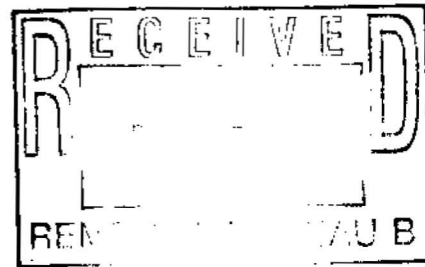


The RETEC Group, Inc.
 1001 W. Seneca St., Suite 204, Ithaca, NY 14850-3342
 T 607.277.5716 F 607.277.9057 www.ensr.aecom.com



Letter of Transmittal

Attention: Mr. Lawrence J. Alden, P.E. Date: December 6, 2007
 Project reference: Ward Products Site Project number: 12518-001-300

We are sending you the following:

Number of originals:	Number of copies:	Description:
<u>1</u>	<u> </u>	<u>Remedial Design / Remedial Action Work Plan,</u> <u>Ward Products Site, Amsterdam, NY</u>

Please find attached the Remedial Design / Remedial Action Work Plan for the Ward Products Site in Amsterdam, NY, for your review and approval.

If you have any questions, please contact me at 607-277-5716, or Darin Payne at 845-348-1520.
 Thank you.


 John T. Finn, P.E., Senior Engineer

cc: Heidi Firstencil – U.S. Army Corps of Engineers
 Richard J. Conway, Jr., Esq. – Schenck, Price, Smith & King, LLP
 Garret O'Connor – New York State Canal Corporation
 Dan Shearer – ENSR Albany
 Darin Payne – ENSR Nyack
 Kathy Harvey – ENSR Westford
 File: 12518-001

Merged with ENSR in 2007



A Trusted Global Environmental, Health and Safety Partner

Prepared for:
New Water Realty Corporation
 61 Edson Street, Amsterdam, New York 12010

Remedial Design / Remedial Action Work Plan

Ward Products Site
Amsterdam, New York
Site Code 4-29-004



Prepared By Mark Hofferbert, P.E., Project Manager



Darin Payne, Project Engineer



Reviewed By John T. Finn, P.E., Senior Engineer

The RETEC Group, Inc.
 December 5, 2007
Document No.: 12518-001-300

Merged with ENSR in 2007



Contents

1.0	Introduction	1-1
1.1	Site history and nature and extent of contamination.....	1-1
1.2	Project overview	1-3
1.3	Schedule and sequence of activities	1-4
2.0	Remedial design for soil and sediment excavation.....	2-1
2.1	Design basis	2-1
2.1.1	Area, depth, and volume of media of concern.....	2-2
2.1.2	Performance criteria	2-2
2.1.3	Required permits	2-3
2.2	Technical specifications	2-4
2.2.1	Clearing and grubbing.....	2-4
2.2.2	Water handling.....	2-4
2.2.3	Soil and sediment excavation	2-4
2.2.4	Sediment detention basin construction.....	2-5
2.2.5	Transportation and disposal.....	2-6
2.2.6	Site restoration and drainage.....	2-6
3.0	Remedial design for groundwater treatment.....	3-1
3.1	Design basis	3-1
3.1.1	Area, depth, and volume of media of concern.....	3-2
3.1.2	Performance criteria	3-2
3.1.3	Required permits	3-3
3.2	Technical specifications	3-3
3.2.1	Recovery and injection wells.....	3-3
3.2.2	Groundwater treatment system.....	3-3
3.2.3	In situ chemical oxidation	3-4
3.2.4	Long-term monitoring and environmental easement	3-4
4.0	General requirements	4-1
4.1	Health and safety.....	4-1
4.2	Quality assurance.....	4-2
4.3	Environmental monitoring and control	4-2
4.3.1	Erosion and sedimentation control.....	4-2
4.3.2	Air monitoring.....	4-3
4.3.3	Mobilization, demobilization, and decontamination.....	4-3
4.4	Additional general requirements	4-4
4.5	Project reporting	4-4



4.6 Technical execution plan.....	4-5
5.0 References.....	5-1

List of Appendices

Appendix A Summary of relevant soil and sediment analytical results

Appendix B Summary of relevant groundwater analytical results

Appendix C Site photographs

Appendix D Community health and safety plan

Appendix E Site Health and Safety Plan (to be submitted under separate cover)



List of Figures

- Figure 1 Site location and key map for other figures
- Figure 2A Mohawk River excavation plan
- Figure 2B Mohawk River excavation cross-section
- Figure 3 Quist Road excavation plan
- Figure 4A East Branch excavation plan
- Figure 4B East Branch excavation cross-section
- Figure 5A West Branch excavation plan
- Figure 5B West Branch excavation cross-section
- Figure 6 Sam Stratton Road excavation plan
- Figure 7 Groundwater treatment plan
- Figure 8 Groundwater treatment system



Statement of Limitations

The undersigned hereby certifies that this Remedial Design / Remedial Action Work Plan was prepared in accordance with the 2007 Order on Consent between New York State and New Water Realty Corporation, Index # A4-0588-0507, Site #429004, and all applicable regulations.

Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature and condition of work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of New Water Realty Corporation ("NWR"), with New York State Department of Environmental Conservation ("NYSDEC" or "DEC") approval, for specific application to the Ward Products Site in Amsterdam, New York. No other warranty, express or implied, is made.


John T. Finn, P.E.



Stamp and Seal

1.0 Introduction

This document is the Remedial Design / Remedial Action Work Plan (RD/RA WP) for the implementation of the Selected Remedy (as hereafter defined) including treatment of groundwater and removal of selected deposits of impacted soil and sediment associated with the former Ward Products facility in Amsterdam, New York owned by New Water Realty Corporation ("NWR").

This Plan has been prepared in accordance with the 2007 Order on Consent between the State of New York and NWR for this site [NYSDEC, 2007a] for review and approval by the New York State Department of Environmental Conservation ("Department", "NYSDEC" or "DEC").

1.1 Site history and nature and extent of contamination

The former Ward Products site (sometimes the "Site") lies within an industrial and commercial area at 61 Edson Street, Amsterdam, New York, as shown in Figure 1. The site is an 8.6-acre property that consists of a large paved parking lot, an approximately 71,000 square-foot single story building, and lawn and wooded areas. The building is currently vacant, though water and electric power are available. Additional site history is provided in Section 3.1 of the Record of Decision (ROD) [NYSDEC, 2007b]. A commercial or industrial use of the site is expected to be initiated prior to completion of the Selected Remedy.

A drainage ditch begins north of the building and runs southeast, then southwest along the property line. It then runs under Edson Street before branching into two separate streams, referred to as the East Branch and West Branch. Both stream branches run south approximately 2,800 feet to the Mohawk River in the City of Amsterdam. The East Branch, West Branch, and on-site drainage ditches are intermittent streams. They are typically overgrown with dense foliage or mature forest, much of which is inaccessible to conventional equipment. Portions of the ditches run through culverts under highways and railroads.

In 1997 Respondent consented to the issuance of an Order on Consent (Index #W4-0762-96-06) (the "1997 Order") by the Department concerning the Site. Pursuant to the 1997 Order, after preliminary investigations, a remedial investigation (RI) was then conducted to determine the nature and extent of contamination resulting from previous activities at the site. Soil samples were collected from the Site. Surface water samples were collected from the intermittent drainage, and sediment samples were collected from the site down to the Mohawk River. Groundwater monitoring wells were installed and sampled. The field activities and findings of the RI are described in the Revised RI Report [Normandeau, 2005] (RRIR), filed with and approved by the Department, and are summarized in Section 5.1.2 of the ROD.

Between 1997 and 2005, five interim remedial actions (IRMs) were conducted to address soil, sediments, a drain pipe, and indoor air quality impacts resulting from previous activities at the Site. These IRMs are summarized in Section 5.2 of the ROD.

The ROD, Section 6, established remediation goals for this site.

The remediation goals for this site are to eliminate or reduce to the extent practicable:

- Exposures of persons at or around the site to electroplating-related metals in soil and sediments;
- Exposures of persons at or around the site to chromium, or trichloroethene and other VOCs (Volatile Organic Compounds) in groundwater;
- Environmental exposures of flora or fauna to electroplating-related metals in soil and sediments;

- The release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards; and
- The release of contaminants from subsurface soil under buildings into indoor air through soil vapor intrusion.

Further, the remediation goals for the site include attaining to the extent practicable:

- Ambient groundwater quality standards; and
- Lowest effect level (LEL) sediment guidance values in the NYSDEC "Technical Guidance for Screening Contaminated Sediments."

An alternatives analysis was conducted as part of the remedy selection process documented in the Feasibility Study Report (FS) [RETEC, 2006], resulting in NWR's proposed preferred remedy for specified conditions, summarized in Section 7 of the ROD. In March 2007, after consideration of the administrative record described therein, the Department issued its Record of Decision ("ROD") selecting the preferred remedy for on-site and off-site areas associated with the Site (as more particularly identified in the ROD, FS Report and RRIR), proposed by the Respondent in the FS Report, subject to requirements specified in the ROD (as clarified in subsequent correspondence between the Respondent and the Department) [the "Selected Remedy"]. The Selected Remedy is summarized in Section 1.2 of this RD/RAWP and in Section 8 of the ROD.

Thereafter the Department and NWR entered into a certain Order on Consent dated July 9, 2007 (the "2007 Order"), Index # A4-0588-0507, Site #429004, governing the Selected Remedy and under which NWR has filed a Declaration with the Clerk of Montgomery County providing notice as required by 6 NYCRR 375-1.5(a).

Since the DEC approval of the ROD, NWR has conducted the following efforts, as preliminary parts towards the obligation to provide one or more RD /RA WPs, as to which this report is the culmination intended to address all remaining steps under the 2007 Order, excepting only as hereafter provided.

- Correspondence from Richard J. Conway, Jr., Esq. to Lawrence Alden, dated May 24, 2007, RE: Clarification to NYSDEC Approved Record of Decision.
- Correspondence - Progress Report for First Quarter, 2007, submitted from RETEC to Lawrence Alden and distribution, dated April 11, 2007.
- Correspondence from Richard J. Conway, Jr., Esq. to Sonia Meyer, Esq. at NYSDEC, dated June 26, 2007, RE: Order on Consent and Administrative Settlement Agreement for signature.
- Correspondence - Progress Report for Second Quarter, 2007, submitted from RETEC to Lawrence Alden and distribution, dated July 5, 2007.
- Work Plan - Pre-Design Investigation and Engineering Design Work Plan, submitted from RETEC to Lawrence Alden and distribution, dated July 17, 2007.
- Letter Report - Results of May 2007 Water Quality Samples, submitted from RETEC to Lawrence Alden and distribution, dated July 31, 2007.
- Correspondence - Progress Report for July, 2007, submitted from RETEC to Lawrence Alden and distribution, dated August 1, 2007.
- Correspondence sent from Richard J. Conway, Jr., Esq. to Lawrence Alden, dated August 30, 2007, RE: July 2007 Order on Consent – Proof of Filing of Second Declaration.
- Correspondence - Progress Report for August 2007, submitted from RETEC to Lawrence Alden and distribution, dated September 10, 2007.



- Letter Report - Results of August 2007 Water Quality Samples, submitted from RETEC to Lawrence Alden and distribution, dated September 18, 2007.
- Correspondence - Progress Report for September 2007, submitted from RETEC to Lawrence Alden and distribution, dated October 9, 2007.
- Email - Sent from Larry Alden to Mark Hofferbert on May 11, 2007, RE: Ward Products Groundwater Sampling – need for analysis of chromium in FGI wells.
- Email - Sent from Larry Alden [ljalden@gw.dec.state.ny.us] to Mark Hofferbert of RETEC on September 21, 2007, RE: Ward Products Post-Injection Analytical Data.
- Meeting at the Amsterdam POTW among Larry Alden of NYSDEC; Tim Colucci of Amsterdam POTW; Mike Clark, City of Amsterdam; and Mark Hofferbert and John Finn of RETEC.

1.2 Project overview

Based on the RI, the results of the previous IRMs, the evaluations presented in the FS, the Order on Consent and the ROD, the Selected Remedy consists of the following components:

- Continued operation of the on-site sub-slab depressurization system during periods of building occupancy (i.e., for any industrial or commercial use) so long as significant contamination of concern persists under the building slab;
- Excavation of off-site sediments and construction of sediment detention basins;
- Groundwater extraction for on-site groundwater plume control, and pre-treatment of effluent for disposal to the publicly owned treatment works (POTW), in combination with limited in-situ chemical oxidation (ISCO) for source reduction; and
- Long-term on- and off-site groundwater monitoring, including monitored natural attenuation.
- An environmental easement will be placed on the property, restricting site use, groundwater use, and requiring a site management plan. Because the details of the easement and/or site management plan will be better defined after information is gained from completion of certain on-site remedial activities, the initial draft of the easement and site management plan will be provided to DEC following both the completion of the off-site portion of the Selected Remedy and the first full-scale groundwater chemical oxidation injection. The easement and site management plan may be further delayed if warranted by initial results of groundwater treatment.

As the site owner, NWR is responsible to NYSDEC for the remedial design, construction, and evaluation in accordance with the 2007 Order. NWR has the authority to monitor and control the quality of construction and related activities to ensure conformance with the engineering design plans and specifications. NWR has the authority to select and dismiss the Contractor(s) used to assist them with fulfilling these responsibilities. NWR also has the authority to select and accept or reject design plans and specifications, and materials and workmanship of the contractors and subcontractors.

The NYSDEC will review NWR's remedial designs, plans, and specifications for substantial compliance with the agency's regulations. Any substantial deviations from the requirements or approved design plans and their potential effect on the schedule must be approved by NYSDEC.

ENSR Corporation (dba The RETEC Group, Inc. [RETEC]) is the engineer responsible for the Selected Remedy design. RETEC will also be conducting field engineering and contractor supervision during the work and will make recommendations to NWR regarding field decisions during construction. RETEC will prepare the Final Engineering Report.



The Contractor(s) referred to in this Work Plan will be selected by NWR, with RETEC assistance, from among qualified companies identified by RETEC and responding to detailed bid packages prepared by RETEC after NYSDEC approval of this Work Plan. NWR may select one or more contractors to perform the work implementing this Work Plan. The selected Contractor(s) will be responsible for the performance of the work in accordance with the bidding documents and this Work Plan.

1.3 Schedule and sequence of activities

This section describes the approximate schedule and sequence for implementation of the Selected Remedy, based on typical and expected site conditions and other factors. The actual schedule and sequence will depend upon several conditions, as determined by RETEC, including, but not limited to the following:

- Obtaining, and complying with, the requirements of all necessary site access arrangements.
- Obtaining, and complying with, the requirements of all necessary approvals and permits from federal, state, and local government agencies.
- Obtaining acceptable bids and entering into acceptable contracts with acceptable remediation contractors.
- Remediation contractors' availability of staff and equipment.
- Disposal facility acceptance and scheduling.
- Weather conditions.
- Water levels and velocities in the Mohawk River and the East and West Branch drainages.
- Conditions of the sediment, soil and groundwater at the site, including the actual extent and concentrations of contaminants.

If these or other factors cause a change in conditions that could lead to a substantial change to the planned schedule and sequence of work, then the NYSDEC will be notified within one week and a modified schedule will be developed.

The implementation of the Selected Remedy will be conducted in the following three distinct tasks, which will be sequenced to address considerations of river level, weather, and property access:

- Task 1: Work in the East Branch and in the Mohawk River. These activities will be conducted during the winter low-water period in February and March. The East Branch excavations will proceed first, and in sequence from upstream to downstream, to avoid recontamination of remediated areas.
- Task 2: Work in the West Branch and at Sam Stratton Road. These activities will be done during favorable weather and drainage flow conditions. They are highly dependant upon making the necessary access arrangements. For these reasons, these activities are planned for spring or summer 2008.
- Task 3: Groundwater treatment system construction and operation. These activities will be done during favorable weather conditions and are planned for the spring or summer 2008.

The approximate planned schedule milestones for each of these tasks are as follows:

Task 1. East Branch and Mohawk River

- Preconstruction Notification to U.S. Army Corps of Engineers (USACE) [December 7, 2007]
- Application for New York State Canal Corporation (NYSCC) Work Permit (December 7, 2007)



- Final (100%) RD/RA WP to NYSDEC (December 15, 2007)
- Completion of NYSDEC review and approval of RD/RA WP (December 21, 2007)
- Completion of Access Arrangements (December 21, 2007)
- Solicitation of Earthwork Contractor Bids (January 4, 2008)
- Receive Earthwork Contractor Bids (January 18, 2008)
- Completion of Bidder Selection and Contracting (February 8, 2008)
- Earthwork Construction Mobilization (February 18, 2008)
- Substantial Completion of Task 1 Work, East Branch and Mohawk River (March 28, 2008)

Task 2. West Branch and Sam Stratton Road

The following schedule is based on the Contractor selected for Task 1 Work continuing on the Task 2 Work. RETEC and NWR reserve the right to select a different contractor for Task 2 Work, even if this extends the planned schedule:

- Completion of Access Arrangements (March 14, 2008)
- Earthwork Construction Mobilization (March 28, 2008 or later if weather conditions are not favorable, as determined by RETEC).
- Substantial completion of Task 2 Work, West Branch and other soil Excavation and basin construction (approximately two months after mobilization, weather permitting).

Task 3. Groundwater Treatment System

- Solicitation of Groundwater Contractor's Bids (March 8, 2008). This date, and subsequent dates pertaining to the groundwater treatment system are based on receiving approval from the POTW by December 30 so that the design could be finalized. A delay in receiving approval will result in an equivalent delay in this schedule.
- Receive Groundwater Contractor's Bids (March 28, 2008)
- Completion of Bidder Selection and Contracting (April 15, 2008)
- Groundwater Construction Mobilization (May 1, 2008)
- Groundwater Wells Construction Completion (May 15, 2008)
- Substantial Completion of Groundwater Treatment System Construction and Mechanical Troubleshooting (May 28, 2008)
- Begin operation of Groundwater Pumping System (May 30, 2008)
- First Full Scale ISCO Injection (June 1, 2008)
- Last ISCO Injection (December 1, 2009)
- Groundwater Monitoring (ongoing)

A Final Engineering Report will be prepared within 60 days of construction completion (July 28, 2008).



2.0 Remedial design for soil and sediment excavation

2.1 Design basis

This Remedial Design for Soil and Sediment Excavation was based on information provided in the following:

- The Revised Remedial Investigations Report [Normandeau, 2005]; and
- The Feasibility Study Report and Risk Assessment [RETEC, 2006].

The most impacted sediments were removed from the Site during the Soils and Sediments IRM [RETEC, 2004]. The residual contaminants of concern are cadmium, chromium, nickel, and zinc. A summary of soil and sediment analytical results is provided in Appendix A. There is currently little or no human health risk associated with the remaining soils/sediments. The Selected Remedy for sediments is being pursued in order to better protect against impacts to ecological receptors.

This aspect of the Selected Remedy involves the excavation and off-site disposal of certain soils and sediments from portions of the West Branch Drainage, the East Branch Drainage, and the Mohawk River at the East Branch outfall. Sediments in exceedance of severe effects levels (SELs) within the excavation limits will be removed and disposed off site during the work. The proposed excavation areas for this aspect of the Selected Remedy are shown in Figures 1 through 6.

To manage the potential for future migration of post-excavation residual materials and related impacts to the Mohawk River, two sediment detention basins will be constructed as part of the Selected Remedy, one in the East Branch and one in the West Branch. These basins will facilitate the controlled deposition of sediment from upstream, if any. Each of the sedimentation basins will provide sufficient surface area and detention time for the purpose.

Site restoration and drainage will include backfilling with armor stone in areas designated as erosional areas. The erosional areas will be visually identified by coarse-grained sand and gravel, whereas the depositional areas will be visually identified by fine-grain silt and sand. These areas will be visually verified in consultation between RETEC and the NYSDEC prior to excavation. The construction of the settling basin and spillway structures will cause changes to the streambed characteristics. In particular, the construction of the settling basin and spillway shown in Figure 4A will create a depositional area upstream of the spillway to a point 10 feet from the 24-inch culvert pipe. The spillway will create an erosional area downstream of the spillway to the grated drop inlet.

Following construction, a sediments monitoring program will be initiated. Sediment samples will be biannually (i.e., every two years) collected from the top 4 inches of deposited material within the basins to determine the characteristics of re-deposited sediments so that future Selected Remedy, if necessary, could be taken consistent with the FS Report and ROD. If monitoring shows the absence of accumulation of residual materials likely to require future remediation, NWR may request NYSDEC for termination or reduction of monitoring.

The scope of work for this Selected Remedy will include the following actions:

- Prepare the job site and clear excavation areas as necessary;
- Divert water flow as necessary;
- Excavate, segregate, characterize, and dispose of impacted soils and sediments;
- Construct two (2) sediment detention basins;



- Restore or improve water flow patterns;
- Restore excavated areas with stone and soil;
- Hydroseed all non-aquatic disturbed areas; and
- Document as-built conditions.

2.1.1 Area, depth, and volume of media of concern

The areas and volumes of materials impacted and to be remediated are detailed in the FS Report.

There are approximately 600 linear feet of material both sufficiently accessible and in sufficient exceedance of NYSDEC's LELs as to require excavation and removal as part of the Selected Remedy in the East Branch Drainage. The impacts to be remediated extend approximately to the depths shown in the Figures across the width of the wetted channel.

A small amount of soil located in the berm of a recently constructed detention basin along the East Branch at Sam Stratton Road (Figure 6), contains chromium in excess of the human health screening values. The volume of impacted material at this location to be remediated as part of the Selected Remedy is approximately 2 cubic yards, spread over 295 square feet.

The area between NYS Route 5 and the CSX mainline (Figure 4A) is naturally depositional. The impacted material at this location to be remediated as part of the Selected Remedy is 12 inches deep over 5,840 square feet and total approximately 220 cubic yards.

The impacted material at the East Branch outfall channel leading south of Quist Road to the typical high water line of the Mohawk River (Figures 2A and 3 to be remediated as part of the Selected Remedy is approximately 910 cubic yards of impacted material, up to 18 inches deep, over 16,400 square feet.

Impacted material in the Mohawk River area at the East Branch outfall to be remediated as part of the Selected Remedy is approximately 2,100 square feet and a depth of 18-inches, totaling approximately 120 cubic yards. The total mass of the contaminants in the Mohawk River is small and limited to fine-grained sediment located within the cobble river bed (see photos in Appendix C).

