RG&E AND
Always at Your Service

March 31, 2009

Mr. Salvatore Priore, P.E.
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, New York 12233-7013

Re: Completion Report for Phase IV, Interim Remedial Measure at RG&E's East Station Former MGP Site, Rochester, New York.
VCA Index #: B8-0535-98-07 Site #: V000358-8

Dear Mr. Priore:

Rochester Gas & Electric Corporation (RG&E) is submitting the enclosed Completion Report for Phase IV, Interim Remedial Measure at East Station Former MGP Site, Rochester, New York.

I have enclosed two printed copies of the Completion Report for your review as per our discussion on 3-17-09. I'm also sending one copy to Katherine Comerford, NYSDOH as requested.

Please feel free to call me at (585) 724-8386 or 585-315-0950 respectively if you have any questions on this submission.

Sincerely,

Daniel M Kennedy

Daniel M. Kennedy
RG&E Project Manager

Encl: Completion Report for East Station ISS IRM

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cc: Robert W. Schick, P.E. DEC (w/o attachment)
Katherine Comerford, NYS Department of Health (one Copy)
James Charles, Esq., DEC (one Copy)
David Crosby, P.E., NYSDEC (w/o attachment)
Bartholomew H. Putzig, P.E. DEC (one Copy)
Joseph Simone, P.E., RG&E (w/o attachment)
Thomas F. Walsh, Esq., Special Counsel to RG&E (one copy)

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PHASE IV INTERIM REMEDIAL MEASURE IMPLEMENTATION REPORT EAST STATION FORMER MGP SITE ROCHESTER, NEW YORK

MSVCA Index #B8-0535-98-07
Site # V00358-8

March 2009

Prepared for:

Rochester Gas & Electric Corporation
89 East Avenue
Rochester, New York 14649

Prepared by:

Ish Inc.
804 Salem Woods Drive, Suite 201B
Raleigh, NC 27615

PHASE IV INTERIM REMEDAL MEASURE IMPLEMENTATION REPORT EAST STATION FORMER MGP SITE ROCHESTER, NEW YORK

This Implementation Report provides details of the construction activities completed for the Phase IV ISS IRM at RG&E's East Station Former MGP Site in Rochester, New York. The ISS IRM involved excavation and off-site disposal of cyanide-impacted soils; installation of three rows of ISS columns incorporating impacted soils containing NAPL; a cement-bentonite slurry wall on the east side of the ISS columns for controlling potential non-aqueous phase liquid (NAPL) flow in the weathered bedrock underneath the ISS columns; and installation of a NAPL collection trench to the east side of the cement-bentonite wall on the land side. As required by NYSDEC, monitoring and NAPL recovery wells were installed for performance monitoring of the IRM. After the construction work was completed, the disturbed areas were restored by backfilling, grading and hydro seeding activities.

This report contains the documentation of the ISS IRM work, as well as the installation details of the monitoring / recovery wells and the restoration work. The ISS IRM activities were also documented with digital photographs, digital movies, and GPS survey data, which are included in this report.

PROFESSIONAL ENGINEER CERTIFICATION

I, William J. Zeli, a Professional Engineer registered in the State of New York, certify that based on my review and/or inquiry of the persons responsible for preparation of the report referenced above that, to the best of my knowledge and belief, the report properly presents the components of the interim remedial measures and activities completed during remediation of the site.

William J. Zeli, P.E.
New York License No. 080787
MTR Engineering, Inc.

3/30/09
Date

UNAUTHORIZED ALTERATION OF THIS ITEM IS UNLAWFUL

APPENDIX J

VIDEO DOCUMENTATION OF SLURRY WALL CONSTRUCTION

EXECUTIVE SUMMARY

Site Background

Rochester Gas and Electric (RG&E) has a Voluntary Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC) to perform environmental investigations and cleanup at the company's property located at 86 Smith Street (referred to as the Former East Station MGP Site) in the City of Rochester. The Former East Station MGP Site is located along the east side of the Genesee River at the corner of Suntru and Smith Street, just west of the intersection of St. Paul Street and Smith Street. The majority of the site is vacant with the exception of four buildings currently used by RG&E that are located along the northern portion of the property.

The site is the location of a former manufactured gas plant (MGP) that was constructed by the Citizen's Gas Company (a predecessor company to RG&E) in 1872. Coal gas manufacturing operations were reduced at the site in 1917, at which time the MGP was used primarily to purify coal gas that was produced at another MGP across the river. With the advent of natural gas distribution in 1952, the East Station site was modified as a catalytic gas reforming plant, which served to reformulate natural gas, rendering it usable in existing appliances and equipment. This operation ended in 1976 and the MGP was demolished.

The manufactured gas was produced by heating coal and other petroleum products in the absence of air (coal carbonization) or in the presence of steam and oil (carbureted water gas). The manufactured gas was used primarily as a lighting, cooking and heating supply. Byproducts of the manufactured gas process often remained at former MGP sites when plants were closed. These byproducts can include coal tar, purifier box wastes and coal ash. Chemicals associated with these coal tar residues and purifier wastes include polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and cyanide compounds, which was the focus of this ISS IRM.

RG&E completed three site investigations at the former East Station MGP between 1992 and 1999. A focused feasibility study was subsequently performed in 2001. RG&E carried out an IRM by excavation and off site treatment and disposal of the tar well area impacted materials in 2004-2005. RG&E pursued a second IRM to mitigate potential non-aqueous phase liquid (NAPL) seeps at the east riverbank as one of the priority actions for implementation at the Former East Station MGP Site.

In October 2003, RG&E submitted to NYSDEC the Draft IRM Work Plan For *In-Situ* Solidification/Stabilization (ISS) to Control NAPL Seeps at the Former East Station MGP Site, Rochester, New York (Ish Inc., October 2003). The ISS IRM Work Plan consists of four phases:

- **Phase I** was a Remedial Design Investigation (RDI) to determine if physical characteristics of the target ISS area are suitable for proceeding with the next phases of the IRM effort. The components of this RDI phase involved soil boring/rock coring, test pitting, and collecting soil samples for chemical characterization and treatability testing. **(This phase was completed in 2004-2005)**
- **Phase II** consisted of designing and carrying out laboratory treatability tests to establish the optimum mixture for the ISS process and to develop the performance measures for stabilized material. **(This phase was completed in 2005-2006)**
- **Phase III** consisted of preparing the engineering design and construction specifications for ISS application at the East Station MGP Site. To support the Phase III design effort, a work plan for

additional Remedial Design Investigation activities was prepared and submitted to NYSDEC in April 2007. The work plan was approved by NYSDEC in May 2007 before its implementation.

- **Final Phase III Remedial Design and Phase IV Implementation Plan Report** was prepared and submitted to NYSDEC in November 2007 with NYSDEC approval also received in November 2007. The design package was utilized to prepare the bid documents for the ISS IRM. **(This phase was completed in 2006-2007)**
- **Phase IV** consisted of selecting the construction contractor(s), implementing the *in-situ* stabilization/solidification construction work, and documenting the ISS IRM implementation. **(This phase was completed in 2007-2008 and is the subject of this Completion Report.)**

ISS IRM Implementation Tasks Completion Summary

Phase IV ISS IRM implementation work was conducted at RG&E's East Station Former MGP Site in Rochester, New York from November 2007 through November 2008. The components of the ISS IRM work are identified on Figure ES-1. This Executive Summary contains a synthesis of the major tasks performed and durations of each task in the ISS IRM:

Mobilization and Site Preparation for Cyanide-Impacted Material Removal
(November 14, 2007 through November 28, 2007)

- Mobilized equipment, personnel and office trailers
- Conducted clearing and grubbing activities
- Constructed stone haul road
- Installed erosion control measures and exclusion zone fencing

Cyanide-Impacted Material Excavation, Transport and Disposal
(November 28, 2007 through December 28, 2007)

- Total of 31,513 tons of material transported off-site for landfill disposal

Initial Backfill of Excavated Area and Demobilization
(December 28, 2007 through January 17, 2008)

- Approximately 2,300 cubic yards of unimpacted overburden soils excavated from Area 3 were reused as fill material in Area 1

Re-Mobilization and Site Preparation for ISS Activities
(April 21, 2008 through May 7, 2008)

- Mobilized auger and other construction equipment and personnel
- Assembled ISS grout plant and the auger rig
- Set up water storage tanks, pumps and hoses
- Removed additional 3 to 4 feet of overburden from Area 3 and placed it in the transition area of Area 2

ISS Columns Construction
(May 7, 2008 through June 20, 2008)

- A total of 667 ISS columns constructed
- 19 columns re-constructed due to initial slag quality
- 10 columns re-drilled for proper tie-in west of gasholder
- Total of approximately 14, 280 cubic yards of subsurface soils stabilized/solidified

Cement-Bentonite Slurry Wall Construction
(June 24, 2008 through July 11, 2008)

- 970 linear feet in length, approximately 2 to 3 feet in width and depth extended into competent bedrock
- Total of approximately 1,375 cubic yards of material excavated to construct slurry wall

NAPL Recovery Trench Construction
(July 15, 2008 through August 7, 2008)

- 840 linear feet in length, approximately 3-5 feet wide and depth extending to the competent bedrock
- 20 NAPL monitoring/recovery points installed in the trench
- Total of approximately 1,235 cubic yards of material excavated to construct NAPL collection trench

Spoils Stabilization/Solidification
(July 3, 2008 through August 8, 2008)

- Total of approximately 2,610 cubic yards of spoils from slurry wall and NAPL collection trench stabilized/solidified by mixing with excavator bucket and placed on top of the ISS columns in the northeast area of the site

Backfill, Site Restoration and Demobilization
(August 9, 2008 through September 19, 2008)

- 10,647 tons of imported backfill material used for backfilling approximately 18" thick
- 2,324 cubic yards of imported topsoil used for placing at least 6" thick surface soil layer
- Graded and hydro seeded areas disturbed during the ISS IRM construction work
- Demobilized personnel and equipment

Performance Monitoring and NAPL Recovery Well Installations
(September 8, 2008 through September 18, 2008)

- 3 additional NAPL monitoring/recovery points to the east of the ISS IRM area
- 3 ISS column wells for NAPL performance monitoring
- 5 shallow bedrock monitoring wells underneath the ISS columns for NAPL and water quality monitoring
- 2 overburden upgradient water quality monitoring wells to the east of the ISS IRM area

A formal work plan for monitoring the performance of the ISS IRM remedy will be submitted separately for NYSDEC review and approval by mid-year in 2009.

Additional Site Restoration
(November 6, 2008 through November 14, 2008)

- Cut-out of berm along river to facilitate surface drainage
- 79.45 tons of material to Mill Seat Landfill
- Placement of riprap in swale and gabions along riverbank

Additional Site Restoration
(Anticipated Spring 2009)

- Additional topsoil will be placed and regraded in the identified low lying areas (at the south end and to the north of the central area) approximately 6" to 10" higher in elevation
- After regrading, hydro seeding will be completed

Disposal of Soil Cuttings and Site Water
(December 23, 2008)

- Shipment and disposal of soil cuttings and site waste water generated from installation, development and decontamination activities for the performance monitoring wells.

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1.0 INTRODUCTION

Rochester Gas & Electric Corporation (RG&E) owns property at 86 Smith Street in Rochester, New York that was formerly operated as a manufactured gas plant (MGP). This property is referred to as the former East Station MGP Site and a general site map is provided as Figure 1-1. RG&E has a Voluntary Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC) to perform environmental investigations and cleanup at the Former East Station MGP Site. The Former East Station MGP Site is located along the east side of the Genesee River at the corner of Suntru and Smith Street, just west of the intersection of St. Paul Street and Smith Street, north of the Smith Street bridge. The majority of the site is vacant with the exception of four buildings currently used by RG&E that are located along the northern portion of the property.

The site is the location of a former manufactured gas plant (MGP) that was constructed by the Citizen's Gas Company (a predecessor company to RG&E) in 1872. Coal gas manufacturing operations were reduced at the site in 1917, at which time the MGP was used primarily to purify coal gas that was produced at another MGP. With the advent of natural gas distribution in 1952, the East Station site was modified as a catalytic gas reforming plant, which served to reformulate natural gas, rendering it usable in existing appliances and equipment. This operation ended in 1976 and the plant was demolished.

The manufactured gas was produced by heating coal and other petroleum products in the absence of air (coal carbonization) or in the presence of steam and oil (carbureted water gas). The manufactured gas was used primarily as a lighting, cooking and heating supply. Byproducts of the manufactured gas process often remained at former MGP sites when plants were closed. These byproducts can include coal tar, purifier box wastes and coal ash. Chemicals associated with these coal tar residues and purifier wastes include polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and cyanide compounds, which was the focus of this ISS IRM.

This report documents the completion of the ISS IRM activities at the East Station site that were conducted in accordance with the *Final Phase III Remedial Design and Phase IV Implementation Plan for the ISS IRM at the Former East Station MGP Site Rochester, New York* dated November 2007 (Implementation Plan) or as modified and approved by the NYSDEC based on field observations. The Implementation Plan is a supplement to the work plan entitled *Draft IRM Work Plan for In-Situ Solidification/Stabilization (ISS) to Control NAPL Seeps at the Former East Station MGP Site, Rochester, New York,* dated October 2003 (ISS IRM Work Plan). The ISS IRM work was comprised of the following components:

- Excavation and off-site disposal of overburden material impacted by cyanide;
- Temporary excavation and replacement of unimpacted overburden material;
- Installation of ISS columns by an *in-situ* process;
- Installation of a cement-bentonite slurry wall to the east of the ISS columns;
- Installation of a NAPL collection trench with 20 NAPL recovery wells along the east side of the cement-bentonite slurry wall;
- Restoration by backfilling, grading and hydro seeding; and
- Installation of monitoring and recovery wells for performance monitoring of the IRM.

1.1 Background

RG&E completed three site investigations at the former East Station MGP between 1992 and 1999. A focused feasibility study was subsequently performed in 2001. RG&E carried out an IRM by excavation and off site treatment and disposal of the tar well area impacted materials in 2004-2005. RG&E pursued a second IRM to mitigate potential non-aqueous phase liquid (NAPL) seeps at the riverbank as one of the priority actions for implementation for the East Station site.

In October 2003, RG&E submitted to NYSDEC the *Draft IRM Work Plan For In-Situ Solidification/Stabilization (ISS) to Control NAPL Seeps at the Former East Station MGP Site, Rochester, New York* (Ish Inc., October 2003). The ISS IRM Work Plan consisted of the following four phases and this report documents completion of the fourth phase:

- **Phase I** was the Remedial Design Investigation (RDI) to determine if physical characteristics of the target ISS area were suitable for proceeding with the next phases of the IRM effort. The components of the RDI phase involved soil boring/rock coring, test pitting, and collecting soil samples for chemical characterization and treatability testing.
- **Phase II** (implemented because results from the Phase I RDI indicated the physical characteristics of the East Station site are suitable for the ISS technology) consisted of designing and conducting laboratory treatability tests to establish the optimum mixture for the ISS process and to develop the performance measures for stabilized material.
- **Phase III** consisted of preparing the engineering design and construction specifications for ISS application at the East Station site, based on the treatability test results yielding a suitable mixture that would meet the desired criteria. To support the Phase III design effort, a work plan for additional RDI activities was prepared and submitted to NYSDEC (Ish Inc., April 2007). The additional investigative activities involved soil borings and test pits to evaluate the extent of cyanide-impacted material and the presence of obstructions in the light oil plant area and were completed in the summer of 2007. The Phase III remedial design utilized the results of the supplemental remedial design investigations, and incorporated excavation of cyanide-impacted material and construction of a NAPL collection trench into the IRM.
- **Final Phase III Remedial Design and Phase IV Implementation Plan Report** was prepared and submitted to NYSDEC in November 2007 with NYSDEC approval also received in November 2007. The design package was utilized to prepare the bid documents to select the construction contractor(s).
- **Phase IV** consisted of selecting the construction contractor(s), implementing the excavation, *in-situ* stabilization/solidification and NAPL trench construction work, and documenting the IRM implementation. **(This Implementation Report documents completion of these activities.)**

Phases I and II of the Draft ISS IRM work plan were completed between 2004 and 2006 as approved by the NYSDEC. To support the Phase III design effort, a work plan for additional remedial design investigation activities was prepared and submitted to NYSDEC (Ish Inc., April 2007). The work plan was approved by NYSDEC in May 2007 before its implementation.

Final Phase III remedial design and Phase IV implementation Plan report was prepared and submitted to NYSDEC in November 2007 with NYSDEC approval also received in November 2007.

Phase IV ISS IRM implementation work began at the site in November 2007 immediately after approval from NYSDEC and was completed in September 2008.

1.2 Conceptual IRM Approach

The findings of investigative activities conducted at the site along with the development of a grout mix design for ISS (Phases I and II) provided the basis for the IRM Phase III design and Phase IV implementation. Locations of monitoring wells, soil borings and test pits utilized during the investigations are identified on Figure 1-2.

The specific objectives of the ISS IRM were:

- To use ISS technology to solidify and stabilize the subsurface material near the riverbank at the East Station site to control potential NAPL seeps along the riverbank;
- To manage overburden material during implementation of the ISS technology, including temporary removal and return of unimpacted material for backfilling activities at the site. Part of the ISS IRM work also involved excavation and off-site disposal of cyanide-impacted overburden material; and
- To install a NAPL collection system on the east (land) side of the ISS barrier for NAPL that may accumulate behind the ISS barrier wall.

The proposed remediation areas described in the Implementation Plan (Ish Inc., November 2007), included cyanide-impacted material planned to be excavated and disposed off-site, the planned locations of the ISS barrier and the NAPL collection trench, are identified on Figure 1-3. The remedial design included excavation of cyanide-impacted overburden material from Area 1 in the north portion and Area 2 in the central portion. The ISS barrier and trench extended through each area (including Area 1, Area 2 and Area 3 in the south portion of the site along the riverbank).

The areal extent of the cyanide-impacted material removal was determined using a total cyanide concentration of 27 mg/Kg, based on the unrestricted use soil cleanup objective for cyanide provided in 6 NYCRR Part 375-6. The planned excavation depth was expected to vary from approximately 5 to 11 feet below ground surface (bgs). Overburden material in the southern portion of the ISS barrier (Area 3) was planned to be removed temporarily and reused as backfill following installation of the ISS barrier and NAPL collection trench.

The ISS portion of the project was planned to create an approximately 20-foot wide set of columns of stabilized/solidified soil about 1,000 feet long and 11 to 17 feet in height, which would key into the underlying weathered bedrock to the extent feasible. ISS technology creates columnar elements so a series of overlapping ISS columns are used to make the barrier wall continuous and interlocked. A NAPL collection trench on the upgradient (east) side of the ISS barrier was planned as an additional remedial measure to augment the ISS. A conceptual cross-section of the ISS barrier and NAPL collection trench construction features is shown in Figure 1-4.

As presented in this report, the planned width of the ISS barrier wall was expanded in the north east area of the site and the east side of the barrier was supplemented with a cement-bentonite slurry wall keyed deeper into the bedrock as concurred by the NYSDEC project manager. These measures were taken to further assure that the objectives of the ISS IRM were met.

The NAPL collection trench location was designed on the (east) landside of the ISS barrier wall (see Phase III design report). The proposed design involved installation of the trench along the entire length of the ISS barrier, with provisions for further consideration and optimization based on observations of NAPL occurrence during excavation and installation of the ISS columns. The trench was designed to collect mobile free-phase NAPL that may potentially accumulate at the ISS barrier and may migrate through the weathered bedrock underneath the ISS columns. The conceptual approach involved excavation of a trench approximately 2-foot wide with a base at the top of the competent bedrock formation that was backfilled with free-draining gravel (e.g., pea stone gravel). The method for removal of NAPL that may accumulate within the trench was proposed to be finalized after coordination with the selected remediation contractor, with consideration given to factors including the subsurface conditions and potential construction constraints.

The final design of the NAPL collection/removal system, which incorporated elements of vertical point and lateral pipe approaches, is presented in this Implementation Report.

1.3 IRM Performance Monitoring

Performance monitoring criteria for the cyanide-impacted material removal, ISS barrier construction and NAPL collection trench installation activities were identified in Section 7.0 of the Final Phase III Remedial Design and Phase IV Implementation Plan Report. These criteria included collection of excavation bottom and sidewall soil samples for total cyanide analysis following the removal activities. Further information regarding collection of these samples and the corresponding analytical results are provided in Section 2.5 of this report.

ISS barrier construction performance monitoring included routine inspections, measurements and testing of the grout and mixed soil, and other quality control functions. Detailed information on these activities is provided in Section 3.2.8 of this report.

The NAPL collection trench performance / functionality is based on the potential extent of mobile, free-phase NAPL present upgradient (east) of the trench and the ISS barrier. The monitoring/recovery point design provided in Section 3.4 will facilitate evaluation of the extent of NAPL occurrence and effectiveness of the ISS IRM remedy. A formal work plan for monitoring the performance of the ISS IRM remedy will be submitted separately from this report for NYSDEC review and approval by mid-year in 2009.

1.4 Selection of Construction Contractor(s) for the ISS IRM Project

RG&E developed bid specifications for the IRM project and received bids from three qualified remediation contractors. Sevenson Environmental Services, Inc. (Sevenson) with Geo-Solutions as subcontractor was selected to perform the IRM construction work with field oversight provided by NYSDEC, RG&E and Ish, Inc. personnel.

2.0 CYANIDE-IMPACTED MATERIAL REMOVAL

The first step of the Phase IV ISS IRM implementation was the excavation and off-site disposal of the cyanide-impacted material. Based on the timing of the project, the schedule for completion included a break over the winter months after completion of the excavation activities for cyanide-impacted soils, with remobilization in the spring of 2008.

Fieldwork for the cyanide impacted soils excavation activities began on November 14, 2007 and continued through demobilization on January 15, 2008. This portion of the project consisted of the following four components:

- Mobilization and site preparation activities;
- Excavation and off-site disposal of cyanide impacted material;
- Excavation of unimpacted overburden material and initial partial backfill of excavated areas; and
- Equipment decontamination and demobilization.

This section provides detailed information on the cyanide-impacted soil excavation and overburden material relocation activities. This report also contains information on off-site soil disposal and community air monitoring program (CAMP) conducted during removal operations. As part of the remedial design investigations in Phase III, waste characterization data were developed and submitted to landfills for acceptance as non-hazardous soils from an MGP site. The waste characterization data confirmed that the cyanide-impacted soils were non-hazardous and were accepted by the landfills for daily soil cover use.

2.1 Mobilization and Site Preparation

The remediation construction contractor, Sevenson, and the environmental consultant (Ish Inc.) began mobilization and site preparation activities on November 14, 2007. These mobilization and site preparation activities were completed during the first two weeks before excavation operations began on November 28, 2007. Two office trailers were placed at the site and electrical and telephone services were established. Sevenson began mobilizing heavy equipment to the site and completed clearing and grubbing activities, which included cutting down and chipping several trees and brush within the planned excavation and ISS area. Surveyors were utilized to establish the planned excavation boundaries and to complete the pre-excavation topographic survey. Grading was completed in order to construct a stone haul road along the eastern edge of the planned excavation area. Figure 2-1 provides photographic documentation of mobilization and site preparations activities. Wire reinforced silt fence was installed between the western border of the excavation area and the Genesee River bank, and orange barrier fencing was installed to demarcate the exclusion zone.

A total of fourteen wells and piezometers located within the planned excavation area were abandoned by grouting each well or piezometer from the bottom to ground surface. SJB Drilling was utilized for the abandonments. Two additional piezometers could not be located for abandonment and were presumed to have been previously sheared off at the ground surface. Figure 2-2 provides the location of the abandoned and presumed damaged monitoring wells and piezometers.

2.2 Area 1 Excavation

Intrusive excavation work began in the northwest corner of Area 1 near abandoned monitoring well MW-2 on November 28, 2007. Cyanide-impacted material was excavated and stockpiled on the eastern edge of Area 1 near the newly constructed haul road where it was accessible for direct loading into trucks. Load-out of material began on November 29, 2007.

Soil excavation continued in the northwestern corner of Area 1 and extended south and east. Initially, the cyanide-impacted material was removed down to an excavation bottom elevation of 395 feet above mean sea level (msl) as planned. Visually impacted material was still evident at this excavation depth. After discussions and concurrence with the NYSDEC project manager, cyanide impacted soil removal efforts continued to just above the water table at an approximate elevation of 391 to 392 feet. Figure 2-3 provides the area and bottom elevation information for Area 1 as of December 7, 2007. Several photographs are also included on Figure 2-3, which document the excavation area conditions at certain depths and locations.

Cyanide impacted soil was still observed in Area 1 on the excavation floor. Therefore, additional material was removed from the floor of Area 1 to an approximate elevation of 390 to 391 feet msl. Figure 2-4 provides the excavation area and depth information as of December 14, 2007. Photographs provided on Figure 2-4 document the excavation floor before and after the removal of the additional material. Standing water can be seen in the area where material was removed below the water table.

In general, the Area 1 excavation was completed to the predetermined northern and eastern limits that were established in the Implementation Plan. The haul road and the leach field to the east and the buried gas line to the north comprised these boundaries. Section 2.5 discusses sample analytical data from the excavation sidewalls in these areas.

The western edge of the excavation was moved approximately 5 feet east of the initial planned location, which was the crest of the bank leading down to the Genesee River. It was not practical to extend the excavation to the crest of the bank because it would have potentially jeopardized the stability of the riverbank, particularly during the time period between the excavation and remobilization for the ISS barrier. Also, visually impacted material was not noted in the western sidewall in Area 1. The final western edge of the excavation in Area 1 is shown on Figure 2-5.

2.3 Area 2 Excavation

The excavation activities continued to move to the south and east in Area 1 as planned reaching the northern edge of Area 2 on December 7, 2007. Excavation operations continued in the northern portion of Area 2 and the eastern portion of Area 1 simultaneously and material from Area 2 was transported to the load-out stockpile located on the eastern edge of Area 1.

Soil removal continued around the gasholder base, which can be seen on Figure 2-5. Tar like material was located on the southern edge of the gasholder base adjacent to the eastern wall of the excavation. Figure 2-5 provides the location, elevations and pictures of this material.

