
Division of Environmental Remediation

Record of Decision
Mechanicville Light Industrial Site
Environmental Restoration Project
City of Mechanicville, Saratoga County,
New York
Site Number E546050

February 2010

DECLARATION STATEMENT - RECORD OF DECISION

Mechanicville Light Industrial Park Environmental Restoration Project City of Mechanicville, Saratoga County, New York Site No. E546050

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Mechanicville Light Industrial Park site, an environmental restoration. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law, 6 NYCRR Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Mechanicville Light Industrial Park and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

Based on the results of the remedial investigation/alternative analysis (RI/AA) for the Mechanicville Light Industrial Park site and the criteria identified for evaluation of alternatives, the Department has selected placement of a barrier to contact in the proposed softball field area and the proposed industrial area with institutional and engineering controls. The components of the remedy are as follows:

- 1) A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.
- 2) A soil cover will be constructed over all vegetated areas in the future softball field (restricted residential) area to prevent exposure to contaminated soils. The two-foot thick cover will consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Clean soil will constitute soil that meets the Division of Environmental Remediation's criteria for backfill or local site background. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick. The existing baseball field in the restricted residential use area will not require the two foot soil cover as the remedial investigation results confirm that during the construction of the ballfield and batting cages clean fill from off site was used as surface covering.

- 3) A soil cover will be constructed over all vegetated areas in the undeveloped portion of the future industrial use area to prevent exposure to contaminated soils. The one-foot thick cover will consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Clean soil will constitute soil that meets the Division of Environmental Remediation's criteria for backfill or local site background. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick.
- 4) Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the existing baseball field and future softball field property to restricted residential use which would also permit commercial or industrial uses; and limiting the use and development of the industrial park to industrial use (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.
- 5) Development of a site management plan which will include the following institutional and engineering controls: (a) management of the final cover systems to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. Excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (c) identification of any use restrictions on the site; (d) and provisions for the continued proper operation and maintenance of the components of the remedy.
- 6) The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

_____ 2/19/10 _____
Date

_____/s/_____
Dale A. Desnoyers, Director
Division of Environmental Remediation

RECORD OF DECISION
Mechanicville Light Industrial Park
Environmental Restoration Project
City of Mechanicville, Saratoga County, New York
Site No. E546050
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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected this remedy for the Mechanicville Light Industrial Park Site. The disposal of hazardous substances at the site has resulted in threats to public health and the environment that are addressed by this remedy presented in this Record of Decision (ROD). The disposal of hazardous substances at this site, as more fully described in Sections 5 of this document, have contaminated various environmental media. The remedy, discussed in detail in Section 8, is intended to attain the remedial action objectives identified for this site in Section 6 for the protection of public health and the environment. This ROD identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for the selected remedy. The Department has selected a final remedy for the site after careful consideration of all comments received during the public comment period.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this ROD in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, 6 NYCRR Part 375.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Mechanicville Light Industrial Park site, is approximately 25 acres in size, and lies in an urban setting in the City of Mechanicville, Saratoga County (See Figure 1). The site is bisected by Industrial Park Drive and Clement Street borders the site to the south. The site lies in a mixed use area situated among commercial use, residences, and a recreational ball field. A portion of the site is currently occupied by the Mechanicville Department of Public Works (DPW) and includes an office, garage, paved parking area, and Industrial Park Drive. In addition, a portion of the site is occupied by a small baseball field (Field C) and batting cages used by the Mechanicville/Stillwater Little League. Fields "A" and "B" are not located on the site.

Site geology includes a horizon of approximately 1 ft of fill material which included topsoil, gravel, sand, brick and some coal. Below the fill layer is a fine to medium grained sand from approximately 2 ft to 6 ft below ground surface (bgs). Below the fine sand is a coarser sand or clay from approximately 6 to 12 ft bgs. Shale bedrock was encountered at approximately 11 ft bgs. Groundwater was encountered in the coarse sand or clay horizon from approximately 6 ft to 10 ft bgs. As indicated in Figure 3, groundwater flow is easterly towards the Hudson River, approximately a half mile from the site.

The Mechanicville Light Industrial Park site is planned to be broken up into three areas for proposed future use. The main portion of the site (or approximately 17 acres or 68% of the site), is proposed as industrial use. The City is also proposing two separate areas, which are adjacent and contiguous to be used as restricted residential use (8 acres or approximately 32% of the site). This restricted residential use will apply to the existing baseball field, (approximately 2- acres or 8% of the site), and the remaining undeveloped area, the proposed soft ball fields.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site was vacant undeveloped land prior to 1921 when the site was developed as the southwestern portion of a 200-acre Boston and Maine/Delaware and Hudson railroad yard. Historically the site had several structures on site including a power house, sand house, engine house, round house and a coal trestle. Historical site operations consisted of train engine maintenance, fueling, sanding, and rerouting. Various site structures and operations were removed throughout the railroad's tenure on site, from 1921 until the 1990s. The City purchased the site from Boston and Maine Railroad in 1996. In 1996 and 1997, the City improved a portion of the 25-acre site with the current DPW buildings. In addition, Industrial Park Road was constructed, running east/west along the site. The Mechanicville/Stillwater Little League has leased a section of the southwest corner of the site and has constructed a ball field. The field or area is known as Field "C". Later batting cages were installed as well.

