any notice of claim and any other notice or statement in writing required to be given the Company under this Policy must be given to the Company at the address shown in Section 18 of the Conditions.

COVERED RISKS

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS, STEWART TITLE INSURANCE COMPANY, a New York corporation, (the "Company") insures, as of Date of Policy and, to the extent stated in Covered Risks 9 and 10, after Date of Policy, against loss or damage, not exceeding the Amount of Insurance, sustained or incurred by the insured by reason of:

1. Title being vested other than as stated in Schedule A.
2. Any defect in or lien or encumbrance on the Title. This Covered Risk includes but is not limited to insurance against loss from
   (a) A defect in the Title caused by
      (i) forgery, fraud, undue influence, duress, incompetency, incapacity, or impersonation;
      (ii) failure of any person or Entity to have authorized a transfer or conveyance;
      (iii) a document affecting Title not properly created, executed, witnessed, sealed, acknowledged, notarized, or delivered;
      (iv) failure to perform those acts necessary to create a document by electronic means authorized by law
      (v) a document executed under a falsified, expired, or otherwise invalid power of attorney
      (vi) a document not properly filed, recorded, or indexed in the Public Records including failure to perform those acts by electronic means authorized by law; or
      (vii) a defective judicial or administrative proceeding.
   (b) The lien of real estate taxes or assessments imposed on the Title by a governmental authority due or payable, but unpaid.
   (c) Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. The term "encroachment" includes encroachments of existing improvements located on the Land onto adjoining land, and encroachments onto the Land of existing improvements located on adjoining land.
3. Unmarketable Title.
4. No right of access to and from the Land.
5. The violation or enforcement of any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (a) the occupancy, use, or enjoyment of the Land;
   (b) the character, dimensions, or location of any improvement erected on the Land;
   (c) the subdivision of land; or
   (d) environmental protection
   if a notice, describing any part of the Land, is recorded in the Public Records setting forth the violation or intention to enforce, but only to the extent of the violation or enforcement referred to in that notice.
6. An enforcement action based on the exercise of a governmental police power not covered by Covered Risk 5 if a notice of the enforcement action, describing any part of the Land, is recorded in the Public Records, but only to the extent of the enforcement referred to in that notice.
7. The exercise of the rights of eminent domain if a notice of the exercise, describing any part of the Land, is recorded in the Public Records.
8. Any taking by a governmental body that has occurred and is binding on the rights of a purchaser for value without Knowledge.

Countersigned by:

Authorized Signature

STEWART TITLE INSURANCE COMPANY
Company

Rochester, NY
City, State

STEWART TITLE INSURANCE COMPANY INCORPORATED 1967 NEW YORK

President

Secretary

Part 1 of Policy Serial No. **O-8911-000647515**

If you want information about coverage or need assistance to resolve complaints, please call our toll free number: 1-800-433-0014. If you make a claim under your policy, you must furnish written notice in accordance with Section 3 of the Conditions. Visit our Word-Wide Web site at http://www.StewartNewYork.com

SCHEDULE A

Name and Address of Title Insurance Company: **Stewart Title Insurance Company**
300 East 42nd Street,
10'th Floor
New York, New York 10017

Policy No.: O-8911-000647515
Address Reference: 1000 Driving Park Avenue, City of Rochester, New York
Amount of Insurance: $35,000.00
Date of Policy: December 23, 2013

1. Name of Insured:

   The People of the State of New York Acting Through Commissioner of the Department of Environmental Conservation

2. The estate or interest in the Land that is insured by this policy is:

   Easement

3. Title is vested in:

   Easement Agreement made by City of Rochester to The People of the State of New York Acting Through Commissioner of the Department of Environmental Conservation dated November 26, 2013 and recorded December 23, 2013 in Liber 11342 of Deeds at Page 650.

4. The Land referred to in this policy is described as follows:

   All that certain plot, piece and parcel of land lying and being in the City of Rochester, County of Monroe, State of New York, being bounded and described as follows:

   Beginning at a point in the north ROW line of Driving Park Avenue on the east line of premises conveyed to Bell & Howell Company by Trustees Deed dated March 29, 1949 and recorded the same day in Monroe County Clerk's Office in Liber 2539 of Deeds, page 51 which point is 1305.77 feet southeasterly from the intersection of the north line of Driving Park Avenue and the east line of Mt. Read Boulevard; thence

   (1) north along the east line of said Bell & Howell Company's land, a distance of 1270.67 feet to a point; thence

   (2) west at an included angle of 89° 58' 42" with the said east line of the lands conveyed to Bell

& Howell Company a distance of 500 feet to a point; thence

(3) south on a line parallel with the said east line of the Bell & Howell property a distance of 300 feet to a point; thence

(4) southwesterly at an included angle with course (3) of 227° 31' 05" on a line which intersects the northerly line of Driving Park Avenue at a right angle, for a distance of approximately 286.68 feet to the north ROW line of Driving Park Avenue; thence

(5) southeasterly along the north ROW line of Driving Park Avenue, a distance of 1053.40 feet to the point and place of beginning.

SCHEDULE B

Policy No.: O-8911-000647515

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

1. Subject to any state of facts an inspection of the premises would show.

2. Rights of lessees or any parties in possession of the premises other than the insured or owner.

3. Instrument survey of premises in Schedule "A" made by LaBella Associates, P.C. dated January, 2013 discloses the following:

A) Centerline of six foot ditch along east line.

B) Said premises as vacant land.

4. Easements reserved in Quit Claim deed by The City of Rochester to Technifinish Laboratory, Inc. dated March 26, 1946 and recorded March 30, 1946 in Liber 2314 of Deeds, page 379.

5. Easement granted by Photech Imaging Systems, Inc. to Rochester Gas and Electric Corporation and Rochester Telephone Corporation, dated November 15, 1988 and recorded November 29, 1988 in Liber 7506 of Deeds, page 31.

6. Easement granted by Photech Imaging Systems, Inc. to Rochester Pure Waters District, dated March 22, 1989 and recorded March 28, 1989 in Liber 7595 of Deeds, page 123.

7. Terms, conditions, covenants, agreements and reservations contained in Environmental Easement made by the City of Rochester to The People of the State of New York acting through their Commissioner of the Department of Environmental Conservation dated November 26, 2013 and recorded December 23, 2013 in Liber 11342 of Deeds at page 650.

stewart
title insurance company

STANDARD NEW YORK ENDORSEMENT

(OWNER'S POLICY)

1. The following is added as a Covered Risk:

   "11. Any statutory lien for services, labor or materials furnished prior to the date hereof, and which has now gained or which may hereafter gain priority over the estate or interest of the insured as shown in Schedule A of this policy."

2. Exclusion Number 5 is deleted, and the following is substituted:

   5. Any lien on the Title for real estate taxes, assessments, water charges or sewer rents imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as Shown in Schedule A.

This endorsement is issued as part of the policy. Except as it expressly states, it does not (i) modify any of the terms and provisions of the policy, (ii) modify any prior endorsements, (iii) extend the Date of Policy, or (iv) increase the Amount of Insurance. To the extent a provision of the policy or a previous endorsement is inconsistent with an express provision of this endorsement, this endorsement controls. Otherwise, this endorsement is subject to all of the terms and provisions of the policy and of any prior endorsements.

Countersigned By:

Date: December 23, 2013

STEWART TITLE
INSURANCE COMPANY

STEWART TITLE INSURANCE COMPANY INCORPORATED 1987 NEW YORK

President

Secretary

Stewart Title Insurance Company
Rochester Office
47 West Main Street
Rochester, NY 14614

STEWART TITLE INSURANCE COMPANY

PRIVACY POLICY NOTICE

PURPOSE OF THIS NOTICE

Title V of the Gramm-Leach-Bliley Act (GLBA) generally prohibits any financial institution, directly or through its affiliates, from sharing nonpublic personal information about you with a nonaffiliated third party unless the institution provides you with a notice of its privacy policies and practices, such as the type of information that it collects about you and the categories of persons or entities to whom it may be disclosed. In compliance with the GLBA, we are providing you with this document, which notifies you of the privacy policies and practices of Stewart Title Insurance Company.

We may collect nonpublic personal information about you from the following sources:

- Information we receive from you, such as on applications or other forms.
- Information about your transactions we secure from our files, or from our affiliates or others.
- Information we receive from a consumer reporting agency.
- Information that we receive from others involved in your transaction, such as the real estate agent or lender.

Unless it is specifically stated otherwise in an amended Privacy Policy Notice, no additional nonpublic personal information will be collected about you.

We may disclose any of the above information that we collect about our customers or former customers to our affiliates or to nonaffiliated third parties as permitted by law.

We also may disclose this information about our customers or former customers to the following types of nonaffiliated companies that perform marketing services on our behalf or with whom we have joint marketing agreements:

- Financial service providers such as companies engaged in banking, consumer finance, securities and insurance;
- Non-financial companies such as envelope stuffers and other fulfillment service providers.

WE DO NOT DISCLOSE ANY NONPUBLIC PERSONAL INFORMATION ABOUT YOU WITH ANYONE FOR ANY PURPOSE THAT THIS IS NOT SPECIFICALLY PERMITTED BY LAW.

We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

2. CONTINUATION OF INSURANCE

The coverage of this policy shall continue in force as of Date of Policy in favor of an Insured, but only so long as the Insured retains an estate or interest in the Land, or holds an obligation secured by a purchase money Mortgage given by a purchaser from the Insured, or only so long as the Insured shall have liability by reason of warranties in any transfer or conveyance of the Title. This policy shall not continue in force in favor of any purchaser from the Insured of either (i) an estate or interest in the Land, or (ii) an obligation secured by a purchase money Mortgage given to the Insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT

The Insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 5(a) of these Conditions, (ii) in case Knowledge shall come to an Insured hereunder of any claim of title or interest that is adverse to the Title, as insured, and that might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if the Title, as insured, is rejected as Unmarketable Title. If the Company is prejudiced by the failure of the Insured Claimant to provide prompt notice, the Company's liability to the Insured Claimant under the policy shall be reduced to the extent of the prejudice.

4. PROOF OF LOSS

In the event the Company is unable to determine the amount of loss or damage, the Company may, at its option, require as a condition of payment that the Insured Claimant furnish a signed proof of loss. The proof of loss must describe the defect, lien, encumbrance, or other matter insured against by this policy that constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage.

5. DEFENSE AND PROSECUTION OF ACTIONS

(a) Upon written request by the Insured, and subject to the options contained in Section 7 of these Conditions, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an Insured in litigation in which any third party asserts a claim covered by this policy adverse to the Insured. This obligation is limited to only those stated causes of action alleging matters insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the Insured to object for reasonable cause) to represent the Insured as to those stated causes of action. It shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs, or expenses incurred by the Insured in the defense of those causes of action that allege matters not insured against by this policy.

(b) The Company shall have the right, in addition to the options contained in Section 7 of these Conditions, at its own cost, to institute and prosecute any action or proceeding or to do any other act that in its opinion may be necessary or desirable to establish the Title, as insured, or to prevent or reduce loss or damage to the Insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable to the Insured. The exercise of these rights shall not be an admission of liability or waiver of any provision of this policy. If the Company exercises its rights under this subsection, it must do so diligently.

(c) Whenever the Company brings an action or asserts a defense as required or permitted by this policy, the Company may pursue the litigation to a final determination by a court of competent jurisdiction, and it expressly reserves the right, in its sole discretion, to appeal any adverse judgment or order.

6. DUTY OF INSURED CLAIMANT TO COOPERATE

(a) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding and any appeals, the Insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, including the right to use, at its option, the name of the Insured for this purpose. Whenever requested by the Company, the Insured, at the Company's expense, shall give the Company all reasonable aid (i) in securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act that in the opinion of the Company may be necessary or desirable to establish the Title or any other matter as insured. If the Company is prejudiced by the failure of the Insured to furnish the required cooperation, the Company's obligations to the Insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

(b) The Company may reasonably require the Insured Claimant to submit to examination under oath by any authorized representative of the Company and to produce for examination, inspection, and copying, at such reasonable times and places as may be designated by the authorized representative of the Company, all records, in whatever medium maintained, including books, ledgers, checks, memoranda, correspondence, reports, e-mails, disks, tapes, and videos whether bearing a date before or after Date of Policy, that reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the Insured Claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect, and copy all of these records in the custody or control of a third party that reasonably pertain to the loss or damage. All information designated as confidential by the Insured Claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the Insured Claimant to submit for examination under oath, produce any reasonably requested information, or grant permission to secure reasonably necessary information from third parties as required in this subsection, unless prohibited by law or governmental regulation, shall terminate any liability of the Company under this policy as to that claim.

7. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance. To pay or tender payment of the Amount of Insurance under this policy together with any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment or tender of payment and that the Company is obligated to pay. Upon the exercise by the Company of this option, all liability and obligations of the Company to the Insured under this policy, other than to make the payment required in this subsection, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.

(b) To Pay or Otherwise Settle With Parties Other Than the Insured or With the Insured Claimant.

(i) To pay or otherwise settle with other parties for or in the name of an Insured Claimant any claim insured against under this policy. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay; or

(ii) To pay or otherwise settle with the Insured Claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in subsections (b)(i) or (ii), the Company's obligations to the Insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.

8. DETERMINATION AND EXTENT OF LIABILITY

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the Insured Claimant who has suffered loss or damage by reason of matters insured against by this policy.

(a) The extent of liability of the Company for loss or damage under this policy shall not exceed the lesser of
  (i) the Amount of Insurance; or
  (ii) the difference between the value of the Title as insured and the value of the Title subject to the risk insured against by this policy.

(b) If the Company pursues its rights under Section 5 of these Conditions and is unsuccessful in establishing the Title, as insured,
  (i) the Amount of Insurance shall be increased by 10%, and
  (ii) the Insured Claimant shall have the right to have the loss or damage determined either as of the date the claim was made by the Insured Claimant or as of the date it is settled and paid.

(c) In addition to the extent of liability under (a) and (b), the Company will also pay those costs, attorneys' fees, and expenses incurred in accordance with Sections 5 and 7 of these Conditions.

9. LIMITATION OF LIABILITY

(a) If the Company establishes the Title, or removes the alleged defect, lien, or encumbrance, or cures the lack of a right of access to or from the Land, or cures the claim of Unmarketable Title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused to the Insured.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals, adverse to the Title, as insured.

(c) The Company shall not be liable for loss or damage to the Insured for liability voluntarily assumed by the Insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY

All payments under this policy, except payments made for costs, attorneys' fees, and expenses, shall reduce the Amount of Insurance by the amount of the payment.

11. LIABILITY NONCUMULATIVE

The Amount of Insurance shall be reduced by any amount the Company pays under any policy insuring a Mortgage to which exception is taken in Schedule B or to which the Insured has agreed, assumed, or taken subject, or which is executed by an Insured after Date of Policy and which is a charge or lien on the Title, and the amount so paid shall be deemed a payment to the Insured under this policy.

12. PAYMENT OF LOSS

When liability and the extent of loss or damage have been definitely fixed in accordance with these Conditions, the payment shall be made within 30 days.

v

13. RIGHTS OF RECOVERY UPON PAYMENT OR SETTLEMENT

(a) Whenever the Company shall have settled and paid a claim under this policy, it shall be subrogated and entitled to the rights of the Insured Claimant in the Title and all other rights and remedies in respect to the claim that the Insured Claimant has against any person or property, to the extent of the amount of any loss, costs, attorneys' fees, and expenses paid by the Company. If requested by the Company, the Insured Claimant shall execute documents to evidence the transfer to the Company of these rights and remedies. The Insured Claimant shall permit the Company to sue, compromise, or settle in the name of the Insured Claimant and to use the name of the Insured Claimant in any transaction or litigation involving these rights and remedies. If a payment on account of a claim does not fully cover the loss of the Insured Claimant, the Company shall defer the exercise of its right to recover until after the Insured Claimant shall have recovered its loss.

(b) The Company's right of subrogation includes the rights of the Insured to indemnities, guaranties, other policies of insurance, or bonds, notwithstanding any terms or conditions contained in those instruments that address subrogation rights.