The soil excavation work continued south through Area 2 and the floor elevation of the excavation trended upward, as planned, with an approximate bottom elevation of 392 feet near the gasholder base and 398 feet near the northern edge of the light oil plant structure.

Additional visually impacted purifier waste material was encountered on the eastern sidewall of Area 2. As a result, a portion of the haul road was relocated eastward in order to remove this material to the extent feasible with concurrence from RG&E and NYSDEC. Impacted material excavation activities were concluded on December 28, 2007. Site work restarted on January 3, 2008 and included breaking up the oversized concrete and debris removed from the excavation areas. The final load-out of concrete and debris occurred on January 11, 2008. Figure 2-5 provides the final survey of the excavation areas, which was conducted on January 10, 2008.

2.4 Cyanide Impacted Soil Disposal Volumes

Table 2-1 provides a summary of the tonnage of material sent off-site for disposal. A total of 31,513.22 tons of material was transported off-site, with 23,194.67 tons going to the Waste Management High Acres landfill and 8,185.95 tons going to the Waste Management Mill Seat landfill. A total of 132.6 tons of material from the area surrounding soil boring DP-05 was transported and disposed into the Seneca Meadows landfill. Summary tables providing the daily material shipment information and a CD containing scanned images of the waste disposal manifests are provided in Appendix A.

2.5 Excavation Bottom and Sidewall Sample Results

A total of 45 excavation bottom samples and 30 excavation sidewall samples were collected based on the guidelines specified in the Draft DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2002). Excavation bottom samples were collected at a frequency of approximately one sample per 900 square feet of excavation bottom area to the east side of the planned ISS barrier. The sidewall samples were collected at approximate 30-foot intervals on the northern and eastern edges of the excavated area. The first sidewall sample was collected in the northwest corner of Area 1. The excavation bottom and sidewall sample locations are identified on Figure 2-6.

The samples were collected on December 12, 13 and 20, 2007 and January 3, 2008. During each sampling event, the samples were placed in coolers with ice, kept under chain-of-custody and transported to TestAmerica Laboratories, Inc. in Buffalo, NY for total cyanide analysis. Laboratory analytical reports are provided in Appendix B. Analytical results are summarized in Table 2-2 for the bottom samples and Table 2-3 for the sidewall samples. The following sections provide a discussion of the sample results.

2.5.1 Excavation Bottom Cyanide Sample Results

Excavation bottom samples in Area 1 were collected in an approximate grid pattern with nodes spaced at approximate 30-foot intervals. Samples in the extreme north and south of Area 1 were not located in accordance with the grid pattern due to the irregular shape of the excavation areas. Area 2 excavation bottom samples were located between the planned ISS barrier location and the eastern sidewall.

Of the 45 excavation bottom samples, eight exhibited results below the total cyanide remediation goal of 27 mg/Kg. Sample locations that produced results below the remediation goal are shaded blue on Figure 2-6. The majority of these samples (5 samples) were located in the southern portion of Area 2, and the

remainder of the samples are located on the eastern edge of the excavation directly north of the gasholder base.

Six samples produced results between 27 mg/Kg and 100 mg/Kg, and 29 samples exhibited results between 100 mg/Kg and 1,000 mg/Kg. Two samples were above 1,000 mg/Kg, with the highest excavation bottom sample result as 2,950 mg/Kg.

2.5.2 Excavation Sidewall Cyanide Sample Results

Of the thirty excavation sidewall samples, a total of fourteen were below 27 mg/Kg. These samples were primarily located on the north and northeast sidewalls of Area 1 and along the eastern sidewall in Area 2. Nine additional samples produced results below 100 mg/Kg, and the remaining seven samples were above 100 mg/Kg with the highest sidewall sample result being 309 mg/Kg.

2.6 Overburden Removal in Area 3 and Partial Backfill of Excavated Areas

The initial plan for Area 3 involved removal of the unimpacted overburden material down to an approximate bottom elevation of 400 feet msl in preparation for the ISS barrier installation. During implementation, it was decided to remove the overburden material to a depth of approximately 5 feet bgs or approximately 407 feet msl elevation due to visual indication of impacted soils below that elevation. Six soil samples were collected on December 6, 2007 from three test pits, each approximately 5 feet deep, located in Area 3 to characterize this material for reuse as backfill. Following receipt of the laboratory analytical reports (Appendix C), excavation of the unimpacted overburden material was initiated on December 20, 2007 and completed on January 10, 2008.

The approximate top 5 feet of material down to an approximate elevation of 407 feet msl was removed and transported to Area 1 and the northern portion of Area 2, where it was reused as backfill material. Approximately 2,300 cubic yards of material was removed from Area 3. The backfill operations began in the northeastern corner of Area 1 and the material was pushed westward and south. Unimpacted material from the mound (site areas) located east of the haul road and a few other portions of the site were also relocated and reused as fill material. Plastic sheeting was placed along the northern and eastern excavation sidewalls. Orange fence material was laid on the floor of the excavation in Area 1 to provide a visual demarcation of the excavated floor in Area 1. However, with the expanded ISS activities in Area 1 this demarcation material (orange fence) was incorporated in the ISS columns. The backfill material was sloped from east to west with approximately 4 to 5 feet of material being placed in the eastern portion and approximately 1 foot of material along the western edge where the ISS operations were planned. Figure 2-5 provides the completed Area 3 excavation extent, topography and photographic documentation of the completed overburden removal and backfill operations.

2.7 Health and Safety and Community Air Monitoring

Air monitoring activities were completed in accordance with the NYSDEC approved Community Air Monitoring Plan (CAMP) that was submitted as part of the Phase IV Implementation Plan. Real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the upwind and downwind perimeter of designated work areas was conducted on a daily basis when intrusive activities were occurring and daily CAMP reports were completed and submitted to NYSDEC and RG&E. Electronic copies of the CAMP reports are provided on CD-ROM in Appendix D.

Three MiniRae 2000 datalogging photoionization detectors (PID) and three PDR-1000 portable aerosol monitor/data loggers were used daily when intrusive activities were being conducted. Two meters were placed downwind of the planned work area and one meter was placed upwind for background data collection. These meters were calibrated daily in accordance with the manufacturer's recommendations and set to record data at 15-minute intervals as specified in the CAMP. No exceedances of the action levels specified in the CAMP occurred during these excavation and partial backfill activities.

In addition, no health and safety related issues or incidents occurred. Odors generated from excavation of the impacted material were controlled by the application of BioSolve solution and by covering the impacted material stockpile as specified in the Odor Management Plan (OMP) submitted with the Final Phase III Remedial Design and Phase IV Implementation Plan Report.

3.0 INSTALLATION OF ISS BARRIER, SLURRY WALL AND NAPL COLLECTION TRENCH

3.1 Mobilization and Site Preparation

On April 21, 2008 Sevenson and Geo-Solutions, Inc. began re-mobilization and site set-up activities for completion of the second phase of the Phase IV ISS IRM implementation field work. The majority of the mobilization and site preparation activities were focused on setting up of the grout batch plant on the exposed portion of the concrete gasholder base and physically assembling the ISS auger equipment. The grout plant components included three hoppers to contain the three raw materials of the grout mix (Portland cement, bentonite and slag), a mixing tank, control panels, generator, water storage tanks and various pumps and hoses. A large capacity slag holding tank ("pig") was also brought on-site after initiation of ISS activities in order to increase the storage capacity for the slag and reduce potential downtime resulting from delays in slag deliveries by trucks.

Additional site preparation activities included further grading in Areas 2 and 3. Area 3 was lowered approximately 3 to 4 additional feet and the excavated soil was transported to the elevation transition area between Areas 2 and 3 and placed within the planned ISS footprint. Lowering Area 3 and using the removed material to raise the elevation of the transition area served two main functions. It decreased the severity of the slope in the transition area and it reduced the overall thickness of the ISS columns in Area 3. Figure 3-1 provides the final surveyed surface elevation contours prior to initiation of ISS columns installation activities. Figure 3-2 contains photographic documentation of the site preparation activities.

Other preparatory work included installation of the perimeter Piian misting system for odor control. The Piian pump was placed inside a storage container located at the southwest corner of the training building (north of Area 1). Small diameter flexible hose was run east along the northern exclusion zone fence and south along the crest of the riverbank. Additional hose was run along a portion of the southern fence line under the Smith Street Bridge. Spray nozzles were placed at approximate 20-foot intervals along the length of the flexible hose sections. The Piian system was operated continuously throughout the duration of the project, until site restoration was essentially completed.

3.2 ISS Columns Installation

Mobilization and site preparation activities continued for approximately two weeks and the first ISS column was constructed on May 7, 2008. ISS activities began with Column A-1 located in the northwest corner of the planned ISS area. The general daily sequence of events during the ISS construction portion of the project included utilizing an on-site GPS unit to accurately locate the center points and ground surface elevations for the columns that were planned for construction on that date. The points were marked with pin flags. The auger rig operator and the on-site engineer recorded the ground elevations for the center points in daily logs. The auger rig would then set up over a center point and the operator would enter the starting elevation and the column name into the rig's computer system. The ISS grout plant began mixing the grout in accordance with the mixture determined through the treatability testing described in Section 3.2.1. The water content of the grout was lowered based on the moisture present in the material to be stabilized, while maintaining the established ratio of grout solids and stabilized material. After the grout plant had mixed a sufficient volume of grout and the auger rig was in place, the stabilization operations would commence.

The columns were constructed in general accordance with the guidelines and specifications provided in the Implementation Plan. The grout would be pumped to the mixing head and the auger would begin drilling down and continuously injecting grout until refusal was encountered. If refusal was encountered shallower than anticipated, the auger would be reversed and a stand-by excavator would investigate the column area for the presence of an obstruction such as a large rock or a buried piece of large diameter pipe. The stand-by excavator would remove the obstructions, as necessary, and auguring activities would continue. The stand-by excavator would also manage the swell material generated during the mixing process. The swell would be removed from the drilling area and placed over adjacent completed columns.

The auger rig would complete a minimum of two complete passes from top to bottom for each column and inject the predetermined amount of grout as evenly as practicable over the entire length of the column. The volume of grout for each column was a function of the column height and its location. A and C columns received more grout because they were located on the outside rows. The B column received proportionally less grout due to the overlap with the A and C columns. In accordance with the work plan, the auger was advanced until refusal was met. After the auger rig met refusal, contact with the top of competent bedrock was confirmed (through elevation comparison), and the prescribed amount of grout and mixing passes was confirmed, the column was considered complete. Grout flow to the mixing head would then be stopped and the rig would align on the next column's center point. Column rows were generally completed in an A-C-B pattern with the outside columns being completed before the inner "B" column. Figure 3-3 contains photographic documentation of the ISS construction activities. Table 3-1 provides specific information for the completed columns including the date, time, starting elevation and ending elevation.

The ISS column logs and a figure identifying the column designations are provided in Appendix E. These logs were generated by the auger rig control computer and include information on the start and completion times, amount of grout injected, depth of column, number of vertical passes, rotation speed of the mixing head and the amount of downward force exerted by the rig on the mixing / auger head.

3.2.1 Summary of Treatability Testing and Grout Mix Development

As described in Section 1.1 of this report, laboratory treatability testing was the second phase of the four-phase process identified in the ISS IRM Work Plan. The Phase II IRM ISS Treatability Testing Work Plan was submitted to NYSDEC in September 2005. The objective of the treatability testing program was to develop a site-specific mixture of materials that can be blended *in-situ* (without excavation) with site soils to stabilize and solidify these materials to limit the mobility of tar and/or NAPL from residuals near the riverbank.

A total of fourteen trial mixes were completed during the treatability testing and the results were compared to two design criteria found to be critical to performance at other MGP sites. These two performance criteria are: (1) an unconfined compressive strength (UCS) of 50 PSI or greater at 28 days of testing, and (2) a permeability of equal to or less than 10^{-6} cm/sec. Based on the results of the testing, trial mix No. 13 was selected as the optimal mix. Trial mix No. 13, when injected into the soils, will produce a soil-cement containing approximately 17% water, 5.25% blast furnace slag, 1.75% Portland cement and 0.5% bentonite clay. The *Report Phase II (Treatability Testing) of the Draft IRM Work Plan for In-Situ Stabilization/Solidification to Control NAPL Seeps at the East Station Former MGP Site, Rochester, New York* documented the treatability testing procedures and results.

Following submission and review of the above report by NYSDEC, supplemental treatability testing was deemed necessary in order to determine the potential impact of increased amounts of NAPL-containing soil on the planned ISS grout mix. Additional treatability tests were conducted and documented in the *Report for the Supplemental Testing in Phase II (Treatability Testing) of the Draft IRM Work Plan for In-Situ Stabilization/Solidification to Control NAPL Seeps at the East Station Former MGP Site, Rochester, New York*. The supplemental tests concluded that the previously identified grout mix was sufficient to stabilize the high NAPL content soils from the ISS target area. This was approved by NYSDEC on September 29, 2006.

3.2.2 Area 1

The ground surface elevation in Area 1 ranged from 392.5 to 394.6 and the bottom elevations of the completed columns ranged from 380.4 to 384.6. The subsequent column heights in Area 1 ranged from 7.9 to 13.8 feet. The hard Irondequoit Limestone bottom was prevalent throughout Area 1 and very few obstructions were encountered during the construction of the ISS columns.

3.2.3 Area 2

The ground surface elevation in Area 2 ranged from 394.3 to 400.4 and the bottom elevations of the completed columns ranged from 382.6 to 390.1. The subsequent column heights in Area 2 ranged from 9.1 to 13.0 feet. The Irondequoit limestone bottom was encountered in the northern portion of Area 2 and the more weathered Rochester Shale began to be noticed during drilling activities in the southern portion of Area 2. This transition was expected and identified during previous investigations conducted at the site. The weathered bedrock was identifiable during the drilling operations as a semi-hard material that was penetrated to some extent prior to the ISS auger reaching refusal. This differed from the limestone, which yielded very little continued vertical progress once the hard bottom was encountered. The weathered bedrock was penetrated to the operational limits of the auger rig.

A small cluster of obstructed columns was located in the southern portion of Area 2 and more significant obstructions were encountered west of the gasholder base. Some of the columns in this area were

initially terminated early or skipped. This was due to the space constraints in this area, which precluded access by the stand-by excavator. Figure 3-4 shows these columns as shaded in red. The obstructions were removed once the adjacent columns had solidified enough to permit excavator access to the area. Also, a significant amount of NAPL containing soil was encountered in this area. Some columns were re-constructed at a later date in this area in order to ensure adequate solidification of material and tie-in with adjacent columns. Additional information pertaining to the obstructed and re-stabilized "tie-in" columns is provided in Section 3.2.5.

3.2.4 Area 3

The ground surface elevation in Area 3 ranged from 400.7 to 405.4 and the elevations of the completed columns ranged from 387.1 to 395.9. The subsequent column heights in Area 3 ranged from 8.3 to 17.1 feet. Weathered bedrock continued to be encountered and penetrated to the operational limits of the auger rig in this area. Also the column height increased in the southern most portion of Area 3 near the southern fence line due to a decrease in the elevation of the bedrock. The longest columns of the project were completed in the southern portion of Area 3. This decrease in bedrock elevation was anticipated and was identified during previous investigations.

The southern progression of the ISS columns construction was altered in Area 3 at row 111. At this point, construction activities moved to the southernmost portion of Area 3 and began a northward progression until connection with the completed columns was conducted on June 4, 2008. This change in the construction sequence was necessary due to the access constraints in the southern portion of Area 3.

3.2.5 Obstructed, Tie-in and Reconstructed Columns

Following completion of the ISS barrier installation in Area 3, the columns that were skipped or terminated early due to obstructions were completed. A total of 21 columns required obstruction removal. Table 3-2 provides details pertaining to these columns and they are shaded red or brown (3 obstructed and tie-in columns) on Figure 3-4. The obstructions were removed prior to setting up the auger rig on these locations.

The area of obstructed columns located west of the gasholder base also contained a significant amount of soil with NAPL. While constructing the obstructed ISS columns in this area, 13 additional columns were re-constructed in order to ensure that proper solidification of the material was achieved. This also ensured proper tie-in of the obstructed columns with the previously stabilized material to the north and south. The re-constructed "tie-in" columns are shaded green or brown (3 obstructed and tie-in columns) on Figure 3-4. Additional visually unimpacted soil was added to these columns in the tarry area, as necessary, during installation to ensure enough soil was present to achieve adequate solidification.

In the northern-most portion of Area 1, 19 columns (shaded yellow on Figure 3-4) were reconstructed because the slag utilized in the grout mixture for these columns did not meet the specifications provided in the Implementation Plan. The slag utilized in these columns was of 100 grade instead of 120 grade slag that was specified for the project. These columns were constructed during the first two days of ISS construction activities. The 120 grade slag was supplied from the third day onwards for the project.

3.2.6 Expanded ISS Area

During construction of the primary ISS columns RG&E, with concurrence from NYSDEC, decided to expand the ISS columns construction area in Area 1. A total of 269 additional columns were constructed

in this expanded area. These additional columns are shown on Figure 3-4. Prior to initiating construction of the additional columns, the unimpacted overburden material placed in this portion of Area 1 during the excavation backfill operations was removed and placed just north and east of the gasholder base and outside of the expanded ISS area.

The ISS work in this area was similar to the work previously conducted in Area 1. A total of 13 rows of ISS columns were constructed. The ground surface elevation ranged from 391.1 to 394.7 in this area and refusal elevations ranged from 379.5 to 388.0. The resulting column heights varied from 5.5 to 13.0 feet. The general upward trend in the limestone bedrock elevation as the columns moved from west to east produced shorter length columns on the eastern edge of the expanded area with the northeast corner being the shallowest depths overall.

Following completion of ISS in the expanded area, the surface of the ISS material, which included the swell material, was uniformly graded and inspected by RG&E, Ish Inc. and NYSDEC representatives. The primary purpose of the inspection was to check for the presence of soft spots or areas where stabilization may not have been achieved. All ISS columns construction areas were found to be visually acceptable. Figure 3-5 provides the topographic contours of the ISS area following completion of the ISS construction and final stabilized material grading activities.

Upon completion of the ISS columns, the auger rig was decontaminated, dismantled and demobilized from the site. The grout plant remained at the site in order to supply grout for construction of the cement-bentonite slurry wall and stabilizing the spoils generated during construction of the slurry wall and NAPL collection trench.

3.2.7 ISS Barrier Groundwater Flow Channels

In order to partially alleviate groundwater mounding potentials upgradient (east) of the ISS columns, two groundwater flow channels were excavated in the ISS barrier on August 14, 2008 at the locations shown on Figure 3-5. The channels were constructed to provide drainage areas over the top of the ISS barrier at the approximate pre-construction groundwater elevation (approximately 391 feet) for the area. Photographic documentation of the flow channel construction is provided as Figure 3-6.

The northern swale was the first one constructed. An approximate 45 to 55 feet long by 15 feet wide by 8 feet deep channel was excavated in the ISS barrier. The bottom of the channel elevation was approximately 392 feet in elevation. Approximately 1 foot of cobblestone was placed on the bottom of the channel, covered with geotextile fabric and then backfilled to the original grade with the excavated stabilized material. Groundwater flow was observed passing through the channel at the constructed elevation.

The second channel, completed in Area 2, was approximately 25 feet long by 18 feet wide and 5 feet deep. The same bottom elevation and construction details were utilized for the second channel although no groundwater flow was observed at the time of construction.

3.2.8 QC Information for ISS Activities

Quality control oversight was an important component of the ISS construction activities and was completed in general accordance with the procedures outlined in the ISS Construction Plan submitted as part of the Implementation Plan. Components of the QC activities included routine inspections and

oversight by qualified personnel, material testing and ISS test pit observations. Video recordings of column construction were also obtained.

Routine Inspections and Oversight

Quality control functions were completed in order to ensure that the ISS columns were constructed properly and in accordance with the Phase III approved design. An experienced ISS specialist from Geo-Solutions was on-site during all ISS construction activities and conducted the prescribed quality control, sampling and reporting tasks as identified in the Final Phase III Remedial Design and Phase IV Implementation Plan Report.

Ish Inc.'s oversight engineer monitored the final elevations of the columns and compared them with available information relating to the anticipated top of bedrock elevations in order to ensure that obstructions were not present and that the auger rig was encountering refusal while in contact with the bedrock material. Swell placement and grading were monitored and the planned locations of the columns were periodically checked to verify that the proper placement and overlap of the columns was consistently being achieved.

In addition to the on-site engineer, an independent professional engineer with significant multi-project ISS experience was utilized to periodically review on-site procedures and ensure that the project was being completed in accordance with the approved work plan and general industry standards for this type of work. A memo documenting this independent engineer's inspections and review of the projects QA/QC program is provided in Appendix F.

Section 3.2.5 provides a description of the columns that were re-stabilized as a result of the incorrect slag being utilized during the first two days of ISS construction activities. Other than this instance, no other quality control issues were identified during the ISS construction work.

Sampling and Analysis

ISS material test specimens were collected daily and properly molded and stored on-site. Half of the samples (one every other day) were submitted to the Geotechnics Laboratory in East Pittsburgh, PA for unconfined compressive strength (ASTM D1633) and permeability (ASTM D5084) analysis. The results of these analyses are summarized in Table 3-3 and the laboratory analytical reports are provided in Appendix G. All analyzed samples met the specifications established for the project of a UCS of at least 50 psi and a hydraulic conductivity (or permeability) of no greater that 1×10^{-6} cm/sec.

In addition, multiple samples of the grout mix were collected throughout the day and analyzed on-site by the Geo-Solutions representative for density, pH, temperature and viscosity. These samples were utilized to maintain process control over the grout mixing operation. A compilation of these results is included on the CD-ROM as Appendix H.

ISS Barrier Test Pits

Three test pits were excavated within the primary ISS columns in order to provide information on the subsurface characteristics of the stabilized material and potential groundwater and NAPL infiltration. The locations of the test pits are provided on Figure 3-4. The test pits were excavated on May 28, 2008, June 4, 2008 and June 26, 2008. NYSDEC, RG&E, Ish Inc., Geo-Solutions and Sevenson personnel were present for each test pit excavation. Figure 3-7 provides photographic documentation of the test pits and

video recordings are included in Appendix I. The test pits were excavated down the center columns (B-row) of the primary barrier with an excavator. Each test pit was excavated down to the hard bedrock beneath the columns. The stabilized material was hard and difficult for the excavator to penetrate. Following completion of the test pits, the previously stabilized material was remixed with grout for re-solidification as it was being replaced into the pit.

The first test pit was excavated through columns B-6, B-7 and B-8 in the northern portion of Area 1. The pit was excavated to approximately 11 feet bgs and encountered the hard bedrock layer. No water or NAPL was present in the test pit. A smaller and shallower test pit was excavated outside the ISS wall footprint directly east of the first ISS columns test pit in unstabilized material. Significant groundwater was encountered within a few feet of ground surface, while no water was encountered in the ISS barrier test pit located to the west. Photographs on Figure 3-7 show the orientation of the two test pits.

The second test pit was excavated through columns B-24, B-25 and B-26 in Area 2. This test pit was also dry down to 11.5 feet bgs where the bedrock layer was encountered. The bedrock layer was scraped and penetrated with the excavator rock bucket and water infiltration began entering from the bottom at the ISS interface after the bedrock was breached. NAPL was not encountered in this test pit.

The third test pit was excavated through columns B-111, B-112 and B-113 in Area 3 to a depth of approximately 10 feet bgs. The bedrock was encountered and no free water or NAPL was observed in the stabilized mass.

Video Recordings

Per NYSDEC request, video recordings of columns were completed on a daily basis and are included on DVDs in Appendix I. An effort was made to record at least two columns per day unless construction activities were ceased or inclement weather precluded recording activities. Table I-1 in Appendix I provides a summary of the video documentation activities including the column or portion of the project that was recorded as well as the date and time.

3.2.9 ISS Materials and Volume Summary

ISS construction activities were completed on June 20, 2008. The completed ISS barrier extends along the east bank of the Genesee River for a length of approximately 970 feet and covers a surface area of approximately 36,800 square feet.

A total of 667 ISS columns were constructed and approximately 14,280 cubic yards of impacted soil was stabilized during completion of this phase of the project. Nineteen columns in Area 1 were re-stabilized with the specified slag and thirteen columns were re-stabilized in Area 2 in order to ensure proper "tie-in" and stabilization of the more heavily impacted material in this area.

3.3 Cement-Bentonite Slurry Wall Construction

The cement-bentonite slurry wall construction began following completion of the ISS construction activities. The slurry wall was installed on the inland (east) side of the ISS columns at the location identified on Figure 3-8. The slurry wall was constructed to augment the ISS barrier by potentially penetrating deeper through the weathered bedrock than the ISS auger rig before excavation equipment

refusal was encountered. The deeper penetration provides a more effective barrier to potential NAPL migration through the weathered bedrock underneath the ISS columns.

Construction of the cement-bentonite slurry wall began on June 24, 2008 in the southern most corner of Area 3, and progressed north. An excavator with a specially designed rock-cutting bucket, shown in the photographic documentation of the slurry wall activities on Figure 3-9, was utilized to excavate a trench approximately 2 to 3 feet in width directly adjacent to the eastern edge of the ISS barrier. The trench was extended vertically down to the bedrock until the excavator reached refusal. The bottom of the trench was then scraped to remove as much debris as possible and the depth below current ground surface was measured by the on-site engineer at 5-foot intervals along the trench. This measured depth in the Cement-bentonite slurry trench was compared to the adjacent ISS column depth to make sure that the trench had reached or exceeded the adjacent column's final bottom depth. Table 3-4 provides these measurements and Figure 3-10 depicts the slurry wall final bottom elevation and the adjacent ISS column bottom elevation. The slurry wall depth was consistently at or below the depth of the adjacent ISS barrier.

Cement-bentonite grout for construction of the slurry wall consisted of the same grout mixture as the ISS wall grout and was pumped into the trench via flexible hose running from the grout plant area. The grout helped to keep open the sidewalls of the trench and minimized cave-in. Similar to the ISS construction activities, sampling of the grout mixture was conducted on a daily basis and three samples were submitted to the Geotechnics Laboratory for UCS and permeability analysis. Table 3-3 provides this data and the lab reports are included in Appendix G. The data are consistent with expected results and specifications for the project.