3.2: Remedial History

In 1997, a Phase II investigation was performed by the City, documenting petroleum contamination on site. In 2002, a Phase I investigation was performed, followed by a Phase II investigation in 2003.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past owners and operators, waste generators, and haulers.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The City of Mechanicville will assist the state in its efforts by providing

all information to the state which identifies PRPs. The City of Mechanicville will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 5: SITE CONTAMINATION

The City of Mechanicville has recently completed a remedial investigation/alternatives analysis report (RI/AA) to determine the nature and extent of any contamination by hazardous substances at this environmental restoration site.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted from July 2007 to March 2009. The field activities and findings of the investigation are described in the RI report.

Investigative tasks performed during the RI included performing a ground penetrating radar survey, the collection of 23 surface soil samples, 22 subsurface soil samples, 5 offsite background surface soil samples, and 5 soil vapor samples. Subsequently, three additional surface soil samples were collected in the proposed new softball field area.

The subsurface investigative tasks performed included the installation of 11 test pits and 26 soil borings. During the RI, 8 groundwater monitoring wells were installed and sampled along with 6 existing groundwater monitoring wells. In addition, a potable well survey was completed.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the surface soil, subsurface soil, groundwater, and soil gas contains contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on the Department's June 1998 "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on 6 NYCRR Subpart 375-6: Remedial Program Soil Cleanup Objectives (SCOs).
- Concentrations of VOCs in air were evaluated using the air guidelines provided in the NYSDOH guidance document titled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2006.
- Concentrations of VOCs in air were compared to typical background levels of VOCs in indoor and outdoor air using the background levels provided in the NYSDOH guidance document titled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2006. The background levels are not SCGs and are used only as a general tool to assist in data evaluation.

- Background surface soil samples were taken from 5 locations. These locations were taken from public lands within 0.5 miles from the site, and were unaffected by historic or current site operations. The samples were analyzed for VOCs, SVOCs, pesticides, PCBs, and inorganic metals (metals). The results of the background sample analysis were compared to relevant SI data to determine appropriate site remediation goals.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized in Section 5.1.2. More complete information can be found in the RI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the RI report, many soil, subsurface soil, groundwater and soil vapor samples were collected to characterize the nature and extent of contamination. As seen in Figures 2A, 4, 5 and summarized in Tables 1, 2, 3, and 4, the main categories of contaminants that exceed their SCGs are semivolatile organic compounds (SVOCs) and inorganics (metals). For comparison purposes, where applicable, SCGs are provided for each medium.

Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil. Air samples are reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Figures 2A, 4, and 5 indicate the location and summarize the degree of contamination for the contaminants of concern in surface soil, subsurface soil, and groundwater and compare the data with the respective restricted residential and industrial use SCGs. Tables 1, 2, 3, and 4 summarize the degree of contamination for the contaminants of concern in surface soil, subsurface soil, groundwater and soil vapor respectively, and compare the data with the unrestricted SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Surface Soil

Investigative tasks performed during the RI included the collection of 23 surface soil samples and 5 offsite background surface soil samples. Three additional surface soil samples were taken in the proposed softball field area to further define the SVOC contamination detected. The background surface soil samples were collected off-site from Tallmadge Park located south of the site and areas along sidewalks in the residential neighborhoods south-southeast of the site.

Existing Baseball Field Area (Restricted Residential Use)

As indicated on Figure 2, four of the 23 surface soil samples collected on site were collected from the existing baseball field area. As indicated on Table 1, in surface soil sample SS-20, there was a detection of two pesticides, 4,4-DDE and 4,4-DDT, and one inorganic, copper, slightly above the

respective unrestricted use SCOs, but below the respective restricted residential SCOs. No other contaminants were detected above the unrestricted use SCOs.

Proposed Softball Field Area (Restricted Residential Use)

As indicated on Figure 2, two of the 23 surface soil samples collected on site were collected from the proposed softball field area. In surface soil sample SS-19, there was a detection of several inorganics, including arsenic, copper, lead, and zinc slightly above the unrestricted use SCO, but below the restricted residential SCO. As indicated on Figure 5, surface soil sample SS-15, had several estimated detections of SVOC contaminants above the restricted residential SCOs. To confirm whether this contamination was an isolated case or anomaly, three additional surface soil samples, SS-24, SS-25 and SS-26, were collected and analyzed for SVOCs only. In surface soil samples SS-24 and SS-25, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene and dibenz(a,h)anthracene were detected above the respective SCOs. However, the concentrations of SVOCs detected in the additional samples were several orders of magnitude lower than that detected in SS-15. The detection of SVOC contamination at surface soil samples SS-24 and SS-25 confirms that there is slight SVOC surface soil contamination in the proposed softball field area.

Proposed Industrial Area

As indicated on Figure 2, 17 of the 23 surface soil samples collected on site, were collected from the proposed industrial area. As indicated in Table 1, when compared to the unrestricted use SCO, several SVOC contaminants were detected above the unrestricted use SCOs, including benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene and indeno(1,2,3-cd)pyrene. There were five slight exceedances of pesticide compounds above their respective unrestricted use SCOs. There was one slight detection of PCBs at 0.11 ppm above the unrestricted use SCO of 0.1 ppm. Five inorganic or metals compounds were detected above the unrestricted use SCOs. While there were numerous detections of various contaminants above the unrestricted use SCOs, as indicated on Figure 4, only 3 of the 14 surface soil samples exceeded the industrial SCO for benzo(a)pyrene. Benzo(a)pyrene exceedances above the SCO of 1.1 ppm, ranged from 1.6 ppm to 2.5 ppm. In addition, as indicated on Figure 4, 8 of the 14 surface soil samples (SS-1, SS-2, SS-4, SS-5, SS-7, SS-9, SS-10, and SS-13) exceeded the industrial use SCO for arsenic, an inorganic. The arsenic exceedances above the SCO of 16.0 ppm ranged from 16.4 ppm to 65.3 ppm.

