PROPOSED PLAN
NIAGARA FALLS ARMED FORCES RESERVE CENTER
NIAGARA FALLS, NEW YORK
APRIL 2013

1.0 INTRODUCTION

This Proposed Plan documents the following proposed decision for the Niagara Falls Armed Forces Reserve Center located at 9400 Porter Road in Niagara Falls (Site): implementation of a Site Management Plan for the impacted area at the Site.

This Proposed Plan includes a summary of the Site background and characterization from the *Remedial Investigation/Interim Remedial Action Report and Human Health Risk Assessment,* (PARS Environmental, Inc., March 2013). This report is contained in the Administrative Record for this Site.

The US Army is issuing the Proposed Plan as part of its public participation responsibilities to inform the public of the US Army's preferred remedy and to solicit public comments pertaining to the remedial alternatives under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA).

The US Army, as the lead agency, is conducting response actions at the Site in accordance with the Defense Environmental Restoration Program (DERP), which requires that these activities be conducted in accordance with CERCLA and the NCP. Although the US Army is conducting activities at the Site in accordance with CERCLA, the facility is not included on the National Priorities List (NPL) nor has the U.S. Environmental Protection Agency (USEPA) included the Site in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).

Community members are invited to comment on this Proposed Plan during the 30-day public comment period, which begins on April 14, 2013 and concludes on May 14, 2013. For additional information concerning this Site, the Administrative Record can be found at the Niagara Falls Public Library, Earl W. Brydges Building, 1425 Main Street, Niagara Falls, NY, 14305. Comments should be sent to Mr. Jeffery Hrzic at the following address, 5231 South Scott Plaza, Ft Dix, NJ, 08054 or by email at jeffrey.m.hrzic.civ@mail.mil. Comments received will be documented in the Responsiveness Summary Section of the Decision Document.

The US Army, in consultation with New York State Department of Environmental Conservation ("NYSDEC"), will select the final remedy after reviewing and considering all information submitted during a 30-day public comment period and may modify the preferred alternative or select another response action based on new information or public comments. Therefore, the public is encouraged to review and comment on the alternatives presented in this document.

2.0 SITE BACKGROUND

The Niagara Falls Armed Forces Reserve Center (AFRC) is an approximate 19.5-acre parcel located on the southern portion of Niagara Township, in Niagara Falls, Niagara County, New York. The Site is currently owned by the US Army. A Site Location Map and Site Plan are included as Figure 1 and Figure 2, respectively.

The United States Government acquired the Site in 1955 and the United States Navy used the Site to service helicopters and airplanes. Most of the buildings at the Site were constructed by 1956. The Army obtained the Site from the Navy in 1962. From 1970 to 1975, the Site was used to service Nike Missiles from missile batteries around the state of New York.

The Site was most recently occupied by the 277th Quartermaster Company, the 865th Combat Support Hospital, the 1982nd Forward Surgical Unit and Area Maintenance Support Activity 76. A small presence was also maintained by personnel of the Department of Public Works (DPW), Fort Drum, New York (*Environmental Condition of Property Report*, CH2MHill, June 2007). No personnel or units have occupied the Site as of September 15, 2011 per Base Realignment and Closure (BRAC) law.

In 2008, a yellow substance was observed discharging from the 24-inch diameter corrugated storm sewer at outfall (Outfall No. 5) into the drainage swale at the southeast corner of the Site. An investigation was performed by United States Army Reserve (USAR). The New York State Department of Environmental Conservation (NYSDEC) was notified and Spill #0803478 was assigned for the discharge.

Product was also observed discharging from a 6-inch diameter cast iron fire protection main into the 24-inch diameter corrugated storm sewer. The 6-inch line was capped by USAR. The drain valve for the 6-inch line was uncovered and dislodged. After dislodging the valve, product was observed in the excavated hole. A sample was collected and the product was identified as diesel fuel. Polychlorinated biphenyls (PCBs) were detected in the sample at a concentration of 2.1 mg/kg (Aroclor 1254).

As part of the investigation, a sediment sample was collected from the 24-inch diameter storm sewer adjacent to the cast iron pipe. A sample of the yellow substance was also collected from the drainage swale. The sample results revealed that the sediment in the pipe and the yellow substance present in the swale contained detectable levels of PCBs. PCB concentrations in the sediment and yellow substance were 220 mg/kg (Aroclor 1254) and 2.81 mg/kg (Aroclor 1254), respectively.

The USACE and the USAR 99th Regional Support Command (99th RSC) retained the services of PARS to investigate and remediate the drainage swale at Outfall No. 5. The 24-inch diameter storm sewer was also cleaned as part of the remedial action. Approximately 134 tons of PCB impacted soil was excavated from the drainage swale. PCB concentrations in the post-excavation soil samples at Outfall No. 5 and from the drainage swale were below the maximum contaminant level of 1 milligram per kilogram (mg/kg) that was established by the NYSDEC. Investigation and remediation activities are outlined in the *Remedial Action Report* (PARS, March 2010).

Site Inspection – Former Building 2 and Fire Protection Main

In November and December 2010, PARS conducted a site inspection to evaluate potential impacts associated with the former USTs at Building 2 and the fire protection main. Inspection activities consisted of a geophysical survey, exploratory excavations and soil and water sampling. No anomalies consistent with USTs were identified as part of the geophysical survey. The findings are outlined in the *Site Inspection Report* (PARS, June 2011).

Twelve exploratory excavations (TP-1 through TP-12) were completed based on the findings of the geophysical survey, previous investigations and field observations. A soil sample for laboratory analysis was collected from TP-1. Several SVOCs were detected in the sample at concentrations exceeding the NYSDEC Unrestricted and Restricted Use Soil Cleanup Objectives.

The 6-inch diameter cast iron fire protection water main was encountered in six exploratory excavations. At TP-11, the 6-inch diameter pipe terminated at a concrete catch basin presumed to be the 500,000-gallon reservoir drain. A sample was collected from the water flowing from the 6-inch diameter line into the concrete catch basin. Several compounds including toluene, naphthalene, PCBs and chromium were detected in the water sample at concentrations exceeding the NYSDEC Class GA NYSDEC Groundwater Effluent Limitations (Class GA) Objectives. Class GA objectives apply to a discharge from a point source or outlet or any other discharge that will or may enter the waters of the state.

Petroleum product and a heavy sheen were observed within the fill material and on the groundwater surface in one of the exploratory excavations (TP-12). Several compounds, including PCBs, were detected in a water sample collected from TP-12 at concentrations exceeding the NYSDEC Class GA Objectives. A drum vacuum was used to remove petroleum impacted water from the excavation.

Twenty-one soil probes were completed as part of the site inspection. Acetone, metals and PCBs were detected in several samples at concentrations exceeding the Unrestricted Use Soil Cleanup Objective (USCO). Several metals were detected at concentrations exceeding the Restricted Use Soil Cleanup Objectives.

Remedial Investigation/Interim Remedial Action/Human Health Risk Assessment

In September 2011, PARS submitted a QAPP/Sampling Plan for the RI/IRA to NYSDEC. Comments received from the NYSDEC Case Manager stated that fill material brought on-site may be the cause of the elevated concentrations for certain metals in the soil, which should nullify any concerns for high metal content in the soils. The origin of the fill material is unknown, but the fill material does contain some slag. Iron blast slag and open hearth slag from production of carbon steel is commonly found as fill material in the region.

The remedial investigation (RI) was performed at the Site in September 2011. During the RI, 30 soil probes were advanced at the Site and two soil samples were collected from each probe for Target Compound List (TCL) Volatile Organic Compounds (VOCs), TCL Semi-Volatile Organic Compounds (SVOCs) and PCBs. Acetone was detected in one sample at a concentration slightly exceeding the USCO. All other detected VOCs were at concentrations below their USCO and Commercial Soil Clean up Objective (CSCO). Two soil samples contained SVOCs at concentrations that exceeded the USCO and CSCO. SVOCs were not detected in any other samples at concentrations exceeding the respective USCO and CSCO. Total PCB concentrations exceeded the USCO in five samples and the CSCO in one sample. PCBs were not detected in the remaining samples concentrations exceeding the USCO and CSCO.

Temporary well points were installed in the open probe holes at nine locations. Eight groundwater samples were collected and analyzed for VOCs, SVOCs, and PCBs. Benzene was detected at SP-49 and trichlorofluoromethane was detected at SP-22 at concentrations slightly exceeding the respective Class GA criteria. No other VOCs were detected in the groundwater samples at concentrations exceeding the respective Class GA criteria. Four SVOCs were detected at concentrations exceeding the respective Class GA criteria at 3 locations. Total PCBs were detected in groundwater samples from three locations at concentrations exceeding the Class GA Criteria for the compound. PCBs were not detected in the other groundwater samples at concentrations above the laboratory MDL.

Supplemental Investigation

A supplemental investigation was performed in November 2012 to further evaluate the horizontal extent of groundwater impacts on the eastern portion of the Site. Seven permanent monitoring wells and six temporary well points were installed as part of the investigation. Benzene was detected in the perched groundwater sample from TW-1 and TCE was detected in the sample from TW-5 at concentration slightly above their respective Class GA criteria. No other compounds were detected above their respective Class GA criteria. Groundwater sample locations and results are shown in Figure 3

Based on the findings of the supplemental investigation, boundaries for a proposed groundwater land use control area were defined. These boundaries are depicted in Figure 4.

3.0 SITE CHARACTERISTICS

The Site consists of approximately 19.5 acres and is bound to the south by Porter Road. The property located immediately south of Porter Road is undeveloped forested land. Niagara Falls International Airport is located immediately north and east of the Site. Other properties in the vicinity of the Site are used primarily for commercial purposes (Figure 1).

Surface and storm water drainage is to Cayuga Creek located immediately west of the Site. Cayuga Creek is an intermittent tributary of the Niagara River. Storm sewer lines, drainage swales and outfalls are depicted in Figure 2.

The Site is currently vacant and future land use for the Site is restricted commercial usage.

4.0 SCOPE AND ROLE OF RESPONSE ACTION

An interim remedial action (IRA) was performed on September 29, 2011. An approximate 10-foot (north-south) by 12-foot (east-west) area was excavated to a depth of approximately 5 feet bgs in the vicinity of the former exploratory excavation, TP-12. Approximately 40 tons of soil were removed from the excavation and properly disposed. During soil excavation activities, perched groundwater was observed at approximately 2 feet bgs. Perched groundwater exhibiting a surface sheen was pumped from the excavation using a vacuum truck. Approximately 2,000 gallons of groundwater was removed from the excavation and properly disposed. Five confirmatory soil samples, four (4) sidewall samples and one (1) bottom of excavation sample, were collected from the excavation. The confirmatory soil samples were analyzed for TCL VOCs, TCL SVOCs and PCBs. VOCs, SVOCs and PCBs were not detected in the confirmatory samples at concentrations exceeding the applicable USCOs and CSCOs.

After the completion of the RI and IRA, a Human Health Risk Assessment (HHRA) was performed to evaluate potential risks to human health under current and reasonably foreseeable future conditions from exposure VOCs, SVOCs and PCBs in subsurface soils and groundwater. Under current or future conditions, the commercial/industrial and construction workers exposures to the individual subsurface soil pathways at the Site do not pose and unacceptable risk for carcinogens. The construction workers total potential exposure to groundwater is slightly above the USEPA acceptable carcinogenic risk range of greater than 1.0E-4 to 1.0E-6. The findings and conclusions of the RI, IRA and HHRA are included in the *Remedial Investigation/Interim Remedial Action Report and Human Health Risk Assessment.*

Comments on the draft report were provided by NYSDEC and the NY Department of Health (NYDOH) on March 23, 2012. These comments were addressed in the final report that was submitted on April 12, 2012. In a letter dated April 23, 2012, NYSDEC approved the report including the proposed implementation of a Site Management Plan.

Potential remedial alternatives were evaluated based on the remedial action objectives (RAOs) for the Site. In addition to achieving the RAOs, the Site remedy must be evaluated using the following nine criteria in accordance with section 40 CFR 300.430 (e)(9) of the National Contingency Plan (NCP). The NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, was also consulted. The nine criteria include Overall Protection of Human Health and the Environment, Compliance with Applicable or Relevant and Appropriate Requirements (ARARs), Long-Term Effectiveness and Permanence, Reduction of Toxicity, Mobility or Volume through Treatment, Short-Term Impacts and Effectiveness, Implementability, Cost, State Acceptance and Community Acceptance.

Based on the evaluation, the IRA completed at the Site, and that the only exposure scenario identified by the HHRA as a concern was exposure to impacted groundwater by construction workers, the implementation of a Site Management Plan would satisfy the RAOs.

Based on the above conclusions, it has been determined that a Site Management Plan should be prepared and implemented within the impacted area on the eastern part of the Site limit exposure to construction workers. Development and implementation of the Site Management Plan will be the responsibility of the future landowner and the plan will be based on the planned redevelopment and use of the Site. Intrusive work is restricted within the area of known groundwater impacts (see Figure 3) unless the owner submits a Site Management Plan to the NYSDEC for review and approval. This requirement will be included in a deed restriction for the Site.

5.0 SUMMARY OF SITE RISKS

The baseline risk assessment estimates what risks the impacted area poses if no action were taken. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed. A HHRA was performed for VOCs, SVOCs and PCBs in subsurface soils and groundwater in accordance with CERCLA, the NCP and applicable USEPA guidance. A detailed discussion of the HHRA is presented in the *Remedial Investigation/Interim Remedial Action Report and Human Health Risk Assessment*.

An initial and secondary screening of compounds of concern in soil and groundwater was conducted as part of the HHRA. The contaminants of potential concern (CPCs) selected for further evaluation in subsurface soil were benzo(a)anthracene, dibenz(a,h)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, Aroclor 1254 and Aroclor 1260. The CPCs identified in groundwater were benzene, naphthalene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, Aroclor 1254 and Aroclor 1260.

Based on current and future human activity and land use patterns in the vicinity of the Site it was determined that the following populations would be evaluated in the risk assessment: commercial/industrial workers and construction workers. A groundskeeper/landscaper scenario was considered while evaluating the commercial/industrial worker. After examining current and reasonably foreseeable future uses of the Site, as well as contaminated media and the nature of the contaminants, five pathways of exposure were identified. These exposures are dermal exposure to subsurface soil and groundwater, inhalation of subsurface soil particulates, incidental ingestion of subsurface soil and inhalation of groundwater.

When examining risk, the most conservative estimate was calculated. Qualitative estimates were used to assume that a construction worker or groundskeeper/landscaper is spending the entire work day within the impacted area at the Site. While this scenario is unlikely, it gives the most conservative estimate, and therefore, overestimates the potential risk. A construction worker or groundskeeper/landscaper conducting work outside of the impacted area will not be exposed to the CPCs.