Slurry wall construction progressed north toward the gasholder pad. The material removed to construct the trench, which contained soil and the grout mixture, was transported by an articulated dump truck (moxy) to the northern portion of Area 1 and staged on top of the previously stabilized material. Once the gasholder pad was encountered the slurry wall was widened to occupy the entire space between the gasholder pad foundation and the ISS barrier as depicted on Figure 3-8, with photographic documentation provided on Figure 3-9. When slurry wall construction activities progressed beyond the gasholder pad to the north, operations were relocated to the northernmost extent of the ISS barrier. Construction then progressed southward until connected / merged with the previously completed slurry wall portion on July 11, 2008.

Approximately 1,375 cubic yards of spoil material were excavated to construct the 970 linear foot cement-bentonite slurry wall. The spoil material was stabilized via excavator mixing, which is described in detail in Section 3.5. The slurry wall ranged in height from a minimum of 9.2 feet at the shallowest point in northern Area 1 to a maximum of 19.5 feet at the deepest point in southern Area 3.

Similar to the ISS construction activities, video documentation of the slurry wall activities (Appendix J) was completed on a daily basis depending on construction activity and weather conditions.

3.4 NAPL Collection Trench

3.4.1 Trench Installation

The NAPL collection trench construction activities began on July 15, 2008, directly following completion of the slurry wall and associated spoils stabilization activities. The NAPL collection trench was installed

directly inland (east) of the slurry wall as depicted on Figure 3-11 and in accordance with the specifications provided in the Final Phase III Remedial Design and Phase IV Implementation Plan Report. The trench was excavated in the same manner as the slurry wall, using the specially designed "rock-cutting" excavator bucket to penetrate as deeply as practicable into the bedrock layer. Trench boxes were employed as necessary to keep the sides of the trench open while the excavator completed removing material down to the bedrock layer. Figure 3-12 provides photographic documentation of the NAPL trench construction activities.

NAPL collection trench excavation activities began adjacent to the southern most point of the slurry wall near the Smith Street Bridge in Area 3 and moved north. The trench was excavated to the bedrock or mechanical limits of the excavator and the depth of the trench was measured every 5 linear feet and compared to the adjacent depth measurements for the slurry wall. Figure 3-13 depicts the depths of the slurry wall and trench bottom elevations and Table 3-5 provides a summary of the measurements. The trench bottom elevations were generally similar or slightly lower than the adjacent slurry wall bottom elevations, except in the area immediately north of the gasholder base. An apparent rise in the bedrock in this area caused the trench bottom elevation to be slightly higher that the adjacent slurry wall bottom elevation.

After the final trench excavation depth was achieved, the NAPL monitoring/recovery points / NAPL recovery wells were installed in the trench segment (as described in section 3.4.2 below) and the trench was backfilled with pea gravel to within approximately 2 feet of the land surface. Geotextile fabric was laid over the pea-gravel and backfilling of the trench was completed utilizing soil and stabilized material located adjacent to the trench. Excavated material was transported to Area 1 where it was stabilized with grout via excavator mixing, which is described in Section 3.5.

The trench construction progressed north along the eastern edge of the slurry wall until the southern edge of the gasholder pad / foundation was reached. Trench construction began again on the northern edge of the gasholder pad / foundation and continued north for approximately 65 linear feet. Similar to the slurry wall, the trenching operations were then moved to the northern most point and construction moved south until tie-in was made. The NAPL trench construction was completed on August 7, 2008. A total of 840 linear feet of collection trench was completed, with the width typically varying from 3 to 5 feet. The fill height of the pea-gravel material within the trench ranged from approximately 19 feet in the southern portion of Area 3 to 8 feet in the northern portion of Area 1. Approximately 1,235 cubic yards of material was excavated from the NAPL trench construction work and stabilized via excavator mixing.

Similar to the ISS and slurry wall construction activities, video documentation of the NAPL collection trench installation activities (Appendix K) was completed on a daily basis depending on construction activity and weather conditions.

3.4.2 NAPL Monitoring/Recovery Points

Provisions for the monitoring and removal of NAPL that may accumulate within the trench were made through the installation of 20 NAPL monitoring/recovery points. The design of the points incorporated features of both the vertical points and lateral pipes described in the Implementation Plan, and targeted locations of potential NAPL occurrence and bedrock conditions amenable to NAPL collection.

NAPL monitoring/recovery points were constructed on-site utilizing 8-inch diameter HDPE solid vertical risers with perforated lateral screen sections, "T" connections and end caps. A diagram of a typical NAPL recovery point is provided as Figure 3-14. Two 5-foot length perforated screen sections of pipe were capped on one end and joined laterally to the solid vertical riser pipe via the "T" connection. The riser was left longer than its final above ground height, which was determined after the final site grading.

The adjacent slurry wall bottom elevation measurements were utilized to ensure that the trench was excavated to appropriate depths and for planning the location of the NAPL collection points. Prior to initiating trench construction activities, the bottom elevations of the slurry wall were plotted and 20 low points were identified for potential locations of the NAPL collection points in the trench. These points were used as benchmarks for the field personnel to plan installation of NAPL recovery wells. If a lower elevation point was identified during construction work near a planned location, the final location of the recovery well was adjusted accordingly within the trench. Figure 3-13 presents a plot of the slurry wall final bottom elevations and the NAPL collection trench final bottom elevations, as well as the locations of the NAPL recovery points.

The heights of vertical pipes at the recovery points were finished by cutting them off approximately 4 feet above final grade and installing a 12-inch diameter protective steel surface casing. The casings were approximately 9 feet in total length and were installed with approximately 4 to 5 feet of casing below final grade. 36-inch circular concrete pads, approximately 6 inches thick, were poured around each of the casings at the monitoring/recovery well locations. Table 3-6 provides specific information for each monitoring/recovery point, and the final locations are on identified on Figure 3-11.

3.5 Spoils and Excavated Soil Stabilization

Excavated material from the slurry wall and NAPL collection trench construction work was placed in an articulating dump truck (moxy) and transported from the point of excavation to Area 1 where it was stockpiled prior to being stabilized by mixing with a prescribed amount of grout. The same grout mix that was utilized for the ISS columns and for slurry wall construction was used for the spoils solidification/stabilization.

To ensure that the appropriate grout to spoil/soil mix was attained, a mix ratio of 44 cubic yards of spoil/soil to 3,000 gallons of grout was calculated. This ratio was an increase of about 20 percent of grout over the ISS columns mixture and was intended to compensate for solidification/stabilization of the spoils/soil via excavator bucket mixing. Individual mixing cells were constructed in Area 1 as seen in the photographic documentation on Figure 3-15 and the prescribed cubic yards of spoil material was placed in the cell. The grout was pumped to the cell and thoroughly mixed with the spoils using the excavators. Mixed material within the cell was allowed to solidify for a period (typically four hours) to permit easier handling, prior to the stabilized spoils mixture being transported and placed over the previously stabilized ISS area. One sample of material mixed during spoils stabilization activities was tested for UCS permeability analyses. The results are provided in Appendix G and Table 3-3, and confirm the effectiveness of the mixing process.

Approximately 2,610 cubic yards of material were solidified/stabilized in this manner. Figure 3-16 provides the final elevation contours of the work area following spoils stabilization activities. Similar to the ISS columns, cement-bentonite slurry wall and NAPL trench construction activities, video documentation

of the spoils stabilization (Appendix K) was completed on a daily basis depending on construction activity and weather conditions.

3.6 Health and Safety and Community Air Monitoring

Air monitoring activities were completed in accordance with NYSDEC approved CAMP submitted as part of the Final Phase III Remedial Design and Phase IV Implementation Plan Report. Real-time monitoring for VOCs and particulates (i.e., dust) at the upwind and downwind perimeter of designated work areas was conducted on a daily basis when intrusive activities were occurring and daily CAMP reports were completed and submitted to NYSDEC. Electronic copies of the CAMP reports are provided in Appendix L.

Three MiniRae 2000 datalogging PIDs and three PDR-1000 portable aerosol monitor/data loggers were used daily when intrusive activities were being conducted. Two meters were placed downwind of the planned work area and one meter was placed upwind for background data collection. These meters were calibrated daily in accordance with the manufacturer's recommendations and set to record data at 15-minute intervals as specified in the CAMP.

The action level for VOCs was not exceeded at any time. Exceedances of the particulate action level were noted on five occasions during the second phase of IRM activities. These exceedances were attributable to either high moisture content in the air (heavy mist, fog, light rain) or meter malfunction (dirty sensors). Each daily CAMP report for these dates (4-25-08, 4-28-08, 5-2-08, 5-7-08 and 6-24-08) provides an explanation of the potential cause for the exceedance and the subsequent remedy. In most cases the meter was taken out of service and replaced with a new meter. Visible dust was not identified on the dates were the exceedances were noted. NYSDEC and RG&E project managers were immediately informed of these occasional readings and the corrective measures that were taken.

In addition, no health and safety related issues or incidents occurred. Odors generated from impacted material were controlled by the constant use of the Piian misting system, application of BioSolve solution via pressure washer and by covering the impacted material stockpile with plastic.

4.0 SITE RESTORATION

Site restoration and demobilization activities were completed following the well installation work. Community air monitoring was conducted during site restoration work. Electronic copies of the CAMP reports are provided in Appendix L.

4.1 Backfill Source and Quality

The Dolomite Group Ogden pit was chosen by RG&E and Sevenson as the source for backfill material. Sevenson sampled the material and the analytical results are provided in Appendix N. Topsoil for this project came from a stockpile source near Brockport, NY.

4.2 Site Restoration and Demobilization

The areas disturbed during the ISS IRM work were uniformly graded and covered with an orange delineation fabric (as required by NYSDEC) before placing a minimum of 18 inches of compacted imported backfill material followed by placement of a minimum of 6 inches of imported topsoil. This fulfilled NYSDEC's requirement of 2-feet of total imported cover material. Backfill and topsoil thicknesses within the excavation and ISS areas were field verified by the on-site engineer. Photographic documentation of the backfill and surface restoration activities is provided on Figure 4-1.

A riprap lined drainage swale was constructed immediately north of the light oil plant structure to direct storm water runoff from south of the structure to the river. Gabion baskets were placed at the base of the drainage swale, as suggested by NYSDEC, to stabilize the ground fabric and riprap material on the incline surface during periods of high flow.

Disturbed areas outside of the planned excavation and ISS footprint were restored by surface grading and backfill/topsoil placement as necessary to provide a base for re-vegetation. A total of 10,647 tons of imported fill material and 2,324 cubic yards of topsoil were brought to complete the final grading and surface restoration. Following completion of the topsoil placement and rough grading by Sevenson, a landscape subcontractor completed fine grading the topsoil to remove stones with a power rake. Then they hydro seeded the area with a seed and mulch mixture designed to provide quick germination and to establish cover vegetation prior to the onset of colder temperatures. Figure 4-2 provides the final topographic contours following surface restoration.

Other site restoration activities included the installation of two sets of metal gates. The gates were installed at each end of the haul road to restrict vehicular access to the area. Sevenson conducted equipment decontamination and transportation of equipment off-site as needed throughout the final days of the project and the office trailers were removed on September 19, 2008. Photographic documentation of the vegetation cover and site restoration is provided on Figure 4-3.

4.3 Additional Final Grading Activities

Following demobilization in late September 2008 and after heavy rainfall, it became evident that some additional grading and surface water runoff management would be required in order to alleviate surface water ponding in Areas 1 and 3. Sevenson and Ish Inc. developed plans to install an additional drainage swale in Area 1 and to place additional topsoil material in Areas 1 and 3 to alleviate ponding. This plan was approved for implementation by NYSDEC.

Figure 4-4 provides photographic documentation of the fieldwork to construct the riprap drainage swale in Area 1 for surface water runoff management. Field activities began on November 6, 2008 and were completed on November 14, 2008. Initial activities involved mobilization of equipment, removal of ponded water in Area 1, removal and staging of the 6" topsoil layer and construction of a temporary access road. A drainage swale constructed of riprap stone on geotextile fabric and gabion baskets were installed in Area 1 at the approximate location identified on Figure 4-2. Material removed from the riverbank berm (79.45 tons) for construction of the drainage swale was loaded directly into trucks and transported off-site to the Mill Seat landfill on November 11, 2008. The appropriate manifests are provided in Appendix O.

Gabions were placed on a bench of existing riprap material at the riverbank above existing water line and filled with stone. A swale area within an existing low spot in Area 1 was developed by removing existing topsoil and grading the surface toward the berm cutout using a laser level to establish grade. Riprap stone material was placed over geotextile fabric within the swale boxed out area that extended to the gabion baskets at the riverbank. Final activities included regrading of the banks adjacent to the riprap area and the temporary roadway area, the placement and regrading of the 6" topsoil layer and finally grass seed and straw mulch. Demobilization of equipment from the site followed.

No additional topsoil placement or regrading for drainage occurred during this mobilization due to weather and wet soil conditions. The additional placement of topsoil and regrading for drainage in Areas 1 and 3 will be completed in the spring of 2009 or as soon after that as the field conditions permit. Final documentation of this activity will be provided as an Addendum to this report. The approximate locations for placement of the additional topsoil are identified on Figure 4-5.

5.0 TEST PITTING, PERFORMANCE MONITORING AND RECOVERY WELL INSTALLATION

5.1 Test Pitting

Discussions between NYSDEC, RG&E and Ish Inc. during the summer 2008 led to a collective decision to carry out test pitting at the site east of the ISS IRM area to determine potential for NAPL flow and accumulation in the NAPL collection trench to be installed. Seven test pits were excavated during IRM activities to evaluate the potential presence of free-phase, mobile NAPL on the land side of the ISS barrier. The test pit activities occurred on June 4, July 23 and July 24, 2008 at the locations identified on Figure 5-1. Elevation information and observations are summarized in Table 5-1.

5.2 Performance Monitoring Wells and Recovery Wells Installation

Performance monitoring for the ISS IRM was required by NYSDEC. RG&E developed a plan for installation of performance monitoring wells and also for NAPL recovery wells, which was summarized in a letter submitted to NYSDEC on September 4, 2008. A total of 10 monitoring wells and 3 additional NAPL monitoring / NAPL recovery wells were proposed for performance monitoring purposes. After receiving NYSDEC approval, the ten proposed monitoring wells and three recovery wells were installed in September 2008 as the site restoration work was being completed.

Three of the ten monitoring wells (MW-2R, MW-4R and PZ-01R) were installed within the ISS columns to monitor potential NAPL release from the ISS stabilized soil. Five shallow bedrock monitoring wells (DW-1R, MW-3DR, MW-3R, MW-5R and MW-8R) were installed underneath the ISS columns to monitor occurrence of NAPL and water quality.

Based on the information obtained from test pits, two monitoring wells (TPMW-1 and TPMW-2) were installed adjacent to or within previously excavated test pit locations east of the ISS IRM remediation area. These two wells were installed within the overburden material above the bedrock. These two wells will be utilized to monitor for the presence of NAPL to the east of the current ISS construction area as well as to provide additional groundwater quality information upgradient of the ISS IRM area.

The 10 monitoring wells were installed utilizing the same methods that were used during the RI conducted at the site during 1998-1999. Each well was constructed of 2-inch diameter PVC pipe with 0.020-inch slotted screens, with a 5 or 10 foot screened section. Installation data for the wells are given in Table 5.2.

The remaining three monitoring / NAPL recovery wells (RW-21, RW-22 and RW-23) were installed to monitor and remove accumulated NAPL if and when present. RW-21 and RW-22 were installed through the concrete gasholder pad and RW-23 was installed above the bedrock adjacent to or within a previously excavated test pit that contained a significant amount of NAPL. These three NAPL recovery wells were constructed of 6-inch diameter PVC pipe with 0.020-inch slotted screens, and each was installed with a 1-foot sump placed within the bedrock with the bottom of the 10 foot screened interval intersecting the bedrock surface.

Well installation and development activities were conducted from September 8, 2008 to September 18, 2008. Appendix M provides the well completion logs and Table 5-2 provides additional specific information for each well. The final locations for the wells are on Figure 5-2.

Drill cuttings produced during the well installation activities were containerized within 55-gallon drums. Water generated from well installation, development and decontamination activities was stored in poly tanks located onsite. A total of 29 drums and approximately 2,100 gallons of water were produced during this phase of the project. The 29 drums of soil cuttings, 4 drums of oil absorbing booms and approximately 2,100 gallons of water generated from installation, development and decontamination activities for the performance monitoring wells were shipped to Covanta Secure Services on December 23, 2008, for incineration. The non-hazardous manifests, trucking and disposal information are included in Appendix P.

TABLES

TABLE 2-1

TOTAL TONNAGE SUMMARY BY DISPOSAL FACILITY
CYANIDE IMPACTED MATERIAL

East Station Former MGP Site
Rochester, New York

Date	Mill Seat	High Acres	Seneca Meadows	Daily Total
11/29/2007	624.96	639.10	--	1,264.06
11/30/2007	1,104.99	678.45	--	1,783.44
12/3/2007	2,132.42	0.00	--	2,132.42
12/4/2007	640.48	432.23	--	1,072.71
12/5/2007	1,617.71	417.61	--	2,035.32
12/6/2007	2,065.39	432.55	--	2,497.94
12/7/2007	--	2,432.54	--	2,432.54
12/10/2007	--	2,599.13	--	2,599.13
12/11/2007	--	2,704.58	132.60	2,837.18
12/12/2007	--	2,139.58	--	2,139.58
12/13/2007	--	1,520.23	--	1,520.23
12/14/2007	--	2,331.21	--	2,331.21
12/18/2007	--	2,150.05	--	2,150.05
12/19/2007	--	722.18	--	722.18
12/27/2007	--	2,375.12	--	2,375.12
12/28/2007	--	1,319.26	--	1,319.26
1/11/2008	--	300.85	--	300.85
Total	**8,185.95**	**23,194.67**	**132.60**	**31,513.22**

TABLE 2-2

EXCAVATION BOTTOM CYANIDE SAMPLE RESULTS

East Station Former MGP Site
Rochester, New York

Sample ID	A3	A4	A5	A6	A7	A8	A9	A10	A11
Date Sampled	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/20/2007
Cyanide - Total MG/KG	186 J	215 J	2100 J	125 J	91.3 J	62.2 J	113 J	355 J	124

Sample ID	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
Date Sampled	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/20/2007
Cyanide - Total MG/KG	502 J	299 J	2950 J	299 J	435 J	766 J	384 J	222 J	332 J	340

Sample ID	C2	C3	C4	C5	C6	C7	C8	C9	C10
Date Sampled	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007
Cyanide - Total MG/KG	28.1 J	611 J	181 J	169 J	216 J	15.3 J	11.4 J	22.6 J	33.5 J

Sample ID	AB1	AB2
Date Sampled	12/13/2007	12/13/2007
Cyanide - Total MG/KG	167 J	682 J

Sample ID	CD3	CD4	CD5
Date Sampled	12/13/2007	12/13/2007	12/13/2007
Cyanide - Total MG/KG	149 J	104 J	71.6 J

Sample ID	A2-1	A2-2	A2-3	A2-4	A2-5	A2-6	A2-7	A2-8	A2-9	A2-10	A2-11	A2-12
Date Sampled	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	1/3/2008	1/3/2008	1/3/2008	1/3/2008
Cyanide - Total MG/KG	283	174	232	150	246	107	10	37.2	3.8	22.7	26.4	26.8

Note:
J - Indicates an estimated value.

TABLE 2-3

EXCAVATION SIDEWALL CYANIDE SAMPLE RESULTS

East Station Former MGP Site
Rochester, New York

Sample ID	A2SW-1	A2SW-2	A2SW-3	A2SW-4	A2SW-5	A2SW-6	A2SW-7	A2SW-8
Date Sampled	1/3/2008	1/3/2008	1/3/2008	1/3/2008	1/3/2008	1/3/2008	1/3/2008	1/3/2008
Cyanide - Total MG/KG	18.2	10.2 J	1.3	3.9	4.7	1.3	10.3	19.9

Sample ID	ESW-1	ESW-2	ESW-3	ESW-4	ESW-5	ESW-6	ESW-7	ESW-8	ESW-9
Date Sampled	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007
Cyanide - Total MG/KG	34.2	19.1	2.5	8.3	236	109	309	36.3	200

Sample ID	GH-1	GH-2	GH-3	GH-4	GH-5	GH-6	GH-7	GH-8	GH-9
Date Sampled	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007	12/20/2007
Cyanide - Total MG/KG	97.5	130	36.6	33.4	98.1	189	89.1	159	58.5

Sample ID	NSW-1	NSW-2	NSW-3	NSW-4
Date Sampled	12/20/2007	12/20/2007	12/20/2007	12/20/2007
Cyanide - Total MG/KG	1.1	39.8	26.1	4.2

Note:
J - Indicates an estimated value.