14. ARBITRATION

Either the Company or the Insured may demand that the claim or controversy shall be submitted to arbitration pursuant to the Title Insurance Arbitration Rules of the American Land Title Association ("Rules"). Except as provided in the Rules, there shall be no joinder or consolidation with claims or controversies of other persons. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the Insured arising out of or relating to this policy, any service in connection with its issuance or the breach of a policy provision, or to any other controversy or claim arising out of the transaction giving rise to this policy. All arbitrable matters when the Amount of Insurance is $2,000,000 or less shall be arbitrated at the option of either the Company or the Insured. All arbitrable matters when the Amount of Insurance is in excess of $2,000,000 shall be arbitrated only when agreed to by both the Company and the Insured. Arbitration pursuant to this policy and under the Rules shall be binding upon the parties. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court of competent jurisdiction.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT

(a) This policy together with all endorsements, if any, attached to it by the Company is the entire policy and contract between the Insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage that arises out of the status of the Title or by any action asserting such claim shall be restricted to this policy.

(c) Any amendment of or endorsement to this policy must be in writing and authenticated by an authorized person, or expressly incorporated by Schedule A of this policy.

(d) Each endorsement to this policy issued at any time is made a part of this policy and is subject to all of its terms and provisions. Except as the endorsement expressly states, it does not (i) modify any of the terms and provisions of the policy, (ii) modify any prior endorsement, (iii) extend the Date of Policy, or (iv) increase the Amount of Insurance.

16. SEVERABILITY

In the event any provision of this policy, in whole or in part, is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision or such part held to be invalid, but all other provisions shall remain in full force and effect.

17. CHOICE OF LAW; FORUM

(a) Choice of Law: The Insured acknowledges the Company has underwritten the risks covered by this policy and determined the premium charged therefore in reliance upon the law affecting interests in real property and applicable to the interpretation, rights, remedies, or enforcement of policies of title insurance of the jurisdiction where the Land is located.
Therefore, the court or an arbitrator shall apply the law of the jurisdiction where the Land is located to determine the validity of claims against the Title that are adverse to the Insured and to interpret and enforce the terms of this policy. In neither case shall the court or arbitrator apply its conflicts of law principles to determine the applicable law.

(c) Choice of Forum: Any litigation or other proceeding brought by the Insured against the Company must be filed only in a state or federal court within the United States of America or its territories having appropriate jurisdiction.

18. NOTICES, WHERE SENT

Any notice of claim and any other notice or statement in writing required to be given to the Company under this policy must be given to the Company at Claims Department at 300 East 42nd St, 10th Floor, New York, NY 10017.

MONROE COUNTY CLERK'S OFFICE

ROCHESTER, NY

THIS IS NOT A BILL. THIS IS YOUR RECEIPT

Receipt # 1014316

Index DEEDS

Book 11344 Page 516

No. Pages : 16

Instrument MISCELLANEOUS RECORD

Date : 12/30/2013

Time : 11:34:56AM

Control # 201312300347

Return To:
BOX 80 (DLW)

ROCHESTER CITY OF
PEOPLE OF THE STATE OF NEW YORK

ROCHESTER GAS AND ELECTRIC CORPORATION
ROCHESTER PURE WATERS DISTRIC
FRONTIER TELEPHONE OF ROCHESTER INC

Ref 1 #

Employee : RoseM

COUNTY FEE NUMBER PAGES	$	75.00
RECORDING FEE	$	45.00

Total	$	120.00

State of New York

MONROE COUNTY CLERK'S OFFICE

WARNING - THIS SHEET CONSTITUTES THE CLERKS ENDORSEMENT, REQUIRED BY SECTION 317-a(5) & SECTION 319 OF THE REAL PROPERTY LAW OF THE STATE OF NEW YORK. DO NOT DETACH OR REMOVE.

CHERYL DINOLFO

MONROE COUNTY CLERK

PI182-201312300347-16

(5)

RECORDE

Box 80

AFFIDAVIT OF SERVICE BY MAIL

2013 DEC 30 AM 11

MONROE COUNTY CL

Jennifer L. Wright, being duly sworn, deposes and says, I am an attorney with the law firm of Harter Secrest & Emery LLP.

On December 23, 2013, an Environmental Easement between The City of Rochester and The People of the State of New York, acting through their Commissioner of the Department of Environmental Conservation, was filed in the Monroe County Clerk's Office in Liber 11342 of Deeds, at page 650.

On December 27, 2013, a copy of the filed Environmental Easement, attached hereto as Exhibit "A" and the Notice of the Environmental Easement, attached hereto as Exhibit "B," were mailed to the following by first class mail with the United States Post Office within the State of New York:

1. Rochester Gas and Electric Corporation
   89 East Avenue
   Rochester, New York 14649

2. Rochester Pure Waters District
   30 Church Street
   Rochester, New York 14614

3. Frontier Telephone of Rochester, Inc.
   Formerly Rochester Telephone Company
   180 South Clinton Avenue
   Rochester, New York 14646

By certified mail with return receipts requested, copies of which are attached hereto and made apart hereof as "Exhibit C" and by regular first class mail, by delivery of postage paid addressed envelopes with the United States Post Office within the State of New York.

Harter Secrest & Emery LLP

By: _____
Jennifer L. Wright

Sworn to before me on this
27th day of December 2013

_____
Notary Public

DEBRA L. WILLIAMSON
Notary Public, State of New York
Monroe County, No. 02WI5000383
Commission Expires August 17, 2014

2788564_2

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

THIS INDENTURE made this 26th day of November, 2013 between Owner(s) The City of Rochester, having an office at 30 Church Street, City of Rochester, County of Monroe, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

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

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

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

WHEREAS, Grantor, is the owner of real property located at the address of 1000 Driving Park Avenue in the City of Rochester, County of Monroe and State of New York, known and designated on the tax map of the County Clerk of Monroe as tax map parcel numbers: Section 090.63 Block 1 Lot 1, being the same as that property conveyed to Grantor by deed dated August 7, 1997 and recorded in the Monroe County Clerk's Office in Liber and Page 8903, 379. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 12.48 +/- acres, and is hereinafter more fully described in the Land Title Survey dated January, 2013 prepared by LaBella Associates, P.C., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is

extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of State Assistance Contract Number: SAC # C303768, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv) if current land use is selected, enter current use.

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Monroe County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining

contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved b the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C303768
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

[10/12]

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

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

City of Rochester:

By: _____

Print Name: MARK D GREGER

Title: MANAGER ENVIRONMENTAL QUALITY Date: 5-30-2013

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 30th day of May, in the year 2013, before me, the undersigned, personally appeared Mark Gregor, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Vicki Brown
Notary Public - State of New York

VICKI BRAUN
Notary Public in the State of New York
MONROE COUNTY
Commission Expires Aug. 18, 2014

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____

Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 26th day of November, in the year 2013, before me, the undersigned, personally appeared Robert Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT CERTAIN plot, piece and parcel of land lying and being in the City of Rochester, County of Monroe, State of New York, being bounded and described as follows:
BEGINNING at a point in the north ROW line of Driving Park Avenue on the east line of premises conveyed to Bell & Howell Company by Trustees Deed dated March 29, 1949 and recorded the same day in Monroe County Clerk's Office in Liber 2539 of Deeds, page 51 which point is 1305.77 feet southeasterly from the intersection of the north line of Driving Park Avenue and the east line of Mt. Read Boulevard; thence

(1) north along the east line of said Bell & Howell Company's land, a distance of 1270.67 feet to a point; thence

(2) west at an included angle of 89°58'42" with the said east line of the lands conveyed to Bell & Howell Company a distance of 500 feet to a point; thence

(3) south on a line parallel with the said east line of the Bell & Howell property a distance of 300 feet to a point; thence

(4) southwesterly at an included angle with course (3) of 227°31'05" on a line which intersects the northerly line of Driving Park Avenue at a right angle, for a distance of approximately 286.68 feet to the north ROW line of Driving Park Avenue; thence

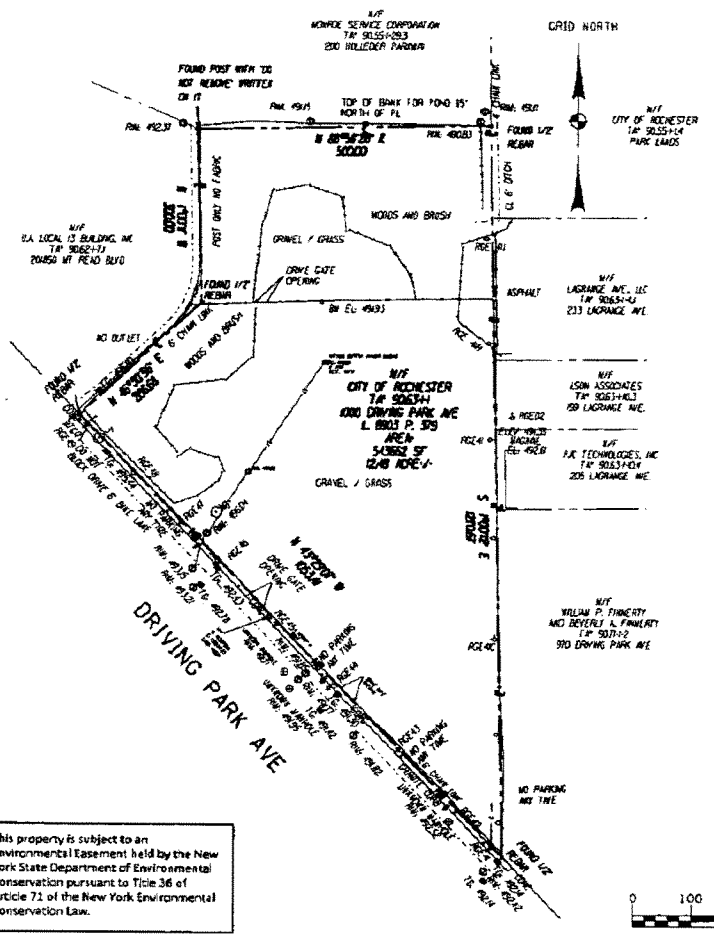
(5) southeasterly along the north ROW line of Driving Park Avenue, a distance of 1053.40 feet to the point and place of beginning.

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

STATE ASSISTANCE CONTRACT # 6303768
FORMER PHOTECH IMAGING SITE
DRIVING PARK BLVD
Rochester, New York

ENVIRONMENTAL EASEMENT AREA ACCESS

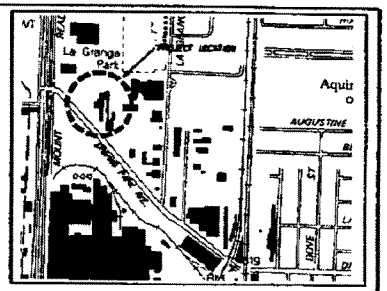
DEC, ITS AGENTS AND EMPLOYEES, AND OTHER STATE REPRESENTATIVES, MAY DIRECTLY ACCESS THE SITE SUBJECT TO THE ENVIRONMENTAL EASEMENT FROM DRIVING PARK AVE., A PUBLIC STREET IN THE CITY OF ROCHESTER, NEW YORK.



LEGEND

UTILITY POLE
DRAINAGE STRUCTURE
WATER VALVE
FOUND IRON PIPE
SPOT ELEVATION
POST
FOUND IRON PIN
SIGN
LIGHT POLE
DECIDUOUS TREE
CONTROL POINT

GRAVEL DRIVEWAY
WOODS/BRUSH LINE
CENTERLINE
SIDEWALK
FENCE
BREAKLINE
CONCRETE
BUILDING
ROW
PROP LINE



LOCATION MAP

REFERENCES

1) CITY OF ROCHESTER TAX MAP NO'S 90.55 90.62 90.63 AND 90.71
2) MAP TITLED "RESUBDIVISION OF HOLLEDER PARK" FILED AT THE MCCO UNDER MAP LIBER 291 PAGE 63
3) MAP TITLED "RESUBDIVISION OF LOT R-475 OF MUNICIPAL RESUBDIVISION 80-AP FILED AT THE MCCO UNDER MAP LIBER 222 PAGE 56
4) ABSTRACT OF TITLE ????????

SURVEY NOTES

1) THE HORIZONTAL DATUM IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM CENTRAL ZONE AND AS FIXED, OBTAINED BY KEY GPS CONNECTED TO THE NYSNET NETWORK.
2) THE VERTICAL DATUM IS REFERENCED TO NAVD 88.
3) UTILITIES SHOWN ARE PLOTTED FROM DATA ????.

SUBJECT PROPERTY DESCRIPTION OF RECORD
LIBER 8804 PAGE 346

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the City of Rochester, County of Monroe, State of New York, more particularly described as follows:

Beginning at a point in the north ROW line of Driving Park Avenue on the east line of premises conveyed to Bell & Howell Company by Trustees Deed dated March 29, 1949 and recorded the same, and

In Monroe County Clerk's Office in Liber 2539 of deeds, page 51 which point is 1305.71 feet southeasterly from the intersection of the north line of Driving Park Avenue and the east line of Mt. Read Boulevard; thence

1) north along the east line of said Bell & Howell Company's land, a distance of 1210.57 feet to a point; thence
2) west at an included angle of 83°56'49" with the said east line of the lands conveyed to Bell & Howell Company a distance of 506.58 feet to a point; thence
3) south on a line parallel with the said east line of the Bell & Howell property a distance of 300 feet to a point; thence
4) Southeasterly at an included angle with course #3 of 227°31'05" on a line which intersects the northerly line of Driving Park Avenue at a right angle, for a distance of approximately 286.68 feet to the north ROW line of Driving Park Avenue; thence
5) southeasterly along the north ROW line of Driving Park Avenue, a distance of 1053.40 feet to the point and place of beginning.

ENVIRONMENTAL EASEMENT DESCRIPTION

Beginning at a point in the Northeasterly Right of Way for Driving Park Avenue at its intersection with the division line between lands now or formerly of The City of Rochester on the East and lands now or formerly of U.A. local 13 Building, Inc on the West; thence

1) N 46°30'56" E along said division line a distance of 286.58 feet to a point; thence
2) N 1°00'17" W continuing along said division line a distance of 300.00 feet to a point in the division line between lands now or formerly of the City of Rochester on the South and lands now or formerly of Monroe Service Corporation on the North; thence
3) N 88°58'28" E along said division line a distance of 506.00 feet to a point; thence
4) S 1°00'12" E a distance of 1270.67 feet to a point in the Northeasterly Right of Way for Driving Park Avenue; thence
5) N 43°29'07" W along said Right of way a distance of 1053.41 feet to the POINT OF BEGINNING.

The above described parcel contains 12.48 acres 1543662 sq. Ft. I more or less.

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law.

CERTIFY TO: THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND ?

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "SURVEY REQUIREMENTS" AS DEFINED PER NYSDEC AS PART OF AN ENVIRONMENTAL EASEMENT PACKAGE.

WE, LABELLA ASSOCIATES PC, CERTIFY THAT THIS MAP WAS PREPARED USING REFERENCE MATERIAL AS LISTED HEREON AND FROM FIELD NOTES OF AN INSTRUMENT SURVEY COMPLETED JANUARY 2013. THESE PARCELS ARE SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES OF RECORD.

MICHAEL W. HALEY PLS
NYS PLS NO. 049888

2/21/2013 11:22:24 AM Boundary Basemap 20.dgn

LABELLA Associates, P.C.
300 STATE STREET
ROCHESTER, NY 14614
P: (585) 454-6110
F: (585) 454-3066

1000 DRIVING PARK AVE
ROCHESTER, NY

CITY OF ROCHESTER
ROCHESTER, NY

INSTRUMENT SURVEY
ENVIRONMENTAL EASEMENT

209288

E-1

Exhibit B

NOTICE OF ENVIRONMENTAL EASEMENT

The New York State Department of Environmental Conservation (the "Grantee"), has been granted an Environmental Easement pursuant to Article 71, Section 36 affecting real property located at the following address:

1000 Driving Park Avenue, Rochester, New York

Property Owner/Grantor: City of Rochester

The Tax Map Identification No.: 090.63-1-1

NYS Department of Environmental Conservation Site No.: C303768

The Environmental Easement for the above referenced property has been filed in the Monroe County Clerk's Office on December 23, 2013 in Liber 11342 of Deeds, Page 650.