The construction worker was examined for all pathways. The most common way for the construction worker to be exposed to subsurface soil and groundwater is during development of the impacted area. This exposure would only occur for a short period of time.

The industrial/commercial worker was examined for exposure to subsurface soil via dermal exposure, inhalation of particulates and incidental ingestion. The industrial/commercial worker would not be exposed to groundwater. The highest probable exposure to subsurface soil would be to a landscaper/groundskeeper conducting planting/tilling activities greater than one foot below ground surface within the impacted area.

The total cancer risk for commercial/industrial workers from exposure to subsurface soil is 6.0E-05. The total cancer risk for construction workers from exposure to subsurface soil is 1.5E-06. These values are within the acceptable range set by USEPA from 1E-04 to 1E-06. The total cancer risk for construction workers from exposure to groundwater during excavation is 3.5E-04. This value is slightly outside the acceptable range set by USEPA of 1E-04 to 1E-06. The construction worker would only be affected by impacts to groundwater within the designated area by exposing the groundwater during subsurface excavation activities.

6.0 REMEDIAL ACTION OBJECTIVES

Remedial measures for the Site must satisfy Remedial Action Objectives (RAOs) in accordance with the NYSDEC Technical Guidance for Site Investigation and Remediation and Section 40 CFR 300.430 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The RAOs are statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment. The RAOs for the Site only apply to Spill # 0803478. RAOs were developed to protect human health and the environment based on the conclusions of the HHRA. The RAOs for the Site are as follows:

Groundwater

- Reduce or eliminate inhalation of volatiles from exposed contaminated groundwater during subsurface construction activities.

- Reduce or eliminate dermal contact with groundwater that may occur during construction activities

7.0 SUMMARY OF REMEDIAL ALTERNATIVES

Although the Site is to be used for commercial purposes, evaluating a more restricted-use scenario is required. DER-10 guidance also requires the evaluation of a "no-action" alterative to provide a baseline for comparison against other alternatives. Since an IRA has been completed for the Site, the following alternatives were evaluated.

- No Action (Alternative No. 1): Under this alternative, the Site would remain in its current state, with no additional controls in-place.

- Implementation of a Site Management Plan (Alternative No. 2): Under this alternative, a Site Management Plan would be developed to address contaminated groundwater remaining at the Site in the event subsurface activities were performed (i.e., site upgrades, utility repair, new construction, etc.).

- Unrestricted Use Cleanup (Alternative No. 3)**:** Under this alternative, it would be necessary to remediate soil and fill material where concentrations exceed the USCOs. For unrestricted use scenarios, excavation and off-Site disposal of impacted soil and fill is generally regarded as the most applicable remedial measure. This alternative assumes that those non-building areas which exceed USCOs would be excavated and disposed at an approved off-Site landfill. During the excavations, groundwater encountered would also be captured, stored and disposed of off-Site (assumed disposal into the City of Niagara Falls sanitary sewer system).

  Based on the Site analytical data from this and previous investigations, it is estimated that an approximate 20,500 square foot area or 3,034 cubic yards of soil would be excavated and 92,000 gallons of perched groundwater would be pumped from the excavations. The soil and groundwater would be disposed of off-site.

The Preferred Alternative selected in the Feasibility Study is Alternative No. 2: Implementation of a Site Management Plan. It is concluded that the implementation of a Site Management Plan would satisfy the RAOs.

8.0 EVALUATION OF ALTERNATIVES

Below is a summary of the evaluation of the three alternatives remedy using the nine criteria in accordance with section 40 CFR 300.430 (e) (9) of the National Contingency Plan (NCP). A comparative analysis of each alternative is detailed in Section 8.3 and 8.4 of the *Remedial Investigation/Interim Remedial Action Report and Human Health Risk Assessment*.

Overall Protection of Human Health and the Environment:
Alternative No. 1 involves taking no further action. As the Site exists, there is a potential for construction worker exposure to groundwater levels via inhalation act at levels deemed unacceptable according to the HHRA.

Alternative No. 2 involves the implementation of a SMP. It is considered an adequate remedy to reduce the risk of exposure for human health. Implementation of this alternative would result in reducing the potential exposure to contaminants during construction or excavation activities. Although the alternative will not meet the chemical SCGs, it will manage soil, groundwater or materials generated during maintenance or construction activities.

Alternative No. 3 involves the removal of the contaminated soil and groundwater, and would be the most protective of human health and the environment.

Compliance with ARARs:
Alternative No. 3 is expected to achieve compliance with the chemical-specific ARARs for soil and groundwater. The RAOs for groundwater can be met; however, additional protective measures will need to be taken to limit the worker's exposure to groundwater during excavation activities.

Alternatives No. 2 is not expected to meet the chemical-specific ARARs for the identified

groundwater contamination at all locations, unless these materials are removed for disposal due to planned maintenance or construction activities. These materials would be managed in accordance with the SMP and would meet the RAOs.

Alternative No. 1 will not achieve compliance with the RAOs or ARARs related to the construction worker exposure scenario.

Long-Term Effectiveness and Permanence:
Alternative Nos. 2 and 3 are considered to be adequate, reliable remedies for the management and/or remediation of soil contamination. The risks involved with the exposure to contaminants or direct contact with soil and groundwater contaminants, although considered low, would still exist with Alterative No. 1.

Reduction of Toxicity, Mobility and Volume:
Alternative No. 3 provides for the greatest reduction of toxicity, mobility and volume of soil and groundwater contamination, as the majority of the contamination would be removed and disposed off-site.

Alternatives Nos. 1 and 2 will not reduce the toxicity, mobility and volume of the contamination; however, Alternative No. 2 will reduce the risk of exposure to contaminants should they be encountered during scheduled or planned maintenance or construction activities performed at the Site. Should contaminants be encountered, the SMP would identify management, handling and disposal procedures.

Short-Term Impacts and Effectiveness:
Alternative No. 3 involves excavation work, which could possibly cause exposure to contamination during remediation. Alternatives No. 1 and No. 2 would not cause disruption to the facility. Alternatives No. 2 and 3 would reduce potential exposures to existing soil contamination. Alternative No. 2 would outline procedures to properly manage materials generated from scheduled maintenance or construction activities.

Alternative Nos. 2 and 3 are expected to achieve the RAOs, however, Alternative No. 1 will not.

Implementability:
Alternatives No. 1 and 2 are technically and administratively implementable and can be implemented with readily available methods, equipment, materials and/or services. Alternative No. 3 will require a significant expenditure of equipment, materials and services. Additionally, Alternative No. 2 will require approvals from disposal facilities for soil and the City of Niagara Falls for discharge of groundwater to the sanitary sewer treatment plant.

Cost:
Alternative No. 1, which involves taking no further action, has the lowest capital and O&M cost as there will be no additional remedial activities completed.

Alternative No. 2, which is the implementation of a SMP, has the second highest capital cost of approximately $13,200. O&M costs would associated with Alternative No. 2 include annual inspection and report preparation which are approximately $3,360.

Alternative No. 3, which includes removal of contaminated soil and groundwater, has the highest capital cost estimated at approximately $335,800 for remediation to Unrestricted SCOs. There is no long term O&M cost associated with Alternative No. 3.

State Acceptance & Community Acceptance:
These alternatives will be evaluated/completed after the comment period for this proposed plan.

Summary:
Alternative No.1 (No Further Action) was not selected because it does not meet the RAOs. Therefore, this alterative is not protective of potential exposure to impacted groundwater to construction workers. No technical or administrative implementability issues are associated with the no further action alternative and there would be no capital or long-term operation, maintenance or monitoring costs.

Alternative No. 2 (Implementation of a Site Management Plan) was selected because it meets the RAOs and would reduce the risk of exposure for human health. Implementation of this alternative would result in reducing the potential exposure to contaminants during construction or excavation activities. This alternative is not expected to meet the chemical-specific ARARs for the identified groundwater contamination at all locations, unless these materials are removed for disposal due to planned maintenance or construction activities. These materials would be managed in accordance with the SMP and would meet the RAOs. This alternative is readily implementable on a technical basis.

Alternative No. 3 (Unrestricted Use Cleanup) was not selected because of the required expenditure of equipment, materials and services. Additionally, there is significant capital cost associated with the alternative and approvals are required for off-site disposal of soil and groundwater. This alternative is considered to be protective of human health and the environment. The RAOs for groundwater can be met; however, additional protective measures will need to be taken to limit the worker's exposure to groundwater during excavation activities. Furthermore, this alternative was not selected because potential exposure is limited to only the construction worker and contaminant levels are only slightly above the chemical-specific ARARs.

9.0 DESCRIPTION PREFERRED ALTERNATIVE: IMPLEMENTATION OF A SITE MANAGEMENT PLAN

Based on the alternative evaluation, the IRA completed at the Site, and that the only exposure scenario identified by the HHRA as concern was exposure to impacted groundwater by construction workers, the implementation of a Site Management Plan would satisfy the RAOs for the Site. Accordingly, the implementation of a Site Management Plan is the recommended as the remedial alternative for the Site.

The future owner will be responsible for developing and implementing the Site Management Plan, which will be based on the planned redevelopment and use of the Site within the impacted area. Intrusive work is restricted within the area of known groundwater impacts (see Figure 4) unless the owner submits a Site Management Plan to the NYSDEC for review and approval. This requirement will be included in a deed restriction for the Site.

10.0 COMMUNITY PARTICIPATION

The US Army and NJDEP are requesting input from the community on the preferred remedy proposed for the Site. The comment period will extend from April 14, 2013 and concludes on May 14, 2013 Public comments received on this Proposed Plan will be considered prior to the issuance of a Decision Document, detailing a final remedy for the Site. These comments will be summarized and responses will be provided in the "Responsiveness Summary" section of the Decision Document.

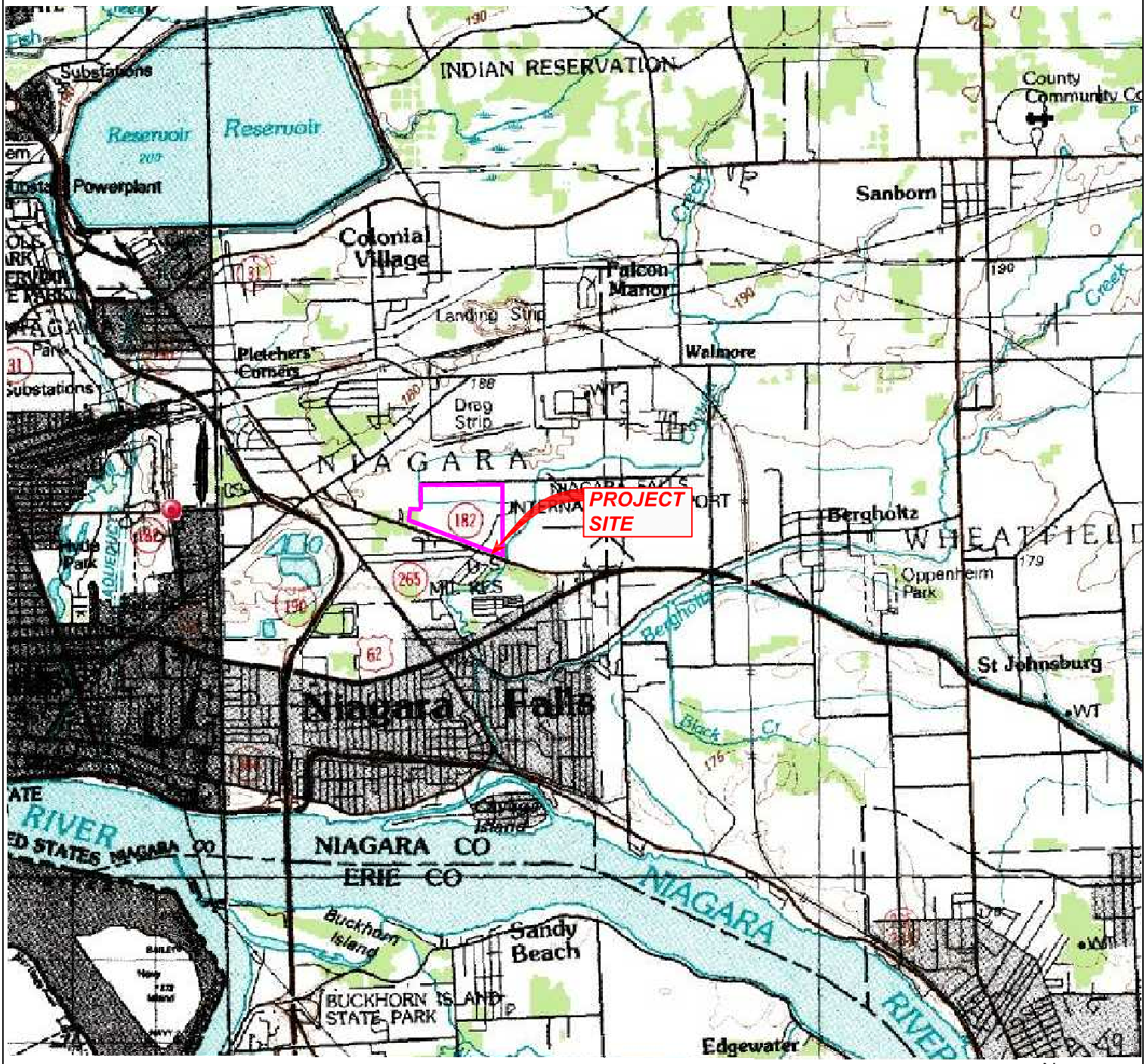
The Decision Document is a legal, technical, and public document that will describe the selected Site response. Because the preferred remedy selected in the Decision Document is based on previous investigations, the public is encouraged to review this Proposed Plan and the supporting technical documentation available in the information repository to gain an understanding of the proposed no further action response for the Site. The location of this repository is listed in Section 1.0 of this Proposed Plan.

Your input on the Proposed Plan is a very important part of the decision-making process. We want to hear from you and will pay careful attention to your valuable input.

For more information contact: Mr. Jeffery Hrzic at the following address, 5231 South Scott Plaza, Ft Dix, NJ, 08054 or by email at jeffrey.m.hrzic.civ@mail.mil.