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
5/7/08	A1	392.5	384.6	7.9	Re-stabilized on 6-5-08
	C1	394.1	383.7	10.4	Re-stabilized on 6-5-08
	A2	393.2	382.0	11.2	Re-stabilized on 6-5-08
	B1	393.4	384.1	9.3	Re-stabilized on 6-5-08
	A3	393.4	383.0	10.4	Re-stabilized on 6-5-08
	C2	393.4	383.3	10.1	Re-stabilized on 6-5-08
	B2	393.4	382.8	10.6	Re-stabilized on 6-5-08
	A4	393.4	383.1	10.3	Re-stabilized on 6-5-08
	C3	393.4	382.9	10.5	Re-stabilized on 6-5-08
	B3	393.6	382.7	10.9	Re-stabilized on 6-6-08
5/8/08	C4	393.5	382.9	10.6	Re-stabilized on 6-5-08
	B4	393.5	383.1	10.4	Re-stabilized on 6-5-08
	A5	393.5	382.7	10.8	Re-stabilized on 6-5-08
	C5	393.6	382.8	10.8	Re-stabilized on 6-5-08
	B5	393.6	382.6	11.0	Re-stabilized on 6-5-08
	A6	393.5	382.7	10.8	Re-stabilized on 6-5-08
	C6	394.0	383.2	10.8	Re-stabilized on 6-5-08
	B6	393.8	383.0	10.8	Re-stabilized on 6-5-08
	A7	393.0	382.4	10.6	Re-stabilized on 6-20-08
5/9/08	C7	393.8	382.2	11.6	
	B7	393.8	383.7	10.1	
	A8	393.6	382.8	10.8	
	C8	393.6	382.1	11.5	
	B8	394.0	382.9	11.1	
	A9	393.6	382.4	11.2	
	C9	393.9	382.8	11.1	
	B9	394.0	382.2	11.8	
	A10	393.7	382.4	11.3	
	C10	394.1	382.8	11.3	
	B10	394.0	382.9	11.1	
	A11	393.9	382.6	11.3	
	C11	394.0	382.3	11.7	
	B11	394.0	382.5	11.5	
	A12	393.9	382.4	11.5	
5/12/08	C12	393.8	383.1	10.7	
	B12	393.9	382.4	11.5	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	A13	393.7	382.7	11.0	
	C13	393.8	382.7	11.1	
	B13	393.6	382.4	11.2	
	A14	393.7	382.6	11.1	
	C14	393.7	383.1	10.6	
	B14	393.7	382.7	11.0	
	A15	393.4	382.0	11.4	
	C15	393.4	382.4	11.0	
	B15	393.3	382.3	11.0	
	A16	393.4	382.3	11.1	
	C16	393.5	382.6	10.9	
	B16	393.6	382.4	11.2	
	B17	393.7	382.3	11.4	
5/13/08	A17	393.3	380.8	12.5	
	C17	393.6	382.0	11.6	
	A18	393.4	380.8	12.6	
	C18	393.6	381.3	12.3	
	B18	393.6	381.4	12.2	
	A19	393.3	380.9	12.4	
	C19	393.5	381.5	12.0	
	B19	393.6	380.7	12.9	
	A20	393.1	380.9	12.2	
	C20	393.2	381.1	12.1	
	B20	393.1	380.4	12.7	
	A21	393.1	381.2	11.9	
	C21	393.4	381.2	12.2	
	B21	393.4	381.2	12.2	
	A22	393.2	381.3	11.9	
	C22	393.4	381.5	11.9	
	C23	393.5	381.3	12.2	
	B22	393.4	381.5	11.9	
5/15/08	A23	393.2	381.5	11.7	
	B23	393.4	383.1	10.3	
	A24	393.3	382.4	10.9	
	C24	393.1	382.7	10.4	
	B24	393.5	383.3	10.2	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	A25	393.4	383.0	10.4	
	C25	393.6	383.1	10.5	
	B25	393.4	381.7	11.7	
	A26	393.4	381.3	12.1	
	C26	393.5	382.7	10.8	
	B26	393.5	382.4	11.1	
5/19/08	A27	393.5	380.4	13.1	
	C27	393.4	380.9	12.5	
	B27	393.5	383.5	10.0	
	A28	393.4	380.4	13.0	
	C28	393.8	381.2	12.6	
	B28	393.5	380.7	12.8	
	A29	393.6	381.3	12.3	
	C29	393.6	379.8	13.8	
	B29	393.8	380.9	12.9	
	A30	393.5	384.0	9.5	
	C30	393.4	381.4	12.0	
	B30	393.6	382.1	11.5	
	A31	393.3	382.8	10.5	
	C31	393.3	382.7	10.6	
	B31	393.6	383.1	10.5	
	A32	393.7	383.4	10.3	
	C32	393.4	383.4	10.0	
	B32	393.8	383.6	10.2	
	A33	393.6	383.6	10.0	
	C33	393.3	383.3	10.0	
	B33	393.6	383.8	9.8	
	A34	393.6	383.8	9.8	
	C34	393.6	383.3	10.3	
	B34	393.6	383.7	9.9	
	A35	393.5	384.0	9.5	
	C35	393.4	383.9	9.5	
	B35	393.6	383.7	9.9	
5/20/08	A36	393.7	384.1	9.6	
	C36	393.4	384.0	9.4	
	B36	393.6	383.9	9.7	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	A37	393.5	383.6	9.9	
	C37	393.6	384.0	9.6	
	B37	393.7	383.8	9.9	
	A38	393.7	384.0	9.7	
	C38	393.6	384.1	9.5	
	B38	393.8	383.9	9.9	
	A39	393.6	384.2	9.4	
	C39	393.7	383.8	9.9	
	B39	393.9	384.4	9.5	
	A40	393.7	383.7	10.0	
	C40	393.8	384.2	9.6	
	B40	393.9	384.2	9.7	
	A41	393.9	384.2	9.7	
	C41	393.7	384.2	9.5	
	B41	394.0	384.0	10.0	
	A42	394.0	384.0	10.0	
	C42	394.0	384.4	9.6	
	B42	394.0	384.3	9.7	
	A43	394.1	384.2	9.9	
	C43	394.1	384.4	9.7	
	B43	394.0	383.9	10.1	
	A44	394.2	390.7	3.5	Obstruction
	C44	394.2	383.9	10.3	
	B44	394.2	391.2	3.0	Obstruction
	A45	394.3	384.0	10.3	
	C45	394.7	384.4	10.3	
	B45	394.4	391.1	3.3	Obstruction
	A46				Obstruction/Aborted
	C46	394.5	383.6	10.9	
	B46	394.5	383.5	11.0	
	A47		0.0		Obstruction/Aborted
	C47	394.5	384.1	10.5	
	B47	394.4	383.6	10.8	
	A48		0.0		Obstruction/Aborted
	C48	394.6	383.5	11.1	
	B48	394.5	383.3	11.2	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	C49	394.4	383.4	11.0	
5/21/08	A49	394.6	383.3	11.3	
	B49	394.5	383.2	11.3	
	A50	394.5	392.0	2.5	Obstruction
	C50	394.3	382.7	11.6	
	B50	394.4	383.0	11.4	
	A51	394.6	392.4	2.2	Obstruction
	C51	394.5	382.7	11.8	
	B51	394.4	382.6	11.8	
	A52	394.5	392.2	2.3	Obstruction
	C52	394.5	382.9	11.6	
	B52	394.5	382.8	11.7	
	A53	394.7	392.6	2.1	Obstruction
	C53	394.6	382.9	11.7	
	B53	394.7	382.6	12.1	
	C54	394.7	382.6	12.1	
	B54	394.9	382.9	12.0	
	C55	394.9	383.2	11.7	
	B55	395.2	383.1	12.1	
	A56	395.0	382.8	12.2	
	C56	394.9	383.4	11.5	
	B56	395.2	388.3	6.9	Obstruction
	A57	395.1	383.3	11.8	
	Bb56	395.2	383.0	12.2	Completed - Obs. Removed
	C57	395.2	383.8	11.4	
	B57	395.4	383.0	12.4	
	A58	395.2	383.0	12.2	
	C58	395.4	384.2	11.2	
	B58	395.5	383.3	12.2	
	A59	395.6	383.5	12.1	
	C59	395.4	383.9	11.5	
	B59	395.5	383.6	11.9	
	A60	395.7	384.1	11.6	
	C61	395.7	384.1	11.6	
	C60	395.6	384.0	11.6	
5/22/08	B60	395.7	384.1	11.6	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	A61	395.6	383.9	11.7	
	B61	395.6	384.0	11.6	
	A62	395.8	384.2	11.6	
	C62	395.8	384.7	11.1	
	B62	395.8	383.9	11.9	
	A63	395.9	383.6	12.3	
	C63	395.8	384.5	11.3	
	B63	396.0	384.1	11.9	
	D63	396.0	383.1	12.9	
	F63	396.0	384.2	11.8	
	E63	396.0	384.0	12.0	
	A64	396.1	383.2	12.9	
	C64	396.0	385.5	10.5	
	B64	396.4	384.7	11.7	
	A65	396.2	384.8	11.4	
	C65	396.1	385.0	11.1	
	B65	396.2	384.3	11.9	
	A66	396.3	384.5	11.8	
	C66	396.2	384.5	11.7	
	B66	396.3	384.6	11.7	
	A67	396.6	383.7	12.9	
	C67	396.4	384.4	12.0	
	B67	396.5	384.4	12.1	
	A68	396.5	383.8	12.7	
	C68	396.4	383.4	13.0	
	B68	396.7	383.8	12.9	
	A69	396.6	384.1	12.5	
	C69	396.5	385.2	11.3	
	B69	396.7	384.5	12.2	
	A70	396.7	384.4	12.3	
	C70	396.7	384.7	12.0	
5/23/08	B70	396.8	384.7	12.1	
	A71	396.9	384.1	12.8	
	C71	396.7	385.2	11.5	
	B71	397.1	385.3	11.8	
	A72	397.0	384.7	12.3	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	C72	396.7	385.6	11.1	
	B72	397.1	385.7	11.4	
	A73	397.1	385.7	11.4	
	C73	396.8	386.3	10.5	
	B73	397.1	385.6	11.5	
	A74	397.2	385.1	12.1	
	C74	397.0	386.2	10.8	
	B74	397.3	386.0	11.3	
	A75	397.3	385.5	11.8	
5/27/08	C75	397.0	385.9	11.1	
	B75	397.2	386.2	11.0	
	A76	397.5	392.0	5.5	Obstruction
	C76	397.1	386.4	10.7	
	B76	397.4	393.1	4.3	Obstruction
	A77	397.6	385.7	11.9	
	C77	397.3	386.5	10.8	
	B77	397.5	385.9	11.6	
	A78	397.7	384.9	12.8	
	C78	397.4	386.9	10.5	
	B78	397.6	386.3	11.3	
	A79	397.9	385.9	12.0	
	C79	397.6	387.7	9.9	Obstruction
	B79	397.8	386.5	11.3	
	A80	398.0	385.7	12.3	
	C80	397.7	387.9	9.8	Obstruction
	B80	398.0	389.0	9.0	Obstruction
	A81	398.2	385.9	12.3	
	Bb80	398.0	387.0	11.0	Completed - Obs. Removed
	C81	398.0	387.6	10.4	
	B81	398.2	386.7	11.5	
	A82	398.6	386.4	12.2	
	C82	398.2	387.1	11.1	
	B82	398.5	387.3	11.2	
	A83	398.6	386.2	12.4	
	C83	398.4	386.9	11.5	
	B83	398.6	386.1	12.5	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	A84	398.7	386.2	12.5	
	C84	398.6	389.6	9.0	Obstruction
	B84	398.7	394.5	4.2	Obstruction
	A85	398.9	391.9	7.0	Obstruction
	Bb84	398.7	393.9	4.8	Obstruction
5/28/08	Cc84	398.6	389.3	9.3	Completed - Obs. Removed
	Bbb84	398.7	387.8	10.9	Completed - Obs. Removed
	Aa85	398.9	386.6	12.3	Completed - Obs. Removed
	C85	398.7	388.4	10.3	
	B85	399.0	387.4	11.6	
	A86	398.8	387.0	11.8	
	C86	398.9	388.5	10.4	
	A87	399.0	387.7	11.3	
	D86	399.0	388.1	10.9	
	E87	399.1	388.1	11.0	
	A88	399.2	387.3	11.9	
	C88	399.2	390.1	9.1	
	B88	399.3	389.2	10.1	
	A89	399.3	388.5	10.8	
	C89	399.6	389.0	10.6	
	B89	399.9	388.6	11.3	
	A90	400.0	388.5	11.5	
	C90	400.3	388.9	11.4	
	B90	400.4	388.0	12.4	
	A91	400.7	387.6	13.1	
	C91	401.0	389.5	11.5	
	B91	401.0	389.0	12.0	
	A92	401.3	390.8	10.5	
	C92	401.6	390.7	10.9	
	B92	401.8	391.3	10.5	
	A93	401.9	391.8	10.1	
	C93	402.0	390.8	11.2	
	B93	402.2	391.3	10.9	
5/29/08	A94	402.1	392.6	9.5	
	C94	402.1	392.2	9.9	
	B94	402.0	392.3	9.7	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	A95	402.0	393.5	8.5	
	C95	402.0	393.0	9.0	
	B95	401.9	391.6	10.3	
	A96	401.8	392.7	9.1	
	C96	401.9	392.8	9.1	
	B96	401.7	392.2	9.5	
	A97	401.9	391.4	10.5	
	C97	401.9	393.2	8.7	
	B97	401.6	391.6	10.0	
	A98	402.0	392.8	9.2	
	C98	401.9	392.0	9.9	
	B98	402.0	391.1	10.9	
	A99	402.5	393.1	9.4	
	C99	402.2	392.5	9.7	
	B99	402.1	392.5	9.6	
	A100	402.7	393.3	9.4	
	C100	402.7	393.2	9.5	
	B100	402.7	393.1	9.6	
	C101	402.5	393.4	9.1	
	A101	402.8	392.8	10.0	
	C102	402.4	393.3	9.1	
	B101	402.5	393.5	9.0	
	B102	402.7	393.5	9.2	
	A103	402.7	393.4	9.3	
	C103	402.8	393.7	9.1	
	B103	403.0	393.9	9.1	
	A104	403.2	393.7	9.5	
	C104	402.9	393.7	9.2	
	B104	403.3	393.8	9.5	
	A105	403.5	393.9	9.6	
5/30/08	C105	403.2	393.3	9.9	
	B105	403.3	393.5	9.8	
	A106	403.5	393.0	10.5	
	C106	403.4	393.2	10.2	
	B106	403.6	393.1	10.5	
	A107	403.7	392.9	10.8	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	C107	403.7	393.3	10.4	
	B107	403.6	392.4	11.2	
	A108	404.1	393.1	11.0	
	C108	404.0	392.6	11.4	
	B108	404.2	392.1	12.1	
	A109	404.2	392.6	11.6	
	C109	404.4	392.6	11.8	
	B109	404.4	392.9	11.5	
	A110	404.6	392.9	11.7	
	C110	404.5	393.1	11.4	
	B110	404.5	393.5	11.0	
	A111	404.8	393.6	11.2	
6/2/08	A133	404.3	387.7	16.6	
	C133	404.3	387.4	16.9	
	B132	404.1	387.2	16.9	
	A132	404.0	386.9	17.1	
	C132	404.1	387.5	16.6	
	B131	404.2	387.2	17.0	
	A131	404.0	387.1	16.9	
	C131	404.2	388.7	15.5	
	B130	404.6	389.0	15.6	
	A130	404.1	387.7	16.4	
	C130	404.0	388.7	15.3	
	A129	404.3	393.9	10.4	Obstruction
	B129	404.5	389.1	15.4	
	C129	404.8	389.0	15.8	
	A128	404.3	396.0	8.3	Obstruction
	B128	404.4	388.7	15.7	
	C127	404.1	389.3	14.8	
	A127	404.1	388.9	15.2	
	B126	404.4	389.1	15.3	
	A126	404.1	388.5	15.6	
	C126	404.8	390.8	14.0	
6/3/08	D125	404.4	388.6	15.8	
	B125	404.6	389.2	15.4	
	A125	404.4	388.9	15.5	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	C125	404.9	391.4	13.5	
	B124	404.9	391.7	13.2	
	A124	404.6	391.0	13.6	
	C124	404.8	392.9	11.9	
	B123	404.4	392.5	11.9	
	A123	404.5	392.1	12.4	
	C123	404.5	393.9	10.6	
	B122	404.4	393.5	10.9	
	A122	404.2	393.3	10.9	
	C122	404.3	395.0	9.3	
	B121	404.2	394.8	9.4	
	A121	404.5	394.5	10.0	
	C121	404.4	395.9	8.5	
	B120	404.4	395.4	9.0	
	A120	404.6	394.7	9.9	
	C120	404.8	395.4	9.4	
	B119	404.7	395.6	9.1	
	A119	405.2	395.1	10.1	
	C119	405.1	395.3	9.8	
	B118	405.2	395.1	10.1	
	C118	405.2	394.5	10.7	
	A118	405.2	395.2	10.0	
	B116	405.2	394.3	10.9	
	C117	404.9	394.3	10.6	
	D116	405.1	394.3	10.8	
	A116	405.4	394.8	10.6	
	C116	404.8	394.3	10.5	
6/4/08	B115	405.9	395.5	10.4	
	A115	405.7	395.2	10.5	
	C115	405.8	395.1	10.7	
	B114	405.8	394.6	11.2	
	A114	405.8	394.8	11.0	
	C114	405.3	394.5	10.8	
	B113	405.4	395.0	10.4	
	A113	405.3	394.8	10.5	
	C113	405.2	393.9	11.3	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	B112	405.3	395.4	9.9	
	A112	404.9	395.0	9.9	
	C112	405.2	395.3	9.9	
	B111	404.7	394.8	9.9	
	C111	404.6	394.5	10.1	
	Cc80	399.6	386.5	13.1	Completed - Obs. Removed
	Bb80	400.3	388.5	11.8	Completed - Obs. Removed
	Cc79	399.8	388.2	11.6	Completed - Obs. Removed
	Bb76	399.0	386.0	13.0	Completed - Obs. Removed
	Aa76	398.8	385.3	13.5	Completed - Obs. Removed
	Aa55	395.0	381.9	13.1	Tie-in Column
	Aa54	394.9	382.0	12.9	Tie-in Column
	Aa53	394.6	382.5	12.1	Completed - Obs. Removed
	D53	394.6	382.4	12.2	
	Aa52	394.8	382.6	12.2	Completed - Obs. Removed
6/5/08	Aa51	394.4	382.2	12.2	Completed - Obs. Removed
	Aa50	394.8	383.4	11.4	Completed - Obs. Removed
	Aa48	394.6	383.3	11.3	Completed - Obs. Removed
	Cc1	395.1	383.5	11.6	Re-stabilized due to slag
	Aa1	395.1	384.4	10.7	Re-stabilized due to slag
	Bb1	395.3	383.9	11.4	Re-stabilized due to slag
	Cc2	395.1	384.3	10.8	Re-stabilized due to slag
	Ccc2	395.1	383.7	11.4	Re-stabilized due to slag
	Aa2	395.0	382.2	12.8	Re-stabilized due to slag
	Bb2	395.2	382.8	12.4	Re-stabilized due to slag
	Cc3	395.1	382.9	12.2	Re-stabilized due to slag
6/6/08	Aa3	395.0	382.7	12.3	Re-stabilized due to slag
	Bb3	395.1	382.8	12.3	Re-stabilized due to slag
	Cc4	395.1	382.8	12.3	Re-stabilized due to slag
	Aa4	394.8	383.0	11.8	Re-stabilized due to slag
	Bb4	395.2	383.1	12.1	Re-stabilized due to slag
	Cc5	395.2	382.8	12.4	Re-stabilized due to slag
	Aa5	395.1	382.5	12.6	Re-stabilized due to slag
	Bb5	395.4	382.8	12.6	Re-stabilized due to slag
	Cc6	395.3	383.2	12.1	Re-stabilized due to slag
	Aa6	395.3	382.7	12.6	Re-stabilized due to slag
	Bb6	395.3	383.0	12.3	Re-stabilized due to slag

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
EXTENDED AREA					
6/9/08	D1	392.5	381.3	11.2	
	E1	392.4	379.5	12.9	
	F1	392.6	379.6	13.0	
	D2	392.2	380.8	11.4	
	E2	392.4	379.8	12.6	
	F2	392.5	379.5	13.0	
	D3	392.2	380.9	11.3	
	E3	392.3	380.0	12.3	
	F3	392.4	380.2	12.2	
	D4	392.2	383.0	9.2	
	E4	392.2	379.8	12.4	
	F4	392.4	380.3	12.1	
	D5	392.3	381.4	10.9	
	E5	392.3	382.2	10.1	
	F5	392.4	382.5	9.9	
	Dd6	392.3	382.2	10.1	
	E6	392.5	381.8	10.7	
	F6	392.4	381.7	10.7	
	D7	392.3	382.3	10.0	
	E7	392.3	381.5	10.8	
	F7	392.4	381.7	10.7	
	D8	392.2	382.1	10.1	
	E8	392.3	381.3	11.0	
	F8	392.5	382.0	10.5	
	D9	392.5	383.1	9.4	
	E9	392.3	380.7	11.6	
	F9	392.5	382.2	10.3	
	D10	392.4	384.3	8.1	
	E10	392.4	383.1	9.3	
6/10/08	D11	392.3	384.6	7.7	
	D12	392.2	382.3	9.9	
	D13	392.0	384.6	7.4	
	D14	392.0	384.4	7.6	
	D15	392.2	385.1	7.1	
	D16	392.0	381.3	10.7	
	D17	391.9	381.0	10.9	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	D18	391.1	380.0	11.1	
	E11	392.4	382.1	10.3	
	E12	392.4	382.8	9.6	
	E13	392.5	382.7	9.8	
	E14	392.4	382.0	10.4	
	E15	392.2	381.5	10.7	
	E16	392.3	381.7	10.6	
	E17	392.3	381.8	10.5	
	E18	392.3	381.4	10.9	
	F10	392.6	382.4	10.2	
	F11	392.4	382.9	9.5	
	F12	392.3	382.8	9.5	
	F13	392.4	382.7	9.7	
	F14	392.5	383.1	9.4	
	F15	392.6	382.7	9.9	
	F16	392.5	381.8	10.7	
	F17	392.3	381.4	10.9	
	F18	392.4	381.4	11.0	
	G2	392.8	382.0	10.8	
	G3	392.6	382.0	10.6	
	G4	392.6	383.0	9.6	
	G5	392.6	382.0	10.6	
	H2	393.2	382.2	11.0	
	H3	392.9	383.3	9.6	
	H4	392.6	383.4	9.2	
	I3	393.1	382.1	11.0	
	I4	392.8	382.6	10.2	
	I5	392.7	382.9	9.8	
6/11/08	H5	392.6	383.3	9.3	
	G6	392.6	383.1	9.5	
	I6	392.7	382.3	10.4	
	G7	392.6	383.0	9.6	
	H6	392.7	382.3	10.4	
	I7	392.6	382.4	10.2	
	H7	392.6	382.1	10.5	
	G8	392.6	383.3	9.3	
	I8	392.6	382.3	10.3	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	H8	392.7	383.0	9.7	
	G9	392.5	382.7	9.8	
	I9	392.7	382.5	10.2	
	H9	392.7	383.1	9.6	
	G10	392.5	382.2	10.3	
	I10	392.7	382.2	10.5	
	H10	392.6	382.1	10.5	
	G11	392.6	382.7	9.9	
	I11	392.7	382.1	10.6	
	H11	392.7	382.0	10.7	
	G12	392.4	382.7	9.7	
	I12	392.6	381.3	11.3	
	H12	392.4	382.3	10.1	
	G13	392.4	382.5	9.9	
	I13	392.6	382.9	9.7	
	H13	392.5	383.6	8.9	
	G14	392.4	383.0	9.4	
	I14	392.5	382.7	9.8	
	H14	392.6	383.5	9.1	
	G15	392.4	384.3	8.1	
	I15	392.6	382.6	10.0	
	H15	392.5	382.9	9.6	
	G16	392.4	382.9	9.5	
	I16	392.5	383.1	9.4	
	H16	392.5	383.0	9.5	
	G17	392.4	382.3	10.1	
6/12/08	I17	392.5	382.7	9.8	
	H17	392.6	383.9	8.7	
	G18	392.4	382.5	9.9	
	I18	392.4	383.2	9.2	
	H18	392.4	383.3	9.1	
	E19	392.3	381.7	10.6	
	D19	393.3	383.0	10.3	
	F19	392.5	382.0	10.5	
	E20	392.6	381.7	10.9	
	D20	393.0	382.0	11.0	
	F20	392.6	381.1	11.5	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	E21	392.7	382.5	10.2	
	D21	392.7	381.6	11.1	
	D22	393.0	381.9	11.1	
	F21	392.9	382.3	10.6	
	E22	392.8	383.2	9.6	
	F22	392.8	383.3	9.5	
	D23	392.8	383.0	9.8	
	E23	392.7	382.9	9.8	
	E24	392.8	383.1	9.7	
	E25	393.3	383.3	10.0	
	F23	392.6	383.3	9.3	
	F26	393.0	387.5	5.5	
	F24	392.6	383.1	9.5	
	F25	392.6	383.1	9.5	
	Ff26	392.5	384.7	7.8	
	G25	392.6	383.5	9.1	
	G26	392.8	383.8	9.0	
	G19	392.3	381.6	10.7	
	I19	392.6	382.6	10.0	
	G20	392.3	381.2	11.1	
	H19	392.3	381.9	10.4	
	I20	392.5	382.5	10.0	
	G21	392.5	381.5	11.0	
	H20	392.2	383.0	9.2	
	G22	392.6	382.5	10.1	
	I21	392.3	382.9	9.4	
6/13/08	M4	393.2	384.4	8.8	
	N4	393.5	385.8	7.7	
	P4	394.7	388.0	6.7	
	O5	393.8	386.7	7.1	
	M5	393.1	384.1	9.0	
	N5	393.5	385.5	8.0	
	O6	393.9	387.4	6.5	
	M6	393.0	384.1	8.9	
	N6	393.3	385.4	7.9	
	O7	393.5	385.8	7.7	
	M7	392.9	383.9	9.0	

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ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	N7	393.3	385.5	7.8	
	O8	393.8	386.2	7.6	
	M8	393.0	383.5	9.5	
	N8	393.2	385.4	7.8	
	O9	393.4	385.5	7.9	
	M9	393.0	384.2	8.8	
	N9	393.2	384.3	8.9	
	M10	393.0	383.8	9.2	
	N10	393.0	385.2	7.8	
	M11	392.9	384.1	8.8	
6/16/08	N11	393.0	384.3	8.7	
	M12	392.8	384.8	8.0	
	N12	392.8	384.5	8.3	
	M13	392.8	384.6	8.2	
	N13	392.9	384.1	8.8	
	M14	392.8	384.5	8.3	
	M15	392.7	384.5	8.2	
	M16	392.7	384.0	8.7	
	M17	392.7	383.9	8.8	
	M18	392.7	384.0	8.7	
	M19	392.8	383.8	9.0	
	K3	393.4	383.6	9.8	
	L3	393.5	384.3	9.2	
	J3	392.8	381.7	11.1	
	K4	393.2	382.9	10.3	
	L4	393.3	384.3	9.0	
	J4	392.8	382.6	10.2	
	K5	392.9	382.8	10.1	
	L5	393.3	383.9	9.4	
	J5	392.8	382.4	10.4	
	K6	392.8	382.3	10.5	
	J6	392.9	384.5	8.4	
	L6	392.9	384.6	8.3	
	K7	392.8	382.5	10.3	
	L7	392.9	383.4	9.5	
	J7	392.8	384.6	8.2	Not completed this date
6/17/08	Jj7	392.8	383.3	9.5	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	K8	392.9	383.9	9.0	
	L8	393.1	382.8	10.3	
	J8	392.8	384.7	8.1	
	K9	392.8	383.2	9.6	
	L9	393.0	383.1	9.9	
	J9	392.9	382.3	10.6	
	K10	392.7	383.9	9.8	
	L10	392.8	383.1	9.7	
	J10	392.6	383.1	9.5	
	K11	392.6	383.1	9.5	
	L11	392.6	383.6	9.1	
	J11	392.6	383.1	9.5	
	K12	392.7	383.1	9.6	
	L12	392.5	383.4	9.1	
	J12	392.6	383.2	9.4	
	K13	392.5	383.1	9.4	
	L13	392.5	384.3	8.2	
	J13	392.4	382.2	10.2	
	K14	392.6	384.1	8.5	
	L14	392.5	384.1	8.4	
	J14	392.3	382.3	10.0	
	K15	392.5	382.9	9.6	
	L15	392.4	385.8	6.6	
	J15	392.4	383.1	9.4	
	K16	392.5	383.6	8.9	
	L16	392.4	384.2	8.2	
	J16	392.4	384.4	8.2	
	K17	392.3	387.9	8.4	
	L17	392.3	383.9	8.4	
	J17	392.3	384.0	8.3	
	K18	392.4	383.8	8.6	
	J18	392.2	383.8	8.4	
	L18	392.3	383.7	8.6	
	K19	392.4	383.8	8.6	
	L19	392.4	383.3	9.1	
	K20	392.5	394.0	8.5	
	J20	392.6	383.1	9.5	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	G23	392.5	382.5	10.0	
	G24	392.5	383.2	9.3	
	H21	392.2	382.4	9.9	
	H22	392.2	383.4	8.8	
	H24	392.0	383.4	8.6	
	H23	392.3	383.8	8.5	
	J19	392.0	383.5	8.5	
6/18/08	H25	392.2	382.9	9.4	
	H26	392.2	383.3	8.9	
	G27	392.7	383.8	8.9	
	G28	392.5	383.7	8.8	
	G29	392.3	383.4	8.9	
	H27	392.3	383.2	9.1	
	H28	392.3	383.0	9.4	
	H29	392.2	382.3	9.9	
	H30	392.5	384.3	8.2	
	H31	392.7	384.5	8.2	
	L20	392.4	383.7	8.8	
	K21	393.3	385.0	8.3	
	L21	392.6	383.4	9.2	
	J21	392.5	383.3	9.2	
	I22	392.6	384.3	8.3	
	K22	392.3	382.5	9.8	
	L22	392.4	382.5	9.9	
	J22	392.1	383.0	9.1	
	I23	392.1	383.9	8.2	
	K23	392.5	383.7	8.8	
	J23	392.5	383.8	8.7	
	I24	391.8	383.3	8.5	
	K24	392.0	383.4	8.6	
	J24	392.0	382.9	9.1	
	I25	392.0	383.1	8.9	
	K25	392.1	382.6	9.5	
	J25	392.0	382.6	9.4	
	I26	392.0	383.3	8.7	
	K26	392.0	383.0	9.1	
	J26	392.0	382.9	9.1	