Surface soil contamination identified during the RI/AA will be addressed in the remedy selection process.

Subsurface Soil

As indicated in Table 2, while there were several detections of contaminants above the unrestricted use SCOs, there was only one exceedance of restricted residential use SCOs in the subsurface on site. In the baseball field area, as indicated in Figure 5, there was a detection of an inorganic, manganese at SB-22 at the 5 to 10 ft depth at a concentration of 5,570 ppm. This detection is above the unrestricted use SCO of 1,600 ppm and also the restricted residential use SCO of 2,000 ppm. There were also several compounds detected slightly above the unrestricted use, which primarily included metals compounds.

Three metals: copper, nickel and zinc were detected in the future industrial area above the unrestricted use SCOs, however these detections are well below their respective industrial use SCOs.

While there were no contraventions of the industrial use SCOs in the industrial use area, significant grossly contaminated soil was encountered in a discrete area of the central portion of the site that exhibited evidence of petroleum free product, heavy staining and petroleum odors. This subsurface soil contamination identified during the RI/AA was addressed during the soil excavation IRM described in Section 5.2.

Subsurface soil contamination identified during the RI/AA will be addressed in the remedy selection process.

Groundwater

14 monitoring wells, as indicated in Figures 2 and 3, were sampled. There were several detections of VOCs. However, there was only one exceedance of the groundwater standards for VOCs, specifically bromomethane at 6.0 ppb at MW-9, which is slightly above the SCG of 5.0 ppb (see Table 3). While there were numerous detections of SVOCs in the site monitoring wells, there was only one detection of SVOC contamination above SCGs. Bis(2-ethylhexyl)phthalate was detected at 13 ppb at MW-14, which is slightly above the SCG of 5 ppb. As indicated in Table 3, there were various detections of inorganic metals, contaminants in the site monitoring wells. Monitoring well MW-13 exhibited the highest and most detections of metals contamination and also exhibited elevated turbidity readings during the sampling event. This high turbidity may have attributed to the elevated level of metals detected in that sample, including aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, magnesium, mercury, and nickel. In summary, there were 16 metals detected at levels marginally exceeding SCGs from various monitoring wells across the site.

Groundwater contamination identified during the RI/AA will be addressed as part of the institutional controls as described in Section 8.0. Therefore, no remedial alternatives need to be evaluated for groundwater.

Soil Vapor

As depicted on Figure 2, 5 soil vapor samples were collected on site to evaluate the potential for exposures via soil vapor intrusion. As indicated in Table 4, trace to low levels of VOCs were detected in the soil vapor samples collected on site. No site-related soil vapor contamination of concern was identified during the RI/AA. Therefore, no remedial alternatives need to be evaluated for this medium.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/AA. During the RI, grossly contaminated subsurface soils and groundwater were detected in a discrete central portion of the proposed industrial area. The subsurface soils in this location exhibited evidence of petroleum free product, staining, and petroleum odors. To address this source of subsurface contamination, in

September 2008, a focused soil excavation and dewatering IRM was conducted. During excavation activities, excavation dewatering and active groundwater treatment via carbon filtration was performed to address petroleum contamination. Approximately 105,200 gallons of contaminated water was evacuated and treated for petroleum contamination from the excavation prior to discharge to the sanitary sewer system. The dimensions of the excavation were approximately 200 ft in length, 70 feet wide, by 6 feet deep. In total, approximately 2,292 tons of contaminated soil was excavated and transported for off-site disposal. The excavation was backfilled with clean, off-site soil.

The post-excavation confirmatory samples were analyzed for VOCs and SVOCs only, as the preliminary results from the RI revealed that petroleum contamination were the main subsurface contaminants of concern in that area. While there were numerous detections of several VOCs and SVOCs in the 29 confirmatory soil samples collected, as indicated in Figure 2A, only one post-excavation soil sample, SW-9, was detected above the industrial use SCGs. SW-9 was collected from the northeastern most portion of the excavation wall at 3 ft depth. SW-9 exhibited benzo(a)pyrene at 1,500 ppb, which slightly exceeds the respective industrial SCG of 1,100 ppb. These results confirm that a majority of the site's petroleum contamination was addressed through the implementation of the IRM.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 6.1 of the RI report.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Access to the site is not restricted therefore site workers or trespassers could be exposed to contaminated soils during future construction or other ground invasive work. Recreational users of the current baseball field are not expected to come in contact with contamination in the soil as samples collected from the baseball field did not indicate the presence of compounds above applicable standards. Exposures to contaminated groundwater via drinking water are not

expected because public water serves the area. The potential for soil vapor intrusion will be evaluated should structures be constructed on the site.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site prior to the IRM. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands. The site lies in an urban setting with no water resources or other environmentally sensitive receptors in proximity to the site, therefore there are no complete or potentially complete environmental exposure pathways or ecological risks associated with the Mechanicville Light Industrial Park site.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND PROPOSED USE OF THE SITE

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous substances disposed at the site through the proper application of scientific and engineering principles.