There are approximately 50 linear feet of material both sufficiently accessible and in sufficient exceedance of NYSDEC's LELs as to require excavation and removal as part of the Selected Remedy in the West Branch Drainage. A depositional area at the north side of the Chuctanunda and Northern Railroad spur (Figure 5A) to be remediated as part of the Selected Remedy is approximately 100 cubic yards of impacted material at depths up to 6 feet (averaging 3 feet), over 840 square feet, though much of the material is large debris and stone. The culvert leading under the railroad bed is not visible below the debris and the invert elevation is currently unknown.

The total cubic yardage is estimated to be 1,352, which compares favorably with the estimate of 1,300 cubic yards in the FS.

2.1.2 Performance criteria

The remedial goals for this project will be met by:

- 1) Excavating and properly disposing of the specified soils and sediments within the excavation limits shown in the Figures.
- 2) Constructing sediment detention basins at the locations shown in the Figures.



Excavation of contaminated soils and sediments will result in reduction of contaminant mass, but soils and sediments in excess of standards criteria and guidance values (SCGs) will remain. The intent of the soil and sediment excavation is to remove all SEL and most LEL exceedances within the excavation limits. Residual LEL exceedances in erosional excavated areas will be capped with armor stone. Unexcavated impacts in the Drainages upstream of the excavation limits will be substantially prevented from migrating to the Mohawk River by capture within the constructed basins.

Confirmatory excavation bottom samples will be collected from the excavations, one sample per 900 square feet (or 30 feet on center). Horizontal confirmatory samples will be collected at the excavation limits, with samples collected 30 feet on center. Confirmatory samples will be analyzed by Method 6010B for total cadmium, chromium, nickel, and zinc. Excavation in these areas will continue vertically and horizontally until the excavation is shown to comply with the cleanup goal of elimination of SEL exceedances to the extent practicable. Split samples will be available to the NYSDEC representative upon request.

The following specific performance requirements are also key to this proposed remedial measure:

- Reduce exposure of on-site workers and visitors to contaminated material;
- Provide for adequate site drainage;
- Protect existing structures and properties to the extent practicable; and
- Protect human health and the environment during all phases of the work.

2.1.3 Required permits

The USACE will require a Pre-Construction Notification. The Notification will be filed following NYSDEC approval of the RD/RA WP. USACE is then entitled to a 45-day review of the Notification and the Work Plan prior to giving their approval or comments.

The NYSCC requires a Canal Permit Application for a Work Permit. The application includes an insurance certificate and a short environmental assessment form. The NYSCC has indicated they would then provide the Permit within 2 to 3 weeks.

Access agreements will be obtained from the owners of property on which excavation has been proposed, or access is required, to reach the excavation areas. Owners include:

- Amsterdam Industrial Development Agency (including the Chuctanunda & Northern Railway);
- Owners of residential property at 364 Chapman Drive (near Luther St. and Chapman Dr.);
- Sam Stratton Road property owner;
- National Grid;
- Lamar Advertising Company (aka TLC Properties, Inc.); and
- The City of Amsterdam.

There are no known designated wetlands within the work areas.

NWR and RETEC will verify the requirements and obtain the permits and access agreements described above prior to the start of work.



2.2 Technical specifications

This section provides instructions to the Contractor for the implementation of the soil and sediment work. Additional requirements are provided in Section 4. The construction drawings are presented in the Figures. Site photographs are also provided in Appendix C. Additional detailed and formatted specifications and drawings may be provided to prospective Contractors in the bidding documents to be prepared by RETEC.

2.2.1 Clearing and grubbing

The Contractor shall clear and remove above-ground vegetation in consultation with RETEC. To the extent practicable, trees greater than 3-inches diameter outside of the excavation shall not be damaged.

Subsurface vegetation (root balls, etc.) within the excavations shall be disposed of off site as impacted material.

The Contractor shall provide utility clearance for all work at the site. The Contractor shall assume liability for damage to utilities and property.

Measurement and Payment under this section shall be as follows:

- Clearing and Grubbing Lump Sum
- General Site Management Lump Sum

2.2.2 Water handling

Based on surface water sampling and analysis, surface water throughout the Site is not in itself a medium of concern. Runoff conditions over the impacted sediments have been shown not to generate exceedances of constituents of concern (COC) in surface water.

The Contractor shall divert surface water around the work areas with pumps or temporary ditches. Downstream turbidity will be controlled by filtration of the discharge, if necessary, to achieve turbidity equal to or lower than upstream turbidity. No other water treatment will be performed.

Excavation in the Mohawk River will involve the installation of a temporary cofferdam around the excavation area. The temporary cofferdam shall be a water-inflated, baffled barrier, Aqua-Barrier™, or RETEC-approved equivalent. The work area within the wall will be dewatered prior to and during excavation.

Measurement and Payment under this section shall be as follows:

- Water Handling Lump Sum
- Cofferdam Installation and Removal Lump Sum
- General Site Management Lump Sum

2.2.3 Soil and sediment excavation

RETEC or RETEC's surveyor will stake and flag the limits of excavation. RETEC will be available on a continuous basis to discuss the work with the Contractor. The Contractor shall provide a survey rodman/laborer, if requested by RETEC.

Final excavation depths and horizontal limits will be determined by RETEC based on confirmation sampling results. The initial minimum depths and horizontal limits shall be as shown in the Figures:



Figure 2A	18 inches
Figure 3	18 inches
Figure 4A	12 inches
Figure 5A	12 inches
Figure 6	12 inches

The Contractor shall temporarily stockpile excavated material on site. RETEC will sample and analyze the stockpiled material, on a rush (3 to 5 day) turnaround basis. Subsurface vegetation (root balls, etc.) within the excavations shall be disposed of off site as impacted material. Temporarily stockpiled material, shall be placed on, and covered by, 6-mil polyethylene, with appropriate berms for runoff control, at an on-site location approved by RETEC and NWR.

Prior to removal, wet soil and sediment shall be allowed to drain and dewater within the excavation until dry enough to meet applicable transportation and disposal requirements.

The Contractor shall cordon completed excavations with orange barricade fence and continue work elsewhere on the site while awaiting confirmation sampling results.

Measurement and Payment under this section shall be as follows:

- | | |
|------------------------------------|--|
| • Excavation, Stockpiling, Loading | Base Lump Sum, with Unit Price for additional quantities |
| • Rodman | Time and Materials |

2.2.4 Sediment detention basin construction

The East Branch sediment detention basin shall be constructed as shown in Figures 4A and 4B. Light Stone Fill shall be used to construct a spillway to Elevation 268 feet.

The Light Stone Fill shall conform to New York State Department of Transportation (NYSDOT) "light stone fill" specifications 620-2.02 [NYSDOT, 1990], shall be angular, and shall have the following approximate analysis:

Lighter than 100 lbs.	90% to 100%
Larger than 6 inches	50% to 100%
Smaller than ½ inch	less than 10%

The West Branch sediment detention basin shall be constructed as shown in Figures 5A and 5B. Excavation shall proceed as shown to the toe of the slope, and the existing steel culvert shall be located and cleared of all solid material. A concrete pad 6 feet wide, 6 feet long, and 2 feet thick shall be constructed. A 42-inch corrugated steel culvert riser shall be emplaced 1-foot within the concrete and fitted to the existing culvert with an anti-seep collar to enable water flow from the riser into the culvert. The riser shall have 1-inch perforations on 1-foot centers, and shall be fitted with a 48-inch steel pyramid trash rack at the open top. The top elevation shall be 334 feet. The riser area shall be backfilled with Fine Stone Fill (NYSDOT 620.02, 2-inches to 4-inches), to a 2:1 slope, as shown in Figure 5B.

Measurement and Payment under this section shall be as follows:

- Site Re-grading Lump Sum
- East Branch Basin Lump Sum
- West Branch Basin Lump Sum

2.2.5 Transportation and disposal

The Contractor shall propose in their Technical Execution Plan (see Section 4.6) off-site disposal facilities for both "hazardous" and "non-hazardous" solid waste. The selected facilities must be properly permitted to dispose of the waste.

RETEC will provide existing analytical data to the selected disposal facilities prior to commencing the work. Typical stockpile sampling frequencies are one sample per 250 cubic yards, 500 cubic yards, or 1000 cubic yards, depending on the receiving facilities' requirements. Additional analytical results generated during the work will be made available as soon as practicable.

It is anticipated that all excavated sediment would be disposed of as a non-hazardous waste. The Soils and Sediments IRM [RETEC, 2004] addressed all previously known sediments classifiable by RCRA TCLP testing as hazardous wastes and none are known or suspected to remain.

The Contractor shall load, transport, and dispose of the excavated and stockpiled material, including subsurface vegetation, from the excavations in the West Drainage Basin, East Drainage Basin (including from the Mohawk River), and from the sedimentation basin along Sam Stratton Road. Trucks shall be lined, and loads shall be covered, by 6-mil (minimum) polyethylene.

All trucks shall access the site via NYSDOT approved roads.

NWR's designated agent will sign the transportation manifests (bills of lading) prior to loads leaving the site.

Measurement and Payment under this section shall be as follows:

- Transportation Per Ton (by disposal weigh ticket)
- Disposal Per Ton (by disposal weigh ticket)

NWR may elect to be invoiced directly by the disposal facilities.

2.2.6 Site restoration and drainage

Areas designated as erosional areas by RETEC shall be armored using armor stone. Erosional areas that contain residual LEL exceedances, as determined by RETEC, after a minimum excavation depth of 18 inches or 12 inches shall be armored with 12 inches of armor stone. Armor stone placed within the Mohawk River channel, if any, shall also receive 6 inches of topsoil for benthic restoration (it is intended that the topsoil settle partially into the armor stone). In designated erosional areas where there are no residual LEL exceedances, as determined by RETEC, shall be armored with 3 inches of armor stone. Depositional areas with residual LEL exceedances will not require armoring. Likewise, the constructed sediment basins will not be armored.

In particular, for the area shown in Figure 4A, the Contractor shall place 12 inches of armor stone in the excavated area between the 24-inch corrugated metal pipe (CMP) culvert at NYS Route 5, and a point 10 feet downstream of the culvert pipe. The Contractor shall place 12 inches of armor stone from immediately downstream of the spillway to the grated drop inlet.



The armor stone shall conform to NYSDOT "light stone fill" specifications 620-2.02 [NYSDOT, 1990], shall be angular, and shall have the following approximate analysis:

Lighter than 100 lbs.	90% to 100%
Larger than 6 inches	50% to 100%
Smaller than ½ inch	less than 10%

Topsoil. A suitable topsoil specification will be added here.

Placement of jute mesh and/or armor stone for erosion control may also be required in some additional locations, as determined in the field by RETEC.

All non-aquatic disturbed areas shall be regraded, as necessary, to restore or improve drainage patterns. The areas shall then be hydroseeded with the supplier's recommended lbs/acre of seed and nutrients. Grass seed mixture shall compliment existing grass areas, and shall comply with the tolerance for purity and germination established by the Official Seed Analysts of North America. It is the Contractor's responsibility to maintain the area until a vegetative cover is established.

Measurement and Payment under this section shall be as follows:

• Light Stone Fill	Per Ton, Placed
• Top Soil	Per Ton, Placed
• Site Regrading	Lump Sum
• Hydroseeding and Cover Establishment	Per Square Foot, Placed
• Jute Mesh	Per Square Foot, Placed



3.0 Remedial design for groundwater treatment

3.1 Design basis

This Remedial Design for Groundwater Treatment was based on information provided in the following:

- The Revised Remedial Investigations Report [Normandeau, 2005];
- The Feasibility Study Report and Risk Assessment [RETEC, 2006];
- Historical and recent groundwater monitoring results [RETEC 2007a]; and
- Results of a pre-design investigation including a groundwater pump test and ISCO pilot study [RETEC, 2007b].

Twenty-two groundwater monitoring wells have been installed on and around the Site. Additionally, two (former) groundwater production wells are located on FGI property to the east of the Site, now periodically used for monitoring. Four of the on-site wells (MW-1, -2, -3, and -4) collect groundwater samples from the shallow glacial till aquifer. The other 20 wells collect groundwater from the fractured bedrock. A summary of groundwater monitoring results is provided in Appendix B.

Trichloroethene (or trichloroethylene [TCE]) has been consistently detected above its NYSDEC Groundwater Quality Standard in samples collected from 14 of the 24 wells on and around the Site. Other chlorinated VOCs (e.g., dichloroethene [DCE]) have also been detected in the groundwater.

Chromium has been consistently detected in three of the four glacial till monitoring wells and in eight of the fractured bedrock monitoring wells, all on site. Chromium exceeds the groundwater standard in on-site wells. Chromium has not been detected above the groundwater standard in the off-site wells. The chromium is predominantly hexavalent (Cr^{+6}).

For the purposes of this groundwater aspect of the Selected Remedy, the action should not exacerbate the existing chromium plume, and the chromium discharge concentration to the POTW should not exceed the permitted level.

This Selected Remedy should hydraulically control groundwater flow in the most impacted area, resulting in a capture zone that greatly reduces the off-site migration of COC.

There are currently no wells supplying drinking water in the impacted area and potential for ingestion of groundwater is minimal. The groundwater Remediation Goals focus, therefore, on preventing future exposure to on-site and off-site groundwater exceeding SCGs and control of plume migration through the long-term reduction in groundwater COC toxicity, mass, volume, and/or mobility.

Under this Selected Remedy, a central groundwater recovery well, with an electric submersible pump and an on-site treatment system, will be installed. Treated effluent will be discharged to the City of Amsterdam's municipal wastewater treatment plant (POTW), via the sanitary sewer, under an appropriate discharge permit. Periodic monitoring will be required.

The treatment system will include an air stripper and a flow totalizer in a heated shed. This treatment train assumes that chromium treatment will not be required.

A limited ISCO program will also be concurrently implemented with the intent of reducing the duration of extraction and treatment system operations. For estimating purposes, however, a 10-year groundwater



extraction/treatment period has been assumed with a 30-year groundwater monitoring program. This Selected Remedy also included groundwater use restrictions.

The Selected Remedy for groundwater is being pursued in order to reduce on-site sources of contaminants in groundwater and to control or reduce future migration from the Site for some period of time. If monitoring shows sufficient improvement, or the absence of further off-site migration, or on any other basis there does not appear to be a likely need for future active remediation, NWR may request NYSDEC for termination or reduction of groundwater pumping, treatment, and/or monitoring. In summary, the components of the remedial design for groundwater treatment consist, per the ROD [NYSDEC, 2007], of the following:

- On-site groundwater recovery and treatment for TCE;
- Limited on-site ISCO within the TCE plume; and
- Long term on-site and off-site groundwater monitoring and an on-site environmental easement.

3.1.1 Area, depth, and volume of media of concern

The TCE in groundwater is primarily a bedrock contaminant. The concentration on site is several orders of magnitude higher than off site. As seen in Figure 7, the source of the TCE impacts appears to be located in the vicinity of MW-4R, MW-6, and MW-10. Concentrations in this area typically exceed 2000 ug/L.

Based on recent and historical groundwater data [RETEC, 2007a], the lateral extent of TCE impacts in excess of the NYSDEC SCG (5 ug/L) is approximately 300,800 square feet. Approximately half of that area (and by far the bulk of the TCE mass) is on site.

Assuming an average aquifer thickness of 50 feet and a bedrock porosity of 2%, the volume of TCE-impacted groundwater is approximately 2.25 million gallons.

3.1.2 Performance criteria

This remedial measure is not anticipated to produce rapid reductions in existing contaminant concentrations in site groundwater. Based on the characteristics of the fractured bedrock at the Site and the evaluation of technologies available, residual TCE and hexavalent chromium will remain in the bedrock fractures and constitute a long-term impact to on-site groundwater.

Typical Best Available Technology evaluations for removal of TCE using air strippers allow for a removal efficiency of 99% [USACE, 2001]. The air stripper will be designed to reduce TCE concentrations to a reasonable discharge limit required by the POTW, which has not yet been determined. Once the discharge limits are determined, an addendum to this RD/RA WP will be prepared providing additional design details and requirements of the treatment system. The air stripper is not expected to reduce the concentration of chromium.

The ISCO program is intended to reduce TCE concentrations within the area of MW-4R, MW-6, and MW-10, in accordance with the FS, the ROD, the Order on Consent of July 2007, and any previous and subsequent related Project Correspondence between NWR and its Agents and the NYSDEC. Three injections will be performed and the results will be reviewed and evaluated for cost-effectiveness with NYSDEC.

This Selected Remedy should hydraulically control groundwater flow in the most impacted area, resulting in a capture zone encompassing MW-4R, MW-6, and, MW-10.

The following specific performance requirements are also key to the proposed remedial measure:

- Reduce exposure of on-site workers and visitors to contaminated material;



- Provide for adequate site drainage;
- Protect existing structures and properties to the extent practicable; and
- Protect human health and the environment during all phases of the work.

3.1.3 Required permits

Based on anticipated treatment system flow rates and TCE concentrations, no air discharge permit is required.

No permits are required for the ISCO component.

A long-term discharge permit is required with the POTW. The feasibility of this option may be adversely affected by requirements of the POTW, including charges of the POTW. RETEC will acquire the POTW discharge permit.

A building permit may be required for the treatment shed. The Contractor shall acquire the building permit.

3.2 Technical specifications

This section provides instructions to the Contractor for the construction of the groundwater treatment system. Additional requirements are provided in Section 4. The construction drawings are presented in the Figures. Additional detailed and formatted specifications and drawings may be provided to prospective Contractors in the bidding documents to be prepared by RETEC.

3.2.1 Recovery and injection wells

Four ISCO injection wells shall be installed in a grid encompassing the source area near MW-4R and MW-6 as shown on Figure 7. Bedrock elevations in these areas are 12 to 16 feet below ground surface. The injection wells shall be 2-inches diameter PVC and screened within the bedrock with a steel isolation casing extending 2 feet into the bedrock surface. Total injection well depth shall be 80 feet. The wells shall be flush mounted at the ground surface and the top of the PVC casing shall have a threaded coupling. The 2-inch PVC casing shall be placed within a 4-inch bedrock borehole, without sandpack, for the purpose of maintaining open bedrock boreholes.

One recovery well shall be constructed of 6-inch diameter PVC, 80-feet deep, and screened within the bedrock from 30 to 80-feet. The recovery well head shall be fitted with a flush mount vault, approximately 24-inches square and 24 inches deep.

All drill cuttings and fluids shall be properly handled, containerized, and characterized for off-site disposal.

Measurement and Payment under this section shall be as follows:

• Injection Wells	Each, Installed
• Recovery Well	Each, Installed
• Drill Rig Mobe, Demobe, Decon	Lump Sum
• Characterization and Disposal of Cuttings	Unit Price, per Drum

3.2.2 Groundwater treatment system

The groundwater treatment system shall be constructed as shown on Figure 8. Model numbers for the primary components are provided in the Figure.

Revised: 01/27/00



During system startup, the system will be monitored by RETEC to assure that POTW discharge criteria are being met.

Measurement and Payment under this section shall be as follows:

- | | |
|------------------------|----------|
| • Earthwork and Slab | Lump Sum |
| • Shed with Insulation | Lump Sum |
| • Treatment System | Lump Sum |
| • Electrical Service | Lump Sum |

3.2.3 In situ chemical oxidation

This Selected Remedy requires the handling of potentially dangerous oxidizing chemicals. Per the site-specific health and safety plan (HASP), appropriate personal protection equipment (PPE) includes chemical-resistant coveralls, gloves, respiratory protection, and face shields. Application of the oxidants will be carefully monitored.

Each injection well will likely receive three injections of potassium permanganate (KMnO_4), one injection every six months. There may be some adjustment based on prior results. Residual concentrations of chromium, manganese, and VOCs (including TCE) would be measured immediately before injection, 1 week after, and approximately 1 month after. It is assumed that the concentrations will initially decrease, followed by an incomplete rebound.

The mass of KMnO_4 to be injected per well will be determined based on the anticipated concentration of TCE, though it is currently estimated at 25 lbs per well per injection.

Introduction of an oxidant to the subsurface will mobilize precipitated chromium. Mobilized chromium will be captured by the groundwater extraction system, but if concentrations exceed the treatment system discharge limit, then system modifications, in consultation with NYSDEC and/or the POTW, may be required.

No Measurement and Payment shall be made under this section as the work will be performed by Others.

3.2.4 Long-term monitoring and environmental easement

This Selected Remedy includes on-site groundwater use restrictions and a long-term groundwater on-site and off-site monitoring program.

The groundwater containment and treatment system may be phased out, with NYSDEC concurrence, when on-site groundwater quality reaches a stable value and off-site concentrations begin to exhibit a long-term decline, indicating that the source area of the TCE had been substantially and permanently remediated within the limits of technical feasibility. This may mean reduced or no pumping and/or reduced or no treatment. Groundwater will thereafter be monitored for natural attenuation, and to detect possible rebounds of concentrations. On-site and off-site monitoring parameters may be reduced or eliminated, with NYSDEC concurrence, if and as groundwater quality stabilizes or improves.

No Measurement and Payment shall be made under this section as the work will be performed by Others.



4.0 General requirements

This section describes the general requirements for conducting the work, including health and safety requirements, quality assurance, the Technical Execution Plan, environmental monitoring and control, and project reporting.

4.1 Health and safety

A Safety Qualification Form (provided by RETEC) shall be completed and submitted by the Contractor(s) during the bidding process for this work for RETEC's review and NWR's approval.

The selected Contractor shall comply with all applicable health and safety requirements including OSHA regulations 40 CFR 1926, 40 CFR 1910, and RETEC's site-specific Health and Safety Plan (HASP). RETEC's HASP will be reviewed by NYSDEC and NYSDOH prior to the work.

RETEC will provide a copy of the HASP to the Contractor under separate cover. Subjects covered in the HASP include:

- Health & Safety Risk Analysis;
- PPE;
- OSHA Air Monitoring & Action Levels;
- Site Control;
- Railroad Property Work, including the Chuctanunda & Northern Railway operational rail line;
- Decontamination;
- Emergency Response Plan;
- Lockout/Tagout;
- Heavy Equipment Operations;
- Excavation and Trenching;
- Material Safety Data Sheets; and
- Health and Safety Records and Reports.

Prior to the work, the Contractor shall provide to RETEC written evidence of the following items for each person who will be entering the work zone:

- Date of respirator fit test;
- Date of OSHA 40 hour training (or 8 hour refresher training); and
- Date of annual physical.

Persons without these items both up-to-date and on file with RETEC will not be allowed to enter the work zone.