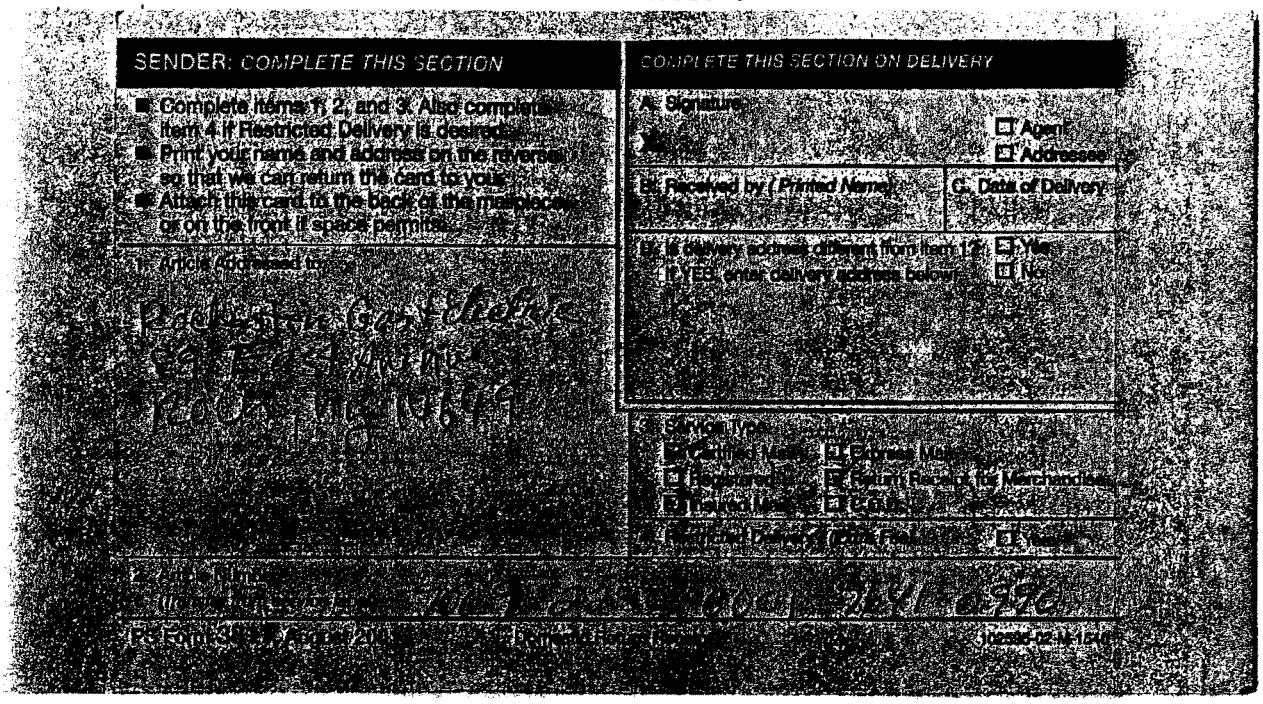
The Environmental Easement contains institutional and/or engineering controls that run with the land. The Environmental Easement may restrict the use of the above referenced property to commercial or industrial uses.

NOTICE IS HEREBY GIVEN that any activity on the land which might or will prevent or interfere with the ongoing or completed remedial program, including the controls as set forth in the Environmental Easement and the Site Management Plan, must be done in accordance with the Site Management Plan which is incorporated by reference into the Environmental Easement. A copy of the Site Management Plan can be obtained by contacting the Department at derweb@gw.dec.state.ny.us. Be further advised of the notice provisions of NYCRR 375-1.11(d) relative to contemplated significant changes in use.

Failure to Comply with the terms and conditions of the Environmental Easement may subject violators to penalties of up to $37,500 per day for violation of 6 NYCRR 375-1.11(b).

An electronic version of this environmental easement has been accepted by the New York State Department of Environmental Conservation and is available to the public at: http://www.dec.ny.gov/chemical/36045.html.

Exhibit C


SENDER: COMPLETE THIS SECTION
COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
Article Addressed to:
Rochester Gas & Electric
89 East Avenue
Rochester, NY 14649
A. Signature
Agent
Addressee
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No
3. Service Type
Certified Mail
Express Mail
Registered
Return Receipt for Merchandise
Insured Mail
C.O.D.
Restricted Delivery? (Extra Fee)
Yes
2. Article Number
PS Form 3811, August 2006
Domestic Return Receipt
102595-02-M-1540

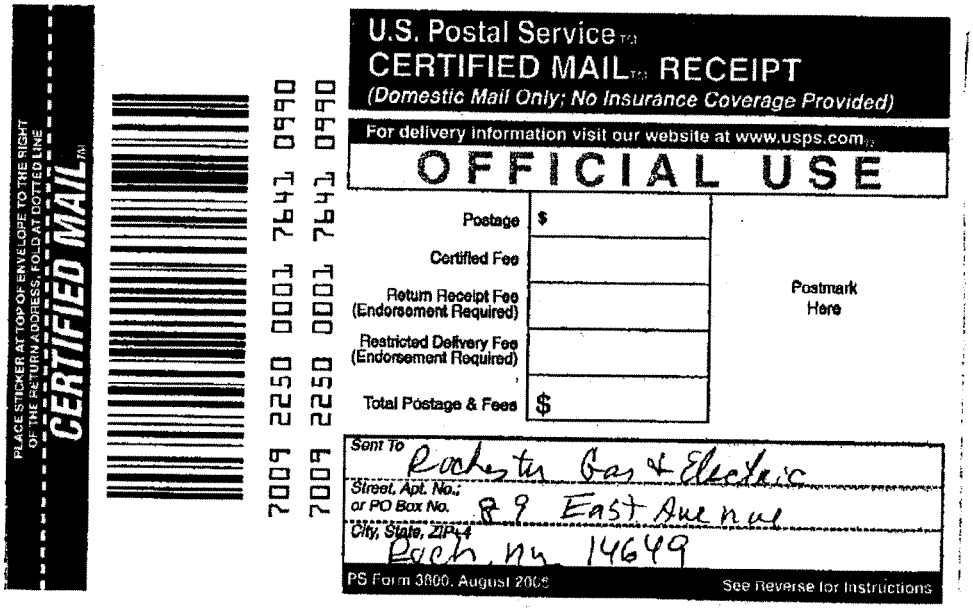

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE
CERTIFIED MAIL
7009 2250 0001 7641 0990
7009 2250 0001 7641 0990
U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
OFFICIAL USE
Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
Postmark Here
Sent To
Rochester Gas & Electric
Street, Apt. No.; or PO Box No.
89 East Avenue
City, State, ZIP+4
Roch. NY 14649
PS Form 3800, August 2006
See Reverse for Instructions

Exhibit C Continued

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Rochester Telephone
180 S. Clinton Ave
14th Floor
Rochester, NY 14646

COMPLETE THIS SECTION ON DELIVERY

A. Signature: X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7009 2250 0001 7641 0976

PS Form 3811, August 2006 Domestic Return Receipt 102595-02-M-1540

7009 2250 0001 7641 0976

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL™

7009 2250 0001 7641 0976

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: Rochester Telephone & Rochester
Street, Apt. No.; or PO Box No.: 180 S. Clinton Ave, 14th Floor
City, State, ZIP+4: Rochester, NY 14646

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Rochester Pure Waters
30 Church Street
Rochester, NY 14614

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7009 2250 0001 7641 0983

PS Form 3811, August 2006 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

CERTIFIED MAIL™

7009 2250 0001 7641 0983

7009 2250 0001 7641 0983

7009 2250 0001 7641 0983

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: Rochester Pure Waters
Street, Apt. No.; or PO Box No.: 30 Church Street
City, State, ZIP+4: Rochester, NY 14614

PS Form 3800, August 2006 See Reverse for Instructions

DARAMEND-M® is a specially formulated version of Adventus' controlled-release, integrated carbon and zero valent iron (ZVI) technology for in situ chemical reduction. Similar to EHC-M® (http://www.adventusgroup.com/products/ehc_m.shtml), new DARAMEND-M encourages the precipitation and adsorption of arsenic and other dissolved metals (such as chromium, lead and mercury) to limit their mobility.

This new product from Adventus is capable of reducing the amount of metals that can leach from metal-impacted soil, in particular the amount of leachable metal in samples analyzed using the TCLP; Toxicity Characteristic Leaching Procedure (http://www.ehso.com/cssepa/TCLP.htm). Many regulatory jurisdictions have TCLP limits for a variety of metals whereby if a metal exceeds a certain TCLP value, it must be disposed of at a facility that is designed to handle that type of soil. This will often be much more expensive than disposal of soils that do not exceed the TCLP values. Pre-treatment of soil using DARAMEND-M may reduce the leachable metal concentrations, thus allowing for much more cost effective disposal. There may be other circumstances whereby soils can be treated and left in-place should they not exceed the TCLP values, in which case the economic benefit of applying the treatment will be even greater.

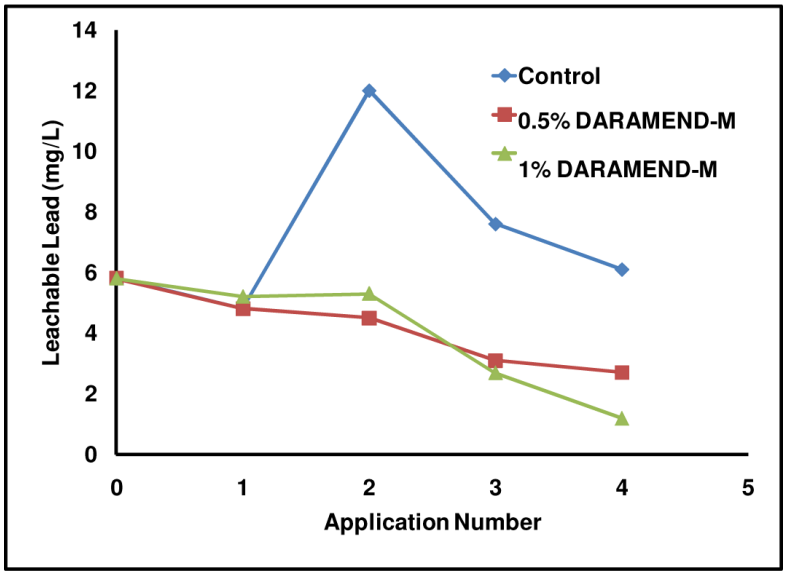


Figure 1. Influence of DARAMEND-M Application on Leachable Lead from Soil.

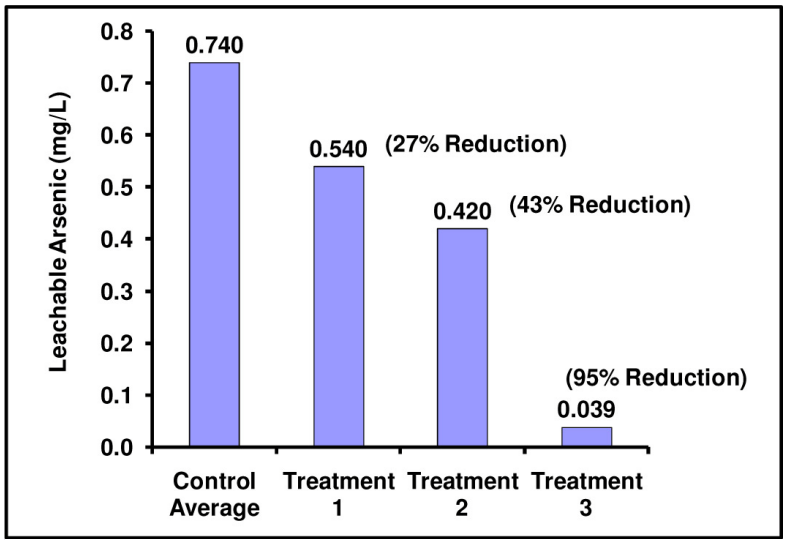


Figure 2. Influence of DARAMEND-M Treatment Methods on Leachable Arsenic from soil.

The technology has been demonstrated to be effective. Figure 1 above illustrates how the amount of lead that is leachable decreases with each additional application of DARAMEND-M. In this case application of the technology was able to reduce the amount of leachable lead to below the TCLP standard. Other results of laboratory treatability testing performed to develop the DARAMEND-M product, are shown in Figure 2. In these tests, the most effective treatment method reduced the amount of leachable arsenic by 95%, using an application rate of 3% weight of DARAMEND-M by dry weight of soil.

LABELLA Associates, P.C.

Engineering
Architecture
Environmental
Planning

Site-Specific Community Air Monitoring Plan

Location:

Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York

Prepared For:

City of Rochester
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York 14614

LaBella Project No. 209288

April 2012

Site-Specific Community Air Monitoring Plan

Location:

Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York

Prepared For:

City of Rochester
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York 14614

LaBella Project No. 209288

April 2012

LaBella Associates, P.C.
300 State Street
Rochester, New York 14614

Table of Contents

Page

1.0 INTRODUCTION

This Site Specific Community Air Monitoring Plan (CAMP) has been prepared by LaBella Associates, P.C. (LaBella) on behalf of the City of Rochester. This CAMP addresses potential Volatile Organic Compound (VOC) vapor and particulate emissions that may occur during implementation of the Remedial Measures at the former Photech Imaging Site located at 1000 Driving Park Avenue, Rochester, New York which encompasses approximately 12.5 acres located in a commercial/industrial zoned area in the northwest quadrant of the City of Rochester, Monroe County, New York herein after referred to as the "Site."

2.0 PURPOSE

Various levels of VOCs, semi-VOCs, and metals (collectively refered to as "constituents of concern" (COCs)) have been detected in the soil and groundwater at the Site or are suspected to be contained in the soil and/or groundwater at the Site. The presence of these COCs through disturbance of soil and groundwater at the Site can potentially result in nuisance odors or fugitive emissions to the neighborhood in the immediate vicinity of the Site as well as to the various occupants of the Site. However, it should be noted that this CAMP is in-place as a precautionary measure.

This CAMP is specific to activities being conducted as part of the Post Remediation Groundwater Sampling Work Plan and all ground intrusive activities at the Site. The CAMP describes the air monitoring activities to be completed in order to provide a measure of protection for any downwind receptors including Site occupants and occupants of neighboring properties. This CAMP is not intended to provide action levels for respiratory protection of workers involved with the building demolition.

This CAMP is based on the air monitoring specified in the New York State Department of Health (NYSDOH) Generic CAMP (included as Appendix 1A of the DER-10 NYSDEC Technical Guidance for Site Investigation and Remediation. However, this CAMP also includes more stringent (i.e., lower level) criteria for VOC monitoring as an added level of protection for Site occupants.

3.0 METHODOLOGY

This CAMP has been designed for all ground intrusive activities at the Site. The CAMP is arranged in the following sections:

- Section 3.1: Site Background Monitoring – This section identifies the background monitoring (VOC and fugitive dust) to be completed at the beginning of each day and periodically throughout the day when ground intrusive activities are being conducted. The background monitoring is used for comparing readings from the other monitoring locations.

- Section 3.2: Downwind Perimeter Monitoring – This section identifies the downwind perimeter work area monitoring (VOC and fugitive dust) to be completed continuously during the ground intrusive activities. Action levels are identified in this section.

- Section 3.3: Nearest Potential Receptor Monitoring – This section identifies additional VOC monitoring that will be completed during ground intrusive activities to provide an added measure of protection at this Site that would not normally be required by NYSDEC or NYSDOH (i.e., this is above and beyond the NYSDOH Generic CAMP). Action levels are identified in this section.

It should be noted that based on the type of work, the various monitoring locations will be moved throughout the day to comply with the appropriate testing location.