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

- exposures of persons at or around the proposed softball field area of the site to SVOCs in the surface soil;
- exposures of persons at or around the proposed industrial area site to inorganics (metals) in surface soil;
- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards; and
- the release of contaminants from subsurface soil into indoor air through soil vapor.

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

- Groundwater SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values," and
- Soil SCOs are based on the 6 NYCRR Part 375 soil cleanup objectives (SCOs).

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy must be protective of human health and the environment, be cost-effective, and comply with other statutory requirements. Potential remedial alternatives for the Mechanicville

Light Industrial Park were identified, screened and evaluated in the AA report which is available at the document repositories established for the site.

A summary of the remedial alternatives that were considered for this site is discussed below. The present worth represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved.

7.1: Description of Remedial Alternatives

The following potential remedies were considered to address the contaminated soils and groundwater at the site.

Alternative 1: No Further Action

The No Further Action alternative recognizes remediation of the site conducted under a previously completed IRM. To evaluate the effectiveness of the remediation completed under the IRM, only continued monitoring is necessary. This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

Alternative 2: Institutional Controls

<i>Present Worth:</i>	\$22,000
<i>Capital Cost:</i>	\$2,500
<i>Annual Costs:</i>	
<i>(Years 1-5):</i>	\$2,700
<i>(Years 5-30):</i>	\$700

Alternative 2 would leave site conditions the same, but include the imposition of institutional controls and the development of a Site Management Plan (SMP). The institutional controls would be in the form of an environmental easement that: would restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; limit the use and development of the property to industrial use only; require the property owner to complete and submit to the Department a periodic certification that the controls are in place, and; would require notification to a potential purchaser of site contamination upon a change of property ownership.

Alternative 3: Barrier to Contact in Softball Field Area, Barrier to Contact in Industrial Area, with Institutional and Engineering Controls

<i>Present Worth:</i>	\$1,300,000
<i>Capital Cost:</i>	\$1,300,000
<i>Annual Costs:</i>	
<i>(Years 1-5):</i>	\$2,700

(Years 5-30):\$700

Alternative 3 would require a soil cover to be constructed over all vegetated areas in the future softball field area to prevent potential exposure to contaminated soils. The two-foot thick cover would consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. The top six inches of soil would be of such quality to support vegetation. Clean soil would constitute soil that meets the Division of Environmental Remediation’s criteria for backfill or local site background. Non-vegetated areas (buildings, roadways, parking lots, etc.) would be covered by a paving system or concrete at least 6 inches thick.

Alternative 3 would also require a soil cover to be constructed over all vegetated areas in the undeveloped portion of the industrial area to prevent potential exposure to contaminated soils. The one-foot thick cover would consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. Clean soil would constitute soil that meets the Division of Environmental Remediation’s criteria for backfill or local site background. Non-vegetated areas (buildings, roadways, parking lots, etc.) would be covered by a paving system or concrete at least 6 inches thick.

Alternative 3 would also include institutional controls as described in Alternative 2.

Alternative 4: Soil Excavation and Disposal Off-site, Groundwater Removal and Treatment

Present Worth:\$4,800,000
Capital Cost:\$4,800,000
Annual Costs:
(Years 1-5):\$0
(Years 5-30):\$0

Alternative 4 would provide removal of soils with concentrations of constituents above the Part 375-6 unrestricted use SCOs. Excavated soil would be transported off-site for treatment and/or disposal. This alternative would achieve the remedial action objective of preventing direct contact with unacceptable levels of metals, VOCs, and SVOCs in soil and the Department’s preference to restore a site to pre-release conditions where feasible by removing all contaminated soil above the SCOs. The excavated soil would be disposed of properly off-site and the excavation would be backfilled with clean off-site fill. If contaminated groundwater were encountered during excavation, the groundwater would need to be collected and disposed of off-site at an appropriate receiving facility.

7.2 Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which governs the remediation of environmental restoration projects in New York A detailed discussion of the evaluation criteria and comparative analysis is included in the RA report.

The first two evaluation criteria are termed “threshold criteria” and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative’s ability to protect public health and the environment.
2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

The next five “primary balancing criteria” are used to compare the positive and negative aspects of each of the remedial strategies.

3. Short-term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.
4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.
5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.
6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.
7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision. The costs for each alternative are presented in Table 5.

This final criterion is considered a “modifying criterion” and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

8. Community Acceptance - Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. The responsiveness summary (Appendix A) presents

the public comments received and the manner in which the Department addressed the concerns raised. In general, the public comments received were supportive of the selected remedy. Several comments were received, however, pertaining to liability and implementation of the proposed remedy.

SECTION 8: SUMMARY OF THE SELECTED REMEDY

Based on the Administrative Record (Appendix B) and the discussion presented below, the Department has selected Alternative 3, Barrier to Contact with Institutional and Engineering Controls. The elements of this remedy are described at the end of this section.

8.1 Basis for Selection

The selected remedy is based on the results of the RI and the evaluation of alternatives.