Hours of operation shall be daylight hours between 8 AM and 5 PM, Monday through Friday, unless otherwise allowed in writing by RETEC.



If at any time during the course of the work the conditions at the site are discovered to be substantially different than anticipated in this Work Plan, thereby affecting the purpose of the work or the health and safety of personnel, the work area will be halted and the site will be returned to a safe condition. A conference will then be convened among representatives of NYSDEC, NWR, the Contractor(s), and RETEC to determine the appropriate actions and modifications to this Work Plan and the HASP. Work will then resume in accordance with the revised plans.

Measurement and Payment under this section shall be as follows:

- H&S Compliance Lump Sum under General Site Management

4.2 Quality assurance

The work will utilize standard quality assurance procedures including:

- Submittal by Contractor of weigh tickets for all earthen materials transported to or from the site;
- Submittal by Contractor, prior to the work, of sieve analyses at a frequency of one sample per 1,000 cubic yards, or approximately equivalent tonnage, for all imported earthen materials;
- Submittal by Contractor of drillers boring logs and well construction logs;
- Confirmation samples every 900 square feet (approximately 30 feet on center) of open excavation, analyzed by Method 6010B for total cadmium, chromium, nickel, and zinc;
- Evaluation by RETEC of Contractor's proposed borrow source(s) for imported earthen and stone materials. Materials must meet NYSDOT specifications, if applicable. Contractor must provide to RETEC analytical data indicating that imported material is non-contaminated at a frequency of one sample per 1,000 cubic yards, or approximately equivalent tonnage; and
- Field verification by RETEC of excavation and placed material depths, areas, and volumes.

Measurement and Payment under this section shall be as follows:

- QA/QC Compliance Lump Sum under General Site Management

4.3 Environmental monitoring and control

Environmental monitoring and mitigation procedures will be followed to manage impacted materials during construction and to control fugitive emissions.

4.3.1 Erosion and sedimentation control

The Contractor shall comply with general erosion and sedimentation control practices, including installation of hay bales and/or silt fence as directed by RETEC.

If the ditches are flowing during the work, the Contractor will be responsible for maintaining a downstream turbidity visibly (to RETEC) not greater than upstream. Contractor shall pump flowing water around the work areas and shall have sufficient pumps, filters, and hoses operational at the site. Water Handling is discussed in Section 2.2.2.

Measurement and Payment under this section shall be as follows:

- Erosion Control Time and Materials

Final site conditions shall be provided in acceptable condition by the determination of RETEC, prior to Contractor demobilization.

Measurement and Payment under this section shall be as follows:

- Mobe/Demobe Lump Sum
- Decontamination Lump Sum
- Transportation Per Ton (by disposal weigh ticket)
- Disposal Per Ton (by disposal weigh ticket)

4.4 Additional general requirements

During the course of this work:

- The Contractor shall establish locations of overhead and subsurface structures, including utilities, pipes, and monitoring wells, in the area of the work. Contractor shall repair, at no additional cost, structures damaged due to the work. Contractor is responsible for all utility clearances.
- Trucking of all materials both on site and off site shall be done in accordance with applicable DOT standards. Trucks hauling materials to and from the site shall use only designated haul roads approved by RETEC and shall ensure that the remedial activity does not conflict with other Site or neighboring operations. Trucking methods shall be protective of human health and the environment.
- Contractor shall not disrupt or hinder the work of others.
- The Contractor shall perform all work in accordance with all applicable regulations and permits.

Measurement and Payment under this section shall be as follows:

- Additional Gen. Reqs. Lump Sum under General Site Management

4.5 Project reporting

During the course of the work, the Contractor shall regularly provide to RETEC:

- Daily field logs;
- Equipment and material testing records;
- Weigh tickets; and
- Well construction logs.

At the conclusion of each workday, the Contractor and RETEC will review the work completed and reach consensus on the quantities for payment.

During the course of the work, the Contractor shall attend weekly progress meetings convened by RETEC with NYSDEC and NYSDOH in attendance.

RETEC shall provide weekly Progress Reports to NWR and NYSDEC. Progress Reports will include:

- The previous week's actions;
- Next week's planned actions;



- Sampling and analytical results;
- Design changes and other modifications to the design; and
- Revised project schedules.

Within 60 days of completion of the remedial activities, RETEC will prepare a Final Engineering Report, approved by a professional engineer licensed in the State of New York. The following items will be included in the Final Report:

- A description of all field work performed;
- As-built drawings;
- All pertinent analytical results;
- Copies of the bills of lading and manifests from the disposal of materials;
- Copies of the Contractor's testing records and weigh tickets; and
- A Site Management Plan, including an Operation and Maintenance Plan

Measurement and Payment to Contractor under this section shall be as follows:

- Reporting Lump Sum under General Site Management

4.6 Technical execution plan

A Technical Execution Plan (TEP) shall be prepared and submitted by the Contractor(s) during the bidding process for this work for RETEC's review and NWR's approval. It shall describe:

- The materials, equipment, and methods to be used to perform the work;
- The proposed schedule for completing the work;
- Resumes of key project personnel;
- Names, addresses, contact persons, and other information relevant to the Contractor's proposed trucking and disposal subcontractors for:
 - Hazardous solids
 - Hazardous liquids
 - Non-hazardous solids
 - Non-hazardous liquids
- Contractor's proposed equipment list;
- Means and methods that the bidding contractor would like to propose as alternatives to this Work Plan;
- A summary of the Contractor's standard health, safety, and site monitoring procedures;
- List of Subcontractors; and
- Qualifications for railroad work.

The selected Contractor may be required by RETEC to provide additional clarifications to their Plan prior to, and during the course of, the work.



Measurement and Payment under this section shall be as follows:

- Submittal of TEP Lump Sum under General Site Management



5.0 References

New York State Department of Environmental Conservation (NYSDEC), 2007a. Order on Consent, New Water Realty Corporation, Index # A4-0588-0507, Site Code #4-29-004.

NYSDEC, 2007b. Record of Decision, Ward Products Site, Site Number 429004, March 2007.

New York State Department of Transportation (NYSDOT), 1990. Standard Specifications, Construction and Materials, January 2, 1990.

Normandeau Associates, Inc., 2005. Revised Remedial Investigations Report, Ward Products Corporation Site, May 2005.

RETEC, 2004. Construction Complete Final Engineering Report – Soils and Sediments IRM, Ward Products Site, August 18, 2004.

RETEC, 2006. Feasibility Study and Risk Assessment, Ward Products Corporation Site, September 25, 2006.

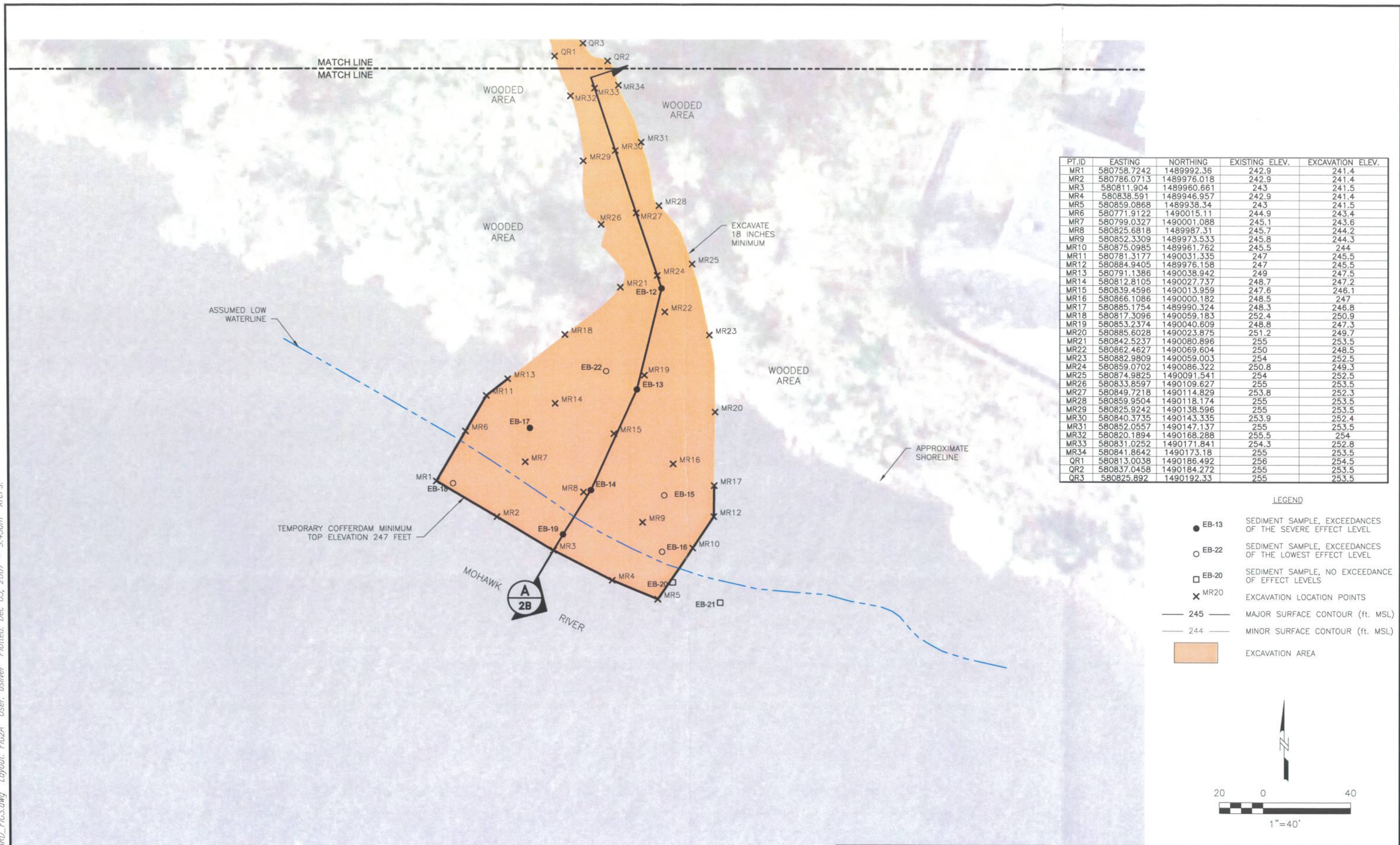
RETEC, 2007a. Results of August 2007 Water Quality Samples, Ward Products Site, September 18, 2007.

RETEC, 2007b. Results of Groundwater In-situ Oxidation Pilot Study [in preparation].

USACE, 2001. U.S. Army Corps of Engineers, Design Guide No. 1110-1-3. USACE, Washington, D.C. October 31, 2001.

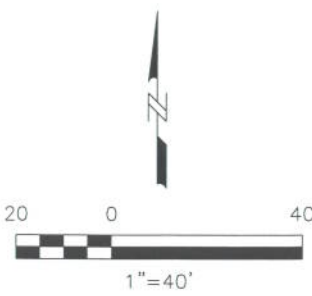


File: H:\ward\WARD_FIGS.dwg Layout: FIG2A User: dsilver Plotted: Dec 05, 2007 - 9:45am Xref's:



PT.ID	EASTING	NORTHING	EXISTING ELEV.	EXCAVATION ELEV.
MR1	580758.7242	1489992.36	242.9	241.4
MR2	580786.0713	1489976.018	242.9	241.4
MR3	580811.904	1489960.661	243	241.5
MR4	580838.591	1489946.957	242.9	241.4
MR5	580859.0868	1489938.34	243	241.5
MR6	580771.9122	1490015.11	244.9	243.4
MR7	580799.0327	1490001.088	245.1	243.6
MR8	580825.6818	1489987.31	245.7	244.2
MR9	580852.3309	1489973.533	245.8	244.3
MR10	580875.0985	1489961.762	245.5	244
MR11	580781.3177	1490031.335	247	245.5
MR12	580884.9405	1489976.158	247	245.5
MR13	580791.1386	1490038.942	249	247.5
MR14	580812.8105	1490027.737	248.7	247.2
MR15	580839.4596	1490013.959	247.6	246.1
MR16	580866.1086	1490000.182	248.5	247
MR17	580885.1754	1489990.324	248.3	246.8
MR18	580817.3096	1490059.183	252.4	250.9
MR19	580853.2374	1490040.609	248.8	247.3
MR20	580885.6028	1490023.875	251.2	249.7
MR21	580842.5237	1490080.896	255	253.5
MR22	580862.4627	1490069.604	250	248.5
MR23	580882.9809	1490059.003	254	252.5
MR24	580859.0702	1490086.322	250.8	249.3
MR25	580874.9825	1490091.541	254	252.5
MR26	580833.8597	1490109.627	255	253.5
MR27	580849.7218	1490114.829	253.8	252.3
MR28	580859.9504	1490118.174	255	253.5
MR29	580825.9242	1490138.596	255	253.5
MR30	580840.3735	1490143.335	253.9	252.4
MR31	580852.0557	1490147.137	255	253.5
MR32	580820.1894	1490168.288	255.5	254
MR33	580831.0252	1490171.841	254.3	252.8
MR34	580841.8642	1490173.18	255	253.5
QR1	580813.0038	1490186.492	256	254.5
QR2	580837.0458	1490184.272	255	253.5
QR3	580825.892	1490192.33	255	253.5

- LEGEND
- EB-13 SEDIMENT SAMPLE, EXCEEDANCES OF THE SEVERE EFFECT LEVEL
 - EB-22 SEDIMENT SAMPLE, EXCEEDANCES OF THE LOWEST EFFECT LEVEL
 - EB-20 SEDIMENT SAMPLE, NO EXCEEDANCE OF EFFECT LEVELS
 - ✕ MR20 EXCAVATION LOCATION POINTS
 - 245 — MAJOR SURFACE CONTOUR (ft. MSL)
 - 244 — MINOR SURFACE CONTOUR (ft. MSL)
 - EXCAVATION AREA



ENSR AECOM



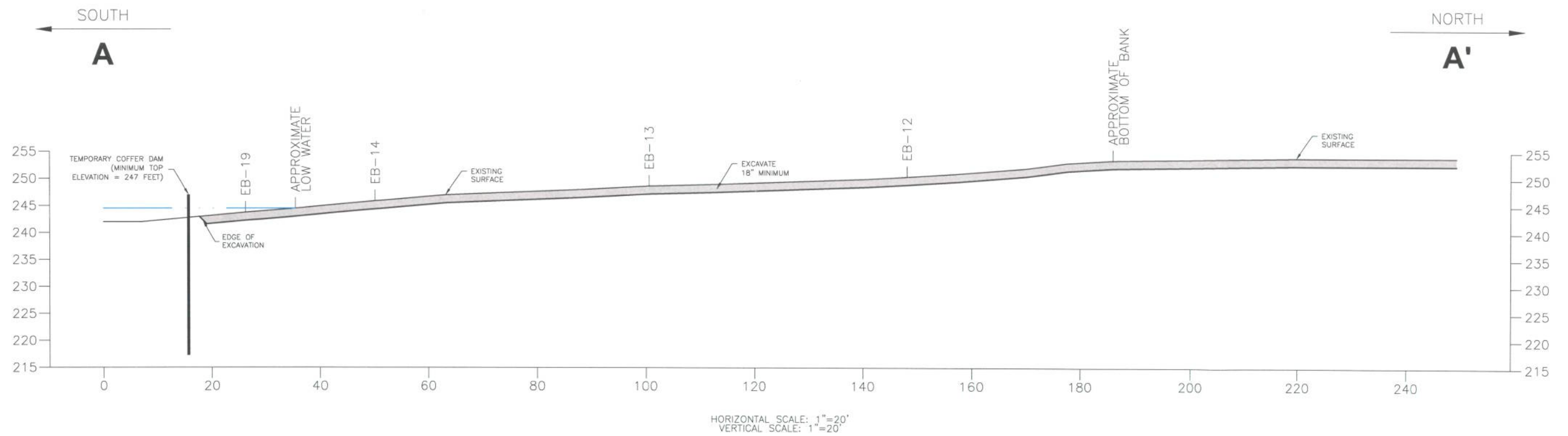
FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK
12518-001-300

DATE: 12/05/07 DRWN: MAW/DLS

MOHAWK RIVER
EXCAVATION PLAN

FIGURE 2A

File: H:\ward\FIG2B.dwg Layout: ANSI_B1-LJ User: dsilver Plotted: Dec 04, 2007 - 10:35am Xref's:



ENSR | AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK
12518-001-300

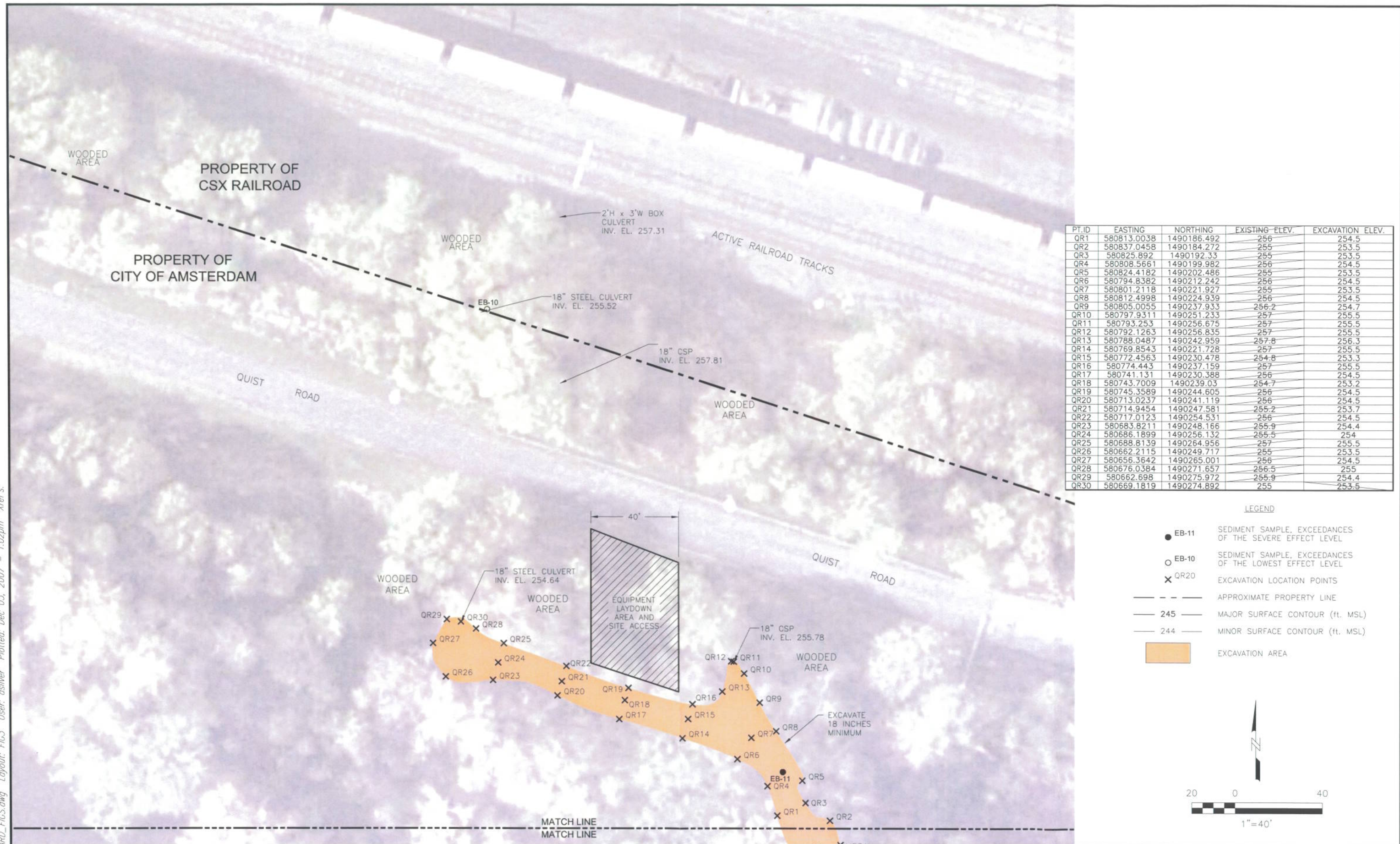
MOHAWK RIVER EXCAVATION
CROSS-SECTION

DATE: 12/04/07

DRWN: MAW/DLS

FIGURE 2B

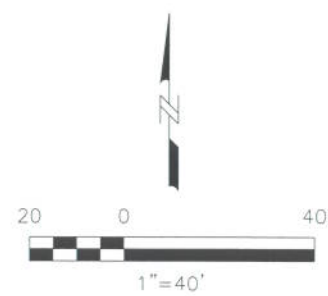
File: H:\ward\WARD_FIGS.dwg Layout: FIG3 User: dsilver Plotted: Dec 03, 2007 - 1:02pm Xref's:



PT.ID	EASTING	NORTHING	EXISTING ELEV.	EXCAVATION ELEV.
QR1	580813.0038	1490186.492	256	254.5
QR2	580837.0458	1490184.272	255	253.5
QR3	580825.892	1490192.33	255	253.5
QR4	580808.5661	1490199.982	256	254.5
QR5	580824.4182	1490202.486	255	253.5
QR6	580794.8382	1490212.242	256	254.5
QR7	580801.2118	1490221.927	255	253.5
QR8	580812.4998	1490224.939	256	254.5
QR9	580805.0055	1490237.933	256.2	254.7
QR10	580797.9311	1490251.233	257	255.5
QR11	580793.253	1490256.675	257	255.5
QR12	580792.1263	1490256.835	257	255.5
QR13	580788.0487	1490242.959	257.8	256.3
QR14	580769.8543	1490221.728	257	255.5
QR15	580772.4563	1490230.478	254.8	253.3
QR16	580774.443	1490237.159	257	255.5
QR17	580741.131	1490230.388	256	254.5
QR18	580743.7009	1490239.03	254.7	253.2
QR19	580745.3589	1490244.605	256	254.5
QR20	580713.0237	1490241.119	256	254.5
QR21	580714.9454	1490247.581	255.2	253.7
QR22	580717.0123	1490254.531	256	254.5
QR23	580683.8211	1490248.166	255.9	254.4
QR24	580686.1899	1490256.132	255.5	254
QR25	580688.8139	1490264.956	257	255.5
QR26	580662.2115	1490249.717	255	253.5
QR27	580656.3642	1490265.001	256	254.5
QR28	580676.0384	1490271.657	256.5	255
QR29	580662.698	1490275.972	255.9	254.4
QR30	580669.1819	1490274.892	255	253.5