In addition to the above, this CAMP also contains a Vapor Emission to Sensitive Receptors Response Plan (Section 4.0). This includes actions to be taken in the event that sustained exceedances of the specified action levels occur.

3.1 Site Background Monitoring

At the beginning of each day of field work during ground intrusive activities, a wind sock or flag will be used to monitor wind direction in the work areas. Based upon daily wind conditions, a background monitoring location will be established. [*Note: In the event that the wind direction changes, the background monitoring location will be moved to an appropriate upwind location*.] The background monitoring location will be at least 25 feet from the work area in an upwind location. Subsequent to establishing the initial background measurements (VOC and particulate, see below), background measurements will be collected every 60 minutes throughout the duration of the building demolition activities for that day. The specific background monitoring is defined below:

Background VOC Monitoring:

A photo-ionization Detector (PID) capable of data logging will be used to screen the ambient air or VOCs in the background location (i.e., upwind). The PID will be calibrated daily (in accordance with the manufacturer's specifications) prior to collecting the background readings. The background readings will be collected by a 15-minute running average which will be used for comparison to the downwind perimeter monitoring (refer to Section 3.2) and the nearest potential receptor monitoring (refer to Section 3.3). After the initial reading, periodic background readings will be collected every 60-minutes.

Background Fugitive Dust Monitoring:

A DustTrak™ Model 8520 aerosol monitor or equivalent will be used for measuring particulates. The meter must be capable of measuring matter less than 10 micrometers in size (PM-10). The dust monitor will be calibrated daily (in accordance with the manufacturer's specifications) prior to collecting the background readings. The background dust monitoring will consist of collecting measurements integrated over a 15 minute period and will be used for comparison to the downwind perimeter monitoring (refer to Section 3.2). After the initial reading, periodic background readings will be collected every 60-minutes.

3.2 Downwind Perimeter Monitoring

Subsequent to collecting the initial Background Monitoring measurements, continuous monitoring of the downwind perimeter of the work area (i.e., exclusion zone) will be conducted throughout the duration of the ground intrusive activities that day. The downwind perimeter will vary depending on the work; however, in general this will be approximately 30 feet from the location of the work being completed. For example, in the event a groundwater monitoring well is being completed, the downwind perimeter monitoring would be conducted approximately 30-ft. from the well location.

Downwind Perimeter VOC Monitoring:

A MiniRae Lite PID or equivalent will be used to continuously monitor for VOCs at the downwind perimeter location. The PID will be calibrated daily (in accordance with the manufacturer's specifications) at the beginning of each day. An audible alarm will be set on the PID to sound in the event that total organic vapors exceed 5 parts per million (ppm) above the background readings. For example, if the background reading is 2 ppm, then the alarm will be set for 7 ppm.

Actions for Elevated VOC Readings

1. In the event that the action level of 5 ppm above background is exceeded, then work activities will 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.

2. If total organic vapor levels at the downwind perimeter of the work area 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 (refer to Section 3.0 for engineering controls), and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200-feet downwind of the work area 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 (background based on the 15-minute average).

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown and the Vapor Emission to Sensitive Receptors Response Plan initiated, refer to Section 3.0.

All of the 15-minute readings will be recorded and will be available to NYSDEC and NYSDOH for viewing upon request. Instantaneous readings, if any, that are used for decision purposes will also be recorded.

Downwind Perimeter Fugitive Dust Monitoring:

A DustTrak™ Model 8520 aerosol monitor or equivalent will be used for measuring particulates. The dust meter must be capable of measuring matter less than 10 micrometers in size (PM-10) and be equipped with an audible alarm. The dust meter will be calibrated daily (in accordance with the manufacturer's specifications) prior to collecting readings. The dust monitoring will be conducted continuously and the measurements integrated over a 15 minute period. The results will be compared to the background monitoring (refer to Section 3.1). An audible alarm will be set on the dust meter to sound in the event that particulate levels exceed 100 micrograms per cubic meter ($\mu g/m^3$) greater than background for the 15-minute period. For example, if the background reading is 100 $\mu g/m^3$, then the alarm will be set for 200 $\mu g/m^3$.

Actions for Elevated Particulate Readings

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind) for the 15-minute period or if airborne dust is observed leaving the work area, then Fugitive Dust Control Techniques must be employed (see below). Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 µg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work must be stopped and the Fugitive Dust Control Techniques identified below will be reevaluated. In this event the NYSDEC Project Manager will be contacted immediately. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 µg /m^3 of the upwind level and in preventing visible dust migration.

All of the 15-minute readings will be recorded and will be available to NYSDEC and NYSDOH for viewing upon request.

Fugitive Dust Control Techniques

One or more of the following dust control measures will be implemented in the event that the above action levels are exceeded:

- Apply water on exposed soils.
- Wetting equipment and test pit faces.
- Reducing test pit sizes.
- Immediately placing any investigation derived waste in drums and/or covering with plastic sheeting.

3.3 Nearest Potential Receptor Monitoring

A MiniRae Lite PID or equivalent will be used to continuously monitor for VOCs between the nearest potential receptor and the work area. Specifically, the MiniRae Lite PID or equivalent will be located half the distance between the perimeter of the work area (exclusion zone) and the nearest potential receptor, hereinafter referred to as the "Nearest Potential Receptor Monitoring Location". It should be noted that this location is not dependent on wind direction. The MiniRae Lite PID or equivalent will be calibrated daily (in accordance with the manufacturer's specifications) prior to collecting readings. The MiniRae Lite PID or equivalent will be operated in continuous mode and evaluate 15-minute running averages to account for any drift. An audible alarm will be set on the MiniRae Lite PID or equivalent to sound in the event that total organic vapors exceed 1 ppm above the background readings. For example, if the background reading is 2 ppm, then the alarm will be set for 3 ppm.

Actions for Elevated VOC Readings

1. In the event that the action level of 1 ppm above background is exceeded, then work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 1 ppm over background at the Nearest Potential Receptor Monitoring Location work activities can resume with continued monitoring (assuming the downwind perimeter location is also below it's action level, refer to Section 3.2).

2. If total organic vapor levels at the Nearest Potential Receptor Monitoring Location persist at levels in excess of 1 ppm over background but less than 3 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions (refer to Section 4.0 for engineering controls), and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level at the Nearest Potential Receptor Monitoring Location is below 10 ppm over background (background based on the 15-minute average).

3. If the organic vapor level is above 3 ppm at the Nearest Potential Receptor Monitoring Location, activities must be shutdown and the Vapor Emission to Sensitive Receptors Response Plan initiated, refer to Section 4.0.

All of the 15-minute readings will be recorded and will be available to NYSDEC and NYSDOH for viewing upon request. Instantaneous readings, if any, that are used for decision purposes will also be recorded.

4.0 VAPOR EMISSION TO SENSITIVE RECEPTORS RESPONSE PLAN

Engineering controls to abate VOC emissions source will immediately be put into effect if the action levels for VOC monitoring identified in Sections 3.2 and 3.3 are exceeded. These engineering controls may include:

- Vapor suppression utilizing foam vapor suppressants, polyethylene sheeting, or water.

- Backfilling of excavations (test pits).
- Covering emission sources with stockpiled materials.

If the measures taken to abate the emission source are ineffective and the total organic vapor readings continue to be above the specified action levels for more than 15 minutes (5 ppm at the downwind perimeter monitoring location or 1 ppm at the Nearest Potential Receptor Monitoring Location), then the following actions shall be placed into effect.

- Occupants of the residential and commercial buildings will be advised to stay inside their respective structure and to close all windows.
- All personnel listed in the Emergency Contacts section of the HASP for this project will be contacted.
- The Site Safety Supervisor will immediately contact the local authorities (fire department) and advise them of the circumstances.
- Continuous air monitoring will be conducted at the Downwind Perimeter Location, the Nearest Potential Receptor Monitoring Location and within the work zone and 1 minute average measurements will be recorded every 15 minutes. Air monitoring may be halted or modified by the Site Safety Supervisor when two successive measurements are below the specified action levels.

If readings remain elevated above the specified action levels for a period of 60 minutes (5 ppm at the downwind perimeter monitoring location or 1 ppm at the Nearest Potential Receptor Monitoring Location) the Site Safety Officer will request that local authorities evacuate the occupants of the buildings.

Y:\ROCHESTER, CITY\209288 PHOTECH\WORK PLANS\WP7.GW.MONITORING\APP3.CAMP.DOC

Site Health and Safety Plan

Location:

Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York

Prepared For:

July 2011

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Page

SITE HEALTH AND SAFETY PLAN

Project Title:

Project Number:

Project Location (Site):

Environmental Director:

Project Manager:

Plan Review Date: _____

Plan Approval Date: _____

Plan Approved By: _____

Site Safety Supervisor:

Site Contact:

Safety Director:

Proposed Date(s) of Field Activities:

Site Conditions:

Site Environmental Information Provided By:

Air Monitoring Provided By:

Site Control Provided By:

EMERGENCY CONTACTS

	Name	Phone Number
Ambulance:	As Per Emergency Service	911
Hospital Emergency:		
Poison Control Center:		
Police (local, state):		
Fire Department:		
Site Contact:		
Agency Contact:		
Environmental Director:		
Project Manager:		
Site Safety Supervisor:		
Safety Director		

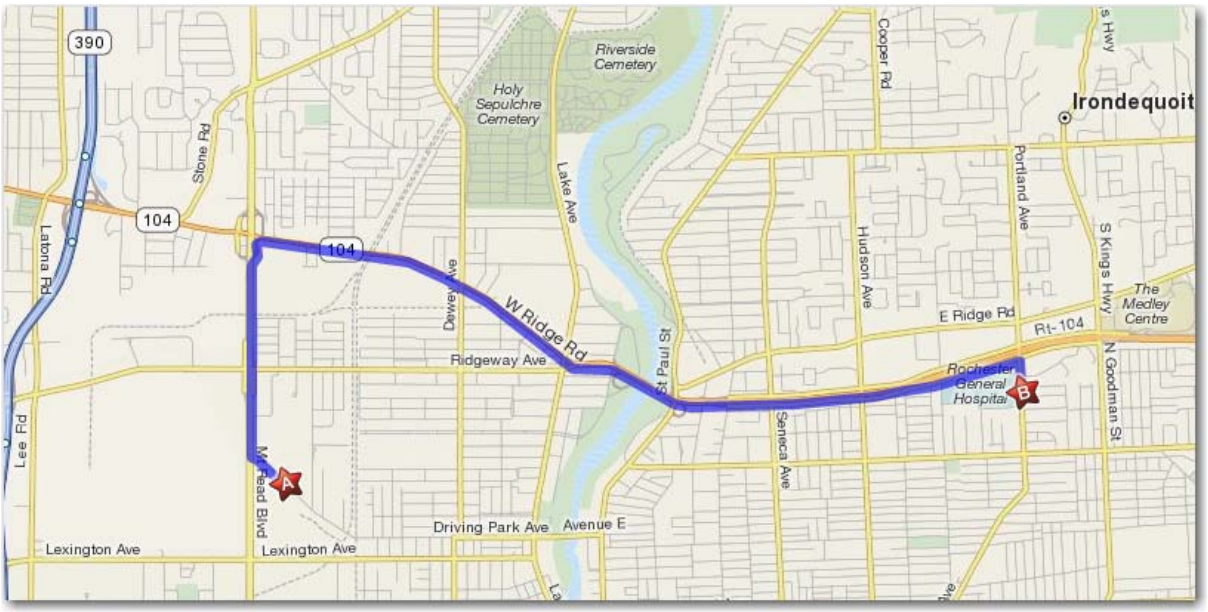
MAP AND DIRECTIONS TO THE MEDICAL FACILITY - ROCHESTER GENERAL HOSPITAL

Total Time: 10 minutes
Total Distance: 5.50 miles

Start: 1000 Driving Park, Rochester, New York

START	1. Start out going **NORTHWEST** on **DRIVING PARK AVE** toward **MT READ BLVD**.	go 0.2 mi
	2. Turn **RIGHT** onto **MT READ BLVD**.	go 1.0 mi
	3. Turn **SLIGHT LEFT** onto **ramp**.	go 0.2 mi
EAST 104	4. Merge onto **NY-104 E**.	go 3.4 mi
RAMP	5. Take the ramp toward **CARTER ST / PORTLAND AVE**.	go 0.1 mi
	6. Stay **STRAIGHT** to go onto **RT-104**.	go 0.4 mi
	7. Turn **RIGHT** onto **PORTLAND AVE / CR-114**.	go 0.2 mi
END	8. **1425 PORTLAND AVE** is on the **RIGHT**.	go 0.0 mi

End: 1425 Portland Ave, Rochester, NY 14621-3001



1.0 Introduction

The purpose of this Health and Safety Plan (HASP) it to provide guidelines for responding to potential health and safety issues that may be encountered during the Remedial Measures (RM) at the site located at 1000 Driving Park Avenue in the City of Rochester, Monroe County, New York. This HASP only reflects the policies of LaBella Associates P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work site. This document's project specifications and the Community Air Monitoring Plan (CAMP) are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP were developed in general accordance with 29 CFR 1910 and 29 CFR 1926 and do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or and other regulatory body.

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
- The removal of subgrade structures
- Excavation Backfill

4.0 Work Area Access and Site Control

The contractor(s) will have primary responsibility for work area access and site control. However, a minimum requirement for work area designation and control will consist of:

- Drilling (Geoprobe/Rotary) – Orange cones to establish at least a 10-foot by 10-foot work area. Alternatively the contractor may elect to establish an exclusion zone that encompasses the entire vicinity of the proposed investigation activity;
- Test Pitting – Orange cones and orange temporary fencing to establish at least 10-feet of distance between test pit and fencing. Alternatively the contractor may elect to establish an exclusion zone that encompasses the entire vicinity of the proposed investigation activity;
- Soil Excavation & Backfill – Construction Fence will be utilized to prevent unauthorized entry within the area targeted for soil excavation and soil stockpiling;
- Subgrade Structure Removal – No confined space entry will be allowed. Construction Fence will be utilized to prevent unauthorized entry within the area where the structures are being removed and staged.

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 or her instructions must be followed.

5.1 Hazards Due to Heavy Machinery

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

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

5.2 Excavation Hazards

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

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

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

Personnel should exercise caution near all excavations at the site as it is expected that excavation sidewalls will be unstable. All excavations will be backfilled by the end of each day. Additionally, no test pit will be left unattended during the day.

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

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

5.4 Injury Due to Exposure of Chemical Hazards

Potential Hazards:
Volatile and Semi-volatile organic compounds and metal are known to be present at the site. Levels of metals at the site range from low to moderate up to hazardous waste levels (for toxicity). It is possible that petroleum or chlorinated solvents or other chemicals may be encountered at the project work site. Inhalation of high concentrations of organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis. Metal compounds adhered to dust particulates could also present an inhalation hazard.

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 and to the Modified CAMP in Appendix 7) 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 is 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).

Dust particulates may be detected by monitoring instrumentation. Approved employees will not work in environments where hazardous concentrations of volatile organic vapors or particulates are present.

5.5 Injuries Due to Extreme Hot or Cold Weather Conditions

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

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

5.6 Potential Exposure to Asbestos

Potential Hazards:
During ground intrusive activities (e.g., test pitting or drilling) soil containing asbestos may be encountered. Asbestos is friable when dry and can be inhaled when exposed to air.

Protective Action:
The presence of asbestos can be identified through visual observation of a white magnesium silicate material. If encountered, work should be halted and a sample of the suspected asbestos should be collected and placed in a plastic sealable bag. This sample should be sent to the asbestos laboratory at LaBella Associates for analysis.

6.0 Work Zones

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

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

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

7.0 Decontamination Procedures

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

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

8.0 Personal Protective Equipment

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

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

Level C:
Level D PPE and full or 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 on-site. Air monitoring will consist at a minimum of the procedures described in the "Site Specific CAMP". Please refer to the Site Specific CAMP for further details on air monitoring at the site.