TABLE 3-1

ISS COLUMN INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Column	Starting Elevation	Ending Elevation	Depth	Notes
	I27	392.0	383.2	8.8	
	K27	392.0	382.9	9.1	
	J27	391.8	383.0	8.8	
	I28	392.2	383.3	8.9	
	I29	392.3	383.2	9.1	
	J29	391.9	382.9	9.0	
	J28	392.0	382.5	9.5	
6/19/08	J28	392.2	382.8	9.4	
	I30	392.2	382.9	9.4	
	J30	392.2	382.5	9.7	
	I32	392.7	382.6	10.1	
	J31	392.4	382.7	9.8	
	I33	392.6	381.8	10.8	
END OF EXTENDED AREA					
6/19/08	Aa128	405.9	393.5	12.4	Completed - Obs. Removed
	Aa129	406.0	395.6	10.4	Completed - Obs. Removed
	Aa51	395.2	382.9	12.3	Tie-in Column
	Bb51	395.2	383.4	11.8	Tie-in Column
	Aa50	394.8	383.0	11.8	Tie-in Column
	Bb50	395.0	382.7	12.3	Tie-in Column
	Aa49	394.7	382.9	11.8	Tie-in Column
	Bb49	394.8	382.8	12.0	Tie-in Column
	Aa48	394.5	382.7	11.8	Tie-in Column
	Bb48	394.8	383.0	11.8	Tie-in Column
	Aa47	394.6	383.0	11.6	Completed - Obs. Removed
	Bb47	394.5	382.6	11.9	Tie-in Column
	Aa46	394.9	383.3	11.6	Completed - Obs. Removed
	Bb46	394.8	382.9	11.9	Tie-in Column
6/20/08	Aa45	394.8	383.0	11.8	Tie-in Column
	Bb45	394.7	383.0	11.7	Completed - Obs. Removed
	Aa44	394.9	383.3	11.6	Completed - Obs. Removed
	Bb44	394.7	383.3	11.4	Completed - Obs. Removed
	Aa7	396.5	383.3	13.2	Re-stabilized due to slag

TABLE 3-2

OBSTRUCTED, TIE-IN AND
RECONSTRUCTED COLUMNS INFORMATION

East Station Former MGP Site
Rochester, New York

Column ID	Obstructed, Tie-in or Reconstructed Column
A1	Reconstructed column due to slag issue
A2	Reconstructed column due to slag issue
A3	Reconstructed column due to slag issue
A4	Reconstructed column due to slag issue
A5	Reconstructed column due to slag issue
A6	Reconstructed column due to slag issue
A7	Reconstructed column due to slag issue
A44	Obstructed Column
A45	Tie-in Column
A46	Obstructed Column
A47	Obstructed Column
A48	Obstructed Column
A48	Tie-in Column
A49	Tie-in Column
A50	Obstructed Column
A50	Tie-in Column
A51	Obstructed Column
A51	Tie-in Column
A52	Obstructed Column
A53	Obstructed Column
A54	Tie-in Column
A55	Tie-in Column
A76	Obstructed Column
A85	Obstructed Column
A128	Obstructed Column
A129	Obstructed Column
B1	Reconstructed column due to slag issue
B2	Reconstructed column due to slag issue
B3	Reconstructed column due to slag issue
B4	Reconstructed column due to slag issue
B5	Reconstructed column due to slag issue
B6	Reconstructed column due to slag issue
B44	Obstructed Column
B45	Obstructed Column
B46	Tie-in Column
B47	Tie-in Column
B48	Tie-in Column
B49	Tie-in Column
B50	Tie-in Column
B51	Tie-in Column
B56	Obstructed Column
B76	Obstructed Column
B80	Obstructed Column
B84	Obstructed Column (completed on third attempt)
C1	Reconstructed column due to slag issue
C2	Reconstructed column due to slag issue
C3	Reconstructed column due to slag issue
C4	Reconstructed column due to slag issue
C5	Reconstructed column due to slag issue
C6	Reconstructed column due to slag issue
C79	Obstructed Column
C80	Obstructed Column
C84	Obstructed Column

TABLE 3-3

UCS AND PERMEABILITY ANALYTICAL RESULTS

East Station Former MGP Site
Rochester, New York

Sample Date	Sample Designation	Unconfined Compressive Strength		Permeability	
		days	Result (psi)	days	Result (cm/sec)
ISS Columns					
5/7/2008	C2	9	25.71	12	2.0×10^{-6}
5/7/2008	C2	28	157.83	35	5.3×10^{-8}
5/8/2008	B6	8	8.68	11	5.1×10^{-6}
5/8/2008	B6	28	36.83	34	3.0×10^{-6}
5/12/2008	C15	10	58.16	10	5.9×10^{-7}
5/15/2008	C27	13	46.04	13	7.9×10^{-7}
5/15/2008	C27	28	181.81	--	--
5/20/2008	A41	8	77.18	8	4.8×10^{-7}
5/22/2008	B67	12	90.17	12	6.1×10^{-7}
5/22/2008	B67	28	341.54	--	--
5/27/2008	C79	7	265.46	7	2.2×10^{-7}
5/29/2008	C100	12	435.88	12	8.4×10^{-8}
6/2/2008	A130	8	82.38	8	4.7×10^{-7}
6/2/2008	A130	28	356.40	--	--
6/4/2008	C114	7	390.20	7	5.2×10^{-8}
6/4/2008	C114	28	592.75	--	--
6/6/2008	Cc4	14	469.32	11	1.5×10^{-8}
6/10/2008	E17	7	398.42	9	9.3×10^{-7}
6/12/2008	D22	13	279.20	13	8.4×10^{-8}
6/16/2008	J5	10	322.14	10	1.3×10^{-7}
6/18/2008	H30	14	377.05	14	4.8×10^{-7}
6/20/2008	Bb44	11	258.87	11	1.0×10^{-7}
CB Slurry Wall					
6/24/2008	Test #1	8	306.92	8	4.1×10^{-7}
7/2/2008	Test #2	15	372.72	15	3.9×10^{-7}
7/10/2008	Test #3	20	249.94	20	3.5×10^{-8}
Spoils Stabilization					
8/7/2008	BM-1	14	254.29	14	3.1×10^{-7}

Notes:
1. psi - pounds per square inch
2. cm/sec - centimeters per second

TABLE 3-4

CEMENT-BENTONITE SLURRY WALL CONSTRUCTION INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Time	Linear Feet	Adjacent Column	Adjacent Column Bottom Elevation (ft. msl)	Current Surface Elevation (ft. msl)	Slurry Wall Depth (ft. bgs)	Final Slurry Wall Bottom Elevation (ft. msl)	Depth Below Adjacent Column (ft.)
6/24/2008	9:30	5	C133	387.4	406.6	19.50	387.10	0.31
	10:30	15	C133	387.4	406.6	19.25	387.35	0.06
	14:15	20	C130	388.7	406.6	18.25	388.35	0.34
	14:30	35	C127	390.2	406.2	18.50	387.70	2.48
	15:40	45	C121	390.2	406.2	17.00	389.20	0.98
	15:40	55	C125	391.4	406.2	17.00	389.20	2.23
	16:45	65	C124	392.9	406.0	14.00	392.00	0.94
	16:45	75	C122	395.0	406.0	14.00	392.00	3.02
	16:45	80	C122	395.0	406.0	14.00	392.00	3.02
6/25/2008	9:50	90	C121	395.9	406.7	11.25	395.45	0.45
	10:00	95	C120	395.4	406.7	12.00	394.70	0.70
	11:00	100	C119	395.3	406.7	13.00	393.70	1.60
	11:00	105	C118	394.5	406.6	13.00	393.60	0.90
	11:05	110	C118	394.5	406.6	13.00	393.60	0.90
	11:05	115	C117	394.3	406.3	13.00	393.30	1.00
	13:05	120	C117	394.3	406.3	12.50	393.80	0.50
	13:10	125	C116	394.3	406.3	12.50	393.80	0.50
	14:15	130	C114	394.5	405.8	13.00	392.80	1.70
	14:15	135	C114	394.5	405.8	12.50	393.30	1.20
	14:17	140	C114	394.5	405.8	11.75	394.05	0.45
	14:37	145	C113	393.9	405.4	11.75	393.65	0.25
	15:10	150	C112	395.3	405.2	12.00	393.20	2.10
	15:30	155	C112	395.3	405.2	11.80	393.40	1.90
	15:30	160	C111	394.5	404.8	12.40	392.40	2.10
	15:45	165	C110	393.1	404.7	12.90	391.80	1.30
	16:30	170	C110	393.1	404.7	13.10	391.60	1.50
	17:00	175	C109	392.6	404.4	12.90	391.50	1.10
	17:10	180	C109	392.6	404.4	13.30	391.10	1.50
6/26/2008	8:40	185	C108	392.6	404.5	13.00	391.50	1.10
	8:40	190	C107	393.3	404.5	13.00	391.50	1.80
	8:40	195	C107	393.3	404.5	12.10	392.40	0.90
	8:45	200	C106	393.2	404.5	12.30	392.20	1.00
	8:45	205	C105	393.3	404.3	11.50	392.80	0.50
	9:41	210	C105	393.3	404.3	12.00	392.30	1.00
	9:41	215	C104	393.7	404.3	11.50	392.80	0.90
	9:58	220	C103	393.7	404.1	11.50	392.60	1.10
	10:50	225	C103	393.7	404.1	11.50	392.60	1.10
	10:51	230	C102	393.3	404.1	11.25	392.85	0.45
	14:00	235	C102	393.3	404.1	11.00	393.10	0.20
	14:25	240	C101	393.4	404.8	12.00	392.80	0.60
	14:25	245	C100	393.2	404.1	12.00	392.10	1.10
	15:45	250	C99	392.5	404.1	12.60	391.50	1.00
	15:55	255	C99	392.5	404.1	12.10	392.00	0.50
	16:07	260	C98	392.0	404.1	12.80	391.30	0.70
	16:45	265	C97	393.2	403.9	12.70	391.20	2.00
	16:50	270	C97	393.2	403.9	12.00	391.90	1.30
6/30/2008	9:00	275	C95	393.0	403.7	11.00	392.70	0.30
	9:15	280	C95	393.0	403.7	11.50	392.20	0.80
	9:30	285	C94	392.2	403.5	11.50	392.00	0.20
	10:10	290	C94	392.2	403.5	14.00	389.50	2.70
	10:15	295	C93	390.8	403.2	13.50	389.70	1.10
	10:50	300	C93	390.8	403.2	13.00	390.20	0.60
	10:50	305	C92	390.7	403.1	12.60	390.50	0.20
	11:00	310	C92	390.7	403.1	14.75	388.35	2.35
	11:00	315	C91	389.5	402.8	14.25	388.55	0.95
	12:53	320	C91	389.5	402.8	14.50	388.30	1.20
	13:17	325	C90	388.9	402.4	14.00	388.40	0.50
	14:00	330	C89	389.0	401.9	14.00	387.90	1.10
	14:10	335	C88	390.1	401.7	13.50	388.20	1.90
	15:00	340	C88	390.1	401.7	12.75	388.95	1.15
	15:15	345	C86	388.5	401.4	13.25	388.15	0.35
	15:40	350	C85	388.4	401.1	13.50	387.60	0.80

TABLE 3-4

CEMENT-BENTONITE SLURRY WALL CONSTRUCTION INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Time	Linear Feet	Adjacent Column	Adjacent Column Bottom Elevation (ft. msl)	Current Surface Elevation (ft. msl)	Slurry Wall Depth (ft. bgs)	Final Slurry Wall Bottom Elevation (ft. msl)	Depth Below Adjacent Column (ft.)
	16:10	355	C85	388.4	401.1	13.00	388.10	0.30
	16:20	360	C84	389.6	400.8	12.75	388.05	1.55
	16:50	365	C83	386.9	400.8	14.00	386.80	0.10
	16:55	370	C83	386.9	400.8	14.00	386.80	0.10
7/1/2008	10:30	375	C82	387.1	400.3	13.50	386.80	0.30
	10:30	380	C82	387.1	400.3	13.50	386.80	0.30
	10:55	385	C81	387.6	400.5	13.25	387.25	0.35
	11:45	390	C81	387.6	400.5	13.50	387.00	0.60
	11:45	395	C80	387.9	400.8	13.00	387.80	0.10
	12:00	400	C79	387.7	400.3	13.00	387.30	0.40
	13:00	405	C78	386.9	399.7	13.00	386.70	0.20
	13:00	410	C78	386.9	399.7	13.00	386.70	0.20
	13:00	415	C77	386.5	399.6	13.25	386.35	0.15
	13:00	420	C76	386.4	399.3	13.75	385.55	0.85
	13:00	425	C76	386.4	399.3	14.00	385.30	1.10
	14:00	430	C75	385.9	399.0	13.50	385.50	0.40
	14:00	435	C75	385.9	399.0	13.50	385.50	0.40
	14:30	440	C74	386.2	398.5	12.75	385.75	0.45
	14:45	445	C73	386.3	398.4	12.50	385.90	0.40
	15:15	450	C73	386.3	398.4	13.75	384.65	1.65
	15:30	455	C72	385.6	398.5	13.75	384.75	0.85
	15:30	460	C72	385.6	398.5	14.00	384.50	1.10
	16:00	465	C71	385.2	398.5	14.00	384.50	0.70
	16:00	470	C70	384.7	398.1	13.75	384.35	0.35
	16:00	475	C70	384.7	398.1	14.00	384.10	0.60
	16:30	480	C69	385.2	398.0	14.00	384.00	1.20
	16:30	485	C68	383.4	397.7	14.50	383.20	0.20
	16:35	490	C67	384.4	397.4	13.75	383.65	0.75
7/2/2008	9:00	495	C67	384.4	397.4	13.50	383.90	0.50
	9:45	500	C66	384.5	396.9	13.00	383.90	0.60
	10:45	505	C66	384.5	396.9	13.50	383.40	1.10
	11:00	510	C65	385.0	396.4	12.50	383.90	1.10
	11:30	515	C65	385.0	396.4	11.50	384.90	0.10
	11:30	520	C64	385.5	396.0	11.50	384.50	1.00
	13:10	525	C63	384.5	396.0	13.50	382.50	2.00
	13:10	530	C63	384.5	396.0	12.25	383.75	0.75
	14:00	535	C62	384.7	396.2	13.50	382.70	2.00
	14:00	540	C62	384.7	396.2	13.50	382.70	2.00
	14:00	545	C61	384.1	396.2	12.50	383.70	0.40
	14:00	550	C61	384.1	396.2	14.00	382.20	1.90
	15:30	555	C60	384.0	396.2	14.50	381.70	2.30
	15:45	560	C60	384.0	396.2	14.50	381.70	2.30
	16:45	565	C59	383.9	396.2	15.00	381.20	2.70
	16:45	570	C59	383.9	396.2	15.00	381.20	2.70
	16:45	575	C58	384.2	396.2	14.75	381.45	2.75
7/7/2008	8:13	580	C57	383.3	396.0	14.25	381.75	1.55
	8:13	585	C56	383.4	395.9	14.25	381.65	1.75
	8:50	590	C55	383.2	395.8	14.70	381.10	2.10
	8:50	595	C54	382.6	396.2	14.90	381.30	1.30
	9:52	600	C53	382.9	395.8	15.50	380.30	2.60
	10:05	605	C52	382.9	396.0	15.25	380.75	2.15
	10:05	610	C52	382.9	396.0	15.25	380.75	2.15
	10:44	615	C51	382.7	396.0	15.30	380.70	2.00
	10:44	620	C50	382.7	395.7	15.25	380.45	2.25
	14:11	625	C50	382.7	395.7	15.30	380.40	2.30
	14:11	630	C49	383.3	395.5	15.25	380.25	3.05
	15:08	635	C48	383.5	395.5	15.50	380.00	3.50
	15:19	640	C47	384.1	395.0	14.40	380.60	3.50
	15:24	645	C47	384.1	395.0	14.25	380.75	3.35
7/8/2008	8:07	650	C46	383.6	394.8	13.50	381.30	2.30
	8:07	655	C46	383.6	394.8	13.50	381.30	2.30
	8:33	660	C45	384.4	394.8	14.00	380.80	3.60

TABLE 3-4

CEMENT-BENTONITE SLURRY WALL CONSTRUCTION INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Time	Linear Feet	Adjacent Column	Adjacent Column Bottom Elevation (ft. msl)	Current Surface Elevation (ft. msl)	Slurry Wall Depth (ft. bgs)	Final Slurry Wall Bottom Elevation (ft. msl)	Depth Below Adjacent Column (ft.)
	8:33	665	C45	384.4	394.8	13.25	381.55	2.85
	9:04	670	C44	383.9	394.8	12.25	382.55	1.35
	9:04	675	C43	384.4	395.1	12.00	383.10	1.30
	9:04	680	C42	384.4	394.5	11.50	383.00	1.40
	9:33	685	C42	384.4	394.5	11.40	383.10	1.30
	9:33	690	C41	384.4	394.6	11.90	382.70	1.70
	11:05	695	C40	384.2	394.7	12.50	382.20	2.00
	11:05	700	C40	384.2	394.7	12.70	382.00	2.20
	11:05	705	C39	383.8	395.1	12.50	382.60	1.20
	11:05	710	C39	383.8	395.1	12.50	382.60	1.20
	13:15	715	C38	384.1	395.0	12.80	382.20	1.90
	13:15	720	C38	384.1	395.0	13.50	381.50	2.60
	13:30	725	C37	384.0	395.1	13.30	381.80	2.20
	13:30	730	C37	384.0	395.1	13.00	382.10	1.90
7/11/2008	9:00	735	C35	383.9	394.4	12.30	382.10	1.80
	8:35	740	C35	383.9	394.4	13.30	381.10	2.80
	8:35	745	J31	382.7	394.9	12.60	382.30	0.40
7/10/2008	15:36	750	J31	382.7	394.4	12.50	381.90	0.80
	15:36	755	J31	382.7	394.4	12.50	381.90	0.80
	15:36	760	J31	382.7	394.4	12.60	381.80	0.90
	14:35	765	J30	382.5	394.9	12.90	382.00	0.50
	14:30	770	J30	382.5	394.9	12.60	382.30	0.20
	14:05	775	J30	382.5	394.9	12.80	382.10	0.40
	14:05	780	K27	382.7	394.0	12.70	381.30	1.40
	13:20	785	K27	382.7	394.0	12.50	381.50	1.20
	13:10	790	K27	382.7	394.0	12.90	381.10	1.60
	13:05	795	K27	382.7	394.0	12.90	381.10	1.60
	13:05	800	K26	383.0	394.6	12.30	382.30	0.70
	12:50	805	K26	383.0	394.6	12.20	382.40	0.60
	12:50	810	K26	383.0	394.6	13.10	381.50	1.50
	12:35	815	K26	383.0	394.6	12.90	381.70	1.30
	12:35	820	L22	383.4	394.6	12.80	381.80	1.60
	10:05	825	L22	383.4	394.6	12.70	381.90	1.50
	9:10	830	L22	383.4	394.6	12.50	382.10	1.30
	9:05	835	L22	383.4	394.6	12.50	382.10	1.30
	9:00	840	L21	383.4	394.6	11.40	383.20	0.20
	9:00	845	L21	383.4	394.6	11.40	383.20	0.20
	8:50	850	L21	383.4	394.6	11.50	383.10	0.30
7/9/2008	15:55	855	M18	384.0	394.9	11.50	383.40	0.60
	15:55	860	M17	383.9	394.9	11.70	383.20	0.70
	15:55	865	M17	383.9	394.9	12.20	382.70	1.20
	15:02	870	M16	384.0	394.9	11.30	383.60	0.40
	15:02	875	M16	384.0	394.9	11.50	383.40	0.60
	15:02	880	M16	384.0	394.9	11.40	383.50	0.50
	14:40	885	N13	384.1	395.0	11.50	383.50	0.60
	14:40	890	N13	384.1	395.0	11.40	383.60	0.50
	14:35	895	N12	384.5	395.1	11.20	383.90	0.60
	14:35	900	N12	384.5	395.1	11.00	384.10	0.40
	14:30	905	N11	384.3	395.0	11.70	383.30	1.00
	14:30	910	N11	384.3	395.0	11.50	383.50	0.80
	13:05	915	O9	385.5	395.2	10.50	384.70	0.80
	13:00	920	O9	385.5	395.2	10.40	384.80	0.70
	13:00	925	O9	385.5	395.2	10.40	384.80	0.70
	12:32	930	O8	386.2	395.3	10.50	384.80	1.40
	12:32	935	O8	386.2	395.3	10.20	385.10	1.10
	12:32	940	O7	385.8	395.5	10.00	385.50	0.30
	11:50	945	O7	385.8	395.5	10.50	385.00	0.80
	11:50	950	P4	385.8	396.0	9.80	386.20	-0.40
	11:35	955	P4	388.0	396.0	10.80	385.20	2.80
	11:30	960	P4	388.0	396.0	10.00	386.00	2.00
	11:15	965	P4	388.0	396.0	9.20	386.80	1.20
	11:15	970	P4	388.0	396.0	9.20	386.80	1.20

TABLE 3-5

NAPL COLLECTION TRENCH CONSTRUCTION INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Time	Linear Feet	Slurry Wall Bottom Elevation (ft. msl)	Current Surface Elevation (ft. msl)	Collection Trench Depth (ft. bgs)	Final Collection Trench Bottom Elevation (ft. msl)	Depth Below Slurry Wall (ft.)	Recovery Well ID
7/15/2008	11:00	0	387.1	406.6	19.65	386.95	0.15	RW-1
	11:00	5	387.1	406.6	19.65	386.95	0.15	
	11:00	10	388.4	406.6	18.50	388.10	0.30	
	12:30	15	387.4	406.6	19.30	387.30	0.10	
	12:30	20	388.6	406.2	18.10	388.10	0.50	
	12:45	25	387.7	406.2	18.50	387.70	0.00	
	13:45	30	387.7	406.2	18.50	387.70	0.00	
	14:50	35	387.7	406.2	18.50	387.70	0.00	
	15:03	40	389.2	406.2	17.10	389.10	0.10	RW-2
	15:31	45	389.2	406.2	17.25	388.95	0.25	
7/16/2008	9:07	50	389.2	407.9	18.70	389.20	0.00	
	9:07	55	389.2	407.9	18.70	389.20	0.00	
	9:39	60	392.0	407.9	16.30	391.60	0.40	
	10:04	65	392.0	407.9	16.50	391.40	0.60	
	11:11	70	392.0	407.9	16.30	391.60	0.40	
	11:47	75	392.0	407.6	16.30	391.30	0.70	
	11:50	80	392.0	407.6	16.30	391.30	0.70	
	13:20	85	392.0	407.6	16.30	391.30	0.70	
	14:21	90	395.5	407.9	13.00	394.90	0.55	
	14:21	95	394.7	406.9	13.00	393.90	0.80	
	14:52	100	393.7	406.6	13.20	393.40	0.30	
7/17/2008	8:45	105	393.6	406.5	13.30	393.20	0.40	
	8:45	110	393.6	406.5	15.00	391.50	2.10	
	9:50	115	393.3	406.4	15.00	391.40	1.90	RW-3
	11:01	120	393.8	406.4	15.00	391.40	2.40	
	11:01	125	393.8	406.3	13.50	392.80	1.00	
	11:40	130	392.8	405.7	13.20	392.50	0.30	
	11:59	135	393.3	405.7	12.90	392.80	0.50	
	11:59	140	394.1	405.7	12.90	392.80	1.25	
	13:30	145	393.6	405.3	12.00	393.30	0.30	
7/18/2008	8:05	150	393.2	405.0	12.50	392.50	0.70	
	8:05	155	393.4	405.0	12.50	392.50	0.90	
	8:55	160	392.4	404.9	13.00	391.90	0.50	
	9:32	165	391.8	404.7	13.50	391.20	0.60	
	10:11	170	391.6	404.7	13.50	391.20	0.40	
	11:32	175	391.5	404.7	14.00	390.70	0.80	
	11:36	180	391.1	404.7	13.80	390.90	0.20	RW-4
	11:36	185	391.5	404.5	13.20	391.30	0.20	
7/21/2008	9:28	190	391.5	404.6	13.10	391.50	0.00	
	9:28	195	392.4	404.6	12.50	392.10	0.30	
	9:47	200	392.2	404.6	12.40	392.20	0.00	
	10:26	205	392.3	404.3	12.00	392.30	0.00	RW-5
	10:26	210	392.8	404.3	11.70	392.60	0.20	
	10:41	215	392.8	404.2	11.80	392.40	0.40	
	10:41	220	392.6	404.1	11.9	392.20	0.40	
	13:36	225	392.6	404.1	11.50	392.60	0.00	
	13:36	230	392.9	403.9	11.20	392.70	0.15	
	14:01	235	393.1	403.9	10.90	393.00	0.10	
	16:07	240	392.8	404.2	11.40	392.80	0.00	
	16:02	245	392.1	404.3	12.25	392.05	0.05	
	16:14	250	391.5	404	12.60	391.40	0.10	
	16:14	255	392.0	404	12.00	392.00	0.00	
7/22/2008	11:57	260	391.3	404	12.70	391.30	0.00	
	12:00	265	391.2	403.8	12.80	391.00	0.20	RW-6
	12:00	270	391.9	403.8	12.00	391.80	0.10	
	14:27	275	392.7	403.5	11.80	391.70	1.00	
	14:27	280	392.2	403.5	11.80	391.70	0.50	
	14:27	285	392.0	403.1	11.80	391.30	0.70	
	15:38	290	389.5	403.1	14.30	388.80	0.70	RW-7
	15:38	295	389.7	403	14.40	388.60	1.10	
	15:40	300	390.2	403	14.00	389.00	1.20	