LEGEND

- EB-11 SEDIMENT SAMPLE, EXCEEDANCES OF THE SEVERE EFFECT LEVEL
- EB-10 SEDIMENT SAMPLE, EXCEEDANCES OF THE LOWEST EFFECT LEVEL
- ✕ QR20 EXCAVATION LOCATION POINTS
- - - APPROXIMATE PROPERTY LINE
- 245 — MAJOR SURFACE CONTOUR (ft. MSL)
- 244 — MINOR SURFACE CONTOUR (ft. MSL)
- EXCAVATION AREA



ENSR | AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTRDAM, NEW YORK

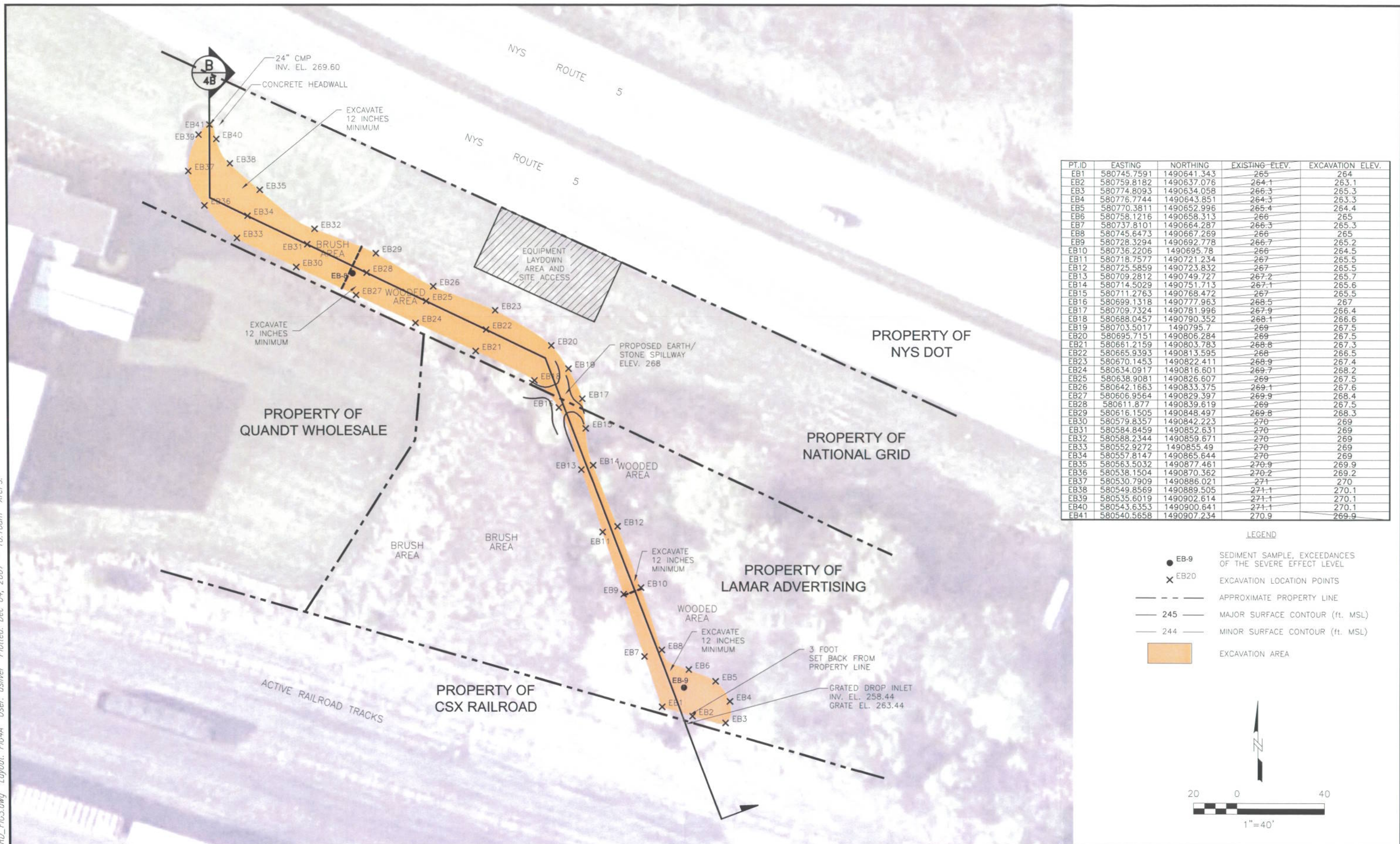
12518-001-300

DATE: 11/09/07 DRWN: MAW/BIL

QUIST ROAD
EXCAVATION PLAN

FIGURE 3

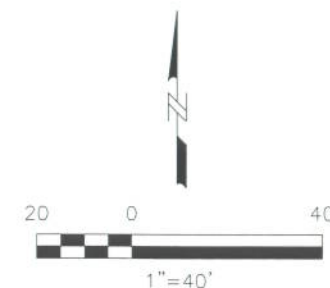
File: H:\ward\WARD_FIGS.dwg Layout: FIG4A User: dsilver Plotted: Dec 04, 2007 - 10:16am Xref's:



PT.ID	EASTING	NORTHING	EXISTING ELEV.	EXCAVATION ELEV.
EB1	580745.7591	1490641.343	265	264
EB2	580759.8182	1490637.076	264.1	263.1
EB3	580774.8093	1490634.058	266.3	265.3
EB4	580776.7744	1490643.851	264.3	263.3
EB5	580770.3811	1490652.996	265.4	264.4
EB6	580758.1216	1490658.313	266	265
EB7	580737.8101	1490664.287	266.3	265.3
EB8	580745.6473	1490667.269	266	265
EB9	580728.3294	1490692.778	266.7	265.2
EB10	580736.2206	1490695.78	266	264.5
EB11	580718.7577	1490721.234	267	265.5
EB12	580725.5859	1490723.832	267	265.5
EB13	580709.2812	1490749.727	267.2	265.7
EB14	580714.5029	1490751.713	267.1	265.6
EB15	580711.2763	1490768.472	267	265.5
EB16	580699.1318	1490777.963	268.5	267
EB17	580709.7324	1490781.996	267.9	266.4
EB18	580688.0457	1490790.352	268.1	266.6
EB19	580703.5017	1490795.7	269	267.5
EB20	580695.7151	1490806.284	269	267.5
EB21	580661.2159	1490803.783	268.8	267.3
EB22	580665.9393	1490813.595	268	266.5
EB23	580670.1453	1490822.411	268.9	267.4
EB24	580634.0917	1490816.601	269.7	268.2
EB25	580638.9081	1490826.607	269	267.5
EB26	580642.1663	1490833.375	269.1	267.6
EB27	580606.9564	1490829.397	269.9	268.4
EB28	580611.8777	1490839.619	269	267.5
EB29	580616.1505	1490848.497	269.8	268.3
EB30	580579.8357	1490842.223	270	269
EB31	580584.8459	1490852.631	270	269
EB32	580588.2344	1490859.671	270	269
EB33	580552.9272	1490855.49	270	269
EB34	580557.8147	1490865.644	270	269
EB35	580563.5032	1490877.461	270.9	269.9
EB36	580538.1504	1490870.362	270.2	269.2
EB37	580530.7909	1490886.021	271	270
EB38	580549.8569	1490889.505	271.1	270.1
EB39	580535.6019	1490902.614	271.1	270.1
EB40	580543.6353	1490900.641	271.1	270.1
EB41	580540.5658	1490907.234	270.9	269.9

LEGEND

- EB-9 SEDIMENT SAMPLE, EXCEEDANCES OF THE SEVERE EFFECT LEVEL
- ✕ EB20 EXCAVATION LOCATION POINTS
- - - APPROXIMATE PROPERTY LINE
- 245 MAJOR SURFACE CONTOUR (ft. MSL)
- 244 MINOR SURFACE CONTOUR (ft. MSL)
- EXCAVATION AREA



ENSR AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK

12518-001-300

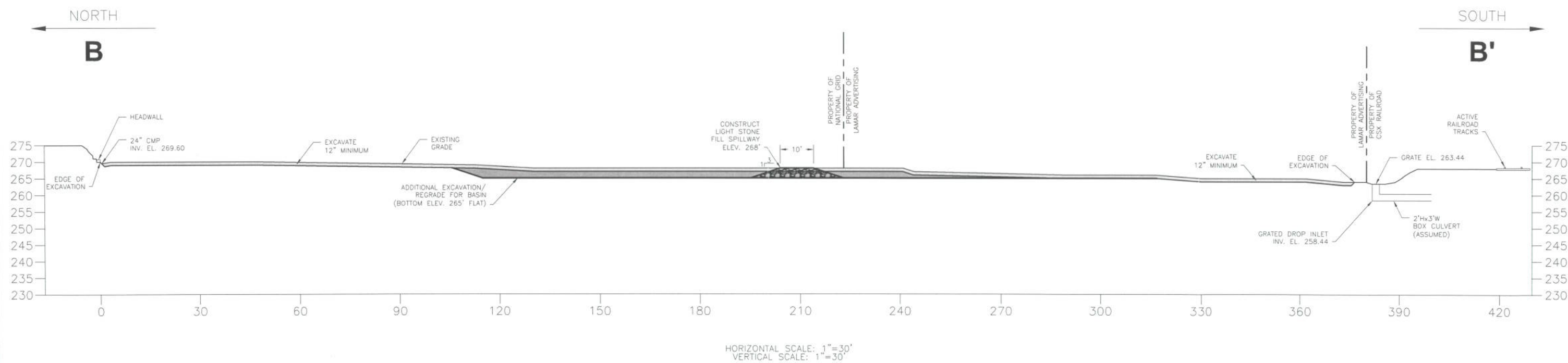
DATE: 12/04/07

DRWN: MAW/DLS

EAST BRANCH
EXCAVATION PLAN

FIGURE 4A

File: H:\ward\FIC4B.dwg Layout: FIC4B User: dsilver Plotted: Dec 04, 2007 - 10:28am Xref's:



ENSR | AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK

12518-001-300

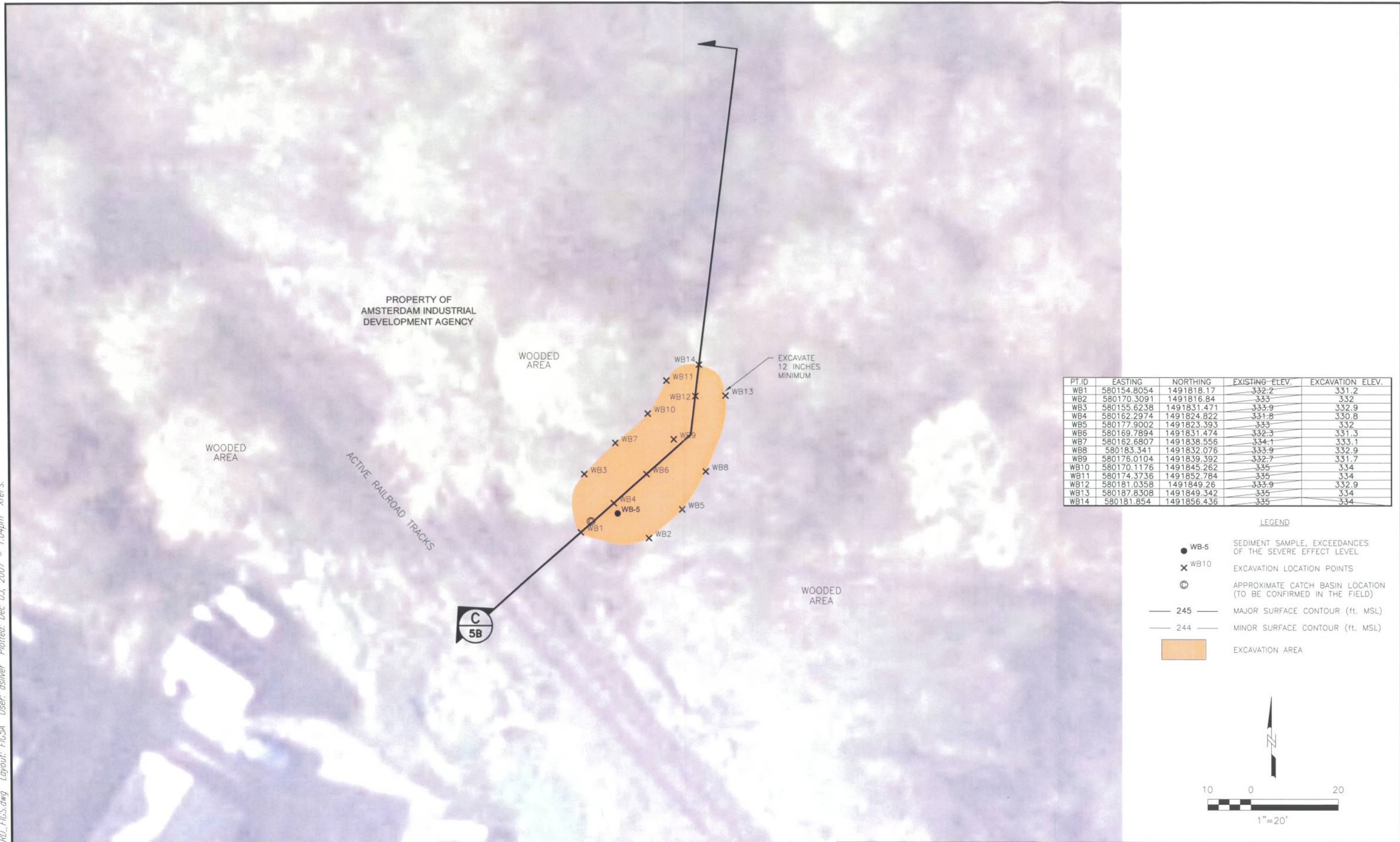
DATE: 12/04/07

DRWN: MAW/DLS

EAST BRANCH EXCAVATION
CROSS-SECTION

FIGURE 4B

File: H:\ward\WARD_FIGS.dwg Layout: FIG5A User: dsilver Plotted: Dec 03, 2007 - 1:04pm Xref's:



ENSR | AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK
12518-001-300

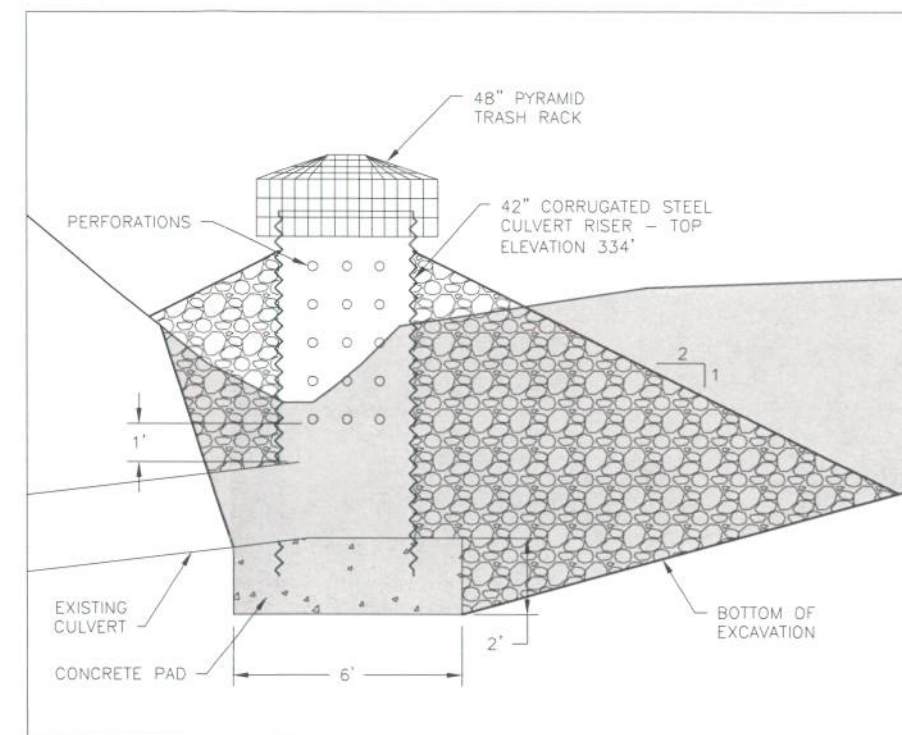
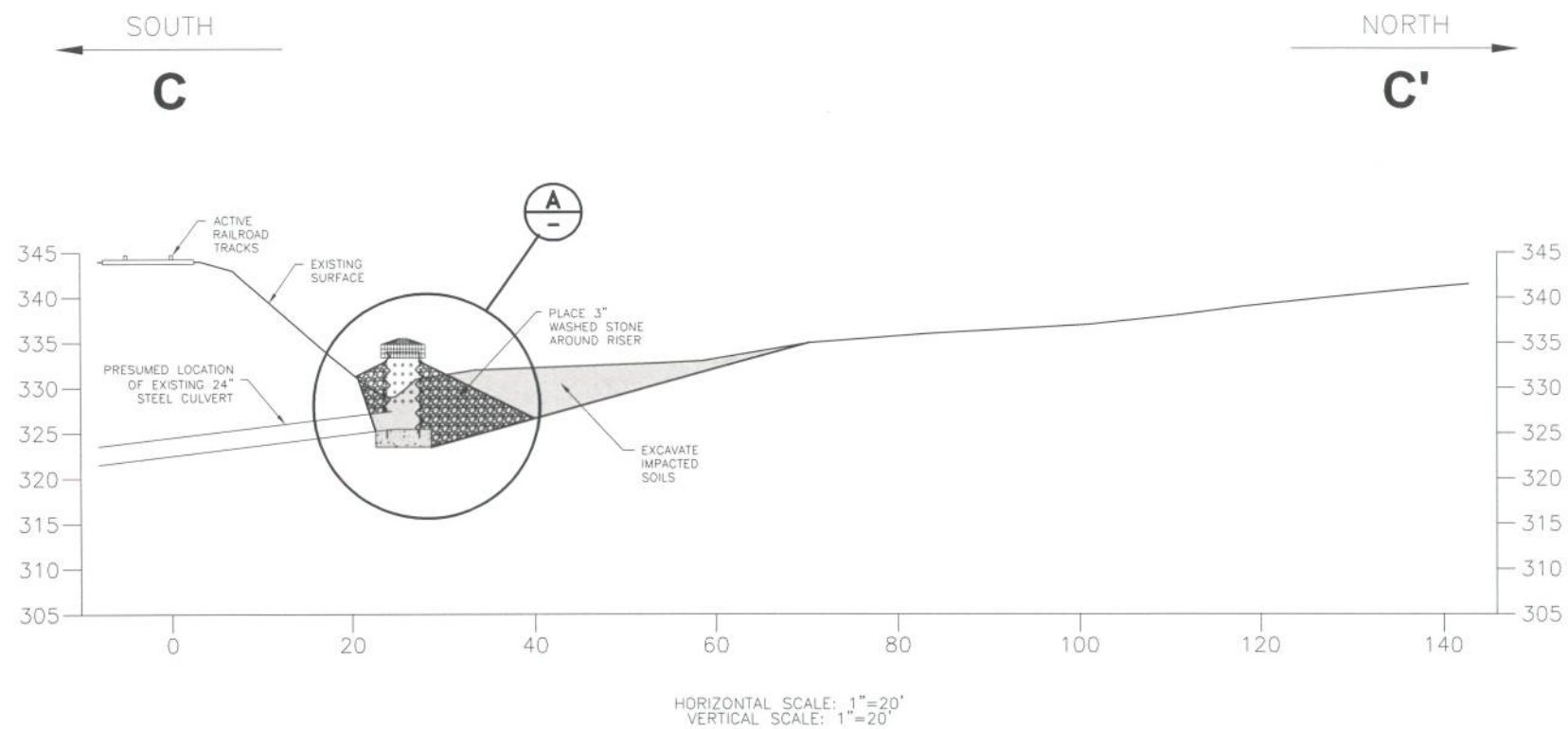
DATE: 11/09/07

DRWN: MAW/BIL

WEST BRANCH
EXCAVATION PLAN

FIGURE 5A

File: H:\ward\FIG5B.dwg User: dsilver Plotted: Dec 04, 2007 - 10:27am Xref's:



A RISER DETAIL
1"=5'-0"

ENSR | AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK

12518-001-300

WEST BRANCH EXCAVATION
CROSS-SECTION

DATE: 12/04/07

DRWN: MAW/DLS

FIGURE 5B

File: H:\ward\WARD_FIGS.dwg Layout: FIG6 User: dsilver Plotted: Dec 03, 2007 - 1:05pm Xref's:



ENSR | AECOM



FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK
12518-001-300

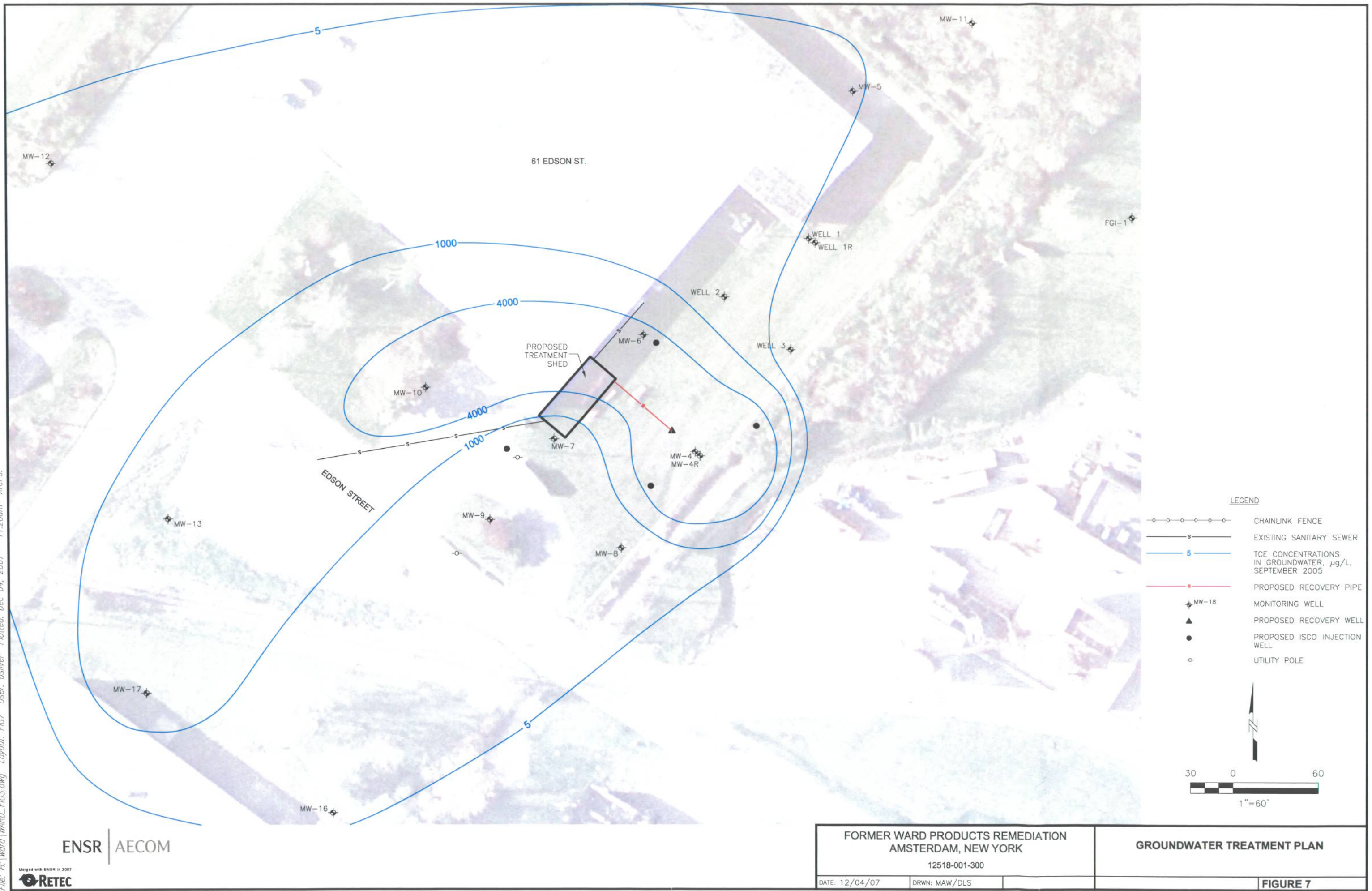
DATE: 11/09/07

DRWN: MAW/BIL

SAM STRATTON ROAD
EXCAVATION PLAN

FIGURE 6

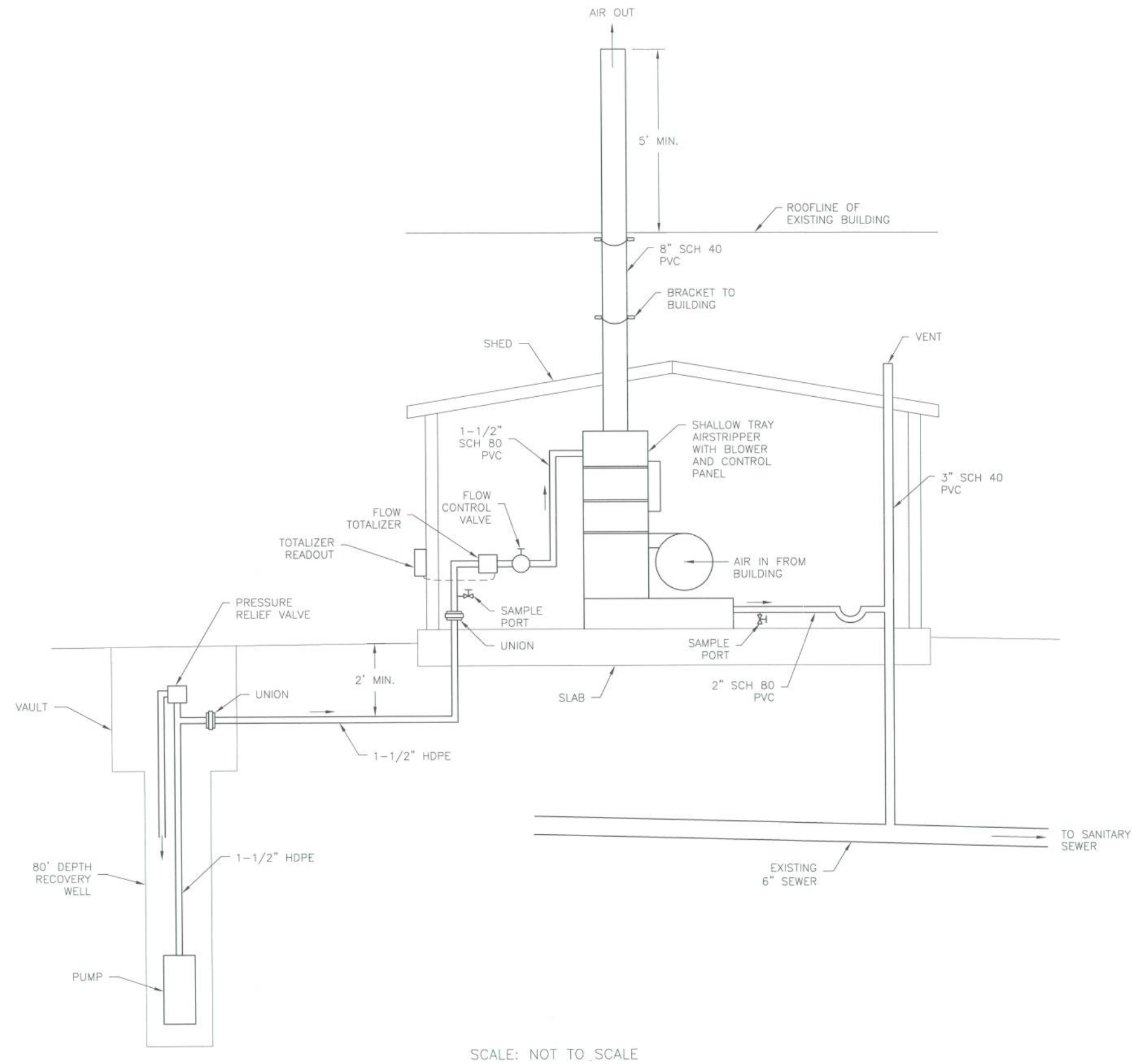
File: H:\ward\WARD_FIGS.dwg Layout: FIG7 User: dsilver Plotted: Dec 04, 2007 - 11:28am Xref's:



ENSR | AECOM

Merged with ENSR in 2007
RETEC

File: J:\12518001\WARD\FIG8.dwg Layout: ANSL_BI-LJ User: mwilliamson Plotted: Oct 18, 2007 - 9:27am Xref's:



NOTES:

1. PUMP SHALL BE MYERS PREDATOR, 8GPM, 2 WIRE, 1/2 HORSEPOWER WITH NO-LOAD SENSOR, OR EQUIVALENT.
2. PRESSURE RELIEF VALVE SHALL BE MCMASTER-CARR PART NUMBER 9763K59, OR EQUIVALENT.
3. FLOW TOTALIZER SHALL BE MCMASTER-CARR PART NUMBER 42075K82, OR EQUIVALENT, WITH REMOTE READOUT CABLE 70985K81.
4. FLOW CONTROL VALVE SHALL BE MCMASTER-CARR PART NUMBER 4695K47, EQUIVALENT.
5. AIR STRIPPER SHALL BE NEEP MODEL 2321, STAINLESS STEEL, OR EQUIVALENT.
6. PUMP SHALL BE WIRED THROUGH THE AIR STRIPPER CONTROL PANEL AND SHALL HAVE OFF, MANUAL AND AUTO SETTINGS. UNDER AUTO SETTING, PUMP SHALL NOT OPERATE WHEN AIR STRIPPER BLOWER IS NOT OPERATING.
7. SHED SHALL BE LOWE'S COMMERCIAL SERVICES DESIGN NUMBER PB8-002D-4508, 8'x12', OR EQUIVALENT, WITH 2" OF BLUEBOARD INSULATION ON INTERIOR WALLS AND CEILING. HEATER SHALL BE CHROMALOX MODEL CPHH-50031, 2 UNITS TOTALING 1000 WATTS, OR EQUIVALENT.
8. RECOVERY WELL VAULT SHALL BE EMCO WHEATON RETAIL PART NUMBER A0717-724ABW.

ENSR | AECOM

Merged with ENSR in 2007
RETEC

FORMER WARD PRODUCTS REMEDIATION
AMSTERDAM, NEW YORK

12518-001-300

DATE: 10/18/07

DRWN: MAW/BIL

GROUNDWATER TREATMENT SYSTEM
SCHEMATIC DRAWING AND
EQUIPMENT LIST

FIGURE 8

Appendix A

Summary of relevant soil and sediment analytical results

Appendix A
Relevant Soil and Sediment Data - Ward Products Site, Amsterdam, NY
(This table includes all known exceedances of levels as shown)

12/5/07 RETEC

Sample ID	Average Sample Depth, feet		Cadmium, mg/Kg	TCLP Cadmium, mg/L	Total Chromium, mg/Kg	Hex Chromium, mg/Kg	Lead, mg/Kg	Nickel, mg/Kg	Zinc, mg/Kg
Surface									
TAGM 4046 Recommended Cleanup Levels			1	1.0 (TCLP)	10	10	61	13	28
C5	0.50		11.0						
C7	0.50		37.0						
C8	0.50		22.0						
C9	0.50		130.0						
S-16	0.50				27.6			31.3	105.0
S-20	0.50		6.4		130.0			357.0	595.0
S-21	0.50				45.6			49.8	100.0
S-22	0.10		13.0		170.0			749.0	663.0
S-22	0.60		8.3		118.0			593.0	678.0
S-23	0.10		7.7		90.0			206.0	367.0
S-23	0.60		17.0		67.0			231.0	304.0
S-24	0.10		2.9		54.0			143.0	165.0
S-24	0.60				18.0			24.0	59.0
S-25	0.10		5.3		45.0			106.0	231.0
S-25	0.60		3.5		63.0			103.0	220.0
S-26	0.10		2.4		32.0			34.0	78.0
S-26	0.60		1.3		30.0			33.0	78.0
S-27	0.10				14.0				52.0
S-27	0.60				20.0			22.0	58.0
S-28	0.10		4.1		69.0			59.0	129.0
S-28	0.60		16.0		191.0			172.0	292.0
S-29	0.10				15.0			17.0	54.0
S-29	0.60				17.0			19.0	53.0
S-30	0.10		6.6		60.0			49.0	88.0
S-30	0.60				21.0			30.0	65.0
S-31	0.10				16.0			19.0	49.0
S-31	0.60				16.0			20.0	59.0
S-32	0.10		4.5		25.0			26.0	63.0
S-32	0.60		3.3		42.0			41.0	91.0
S-33	0.10				15.0			17.0	52.0
S-33	0.60				14.0			20.0	51.0
S-34	0.10				28.0			32.0	73.0
S-34	0.60		14.0		294.0		76.0	188.0	395.0
S-35	0.10				14.0			17.0	47.0
S-35	0.60				15.0			15.0	41.0
S-36	0.60				24.0			16.0	41.0
S-37	0.10				25.0			15.0	45.0
S-37	0.60				62.0			35.0	77.0
S-38	0.10		2.3		71.0			58.0	156.0
S-38	0.60				29.0			28.0	67.0
S-39	0.10		4.9		82.0			63.0	245.0
S-39	0.60				17.0			20.0	50.0
S-41	0.10		12.0		230.0			136.0	372.0
S-41	0.60				21.0			24.0	78.0
S-43	0.10				24.0			34.0	88.0
S-43	0.60				17.0			18.0	55.0
S-44	0.10		6.4		62.0			54.5	144.0
S-44	0.60		14.6		236.0		104.0	198.0	375.0
S-45	0.10		3.2		37.4			40.3	114.0
S-45	0.60		2.0		37.9			31.9	94.9
S-48	0.10				11.8				28.8
S-48	0.60				16.8				34.6
S-49	0.10				28.0			23.8	58.8
S-49	0.60				24.9			24.6	64.8
S-50	0.10				28.3			17.8	45.2
S-50	0.60				17.8				36.5
S-51	0.10				13.5				32.6
S-51	0.60				22.6			19.4	53.3
S-52	0.10				15.9			15.5	44.0
S-52	0.60				11.3				34.3
S-53	0.46		28.7						
S-53	0.60		7.2		102.0		145.0	113.0	245.0

Sample ID	Average Sample Depth, feet		Cadmium, mg/Kg	TCLP Cadmium, mg/L	Total Chromium, mg/Kg	Hex Chromium, mg/Kg	Lead, mg/Kg	Nickel, mg/Kg	Zinc, mg/Kg
S-54	0.95				94.2				
S-55	0.10		2.7		53.0			92.5	155.0
S-55	0.60		3.1		21.4			24.7	73.9
S-56	0.10		5.9		51.4			169.0	264.0
S-56	0.60		20.3		266.0			945.0	778.0
S-57	0.10		2.9		34.3			107.0	172.0
S-57	0.60		1.2		23.7			60.3	89.5
S-58	0.10		1.2		27.2			33.9	77.1
S-58	0.60				28.9			18.5	50.1
S-59	0.10		5.9		54.8			95.7	175.0
S-59	0.60				20.7			54.9	88.2
S-60	0.10		2.5		23.6			28.0	58.9
S-60	0.60				20.5			23.3	48.9
S-61	0.10		7.9		84.1			236.0	385.0
S-61	0.60				22.9			76.1	117.0
S-62	0.10		6.1		41.1			506.0	504.0
S-62	0.60		12.6		91.1			313.0	564.0
S-63	0.10		4.1		35.4			120.0	206.0
S-63	0.60				31.0			53.6	84.7
S-64	0.10		1.2		41.0			46.3	117.0
S-64	0.60				20.0				41.6
S-65	0.10		10.4		120.0			112.0	266.0
S-65	0.60		3.0		63.8			55.4	79.9
S-66	0.10		1.3		25.4				59.5
S-66	0.60				45.8			15.7	72.5
S-67	0.10		1.4		27.4			115.0	155.0
S-67	0.60				10.2				49.6
S-68	0.10				33.3			63.0	135.0
S-68	0.60				12.5				51.5
S-69	0.10				25.3			20.1	68.0
S-69	0.60				16.5				45.2
S-70	0.10				26.8				63.0
S-70	0.60				51.0				33.8
S-71	0.10				14.8				132.0
S-71	0.60				12.3				46.6
S-72	0.10		4.9		78.7			132.0	292.0
S-72	0.60				11.8				39.0
S-73	0.10				19.7			39.4	95.0
S-73	0.60				15.2				50.4
S-74	0.10								30.3
S-74	0.60				11.2				37.3
S-75	0.10		2.9		56.5			22.8	140.0
S-75	0.60		7.0		96.0			94.0	263.0
S-76	0.10				14.1				66.0
S-76	0.60				17.1				47.0
S-77	0.10		2.7		54.2			54.0	236.0
S-77	0.60				19.2				73.0
S-78	0.10		2.3		35.8				132.0
S-78	0.60				16.0				55.6
S-79	0.10		3.0		42.5			28.2	94.5
S-79	0.60		1.4		32.0			19.0	160.0
S-80	0.10		2.7		59.0			30.1	157.0
S-80	0.60				27.0				106.0
S-81	0.10				13.1				44.0
S-81	0.60				10.2				34.6
S-83	0.10				13.0				41.4
S-83	0.60				15.0				43.8
S-84	0.10				10.2				35.3
S-84	0.60				10.7				32.4
S-85	0.10								22.3
S-85	0.60								24.7
S-86	0.10				12.1				45.7
S-86	0.60				11.9				41.6
S-87	0.10				10.3				36.6
S-87	0.60				14.1				44.4
S-88	0.10								31.2
S-88	0.60				16.5				41.6

Sample ID	Average Sample Depth, feet		Cadmium, mg/Kg	TCLP Cadmium, mg/L	Total Chromium, mg/Kg	Hex Chromium, mg/Kg	Lead, mg/Kg	Nickel, mg/Kg	Zinc, mg/Kg
TAGM 4046 Recommended Cleanup Levels			1	1.0 (TCLP)	10	10	61	13	20
C1	1.00		33.0						
C2	1.00		150.0						
C3	1.00		32.0						
C4	1.00		12.0						
Drain Excav Bottom	8.00		10.0		301.0				
Drain Excav NorthEast	4.00		14.3		238.0		84.9		
Drain Excav NorthWest	4.00		2.4		141.0				
Drain Excav South	4.00		3.8		78.7				
S-8	1.50				13.2			21.5	63.0
S-8	2.25				14.3			23.5	100.0
S-13A	1.30		3.3		29.6			30.5	133.0
S-13A	2.25		6.3		134.0			48.3	146.0
S-14	1.08				164.0				
S-14A	1.06		11.4						
S-14A	1.50				19.1			23.6	64.5
S-14A	2.50		1.5		18.0			25.0	61.0
S-16	1.50				25.9			27.3	79.0
S-17	0.50				33.6			40.2	99.0
S-17	1.50				48.0			27.6	96.0
S-40	1.28		15.3						
S-46	1.37		53.5						
S-47	1.78		4.7						
S-82	1.51		30.2						
TAGM 4046 Recommended Cleanup Levels			1	1.0 (TCLP)	10	10	61	13	20
Location A	0.50				47.0			52.8	99.0
Location A	1.50		5.0		139.0	11.2		110.0	217.0
Location B	0.50		7.9		162.0	14.7		270.0	128.0
Location B	1.50		16.4		273.0	11.8		309.0	588.0
Location B	2.50		1.2		37.0			17.2	52.0
Location C	0.50		31.9		153.0			18.1	28.0
Location C	1.50		56.9		24.3			18.4	63.0
Location D	0.50		26.6	1.8	70.7			73.4	86.0
Location D	1.50		72.4		59.2			20.7	74.0
Location E	0.50		263.0	1.8	54.1			45.5	193.0
Location E	1.50		314.0	1.4	51.4			44.8	241.0
Location F	0.50		62.8	1.8	27.4			19.5	75.0
Location F	1.50		1.2		17.3			22.7	57.0
Location F	2.50		65.9	1.7	35.8			20.7	72.0
Aquatic Sediment Lowest Effect Level			0.6		26		31	16	125
Aquatic Sediment Severe Effect Level			9		110		110	50	270
D1	0.67		20.7						
D3	0.70		2.2						
Midpoint (upper)	1.50		13.4		130.0		259.0	148.0	
D4	1.60		2.0		58.5			41.8	
D5	1.80		6.9						
D7	2.15		4.9		42.6			68.4	
D8	1.90		7.1						
D10	1.10		12.2		148.0			193.0	
D11	1.60		14.8						
D12	1.40		0.9						
Downstream 100'	0.25		41.2		263.0			204.0	
Downstream 100'	0.75		3.0		66.4			58.4	
Downstream 200'	0.25		45.4		399.0			212.0	
Downstream 200'	0.75		39.2		403.0			328.0	
Downstream 400'	0.10		12.4		252.0			97.0	
Downstream 400'	0.35		5.7		150.0			69.5	
EC-1/EC-2	3.50		10.2		84.8			48.9	
WC	0.50		4.2		191.0				
WC	0.75		26.5		214.0			102.0	

Sample ID	Average Sample Depth, feet		Cadmium, mg/Kg	TCLP Cadmium, mg/L	Total Chromium, mg/Kg	Hex Chromium, mg/Kg	Lead, mg/Kg	Nickel, mg/Kg	Zinc, mg/Kg
Aquatic Sediment Lowest Effect Level			0.6		26		31	16	120
Aquatic Sediment Severe Effect Level			9		110		110	50	270
DB-2	0.25		12.2		175.0			78.4	
DB-8	0.25		31.2		560.0			146.0	
EB-2	0.25		6.1		80.0			65.0	
EB-3	0.25		9.7		119.0			64.0	
EB-3	0.75		8.8		82.0			61.0	
EB-4	0.25		8.9		69.0			66.0	
EB-4	0.75		19.0		198.0			259.0	
EB-5	0.25		14.0		140.0			102.0	
EB-5	0.75		19.0		156.0			126.0	
EB-6	0.25		15.0		124.0			160.0	
EB-6	0.75		18.0		111.0			201.0	
EB-7	0.25		42.0		443.0			459.0	
EB-7	0.75		31.0		238.0			58.0	
EB-8	0.25		15.0		120.0			129.0	
EB-8	0.75		36.0		385.0			348.0	
EB-9	0.25		27.0		473.0			261.0	
EB-9	0.75		37.0		405.0			305.0	
EB-10	0.25		6.4		34.0			50.0	
EB-10	0.75		3.6		48.0			45.0	
Aquatic Sediment Lowest Effect Level			0.6		26		31	16	120
Aquatic Sediment Severe Effect Level			9		110		110	50	270
WB-1	0.25		29.0		398.0			102.0	
WB-1	0.75		15.0		316.0			52.0	
WB-2	0.25		12.0		151.0			50.0	
WB-2	0.75		6.0		95.0			40.0	
WB-3	0.25		13.0		119.0			69.0	
WB-3	0.75		16.0		184.0			106.0	
WB-4	0.25		13.0		142.0			124.0	
WB-4	0.75		15.0		134.0			165.0	
WB-5	0.25		13.0		116.0			115.0	
WB-5	0.75		9.0		70.0			91.0	
WB-6	0.25		4.3		54.0			30.0	
WB-6	0.75		4.2		46.0			37.0	
WB-10	0.75		0.8						
Aquatic Sediment Lowest Effect Level			0.6		26		31	16	120
Aquatic Sediment Severe Effect Level			9		110		110	50	270
EB-11	0.25		12.0		196.0		48.2	167.0	
EB-11	0.75		16.4		206.0		33.0	164.0	131.0
EB-12	0.25		9.1		112.0			73.5	
EB-12	0.75		8.5		93.0			68.5	
EB-13	0.25		5.6		96.0			68.5	
EB-13	0.75		5.9		70.0			103.0	
EB-14	0.25		8.6		227.0			156.0	
EB-14	0.75		27.1		519.0		82.0	247.0	158.0
EB-15	0.25		0.7					23.0	
EB-16	0.25		1.6					22.9	
EB-16	0.75							17.1	
EB-17	0.25		64.6		64.5			37.0	
EB-17	0.75		3.5		210.0			74.5	
EB-18	0.25		2.1		69.6		33.0		
EB-19	0.25		6.6		211.0			80.2	
EB-22	0.25		2.6		45.4				
EB-22	0.75		1.9		46.8				