PROPOSED PLAN
NIAGARA FALLS ARMED FORCES RESERVE CENTER
NIAGARA FALLS, NEW YORK
APRIL 2013

FIGURES

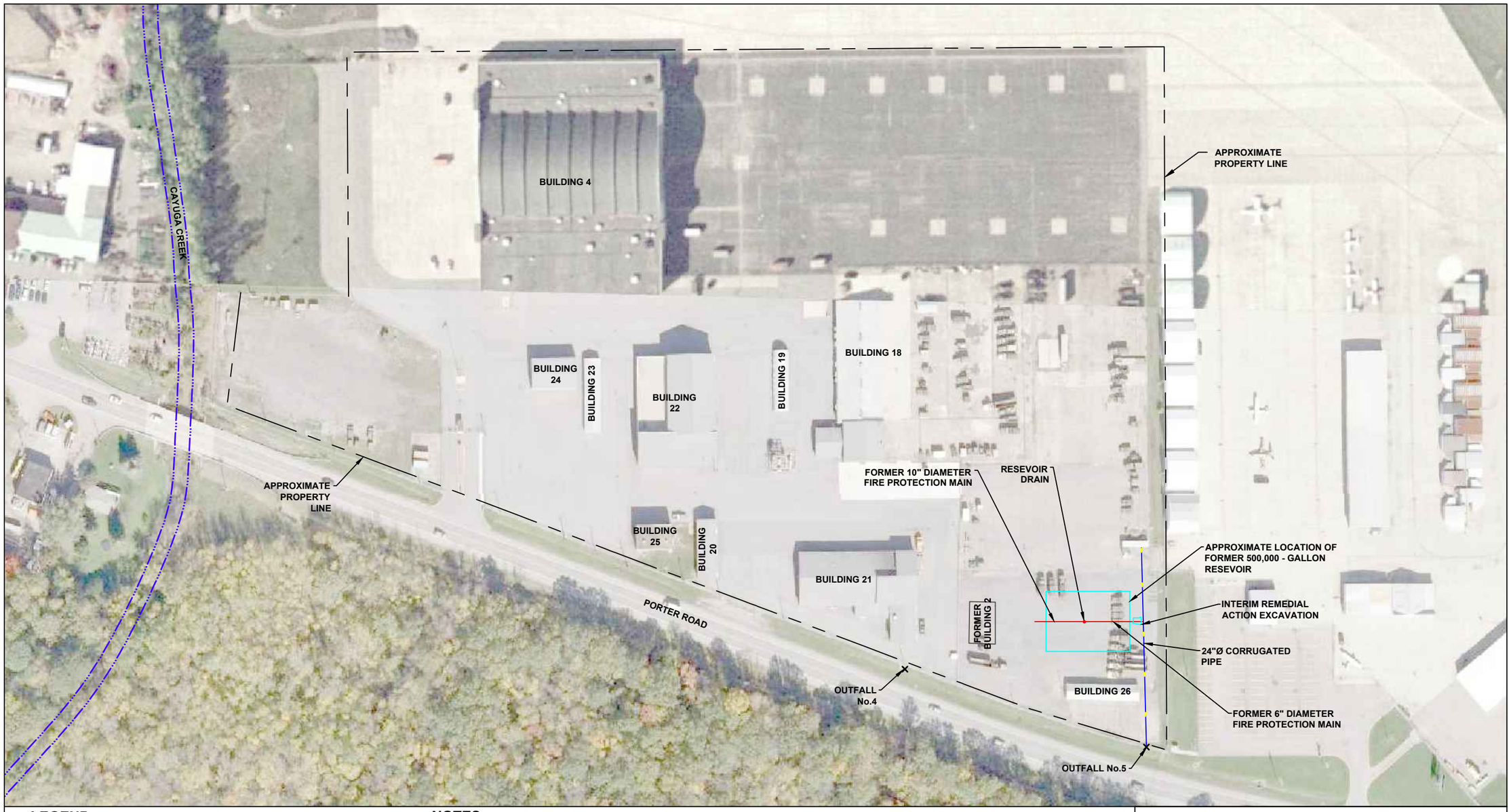


NOTE:
BASE MAP ADAPTED FROM U.S.G.S. TOPOGRAPHIC MAPS DOWNLOADED FROM TERRASERVER.MICROSOFT.COM

FIGURE 1
SITE LOCATION MAP
USAFRC
NIAGARA FALLS, NEW YORK

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: KN	SCALE: 1" = 2,000'	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/10/10	FILE NO.: 773-04
REV. NO. –	REV. DATE: –	FIGURE NO.:1



LEGEND:

- MW-6 — MONITORING WELL LOCATION
- TW-3 — PRIMARY TEMPORARY WELL LOCATION
- TW-6 — SECONDARY TEMPORARY WELL LOCATION
- SP-51 — SOIL PROBE LOCATION (SEPT. 2011)
- SP-36 — SOIL PROBE AND TEMPORARY WELL LOCATION (SEPT. 2011)

NOTES:

1. BASE MAP ADAPTED FROM A 2008 AERIAL PHOTO AND PROPERTY LINE DOWNLOADED FROM http://www.bing.com/maps/l AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

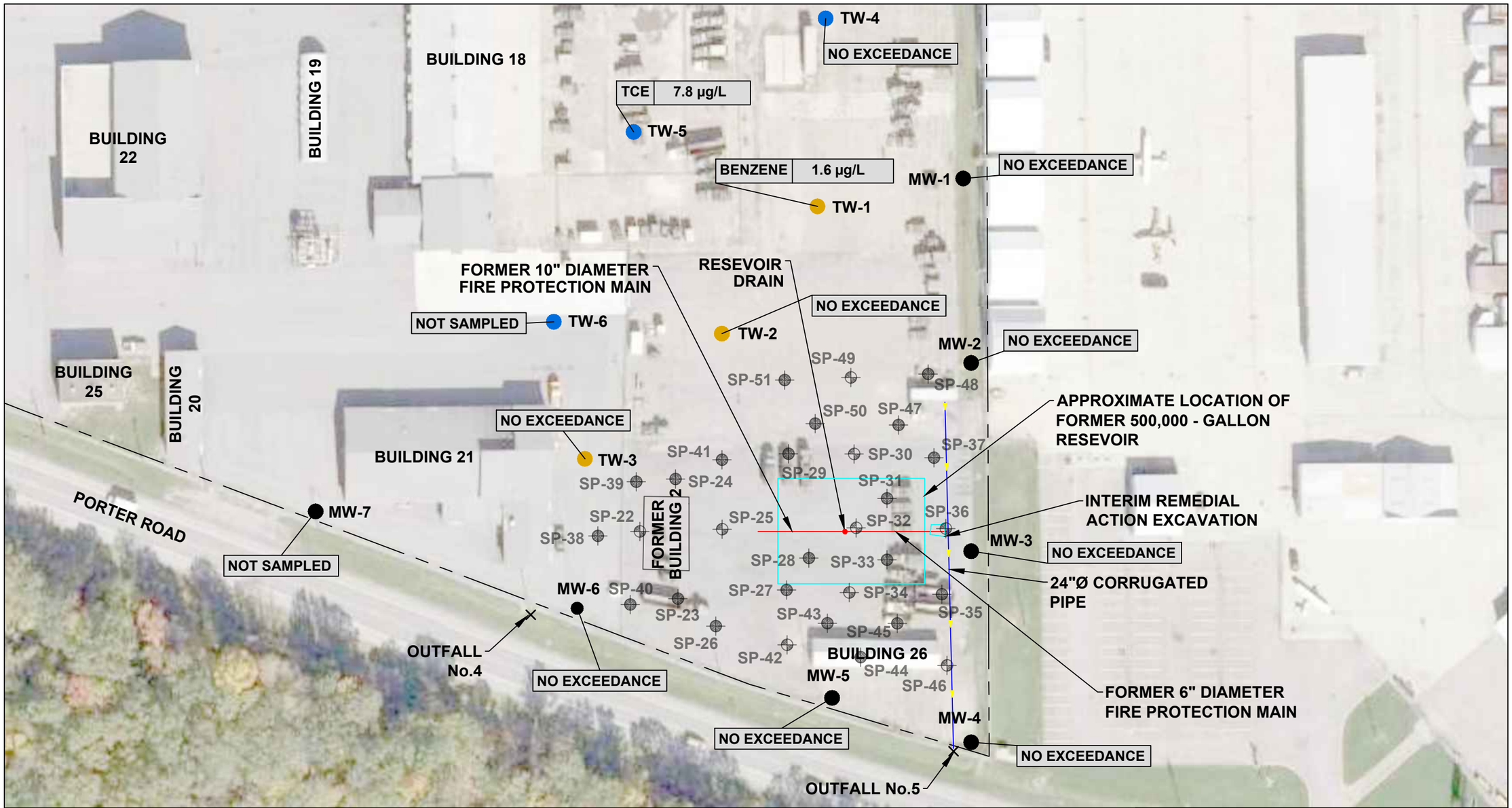
SCALE IN FEET

40 0 70 140

FIGURE 2
SITE PLAN
USAFRC
NIAGARA FALLS, NY

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: JA	SCALE: AS SHOWN	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/9/13	FILE ID.: 773-04
REV. NO. --	REV. DATE: --	FIGURE NO.: 2



LEGEND:

MW-6 ●	MONITORING WELL LOCATION
TW-3 ●	PRIMARY TEMPORARY WELL LOCATION
TW-6 ●	SECONDARY TEMPORARY WELL LOCATION
SP-51 ⊕	SOIL PROBE LOCATION (SEPT. 2011)
SP-36 ⊕	SOIL PROBE AND TEMPORARY WELL LOCATION (SEPT. 2011)

NOTES:

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2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3. ONLY COMPOUDS THAT EXCEED THE GROUNDWATER CLASS GA CRITERIA ARE SHOWN.
4. TW-6 AND MW-7 DID NOT CONTAIN A SUFFICIENT VOLUME OF WATER FOR SAMPLING.

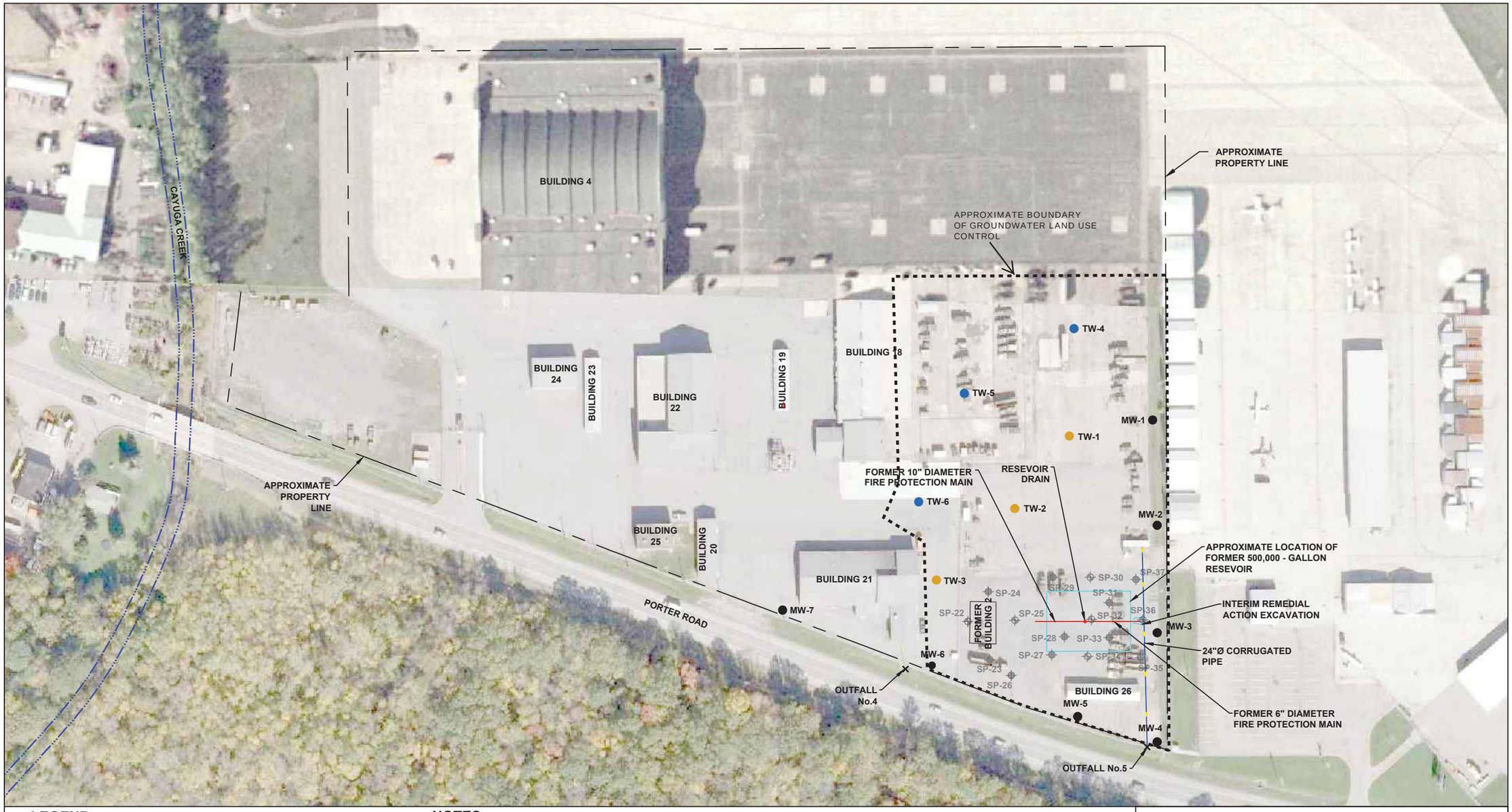
SCALE IN FEET

20 0 40 80

FIGURE 3
SAMPLE LOCATION/GROUNDWATER CONCENTRATION MAP
USAFRC
NIAGARA FALLS, NY

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: JA	SCALE: AS SHOWN	JOB No.: 773-04
CK'D. BY: MM	DATE: 2/13/13	FILE ID.: 773-04
REV. NO. --	REV. DATE: --	FIGURE NO.: 3



LEGEND:

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- TW-6 — SECONDARY TEMPORARY WELL LOCATION
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- SP-36 — SOIL PROBE AND TEMPORARY WELL LOCATION (SEPT. 2011)

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2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