TABLE 3-5

NAPL COLLECTION TRENCH CONSTRUCTION INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Time	Linear Feet	Slurry Wall Bottom Elevation (ft. msl)	Current Surface Elevation (ft. msl)	Collection Trench Depth (ft. bgs)	Final Collection Trench Bottom Elevation (ft. msl)	Depth Below Slurry Wall (ft.)	Recovery Well ID
7/23/2008	9:56	305	390.5	402.5	12.50	390.00	0.50	
	9:56	310	388.4	402.5	14.15	388.35	0.00	
	10:29	315	388.6	402.2	14.2	388.00	0.55	
	10:29	320	388.3	402.2	14.00	388.20	0.10	
	13:47	325	388.4	402.1	14.00	388.10	0.30	
	13:52	330	387.9	401.9	14.00	387.90	0.00	RW-8
	13:57	335	388.2	401.8	13.60	388.20	0.00	
7/25/2008	8:30	340	389.0	401.8	13.20	388.60	0.35	
	8:50	345	388.2	401.5	13.35	388.15	0.00	
	11:04	350	387.6	401.3	13.70	387.60	0.00	
	11:25	355	388.1	401.3	13.20	388.10	0.00	
	11:25	360	388.1	400.1	12.40	387.70	0.35	
	11:42	365	386.8	400.7	13.90	386.80	0.00	
	12:57	370	386.8	400.7	13.90	386.80	0.00	
	12:57	375	386.8	400.7	13.90	386.80	0.00	RW-9
	13:37	380	386.8	400.5	13.70	386.80	0.00	
	13:37	385	387.3	400.5	13.25	387.25	0.00	
	14:49	390	387.0	400.1	13.10	387.00	0.00	
7/28/2008	9:00	395	387.8	400.1	13.00	387.10	0.70	
	9:30	400	387.3	399.8	13.00	386.80	0.50	
	10:30	405	386.7	399.6	13.00	386.60	0.10	
	11:00	410	386.7	399.6	13.00	386.60	0.10	
	11:00	415	386.4	399.5	13.25	386.25	0.10	
	12:30	420	385.6	399.2	13.75	385.45	0.10	
	12:30	425	385.3	399.2	14.00	385.20	0.10	RW-10
	12:30	430	385.5	399.2	13.75	385.45	0.05	
	14:00	435	385.5	399.2	13.75	385.45	0.05	
	14:00	440	385.8	398.9	13.25	385.65	0.10	
	16:00	445	385.9	398.7	13.00	385.70	0.20	
	16:00	450	384.7	398.7	14.20	384.50	0.15	
7/29/2008	9:30	455	384.8	398.7	14.00	384.70	0.05	
	9:30	460	384.5	398.7	14.25	384.45	0.05	
	10:30	465	384.5	398.5	14.00	384.50	0.00	
	10:30	470	384.4	398.5	14.25	384.25	0.10	
	11:00	475	384.1	398.5	14.50	384.00	0.10	
	11:00	480	384.0	398.3	14.50	383.80	0.20	
	11:00	485	383.2	398.3	15.50	382.80	0.40	RW-11
	11:00	490	383.7	397.7	14.25	383.45	0.20	
	15:15	495	383.9	397.7	14.00	383.70	0.20	
	15:15	500	383.9	397.7	14.25	383.45	0.45	
	15:15	505	383.4	397.7	14.75	382.95	0.45	RW-12
	15:15	510	383.4	397.7	14.75	382.95	0.45	
7/30/2008	12:00	635	395.1	381.3	13.25	381.85	-0.55	
	12:00	640	395.1	381.3	13.25	381.85	-0.55	RW-13
	12:00	645	395.1	381.3	12.00	383.10	-1.80	
	12:00	650	395.6	381.3	11.75	383.85	-2.55	
	13:15	655	395.6	381.3	12.25	383.35	-2.05	
	13:15	660	395.6	380.8	12.00	383.60	-2.80	
	14:20	665	395.6	381.5	11.00	384.60	-3.10	
	14:20	670	395.6	382.5	12.00	383.60	-1.10	
	15:00	675	395.6	383.1	13.00	382.60	0.50	
	16:00	680	395.6	383.0	13.00	382.60	0.40	
	16:00	685	395.6	383.1	12.50	383.10	0.00	
7/31/2008	9:00	690	395.6	382.7	13.00	382.60	0.10	
	9:00	695	395.6	382.2	12.25	383.35	-1.15	
	9:00	700	395.6	382.0	12.50	383.10	-1.10	RW-14
	10:15	705	395.6	383.6	12.50	383.10	0.50	
	10:15	710	395.6	382.6	12.50	383.10	-0.50	
	11:30	715	395.6	382.2	12.50	383.10	-0.90	

TABLE 3-5

NAPL COLLECTION TRENCH CONSTRUCTION INFORMATION

East Station Former MGP Site
Rochester, New York

Date	Time	Linear Feet	Slurry Wall Bottom Elevation (ft. msl)	Current Surface Elevation (ft. msl)	Collection Trench Depth (ft. bgs)	Final Collection Trench Bottom Elevation (ft. msl)	Depth Below Slurry Wall (ft.)	Recovery Well ID
8/7/2008	10:56	720	381.5	395.6	14.10	381.50	0.00	
	10:56	725	381.8	395.6	13.60	382.00	-0.20	
	10:24	730	382.2	396.0	14.10	381.90	0.30	
	10:19	735	382.1	396.0	14.00	382.00	0.10	
	10:19	740	381.1	395.8	14.70	381.10	0.00	
	9:27	745	382.3	395.7	13.40	382.30	0.00	
	9:23	750	381.9	395.7	13.80	381.90	0.00	
	9:05	755	381.9	395.7	13.80	381.90	0.00	
8/6/2008	16:15	760	381.8	395.7	14.00	381.70	0.10	
	16:15	765	382.5	395.7	13.20	382.50	0.00	
	15:45	770	382.3	395.7	13.40	382.30	0.00	RW-15
	15:45	775	382.1	395.8	13.70	382.10	0.00	
	15:35	780	381.3	395.9	14.50	381.40	-0.10	
	13:42	785	381.5	395.9	14.70	381.20	0.30	
	13:42	790	381.1	395.9	14.70	381.20	-0.10	
	13:32	795	381.1	395.8	14.20	381.60	-0.50	
	13:09	800	382.3	395.9	13.60	382.30	0.00	RW-16
	10:21	805	382.4	395.9	13.50	382.40	0.00	
	10:21	810	381.5	396.2	14.70	381.50	0.00	
	9:25	815	381.7	396.3	14.60	381.70	0.00	
	9:25	820	381.8	396.5	14.70	381.80	0.00	
	8:28	825	381.9	396.2	14.30	381.90	0.00	RW-17
8/5/2008	16:00	830	382.1	396.2	13.90	382.30	-0.20	
	16:00	835	382.1	396.1	13.80	382.30	-0.20	
	15:35	840	383.2	396.1	12.20	383.90	-0.70	
	15:35	845	383.2	395.1	12.00	383.10	0.10	
	15:35	850	383.1	394.6	12.00	382.60	0.50	
	13:30	855	383.4	394.6	11.20	383.40	0.00	
	13:30	860	383.2	394.6	11.50	383.10	0.10	
	13:30	865	382.7	394.5	12.60	381.90	0.80	
	13:27	870	383.3	396.3	12.70	383.60	-0.30	RW-18
	13:27	875	383.4	396.3	12.70	383.60	-0.20	
8/4/2008	17:10	880	383.5	396.4	12.65	383.75	-0.25	
	17:10	885	383.5	396.4	12.75	383.65	-0.15	
	17:10	890	383.6	396.4	12.75	383.65	-0.05	
	17:05	895	383.9	396.4	12.20	384.20	-0.30	
	17:05	900	384.1	396.3	11.90	384.40	-0.30	
	15:27	905	383.3	396.2	12.50	383.70	-0.40	
	15:27	910	383.5	396.1	12.40	383.70	-0.20	
	14:55	915	384.7	396.1	11.40	384.70	0.00	RW-19
	14:55	920	384.8	396.2	11.40	384.80	0.00	
	15:55	925	384.8	396.2	11.40	384.80	0.00	
	12:15	930	384.8	396.3	11.50	384.80	0.00	
	12:15	935	385.1	396.2	11.10	385.10	0.00	
	12:15	940	385.5	396.3	10.80	385.50	0.00	
	12:10	945	385.0	396.2	11.20	385.00	0.00	
	11:55	950	386.2	395.9	10.30	385.60	0.60	
	11:55	955	385.2	396.0	10.80	385.20	0.00	
	10:39	960	386.0	395.6	9.60	386.00	0.00	RW-20
	9:05	965	386.8	395.5	8.70	386.80	0.00	
	8:50	970	386.8	395.3	8.70	386.60	0.20	

Note:
1. Gap at gasholder occurs approximately between linear feet 510 and 635. Actual trench length is 840 feet.

TABLE 3-6

NAPL MONITORING/RECOVERY POINTS INFORMATION

East Station Former MGP Site
Rochester, New York

Well ID	Top of Well Elevation (feet msl)	Ground Surface Elevation (feet msl)	Total Depth	Well Bottom Elevation (feet msl)
RW-1	412.71	409.7	23.63	389.08
RW-2	412.51	409.7	23.17	389.34
RW-3	412.35	409.5	20.46	391.89
RW-4	411.97	409.2	20.27	391.70
RW-5	411.86	408.9	17.81	394.05
RW-6	410.17	407.3	18.10	392.07
RW-7	410.25	407.3	20.40	389.85
RW-8	407.69	404.9	17.13	390.56
RW-9	406.90	403.9	18.09	388.81
RW-10	405.53	402.5	17.52	388.01
RW-11	404.19	401.2	19.30	384.89
RW-12	403.60	400.9	18.10	385.50
RW-13	404.64	401.5	20.84	383.80
RW-14	401.72	398.8	17.36	384.36
RW-15	401.86	399.1	15.80	386.06
RW-16	402.08	399.2	18.38	383.70
RW-17	402.02	399.3	17.57	384.45
RW-18	402.49	399.5	17.33	385.16
RW-19	402.43	399.5	16.45	385.98
RW-20	406.02	403.1	18.98	387.04

TABLE 5-1

TEST PIT SUMMARY

East Station Former MGP Site
Rochester, New York

Test Pit	Date	Ground Surface Elevation (ft. msl)	Total Depth (ft. bgs)	Bottom Elevation (ft. msl)	Notes
Initial Test Pit	June 4, 2008	411.8	17	394.8	- NAPL saturation beginning at 11' bgs and continuing below total depth of test pit - Test pit located approximately 25' west of PZ-10 - Installed recovery well RW-23
TP-1	July 23, 2008	401.8	15	386.8	- No free phase NAPL encountered
TP-2	July 24, 2008	407.2	16.6	390.6	- Dark stained soil with MGP-like odor at 3' bgs to 6' bgs - Clay layer at 6' bgs with no visual impacts below - Some stained material at bottom of test pit but no free phase NAPL observed
TP-3	July 24, 2008	406.7	9	397.7	- Hit buried pipe at 9' bgs - No NAPL encountered
TP-4	July 24, 2008	412.9	10.9	402	- Dark stained soil with MGP-like odor at 9.5' bgs - Approximately 10.9' to bedrock at bottom of pit, with stained material but no free phase NAPL
TP-5	July 24, 2008	413.5	21.5	392	- Stained material but no free phase NAPL encountered - Installed monitoring well TPMW-2
TP-6	July 24, 2008	416.4	19	397.4	- Stained material but no free phase NAPL encountered - Approximately 19' to refusal (bedrock or concrete) - Installed monitoring well TPMW-1

TABLE 5-2

MONITORING AND RECOVERY WELL INSTALLATION INFORMATION

East Station Former MGP Site
Rochester, New York

Well ID	Location	Basis	Well Construction	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Total Depth (feet bgs)	Screen Length (feet)
MW-2R	Near Former MW-2	ISS Perfomance Monitoring	2"	399.4	401.62	17.74	5'
MW-3DR	Near Former MW-3D (Bedrock)	Shallow Bedrock Water Quality and NAPL Monitoring	2"	399.2	401.02	35.43	10'
DW-1R	Near Former DW-1 (Bedrock)	Shallow Bedrock Water Quality and NAPL Monitoring	2"	399.6	401.04	35.20	10'
MW-4R	Near Former MW-4	ISS Perfomance Monitoring	2"	401.3	403.25	18.18	5'
DW-3R	Near Former DW-3 (Bedrock)	Shallow Bedrock Water Quality and NAPL Monitoring	2"	406.6	407.42	29.04	10'
MW-5R	Near Former MW-5 (Bedrock)	Shallow Bedrock Water Quality and NAPL Monitoring	2"	408.9	410.50	31.22	10'
PZ01R	Near Former PZ-01	ISS Perfomance Monitoring	2"	409.7	411.80	22.46	5'
MW-8DR	Near Former MW-8D (Bedrock)	Shallow Bedrock Water Quality and NAPL Monitoring	2"	410.3	411.63	38.63	10'
TPMW-1	Located at TP-6	NAPL Monitoring and Water Quality	2"	417.0	419.06	27.05	10'
TPMW-2	Located at TP-5	NAPL Monitoring and Water Quality	2"	412.6	414.79	25.14	10'
RW-21	Located on Gasholder Base	NAPL Recovery	6"	401.0	403.25	22.21	10'
RW-22	Located on Gasholder Base	NAPL Recovery	6"	401.0	403.64	24.12	10'
RW-23	Located at Previously Dug Test Pit	NAPL Recovery	6"	411.8	413.72	28.25	10'

FIGURES

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

LEGEND
- NAPL COLLECTION TRENCH
- CEMENT BENTONITE SLURRY WALL
- FORMER STRUCTURE
- ISS PERFORMANCE MONITORING LOCATION
- SHALLOW BEDROCK MONITORING LOCATION
- UPGRADIENT SHALLOW MONITORING LOCATION
- VERTICAL NAPL RECOVERY/MONITORING POINT
- CYANIDE IMPACTED MATERIAL EXCAVATION AREA
- GROUNDWATER FLOW CHANNELS

APPROXIMATE LOCATION OF SWALE AND BERM CUTOUT
GABIONS
EDGE
RIP RAP
DF
MW-3DR
MW-2R
RW-20
RW-19
RW-18
RW-17
RW-16
RW-15
RW-14
DW-1R
RW-13
EDGE OF FOUNDATION
RW-21
RW-22
RW-12
RW-11
MW-4R
RW-10
RW-9
RW-8
RIP-RAP
GABION BASKETS
DW-3R
RW-7
RW-6
RW-5
MW-5R
RW-4
RW-3
PZ01R
RW-2
MW-8DR
RW-1
RW-23
TPMW-2
TPMW-1
CONCRETE BLOCK BUILDING
SEPTIC TANK
M-SCOPE
GRAVEL
C.O.
LEACH FIELD
DOSING CHAMBER
GAS
SEPTIC TANK
CONCRETE BLOCK BUILDING
INSPECTION M.H.
CHLORINE MIX TANK
STONE DRIVEWAY
GRAVEL
M-SCOPE
GAS
GENESEE RIVER
RIVER

NOTE:
WIDTH OF SLURRY WALL AND NAPL COLLECTION TRENCH VARIES AND IS APPROXIMATE.

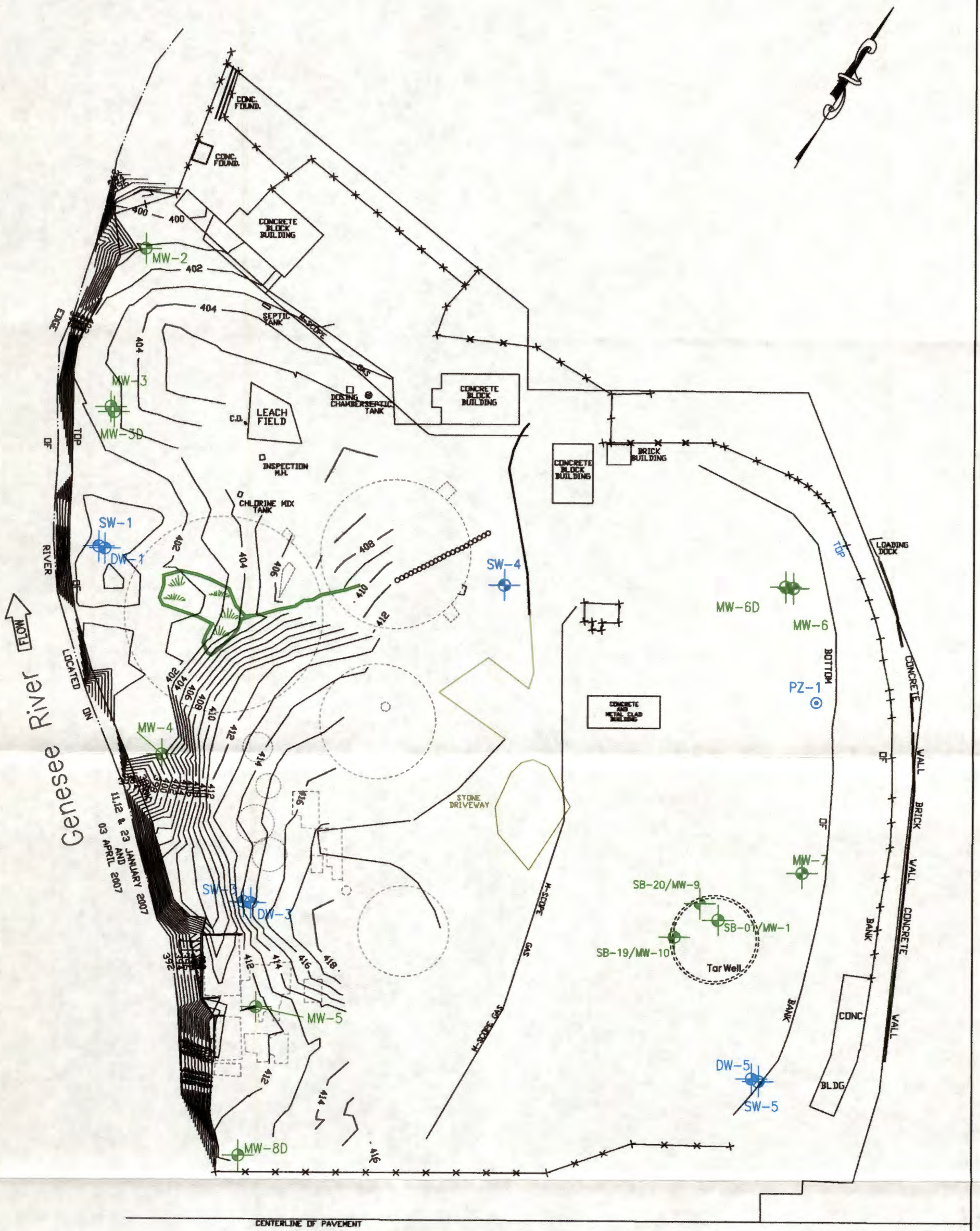
FIGURE ES-1
ROCHESTER GAS & ELECTRIC

SUMMARY OF IRM ACTIVITIES

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 12-12-08 FILE NAME: FIGURE ES-1

ISH, INC. / MTR



LEGEND

- Monitoring Well (Atlantic, 1992)
- Monitoring Well (META, 1998)
- Existing Buildings
- Estimated Location of Former Structures

0 25 50 100 200

Approximate Scale (ft)

1. Base map and survey information completed by META and RG&E.

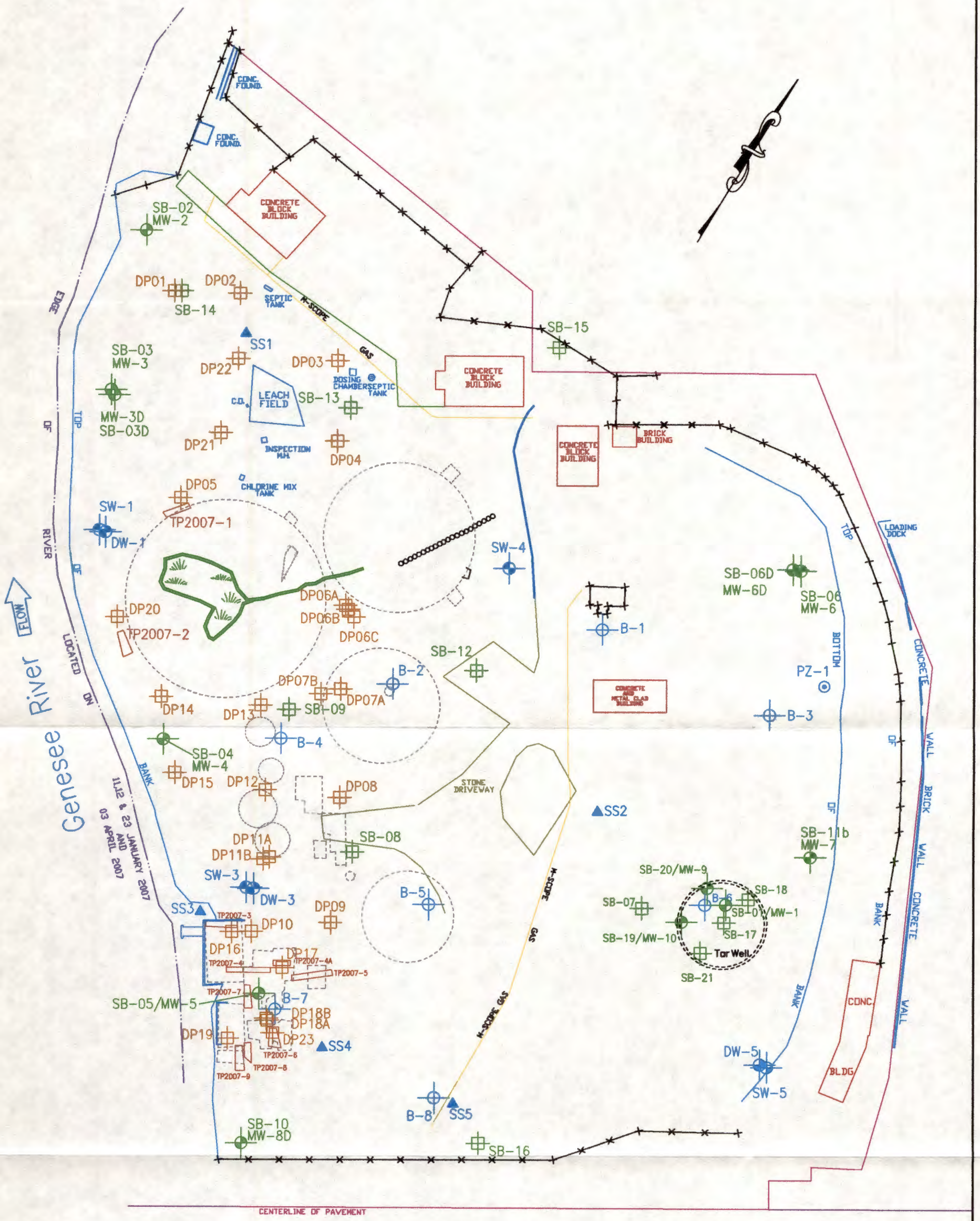
FIGURE 1-1
ROCHESTER GAS & ELECTRIC

SITE MAP PRIOR TO IRM ACTIVITIES

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 9/13/07 FILE NAME: FIGURE 1-1

ISH, INC. / MTR



0 25 50 100 200

Approximate Scale (ft)

LEGEND

- Subsurface Soil Boring (Atlantic, 1992)
- Surface Soil Boring (Atlantic, 1992)
- Monitoring Well (Atlantic, 1992)
- Subsurface Soil Boring (META, 1998)
- Monitoring Well (META, 1998)
- Direct Push Soil Boring (Ish Inc., 2007)
- Test Pit (Ish Inc., 2007)
- Existing Buildings
- Estimated Location of Former Structures

1. Base map and survey information completed by META and RG&E.

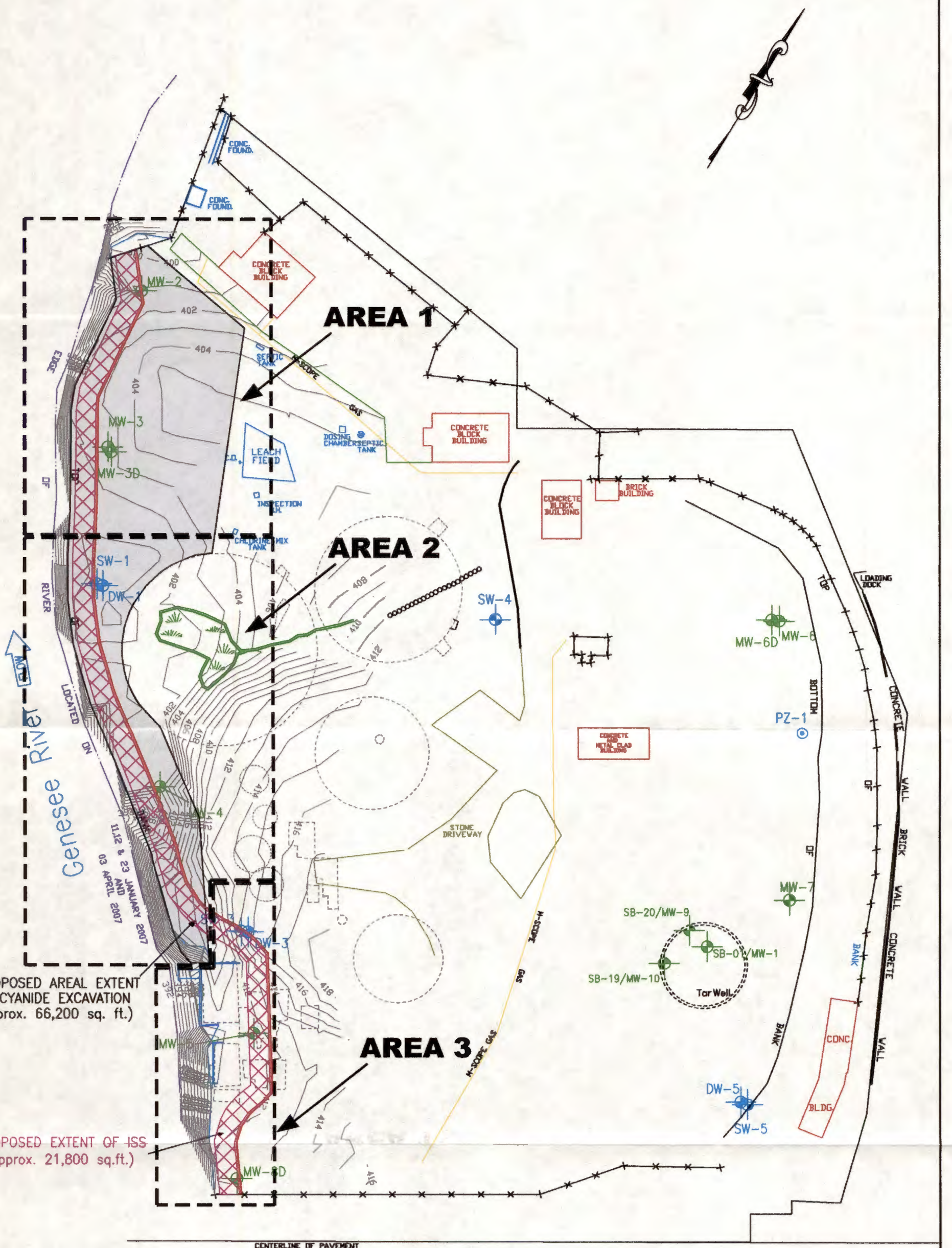
FIGURE 1-2
ROCHESTER GAS & ELECTRIC

MONITORING WELL, SOIL BORING AND TEST PIT LOCATIONS

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 9/13/07 FILE NAME: FIGURE 1-2