Sample ID	Average Sample Depth, feet		Cadmium, mg/Kg	TCLP Cadmium, mg/L	Total Chromium, mg/Kg	Hex Chromium, mg/Kg	Lead, mg/Kg	Nickel, mg/Kg	Zinc, mg/Kg
Aquatic Sediment Lowest Effect Level			0.6		26		31	16	120
Aquatic Sediment Severe Effect Level			9		110		110	50	270
WB-13	0.25		1.2						
WB-13	0.75		1.0						
WB-15	0.25		1.1		47.0			16.6	
WB-16	0.75				162.0		955.0		
WB-16A	0.25				63.8				
WB-16A	0.75				83.6				
WB-16B	0.25				32.8				
WB-16C	0.25				52.6				

Summary of Applicable Criteria:									
		Total Cadmium, mg/Kg	TCLP Cadmium, mg/L	Total Chromium, mg/Kg	Total Hex Chromium, mg/Kg	Total Lead, mg/Kg	Total Nickel, mg/Kg	Total Zinc, mg/Kg	
USEPA Human Health Risk Screening Values		450		450	64	750	20,000	100,000	
TCLP			1						
TAGM 4046 Recom'd Cleanup Levels		1		10		61	13	20	
Aquatic Sediment Severe Effect Level		9		110		110	50	270	
Aquatic Sediment Lowest Effect Level		0.6		26		31	16	120	

Appendix B

Summary of relevant groundwater analytical results

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

MW-1																										NYSDEC	
METALS (mg/L)	8/22/96	5/22/97	9/5/97	11/3/97	5/8/98	8/26/98	11/17/98	5/24/99	8/24/99	11/15/99	5/23/00	8/23/00	5/22/01	8/29/01	6/17/02	9/16/02	9/10/03	5/19/04	8/18/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD	
Cadmium	<0.010	<0.010	<0.0031	<0.0031	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	0.005	
Hexavalent Chromium	1.7	0.58	19.8	36.6J	3.2	NS	19.0	1.3	0.15	1.20	0.69	0.46	0.37	1.08	0.39	NS	0.27	0.24	0.230	0.140	NS	0.130	0.380	0.094	NS	0.05	
Total Chromium	1.58	NA	19J	33.1	3.3	NS	16.1	1.0	11.2	0.985	0.60	0.520	0.34	0.85	0.434	NS	0.232	0.256	0.241	0.129	NS	0.143	0.462	0.092	NS	0.05	
Iron	NA	<0.10	0.330	1.51J	NA	NS	NA	0.29	1.13	0.60	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	0.30	
Lead	<0.10	<0.10	<0.021	<0.021	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	0.025	
Manganese	NA	<0.010	0.033J	0.106J	NA	NS	NA	ND	0.19	0.05	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	0.30	
Nickel	<0.050	<0.050	<0.0078	0.0074	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	0.10	
Zinc	<0.025	<0.025	<0.0090	0.0184J	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	None Set	
NONMETALS (mg/L)																											
Chloride	NA	NA	NA	NA	NA	NS	NA	7.2	8.6	4.4	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	250	
Cyanide, total	0.012	0.0053	0.0573	0.0881	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	0.20	
Ammonia Nitrogen	NA	0.074	0.09	0.14	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	2	
Nitrate Nitrogen	NA	0.37	1.16J	1.29	NA	NS	NA	0.47	2.8	0.48	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	10	
Nitrite Nitrogen	NA	<0.020	0.021	<0.015	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	1	
Sulfate	NA	45.0	81.9J	121	NA	NS	NA	49	64	52	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	250	
Total Suspended Solids	NA	NA	14J	251	36	NS	602	42	238	40	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	None Set	
Turbidity (NTU)	NA	NA	79J	200	45.0	NS	600	52	460	140	37	128	35	42	37	NS	8.7	39	30	25	NS	78	560	NA	NS	5	
VOCs (ug/L)																											
Acrylonitrile	<50	<50	<10	<20	<25	NS	<250	<25	<125	<25	<25	<25	<25	<25	<25	NS	<25	NA	NA	NA	NS	NA	NA	NA	NS	5	
Carbon Tetrachloride	20	<5	30	24	<5	NS	70	<5	300	<5	<5	<5	<5	14	29	<5	NS	6.3	<5	<10	2J	NS	<10	8J	<10.0	NS	5
Chlorobenzene	<5	<5	<1	<2	<5	NS	<50	<5	<25	<5	<5	<5	<5	<5	<5	NS	<5	<5	<10	<10	NS	<10	<10	<10.0	NS	5	
Chloroform	<5	<5	7	6J	<5	NS	90	<5	40	<5	<5	<5	<5	6.0	<5	NS	<5	<5	<10	<10	NS	<10	<10	<10.0	NS	7	
Dichlorodifluoromethane	NA	NA	NA	NA	<5	NS	<100	<10	<50	<10	<10	<10	<10	<10	<10	NS	<10	NA	NA	<10	NS	<10	<10	<10.0	NS	5	
1,1-Dichloroethene	<5	<5	<1	<4	<5	NS	<50	<5	<25	<5	<5	<5	<5	<5	<5	NS	<5	<5	<10	<10	NS	<10	<10	<10.0	NS	5	
cis-1,2-Dichloroethene	47	<5	45	36	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	<5	<5	<10	0.7J	NS	<10	9J	<10.0	NS	5	
trans-1,2-Dichloroethene	<5	<5	<2	<4	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	<5	<5	<10	<10	NS	<10	<10	<10.0	NS	5	
1,2-Dichloroethene, Total	NA	NA	NA	NA	<5	NS	60	<5	170	<5	<5	<5	8	38	<5	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	None Set	
Tetrachloroethene	<5	<5	3J	3J	<5	NS	<50	<5	<25	<5	<5	<5	<5	<5	<5	NS	<5	<5	<10	<10	NS	<10	<10	<10.0	NS	5	
Trichloroethene	440	140	870	940	180	NS	700	18	1400	190	110	100	98	220	66	NS	96	65	100	50	NS	53	120	56	NS	5	
Vinyl Chloride	<5	<5	<2	<4	<10	NS	<100	<10	<50	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<10	NS	<10	<10	<10.0	NS	2	

		MW-1R																								NYSDEC
METALS (mg/L)			9/5/97	11/3/97	5/8/98	8/26/98	11/17/98	5/24/99	8/24/99	11/15/99	5/23/00	8/23/00	5/22/01	8/29/01	6/17/02	9/16/02	9/10/03	5/19/04	8/18/04	5/11/05	9/22/05	5/23/06	9/22/05	5/30/07	8/6/07	STANDARD
Cadmium			<0.0031	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Hexavalent Chromium			6.77	12.0	0.89	1.20	6.40	0.55	1.99	0.68	0.30	0.41	0.26	0.43	0.16	0.18	0.25	0.14	0.200	0.120	0.030	0.130	0.260	0.119	<0.2	0.05
Total Chromium			7.16J	11.5	1.48	0.99	5.71	0.451	1.87	0.50	0.32	0.349	0.26	0.365	0.218	0.18	0.220	0.139	0.214	0.124	0.318	0.132	0.241	0.117	0.019	0.05
Iron			<0.015	0.092J	NA	NA	NA	<0.05	0.18	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Lead			<0.021	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025
Manganese			0.026J	0.03J	NA	NA	NA	<0.02	0.05	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Nickel			0.0078	0.0044J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10
Zinc			<0.0090	<0.0090	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
NONMETALS (mg/L)																										
Chloride			NA	NA	NA	NA	NA	3.4	4.0	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Cyanide, total			0.0367	0.0366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20
Ammonia Nitrogen			0.075	0.078J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Nitrate Nitrogen			0.64J	0.57	NA	NA	NA	0.35	0.76	0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
Nitrite Nitrogen			0.023	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Sulfate			50.9J	66.1	NA	NA	NA	34	40	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Total Suspended Solids			<3.4	30.8	1.5	2.5	52	1.5	<1	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Turbidity (NTU)			1.06J	27.2	5.4	8.5	41.0	2.5	7.0	21	2.6	37.0	4.6	5.5	18.0	5.4	2.7	3.5	3.8	21	18	27	2.1	NA	50	5
VOCs (ug/L)																										
Acrylonitrile			<10	<10	<25	<25	<120	<25	<50	<25	<50	<25	<50	<50	<25	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	5
Carbon Tetrachloride			14	33	<5	11	65	<5	48	36	<10	10	10	11	<5	<10	17	<5	<10	4J	10J	5J	9J	<10.0	<5	5
Chlorobenzene			<1	<1	<5	<5	<25	<5	<10	<5	<10	<5	<10	<10	<5	<10	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5
Chloroform			4J	6	<5	<5	30	<5	<10	<5	<10	<5	<10	<10	<5	<10	<10	<5	<10	<10	2J	6J	<10	<10.0	<5	7
Dichlorodifluoromethane			NA	NA	<10	<10	<50	<10	<20	<10	<20	<10	<20	<20	<10	<20	<20	NA	NA	<10	<10	<10	<10	<10.0	<10	5
1,1-Dichloroethene			<2	<2	<5	<5	<25	<5	<10	<5	<10	<5	<10	NA	NA	<10	<5	<10	<10	<10	<10	<10	<10	<10.0	<5	5
cis-1,2-Dichloroethene			36	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5
trans-1,2-Dichloroethene			<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5
1,2-Dichloroethene, Total			NA	NA	7	29	50	7	50	16	<10	14	<10	16	<5	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Tetrachloroethene			3J	4J	<5	<5	<25	<5	<10	<5	<10	<5	<10	<10	<5	<10	180	98	180	94	200E	110	150	68	<5	5
Trichloroethene			410	690	180	280	550	190	420	280	160	170	140	170	62	110	180	98	180	94	200E	110	150	68	<5	5
Vinyl Chloride			<2	<2	<10	<10	<50	<10	<20	<10	<20	<10	<20	<20	<10	<20	<20	<10	<10	<10	<10	<10	<10	<10.0	<10	2

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

		MW-2																							NYSDEC				
METALS (mg/L)		8/22/96	5/22/97	9/5/97	11/3/97	5/8/98	8/26/98	11/17/98	5/24/99	8/24/99	11/15/99	5/23/00	8/23/00	5/22/01	8/29/01	6/18/02	9/17/02	9/10/03	5/19/04	8/18/04	5/11/05	9/22/05	9/22/05	8/23/06	5/30/07	8/6/07	STANDARD		
Cadmium		<0.010	<0.010	<0.0031	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	
Hexavalent Chromium		0.38	1.42	0.17	0.338J	0.81	0.78	1.70	0.84	0.22	0.78	0.19	0.15	0.11	0.98	0.09	<0.02	<0.02	<0.02	<0.020	<0.020	<0.020	<0.020	0.020	<0.020	<0.020	0.240	0.05	
Total Chromium		0.24	NA	0.306J	0.54	1.81	0.72	1.54	0.788	0.939	0.699	0.190	0.134	0.13	0.528	0.078	0.037	0.010	0.006	0.0037B	0.030	0.317	0.059	0.178	0.027	0.241	0.05		
Iron		NA	4.64	1.10	0.73J	NA	NA	NA	0.12	0.28	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Lead		<0.10	<0.10	<0.021	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025		
Manganese		NA	0.084	0.046J	0.041J	NA	NA	NA	<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Nickel		<0.050	<0.050	<0.0078	<0.0016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10		
Zinc		<0.025	<0.025	<0.0090	<0.0090	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
NONMETALS (mg/L)																													
Chloride		NA	NA	NA	NA	NA	NA	NA	4.0	4.1	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250		
Cyanide, total		<0.005	<0.0050	<0.0040	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20		
Ammonia Nitrogen		NA	<0.050	0.053	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2		
Nitrate Nitrogen		NA	0.317	<0.030	0.13	NA	NA	NA	0.11	0.21	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10		
Nitrite Nitrogen		NA	<0.020	0.02J	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1		
Sulfate		NA	51.0	58.6J	53.3	NA	NA	NA	38	39	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250		
Total Suspended Solids		NA	NA	54J	<3.4	2.0	36	139	2.0	52	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Turbidity (NTU)		NA	NA	43.2J	4.1	5.8	68	140	1.8	180	7	20	43	220	520	6.5	260	13	76	6	41.0	68	36	55	NA	8.1	5		
VOCs (ug/L)																													
Acrylonitrile		<50	<50	<10	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA	5		
Carbon Tetrachloride		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5		
Chlorobenzene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5		
Chloroform		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	5	<10	<10.0	<5	7		
Dichlorodifluoromethane		NA	NA	NA	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10.0	<10	5		
1,1-Dichloroethene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5		
cis-1,2-Dichloroethene		<5	<5	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10.0	6.2	5		
trans-1,2-Dichloroethene		<5	<5	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5		
1,2-Dichloroethene, Total		NA	NA	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	None Set			
Tetrachloroethene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5		
Trichloroethene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	72	130	5	
Vinyl Chloride		<5	<5	<2	<2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2		

		MW-3																							NYSDEC				
METALS (mg/L)		8/22/96	5/22/97	9/5/97	11/3/97	5/8/98	8/26/98	11/17/98	5/24/99	8/23/99	11/15/99	5/23/00	8/23/00	5/23/01	8/29/01	6/17/02	9/18/02	9/11/03	5/19/04	8/18/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD		
Cadmium		<0.010	<0.010	<0.0031	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	0.005	
Hexavalent Chromium		<0.01	<0.010	0.004J	<0.0004	<0.02	0.02	<0.02	<0.02	<0.02	<0.005	<0.02	0.005	<0.005	<0.005	<0.005	NS	<0.005	NS	NS	NS	NA	NS	NS	NS	NS	<0.02	0.05	
Total Chromium		<0.030	NA	<0.0066	<0.0068	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.010	0.005	<0.005	<0.005	<0.005	NS	<0.005	NS	NS	NS	NA	NS	NS	NS	NS	<0.05	0.05	
Iron		NA	4.39	NA	1.66J	NA	NA	NA	0.11	NA	0.23	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	0.30	
Lead		<0.10	<0.10	<0.021	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	0.025	
Manganese		NA	0.152	NA	0.088	NA	NA	NA	<0.02	NA	ND	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	0.30	
Nickel		<0.050	<0.050	<0.0078	0.0028J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	0.10	
Zinc		<0.025	0.038	<0.0090	0.015J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	None Set	
NONMETALS (mg/L)																													
Chloride		NA	NA	NA	NA	NA	NA	NA	<1	NA	ND	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	250	
Cyanide, total		<0.005	<0.0050	<0.0040	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	0.20	
Ammonia Nitrogen		NA	<0.050	NA	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	2	
Nitrate Nitrogen		NA	0.27	NA	0.23	NA	NA	NA	0.19	NA	0.25	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	10	
Nitrite Nitrogen		NA	<0.020	NA	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	1	
Sulfate		NA	<8.0	NA	25.7	NA	NA	NA	13	NA	14	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	250	
Total Suspended Solids		NA	NA	27.6J	4.4J	7.0	93	NA	1.0	123	2.5	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NS	NA	None Set	
Turbidity (NTU)		NA	NA	15.9J	4.9	12	75	NA	1.5	680	19	6.1	8	82	300	7.7	NS	5.7	NS	NS	NS	NA	NS	NS	NS	NS	220	5	
VOCs (ug/L)																													
Acrylonitrile		<50	<50	<10	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NS	NS	NS	<10	NS	NS	NS	NA	5		
Carbon Tetrachloride		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<10	NS	NS	NS	<5	5		
Chlorobenzene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	5		
Chloroform		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	NS	NS	NS	<10	NS	NS	NS	<5	7		
Dichlorodifluoromethane		NA	NA	NA	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS	NS	<10	NS	NS	NS	<10	5		
1,1-Dichloroethene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	5		
cis-1,2-Dichloroethene		<5	<5	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NS	NS	<10	NS	NS	NS	<5	5		
trans-1,2-Dichloroethene		<5	<5	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NS	NS	<10	NS	NS	NS	<5	5		
1,2-Dichloroethene, Total		NA	NA	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NS	NS	NA	NS	NS	NS	NA	None Set			
Tetrachloroethene		<5	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5																

NA = not analyzed
NS = not sampled

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

MW-4																										NYSDEC	
METALS (mg/L)	8/22/96	5/22/97	9/5/97	11/3/97	5/6/98	8/26/98	11/17/98	5/24/99	8/24/99	11/15/99	5/23/00	8/23/00	5/22/01	8/30/01	6/18/02	9/17/02	9/11/03	5/19/04	8/18/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD	
Cadmium	<0.010	<0.010	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05	0.04	0.05	0.06	0.040	0.050	0.030	0.030	0.040	<0.020	<0.02	0.005
Hexavalent Chromium	0.07	0.086	0.082	0.027J	0.10	0.10	0.06	0.08	0.08	0.10	0.08	0.07	0.04	0.04	0.05	0.04	0.05	0.06	0.040	0.050	0.030	0.030	0.040	<0.020	<0.02	0.05	
Total Chromium	0.09	NA	0.078J	NA	0.11	0.070	0.068	0.080	0.064	0.066	0.079	0.068	0.037	0.043	0.052	0.039	<0.005	0.045	0.057	0.044	0.029	0.029	0.029	0.016	0.022	0.05	
Iron	NA	0.39	0.50	NA	NA	NA	NA	0.08	NA	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Lead	<0.10	<0.10	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	
Manganese	NA	0.023	0.016J	NA	NA	NA	NA	<0.02	NA	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Nickel	<0.050	<0.050	<0.0078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10	
Zinc	<0.025	<0.025	<0.0090	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
NONMETALS (mg/L)																											
Chloride	NA	NA	NA	NA	NA	NA	NA	1.9	NA	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total	<0.005	<0.005	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen	NA	<0.050	0.045J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen	NA	0.479	0.39J	NA	NA	NA	NA	0.64	NA	0.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen	NA	<0.020	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate	NA	16.5	12.1J	NA	NA	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids	NA	NA	8.8J	NA	5.0	10	39	1.0	31	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)	NA	NA	9.92J	NA	7.1	9.3	27	2.5	24	19	2.2	10	25	5.1	2.0	5.3	7.8	16	1.2	24.0	79	18	4.7	NA	9	5	
VOCs (ug/L)																											
Acrylonitrile	<50	<50	<10	<10	<25	<62	<500	<125	<125	<125	<125	<125	<50	<50	<63	<1250	<62	NA	NA	NA	NA	NA	NA	NA	NA	5	
Carbon Tetrachloride	<5	<5	<1	<1	<5	<12	<100	<25	<25	<25	<25	<25	<10	<125	<13	<250	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	5	
Chlorobenzene	<5	<5	<1	<1	<5	<12	<100	<25	<25	<25	<25	<25	<10	<25	<13	<250	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	5	
Chloroform	<5	<5	1J	1J	<5	<12	<100	<25	<25	<25	<25	<25	<10	<25	<13	<250	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	7	
Dichlorodifluoromethane	NA	NA	NA	NA	<10	<25	<200	<50	<50	<50	<50	<50	<20	<20	<25	<500	<25	NA	NA	<20	<1000	<20	<50	<10.0	<500	5	
1,1-Dichloroethene	<5	<5	<1	<1	<5	<12	<100	<25	<25	<25	<25	<25	<10	<25	<13	<250	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	5	
cis-1,2-Dichloroethene	<5	<5	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	5	
trans-1,2-Dichloroethene	<5	<5	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	5	
1,2-Dichloroethene, Total	NA	NA	NA	NA	<5	<12	<100	<25	<25	<25	<25	<25	<10	<25	<13	<250	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Tetrachloroethene	<5	<5	<1	<1	<5	<12	<100	<25	<25	<25	<25	<25	<10	<25	<13	<250	<12	<10	<20	<20	<1000	<20	<50	<10.0	<250	5	
Trichloroethene	540	330	330	540	300	400	3200	800	760	920	460	470	240	300	300	6000	430	330	390	340	20000E	300	690	190	6600	5	
Vinyl Chloride	<5	<5	<2	<2	<10	<25	<200	<50	<50	<50	<50	<50	<20	<50	<25	<500	<25	<20	<20	<20	<1000	<20	<50	<10.0	<500	2	

		MW-4R																								NYSDEC
METALS (mg/L)		9/4/97	11/3/97	1/22/98	5/8/98	8/26/98	11/16/98	5/24/99	8/24/99	11/15/99	5/23/00	8/23/00	5/22/01	8/30/01	6/18/02	9/17/02	9/11/03	5/19/04	8/18/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD
Cadmium		<0.010	NS	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Hexavalent Chromium		0.016	NS	0.0052	0.03	0.03	0.03	0.04	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.02	0.05
Total Chromium		<0.030	NS	0.0092J	0.03	0.005	0.015	0.006	0.008	<0.005	0.017	0.006	0.012	0.009	0.008	0.005	0.006	<0.005	0.0071B	0.0076B	0.0047B	0.0071B	0.014	0.022	<.005	0.05
Iron		0.95	NS	NA	NA	NA	NA	0.49	0.31	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Lead		<0.010	NS	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025
Manganese		0.074J	NS	NA	NA	NA	NA	0.06	0.05	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Nickel		<0.050	NS	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10
Zinc		<0.025	NS	0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
NONMETALS (mg/L)																										
Chloride		NA	NS	NA	NA	NA	NA	86	120	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Cyanide, total		<0.0050	NS	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20
Ammonia Nitrogen		<0.050	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Nitrate Nitrogen		0.61J	NS	NA	NA	NA	NA	1.3	1.7	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
Nitrite Nitrogen		<0.020	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Sulfate		46.4J	NS	NA	NA	NA	NA	84	102	97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Total Suspended Solids		<9.0	NS	39.2	29	119	37	34	38	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Turbidity (NTU)		50.1J	NS	21.8	34	180	32	44	28	38	7.2	28	17	62	17	16	5.5	4.8	49	17	12	41	180	NA	8.7	5
VOCs (ug/L)																										
Acrylonitrile		<5000	NS	<200	<2500	<2500	<6200	6200	<2500	<6250	<2500	<2500	<13000	<6250	<2500	<1250	<2500	NA	NA	NA	NA	NA	NA	NA	NA	5
Carbon Tetrachloride		<500	NS	<20	<500	<500	<1200	<1200	<500	<1250	<500	<500	<2500	<1250	<500	<250	<500	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	5
Chlorobenzene		<500	NS	<20	<500	<500	<1200	<1200	<500	<1250	<500	<500	<2500	<1250	<500	<250	<500	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	5
Chloroform		<500	NS	<20	<500	<500	<1200	<1200	<500	<1250	<500	<500	<2500	<1250	<500	<250	<500	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	7
Dichlorodifluoromethane		NA	NS	NA	<1000	<1000	<2500	<2500	<1000	<2500	<1000	<1000	<2500	<2500	<1000	<500	<1000	NA	NA	<20000	<5000	<2000	<1000	<5000	<500	5
1,1-Dichloroethene		<500	NS	<20	<500	<500	<1200	<1200	<500	<1250	<500	<500	<2500	<1250	<500	<250	<250	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	5
cis-1,2-Dichloroethene		<500	NS	80J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<500	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	5
trans-1,2-Dichloroethene		<500	NS	<40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<500	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	5
1,2-Dichloroethene, Total		NA	NS	NA	<500	<500	<1200	<1200	<500	<1250	<500	<500	<2500	<1250	<500	<250	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Tetrachloroethene		1000	NS	210	<500	<500	<1200	<1200	<500	<1250	<500	<500	<2500	<1250	<500	<250	<500	<1000	<2000	<20000	<5000	<2000	<1000	<5000	<250	5
Trichloroethene		140000	NS	28000	22000	17000	28000	52000	14000	25000	20000	19000	45000	13000	14000	7500	19000	49000	28000	180000	70000	24000	210000	59000	7400	5
Vinyl Chloride		<500	NS	ND	<1000	<1000	<2500	<2500	<1000	<2500	<2500	<2500	<5000	<2500	<1000	<500	<1000	<2000	<2000	<20000	<5000	<2000	<1000	<5000	<500	2