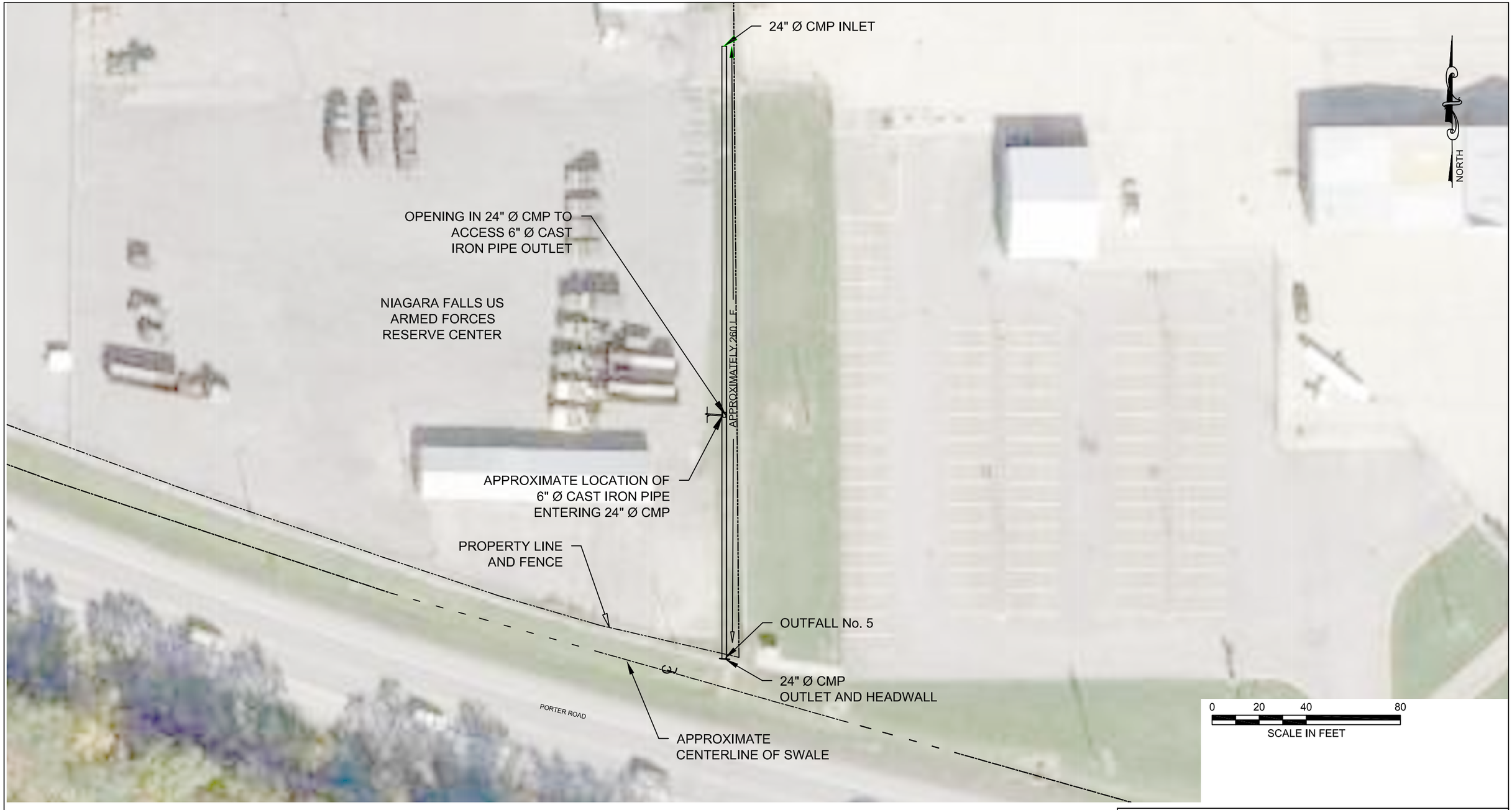
SCALE IN FEET

40 0 70 140

FIGURE 4
PROPOSED GROUNDWATER LAND USE CONTROL
USAFRC
NIAGARA FALLS, NY

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: JA	SCALE: AS SHOWN	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/9/13	FILE ID.: 773-04
REV. NO. --	REV. DATE: --	FIGURE NO.: 4



NOTES:

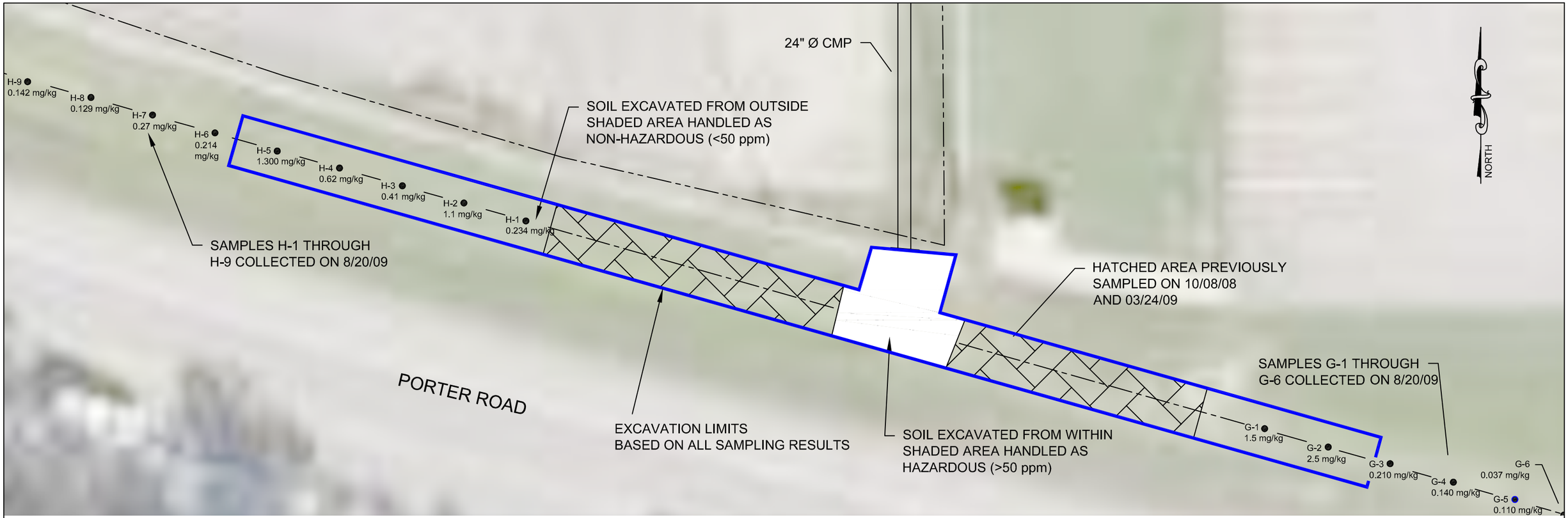
1. BASE MAP ADAPTED FROM A 2008 AERIAL PHOTO AND PROPERTY LINE DOWNLOADED FROM http://www.bing.com/maps/I AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

FIGURE 2
SITE PLAN
USAFRC
NIAGARA FALLS, NEW YORK

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

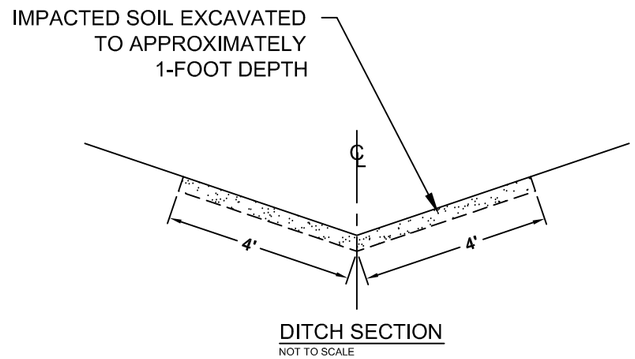
DR. BY: KN	SCALE: 1" = 40'	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/10/10	FILE NO.: 773-04
REV. NO. -	REV. DATE: 3/2/10	FIGURE NO.:2



LEGEND:

H-2 ●
0.640 mg/kg — SAMPLE LOCATION, DESIGNATION AND CONCENTRATION OF POLYCHLORINATED BIPHYNOLS (PCB's)

EXCAVATION LIMITS BASED ON ALL SAMPLING RESULTS



DITCH SECTION
NOT TO SCALE

NOTES:

1. BASE MAP ADAPTED FROM A 2008 AERIAL PHOTO AND PROPERTY LINE DOWNLOADED FROM http://www.bing.com/maps/l AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

0 15 30
SCALE IN FEET

FIGURE 3
SOIL DELINEATION MAP (AUGUST 20, 2009) AND EXCAVATION LIMITS
USAFRC
NIAGARA FALLS, NEW YORK

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: KN	SCALE: 1" = 15'	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/10/10	FILE NO.: 773-04
REV. NO. –	REV. DATE: 3/2/10	FIGURE NO.:3

APPROXIMATE EXCAVATION LIMITS

24" Ø CMP

APPROXIMATE CENTERLINE OF SWALE

CS-1 (0.33 mg/kg)

CS-2 (0.27 mg/kg)

CS-3 (0.17 mg/kg)

CS-4 (0.39 mg/kg)

CS-5 (14 mg/kg)

CS-6 (18 mg/kg)

CS-7 (14 mg/kg)

CS-8 (4.8 mg/kg)

CS-9 (1.9 mg/kg)

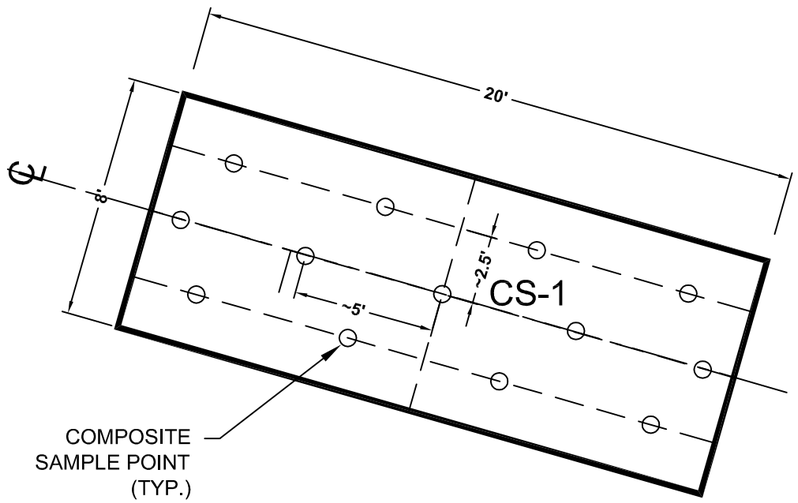
CS-10 (0.33 mg/kg)

BASED ON POST-EXCAVATION SAMPLE RESULTS, ADDITIONAL EXCAVATION REQUIRED WITHIN SHADED AREA. SEE FIGURE 5.

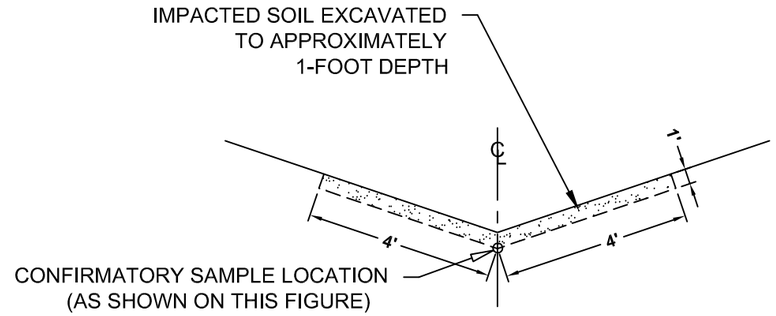
NORTH

PORTER ROAD

POST-EXCAVATION COMPOSITE SAMPLES COLLECTED ON 9/16/09



POST-EXCAVATION COMPOSITE SAMPLE TEMPLATE
NOT TO SCALE



DITCH SECTION
NOT TO SCALE

LEGEND:

CS-7 (14 mg/kg) — POST-EXCAVATION COMPOSITE SAMPLE IDENTIFICATION AND PCB CONCENTRATION FROM 9/16/09 SAMPLES

APPROXIMATE EXCAVATION LIMITS

NOTES:

1. BASE MAP ADAPTED FROM A 2008 AERIAL PHOTO AND PROPERTY LINE DOWNLOADED FROM http://www.bing.com/maps/l AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

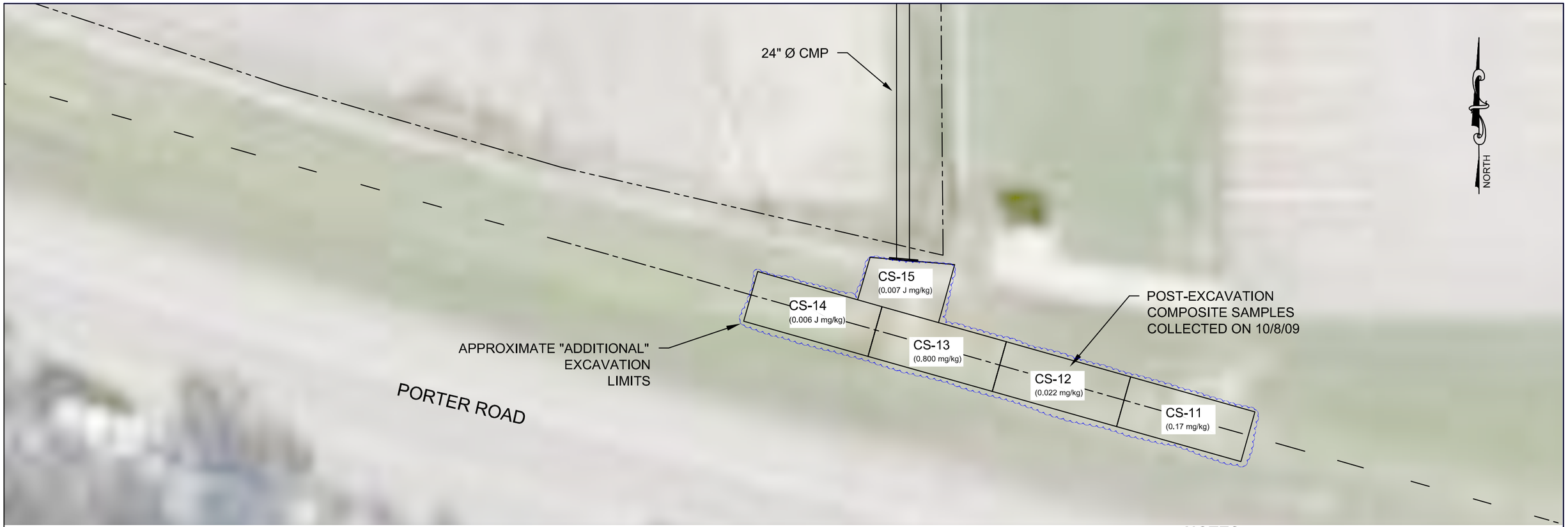
3. COMPOSITE SAMPLE SPACING BASED ON "*FIELD MANUAL FOR GRID SAMPLING OF PCB SPILL SITES TO VERIFY CLEANUP*" EPA, MAY, 1986.