The Air Monitor will utilize a photoionization Detector (PID) to screen the ambient air in the work areas for total Volatile Organic Compounds (VOCs) and a DustTrak tm Model 8520 aerosol monitor or equivalent for measuring particulates. Work area ambient air will generally be monitored in the work area and downwind of the work area. Air monitoring of the work areas and downwind of the work areas will be performed at least every 60 minutes or more often using a PID, and the DustTrak meter.

If sustained PID readings of greater than 25 ppm are recorded in the breathing zone, then 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-hours of use or more frequently, if necessary. If PID readings are sustained, in the work area, at levels above 25 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 dust concentrations exceed the upwind concentration by 150 $\mu g/m^3$ (0.15 mg/m^3) consistently for a 10 minute period within the work area or at the downwind location, then LaBella personnel may not re-enter the work area until dust concentrations in the work area decrease below 150 $\mu g/m^3$ (0.15 mg/m^3), which may be accomplished by the construction manager implementing dust control or suppression measures.

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 and wait at the assigned 'safe area'. 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.

Y:\Rochester, City\209288 PHOTECH\Work Plans\WP6.AOC 2 & 7 Remediation\Appendices\WP4.HASP.DOC

Table 1
Exposure Limits and Recognition Qualities

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	STEL	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	0.2	0.2	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	0.096	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
Ethylbenzene	100	100	NA	1	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
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
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	Almond	NA	NA
Cadmium	0.2	0.5	NA	NA	NA	NA	NA	NA	NA
Chromium	1	0.5	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	Odorless	NA	NA
Selenium	0.2	0.02	NA	NA	NA	Unknown	NA	NA	NA
Other									
Asbestos	0.1 (f/cc)	NA	1.0 (f/cc)	NA	NA	NA	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

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

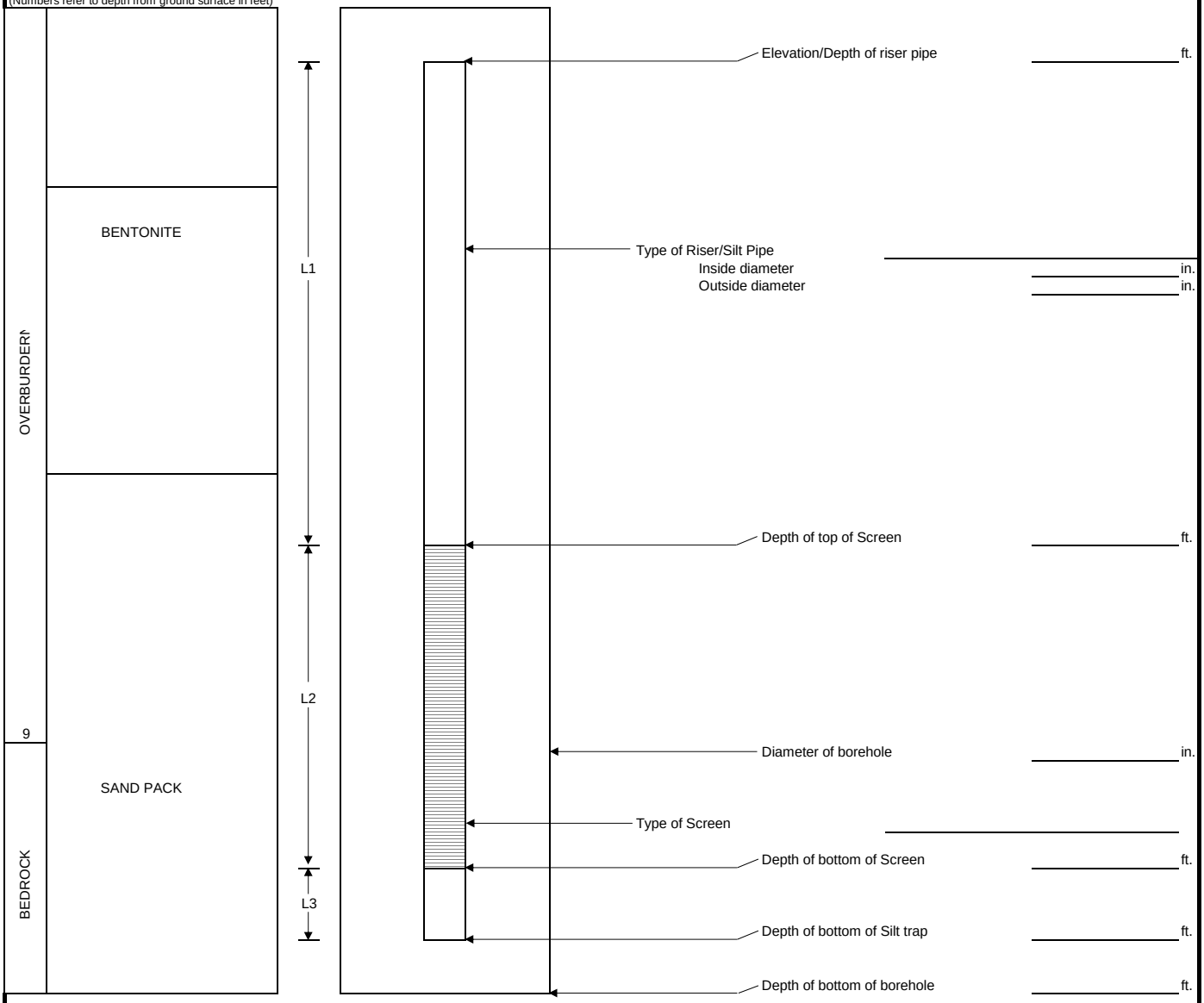
MONITORING WELL ID: **RMW-1**

Project:		LaBella Project No.:	
Location:		LaBella Representative:	
Client:		Date Installed:	
Contractor(s):		Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:		Auger size and type:	

Ground El.: _____ Location: _____ Depth to bedrock: _____

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



_____ ft. (Riser Length (L1)) + _____ ft. (Length of Screen (L2)) + _____ ft. (Length of Silt trap (L3)) = _____ ft. (Total Length)

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

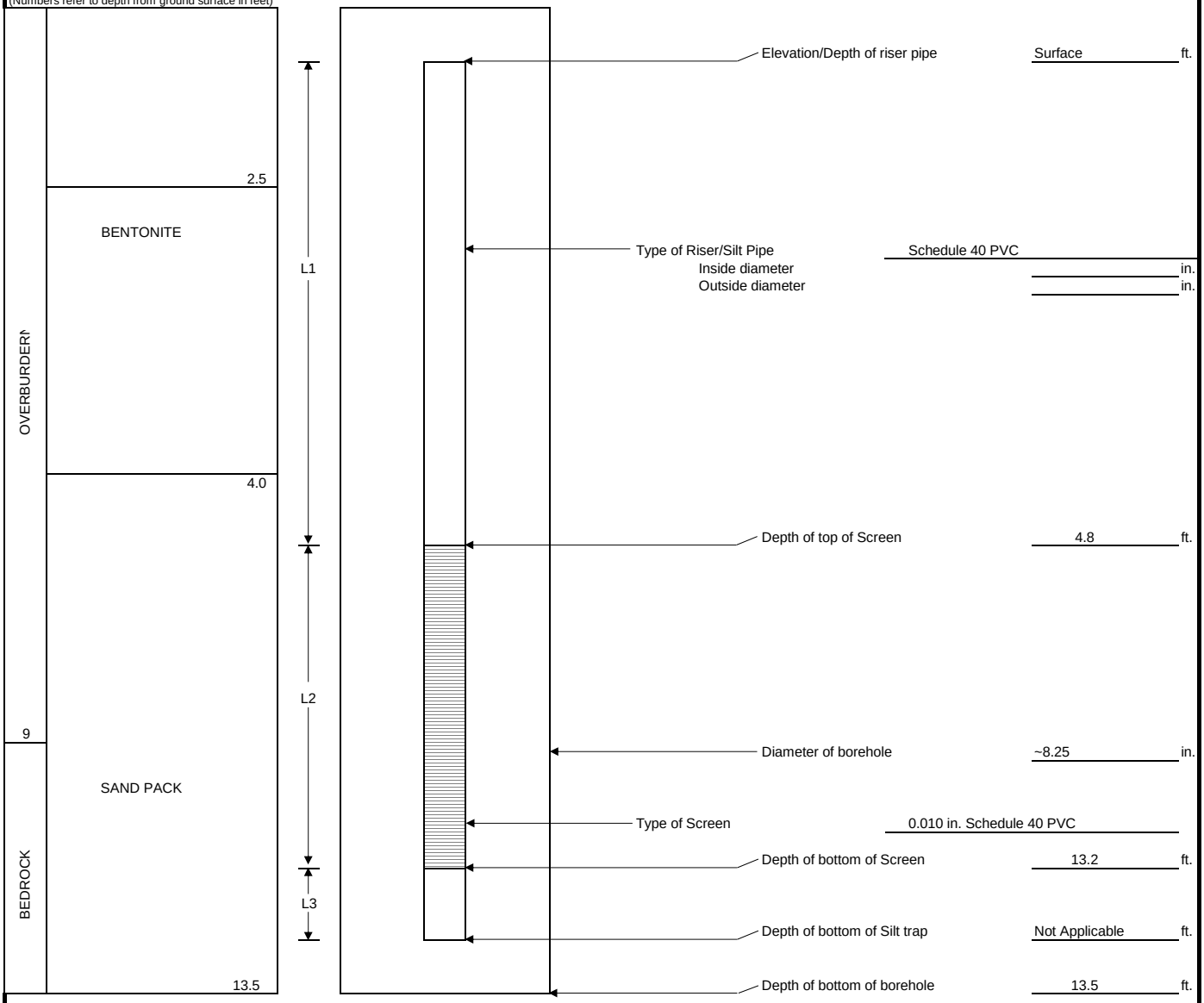
MONITORING WELL ID
RMW-1

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Riser Length (L1)	+	Length of Screen (L2)	+	Length of Silt trap (L3)	=	Total Length
ft.		ft.		ft.		ft.

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

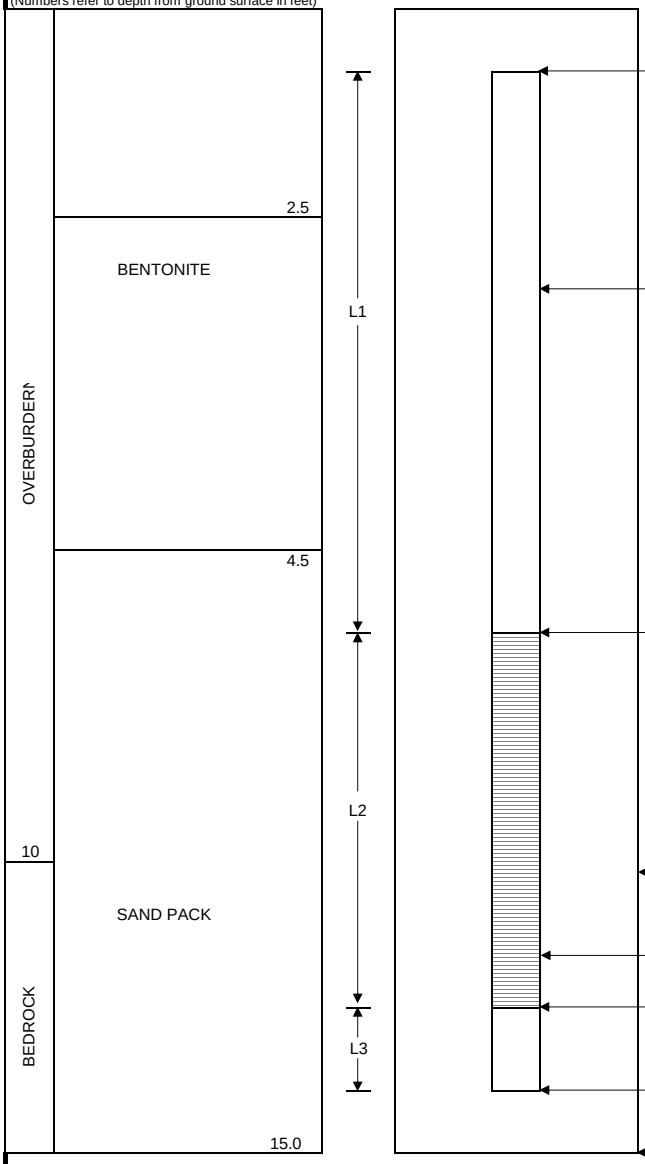
MONITORING WELL ID: **RMW-2**

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Elevation/Depth of riser pipe: Surface ft.

Type of Riser/Silt Pipe: Schedule 40 PVC
Inside diameter: in.
Outside diameter: in.

Depth of top of Screen: 5.0 ft.

Diameter of borehole: ~8.25 in.

Type of Screen: 0.010 in. Schedule 40 PVC

Depth of bottom of Screen: 14.7 ft.

Depth of bottom of Silt trap: Not Applicable ft.

Depth of bottom of borehole: 15.0 ft.

ft.	+	ft.	+	ft.	=	ft.	
Riser Length (L1)		Length of Screen (L2)		Length of Silt trap (L3)		Total Length	

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

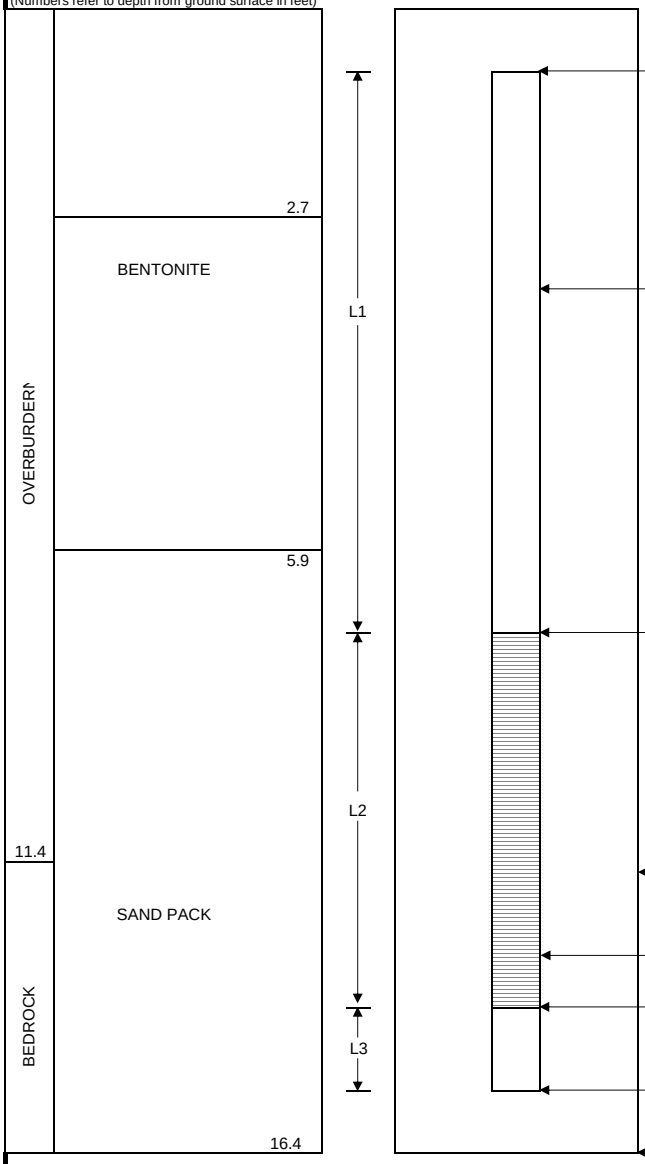
MONITORING WELL ID
RMW-3

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Elevation/Depth of riser pipe	Surface	ft.
Type of Riser/Silt Pipe	Schedule 40 PVC	
Inside diameter		in.
Outside diameter		in.
Depth of top of Screen	6.4	ft.
Diameter of borehole	~8.25	in.
Type of Screen	0.010 in. Schedule 40 PVC	
Depth of bottom of Screen	16.1	ft.
Depth of bottom of Silt trap	Not Applicable	ft.
Depth of bottom of borehole	16.4	ft.