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

		MW-5																								NYSDEC
METALS (mg/L)			9/5/97	11/3/97	5/7/98	8/25/98	11/17/98	5/24/99	8/23/99	11/15/99	5/23/00	8/23/00	5/22/01	8/30/01	6/18/02	9/16/02	9/11/03	5/19/04	8/17/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD
Cadmium			<0.0031	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Hexavalent Chromium			0.007	0.004J	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NA	NA	<0.020	<0.020	NA	NA	NA	NA	0.05
Total Chromium			<0.0066	<0.0060	<0.005	<0.005	0.006	<0.005	0.013	<0.005	0.006	<0.005	<0.005	0.008	0.005	0.006	0.005	NA	NA	0.0059B	<0.0023	NA	NA	NA	NA	0.05
Iron			0.22	0.74J	NA	NA	NA	<0.05	0.16	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Lead			<0.021	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025
Manganese			0.011J	0.008J	NA	NA	NA	<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Nickel			<0.0078	<0.0016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10
Zinc			0.01J	0.029J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
NONMETALS (mg/L)																										
Chloride			NA	NA	NA	NA	NA	2.2	2.6	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Cyanide, total			<0.0040	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20
Ammonia Nitrogen			<0.040	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Nitrate Nitrogen			<0.030	0.032J	NA	NA	NA	0.07	0.02	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
Nitrite Nitrogen			<0.015	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Sulfate			20.5J	20.7	NA	NA	NA	16	20	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Total Suspended Solids			7.2J	15.6	5.0	32	28	2.0	32	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Turbidity (NTU)			6.29J	12.1	7.8	30	31	22	17	38	3.0	15	30	29	0.9	8.9	34	NA	NA	NA	24	16	NA	NA	NA	5
VOCs (ug/L)																										
Acrylonitrile			<25	<25	<120	<25	<125	<50	<50	<125	<50	<75	<25	<50	<62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Carbon Tetrachloride			<5	<5	<25	<5	<25	<10	<10	<25	<10	<15	<5	<10	<12	<5	<20	<20	<50	<20	<50	<10	<20	<10.0	<5	5
Chlorobenzene			<5	<5	<25	<5	<25	<10	<10	<25	<10	<15	<5	<10	<12	<5	<20	<20	<50	<20	<50	<10	<20	<10.0	<5	5
Chloroform			10	<5	<25	<5	<25	<10	<10	<25	<10	<15	<5	<10	<12	<5	<20	<20	5J	<20	5J	<10	<20	<10.0	<5	7
Dichlorodifluoromethane			<10	<10	<50	<10	<50	<20	<20	<50	<20	<30	<10	<20	<25	NA	NA	<20	<50	<20	<50	<10	<20	<10.0	<10	5
1,1-Dichloroethene			<5	<5	<25	<5	<25	<10	<10	<25	<10	<15	<5	<10	<12	<5	<20	<20	<50	<20	<50	<10	<20	<10.0	<5	5
cis-1,2-Dichloroethene			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12	6.3	<20	7J	16J	7J	16J	6J	9J	<10.0	6.2	5
trans-1,2-Dichloroethene			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12	<5	<20	<20	<50	<20	<50	<10	<20	<10.0	<5	5
1,2-Dichloroethene, Total			<5	38	100	11	90	30	14	<25	<10	32	6	52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Tetrachloroethene			<5	<5	<25	<5	<25	<10	<10	<25	<10	<15	<5	<10	<12	<5	<20	<20	<50	<20	<50	<10	<20	<10.0	<5	5
Trichloroethene			180	290	460	210	440	280	290	300	280	270	110	250	190	120	260	250	480	250	480	210E	230	120	140	5
Vinyl Chloride			<10	<10	<50	<10	<50	<20	<20	<50	<20	<30	<10	<20	<25	<10	<20	<20	<50	<20	<50	<20	<20	<10.0	<10	2

		MW-6																									NYSDEC
METALS (mg/L)			9/4/97	11/3/97	5/7/98	8/26/98	11/17/98	5/24/99	8/24/99	11/15/99	5/23/00	8/23/00	5/21/01	8/29/01	6/18/02	9/16/02	9/10/03	5/19/04	8/18/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD	
Cadmium			<0.010	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	
Hexavalent Chromium			0.0187	<0.00040	0.26	0.18	0.10	0.23	0.17	0.20	0.28	0.27	0.12	0.08	0.14	0.08	0.14	0.14	0.140	0.130	0.040	0.110	0.070	0.041	0.040	0.05	
Total Chromium			<0.030	<0.0066	0.290	0.140	0.108	0.212	0.159	0.129	0.271	0.237	0.104	0.150	0.138	0.098	0.112	0.145	0.152	0.135	0.0434	0.105	0.067	0.091	0.044	0.05	
Iron			<0.10	0.32J	NA	NA	NA	0.12	0.27	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Lead			<0.10	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	
Manganese			0.038J	0.246J	NA	NA	NA	<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Nickel			<0.050	0.004J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10	
Zinc			<0.025	0.047J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
NONMETALS (mg/L)																											
Chloride			NA	NA	NA	NA	NA	54	78	65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total			<0.0050	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen			<0.050	0.03J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen			0.47J	<0.030	NA	NA	NA	0.78	0.97	0.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen			<0.020	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate			42.5J	62.0	NA	NA	NA	58	72	75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids			<9.0	18.4	7.5	120	14	4.5	74	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)			12.4J	40.3	11.0	150	12	6	33	10	45	67	2.4	29	1.8	93	7.0	62	49	4	57	46	76	NA	2.4	5	
VOCs (ug/L)																											
Acrylonitrile			<250	<50	<500	<2500	<2500	<2500	<1250	<1250	<1250	<2500	<1250	<500	<2500	<500	<500	<500	NA	NA	NA	NA	NA	NA	NA	5.00	
Carbon Tetrachloride			<25	<5	<100	<500	<500	<500	<250	<250	<250	<500	<250	<100	<500	<100	<100	<250	<100	<200	<1000	<200	<200	<200	<100	5.00	
Chlorobenzene			<25	<5	<100	<500	<500	<500	<250	<250	<250	<500	<250	<100	<500	<100	<100	<250	<100	<200	<1000	<200	<200	<200	<100	5.00	
Chloroform			<25	<5	<100	<500	<500	<500	<250	<250	<250	<500	<250	<100	<500	<100	<100	<250	<100	<200	<1000	<200	<200	<200	<100	7.00	
Dichlorodifluoromethane			NA	NA	<200	<1000	<1000	1000.00	<500	<500	<500	<1000	<500	<200	<1000	<200	<200	<200	NA	<200	<1000	<200	<200	<200	<200	5.00	
1,1-Dichloroethene			<25	<5	<100	<500	<500	<500	<250	<250	<250	<500	<250	<100	<500	<100	<100	<250	<100	<200	<1000	<200	<200	<200	<100	5.00	
cis-1,2-Dichloroethene			<25	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	<250	<100	<200	<1000	<200	<200	<200	<100	5.00	
trans-1,2-Dichloroethene			<25	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	<250	<100	<200	<1000	<200	<200	<200	<100	5.00	
1,2-Dichloroethene, Total			NA	NA	<100	<500	<500	<500	<250	<250	<250	<500	<250	<100	<500	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Tetrachloroethene			48.00	22J	<100	<500	<500	<500	<250	<250	<250	<500	<250	<100	<500	<100	<100	<250	34J	<200	<1000	48J	<200	<200	<100	5.00	
Trichloroethene			4900	3200	11000	14000	10000	12000	5700	5400	7000	3500	8000	3000	3000	1700	2800	3500	1700	3400	19000	3700	3800	2400	4000	5.00	
Vinyl Chloride			<25	<10	<200	<1000	<1000	<1000	<500	<500	<500	<1000	<500	<200	<1000	<200	<200	<500	<100	<200	<1000	<200	<200	<200	<200	2.00	

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

		MW-7																								NYSDEC	
METALS (mg/L)			9/4/97	11/4/97	5/7/98	8/25/98	11/16/98	5/25/99	8/23/99	11/15/99	5/23/00	8/23/00	5/21/01	8/29/01	6/18/02	9/16/02	9/10/03	5/19/04	8/18/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD	
Cadmium			<0.010	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12	<0.02	0.07	0.04	0.06	0.04	<0.020	<0.020	<0.020	0.05	0.04	0.046	0.02	0.005
Hexavalent Chromium			0.018	0.0065	0.18	0.08	0.07	0.13	0.04	0.07	0.17	0.07	0.12	0.068	0.068	0.048	0.057	0.025	0.0232	0.0397	0.0232	0.105	0.044	0.046	0.02	0.05	
Total Chromium			<0.030	0.0077J	0.188	0.057	0.079	0.087	0.041	0.039	0.154	0.066	0.127	0.068	0.068	0.048	0.057	0.025	0.0232	0.0397	0.0232	0.105	0.044	0.046	0.02	0.05	
Iron			1.97	<0.015	NA	NA	NA	0.08	1.87	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Lead			<0.10	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	
Manganese			0.831J	0.0096J	NA	NA	NA	<0.02	0.19	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Nickel			<0.050	0.0081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10	
Zinc			<0.025	0.0191J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
NONMETALS (mg/L)																											
Chloride			NA	NA	NA	NA	NA	62	81	76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total			<0.0050	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen			<0.050	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen			0.27J	0.18	NA	NA	NA	1.3	1.32	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen			<0.020	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate			72.7J	71.8	NA	NA	NA	83	95	111	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids			33.2J	<3.4	9.0	840	65	20	490	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)			36.8J	3.7	7.5	590	58	12	470	23	93	170	285	83	69	390	140	14	26	86	140	87	140	NA	4.7	5	
VOCs (ug/L)																											
Acrylonitrile			<50	<10	<250	<125	<120	<120	<125	<125	<125	<250	<500	<250	<125	<50	<120	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Carbon Tetrachloride			<5	<1	<50	<25	<25	<25	<25	<25	<25	<50	<100	<50	<25	<10	<25	<10	<20	<20	<50	<100	<50	<100	<25	5.00	
Chlorobenzene			<5	<1	<50	<25	<25	<25	<25	<25	<25	<50	<100	<50	<25	<10	<25	<10	<20	<20	<50	<100	<50	<100	<25	5.00	
Chloroform			<5	<1	<50	<25	<25	<25	<25	<25	<25	<50	<100	<50	<25	<10	<25	<10	<20	<20	<50	<100	<50	<100	<25	7.00	
Dichlorodifluoromethane			NA	NA	<100	<50	<50	<50	<50	<50	<50	<100	<200	<100	<50	<20	<50	NA	NA	<20	<50	<100	<50	<100	<50	5.00	
1,1-Dichloroethene			<5	<1	<50	<25	<25	<25	<25	<25	<25	<50	<100	<50	<25	<10	<25	<10	<20	<20	<50	<100	<50	<100	<25	5.00	
cis-1,2-Dichloroethene			<5	3J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<25	<10	<20	<20	<50	<100	<50	<100	<25	5.00
trans-1,2-Dichloroethene			<5	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<25	<10	<20	<20	<50	<100	<50	<100	<25	5.00
1,2-Dichloroethene, Total			NA	NA	<50	<25	<25	<25	<25	<25	<25	<50	<100	<50	<25	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Tetrachloroethene			<5	1J	<50	<25	<25	<25	<25	<25	<25	<50	<100	<50	<25	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Trichloroethene			450	450	730	800	360	1300	420	650	1800	680	2200	600	600	280	750	210	250	270	790	1500	990	1900	530	5.00	
Vinyl Chloride			<5	<2	<100	<50	<50	<50	<50	<50	<50	<100	<200	<100	<50	<20	<50	<20	<20	<20	<50	<100	<50	<100	<50	2.00	

		MW-8																								NYSDEC	
METALS (mg/L)			9/4/97	11/4/97	5/7/98	8/25/98	11/16/98	5/24/99	8/23/99	11/15/99	5/23/00	8/23/00	5/21/01	8/29/01	6/18/02	9/17/02	9/10/03	5/18/04	8/17/04	5/11/05	9/22/05	5/22/06	8/23/06	5/30/07	8/6/07	STANDARD	
Cadmium			<0.010	<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	
Hexavalent Chromium			<0.0050	<0.00040	<0.02	<0.02	0.03	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NA	NA	NA	NA	<0.02	NA	NA	NA	0.05	
Total Chromium			<0.030	<0.0068	<0.005	<0.005	0.021	0.005	0.009	0.005	0.019	0.006	0.007	0.009	<0.005	<0.005	<0.005	NA	NA	NA	0.00835	NA	NA	NA	NA	0.05	
Iron			3.07	1.98J	NA	NA	NA	1.88	0.72	1.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Lead			<0.10	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	
Manganese			0.053J	0.044J	NA	NA	NA	0.14	0.95	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Nickel			<0.050	0.0036J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10	
Zinc			0.078J	0.084J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
NONMETALS (mg/L)																											
Chloride			NA	NA	NA	NA	NA	87	136	75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total			<0.0050	<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen			<0.050	0.030J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen			1.02J	1.07	NA	NA	NA	1.8	2.1	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen			<0.020	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate			87J	85.6	NA	NA	NA	95	121	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids			48J	68.0	167	646	171	276	124	304	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)			56.3J	49.3	180	620	210	154	150	410	28	240	83	170	23	250	31	NA	NA	NA	NA	240	NA	NA	42	5	
VOCs (ug/L)																											
Acrylonitrile			<50	<10	<25	<25	<25	<25	<25	<250	<50	<25	<50	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Carbon Tetrachloride			<5	<1	<5	<5	<5	<5	<5	<50	<10	<5	<10	<5	<5	<5	<5	<5	<10	<20	<10	<20	<10	<20	<5	5.00	
Chlorobenzene			<5	<1	<5	<5	<5	18.00	<5	<50	<10	<5	<10	<5	<5	<5	<5	<5	<10	<20	<10	<20	<10	<20	<5	5.00	
Chloroform			<5	<1	<5	<5	<5	<5	<5	<50	<10	<5	<10	<5	<5	<5	<5	<5	<10	<20	<10	<20	<10	<20	<5	7.00	
Dichlorodifluoromethane			NA	NA	<10	<10	<10	<10	<10	<100	<20	<10	<20	<10	<10	<10	<10	NA	NA	<20	<10	<20	<10	<20	<10	5.00	
1,1-Dichloroethene			<5	<1	<5	<5	<5	<5	<5	<50	<10	<5	<10	<5	<5	<5	<5	<5	<10	<20	<10	<20	<10	<20	<5	5.00	
cis-1,2-Dichloroethene			<5	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	<20	2J	<20	2J	<20	<5	5.00
trans-1,2-Dichloroethene			<5	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	<20	<10	<20	<10	<20	<5	5.00
1,2-Dichloroethene, Total			NA	NA	6.00	<5	<5	<5	<5	<50	14.00	6.00	<10	<5	6.00	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Tetrachloroethene			<5	<1	<5	<5	<5	<5	<5	<50	<10	<5	<10	<5	<5	<5	<5	<5	<10	<20	<10	<20	<10	<20	<5	5.00	
Trichloroethene			51J	34	250	77	120	190	61	550	720	130	340	55	170	32	130	74	180	320	100	190	85	260	7		

NA = not analyzed
NS = not sampled

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

	MW-9																									NYSDEC	
METALS (mg/L)				1/22/98	5/8/98	8/26/98	11/17/98	5/25/99	8/23/99	11/16/99	5/23/00	8/23/00	5/22/01	8/30/01	6/18/02	9/18/02	9/11/03	5/19/04	8/18/04	5/12/05	9/22/05	5/23/06	8/24/06	5/30/07	8/6/07	STANDARD	
Cadmium				ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	
Hexavalent Chromium				0.00051J	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.02	0.05	
Total Chromium				<0.0066	0.007	<0.005	0.008	<0.005	<0.005	0.813	0.006	0.005	<0.005	<0.007	<0.005	<0.005	<0.005	<0.005	0.011	0.0160	0.0288	<0.0037	0.0047B	0.0061 J	0.557	0.05	
Iron				NA	NA	NA	NA	1.77	2.73	0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Lead				<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	
Manganese				NA	NA	NA	NA	0.15	0.29	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Nickel				<0.0016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10	
Zinc				0.0134J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
NONMETALS (mg/L)																											
Chloride				NA	NA	NA	NA	54	65	61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total				<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen				NA	NA	NA	NA	0.22	0.23	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate				NA	NA	NA	NA	99	94	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids				<2.6	151	455	1940	256	516	236	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)				4.8	155	560	1000	>200	220	370	500	265	180	610	385	150	46	38	800	102	250	134	87	NA	177	5	
VOCs (ug/L)																											
Acrylonitrile				<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Carbon Tetrachloride				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00	
Chlorobenzene				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00	
Chloroform				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	7.00	
Dichlorodifluoromethane				NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10.0	<5	5.00	
1,1-Dichloroethene				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00	
cis-1,2-Dichloroethene				<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10.0	<5	5.00	
trans-1,2-Dichloroethene				<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10.0	<5	5.00	
1,2-Dichloroethene, Total				NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Tetrachloroethene				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00	
Trichloroethene				200	150	200	180	180	200	240	190	150	150	120	100	140	170	110	160	120	180	110	130	120	150	5.00	
Vinyl Chloride				<2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00	

MW-10																												NYSDEC
				1/22/98	5/8/98	8/26/98	11/17/98	5/25/99	8/24/99	11/16/99	5/23/00	8/23/00	5/22/01	8/30/01	6/18/02	9/18/02	9/11/03	5/19/04	8/18/04	5/12/05	9/22/05	5/23/06	8/24/06	5/29/07	8/6/07	STANDARD		
METALS (mg/L)																												
Cadmium				<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005		
Hexavalent Chromium				0.007	0.09	0.05	0.05	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05		
Total Chromium				0.0146J	0.094	0.021	0.023	<0.005	0.016	0.008	0.021	0.012	0.012	0.012	0.008	0.012	<0.005	0.045	0.0229	0.0269	0.0232	0.0213	0.0332	0.0064 J	0.010	0.05		
Iron				NA	NA	NA	NA	0.30	0.49	0.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Lead				<0.021	NA	NA	NA	NA	0.08	0.09	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Manganese				NA	NA	NA	NA	0.08	0.09	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Nickel				0.0017J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10		
Zinc				0.114	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
NONMETALS (mg/L)																												
Chloride				NA	NA	NA	NA	64	70	66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250		
Cyanide, total				<0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20		
Ammonia Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2		
Nitrate Nitrogen				NA	NA	NA	NA	0.37	0.26	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10		
Nitrite Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1		
Sulfate				NA	NA	NA	NA	139	144	174	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250		
Total Suspended Solids				7.6J	83	63	38	124	82	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Turbidity (NTU)				29	74	85	48	140	52	120	8.0	25	46	86	8.8	65	3.3	31	75	28	98	134	130	NA	0.1	5		
VOCs (ug/L)																												
Acrylonitrile				<20	<250	<625	<1200	<620	<1250	<1250	<1250	<1250	<1250	<1250	<2500	<625	<620	NA	NA	NA	NA	NA	NA	NA	NA	5.00		
Carbon Tetrachloride				<2	<50	<125	<250	<120	<250	<250	<250	<250	<250	<250	<500	<125	<120	<120	<250	<500	<500	<250	<500	<1000	<250	5.00		
Chlorobenzene				<2	<50	<125	<250	<120	<250	<250	<250	<250	<250	<250	<500	<125	<120	<120	<250	<500	<500	<250	<500	<1000	<250	5.00		
Chloroform				5J	<50	<125	<250	<120	<250	<250	<250	<250	<250	<250	<500	<125	<120	<120	<250	<500	<500	<250	<500	<1000	<250	7.00		
Dichlorodifluoromethane				NA	<100	<250	<500	<250	<500	<500	<500	<500	<500	<500	<1000	<250	<250	NA	NA	<500	<500	<250	NA	<1000	<500	5.00		
1,1-Dichloroethene				7J	<50	<125	<250	<120	<250	<250	<250	<250	<250	<250	<500	<125	<120	<120	<250	<500	<500	<250	<500	<1000	<250	5.00		
cis-1,2-Dichloroethene				39.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120	<120	<250	<500	<500	<250	<500	<1000	<250	5.00		
trans-1,2-Dichloroethene				6J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120	<120	<250	<500	<500	<250	<500	<1000	<250	5.00		
1,2-Dichloroethene, Total				NA	<50	<125	<250	<120	<250	<250	<250	<250	<250	<250	<500	<125	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Tetrachloroethene				8J	<50	<125	<250	<120	<250	<250	<250	<250	<250	<250	<500	<125	<120	<120	<250	<500	<500	<250	<500	<1000	<250	5.00		
Trichloroethene				2900	1800	5500	5000	6000	7800	8000	12000	7000	6000	5700	7200	4500	5000	3800	3500	3800	4100	4700	5100	6300	5400	5.00		
Vinyl Chloride				<4	<100	<250	<500	<250	<500	<500	<500	<500	<500	<500	<1000	<250	<250	<250	<250	<500	<500	<250	<500	<1000	<500	2.00		