0 15 30
SCALE IN FEET

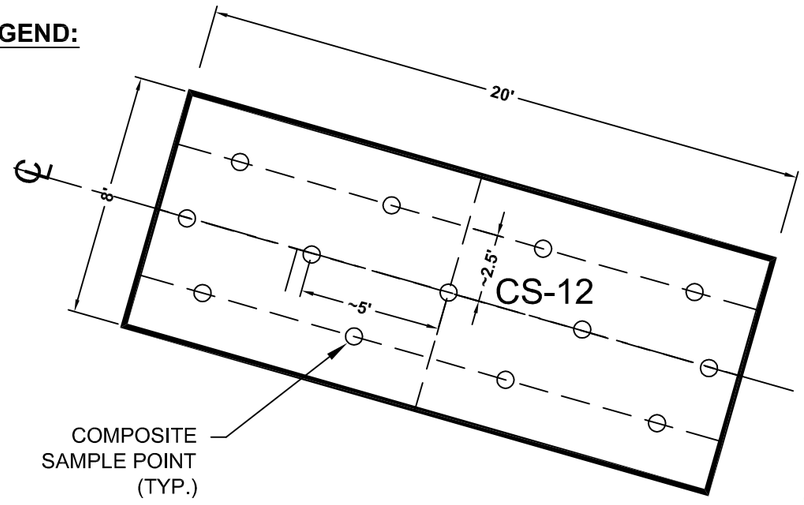
FIGURE 4
POST-EXCAVATION CONFIRMATORY SAMPLE LOCATION MAP (9/16/2009)
USAFRC
NIAGARA FALLS, NEW YORK

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

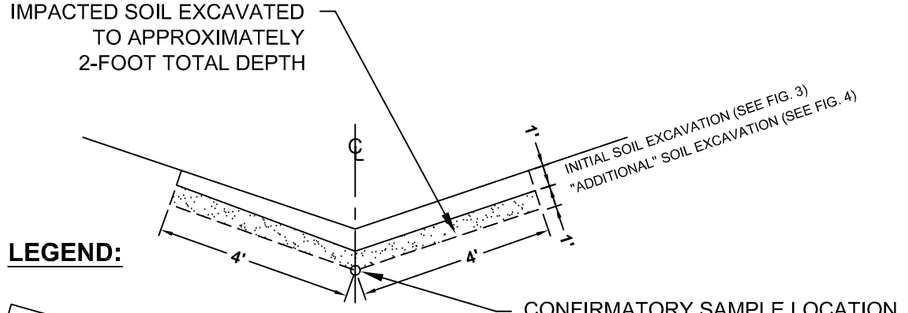
DR. BY: KN	SCALE: 1" = 15'	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/10/10	FILE NO.: 773-04
REV. NO. –	REV. DATE: 3/1/10	FIGURE NO.: 4



LEGEND:

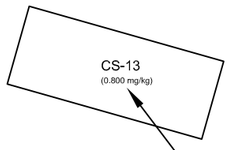


POST-EXCAVATION COMPOSITE SAMPLE TEMPLATE
NOT TO SCALE



DITCH SECTION
NOT TO SCALE

LEGEND:



POST-EXCAVATION COMPOSITE
SAMPLE IDENTIFICATION AND
PCB CONCENTRATION FROM
10/8/2009 SAMPLES

APPROXIMATE "ADDITIONAL"
EXCAVATION
LIMITS

NOTES:

1. BASE MAP ADAPTED FROM A 2008 AERIAL PHOTO AND PROPERTY LINE DOWNLOADED FROM http://www.bing.com/maps/l AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

3. COMPOSITE SAMPLE SPACING BASED ON "*FIELD MANUAL FOR GRID SAMPLING OF PCB SPILL SITES TO VERIFY CLEANUP*" EPA, MAY, 1986.

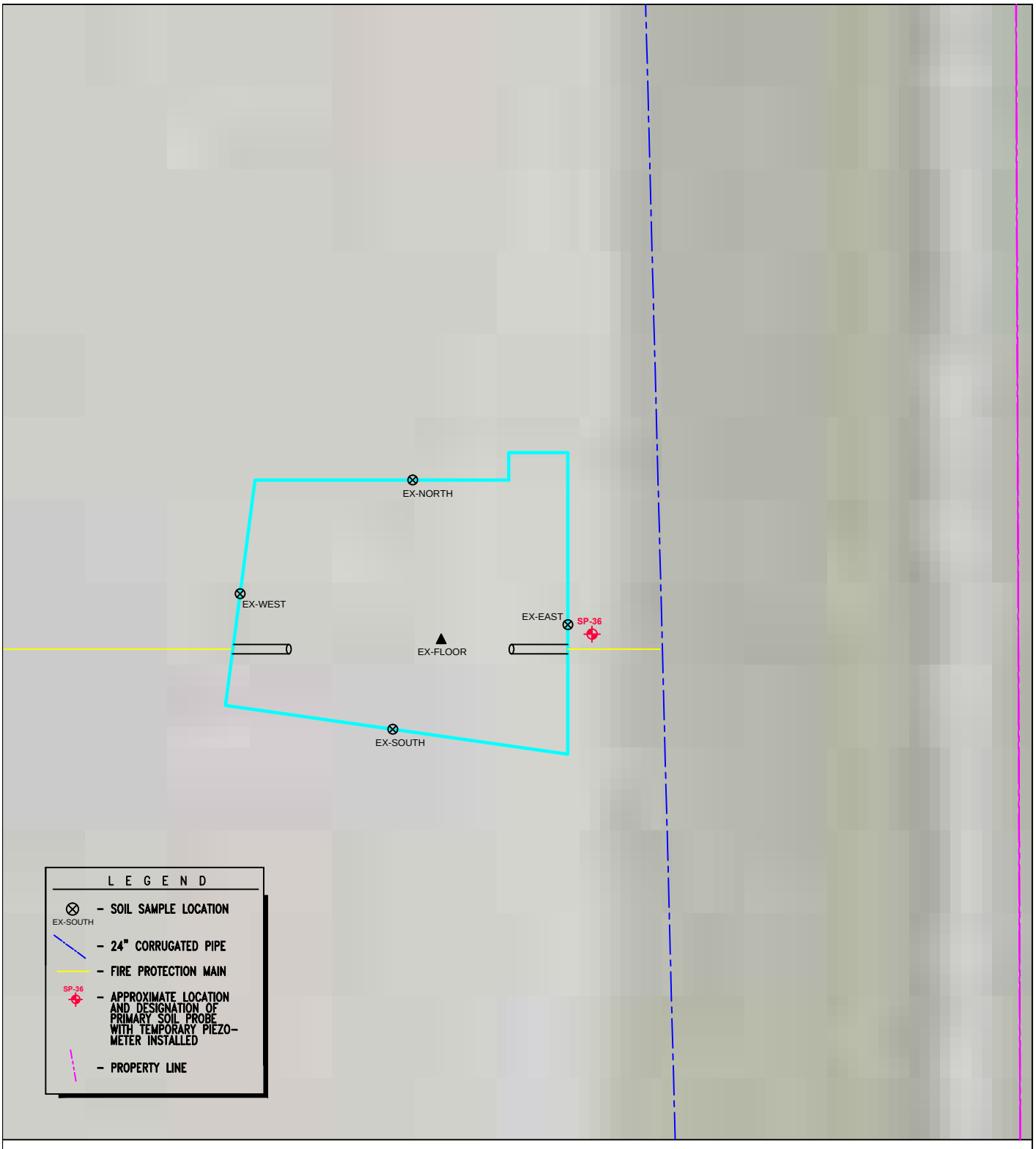
4. J-ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT AND GREATER THAN THE METHOD DETECTION LIMIT.

0 15 30
SCALE IN FEET

FIGURE 5
POST-EXCAVATION CONFIRMATORY SAMPLE LOCATION MAP (10/8/2009)
USAFRC
NIAGARA FALLS, NEW YORK

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: KN	SCALE: 1" = 15'	JOB No.: 773-04
CK'D. BY: MM	DATE: 1/10/10	FILE NO.: 773-04
REV. NO. –	REV. DATE: 3/1/10	FIGURE NO.:5



SCALE IN FEET

0 1 2 3 4 5

FIGURE 5
EXCAVATION LOCATION MAP
NIAGARA FALLS AFRC COMPLEX
NIAGARA FALLS, NEW YORK

PARS ENVIRONMENTAL, INC.
ROBBINSVILLE, NEW JERSEY

DR. BY: JA	SCALE: 1"=5'	JOB No.: 727-04
CK'D. BY: TD	DATE: 11/29/11	FILE NO.: 727-04
REV. NO. --	REV. DATE: --	FIGURE NO.:5

PROPOSED PLAN
NIAGARA FALLS ARMED FORCES RESERVE CENTER
NIAGARA FALLS, NEW YORK
APRIL 2013

TABLES

Table 2
Soil Analytical Testing Results Summary
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Unrestricted Use Soil Cleanup Objectives	Restricted Residential Soil Cleanup Objectives	Restricted Commercial Soil Cleanup Objectives	SP-1-5-7 12/06/2010 Result	SP-2-6-8 12/06/2010 Result	SP-3-4-6 12/06/2010 Result	SP-4-2-4 12/06/2010 Result	SP-5-2-4 12/06/2010 Result	SP-6-2-4 12/06/2010 Result	SP-7-4-6 12/06/2010 Result	SP-8-4-6 12/06/2010 Result	SP-8 (DUP-1) 12/06/2010 Result	SP-9-2-4 12/06/2010 Result	SP-10-2-4 12/06/2010 Result	SP-11-2-4 12/06/2010 Result	SP-12-6-10 12/06/2010 Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)																
Acetone	50	**100,000**	*500,000*	7.1	ND	31	38	70	120	38	38	49	100	45	48	44
Methylene Chloride	50	**100,000**	*500,000*	25	12	32	29	35	31	31	30	20	27	24	38	25
Toluene	700	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,000	**41,000**	*390,000*	ND	31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Xylenes, total	260	**100,000**	*500,000*	ND	23	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	15
Isopropylbenzene	2,300	**NV**	*NV*	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Methylcyclohexane	NV	**NV**	*NV*	ND	66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3,900	**100,000**	*500,000*	ND	42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8,400	**52,000**	*190,000*	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9
4-Isopropyltoluene	10,000 [11]	**NV**	*NV*	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3,600	**52,000**	*190,000*	1.4	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11
sec-Butylbenzene	11,000	**100,000**	*500,000*	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	100,000	**NV**	*NV*	ND	ND	ND	ND	16	28	ND	ND	ND	27	8.9	ND	ND
n-Butylbenzene	12,000	**NV**	*NV*	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	**100,000**	*500,000*	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	230
Total VOCs	NV	**NV**	*NV*	33.5	392.8	66.2	67.0	121.0	179.0	69.0	68.0	69.0	154.0	77.9	86.0	335
Total VOC TICs	NV	**NV**	*NV*	41.1	2140	14	11	17	14	12	12	8.1	12	10	14	51
Semi-Volatile Organic Compounds - EPA Method 8270 (ug/kg)																
Naphthalene	12,000	**100,000**	*500,000*	ND	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	690
2-Methylnaphthalene	410 [11]	**NV**	*NV*	ND	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	**100,000**	*500,000*	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	30,000	**100,000**	*500,000*	17	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	**100,000**	*500,000*	48	170	ND	ND	ND	66	ND	ND	ND	ND	ND	25	33
Anthracene	100,000	**100,000**	*500,000*	ND	50	ND	ND	ND	22	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	**100,000**	*500,000*	51	210	ND	ND	ND	190	ND	ND	ND	ND	22	33	33
Pyrene	100,000	**100,000**	*500,000*	46	180	ND	ND	ND	130	ND	ND	ND	ND	14	24	23
Benzo(a)anthracene	1,000	**1,000**	*5,600*	20	91	ND	ND	ND	89	ND	ND	ND	ND	ND	16	18
Dibenzo(a,h)anthracene	330	**330**	*560*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	50000 [11]	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	ND	ND	ND
Carbazole	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1,000	**3,900**	*56,000*	27	94	ND	ND	ND	78	ND	ND	ND	ND	ND	ND	17
Benzo(b)fluoranthene	1,000	**1,000**	*5,600*	34	110	ND	ND	ND	120	ND	ND	ND	ND	13	14	ND
Benzo(k)fluoranthene	800	**3,900**	*56,000*	12	39	ND	ND	ND	37	ND	ND	ND	ND	ND	ND	ND
Biphenyl	NV	**NV**	*NV*	ND	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	1,000	**1,000**	*1,000*	23	85	ND	ND	ND	85	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	**500**	*5,600*	19	38	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	100,000	**100,000**	*500,000*	26	51	ND	ND	ND	50	ND	ND	ND	ND	ND	ND	ND
Total SVOCs	NV	**NV**	*NV*	323	2,034	ND	ND	ND	907	ND	ND	ND	100	49	112	814
Total SVOC TICs	NV	**NV**	*NV*	1,550	19,150	ND	ND	3,000	7,350	ND	ND	ND	ND	220	1600	690
TAL Metals - EPA Method SW 846 (mg/kg)																
Aluminum	NV	**NV**	*NV*	2,290	2,460	17,600	21,200	27,600	21,000	20,500	17,400	15,300	23,500	9,870	13,600	ND
Antimony	NV	**NV**	*NV*	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND	ND	ND	ND
Arsenic	13	**16**	*16*	2.0	4.8	6.4	2.8	7.1	5.7	7.6	5.7	3.7	3.4	1.9	2.1	4.8
Barium	350	**400**	*400*	11.6	14	105	151	171	130	179	41.2	89.4	106	71.9	84.2	152
Beryllium	7.2	**590**	*590*	0.115	0.105	0.950	1.39	1.95	1.14	1.12	0.903	0.771	1.15	0.456	0.583	1.27
Cadmium	2.5	**9.3**	*9.3*	0.186	0.169	0.221	0.109	0.156	0.251	0.185	0.182	0.151	0.153	0.157	0.169	0.146
Calcium	NV	**NV**	*NV*	95,000	78,300	16,800	2,020	2,090	5,850	10,700	49,300	44,100	1,570	3,040	4,300	18,900
Chromium	30	**180**	*1,500*	3.45	7.12	23.5	27.6	38	29.8	29.5	24.1	22.0	30.8	11.2	15	29.8
Cobalt	30 [11]	**NV**	*NV*	2.03	1.96	13.8	11.5	26.8	14.6	18.2	14.3	14.3	23.1	2.4	3.28	19.3
Copper	50	**270**	*270*	8.7	6.1	23.1	21.6	34.3	22.4	33	24.7	21.1	30.7	7.1	7.3	30.4
Iron	2000 [11]	**NV**	*NV*	5,690	5,360	26,800	31,900	44,600	37,900	35,300	29,300	25,100	31,600	8,600	16,100	34,500
Lead	63	**400**	*1,000*	8	6.3	13.4	15	14.9	17.8	14.4	9.7	8.0	7.5	11.7	8.5	16.6
Magnesium	NV	**NV**	*NV*	50,500	31,200	10,500	8,210	9,580	8,000	14,800	14,000	12,200	8,100	2,130	2,850	10,800
Manganese	1,600	**2,000**	*10,000*	298	222	291	186	476	266	**2,470**	475	587	432	84	162	782
Mercury	0.18	**0.81**	*2.8*	ND	ND	0.0132	0.0423	0.0451	0.0492	0.0341	ND	0.0100	0.0218	0.0685	0.0703	0.0394
Nickel	30	**310**	*310*	5.24	5.04	33.7	33.2	48.8	34.3	42.4	34.6	33.3	37.7	9.53	11.5	42.8
Potassium	NV	**NV**	*NV*	485	659	1,600	1,770	2,450	2,040	1,980	2,260	2,240	1,700	1,240	1,460	2,180
Selenium	3.9	**180**	*1,500.0*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NV	**NV**	*NV*	151	134	136	298	347	141	294	322	278	150	111	112	341
Vanadium	100 [11]	**NV**	*NV*	6.11	5.96	29.7	33.9	47.4	39.6	38.7	32.1	26.8	32.3	9.58	12.5	38.1
Zinc	109	**10,000**	*10,000*	44.6	30.6	62.3	72	100	84.5	69.5	61.7	56.6	74	30.1	35.9	72.1
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)																
Aroclor 1248	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51	ND
Aroclor 1254	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	25	ND
Total PCBs	100*	**1000***	*1,000**	ND	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	76	ND