	ft.	+		ft.	+		ft.	=		ft.
Riser Length (L1)			Length of Screen (L2)			Length of Silt trap (L3)			Total Length	

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

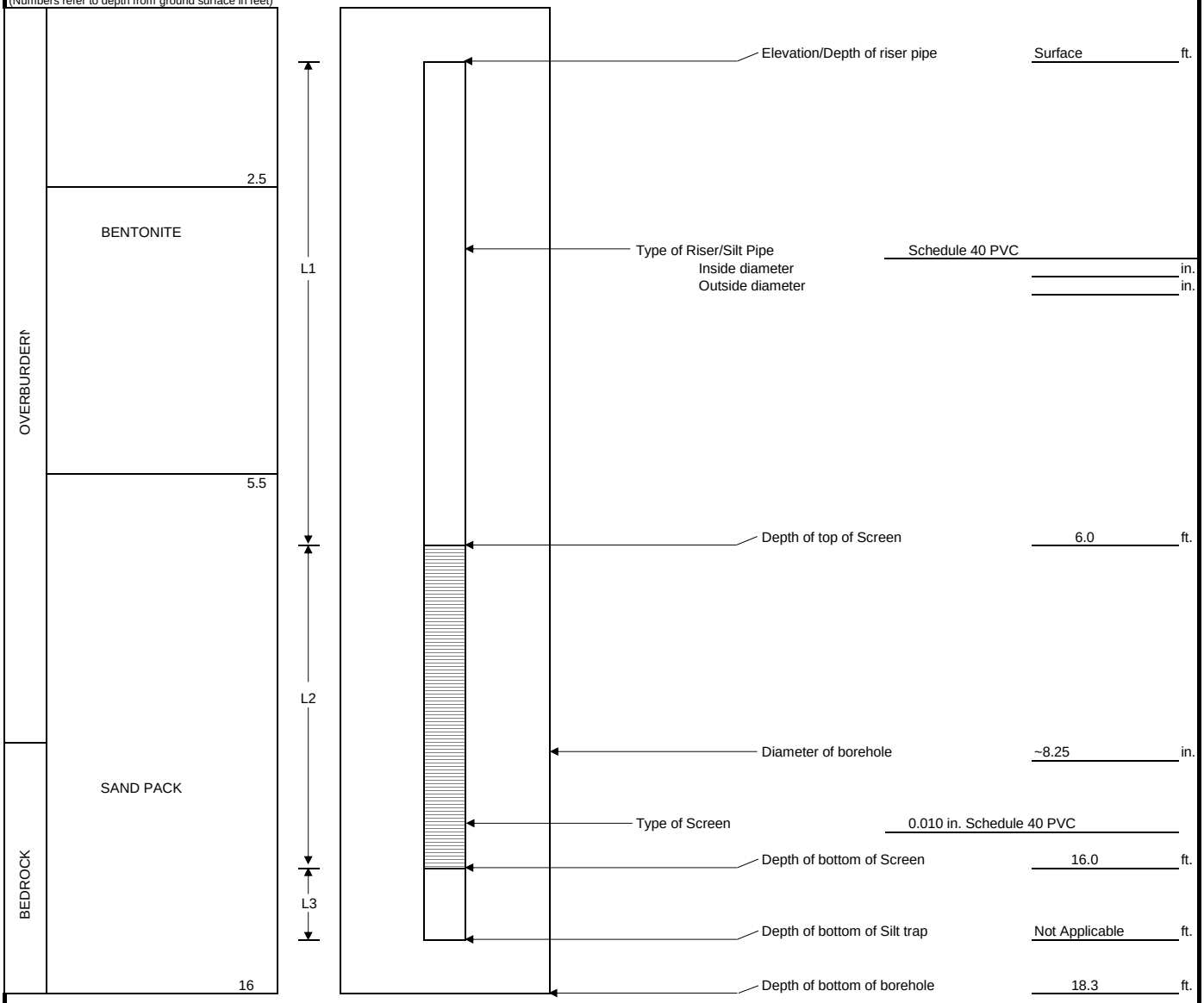
MONITORING WELL ID: **RMW-4**

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Riser Length (L1)	+	Length of Screen (L2)	+	Length of Silt trap (L3)	=	Total Length
ft.		ft.		ft.		ft.

NOTES: No bedrock

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

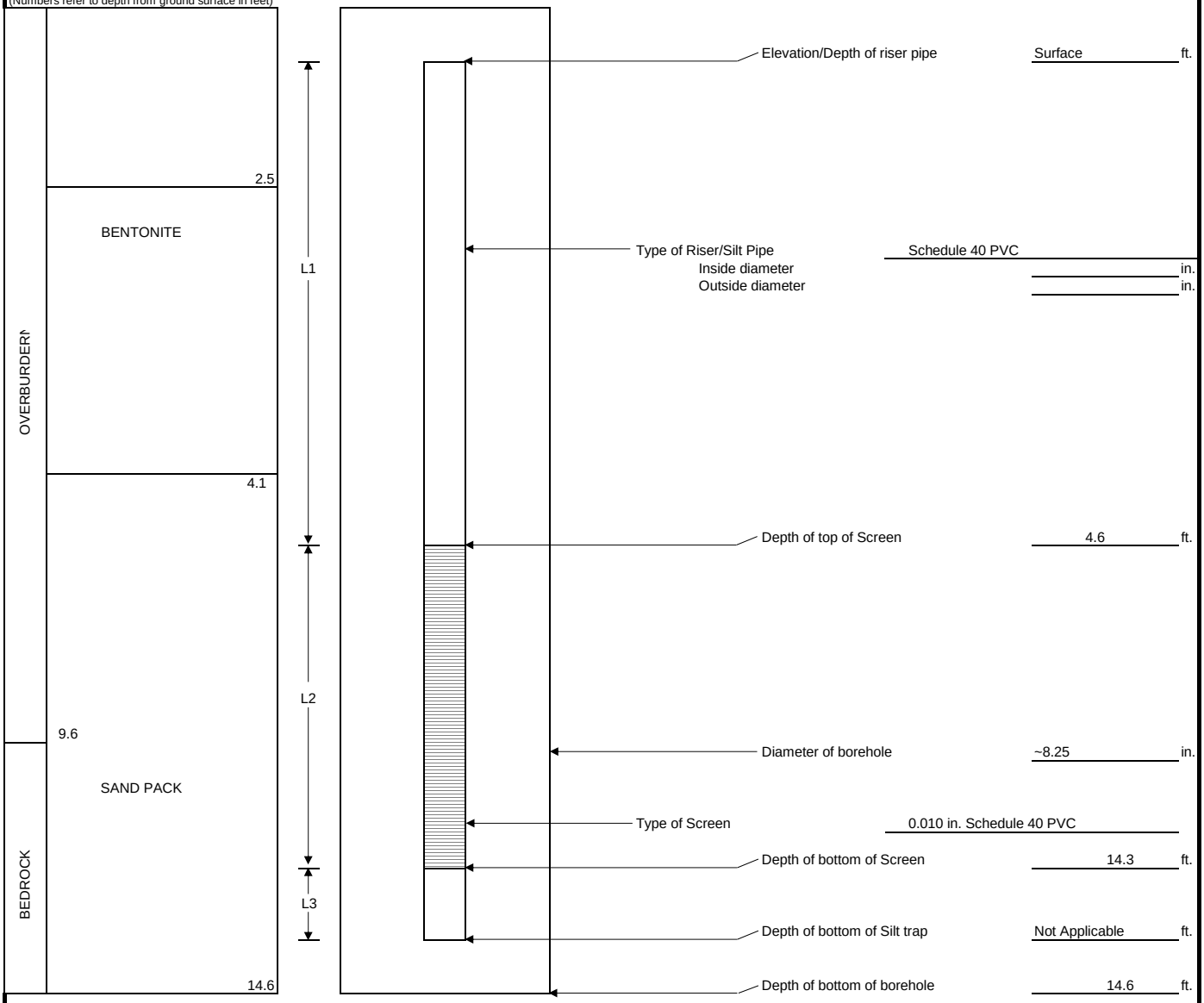
MONITORING WELL ID: **RMW-5**

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	12-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Riser Length (L1)	+	Length of Screen (L2)	+	Length of Silt trap (L3)	=	Total Length
ft.		ft.		ft.		ft.

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

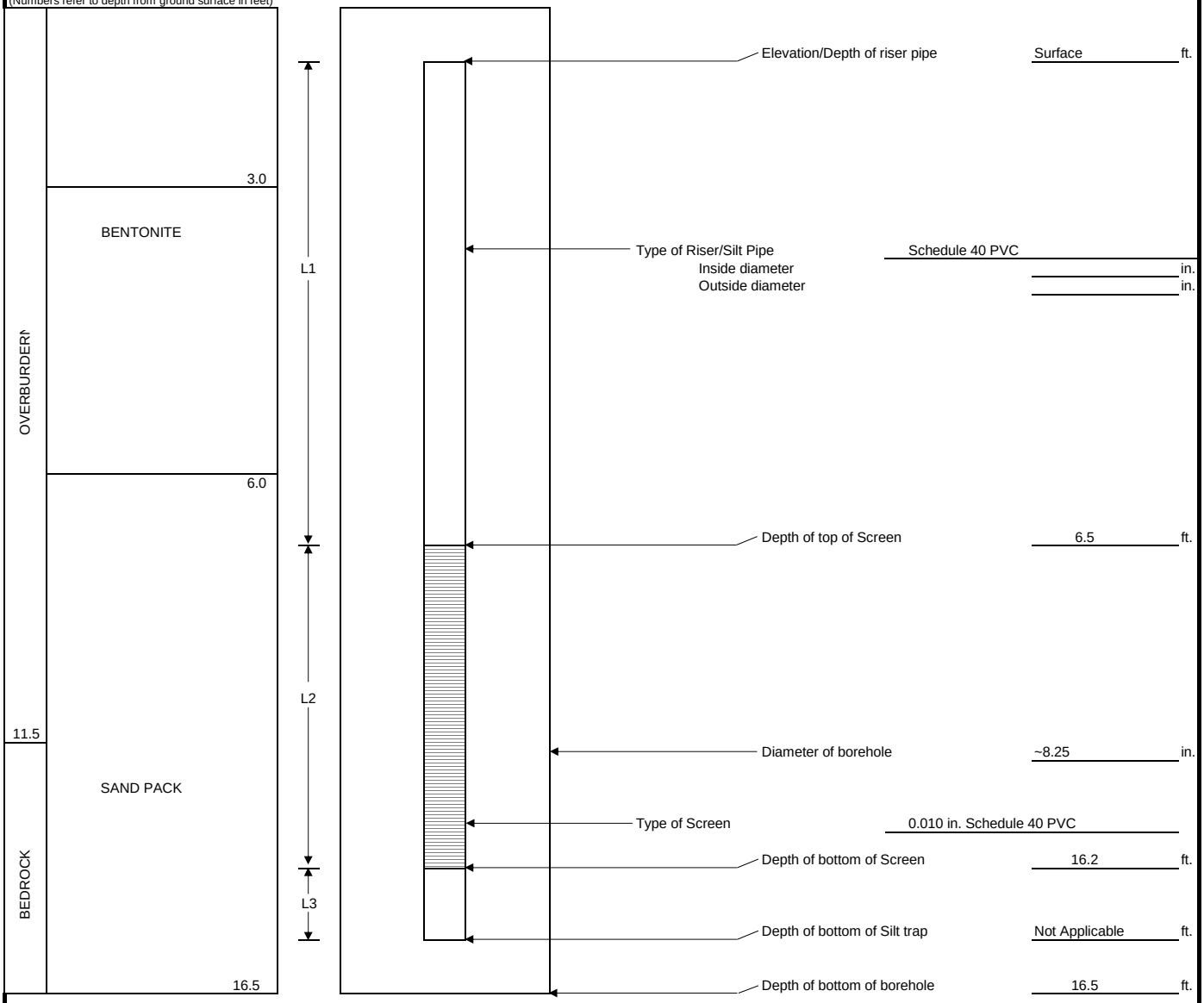
MONITORING WELL ID
RMW-6

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



ft.	+	ft.	+	ft.	=	ft.	
Riser Length (L1)		Length of Screen (L2)		Length of Silt trap (L3)		Total Length	

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

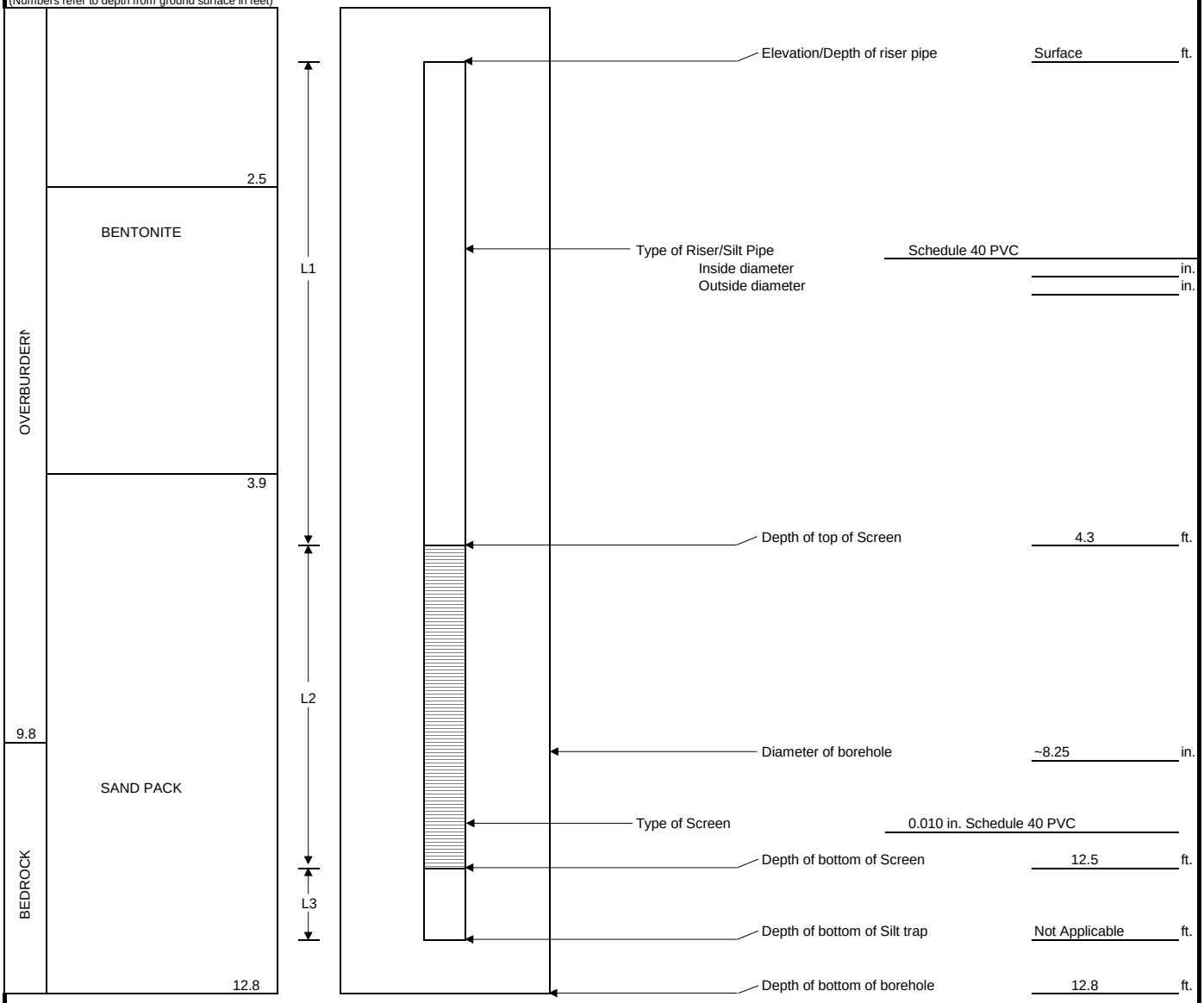
MONITORING WELL ID: **RMW-7**

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Riser Length (L1)	+	Length of Screen (L2)	+	Length of Silt trap (L3)	=	Total Length
ft.		ft.		ft.		ft.