ISH, INC. / MTR



LEGEND

- Monitoring Well (Atlantic, 1992)
- Monitoring Well (META, 1998)
- Existing Buildings
- Estimated Location of Former Structures
- Proposed Cyanide Impacted Material Excavation Area
- Proposed In-Situ Stabilization Area
- NAPL Collection Trench (2ft. width)

0 25 50 100 200

Approximate Scale (ft)

1. Base map and survey information completed by META and RG&E.

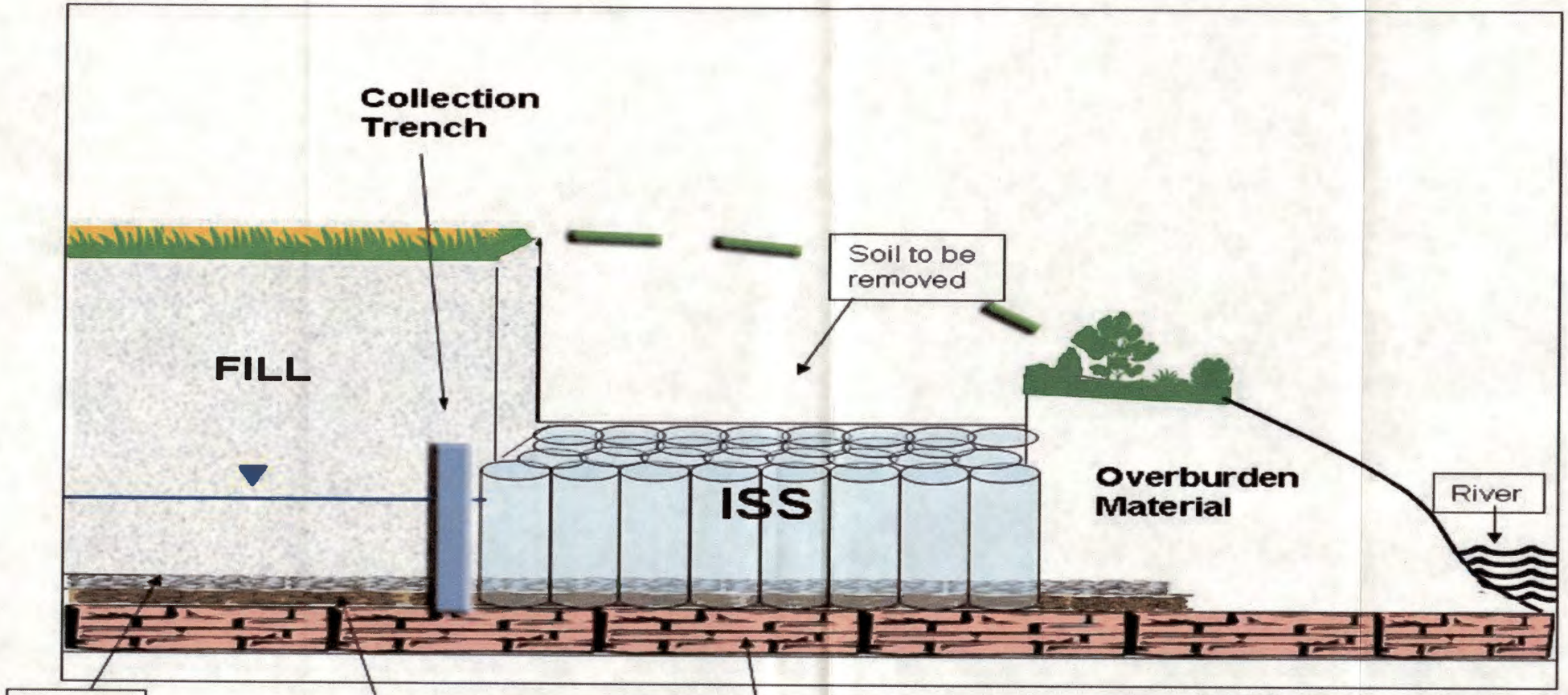
FIGURE 1-3
ROCHESTER GAS & ELECTRIC

IRM PLAN AND REMEDIATION AREAS

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 9/12/07 FILE NAME: FIGURE 1-3

ISH, INC. / MTR



NOTE: Not to scale

FIGURE 1-4
ROCHESTER
GAS & ELECTRIC

ISS DESIGN CONCEPT

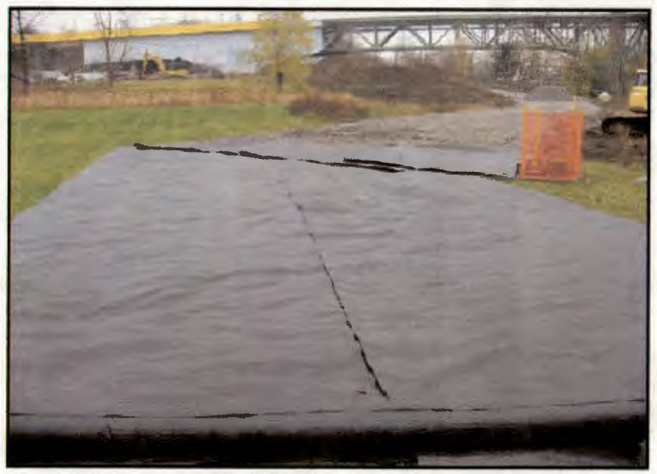
EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK
DATE: 12/2/08 FILE NAME: FIGURE 1-4

ISH, INC. / MTR

Tree Clearing

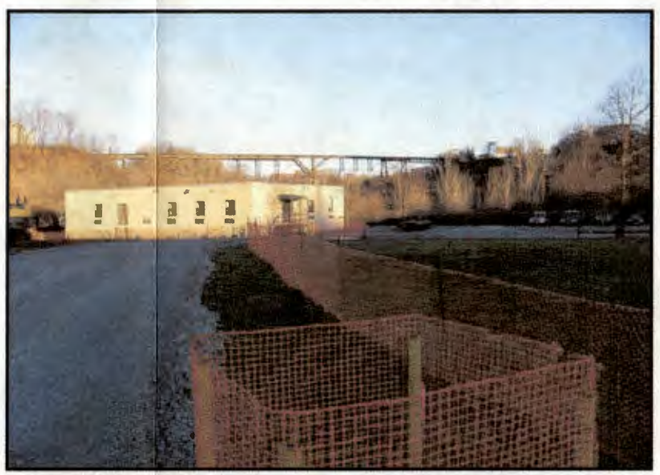
Clearing and Wood Chipping

Haul Road Construction



Haul Road Construction

Silt Fence Installation



Exclusion Zone Fence and Completed Haul Road

FIGURE 2-1

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF MOBILIZATION ACTIVITIES FOR EXCAVATION

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-15-08 FILENAME: FIGURE 2-1

ISH INC. / MTR

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

LEGEND

ABANDONED MONITORING WELL AND PIEZOMETERS

PIEZOMETER UNABLE TO BE LOCATED (MOST LIKELY DAMAGED)

FORMER STRUCTURE

GRID

EDGE OF RIVER

MW-2

PZ8

CONCRETE BLOCK BUILDING

SEPTIC TANK

M-SCOPE

GRAVEL

MW-3

MW-3D

PZ7

C.O.

LEACH FIELD

DOSING CHAMBER

GAS

SEPTIC TANK

CONCRETE BLOCK BUILDING

INSPECTION M.H.

SW-1

DW-1

CHLORINE MIX TANK

EDGE OF FOUNDATION

PZ4

SOFT AREA

MW-4

SOFT AREA

PZ3

GRAVEL

STONE DRIVEWAY

SW-3

DW-3

M-SCOPE

GAS

PZ02

MW-5

PZ01

MW-8D

GENESEE RIVER

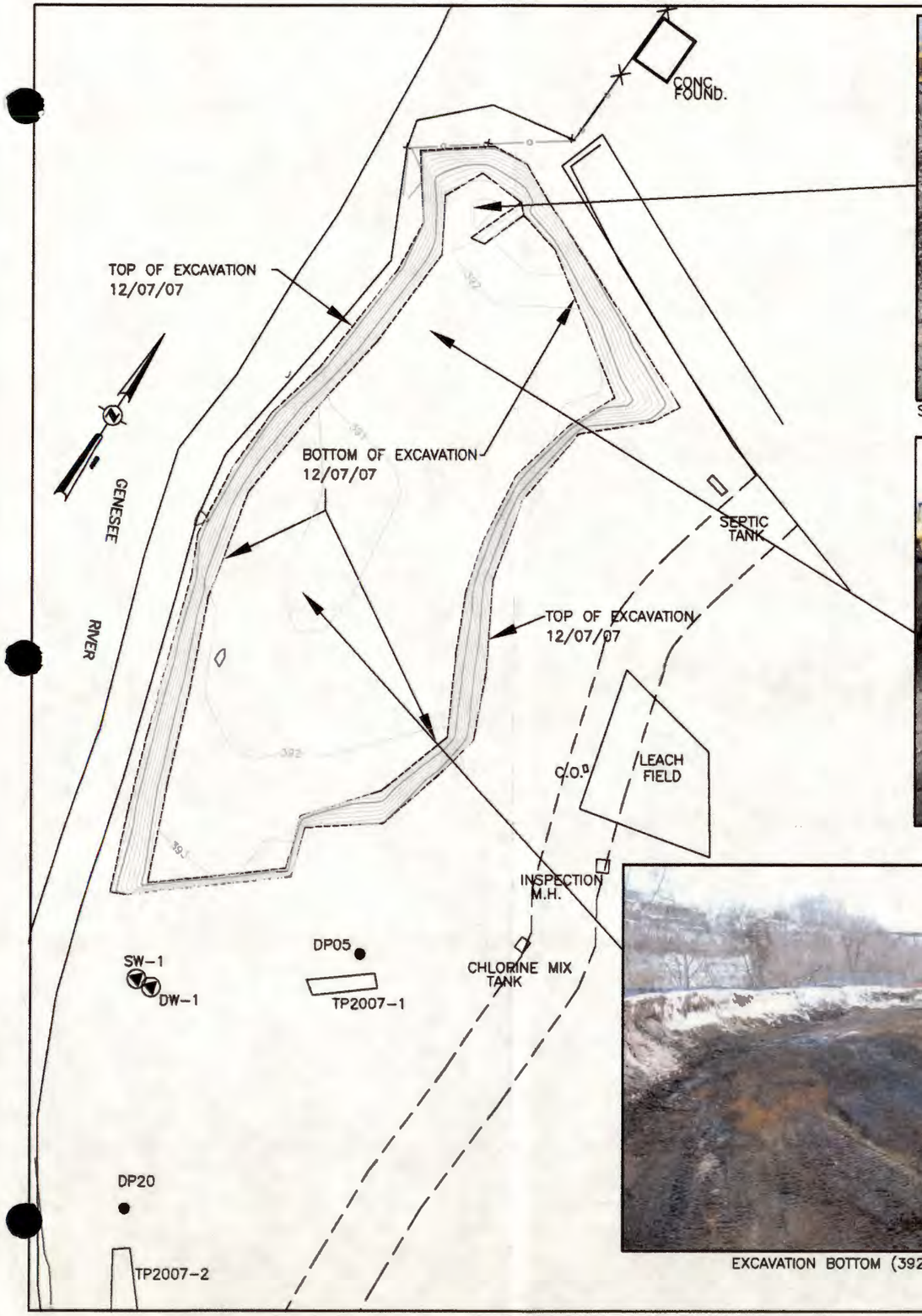
FIGURE 2-2
ROCHESTER
GAS & ELECTRIC

ABANDONED MONITORING WELLS
AND PIEZOMETERS

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 12-12-08 FILE NAME: FIGURE 2-2

ISH, INC. / MTR



SMALL BRICK CYLINDERS UNCOVERED IN NW CORNER OF AREA 1

395' ELEVATION IN AREA 1 NW CORNER

CONTINUED EXCAVATION IN SOUTH EAST AREA 1

APPROXIMATE 392' ELEVATION IN NW CORNER

EXCAVATION BOTTOM (392') ON 12-07-07

APPROXIMATE 392' ELEVATION ALONG EASTERN EDGE

0 50

SCALE IN FEET

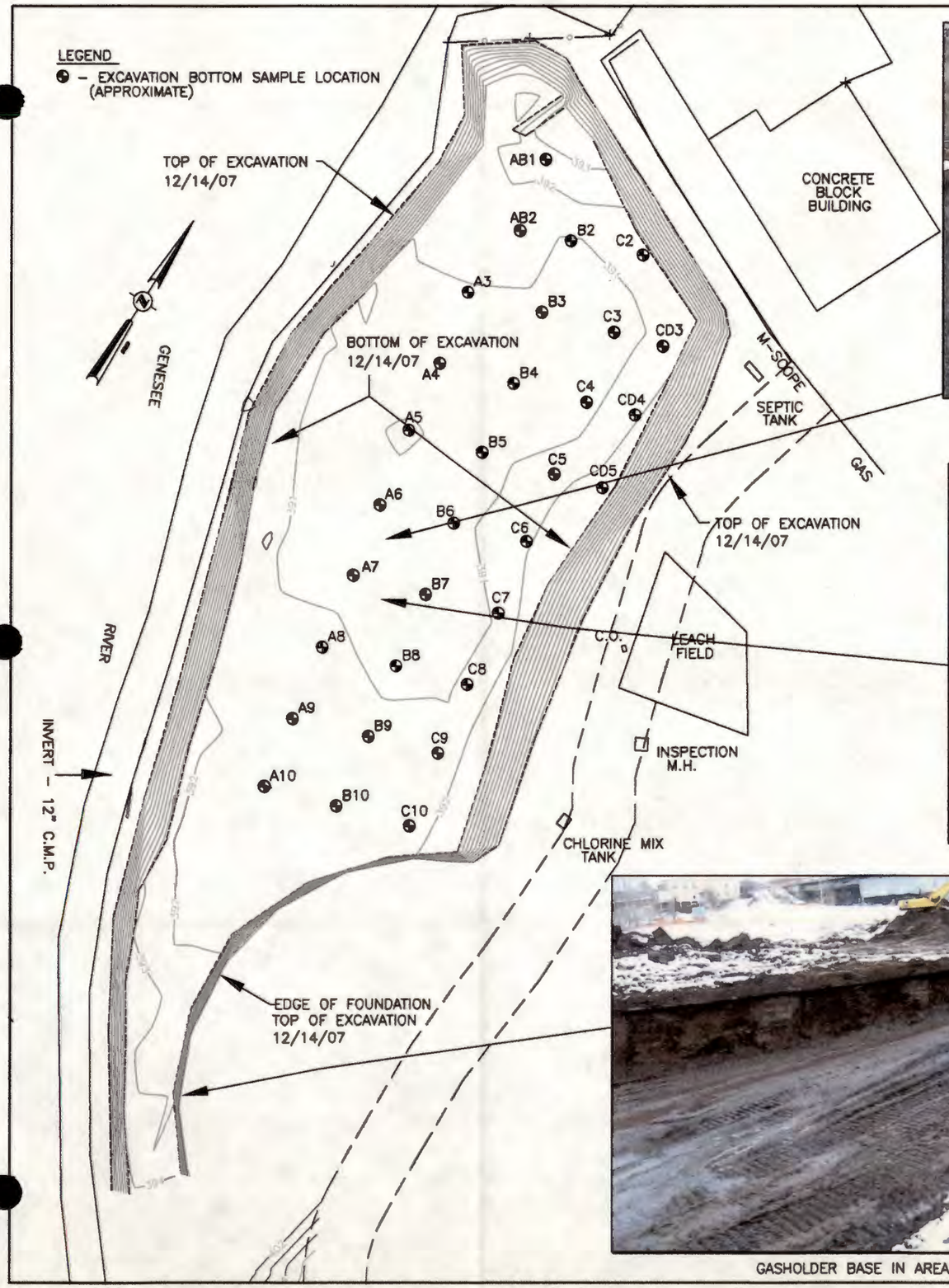
FIGURE 2-3
ROCHESTER
GAS & ELECTRIC

EXCAVATION PROGRESS AS OF
12/07/07

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 02/14/08 FIGURE 2-3

ISH INC. / MTR



AREA 1 (AT APPROXIMATELY 392') BEFORE FINAL REMOVAL OF MATERIAL

REMOVAL OF MATERIAL TO FINAL EXCAVATION DEPTH BELOW WATER TABLE (390' – 391') IN AREA 1

SOIL SAMPLE LOCATIONS IN AREA 1

SOUTHERN CONTINUANCE OF EXCAVATION INTO AREA 2 (GAS HOLDER ON RIGHT SIDE)

GASHOLDER BASE IN AREA 2

GASHOLDER BASE IN AREA 2

0 50
SCALE IN FEET

FIGURE 2-4
ROCHESTER
GAS & ELECTRIC

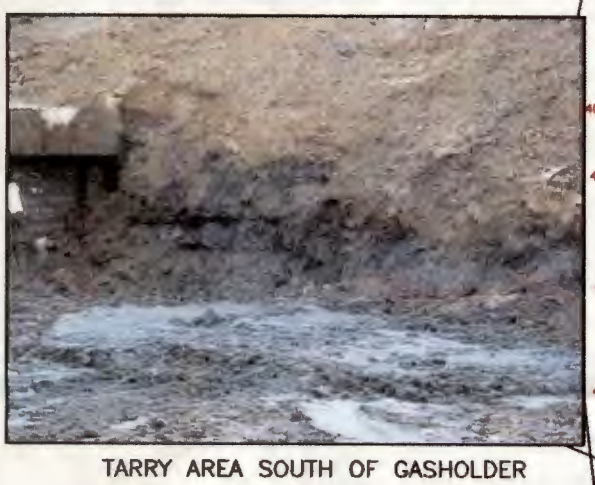
EXCAVATION PROGRESS AS OF 12/14/07

EAST STATION FORMER MGP
ROCHESTER, NY
DATE: 02/15/08 FIGURE 2-4

ISH INC. / MTR

BACKFILL OF AREA 1 WITH AREA 3 MATERIAL

TARRY AREA SOUTH OF GASHOLDER



TARRY AREA SOUTH OF GASHOLDER

AREA 3

AREA 3

FINAL AREA 1 BACKFILL

FINAL AREA 2

FINAL AREA 2 EAST SIDEWALL

FINAL AREA 2

FINAL AREA 2

FINAL SLOPE INTO AREA 2

LEGEND

● – EXCAVATION BOTTOM SAMPLE LOCATION (APPROXIMATE)

412.57 – ELEVATION INFORMATION

FIGURE 2-5
ROCHESTER GAS & ELECTRIC

FINAL EXCAVATION SUMMARY
(01/10/08 SURVEY)

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 02/15/08 FIGURE 2-5

ISH, INC./MTR

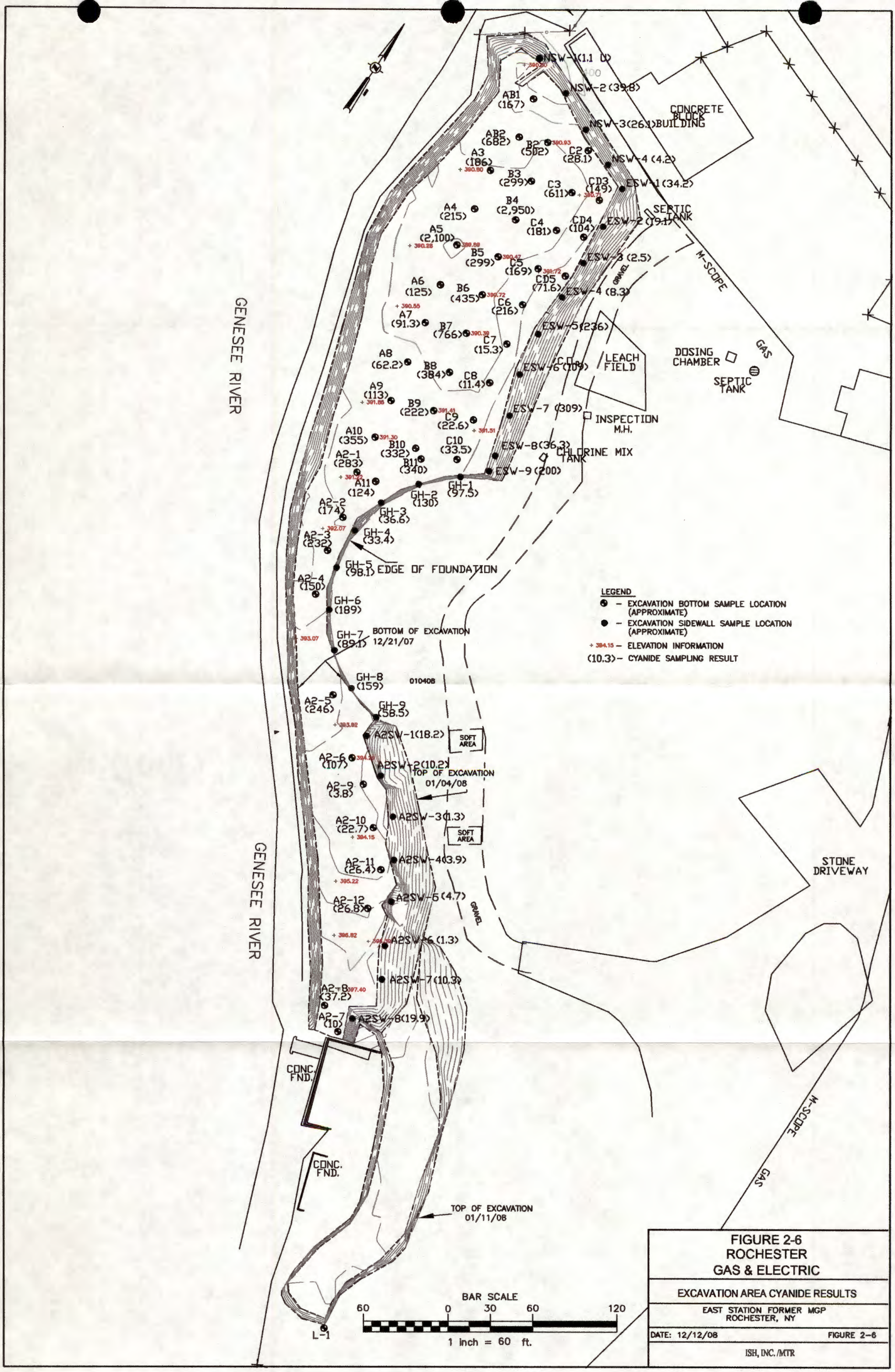


FIGURE 2-6
ROCHESTER
GAS & ELECTRIC

EXCAVATION AREA CYANIDE RESULTS

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 12/12/08 FIGURE 2-6

ISH, INC. /MTR

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

LEGEND

FORMER STRUCTURE

GENESEE

RIVER

EDGE OF RIVER

CONCRETE BLOCK BUILDING

SEPTIC TANK

LEACH FIELD

DOSING CHAMBER

SEPTIC TANK

INSPECTION M.H.

CHLORINE MIX TANK

SOFT AREA

SOFT AREA

STONE DRIVEWAY

GRAVEL

GRAVEL

M-SCOPE GAS

M-SCOPE GAS

FIGURE 3-1
ROCHESTER GAS & ELECTRIC

SITE TOPOGRAPHY PRIOR TO INITIATION OF ISS ACTIVITIES

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 5/20/08 FILE NAME: FIGURE 3-1

ISH, INC. / MTR

PIIAN System

DELMAG Drill Rig

ISS Auger

Batch Plant Components

Grading Area 2 Prior to ISS Construction

Additional Material Removal from Area 3

PIIAN System in Operation

FIGURE 3-2

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF ISS MOBILIZATION ACTIVITIES

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-16-08 FILENAME: FIGURE 3-2

ISH INC. / MTR

ISS Auger

ISS Column Construction Area 1

ISS Column Construction Area 1

ISS Column Construction Area 1

ISS Column Construction Area 2 and Excavator for Swell Management and Obstruction Removal

ISS Column Construction Area 3

ISS Column Construction Area 3

ISS Column Construction Area 3

ISS Column Construction Area 3

ISS Column Construction Expansion Area

ISS Column Construction Expansion Area

FIGURE 3-3

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF ISS CONSTRUCTION ACTIVITIES

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-15-08 FILENAME: FIGURE 3-3

ISH INC. / MTR

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

LEGEND

- FORMER STRUCTURE
- ISS COLUMN
- ISS TEST PIT LOCATION
- COLUMNS CONSTRUCTED AFTER REMOVAL OF OBSTRUCTION
- RECONSTRUCTED COLUMNS
- COLUMN RECONSTRUCTED DUE TO ABUNDANCE OF NAPL

ISS CONSTRUCTION PERIOD:
MAY 7, 2008 TO JUNE 20, 2008

GENESEE RIVER

EDGE OF RIVER

CONCRETE BLOCK BUILDING

PZ-11

SEPTIC TANK

M-SCOPE

GAS

GRAVEL

LEACH FIELD

DOSING CHAMBER

SEPTIC TANK

INSPECTION M.H.

CHLORINE MIX TANK

SW-4

SOFT AREA

SOFT AREA

GRAVEL

STONE DRIVEWAY

M-SCOPE

GAS

NOTE:
- TEST PITS EXCAVATED AFTER A MINIMUM OF 21 DAYS OF CURE TIME.

FIGURE 3-4
ROCHESTER
GAS & ELECTRIC

OBSTRUCTED, TIE-IN AND RECONSTRUCTED COLUMNS AND TEST PIT LOCATIONS

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 12-12-08 FILE NAME: Figure 3-4

ISH, INC. / MTR

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

LEGEND

ISS COLUMN

FORMER STRUCTURE

GROUNDWATER FLOW CHANNEL

- 667 COLUMNS COMPLETED
- APPROXIMATELY 14,280 CUBIC YARDS OF STABILIZED MATERIAL

EDGE OF RIVER

EDGE OF FOUNDATION

CONCRETE BLOCK BUILDING

SEPTIC TANK

M-SCOPE

GRAVEL

LEACH FIELD

DOSING CHAMBER

GAS

SEPTIC TANK

CONCRETE BLOCK BUILDING

INSPECTION M.H.