Table 2
Soil Analytical Testing Results Summary
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Unrestricted Use Soil Cleanup Objectives	Restricted Residential Soil Cleanup Objectives	Restricted Commercial Soil Cleanup Objectives	SP-13-0-2 12/07/2010 Result	SP-14-2-4 12/07/2010 Result	SP-15-0-4 12/07/2010 Result	SP-16-0-2 12/07/2010 Result	SP-17-4-8 12/07/2010 Result	SP-17 (DUP-2) 12/07/2010 Result	SP-18-0-4 12/07/2010 Result	SP-19-0-4 12/07/2010 Result	SP-20-0-4 12/07/2010 Result	SP-21-0-4 12/07/2010 Result	TP-1-0-4* 12/07/2010 Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)														
Acetone	50	**100,000**	*500,000*	10	19	19	ND	52	69	11	340	29	13	7.6
Methylene Chloride	50	**100,000**	*500,000*	5.9	5.2	6.6	4.6	5.9	4.1	7.8	5.4	4.1	4.7	4.6
Toluene	700	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND
Ethylbenzene	1,000	**41,000**	*390,000*	ND	ND	ND	ND	ND	ND	ND	1.9	2.6	ND	ND
Xylenes, total	260	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	5.2	8.3	ND	ND
Isopropylbenzene	2,300	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3,900	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8,400	**52,000**	*190,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	10,000 [11]	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3,600	**52,000**	*190,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11,000	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	100,000	**NV**	*NV*	ND	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND
n-Butylbenzene	12,000	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	**100,000**	*500,000*	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	NV	**NV**	*NV*	15.9	25.5	25.6	4.6	57.9	80.2	18.8	352.5	45.6	17.7	12.2
Total VOC TICs	NV	**NV**	*NV*	10	8.9	9.8	8.6	12	8.4	9.5	8.1	7.1	7.3	6.5
Semi-Volatile Organic Compounds - EPA Method 8270 (ug/kg)														
Naphthalene	12,000	**100,000**	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	410 [11]	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	**100,000**	*500,000*	ND	32	ND	ND	ND	ND	ND	ND	ND	ND	3,000
Acenaphthene	20,000	**100,000**	*500,000*	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	30,000	**100,000**	*500,000*	ND	47	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	**100,000**	*500,000*	ND	330	ND	ND	ND	ND	660	1,100	ND	ND	5,400
Anthracene	100,000	**100,000**	*500,000*	ND	92	ND	ND	ND	ND	160	200	ND	ND	1,900
Fluoranthene	100,000	**100,000**	*500,000*	1,300	510	ND	ND	27	25	800	1,600	ND	ND	16,000
Pyrene	100,000	**100,000**	*500,000*	1,200	480	14	ND	25	23	800	1,400	ND	ND	15,000
Benzo(a)anthracene	1,000	**1,000**	*5,600*	960	290	ND	ND	16	19	420	790	ND	ND	***10,000***
Dibenzo(a,h)anthracene	330	**330**	*560*	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	***2,300***
Bis(2-ethylhexyl)phthalate	50000 [11]	**NV**	*NV*	6,600	170	150	ND	160	160	1,500	1,800	1,300	7,500	ND
Carbazole	NV	**NV**	*NV*	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1,000	**3,900**	*56,000*	690	230	ND	ND	ND	ND	420	690	ND	ND	**9,700**
Benzo(b)fluoranthene	1,000	**1,000**	*5,600*	**1,000**	260	ND	ND	16	ND	450	740	ND	ND	***14,000***
Benzo(k)fluoranthene	800	**3,900**	*56,000*	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	**6,500**
Biphenyl	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	1,000	**1,000**	*1,000*	960	250	ND	ND	ND	15	390	680	ND	ND	***14,000***
Indeno(1,2,3-cd)pyrene	500	**500**	*5,600*	ND	110	ND	ND	ND	ND	210	320	ND	ND	***8,800***
Benzo(g,h,i)perylene	100,000	**100,000**	*500,000*	730	120	ND	ND	ND	ND	280	380	ND	ND	12,000
Total SVOCs	NV	**NV**	*NV*	13,440	3,115	164	ND	244	242	6,090	9,700	1,300	7,500	118,600
Total SVOC TICs	NV	**NV**	*NV*	ND	ND	580	9,400	ND	ND	ND	ND	ND	ND	7,600
TAL Metals - EPA Method SW 846 (mg/kg)														
Aluminum	NV	**NV**	*NV*	10,700	24,000	32,100	15,500	17,400	15,800	11,400	13,200	15,100	9,810	9,970
Antimony	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	13	**16**	*16*	6.0	6.5	2.4	6.1	6.3	2.7	8.1	6.8	5.0	6.1	4.1
Barium	350	**400**	*400*	98.6	194	249	107	***418***	168	104	133	90.3	81.3	153
Beryllium	7.2	**590**	*590*	1.38	4.71	8.21	1.96	0.926	0.800	1.38	0.81	1.27	0.637	1.23
Cadmium	2.5	**9.3**	*9.3*	0.48	0.353	0.061	0.216	0.152	0.114	0.554	0.25	0.168	0.791	0.800
Calcium	NV	**NV**	*NV*	168,000	203,000	268,000	225,000	50,700	49,500	173,000	157,000	44,000	138,000	116,000
Chromium	30	**180**	*1,500*	**682**	**379**	31.4	**1,040**	24.2	22.3	**797**	**969**	119	**720**	165
Cobalt	30 [11]	**NV**	*NV*	3.73	6.41	2.44	3.47	16.2	13.6	5.63	5.83	10.4	11.8	4.68
Copper	50	**270**	*270*	9.5	25.4	4.8	11	24.9	18.5	108	45.3	16	19.5	13
Iron	2000 [11]	**NV**	*NV*	6,750	24,700	4,360	4,140	31,000	23,800	22,200	10,900	16,200	20,900	11,200
Lead	63	**400**	*1,000*	27.3	18.3	3.6	11.2	9.5	8.5	42.4	17	7.8	31.5	39.4
Magnesium	NV	**NV**	*NV*	62,800	20,900	8,020	46,400	11,500	11,500	52,600	45,200	9,010	44,900	39,600
Manganese	1,600	**2,000**	*10,000*	1,090	**2,670**	**3,450**	1,130	722	576	**4,150**	1,230	845	679	771
Mercury	0.18	**0.81**	*2.8*	0.0205	0.0452	ND	ND	0.0109	ND	ND	0.0163	0.0146	0.0259	0.124
Nickel	30	**310**	*310*	13.8	20.7	1.66	19.8	35.8	32.0	41.7	29.9	25.1	32.6	12.8
Potassium	NV	**NV**	*NV*	874	1,650	2,440	635	2,420	2,790	722	885	1,710	716	1,210
Selenium	3.9	**180**	*1,500.0*	ND	1.4	2.1	ND	ND	ND	ND	ND	ND	ND	0.7
Sodium	NV	**NV**	*NV*	328	690	930	616.0	271	290	329	443	154	289	254
Vanadium	100 [11]	**NV**	*NV*	17.1	22.3	5.64	25.7	32.3	26.9	23.4	29.8	22.1	26.7	15.3
Zinc	109	**10,000**	*10,000*	79.2	36.8	0.6	30.5	55	52	124	40.5	43.9	170	124
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)														
Aroclor 1248	NV	**NV**	*NV*	ND	ND	ND	ND	ND	ND	ND	620	ND	ND	ND
Aroclor 1254	NV	**NV**	*NV*	1,700	230	9.8	1,400	21	15	1800	540	65	650	700
Aroclor 1260	NV	**NV**	*NV*	840	67	ND	1,600	ND	ND	760	190	40	410	210
Total PCBs	100*	**1000***	*1,000**	***2,540***	297	9.8	***3,000***	21	15	***2,560***	***1,350***	105	***1,060***	910

Table 2
Soil Analytical Testing Results Summary
Niagara Falls Armed Foreces Reserve Center
Niagara Falls, New York

Notes:

1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Test America Laboratories.
3. ug/kg = micrograms per kilogram; mg/kg = milligrams per kilogram
4. ND indicates compound was not detected above method detection limits.
5. NV = no value.
6. Shading indicates value exceeds Unrestricted Use Soil Cleanup Objectives.
7. **Bold** indicates value exceeds the Restricted Residential Soil Cleanup Objectives.
8. *Italics* indicates value exceeds the Restricted Commercial Soil Cleanup Objectives.
9. A duplicate sample (DUP-1) was collected at soil probe location SP-8. Values shown are the higher of the two analytical results.
10. *Soil cleanup objective is for the sum of the Aroclor compound concentrations detected (Total PCBs).
11. Soil cleanup objective used is from NYSDEC Final Commissioners Policy, CP-51, dated October 21, 2010.

Table 3
Water Analytical Testing Results Summary
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Class GA Criteria	West Pipe End Water	TP-12-Water
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)			
2-Butanone (MEK)	50	2.7	ND
Acetone	50	18	ND
cis-1,2-Dichloroethene	5	0.99	ND
Trichloroethene	5	4.1	ND
Vinyl Chloride	2	1.9	ND
Toluene	5	13	ND
Xylenes (total)	5 [6]	2.5	ND
Naphthalene	10	89	ND
Total VOCs	NV	132.19	ND
Total VOC TICs	NV	37.9	415
Semi-Volatile Organic Compounds - EPA Method 8270 (ug/L)			
2,4-Dimethylphenol	1	3.7	ND
2-Methylnaphthalene	NV	16	ND
4-Methylphenol	1	44	ND
Acenaphthene	20	9.8	ND
Anthracene	50	6.8	ND
Benzo [a] anthracene	0.002*	2	8.3
Benzo [a] pyrene	ND	ND	4.9
Benzo [b] fluoranthene	0.002*	ND	7.3
Carbazole	5	92	ND
Chrysene	0.002*	ND	9.4
Dibenzofuran	NV	17	ND
Fluoranthene	50	10	20
Fluorene	50	27	ND
Naphthalene	10 *	87	ND
Phenanthrene	50 *	49	ND
Phenol	1	330	ND
Total SVOCs	NV	694.3	49.9
Total SVOC TICs	NV	985	18,790
PCBs - EPA Method 8082 (ug/L)			
Aroclor 1254	NV	6.1	1.7
Aroclor 1260	NV	0.94	0.72
Total PCBs	0.09 [11]	7.04	2.42
Dissolved Metals - EPA Method SW 846 (mg/L)			
Aluminum	NV	0.529	0.621
Barium	1	0.0278	0.0173
Calcium	NV	62.8	74.7
Chromium	0.05	0.0706	0.215
Copper	0.2	ND	0.0025
Iron	0.3	0.031	ND
Magnesium	35*	0.154	ND
Manganese	0.3	0.0018	0.0004
Nickel	0.1	0.0067	0.0015
Potassium	NV	21	3.03
Sodium	20	12.3	2.7
Vanadium	NV	0.0044	0.0104
Zinc	2*	0.0137	0.0042

Notes:
1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Test America Laboratories.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, dated October 1993, revised June 1998, January 1999 errata sheet and April 2000 addendum.
4. ug/L = micrograms per liter; mg/L = miligrams per liter
5. Shading indicates values exceeding NYSDEC Class GA groundwater criteria.
6. Class GA criteria shown is for total xylene concentration.
7. ND = compound was not detected.
8. * indicates a Guidance Value instead of a Standard Value.
9. NV = no value.
10. ND = non-detectable concentration by approved analytical methods.
11. Groundwater criteria is for the sum of the Aroclor compound concentrations detected (Total PCBs).