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

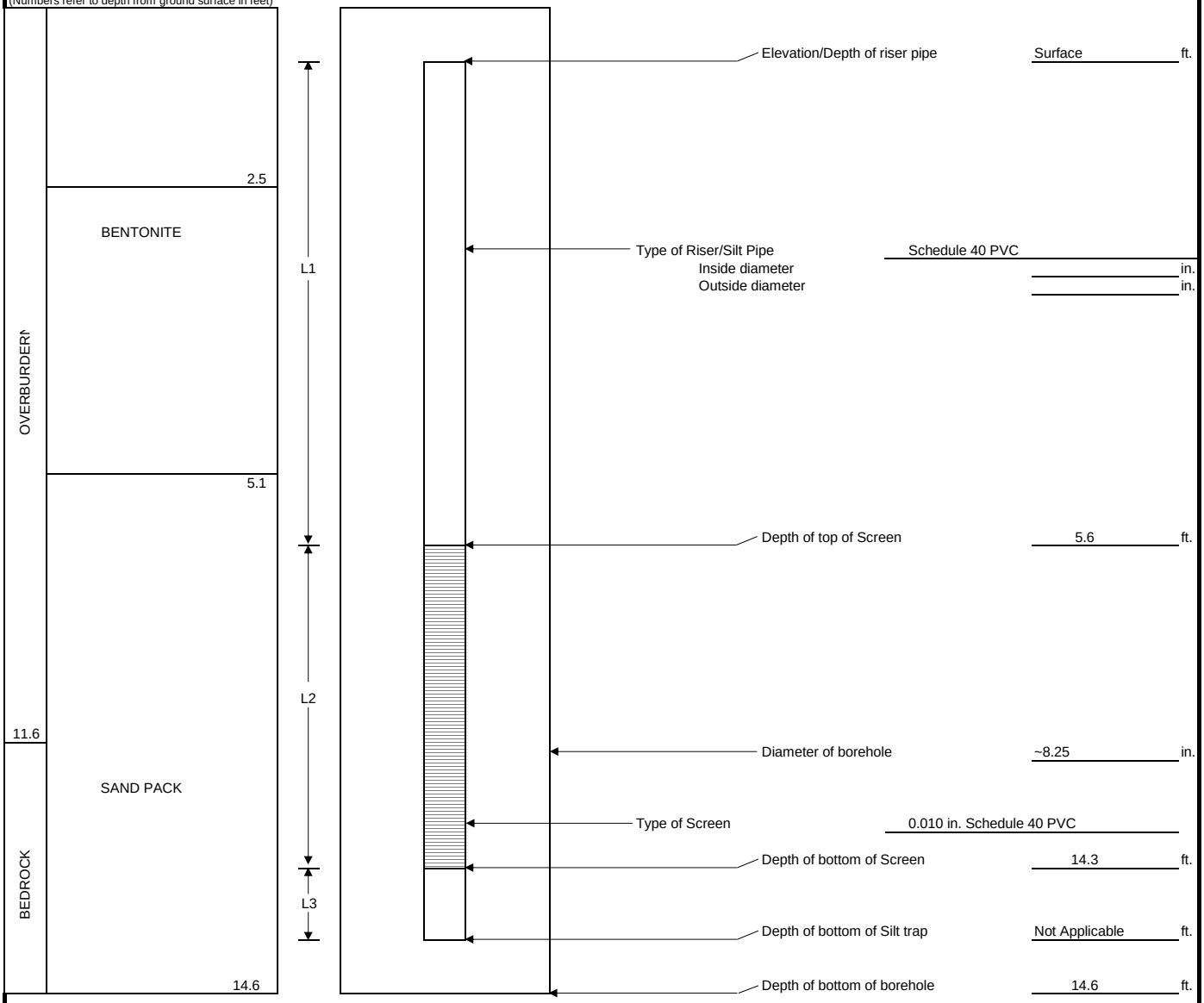
MONITORING WELL ID
RMW-8

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



Riser Length (L1)	+	Length of Screen (L2)	+	Length of Silt trap (L3)	=	Total Length
ft.		ft.		ft.		ft.

NOTES:

LABELLA Associates, P.C.

MONITORING WELL INSTALLATION REPORT

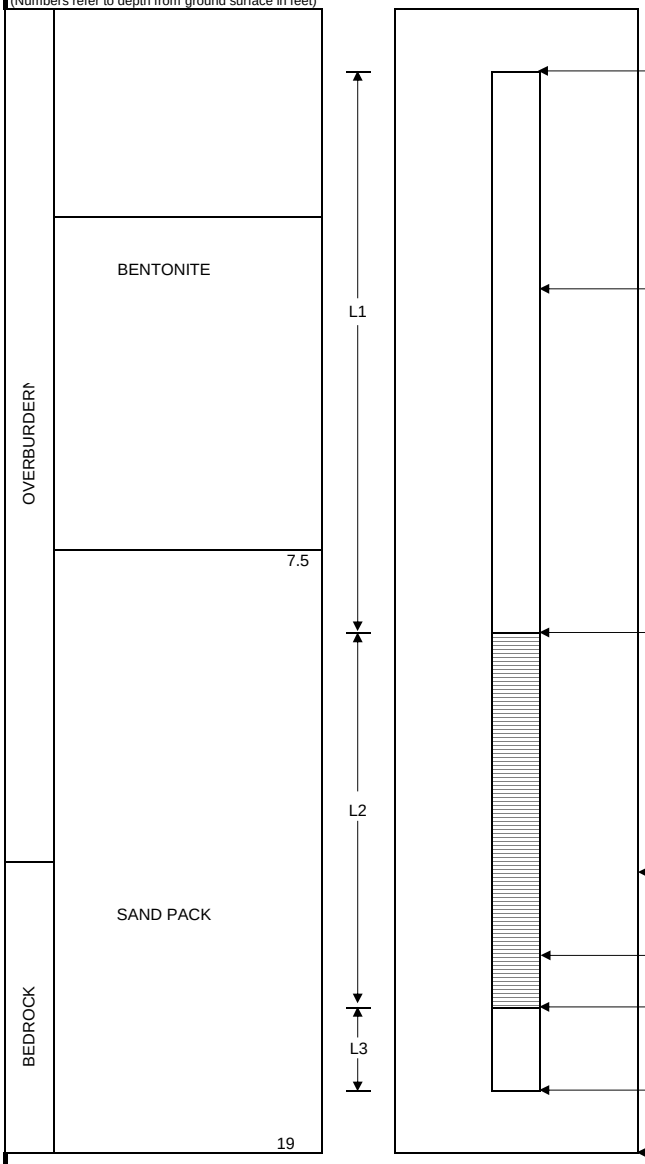
MONITORING WELL ID: **RMW-9**

Project:	FORMER PHOTECH IMAGING SITE	LaBella Project No.:	209288
Location:	1000 DRIVING PARK AVE, ROCHESTER, NY	LaBella Representative:	J. Jaskowiak
Client:	CITY OF ROCHESTER	Date Installed:	11-Jun-12
Contractor(s):	Natures Way	Time:	to
Driller:		Type of Drill Rig:	
Rock Coring Method:	NX BIT	Auger size and type:	4.25 IN. HOLLOW STEM AUGER

Ground El.: Not Applicable | Location: SEE PLAN | Depth to bedrock:

BOREHOLE BACKFILL

(Numbers refer to depth from ground surface in feet)



- Elevation/Depth of riser pipe: Surface ft.
- Type of Riser/Silt Pipe: Schedule 40 PVC
  - Inside diameter: in.
  - Outside diameter: in.
- Depth of top of Screen: 8.5 ft.
- Diameter of borehole: ~8.25 in.
- Type of Screen: 0.010 in. Schedule 40 PVC
- Depth of bottom of Screen: 18.5 ft.
- Depth of bottom of Silt trap: Not Applicable ft.
- Depth of bottom of borehole: 19.0 ft.

Riser Length (L1)	+	Length of Screen (L2)	+	Length of Silt trap (L3)	=	Total Length
ft.		ft.		ft.		ft.

NOTES: bedrock not encountered

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: _____

Project Name: _____
Location: _____
Project No.: _____
Sampled By: _____
Date: _____
Weather: _____

WELL SAMPLING INFORMATION

Well Diameter: _____ Static Water Level: _____
Depth of Well: _____ Length of Well Screen: _____
Measuring Point: _____ Depth to Top of Pump: _____
Pump Type: _____ Tubing Type: _____

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (mL/min)	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O_2 (g/L)	Redox (mV)	Water Level (Feet)	Comments
		+/- 0.1		+/- 3%		+ 10%	+/- 10 mV		

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

OBSERVATIONS

Notes:

LABELLA Associates, P.C. 300 State Street Rochester, New York 14614 Phone: (585) 454-6110 Fax: (585) 454-3066	**SITE-WIDE INSPECTION FORM** Project Name: Location: Project No.: Inspected By: Date of Inspection: Weather Conditions:

INSPECTION FINDINGS

INSPECTION OF SOIL COVER SYSTEM	TAKE PHOTOGRAPHS OF OUTFALL AREAS	ARE CURRENT SOIL CONDITIONS IN ACCORDANCE WITH THE EXCAVATION WORK PLAN? (YES/NO)	COMMENTS AND/OR ACTIONS TAKEN
GENERAL SITE CONDITIONS	CURRENT USE OF SITE (COMMERCIAL/ RESIDENTIAL/ETC.)	SITE RECORDS UP TO DATE (YES/NO)	COMMENTS AND/OR ACTIONS TAKEN

Quality Assurance Project Plan (QAPP)

Location:

Former Photech Imaging Site
Rochester, New York

Prepared for:

City of Rochester

LaBella Project No. 2090288

Quality Assurance Project Plan (QAPP)

Location:

Former Photech Imaging Site
Rochester, New York

Prepared for:

City of Rochester

LaBella Project No. 209288

LaBella Associates, P.C.
300 State Street
Rochester, New York 14614

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Page

1. Introduction

This Quality Assurance Project Plan (QAPP) contains procedures that provide for collected data to be properly evaluated and document that Quality Control (QC) procedures have been followed in the collection of samples. This QAPP represents 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 practices.

Procedures used in LaBella Associates, P.C.'s (LaBella'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 the Site Management Plan (SMP) may have site-specific details that will differ from the procedures in this QC program. In such cases, the SMP should be followed (subsequent to regulatory approval).

2. Quality Control Objectives

The United States Environmental Protection Agency (USEPA) 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 USEPA-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 implementation of the SMP 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 µg/L and mg/L for aqueous samples, and µg/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. 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 USEPA standard reference materials, or laboratory prepared solutions of target analytes spiked into a pure water or sample matrix. In the case of GC or GC/MS analyses, solutions of surrogate compounds, which can be spiked into every sample and are designed to mimic the behavior of target analytes without interfering with their determination, are used.

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 USEPA supplied known solutions, this recovery is compared to the published data that accompany the solution.

For LaBella's prepared solutions, the recovery is compared to USEPA-developed data or LaBella's historical data as available. For surrogate compounds, recoveries are compared to USEPA 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 sometimes not known to ASC and usually not known to bench analysts, so their usefulness for monitoring analytical precision at bench level is limited. 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 USEPA 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:

- LaBella'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. QC 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 QAPP, 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, LaBella will report reasons for deviations from these detection limits or noncompliance with quality control criteria.

5. Groundwater Sampling Procedures

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.

Water levels in all existing monitoring wells will be measured to within 0.01 foot prior to purging and sampling. Purging and sampling of each well will be accomplished as specified in the Site Management Plan (i.e., using low-flow sampling techniques).

In addition to the protocols in the SMP, the following will also be conducted:

- Water clarity will be quantified during sampling with a turbidity meter;
- 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.

The volumes specified in Table 1 will be used for the samples to be collected.

6. Management of Sampling-Derived Waste

Purpose:

The purposes of these guidelines are to ensure the proper holding, storage, transportation, and disposal of materials. Sampling-derived waste (SDW) included the following:

- 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.

Procedure:

1. Personal protective equipment, disposable sampling equipment, and similar equipment may be disposed as municipal waste, unless waste characterization results mandate disposal as industrial wastes.
2. Groundwater purge waters will be containerized and the results of the groundwater testing will be used to determine disposal methods. Depending on the sample results, the purge waters can be disposed of to the sanitary sewer system (subsequent to approval by the municipality) or if impacts warrant, then the purge waters will be profiled and shipped off-site for disposal at a NYSDEC permitted facility. All waste containers for disposal should be staged in a secure area with controlled access. Pending transfer, all containers will be covered and secured when not immediately attended. Label all containers with regard to contents, origin, and date of generation. Use indelible ink for all labeling.

7. 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 composite samples will not require decontamination between aliquots of the same composite sample. All sampling equipment will be decontaminated prior to sampling, after sampling each monitoring well, and after the completion of all sampling.

Decontamination will consist of:

- Alconox and water scrubbing with brushes; and
- Potable water rinse.

8. Sample Containers

The volumes and containers required for the sampling activities are included in pre-washed sample containers will be ordered directly from a firm, which prepares the containers in accordance with USEPA bottle washing procedures.

Table 1
Groundwater Samples
(all may not apply)

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
Volatile Organics	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
Semi-volatile Organics	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
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

Notes: 1. Holding time is based on the times from verified time of sample receipt at the laboratory.

2. All sample bottles will be prepared in accordance with USEPA bottle washing procedures. These procedures are incorporated in LaBella's Quality Control Procedures Manual, January, 1992.

TABLE 2
Soil Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
Volatile Organics, Semi-volatile Organics, PCBs, and Pesticides	8-oz, glass jar with Teflon-lined cap	Two (2), fill as completely as possible	Cool to 4° C (ice in cooler)	7 days
RCRA Characterization	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

Notes: 1. Holding time is based on the times from verified time of sample receipt at the laboratory.

2. All sample bottles will be prepared in accordance with USEPA bottle washing procedures. These procedures are incorporated in LaBella's Quality Control Procedures Manual, January, 1992.

TABLE 3
List of Major Instruments for Sampling and Analysis

- Photovac Micro Tip PID or MiniRae PID
- Hollige Series 963 Nephlometer (turbidity meter)
- 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 chromatrographs 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

9. Sample Custody

This section describes standard operating procedures for sample identification and chain-of-custody to be utilized for all Phase II 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.

10. 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.

10.1. Field Custody Procedures

- As few persons as possible should handle samples.
- Sample bottles will be obtained precleaned 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.

10.2. 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.

10.3. Transfer of Custody and Shipment

- The coolers in which the samples are packed must be accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them must sign, date, and note the time on the chain-of-custody record. This record documents sample custody transfer
- Shipping containers must be sealed with custody seals for shipment to the laboratory. The method of shipment, name of courier, and other pertinent information are entered 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 manage.
- 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.

10.4. 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.

10.5. 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.

10.6. 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.

11. Documentation

11.1. 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 (labels are to be covered with Mylar tape):

XX-YY-O/D

- XX This set of initials indicates the specific Phase II sampling project
- YY 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.

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. The sample label will be filled out using waterproof ink and will be firmly affixed to the sample containers and protected with Mylar tape. The sample label will give the following information:

- Name of sampler,
- Date and time of collection,
- Sample number,
- Analysis required,
- pH, and
- Preservation.

11.2. Daily Logs

Daily logs and data forms are necessary to provide sufficient data and observations to enable participants to reconstruct event that occurred during the project and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings. All daily logs will be kept in a bound waterproof notebook containing numbered pages. All entries will be made in waterproof ink, dated, and signed. No pages will be removed for any reason. Corrections will be made according to the procedures given at the end of this section. The daily logs will include a site log and task log.

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.

- Time spent collecting samples.
- 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.

12. Corrections to Documentation

12.1. 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.

12.2. 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.

12.3. 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 (signature);
- Weather conditions;
- Description of photograph taken;
- Reasons why photograph was taken;
- Sequential number of the photograph and the film roll number; and
- Camera lens system used.