CHLORINE MIX TANK

SOFT AREA

SOFT AREA

STONE DRIVEWAY

GRAVEL

M-SCOPE

GAS

GENESEE RIVER

FIGURE 3-5 ROCHESTER GAS & ELECTRIC
FINAL ISS COLUMNS
EAST STATION FORMER MGP ROCHESTER, NY
12-12-08 FILE NAME: FIGURE 3-5
ISH, INC. / MTR

Removing Stabilized Material in Northern Channel

Northern Channel Excavation

Groundwater Flow at 392' Elevation in Northern Channel

Pea Gravel Placement in Northern Channel

Southern Channel Construction

No Water Infiltration at Southern Channel at 392' Elevatio

Geotextile Over Pea Gravel in Southern Channe

FIGURE 3-6

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF GROUNDWATER FLOW CHANNEL CONSTRUCTION

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-15-08 FILENAME: Fig. 3-6

ISH INC. / MTR

Test Pit at Columns B-6, B-7 and B-8 (5-28-08)

Test Pit in ISS Column

Test Pit to the East of ISS Column

Test Pit at Columns B-6, B-7 and B-8 (5-28-08)
Showing Water Level East of ISS Barrier

Test Pit at Columns B-6, B-7 and B-8 (5-28-08)
Showing Water Level East of ISS Barrier

Test Pit at Columns B-24, B-25 and B-26 (6-4-08)

Test Pit at Columns B-24, B-25 and B-26 (6-4-08)

Test Pit at Columns B-111, B-112 and B-113 (6-26-08)

Test Pit at Columns B-111, B-112 and B-113 (6-26-08)

FIGURE 3-7

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF ISS TEST PITS

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-15-08 FILENAME: FIGURE 3-7

ISH INC. / MTR

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

LEGEND

FORMER STRUCTURE

SLURRY WALL

EDGE OF RIVER

GENESEE RIVER

CONCRETE BLOCK BUILDING

SEPTIC TANK

M-SCOPE

GRAVEL

GAS

LEACH FIELD

DOSING CHAMBER

SEPTIC TANK

CONCRETE BLOCK BUILDING

INSPECTION M.H.

CHLORINE MIX TANK

EDGE OF FOUNDATION

SOFT AREA

SOFT AREA

STONE DRIVEWAY

GAS

M-SCOPE

FIGURE 3-8
ROCHESTER
GAS & ELECTRIC

CEMENT-BENTONITE (CB) SLURRY WALL LOCATION

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 12-12-08 FILE NAME: FIGURE 3-8

ISH, INC. / MTR

CB Slurry Wall Area 3

CB Slurry Wall Area 2

CB Slurry Wall Area 2 (Near Gasholder)

CB Slurry Wall Area 2 (Near Gasholder)

CB Slurry Wall Area 2

CB Slurry Wall Area 2 (Near Gasholder)

CB Slurry Wall Area 1

CB Slurry Wall Area 1

CB Slurry Wall Area 1

CB Slurry Wall Area 1

Excavator with Rock Bucket Attachment

Note:
CB Slurry Wall construction period 6-24-08 to 7-11-08

FIGURE 3-9

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF CB SLURRY WALL CONSTRUCTION

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

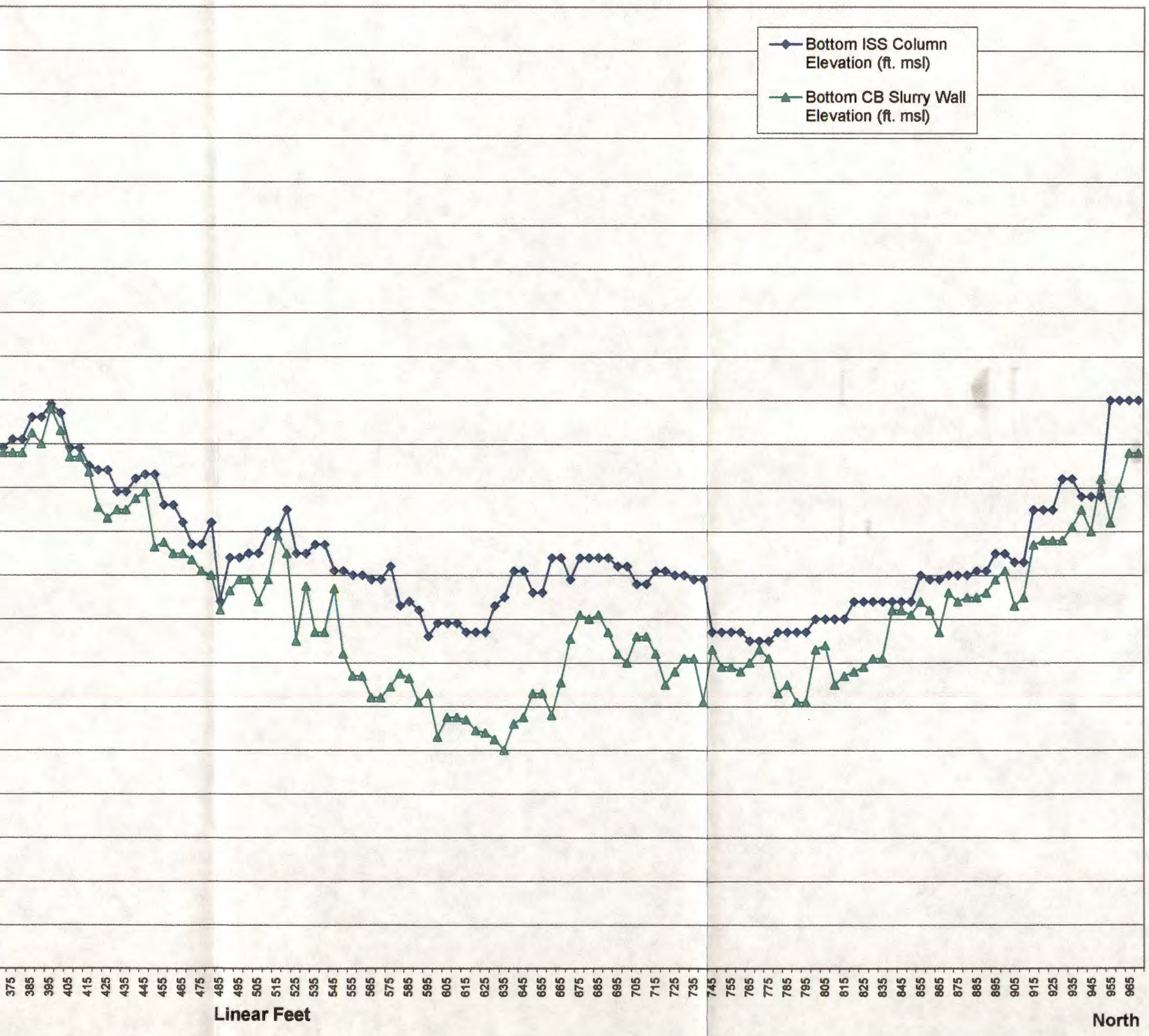
DATE: 12-15-08 FILENAME: Figure 3-9

ISH INC. / MTR

FIGURE 3-10

Bottom Elevation Comparison With Adjacent Column Bottom Elevation

East Station Former MGP Site
Rochester, New York



BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

LEGEND

FORMER STRUCTURE

NAPL COLLECTION TRENCH

VERTICAL NAPL MONITORING/RECOVERY POINT

NAPL COLLECTION TRENCH CONSTRUCTION ACTIVITIES CONDUCTED FROM JULY 15, 2008 TO AUGUST 7, 2008

NOTE:
NAPL COLLECTION TRENCH WIDTH IS VARIABLE AND APPROXIMATE.

FIGURE 3-11
ROCHESTER GAS & ELECTRIC

NAPL COLLECTION TRENCH AND MONITORING/RECOVERY POINT LOCATIONS

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 12-12-08 FILE NAME: FIGURE 3-11

ISH, INC. / MTR

Installation of RW-2

Collection Trench Construction

Collection Trench with Geotextile Over Gravel

Collection Trench Following Backfill over Fabric

Vertical Recovery Point Construction and Placement

Water In Collection Trench

Water In Trench Near Gas Holder

Recovery Well Casing and Sonotube

FIGURE 3-12

ROCHESTER GAS & ELECTRIC

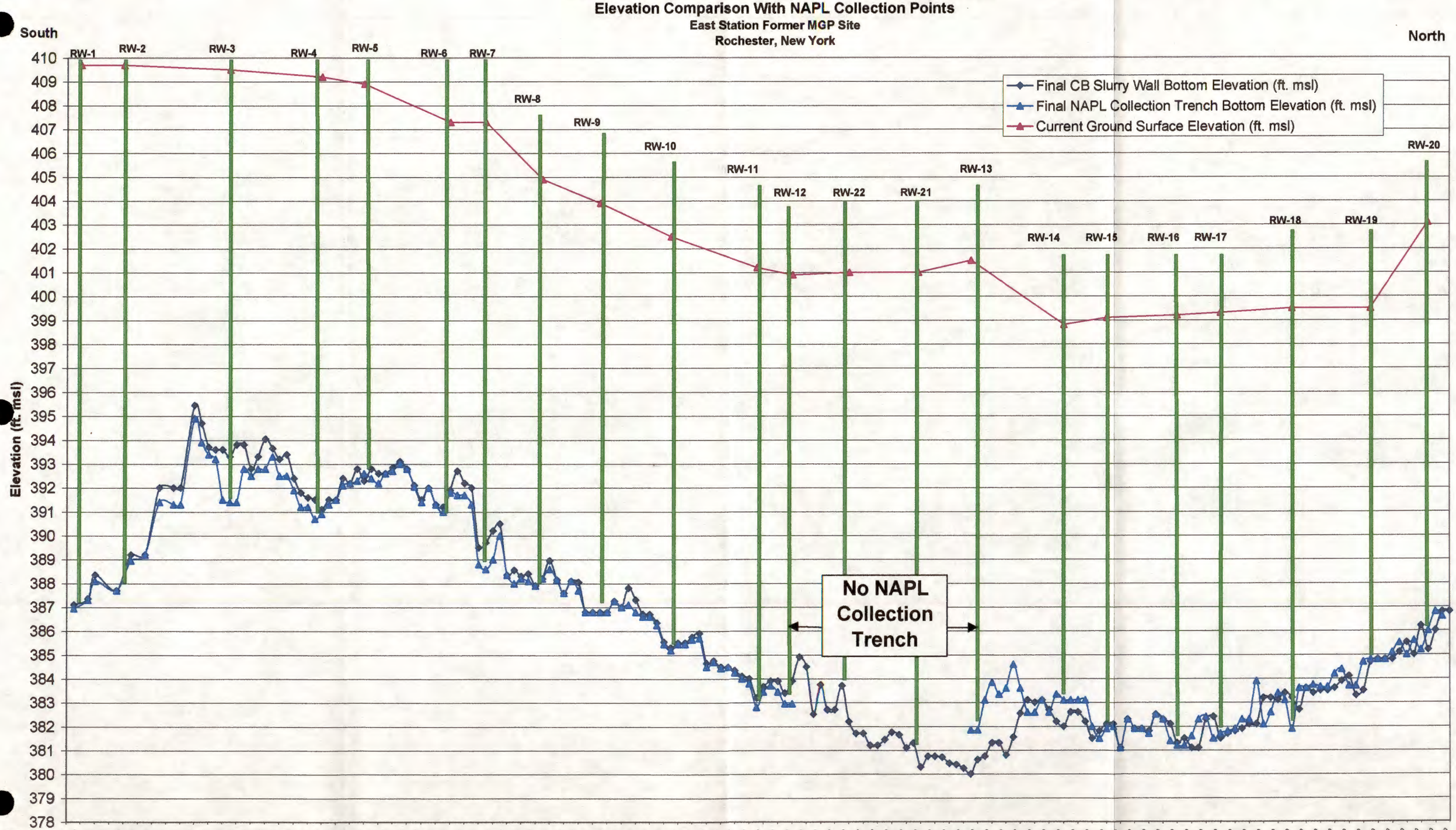
PHOTOGRAPHIC DOCUMENTATION OF NAPL COLLECTION TRENCH CONSTRUCTION

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-15-08 FILENAME: FIGURE 3-12

ISH INC. / MTR

FIGURE 3-13
NAPL Collection Trench and Adjacent CB Slurry Wall Bottom Elevation Comparison With NAPL Collection Points
East Station Former MGP Site
Rochester, New York



Notes:
1. TOC elevation for recovery wells is approximate.
2. RW-21 and RW-22 are in the holder area and not in the NAPL collection trench

TYPICAL INSTALLATION OF NAPL RECOVERY TRENCH AND VERTICAL MONITORING/RECOVERY POINT

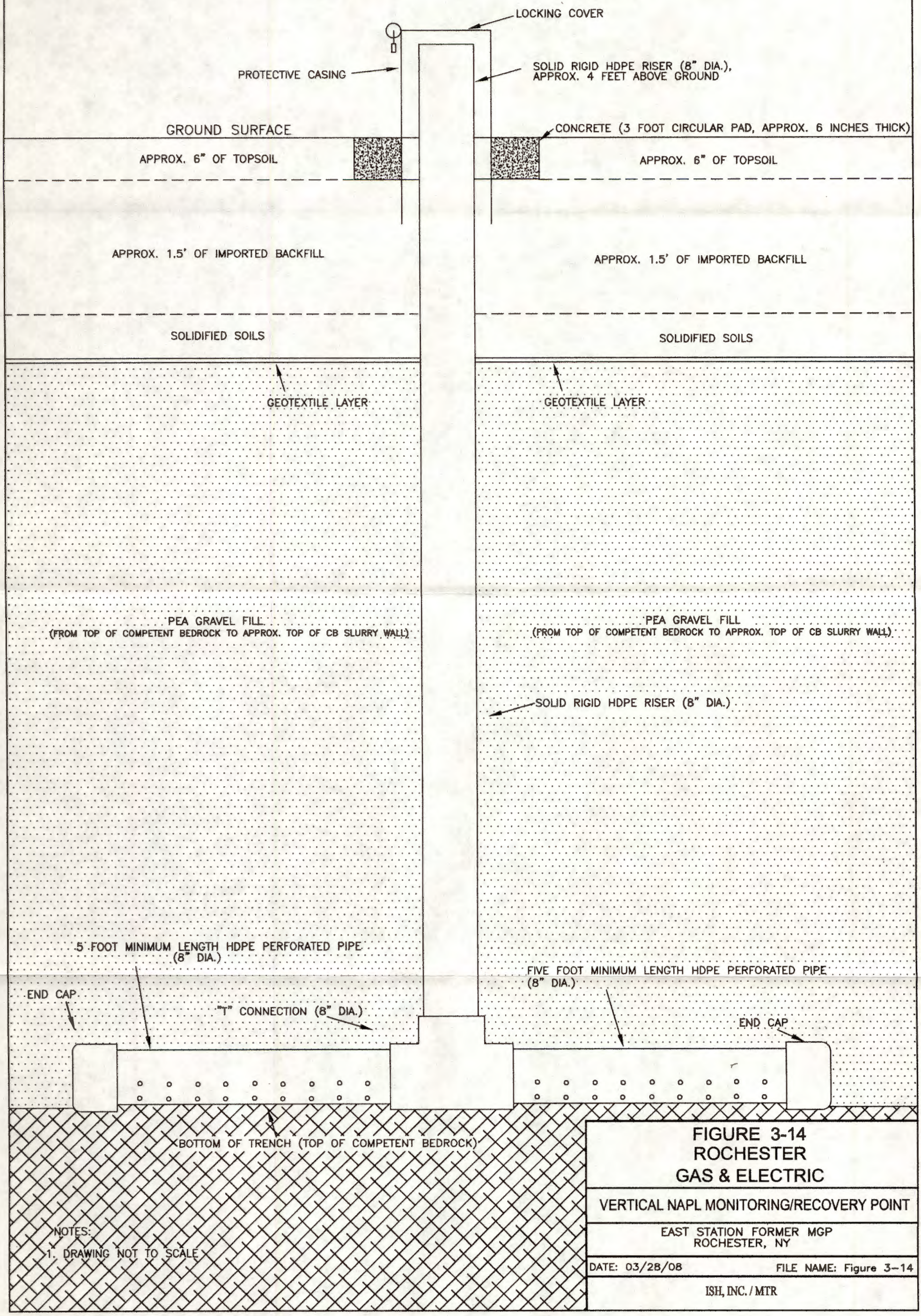


FIGURE 3-14
ROCHESTER GAS & ELECTRIC

VERTICAL NAPL MONITORING/RECOVERY POINT

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 03/28/08 FILE NAME: Figure 3-14

ISH, INC. / MTR

Spoils Mixing in Cell in Area 1

Spoil Mixing Pits in Area 1

Spoils Mixing in Area 1

Stabilized Spoils Stockpile in Area 1

Stabilized Spoils Grading in Area 1

FIGURE 3-15

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF OF SPOILS STABILIZATION

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 12-15-08 FILENAME: FIGURE 3-15

ISH INC. / MTR

BAR SCALE

60 0 30 60 120

1 inch = 30 ft.

APPROXIMATE STABILIZED SPOILS PLACEMENT AREA

GENESEE RIVER

EDGE OF RIVER

CONCRETE BLOCK BUILDING

SEPTIC TANK

M-SCOPE

GRAVEL

LEACH FIELD

C.O.

DOSING CHAMBER

GAS

SEPTIC TANK

CONCRETE BLOCK BUILDING

INSPECTION M.H.

CHLORINE MIX TANK

EDGE OF FOUNDATION

SOFT AREA

SOFT AREA

GRAVEL

STONE DRIVEWAY

M-SCOPE

GAS

CONC. FND.

CONC. FND.

397 398 399 400 401 402 403 404 405 406 407 408 410 412 413 414 415 416 417 418

FIGURE 3-16
ROCHESTER
GAS & ELECTRIC

SITE TOPOGRAPHY FOLLOWING COMPLETION OF ISS ACTIVITIES AND SPOILS STABILIZATION 8/15/08

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 11/23/08 FILE NAME: FIGURE 3-16

ISH, INC. / MTR

Grading and Restoration Activities Area 1 (8-26-08)
(Showing Orange Delineation Fabric Installation)

Grading and Restoration Activities Area 2 (8-21-08)

Grading and Restoration Activities Area 3 (8-19-08)
(Showing Backfill Over Delineation Fabric)

Grading and Restoration Activities Area 1 (9-2-08
(Topsoil Over Imported Fill)

Drainage Swale North of Light Oil Plant (9-9-08)

Top of Light Oil Plant Drainage Swale

Gabions at Bottom of Light Oil Plant Drainage Swal

Hydroseed in Area 1 for Restoration (9-17-08

FIGURE 4-1

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF FINAL SITE GRADING AND RESTORATION OPERATIONS

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 1-9-09 FILENAME: Figure 4-1

ISH INC. / MTR

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

APPROXIMATE LOCATION OF SWALE AND BERM CUTOUT
GABIONS
RIP RAP
EDGE OF SEEDED AREA (TYPICAL)
EDGE OF BURIED FOUNDATION
INV. 18"CIP 401.85'
INV. 12"CIP 403.34'
EDGE OF SEEDED AREA (TYPICAL)
SEEDED AREA
EDGE OF SEEDED AREA (TYPICAL)
EDGE OF SEEDED AREA (TYPICAL)
RIP-RAP
GABION BASKETS
CONC. FND.
CONC. FND.
EDGE OF
TOE OF
RIVER
CONCRETE BLOCK BUILDING
SEPTIC TANK
GATE
M-SCOPE
GAS
C.O.
LEACH FIELD
DOSING CHAMBER
SEPTIC TANK
CONCRETE BLOCK BUILDING
INSPECTION M.H.
CHLORINE MIX TANK
STONE DRIVEWAY
GATE
M-SCOPE
GAS
MAG-DATE

NOTES:
1. BASED ON SURVEY ON 9/18/08.
2. AREA 1 BERM CUT-OUT AND SWALE COMPLETED WEEK OF NOV. 10, 2008 (LOCATION APPROX.).

FIGURE 4-2
ROCHESTER
GAS & ELECTRIC
SITE TOPOGRAPHY FOLLOWING RESTORATION (AS OF 09-18-08)
EAST STATION FORMER MGP
ROCHESTER, NY
DATE: 1-9-09 FILE NAME: FIGURE 4-2
ISH, INC. / MTR

Area 1 Vegetative Cover After Restoration

Area 1 Vegetative Cover After Restoration

Area 2 Vegetative Cover After Restoration

Area 2 Vegetative Cover After Restoration

Area 3 Vegetative Cover After Restoration

Haul Road and Gas Holder Area After Restoration

FIGURE 4-3

ROCHESTER GAS & ELECTRIC

PHOTOGRAPHIC DOCUMENTATION OF VEGETATIVE COVER AND COMPLETED SITE RESTORATION

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 1-9-09 FILENAME: Fig. 4-3

ISH INC. / MTR

Temporary Access Road

Direct Loadout of Material

Gabion Construction

Gabion Construction

Riprap Placement (Upper End)

Riprap Placement (Lower End)

Completed Swale and Berm Cut-Out (11-12-08)

Restored Topsoil Access Road Area (11-13-08)

FIGURE 4-4

ROCHESTER GAS & ELECTRIC

PHOTOGRAHIC DOCUMENTATION OF INSTALLATION OF RIPRAP FOR SURFACE WATER DRAINAGE IN AREA 1

EAST STATION FORMER MGP SITE
ROCHESTER, NEW YORK

DATE: 1-9-09 FILENAME: Figure 4-4

ISH INC. / MTR

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

LEGEND
MONITORING WELL
NAPL RECOVERY WELL

EDGE OF SEEDED AREA (TYPICAL)
APPROXIMATE LOCATION OF SWALE AND BERM CUTOUT
GABIONS
RIP RAP
APPROX. FILL AREA TO ELEVATION 399.5' (APPROX. 16,800 SQ. FT.)
EDGE OF BURIED FOUNDATION
INV.18"CIP 401.85'
INV.12"CIP 403.34'
CHECK SLOPE AND ADJUST AS NEEDED (APPROX. 410' TO 409.5')
FILL TO 410' MINIMUM (0.1' TO 0.2' HIGHER AT SOUTH END)
SEEDED AREA
RIP-RAP
GABION BASKETS
CONC. FND.

MW-2R
MW-50R
MW-4R
MW-5R
DW-1R
DW-3R
TPMW-1
TPMW-2
PZ01R
MW-8DR
RW-1
RW-2
RW-3
RW-4
RW-5
RW-6
RW-7
RW-8
RW-9
RW-10
RW-11
RW-12
RW-13
RW-14
RW-15
RW-16
RW-17
RW-18
RW-19
RW-20
RW-21
RW-22
RW-23

CONCRETE BLOCK BUILDING
SEPTIC TANK
GATE
M-SCOPE
GAS
C.D. LEACH FIELD
DOSING CHAMBER
SEPTIC TANK
CONCRETE BLOCK BUILDING
INSPECTION M.H.
CHLORINE MIX TANK
STONE DRIVEWAY
RIVER
EDGE
DF

FIGURE 4-5
ROCHESTER GAS & ELECTRIC

APPROXIMATE LOCATIONS FOR ADDITIONAL TOPSOIL PLACEMENT

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 2-4-09 FILE NAME: FIGURE 4-5

ISH, INC. / MTR

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

LEGEND

FORMER STRUCTURE

TP-3
TEST PIT LOCATION

EDGE OF RIVER

GENESEE RIVER

CONCRETE BLOCK BUILDING

PZ-11

SEPTIC TANK

M-SCOPE

GRAVEL

C.O.

LEACH FIELD

DOSING CHAMBER

GAS

SEPTIC TANK

CONCRETE BLOCK BUILDING

INSPECTION M.H.

TP-3

TP-1

CHLORINE MIX TANK

EDGE OF FOUNDATION

TP-2

TP-4

ELEVA... (POI...

SOFT AREA

TP-5

PREVIOUSLY DUG TEST PIT
(LOCATION APPROXIMATE)

SOFT AREA

GRAVEL

TP-6

STONE DRIVEWAY

SE... CAPPED ...

CONC. FND.

CONC. FND.

M-SCOPE

GAS

FIGURE 5-1
ROCHESTER
GAS & ELECTRIC

TEST PIT LOCATIONS

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 1-9-09 FILE NAME: FIGURE 5-1

ISH, INC. / MTR

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

LEGEND

- FORMER STRUCTURE
- ISS PERFORMANCE MONITORING LOCATION
- SHALLOW BEDROCK MONITORING LOCATION
- UPGRADIENT SHALLOW MONITORING LOCATION
- VERTICAL NAPL MONITORING/RECOVERY POINT

MW-2R
MW-3DR
MW-4R
MW-5R
DW-1R
DW-3R
PZ01R
MW-8DR
TPMW-1
TPMW-2
RW-1 RW-2 RW-3 RW-4 RW-5 RW-6 RW-7 RW-8 RW-9 RW-10 RW-11 RW-12 RW-13 RW-14 RW-15 RW-16 RW-17 RW-18 RW-19 RW-20 RW-21 RW-22 RW-23
EDGE OF FOUNDATION
CONCRETE BLOCK BUILDING
SEPTIC TANK
M-SCOPE
GRAVEL
LEACH FIELD
DOSING CHAMBER
GAS
INSPECTION M.H.
CHLORINE MIX TANK
SOFT AREA
STONE DRIVEWAY
RIVER
GENESEE
397 398 400 401 402 404 405 406 407 408 410 412 413 414 415 416 417 418

NOTES:

1. RW-1 THROUGH RW-20 ARE 8-INCH DIAMETER RECOVERY WELLS.
2. RW-21 THROUGH RW-23 ARE 6-INCH DIAMETER RECOVERY WELLS.
3. THE TPMW WELLS AND THE ISS PERFORMANCE AND SHALLOW BEDROCK MONITORING WELLS ARE 2-INCH DIAMETER WELLS.

FIGURE 5-2
ROCHESTER
GAS & ELECTRIC

MONITORING AND RECOVERY WELL LOCATIONS

EAST STATION FORMER MGP
ROCHESTER, NY

DATE: 1-9-09 FILE NAME: FIGURE 5-2

ISH, INC. / MTR