Table 2
Soil Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

	Unrestricted	Restricted Commmercial	SP-22-2-4	SP-22-10-12	SP-23-2-4	SP-23-6-8	SP-24-2-4	SP-24-8-10	SP-25-2-4	SP-25-6-8	SP-26-1-3	SP-26-6-8	SP-27-2-4	SP-27-6-8
Parameter	Soil Cleanup	Soil Cleanup												
	Objectives	Objectives	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)														
Acetone	50	*500,000*	ND	7.1 J	60	22 J	28 J	ND	ND	ND	27 J	6.7 J	ND	ND
Methylcyclohexane	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1,300	*150,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	50	*500,000*	4.9 J	5.6 J	4.8 J	5.1 J	5.1 J	3.9 J	5.1 J	5.6 J	4.6 J	4.8 J	4.9 J	5.0 J
2-Butanone (MEK)	100,000	*NV*	ND	ND	7.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds - EPA Method 8270 TCL (ug/kg)														
Naphthalene	12,000	*500,000*	ND	51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	410 [3]	*NV*	ND	12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	*500,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	*500,000*	ND	68 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	30,000	*500,000*	ND	96 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	*500,000*	500 J	210 J	ND	ND	ND	ND	5100 J	3300 J	ND	ND	83 J	ND
Anthracene	100,000	*500,000*	ND	97 J	ND	ND	ND	ND	1300 J	ND	ND	ND	ND	ND
Fluoranthene	100,000	*500,000*	830 J	250	ND	ND	ND	ND	7100 J	7000 J	16 J	ND	80 J	ND
Pyrene	100,000	*500,000*	590 J	160 J	ND	ND	ND	ND	4900 J	6100 J	11 J	ND	40 J	ND
Benzo(a)anthracene	1,000	*5,600*	650 J	110 J	12 J	ND	21 J	ND	3600 J	5600 J	14 J	ND	37 J	ND
Dibenzo(a,h)anthracene	330	*560*	ND	14 J	ND	ND	30 J	ND	**630 J**	**1200 J**	ND	ND	10 J	ND
Dibenzofuran	7,000	*NV*	ND	31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	50,000 [3]	*NV*	ND	ND	ND	88 J	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NV	*NV*	ND	17 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1,000	*56,000*	670 JB	100 JB	11 JB	ND	29 JB	ND	3500 JB	5400 JB	14 JB	ND	45 JB	ND
Benzo(b)fluoranthene	1,000	*5,600*	590 J	91 J	16 J	11 J	ND	11 J	4100 J	5600 J	19 J	12 J	59 J	15 J
Benzo(k)fluoranthene	800	*56,000*	420 J	64 J	13 J	11 J	ND	13 J	1700 J	3100 J	16 J	12 J	27 J	9.1 J
Biphenyl	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	1,000	*1,000*	550 J	90 J	13 J	9.5 J	ND	ND	**3200 J**	**5800 J**	15 J	9.9 J	39 J	ND
Indeno(1,2,3-cd)pyrene	500	*5,600*	280 J	32 J	ND	ND	30 J	ND	1200 J	2100 J	9.3 J	8.8 J	23 J	ND
Benzo(g,h,i)perylene	100,000	*500,000*	310 J	33 J	ND	ND	35 J	ND	1400 J	2500 J	ND	9.8 J	26 J	ND
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)														
Aroclor 1254	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	100*	*1,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 2
Soil Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

	Unrestricted	Restricted Commmercial	SP-28-1-3	SP-28-6-8	SP-29-1-3	SP-29-6-8	SP-30-1-3	SP-30-10-12	SP-31-1-3	SP-31-8-10	SP-32-2-4	SP-32-8-10	SP-33-0-2	SP-33-8-10
Parameter	Soil Cleanup	Soil Cleanup												
	Objectives	Objectives	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)														
Acetone	50	*500,000*	ND	9.7 J	7.3 J	ND	12 J	ND	ND	ND	ND	30	ND	ND
Methylcyclohexane	NV	*NV*	ND	ND	ND	ND	3.0 J	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1,300	*150,000*	ND	ND	ND	ND	ND	<	ND	ND	ND	ND	ND	ND
Methylene Chloride	50	*500,000*	4.7 J	5.8 J	7.8	5.6 J	3.8 JB	2.9 JB	4.3 JB	3.2 JB	5.6 J	5.2 J	ND	ND
2-Butanone (MEK)	100,000	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds - EPA Method 8270 TCL (ug/kg)														
Naphthalene	12,000	*500,000*	ND	ND	ND	ND	17 J	ND	7.7 J	ND	ND	ND	ND	ND
2-Methylnaphthalene	410 [3]	*NV*	ND	ND	ND	ND	9.3 J	ND	ND	ND	ND	ND	52 J	ND
4-Methylphenol	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	*500,000*	ND	ND	ND	32 J	22 J	ND	15 J	ND	ND	ND	68 J	ND
Acenaphthene	20,000	*500,000*	ND	ND	ND	ND	25 J	ND	3.0 J	ND	ND	ND	ND	ND
Fluorene	30,000	*500,000*	ND	ND	ND	33 J	26 J	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	*500,000*	15 J	18 J	1800 J	360	320 B	8.8 JB	96 JB	6.6 JB	88 J	ND	190 JB	ND
Anthracene	100,000	*500,000*	ND	ND	ND	97 J	52 J	ND	28 J	ND	22 J	ND	88 J	ND
Fluoranthene	100,000	*500,000*	36 J	77 J	3100 J	570	630 B	17 JB	250 B	13 JB	180 J	ND	560 JB	5.5 JB
Pyrene	100,000	*500,000*	25 J	57 J	2000 J	350	430 B	12 JB	170 JB	11 JB	120 J	ND	440 JB	4.9 JB
Benzo(a)anthracene	1,000	*5,600*	27 J	46 J	1700 J	210 J	260 B	14 JB	150 JB	15 JB	97 J	11 J	330 JB	9.1 JB
Dibenzo(a,h)anthracene	330	*560*	ND	12 J	ND	29 J	ND	ND	ND	ND	20 J	ND	ND	ND
Dibenzofuran	7,000	*NV*	ND	ND	ND	19 J	16 J	ND	6.4 J	ND	ND	ND	28 J	ND
Diethyl phthalate	NV	*NV*	ND	ND	ND	ND	14 JB	12 JB	16 JB	11 JB	ND	ND	ND	9.8 JB
Di-n-octyl phthalate	NV	*NV*	ND	ND	ND	ND	32 J	32 J	38 J	30 J	ND	ND	310 J	31 J
Di-n-butyl phthalate	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	50,000 [3]	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NV	*NV*	ND	ND	ND	15 J	53 J	4.1 J	14 J	3.7 J	ND	ND	74 J	3.6 J
Chrysene	1,000	*56,000*	25 JB	47 JB	2300 JB	200 J	290 B	17 JB	140 JB	14 JB	110 JB	10 JB	380 JB	7.9 JB
Benzo(b)fluoranthene	1,000	*5,600*	40 J	72 J	3500 J	210 J	440 B	18 JB	190 JB	20 JB	140 J	14 J	740 JB	12 JB
Benzo(k)fluoranthene	800	*56,000*	19 J	35 J	1700 J	110 J	180 JB	16 JB	82 JB	15 JB	64 J	13 J	360 JB	10 JB
Biphenyl	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	1,000	*1,000*	26 J	54 J	**2900 J**	160 J	290 B	15 JB	130 JB	15 JB	98 J	14 J	490 JB	7.0 JB
Indeno(1,2,3-cd)pyrene	500	*5,600*	16 J	27 J	1400 J	86 J	120 JB	10 JB	56 JB	10 JB	45 J	ND	210 JB	7.6 JB
Benzo(g,h,i)perylene	100,000	*500,000*	15 J	28 J	1800 J	91 J	120 JB	7.8 JB	57 JB	11 JB	52 J	ND	400 JB	8.8 JB
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)														
Aroclor 1254	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	NV	*NV*	1,100	ND	320	ND	150 J	ND	ND	ND	410	ND	940	ND
Total PCBs	100*	*1,000**	1,100	ND	320	ND	150	ND	ND	ND	410	ND	940	ND

Table 2
Soil Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

	Unrestricted	Restricted Commmercial	SP-34-2-4	SP-34-6-8	SP-34-6-8 (DUP)	SP-35-1-3	SP-35-6-8	SP-36-1-3	SP-36-8-10	SP-37-1-3	SP-37-4-6	SP-41-1-3	SP-41-6-8	SP-47-1-3
Parameter	Soil Cleanup	Soil Cleanup												
	Objectives	Objectives	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)														
Acetone	50	*500,000*	ND	6.7 J	ND	ND	ND	27 J	17 J	19 J	29 J	NT	NT	NT
Methylcyclohexane	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT
Tetrachloroethene	1,300	*150,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT
Methylene Chloride	50	*500,000*	6.9	5.9 J	3.9 J	ND	ND	2.9 JB	ND	2.9 J	ND	NT	NT	NT
2-Butanone (MEK)	100,000	*NV*	ND	ND	ND	ND	ND	5.2 J	ND	ND	ND	NT	NT	NT
Semi-Volatile Organic Compounds - EPA Method 8270 TCL (ug/kg)														
Naphthalene	12,000	*500,000*	33 J	ND	ND	ND	ND	5.7 J	ND	45 J	ND	ND	ND	NT
2-Methylnaphthalene	410 [3]	*NV*	38 J	ND	ND	ND	ND	4.1 J	ND	28 J	ND	ND	ND	NT
4-Methylphenol	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	17 J	ND	NT
Acenaphthylene	100,000	*500,000*	ND	ND	ND	ND	ND	9.0 J	ND	9.8 J	ND	ND	ND	NT
Acenaphthene	20,000	*500,000*	ND	ND	ND	ND	ND	4.3 J	ND	160 J	ND	ND	ND	NT
Fluorene	30,000	*500,000*	ND	ND	ND	ND	ND	12 J	ND	320	ND	ND	ND	NT
Phenanthrene	100,000	*500,000*	120 J	ND	ND	7.7 JB	ND	89 JB	4.5 JB	2,400 B	10 JB	ND	ND	NT
Anthracene	100,000	*500,000*	ND	ND	ND	ND	ND	22 J	ND	690	ND	ND	ND	NT
Fluoranthene	100,000	*500,000*	140 J	ND	ND	27 JB	7.9 JB	130 JB	5.8 JB	2,700 B	17 JB	ND	ND	NT
Pyrene	100,000	*500,000*	89 J	ND	ND	20 JB	6.0 JB	98 JB	5.1 JB	1,700 B	9.8 JB	ND	ND	NT
Benzo(a)anthracene	1,000	*5,600*	66 J	15 J	15 J	23 JB	8.9 JB	55 JB	9.4 JB	950 B	13 JB	ND	21 J	NT
Dibenzo(a,h)anthracene	330	*560*	13 J	ND	ND	ND	ND	ND	ND	64 J	ND	ND	19 JB	NT
Dibenzofuran	7,000	*NV*	24 J	ND	ND	ND	ND	6.1 J	ND	190 J	ND	ND	ND	NT
Diethyl phthalate	NV	*NV*	ND	ND	ND	11 JB	7.4 JB	13 JB	12 JB	7.9 JB	10 JB	ND	ND	NT
Di-n-octyl phthalate	NV	*NV*	ND	ND	ND	30 J	28 J	ND	31 J	31 J	ND	ND	ND	NT
Di-n-butyl phthalate	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	380	ND	ND	ND	NT
Bis(2-ethylhexyl)phthalate	50,000 [3]	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Carbazole	NV	*NV*	ND	ND	ND	3.6 J	ND	14 J	4.4 J	230	ND	ND	ND	NT
Chrysene	1,000	*56,000*	78 J	14 JB	13 JB	24 JB	10 JB	62 JB	9.6 JB	940 B	9.7 JB	ND	24 J	NT
Benzo(b)fluoranthene	1,000	*5,600*	81 J	16 J	19 J	46 JB	20 JB	97 JB	8.8 JB	1,200 B	18 JB	ND	24 J	NT
Benzo(k)fluoranthene	800	*56,000*	40 J	14 J	12 J	24 JB	11 JB	43 JB	8.1 JB	620 B	16 JB	ND	29 J	NT
Biphenyl	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	17 J	ND	ND	ND	NT
Benzo(a)pyrene	1,000	*1,000*	59 J	14 J	14 J	30 JB	11 JB	63 JB	7.3 JB	920 B	11 JB	ND	17 J	NT
Indeno(1,2,3-cd)pyrene	500	*5,600*	38 J	ND	ND	17 JB	7.4 JB	30 JB	6.2 JB	270 B	9.0 JB	ND	19 JB	NT
Benzo(g,h,i)perylene	100,000	*500,000*	52 J	ND	ND	19 JB	6.9 JB	32 JB	6.0 JB	290 B	7.9 JB	ND	15 JB	NT
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)														
Aroclor 1254	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	100*	*1,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 2
Soil Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

	Unrestricted	Restricted Commmercial	SP-47-6-8	SP-50-1-3	SP-50-6-8	SP-51-1-3	SP-51-6-8	EX-NORTH	EX-SOUTH	EX-EAST	EX-WEST	EX-FLOOR	OUTFALL 004	RINSATE-SOIL
Parameter	Soil Cleanup	Soil Cleanup												
	Objectives	Objectives	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)														
Acetone	50	*500,000*	NT	NT	NT	NT	NT	44	17 J	17 J	29	ND	ND	ND
Methylcyclohexane	NV	*NV*	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1,300	*150,000*	NT	NT	NT	NT	NT	2.4 JB	2.4 JB	2 JB	1.8 JB	2 JB	ND	ND
Methylene Chloride	50	*500,000*	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	100,000	*NV*	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds - EPA Method 8270 TCL (ug/kg)														
Naphthalene	12,000	*500,000*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	390 J	ND
2-Methylnaphthalene	410 [3]	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	460 J	ND
4-Methylphenol	NV	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	*500,000*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	180 J	ND
Acenaphthene	20,000	*500,000*	NT	21 J	ND	ND	ND	ND	ND	ND	ND	ND	4,500	ND
Fluorene	30,000	*500,000*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,400	ND
Phenanthrene	100,000	*500,000*	NT	750 J	160 J	ND	ND	ND	ND	ND	ND	85 J	56,000 B	ND
Anthracene	100,000	*500,000*	NT	160 J	ND	ND	ND	ND	ND	ND	ND	41 J	19,000	ND
Fluoranthene	100,000	*500,000*	NT	1,000 J	260 J	ND	19 J	ND	18 J	ND	ND	580	190,000	ND
Pyrene	100,000	*500,000*	NT	740 J	200 J	ND	ND	ND	18 J	ND	ND	550	160,000	ND
Benzo(a)anthracene	1,000	*5,600*	NT	410 J	140 J	ND	ND	ND	26 J	ND	ND	320	**120,000**	ND
Dibenzo(a,h)anthracene	330	*560*	NT	ND	ND	ND	ND	ND	20 J	ND	ND	47 J	ND	ND
Dibenzofuran	7,000	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,400 J	ND
Diethyl phthalate	NV	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	NV	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	NV	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	50,000 [3]	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NV	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,600	ND
Chrysene	1,000	*56,000*	NT	390 J	120 J	ND	ND	ND	15 J	ND	ND	290	**120,000**	ND
Benzo(b)fluoranthene	1,000	*5,600*	NT	420 J	150 J	ND	ND	4.8 J	32 J	ND	ND	290	**120,000**	ND
Benzo(k)fluoranthene	800	*56,000*	NT	280 J	89 J	ND	ND	4.2 J	22 J	ND	ND	170 J	49,000 B	ND
Biphenyl	NV	*NV*	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	1,000	*1,000*	NT	380 J	130 J	ND	ND	ND	28 J	ND	ND	270	**82,000 B**	ND
Indeno(1,2,3-cd)pyrene	500	*5,600*	NT	230 JB	93 JB	ND	ND	ND	26 J	ND	ND	130 J	**28,000 B**	ND
Benzo(g,h,i)perylene	100,000	*500,000*	NT	230 JB	97 JB	ND	17 JB	ND	27 J	ND	ND	140 J	29,000 B	ND
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)														
Aroclor 1254	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	70 J	ND	ND
Aroclor 1260	NV	*NV*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210	ND
Total PCBs	100*	*1,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	70	210	ND

Table 2
Soil Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Attachment C for list of all compounds included in analysis.
2. Analytical testing completed by Test America Laboratories.
3. ug/kg = part per billion; mg/kg = parts per million
4. < indicates compound was not detected above method detection limits.
5. B = Compound was found in the blank and sample.
6. J = Result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
7. NV = no value.
8. NT = not tested.
9. Shading indicates value exceeds Unrestricted Use Soil Cleanup Objectives.
10. **Bold** indicates value exceeds Restricted Commercial Use Soil Cleanup Objectives.
11. A duplicate sample (DUP-1) was collected at soil probe location SP-34, 6 to 8 feet.
12. *Soil cleanup objective is for the sum of the Aroclor compound concentrations detected (Total PCBs).
13. Soil cleanup objectives (SCOs) are from NYSDEC Part 375, Subpart 375-6: Unrestricted Use Soil Cleanup Objectives and the Supplemetal Soil Cleanup Objectives (SSCOs) are from NYSDEC Final Commissioners Policy, CP-51, Dated October 21, 2010.