NA = not analyzed
NS = not sampled

MW-11																										NYSDEC	
METALS (mg/L)				1/22/98	5/8/98	8/25/98	11/17/98	5/24/99	8/23/99	11/15/99	5/23/00	8/22/00	5/21/01	8/29/01	6/17/02	9/16/02	9/10/03	5/19/04	8/18/04	5/12/05	9/22/05	5/23/06	8/24/06	5/30/07	8/6/07	STANDARD	
Cadmium				<0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.005	
Hexavalent Chromium				<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NS	NS	NS	<0.02	NS	NS	NS	<0.02	0.05	
Total Chromium				<0.0066	<0.005	<0.005	0.006	<0.005	0.006	<0.005	0.008	0.007	<0.005	0.007	<0.005	<0.005	<0.005	NS	NS	NS	0.0050B	NS	NS	NS	<.005	0.05	
Iron				NA	NA	NA	NA	0.19	1.29	1.55	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.30	
Lead				<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.025	
Manganese				NA	NA	NA	NA	0.06	0.09	0.09	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.30	
Nickel				<0.0016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.10	
Zinc				0.0104J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	None Set	
NONMETALS (mg/L)																											
Chloride				ND	NA	NA	NA	1.5	1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	250	
Cyanide, total				ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	0.20	
Ammonia Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	2	
Nitrate Nitrogen				NA	NA	NA	NA	0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	10	
Nitrite Nitrogen				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	1	
Sulfate				NA	NA	NA	NA	37	36	41	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	250	
Total Suspended Solids				4.4J	3.5	31	21	5.5	71	25	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NA	NS	NS	NS	NA	None Set	
Turbidity (NTU)				35.8	6.5	35	31	14	25	120	6.4	98	58	260	155	32	81	NS	NS	NS	96	NS	NS	NS	NA	5	
VOCs (ug/L)																											
Acrylonitrile				<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NS	NS	NS	<10	NS	NS	NS	NA	5.00	
Carbon Tetrachloride				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	5.00	
Chlorobenzene				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	5.00	
Chloroform				<1	<5	<5	<5	<5	<5	<5	6.00	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	7.00	
Dichlorodifluoromethane				NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS	NS	<10	NS	NS	NS	<10	5.00	
1,1-Dichloroethene				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	5.00	
cis-1,2-Dichloroethene				<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NS	NS	NS	<10	NS	NS	NS	<5	5.00
trans-1,2-Dichloroethene				<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NS	NS	NS	<10	NS	NS	NS	<5	5.00
1,2-Dichloroethene, Total				NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NS	NS	NS	NA	NS	NS	NS	NA	None Set	
Tetrachloroethene				<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	<10	NS	NS	NS	<5	5.00	
Trichloroethene				<1	<5	<5	180.00	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	3J	NS	NS	NS	<5	5.00	
Vinyl Chloride				<2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS	NS	<10	NS	NS	NS	<10	2.00	

MW-12																										NYSDEC
METALS (mg/L)									8/23/99	11/16/99	5/24/00	8/22/00	5/21/01	8/30/01	6/19/02	9/17/02	9/11/03	5/18/04	8/17/04	5/12/05	9/23/05	5/23/06	8/24/06	5/30/07	8/6/07	STANDARD
Cadmium									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Hexavalent Chromium									<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	0.05
Total Chromium									0.008	0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	0.05
Iron									0.11	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Lead									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025
Manganese									0.13	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Nickel									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10
Zinc									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
NONMETALS (mg/L)																										
Chloride									47	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Cyanide, total									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20
Ammonia Nitrogen									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Nitrate Nitrogen									<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
Nitrite Nitrogen									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Sulfate									131	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Total Suspended Solids									12	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Turbidity (NTU)									11	20	7.9	430	134	57	380	92	120	NA	NA	NA	NA	NA	NA	NA	NA	5
VOCs (ug/L)																										
Acrylonitrile									<25	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA	5.00
Carbon Tetrachloride									<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<20	<20	<10.0	<10	5.00
Chlorobenzene									<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<20	<20	<10.0	<10	5.00
Chloroform									<5	<5	<5	7.00	7.00	<5	<5	<5	<5	<5	<10	<10	<10	<20	<20	<10.0	<10	7.00
Dichlorodifluoromethane									<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<20	<20	<10.0	<20	5.00
1,1-Dichloroethene									<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	3J	3J	<20	<20	<10.0	<10	5.00
cis-1,2-Dichloroethene									NA	NA	NA	NA	NA	NA	NA	NA	9.8	8.5	<10	6J	6J	10J	13J	5 J	<10	5.00
trans-1,2-Dichloroethene									NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<10	2J	2J	<20	<20	<10.0	<10	5.00
1,2-Dichloroethene, Total									10.00	8.00	9.90	8.00	7.00	9.00	7.00	8.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Tetrachloroethene									<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<10	5.00
Trichloroethene									110	120	120	83	79	86	75	110	120	98	110	160	160	210	380	170	270	5.00
Vinyl Chloride									<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<20	2.00

NA = not analyzed
NS = not sampled

MW-13																									NYSDEC	
METALS (mg/L)									8/23/99	11/16/99	5/24/00	8/23/00	5/21/01	8/30/01	6/18/02	9/18/02	9/11/03	5/19/04	8/18/04	5/12/05	9/22/05	5/23/06	8/24/06	5/30/07	8/7/07	STANDARD
Cadmium									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Hexavalent Chromium									<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.02	0.05
Total Chromium									<0.005	<0.005	<0.005	<0.005	0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.0027B	0.0084B	<0.0023	0.0048B	0.014	0.010 J	0.006	0.05
Iron									0.37	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Lead									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025
Manganese									0.28	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Nickel									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10
Zinc									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
NONMETALS (mg/L)																										
Chloride									48	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Cyanide, total									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20
Ammonia Nitrogen									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Nitrate Nitrogen									<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
Nitrite Nitrogen									97	124	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Sulfate									27	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Total Suspended Solids									27	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Turbidity (NTU)									28	10	908	57	96	210	370	110	280	95	68	5.4	14	89	198	NA	28	5
VOCs (ug/L)																										
Acrylonitrile									<50	<250	<25	<125	<250	<250	<125	<250	<120	NA	NA	NA	NA	NA	NA	NA	NA	5.00
Carbon Tetrachloride									<10	<50	<5	<25	<50	<50	<25	<50	<25	<25	<50	<100	<50	<50	<100	<100	<50	5.00
Chlorobenzene									<10	<50	<5	<25	<50	<50	<25	<50	<25	<25	<50	<100	<50	<50	<100	<100	<50	5.00
Chloroform									<10	<50	<5	<25	<50	<50	<25	<50	<25	<25	<50	<100	<50	<50	<100	<100	<50	7.00
Dichlorodifluoromethane									<20	<100	<10	<50	<100	<100	<50	<100	<50	NA	NA	<100	<50	<50	<100	<100	<100	5.00
1,1-Dichloroethene									<10	<50	14.00	<25	<50	<50	<25	<50	<25	<25	<50	<100	<50	<50	<100	<100	<50	5.00
cis-1,2-Dichloroethene									NA	NA	NA	NA	NA	NA	NA	NA	59.00	46.00	44J	<100	26J	48J	62J	48 J	66	5.00
trans-1,2-Dichloroethene									NA	NA	NA	NA	NA	NA	NA	NA	<25	<25	<50	<100	<50	<50	<100	<100	<50	5.00
1,2-Dichloroethene, Total									20.00	66.00	58.00	55.00	<50	60.00	30.00	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Tetrachloroethene									<10	<50	<5	<25	<50	<50	<25	<50	<25	<25	<50	<100	<50	<50	<100	<100	<50	5.00
Trichloroethene									290	750	530	650	840	940	600	700	800	740	740	950	540	600	1000	1000	1600	5.00
Vinyl Chloride									<20	<100	<10	<50	<100	<100	<50	<100	<50	<50	<50	<100	<50	<50	<100	<100	<100	2.00

MW-14																									NYSDEC
METALS (mg/L)																									STANDARD
Cadmium										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Hexavalent Chromium										<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	0.05
Total Chromium										0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	0.05
Iron										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Lead										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025
Manganese										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30
Nickel										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10
Zinc										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
NONMETALS (mg/L)																									
Chloride										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Cyanide, total										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20
Ammonia Nitrogen										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Nitrate Nitrogen										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
Nitrite Nitrogen										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Sulfate										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250
Total Suspended Solids										NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set
Turbidity (NTU)										89	22	88	57	32	20	NA	NA	NA	NA	NA	NA	NA	NA	9.7	5
VOCs (ug/L)																									
Acrylonitrile										<25	<25	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.00
Carbon Tetrachloride										<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10.0	<5	5.00
Chlorobenzene										<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10.0	<5	5.00
Chloroform										<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10.0	<5	7.00
Dichlorodifluoromethane										<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10	<10.0	<10	5.00
1,1-Dichloroethene										<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10.0	<5	5.00
cis-1,2-Dichloroethene										NA	NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00
trans-1,2-Dichloroethene										NA	NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00
1,2-Dichloroethene, Total										<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Tetrachloroethene										<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10.0	<5	5.00
Trichloroethene										<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	17	<5	5.00
Vinyl Chloride										<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00

NA = not analyzed
NS = not sampled

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

		MW-15																				NYSDEC							
METALS (mg/L)														8/22/00	5/21/01	8/30/01	6/19/02	9/17/02	9/12/03	5/18/04	8/16/04	5/12/05	9/23/05	5/23/05	8/25/06	5/30/07	8/7/07	STANDARD	
Cadmium														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	
Hexavalent Chromium														<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	0.05	
Total Chromium														0.009	<0.005	0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	0.05	
Iron														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Lead														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	
Manganese														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30	
Nickel														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10	
Zinc														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
NONMETALS (mg/L)																													
Chloride														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids														NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)														150	68	27	28	32	12	NA	NA	NA	NA	NA	NA	NA	5.2	5	
VOCs (ug/L)																													
Acrylonitrile														<25	<25	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Carbon Tetrachloride														<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
Chlorobenzene														<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
Chloroform														<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	7.00
Dichlorodifluoromethane														<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10.0	<10	5.00	
1,1-Dichloroethene														<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
cis-1,2-Dichloroethene														NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
trans-1,2-Dichloroethene														NA	NA	NA	NA	NA	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
1,2-Dichloroethene, Total														<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Tetrachloroethene														<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
Trichloroethene														<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<5	<10.0	<5	5.00
Vinyl Chloride														<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00	

MW-16													NYSDEC													
METALS (mg/L)													6/19/02	9/17/02	9/11/03	5/16/04	8/18/04	5/12/05	9/23/05	5/23/06	8/24/06	5/30/07	8/7/07	STANDARD		
Cadmium													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005		
Hexavalent Chromium													<0.02	<0.02	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	0.05		
Total Chromium													<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	0.05		
Iron													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Lead													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025		
Manganese													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Nickel													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10		
Zinc													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
NONMETALS (mg/L)																										
Chloride													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250		
Cyanide, total													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20		
Ammonia Nitrogen													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2		
Nitrate Nitrogen													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10		
Nitrite Nitrogen													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1		
Sulfate													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250		
Total Suspended Solids													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Turbidity (NTU)													480	290	150	NA	NA	NA	NA	NA	NA	NA	5.6	5		
VOCs (ug/L)																										
Acrylonitrile													<25	<25	<50	NA	NA	NA	NA	NA	NA	NA	NA	5.00		
Carbon Tetrachloride													<5	<5	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Chlorobenzene													<5	<5	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Chloroform													<5	<5	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	7.00		
Dichlorodifluoromethane													<10	<10	<20	NA	NA	<10	<10	<10	<10	<10.0	<10	5.00		
1,1-Dichloroethene													<5	<5	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
cis-1,2-Dichloroethene													NA	NA	26.00	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
trans-1,2-Dichloroethene													NA	NA	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
1,2-Dichloroethene, Total													<5	11.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
Tetrachloroethene													<5	<5	<10	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Trichloroethene													<5	33	400	33	43	7J	10	6J	14	8 J	12	5.00		
Vinyl Chloride													<10	<10	<20	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00		

NA = not analyzed
NS = not sampled

Appendix B
Relevant Groundwater Analytical Results
61 Edson Street, Amsterdam, NY
NYSDEC Site #4-029-004

MW-17																		NYSDEC	
																		STANDARD	
METALS (mg/L)																		0.005	
Cadmium																		0.05	
Hexavalent Chromium																		0.05	
Total Chromium																		0.30	
Iron																		0.025	
Lead																		0.30	
Manganese																		0.10	
Nickel																		None Set	
Zinc																			
NONMETALS (mg/L)																		250	
Chloride																		0.20	
Cyanide, total																		2	
Ammonia Nitrogen																		10	
Nitrate Nitrogen																		1	
Nitrite Nitrogen																		250	
Sulfate																		None Set	
Total Suspended Solids																		5	
Turbidity (NTU)																			
VOCs (ug/L)																		5.00	
Acrylonitrile																		5.00	
Carbon Tetrachloride																		5.00	
Chlorobenzene																		7.00	
Chloroform																		5.00	
Dichlorodifluoromethane																		5.00	
1,1-Dichloroethene																		5.00	
cis-1,2-Dichloroethene																		5.00	
trans-1,2-Dichloroethene																		None Set	
1,2-Dichloroethene, Total																		5.00	
Tetrachloroethene																		5.00	
Trichloroethene																		2.00	
Vinyl Chloride																			

MW-18																		NYSDEC	
																		STANDARD	
METALS (mg/L)																		0.005	
Cadmium																		0.05	
Hexavalent Chromium																		0.05	
Total Chromium																		0.30	
Iron																		0.025	
Lead																		0.30	
Manganese																		0.10	
Nickel																		None Set	
Zinc																			
NONMETALS (mg/L)																		250	
Chloride																		0.20	
Cyanide, total																		2	
Ammonia Nitrogen																		10	
Nitrate Nitrogen																		1	
Nitrite Nitrogen																		250	
Sulfate																		None Set	
Total Suspended Solids																		5	
Turbidity (NTU)																			
VOCs (ug/L)																		5.00	
Acrylonitrile																		5.00	
Carbon Tetrachloride																		5.00	
Chlorobenzene																		7.00	
Chloroform																		5.00	
Dichlorodifluoromethane																		5.00	
1,1-Dichloroethene																		5.00	
cis-1,2-Dichloroethene																		5.00	
trans-1,2-Dichloroethene																		None Set	
1,2-Dichloroethene, Total																		5.00	
Tetrachloroethene																		5.00	
Trichloroethene																		2.00	
Vinyl Chloride																			

NA = not analyzed
NS = not sampled

MW-19															NYSDEC												
METALS (mg/L)															9/11/03	1/7/04	5/18/04	8/17/04	5/12/05	9/23/05	5/23/06	5/23/06	5/30/07	8/7/07	STANDARD		
Cadmium															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005		
Hexavalent Chromium															<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05		
Total Chromium															<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05		
Iron															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Lead															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025		
Manganese															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30		
Nickel															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10		
Zinc															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
NONMETALS (mg/L)																											
Chloride															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Cyanide, total															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20	
Ammonia Nitrogen															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	
Nitrate Nitrogen															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	
Nitrite Nitrogen															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Sulfate															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Total Suspended Solids															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set	
Turbidity (NTU)															190	NA	NA	NA	NA	NA	NA	NA	NA	2.1	5		
VOCs (ug/L)																											
Acrylonitrile															<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Carbon Tetrachloride															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Chlorobenzene															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Chloroform															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	7.00		
Dichlorodifluoromethane															<10	NA	NA	NA	<10	<10	<10	<10	<10.0	<10	5.00		
1,1-Dichloroethene															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
cis-1,2-Dichloroethene															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
trans-1,2-Dichloroethene															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set		
1,2-Dichloroethene, Total															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Tetrachloroethene															<5	<5	<5	<10	<10	<10	<10	<10	<10.0	<5	5.00		
Trichloroethene															<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00		
Vinyl Chloride															<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00		

MW-20															NYSDEC													
															9/11/03	1/7/04	5/18/04	8/16/04	5/12/05	9/23/05	5/23/06	8/25/06	5/30/07	8/7/07	STANDARD			
METALS (mg/L)															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005
Cadmium															<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05			
Hexavalent Chromium															<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05			
Total Chromium															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30			
Iron															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025			
Lead															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.30			
Manganese															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10			
Nickel															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set			
Zinc																												
NONMETALS (mg/L)															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	
Chloride															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20			
Cyanide, total															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2			
Ammonia Nitrogen															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10			
Nitrate Nitrogen															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1			
Nitrite Nitrogen															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250			
Sulfate															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set			
Total Suspended Solids															28	NA	NA	NA	NA	NA	NA	NA	NA	110	5			
Turbidity (NTU)																												
VOCs (ug/L)															<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.00	
Acrylonitrile															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
Carbon Tetrachloride															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
Chlorobenzene															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	7.00			
Chloroform															<10	NA	NA	NA	<10	<10	<10	<10	<10.0	<10	5.00			
Dichlorodifluoromethane															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
1,1-Dichloroethene															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
cis-1,2-Dichloroethene															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
trans-1,2-Dichloroethene															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None Set			
1,2-Dichloroethene, Total															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
Tetrachloroethene															<5	<5	<5	<10	<10	<10	<10	<5	<10.0	<5	5.00			
Trichloroethene															<10	<10	<10	<10	<10	<10	<10	<10	<10.0	<10	2.00			
Vinyl Chloride																												

NA = not analyzed
NS = not sampled

FGI-1																		NYSDEC	
METALS (mg/L)																		STANDARD	
Cadmium																		0.005	
Hexavalent Chromium																		0.05	
Total Chromium																		0.05	
Dissolved Chromium																		0.05	
Iron																		0.30	
Lead																		0.025	
Manganese																		0.30	
Nickel																		0.10	
Zinc																		None Set	
NONMETALS (mg/L)																			
Chloride																		250	
Cyanide, total																		0.20	
Ammonia Nitrogen																		2	
Nitrate Nitrogen																		10	
Nitrite Nitrogen																		1	
Sulfate																		250	
Total Suspended Solids																		None Set	
Turbidity (NTU)																		5	
VOCs (ug/L)																			
Acrylonitrile																		5.00	
Carbon Tetrachloride																		5.00	
Chlorobenzene																		5.00	
Chloroform																		7.00	
Dichlorodifluoromethane																		5.00	
1,1-Dichloroethene																		5.00	
cis-1,2-Dichloroethene																		5.00	
trans-1,2-Dichloroethene																		5.00	
1,2-Dichloroethene, Total																		None Set	
Tetrachloroethene																		5.00	
Trichloroethene																		5.00	
Vinyl Chloride																		2.00	

FGI-2																		NYSDEC	
METALS (mg/L)																		STANDARD	
Cadmium																		0.005	
Hexavalent Chromium																		0.05	
Total Chromium																		0.05	
Dissolved Chromium																		0.05	
Iron																		0.30	
Lead																		0.025	
Manganese																		0.30	
Nickel																		0.10	
Zinc																		None Set	
NONMETALS (mg/L)																			
Chloride																		250	
Cyanide, total																		0.20	
Ammonia Nitrogen																		2	
Nitrate Nitrogen																		10	
Nitrite Nitrogen																		1	
Sulfate																		250	
Total Suspended Solids																		None Set	
Turbidity (NTU)																		5	
VOCs (ug/L)																			
Acrylonitrile																		5.00	
Carbon Tetrachloride																		5.00	
Chlorobenzene																		5.00	
Chloroform																		7.00	
Dichlorodifluoromethane																		5.00	
1,1-Dichloroethene																		5.00	
cis-1,2-Dichloroethene																		5.00	
trans-1,2-Dichloroethene																		5.00	
1,2-Dichloroethene, Total																		None Set	
Tetrachloroethene																		5.00	
Trichloroethene																		5.00	
Vinyl Chloride																		2.00	

NA = not analyzed
NS = not sampled

Appendix C

Site photographs



1. East Branch excavation area, Mohawk River bank. View; downstream, low water conditions



2. East Branch excavation area, Mohawk River bank. View; upstream, low water conditions



3. East Branch excavation Area, Mohawk River bank outlet. Low water conditions.



4. East Branch excavation area, Mohawk River. Typical river stone.



5. East Branch excavation area, Mohawk River. East Branch outlet.



6. East Branch excavation area, Mohawk River outlet



7. East Branch excavation area, Mohawk River outlet.

Appendix D

Community health and safety plan



Appendix D

Community Health and Safety Plan

In accordance with 29 CFR 1910.120(h), and the NYSDOH generic Community Air Monitoring Plan, an on-site air monitoring program will be implemented by RETEC to identify and quantify airborne levels of hazardous substances and to determine the appropriate level of protection required for personnel working on site. Dust, which may include heavy metals impacted soil, is the primary vector of concern.

In addition to work area monitoring, RETEC will monitor community air quality upwind and downwind of the work area to provide real-time estimates of particulate releases to the community as a result of remedial activities.

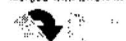
Three MiniRam™ (or equivalent) monitors will be used for continuous (15-minute integrated) real-time dust monitoring. Measurements will be made upwind, downwind, and within the work area. One 8-hour time weighted average personal air sample will be collected in each new work area and analyzed for total cadmium, chromium, lead, nickel, and zinc by NIOSH Method 7300.

The results of the monitoring will be used by RETEC to ensure that all action levels outlined in the site specific Health and Safety Plan are followed. Per NYSDEC TAGM 4031, an action level of 0.150 mg/M³ (or visible dust) will trigger the requirement for dust control measures by the Contractor such as a reduced rate of material handling, wetting of exposed soil surfaces, or encapsulation. The following table reviews the concentrations of on-site contaminants and indicates that the 0.150 mg/M³ action level will be protective of human health.

Contaminant of Concern	TWA (mg/M ³)		Maximum Known Soil Concentration ¹ (mg/mg)	Total Dust Concentration at TWA (mg/M ³)
Cadmium	0.005	OSHA	0.000628	7.96
Chromium	0.500	NIOSH	0.003550	141
Lead	0.050	OSHA	0.000614	81.4
Nickel	0.015	NIOSH	0.007890	1.90
Zinc	N/A		0.002080	N/A
Total Dust	0.150	NYSDEC	1.0	0.150

Note (1): These maximum concentrations were removed during the soil IRM of 2004, but are provided here as a conservative basis for evaluation.

Although chlorinated VOCs are not anticipated to be encountered during this work, RETEC will periodically record airborne upwind, downwind, and work area VOC concentrations using a photoionization detector (PID) with an 11.7 eV bulb.



Appendix E

Site Health and Safety Plan (to be submitted under separate cover)