Alternative 3, Barrier to Contact with Institutional and Engineering Controls is selected because, as described below, it satisfies the threshold criteria and provides the best balance of the balancing criterion described in Section 7.2. It will achieve the remediation goals for the site by preventing uncontrolled exposures to remaining contamination in the future softball field area and undeveloped industrial area through the installation of a protective cover and the implementation of a site management plan. This selected remedy achieves the remediation goal of preventing exposures of persons at or around the proposed softball field area of the site to SVOCs in the surface soil and exposures of persons at or around the undeveloped portion of the industrial area to inorganics (metals) in the surface soil.

The estimated present worth cost to implement the remedy is \$1,300,000. The cost to construct the remedy is estimated to be \$1,300,000 and the estimated average annual costs for 30 years is \$1000.

8.2 Elements of the Selected Remedy

The elements of the selected restricted use remedy are as follows:

- 1) A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.
- 2) A soil cover will be constructed over all vegetated areas in the future softball field (restricted residential) area to prevent exposure to contaminated soils. The two-foot thick cover will consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Clean soil will constitute soil that meets the Division of Environmental Remediation's criteria for backfill or local site background. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick. The existing baseball field in the restricted residential use area will not require the two foot soil cover as the

remedial investigation results confirm that during the construction of the ballfield and batting cages clean fill from off site was used as surface covering.

- 3) A soil cover will be constructed over all vegetated areas in the undeveloped portion of the future industrial use area to prevent exposure to contaminated soils. The one-foot thick cover will consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Clean soil will constitute soil that meets the Division of Environmental Remediation's criteria for backfill or local site background. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick.
- 4) Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the existing baseball field and future softball field property to restricted residential use which would also permit commercial or industrial uses; and limiting the use and development of the industrial park to industrial use (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.
- 5) Development of a site management plan which will include the following institutional and engineering controls: (a) management of the final cover systems to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. Excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (c) identification of any use restrictions on the site; (d) and provisions for the continued proper operation and maintenance of the components of the remedy.
- 6) The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

The site is planned to be broken up into three areas for proposed future use. The main portion of the site (or approximately 17 acres or 68% of the site), is proposed as industrial use. The City is also proposing two separate areas, which are adjacent and contiguous to be used as restricted residential use (8 acres or approximately 32% of the site). This restricted residential use will apply to the existing baseball field, (approximately 2- acres or 8% of the site), and the remaining undeveloped area, the proposed soft ball fields.

SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- A public meeting was held on November 18, 2009 to present and receive comment on the PRAP.
- Fact sheets were sent to the public contact list, notifying them of upcoming activities and document availability.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Mechanicville Light Industrial Park Site City of Mechanicville, Saratoga County, New York Site No. E546050

The Proposed Remedial Action Plan (PRAP) for the Mechanicville Light Industrial Park site, was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on October 23, 2009. The PRAP outlined the remedial measure proposed for the contaminated soils and groundwater at the Mechanicville Light Industrial Park site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on November 18, 2009, to provide an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on December 6, 2009.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: What does “restricted residential SCOs” mean?

RESPONSE 1: SCOs stands for soil clean-up objectives. Soil cleanup objectives that are protective of public health and the environment have been established for various land uses and are presented in Part 375. Restricted residential use is the land use category which will only be considered when there is common ownership or a single owner/managing entity of the site. Restricted residential use includes multiple family housing and active recreational uses, which are public uses with potential for soil contact. Restricted residential use does not include single family housing, or any vegetable gardens on a site, although community vegetable gardens may be considered with Department approval.

COMMENT 2: Are there any environmental issues on the existing little league field and/or batting cages?

RESPONSE 2: The existing baseball field in the restricted residential use area will not require the two foot soil cover, or any other remedy constructed on site, as the remedial investigation results confirmed that during the construction of the ballfield and batting cages clean fill from off-site was used as surface covering.

COMMENT 3: Will any type of industry be allowed in the adjacent industrial area with ball fields in the immediate vicinity? Will the ball fields limit the future use of the industrial area?

RESPONSE 3: There are no restrictions on the type of industry that can occupy the industrial area as long as the occupant follows the site management plan and the terms of the environmental easement. The City's local zoning restrictions may also apply.

COMMENT 4: Who would cover the costs of excavation and disposal of soils if someone was to develop the site?

RESPONSE 4: The costs of site development would be the responsibility of the site owner and/or developer.

COMMENT 5: Does the proposed remedy call for one foot of soil cover plus two feet of soil cover for a total of three feet of soil cover?

RESPONSE 5: No, the two feet of soil cover requirement applies to the proposed softball field area only, and the one foot of soil cover requirement applies to the undeveloped portion of the proposed industrial area only.

COMMENT 6: Will the railroad take any responsibility for funding the soil removal activity?

RESPONSE 6: The State and City will evaluate cost recovery options.

COMMENT 7: Will someone from the Department or the City's consultant be required to oversee the soil excavation during any development or can the developer have their own engineer oversee the project?

RESPONSE 7: While the Department may provide periodic inspections to check that the development is consistent with the Department approved site management plan, the developer will ultimately be responsible for hiring their own qualified environmental professional representative to ensure the development activities are consistent with the site management plan.

COMMENT 8: Would the remedy have to be implemented before the City received the certificate of completion? What if the City wants to sell the property before the remedy is implemented, would the purchaser (developer) acquire the responsibility of implementing the remedy?