After the photographs have been developed, the information recorded in the field notebook should be transferred to the back of the photographs

13. 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 Department of Transportation (DOT) in the Code of Federal Regulation, 49 CFR 171 through 177. All samples will be delivered to the laboratory with 24 to 48 hours from the day of collection.

All chain-of-custody requirements must comply with standard operating procedures in the USEPA sample handling protocol. All sample control and chain-of-custody procedures applicable to the Consultant are presented in the Field Personnel Chain-of-Custody Documentation and Quality Control Procedures Manual, January 1992.

13.1. 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 vermiculite 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.
- The environmental samples are to be cooled. The use of "blue ice" or some other artificial icing material is preferred. If necessary, ice may be used, provided that it is 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.

13.2. 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 at least twice 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. When custody is relinquished to a shipper, field personnel will telephone the lab custodian to inform him of the expected time of arrival of the sample shipment and to advise him of any time constraints on sample analysis. The lab must be notified as early in the week as possible, and in no case later than 3 p.m. (EST) on Thursday, regarding samples intended for Saturday delivery.

13.3. Marking and Labeling

- Use abbreviations only where specified.
- The words "This End Up" or "This Side Up" must be clearly printed on the top of the outer package. Upward pointing arrows should be placed on the sides of the package. The words "Laboratory Samples" should also be printed on the top of the package.
- After a sample container has been sealed, two chain-of-custody seals are placed on the container, one on the front and one on the back. The seals are protected from accidental damage by placing strapping tape over then.
- 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.

14. 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. Documentation of all routine and special maintenance and calibration information will be maintained in an appropriate logbook or reference file, and will be available on request. Table 7-1 lists the major instruments to be used for sampling and analysis. Brief descriptions of calibration procedures for major field and laboratory instruments follow.

15. Field Instrumentation

15.1. Photovac Micro Tip Flameionizer (FID)

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

15.2. Photovac/MiniRae Photoionization Detector (PID)

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

15.3. Conductance, Temperature, and pH Meter

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.

To recalibrate conductance, remove the black plug revealing the adjustment potentiometer screw. Add standard solution to cup, discard and refill. Repeat procedure until the digital display indicates the same value twice in a row. Adjust the potentiometer until the digital display indicates the known value of conductance. To increase the digital display reading, turn the adjustment potentiometer screw counter-clockwise (clockwise to decrease).

To standardize the pH electrode and meter, place the pH electrode in the 7.0 buffer bottle. Adjust the "ZERO" potentiometer on the face of the tester so that the digital display indicates 7.00.

Then place the pH electrode in the 4.0 or 10.0 buffer bottle (depending on where you expect the actual measurement to be). Adjust the "SLOPE" potentiometer on the face of the tester so that the digital display indicates the value of the buffer chosen.

Note: There is interaction between the "ZERO" and "SLOPE" adjustments, so the procedure should be repeated several times.

Do not subject the pH electrode to freezing temperatures.

It is good practice to rinse the electrode in distilled water when going from one buffer to another. When not in use the cap should be kept on the electrode. Keeping the cotton in the cap moist will keep the electrode ready to use. Moisten the cotton frequently (once a week, usually).

15.4. Nephelometer (Turbidity Meter)

The Series 95 nephelometer is calibrated before each use. Allow the instrument to warm up for approximately 2 hours. Using turbidity-free deionized water, zero the meter. Set the scale to 100, fill with a 40 NTU standard (AEPA-1 turbidity standard from Advanced Polymer Systems, Inc.), and insert into the instrument. Adjust the standardize control to give a readout of 200. Re-zero the instrument and repeat these steps with the scale set at 10 and 1 using 4.0 and 0.4 NTU standards, respectively. These standards are prepared by diluting aliquots of the 40 NTU standard.

16. 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.

16.1. 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:

16.2. 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 access ambient field conditions. They will be prepared by filling empty sample containers with deionized water and any necessary preservatives. They will be handled like a sample and shipped to the laboratory for analysis.
- **Trip Blanks** are similar to routine field blanks with the exception that they are **not** exposed to field conditions. Their analytical results give the overall level of contamination from everything except ambient field conditions. For the RI/FS, one trip blank will be collected with every batch of water samples for volatile organic 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.

16.3. 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.

16.4. Quality Control Check Samples

Inorganic and organic control check samples are available from USEPA 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.

J:\ROCHESTER, CITY\209288 PHOTECH\REPORTS\SMP\APPENDICES\APP I - QAPP\APPENDIX_QAPP.DOC

LABELLA Associates, P.C.	**SITE-WIDE INSPECTION FORM**
	Project Name: Former Photec Imagin Site
	Location: 1000 Driving Park, Rochester NY
300 State Street Rochester, New York 14614 Phone: (585) 454-6110 Fax: (585) 454-3066	Project No.: 209288
	Inspected By:
	Date of Inspection:
	Weather Conditions:

1. COMMNETS ON GENERAL SITE CONDITIONS: _____

_____

_____

2. CURRENT USE OF SITE: _____

3. ARE CURRENT SOIL CONDITIONS IN ACCORDANCE WITH THE EXCAVATION WORK PLAN? YES/NO

If No, Explain and indicate actions to be taken: _____

_____

4. PHOTOGRAPHS TAKEN OF OUTFALL AREAS? YES/NO

5. SITE RECORDS UP TO DATE? YES/NO

COMMENTS AND/OR ACTIONS TAKEN

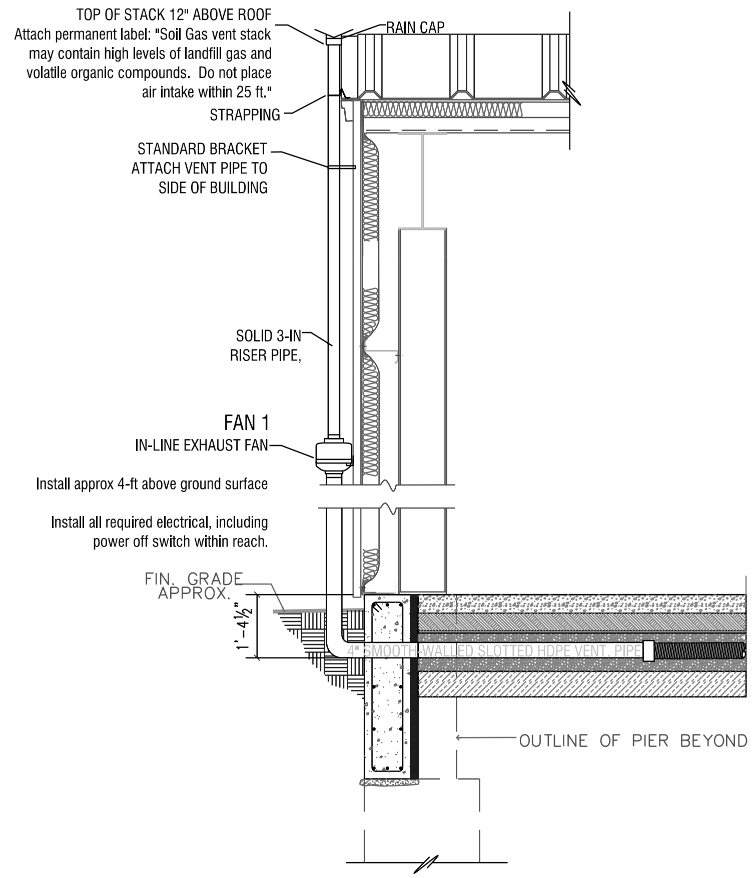
_____

_____

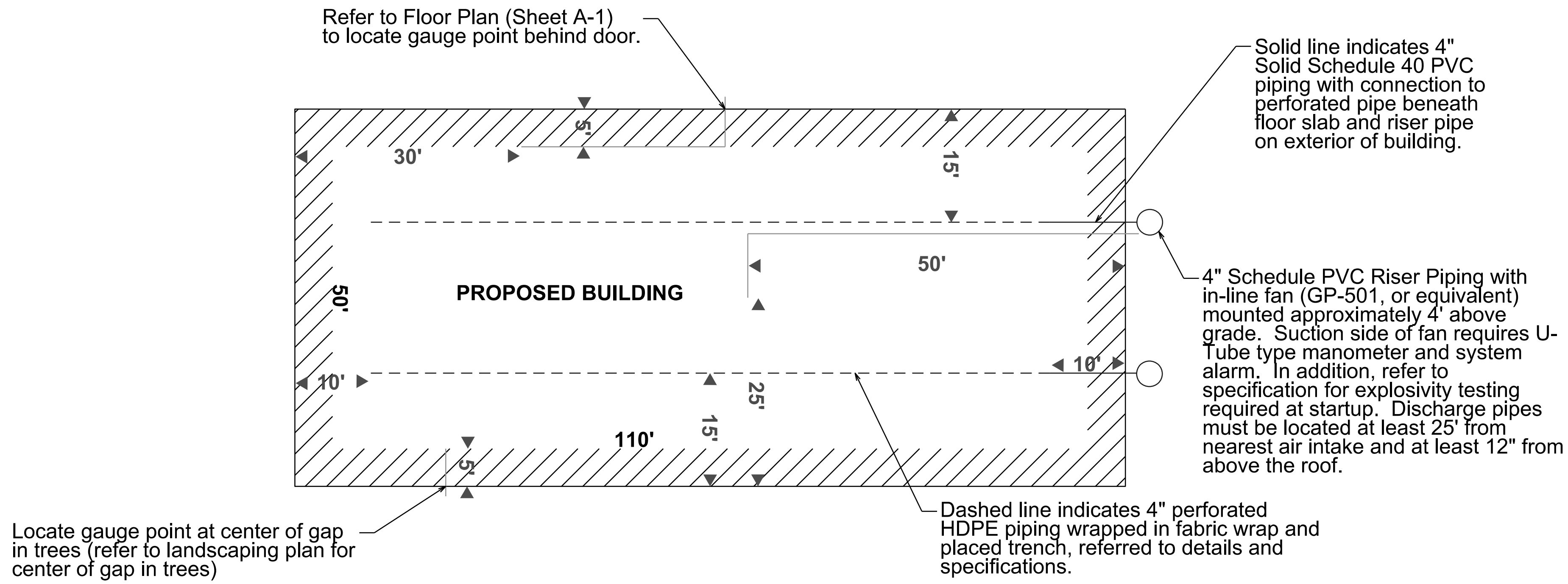
_____

_____

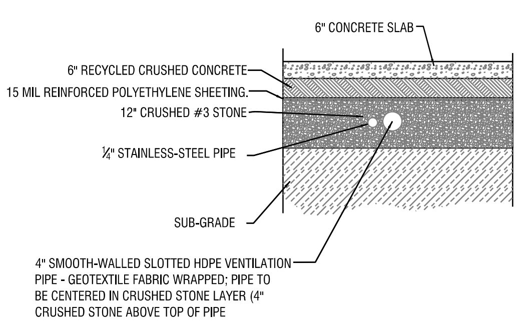
_____



REAR ENDWALL

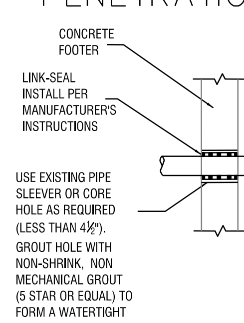


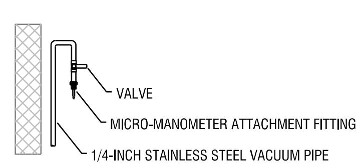
PLAN VIEW



DETAIL: MATERIAL PROFILE

PROFILE AT PENETRATION





PROFILE AT GUAGE POINT

NOTES:

1. Install perforated cap at each vapor collection pipe termination.
2. Slope header pipe up 1/4-inch per foot from connection with vapor collection piping (i.e., drained back to perforated pipe).
3. All sub-slab vapor collection piping is geotextile-wrapped 4-inch perforated dual-walled corrugated exterior smooth interior HDPE.
4. Header piping shown is 4-inch schedule 40 PVC.
5. Profile sequence may change based on materials specified by the slab designer. Any alterations to the depicted profile that reduces the layer of permeable material shall be made in coordination with NYSDEC & MCDOH.
6. To protect the vapor barrier, all penetrations made after pouring of the slab, such as joints, etc, shall be cut in a manner to avoid penetrating the vapor barrier.
7. Seal all penetrations and gaps with an elastomeric joint sealant.

NO.	REVISION	BY	DATE
-			
-			
-			
-			
-			
-			

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300 STATE STREET
ROCHESTER, NY 14614
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F: (585) 454-3066
www.labellapc.com

PROJECT/CLIENT
FORMER EMERSON STREET LANDFILL
1770 EMERSON STREET
ROCHESTER,

DRAWING TITLE
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT

ISSUED FOR: DRAFT
DATE: 08-17-2010
DESIGNED BY: DN
DRAWN BY: IPJ
REVIEWED BY: DN
Y:\Rochester, City\210173 FESL\Drawings\SSDS Design.Dgn
LaBella Half Size.ctb

PROJECT/DRAWING NUMBER
210173

FIG 2

Appendix L - Soil Exceedances of the NYSDEC Unrestricted SCOs

Name	Sample Depth	Metal Analytes				
		Ag	As_	Cd	Cr	Hg
NYSDEC Unrestricted SCOs		2	13	2.5	30	0.18
AOC 3A-CS-38		NA	NA	6.15	NA	NA
AOC2Tank2ConfBot2		NA	NA	4.85	NA	NA
GP-121	3'	9.92	NA	NA	NA	NA
GP-122	5'	37.1	NA	NA	NA	NA
GP-146	1'	5.84	NA	NA	NA	NA
GP-157	9'	2.47	NA	NA	NA	NA
GP-160	10.5'	3.35	NA	8.8	NA	NA
GP-175	1'	4.15	NA	NA	NA	NA
GP-180	1'	16.9	NA	NA	NA	NA
GP-181	3'	10	NA	NA	NA	NA
GP-182	5'	NA	NA	3.56	NA	NA
GP-194	7'	3.03	NA	NA	NA	NA
GP-195	7'	2.17	NA	NA	NA	NA
GP-199	7'	NA	NA	2.54	NA	NA
GP-201	5'	2.26	NA	NA	NA	NA
GP-202	3'	77.7	NA	NA	NA	NA
GP-208	1'	5.93	NA	NA	NA	NA
GP-209	1'	58.5	NA	4.26	NA	NA
GP-210	1'	30.7	NA	NA	NA	NA
GP-211	1'	4.05	NA	NA	NA	NA
GP-62	1'	3.88	NA	NA	NA	NA
GP-64a	6.8'	NA	NA	2.89	NA	NA
GP-69	11.3'	6.65	NA	NA	NA	NA
GP-75	1'	7.35	NA	5.37	NA	NA
GP-82	9'	5.7	NA	4.2	NA	NA
GP-86	9'	2.73	NA	4.55	NA	NA
GP-89	7'	6.29	NA	3.29	NA	NA
GS-03	6'-8.3'	43.8	14.9	3.5	69.2	NA
GS-14	6'-8'	NA	NA	NA	NA	0.221
GS-18	6'-9'	4.61	NA	3.81	NA	NA
GS-46	8'-10'	8.5	NA	NA	NA	NA
SS-21	3"	6.37	NA	3.94	NA	NA
SS-30	7"	10.7	NA	NA	NA	NA
AOC7-SW-02		NA	NA	6.19	NA	NA
AOC7-SW-03		NA	NA	4.1	NA	NA
AOC7-SW-06		NA	NA	2.57	NA	NA
AOC7-SW-09		NA	NA	7.3	NA	NA
TP-03	0'	4.55	NA	5.66	NA	NA
TP-04	0'	2.46	NA	NA	NA	NA
TP-07	3'	9.47	NA	10.1	NA	NA
Well-07	6'-8'	3.4	NA	NA	NA	NA
Well-09	10'-12'	2.4	NA	NA	NA	NA
XRF6 091710	3'	21.2	NA	NA	NA	NA

Note: Highlighted cells indicate an exceedance of the NYSDEC Unrestricted SCO