Table 3
Groundwater Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Class GA Criteria	SP-22-110926	SP-25-110926	SP-30-110927	SP-32-110926	SP-34-110926	SP-34-110926 (DUP)	SP-36-110927	SP-42-110927
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)									
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	3.8 J
Acetone	50	ND	5.8 J	ND	3.0 J	3.4 J	3.8 J	6.6 J	23
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	NV	0.32 J	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NV	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NV	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	0.58 J	ND	ND	ND	ND
Trichlorofluoromethane	5	6.3	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	NV	6.6	5.8	ND	3.6	3.4	3.8	0.0	26.8
Semi-Volatile Organic Compounds - EPA Method 8270 (ug/L)									
2,4-Dimethylphenol	1	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NV	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	1	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20	3.3 J	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	0.91 J	0.43 J	ND	ND	ND	ND	ND	ND
Benzo [a] anthracene	0.002*	0.49 J	0.85 J	ND	ND	0.44 J	0.35 J	ND	ND
Benzo [a] pyrene	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND
Benzo [b] fluoranthene	0.002*	ND	1.1 J	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NV	ND	0.79 J	ND	ND	ND	ND	ND	ND
Carbazole	5	1.9 J	0.41 J	ND	ND	ND	ND	ND	ND
Chrysene	0.002*	0.39 J	0.77 J	ND	ND	0.43 J	0.47 J	ND	ND
Dibenzofuran	NV	1.2 J	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50	4.0 J	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl-phthalate	NV	0.5 JB	0.46 JB	ND	0.47 JB	0.33 JB	0.44 JB	0.74 J	ND
Dibenz(a,h)anthracene	NV	ND	0.67 J	ND	ND	ND	ND	ND	ND
Fluoranthene	50	1.7 J	1.2 J	0.45 J	ND	0.90 J	0.77 J	ND	ND
Fluorene	50	2.8 J	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	ND	0.91 J	ND	ND	ND	ND	ND	ND
Naphthalene	10 *	3.8 J	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50 *	3.7 J	0.59 J	ND	ND	0.44 J	0.44 JB	ND	ND
Pyrene	50	1.5 J	1.2 J	ND	ND	0.99 J	0.83 J	ND	ND
Total SVOCs	NV	26.2	10.3	0.5	0.5	3.5	3.3	0.7	0.0
PCBs - EPA Method 8082 (ug/L)									
Aroclor 1254	NV	ND	ND	ND	2	ND	ND	ND	ND
Aroclor 1260	NV	ND	ND	0.77	1	D	ND	13	ND
Total PCBs	0.09 [1]	0.0	0.0	0.77	3.0	0.0	0.0	13.0	0.0

Table 3
Groundwater Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Class GA Criteria	SP-49-110927	RINSATE	TRIP BLANK 1	TRIP BLANK 2
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)					
2-Butanone (MEK)	50	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND
Benzene	1	1.6	ND	ND	ND
Carbon disulfide	NV	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND
Cyclohexane	NV	0.95 J	ND	ND	ND
Ethylbenzene	5	1.3	ND	ND	ND
Methylcyclohexane	NV	1.1	ND	ND	ND
Methylene chloride	5	ND	ND	0.62 J	0.66 J
Toluene	5	2.7	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Total Xylenes	5	1.8 J	ND	ND	ND
Total VOCs	NV	6.7	ND	0.62	0.66
Semi-Volatile Organic Compounds - EPA Method 8270 (ug/L)					
2,4-Dimethylphenol	1	ND	ND	NT	NT
2-Methylnaphthalene	NV	ND	ND	NT	NT
4-Methylphenol	1	ND	ND	NT	NT
Acenaphthene	20	ND	ND	NT	NT
Anthracene	50	ND	ND	NT	NT
Benzo [a] anthracene	0.002*	ND	ND	NT	NT
Benzo [a] pyrene	ND	ND	ND	NT	NT
Benzo [b] fluoranthene	0.002*	ND	ND	NT	NT
Benzo(g,h,i)perylene	NV	ND	ND	NT	NT
Carbazole	5	ND	ND	NT	NT
Chrysene	0.002*	ND	ND	NT	NT
Dibenzofuran	NV	ND	ND	NT	NT
Diethyl phthalate	50	ND	ND	NT	NT
Di-n-butyl-phthalate	NV	ND	ND	NT	NT
Dibenz(a,h)anthracene	NV	ND	ND	NT	NT
Fluoranthene	50	ND	ND	NT	NT
Fluorene	50	ND	ND	NT	NT
Indeno(1,2,3-cd)pyrene	0.002	ND	ND	NT	NT
Naphthalene	10 *	ND	ND	NT	NT
Phenanthrene	50 *	ND	ND	NT	NT
Pyrene	50	ND	ND	NT	NT
Total SVOCs	NV	0.0	0.0	0.0	0.0
PCBs - EPA Method 8082 (ug/L)					
Aroclor 1254	NV	ND	ND	NT	NT
Aroclor 1260	NV	ND	ND	NT	NT
Total PCBs	0.09 [11]	0.0	0.0	0.0	0.0

Table 3
Groundwater Analytical Results
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Notes:
1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Test America Laboratories.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1)
4. ug/L = part per billion (ppb); mg/L = part per million (ppm)
5. Shading indicates values exceeding NYSDEC Class GA groundwater criteria.
6. Class GA criteria shown is for total xylene concentration.
7. < = compound was not detected.
8. * indicates a Guidance Value instead of a Standard Value.
9. NV = no value.
10. ND = non-detectable concentration by approved analytical methods.
11. Groundwater criteria is for the sum of the Aroclor compound concentrations detected (Total PCBs).

TABLE 2

Soil Analytical Testing Results Summary
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Unrestricted Soil Cleanup Objectives	Commmercial Soil Cleanup Objectives	MW-5-4-6 Result	MW-5-2-6 Result
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)				
Benzene	**60**	44,000	8.9	NT
Toluene	**700**	500,000	2.0 J	NT
Xylenes, Total	**260**	500,000	1.1 J	NT
Semi-Volatile Organic Compounds - EPA Method 8270 TCL (ug/kg)				
Phenanthrene	**100,000**	500,000	NT	6.1 J
Anthracene	**100,000**	500,000	NT	
Fluoranthene	**100,000**	500,000	NT	9.8 J
Pyrene	**100,000**	500,000	NT	9.8 J
Bis(2-ethylhexyl)phthalate	**50,000** [9]	NV	NT	110 J
Acetophenone	**NV**	NV	NT	130 J
Chrysene	**1,000**	56,000	NT	7.8 J
Benzo(a)pyrene	**1,000**	1,000	NT	110 J
Benzo(b)fluoranthene	**1,000**	5,600	NT	150 J
Benzo(k)fluoranthene	**800**	56,000	NT	9.8 J
Polychlorinated Biphenyls - EPA Method 8082 (ug/kg)				
Aroclor 1254	**NV**	NV	<	<
Aroclor 1260	**NV**	NV	<	<
Total PCBs	**100***	1,000*		

Notes:

1. Compounds detected in one or more samples are presented on this table. Refer to Attachment C for list of all compounds included in analysis.
2. Analytical testing completed by Test America Laboratories.
3. ug/kg = part per billion; mg/kg = parts per million
4. < indicates compound was not detected above method detection limits.
5. B = Compound was found in the blank and sample.
6. J = Result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
7. NV = no value.
8. NT = not tested.
9. **Bold** indicates value exceeds Unrestricted Use Soil Cleanup Objectives.
10. Shading indicates value exceeds Restricted Commercial Use Soil Cleanup Objectives.
11. *Soil cleanup objective is for the sum of the Aroclor compound concentrations detected (Total PCBs).
12. Soil cleanup objectives (SCOs) are from NYSDEC Part 375, Subpart 375-6: Unrestricted Use Soil Cleanup Objectives and the Supplemetal Soil Cleanup Objectives (SSCOs) are from NYSDEC Final Commissioners Policy, CP-51, Dated October 21, 2010.

Table 3
Groundwater Analytical Testing Results Summary
Niagara Falls Armed Forces Reserve Center
Niagara Falls, New York

Parameter	Class GA Criteria	TW-1	TW-2	TW-3	TW-4	TW-5	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)												
2-Butanone (MEK)	50	<	<	<	<	1.6 J	<	<	<	3.7 J	5.5 J	<
Acetone	50	4.5 J	5.7 J	4.3 J	<	7.6 J	<	<	6.5 J	28	43	<
Benzene	1	1.6	<	<	<	0.51 J	<	<	<	<	<	<
Carbon disulfide	NV	<	<	<	<	0.88 J	<	1.6 J	2.2	4.7	<	<
Cyclohexane	NV	1.6	<	<	<	0.46 J	<	<	<	<	<	<
Dichlorodifluoromethane	5*	<	<	4.4	<	<	<	<	<	<	<	<
Methylcyclohexane	NV	1.2	0.59 J	<	<	0.5 J	0.42 J	<	<	<	<	<
Toluene	5	2.2	<	<	<	0.78 J	<	<	<	<	<	<
Trichloroethene	5	<	<	<	<	7.8	<	<	<	<	<	<
Xylenes (total)	5 [6]	0.75 J	<	<	<	<	<	<	<	<	<	<
Semi-Volatile Organic Compounds - EPA Method 8270 (ug/L)												
Acetophenone	NV	<	<	<	<	<	<	<	0.60 J	1.8 J	<	<
Caprolactam	NV	34	4.3 J	4.2 J	6.6 H	<	<	3.6 J	21.0	12	67.0	<
Di-n-butyl-phthalate	NV	<	<	<	<	<	0.37 J	0.73 J	0.43 J	0.40 J	0.75 J	<
Phenanthrene	50 *	<	<	<	<	<	<	0.58 J	0.76 J	1.0 J	<	<
PCBs - EPA Method 8082 (ug/L)												
Aroclor 1254	NV	<	<	<	<	<	<	<	<	<	<	<
Aroclor 1260	NV	<	<	<	<	<	<	<	<	<	<	<
Total PCBs	0.09 [13]	<	<	<	<	<	<	<	<	<	<	<

Notes:
1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Test America Laboratories.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, dated October 1993, revised June 1998, January 1999 errata sheet and April 2000 addendum.
4. ug/L = part per billion (ppb); mg/L = part per million (ppm)
5. Shading indicates values exceeding NYSDEC Class GA groundwater criteria.
6. Class GA criteria shown is for total xylene concentration.
7. J = Result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
8. H = Indicates sample was prepped or analyzed beyond the specified holding time.
9. < = compound was not detected.
10. * indicates a Guidance Value instead of a Standard Value.
11. NV = no value.
12. A duplicate sample (GW-Duplicate-110712) was collected at TW-3. Values shown are the higher of the two analytical results.
13. Groundwater criteria is for the sum of the Aroclor compound concentrations detected (Total PCBs).

Table 2
Post Excavation Soil Results - September 2009
9400 Porter Road
Niagara Falls, New York

Sample Location		CS-1	CS-2	CS-3	CS-4	CS-5	CS-6	CS-6 (DUP)	CS-7
Laboratory Sample ID	Maximum	RSI0550-01	RSI0550-02	RSI0550-03	RSI0550-04	RSI0550-05	RSI0550-06	RSI0550-11	RSI0550-07
Sample Date	Contaminant	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009	9/16/2009
Sample Depth (ft bgs)	Level	1.0-1.25	1.0-1.25	1.0-1.25	1.0-1.25	1.0-1.25	1.0-1.25	1.0-1.25	1.0-1.25
PCBs (mg/kg)									
EPA Method 8082	1.0	0.33	0.27	0.17	0.39	**14**	**18**	**12**	**14**

Sample Location		CS-8	CS-9	CS-10
Laboratory Sample ID	Maximum	RSI0550-08	RSI0550-09	RSI0550-10
Sample Date	Contaminant	9/16/2009	9/16/2009	9/16/2009
Sample Depth (ft)	Level	1.0-1.25	1.0-1.25	1.0-1.25
PCBs (mg/kg)				
EPA Method 8082	1.0	**4.8**	**1.9**	0.33

Notes:

Samples detected at levels exceeding the Maximum Contaminant Level are shown in bold and underlined [**thus**].

mg/kg Milligrams per kilogram
ND Non-detect

Sampling Information:
Samples were collected in 8 oz glass containers.
Samples were placed in iced coolers at approximately 4^{o}C.

Table 3
Post-Excavation Soil Results - October 2009
9400 Porter Road
Niagara Falls, New York

Sample Location		CS-11	CS-12	CS-13	CS-14	CS-14(DUP)	CS-15
Laboratory Sample ID	Maximum	RSJ0561-01	RSJ0561-02	RSJ0561-03	RSJ0561-04	RSJ0561-06	RSJ0561-05
Sample Date	Contaminant	10/8/2009	10/8/2009	10/8/2009	10/8/2009	10/8/2009	10/8/2009
Sample Depth (ft bgs)	Level	2.0-2.25	2.0-2.25	2.0-2.25	2.0-2.25	2.0-2.25	2.0-2.25
PCBs (mg/kg)							
EPA Method 8082	1.0	0.170	0.022	0.800	0.006 J	0.016 J	0.007 J

Notes:

mg/kg Milligrams per kilogram
ND Non-detect
J Analyte detected at a level less than the Reporting Limit and greater than the Method Detection Limit.

Sampling Information:
Samples were collected in 8 oz glass containers.
Samples were placed in iced coolers at approximately 4^{o}C.