RESPONSE 8: All remedial actions and associated documentation would need to be submitted to and approved by the Department before the certificate of completion can be released. If the City satisfies the requirements of the State Assistance Contract and receives a liability release from the Department, the City will be able to sell the property and the remedial requirements specified in the ROD would be the responsibility of the purchaser.

COMMENT 9: Will the cost of the remedy (\$1.3 million) be funded by the Department, the City or the developer?

RESPONSE 9: Currently, there is no State grant funding available, therefore funding of the remedial actions would be the responsibility of the city, or the site owner and/or developer.

COMMENT 10: Does the City have to fulfill the remedial action soil cover requirement before the City can sell the property or can the soil cover activity be implemented after the sale of the property?

RESPONSE 10: The soil cover requirement needs to be implemented before the site can be occupied or used for its intended future use. Whether the City chooses to implement the soil cover requirement prior to the sale of the site is up to the City. It should be noted that the City cannot obtain the certificate of completion until all remedial actions are satisfactorily in place. The City would be required to file an environmental easement for the site before a liability release is issued for the site.

COMMENT 11: Can the certificate of completion be received for certain portions of the property if only a section of the property is developed or sold?

RESPONSE 11: No, only one certificate of completion will be issued for the entire site.

COMMENT 12: Can the City lease the property while waiting for the certificate of completion?

RESPONSE 12: Yes, as long as the intended use would be consistent with the site restrictions.

COMMENT 13: Does the soil demarcation layer, i.e. plastic sheeting or snow fence, have to be placed under the asphalt/building areas or just under the soil areas?

RESPONSE 13: The plastic sheeting or snow fencing will only be required under the soil layers to demarcate or differentiate the soil cover from the native soil.

COMMENT 14: Will there be an additional meeting to answer questions?

RESPONSE 14: At the City's or developer's request, the Department would be willing to meet with them to answer their questions.

Therresa M. Bakner, of Whiteman, Osterman & Hanna, LLP on behalf of the City of Mechanicville, submitted a letter dated December 1, 2009 which included the following comments:

COMMENT 15: The PRAP indicates that "a one-foot thick soil cover be constructed over all vegetated areas in the undeveloped portion of the future industrial area to prevent exposure to contaminated soils." The City is considering offering the industrial area of the Mechanicville Light Industrial Park for future development pursuant to a public bidding process. The City would like to know if it will be possible to subdivide and sell off portions of the Mechanicville Light Industrial Park placing the contractual obligation to implement the remedial measure on the purchaser. Could the PRAP be modified to allow phased remediation by others pursuant to

the required institutional controls and site management plan? If so, that would be of great assistance to the City.

RESPONSE 15: Yes, site development can be phased as long as the development is consistent with the ROD, site management plan, and environmental easement. One entity will be responsible for filing the periodic review.

COMMENT 16: Please indicate whether any State funding pursuant to the Clean Water Clean Air Bond Act is available to the City that would provide funds to allow the City to undertake the remediation in either or both the recreational area and the industrial area of the Mechanicville Light Industrial Park.

RESPONSE 16: There is currently no State funding available at this time.

COMMENT 17: Please explain what would occur if the City, lacking any of its own funds or that of the State, has to indefinitely delay implementation of the remedial program. How would such a delay affect the liability protection afforded to the City by the State pursuant to the State Assistance Contract? What temporary measures (e.g. fencing) might the City have to implement?

RESPONSE 17: Site-specific measures, (i.e. fencing, signage, etc) may be required to protect the public from human health and/or environmental threats that remain at the site. Delays in remedial action implementation due to fiscal constraints would not compromise the liability protection under the State Assistance Contract.

COMMENT 18: Alternative 1 of the PRAP provides for “no further action.” Can the NYSDEC approve and the City implement a combination of the proposed alternatives for the site, i.e. no action (Alternative 1) on a portion of the property and institutional controls (Alternative 2) on another portion?

RESPONSE 18: No.

COMMENT 19: Alternative 2- Institutional Controls: Can Multiple Site Management Plans (SMPs) be implemented for various portions of the site, if property is subdivided and sold? In the event of sale (per Alternative 2) the property owner is “to complete and submit to the Department a periodic certification that controls are in place.” Is the certification limited to the terms set forth at page 14, paragraph 6 of the PRAP? Does the Department do any further inspections? Assuming the property owner does not comply with the restrictions and controls, what is the liability of the City re: (1) claims by third parties as a result of the breach; (2) compelling compliance by the property owner.

RESPONSE 19: No, there will be one site management plan, but it will be specific to the requirements of the different future use areas of the site. There will be one periodic review for the entire site. The issue of the City's future liability to others is fully addressed in RESPONSE 22 infra. Assuming that the restrictions and controls were imposed by an environmental easement granted to the State by the City, the law provides that the same would be enforceable

against the new landowner by both the State and the City [ECL 71-3605(10)]; we anticipate that any enforcement action would be taken only after due consultation under the circumstances of the particular situation.

COMMENT 20: Who prepares and pays for the site management plan?

RESPONSE 20: The State is in the process of amending the State Assistance Contract to reimburse the City for preparation of the site management plan.

COMMENT 21: Could implementation of Alternative 3 be effectuated in stages over a number of years if necessary, depending upon interest in redeveloping the site, e.g. multiple subdivisions for small economic development projects?

RESPONSE 21: Yes, site development can be phased as long as the development is consistent with the ROD, site management plan, and environmental easement. One entity will be responsible for filing the periodic review.

COMMENT 22: If the City complies with all aspects of the Remedial plan that it implements, does the State assume liability for any further claims of the property owners, lessees, employees, etc., related to environmental contamination?

RESPONSE 21: The State does not actually assume liability for claims by others based on the presence of contamination prior to the effective date of the State Assistance Contract. What the law provides is that the City is immunized against such claims based on statutory causes of action [ECL 56-0509(1)], and that the State will defend and indemnify the City, much like an insurer, against such claims based on common-law causes of action [ECL 56-0509(3)].

APPENDIX B

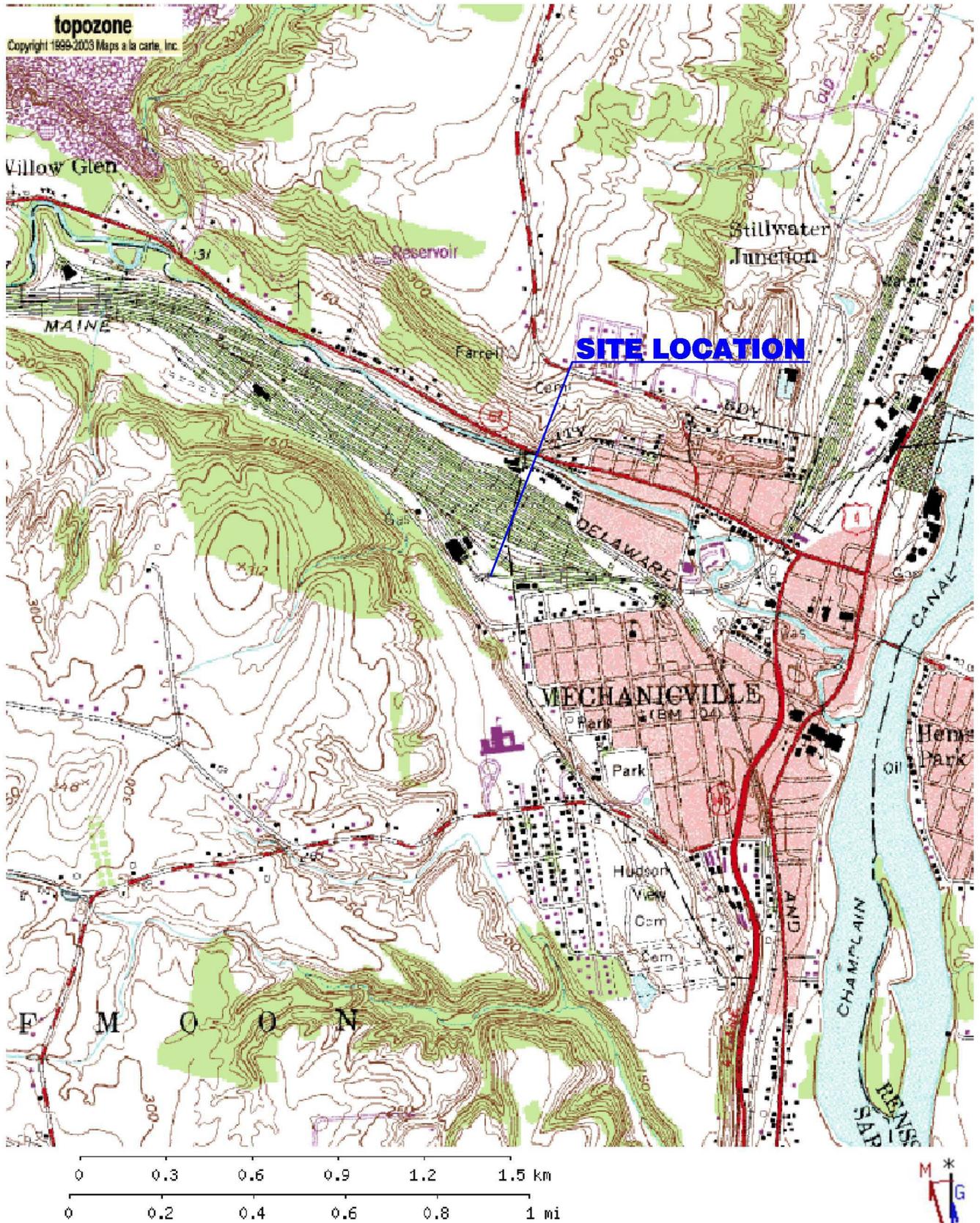
Administrative Record

Administrative Record

**Mechanicville Light Industrial Park Site
City of Mechanicville, Saratoga County, New York
Site No. E546050**

Proposed Remedial Action Plan for the Mechanicville Light Industrial Park site, dated October 2009, prepared by the Department.

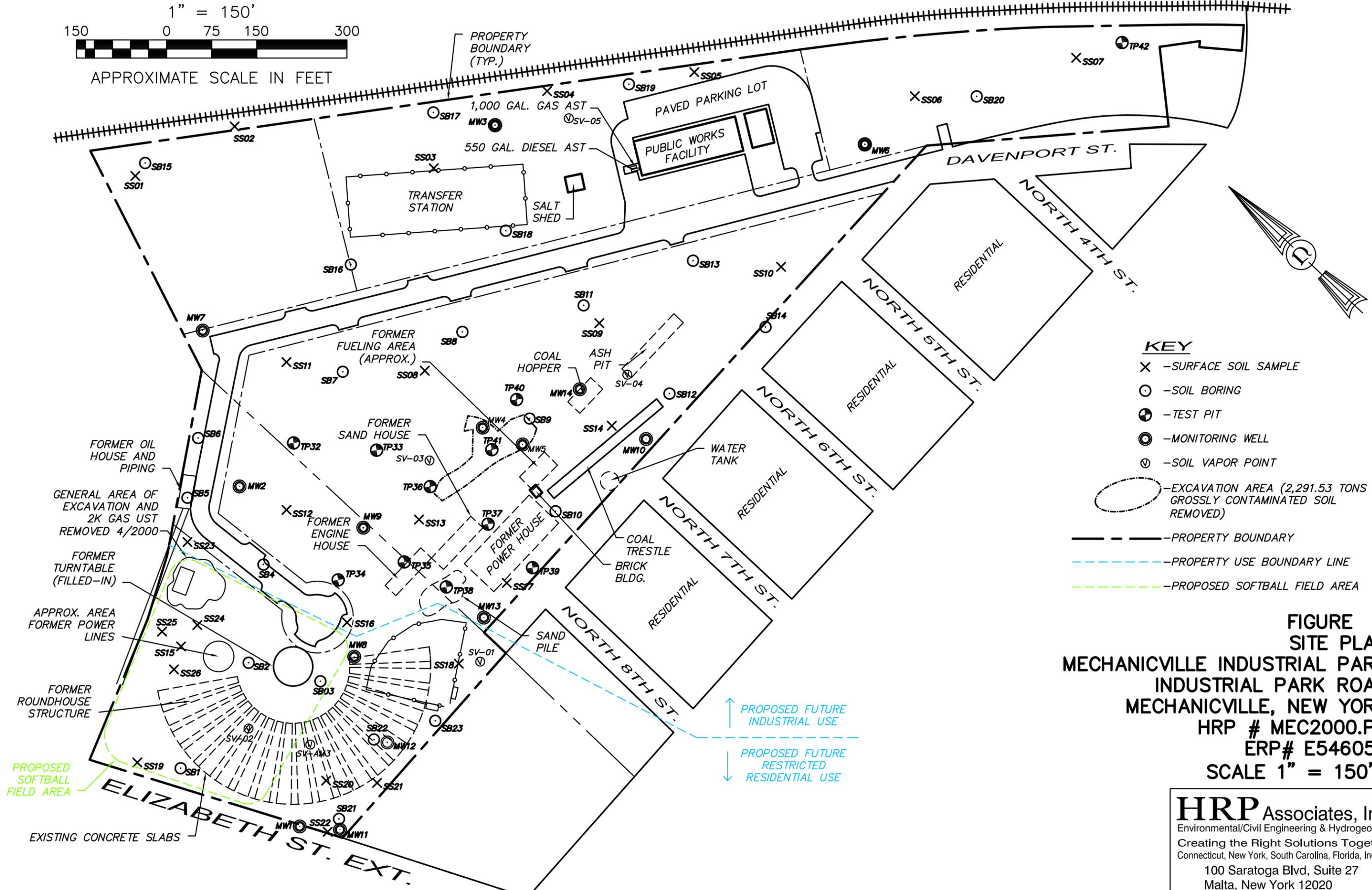
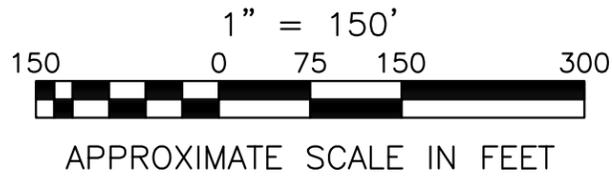
1. The Department and the City of Mechanicville entered into a State Assistance Contract, Contract No. C303093, November 5, 2006.
2. “Remedial Investigation Work Plan,” June 2007, prepared by HRP Associates, Inc.
3. Letter dated June 9, 2008, from HRP Associated, Inc.
4. “Remedial Investigation Report,” March 2009, prepared by HRP Associates, Inc.
5. “Interim Remedial Measures Addendum,” March 2009, prepared by HRP Associates, Inc.
6. “Alternatives Analysis Report,” April 2009, prepared by HRP Associates, Inc.



UTM 18 606100E 4751170N (NAD27)
USGS Mechanicville (NY) Quadrangle
Projection is UTM Zone 18 NAD83 Datum

FIGURE 1
SITE LOCATION
MECHANICVILLE
INDUSTRIAL PARK
MECHANICVILLE, NY
HRP # MEC2000.P2

M *
G
M=-14.368
G=0.885



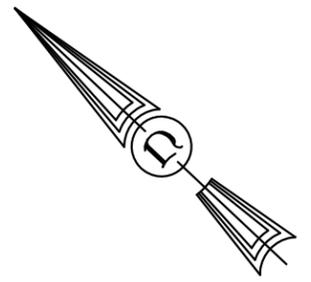
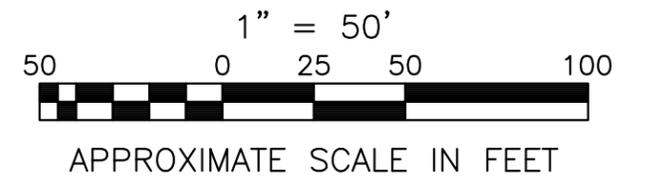
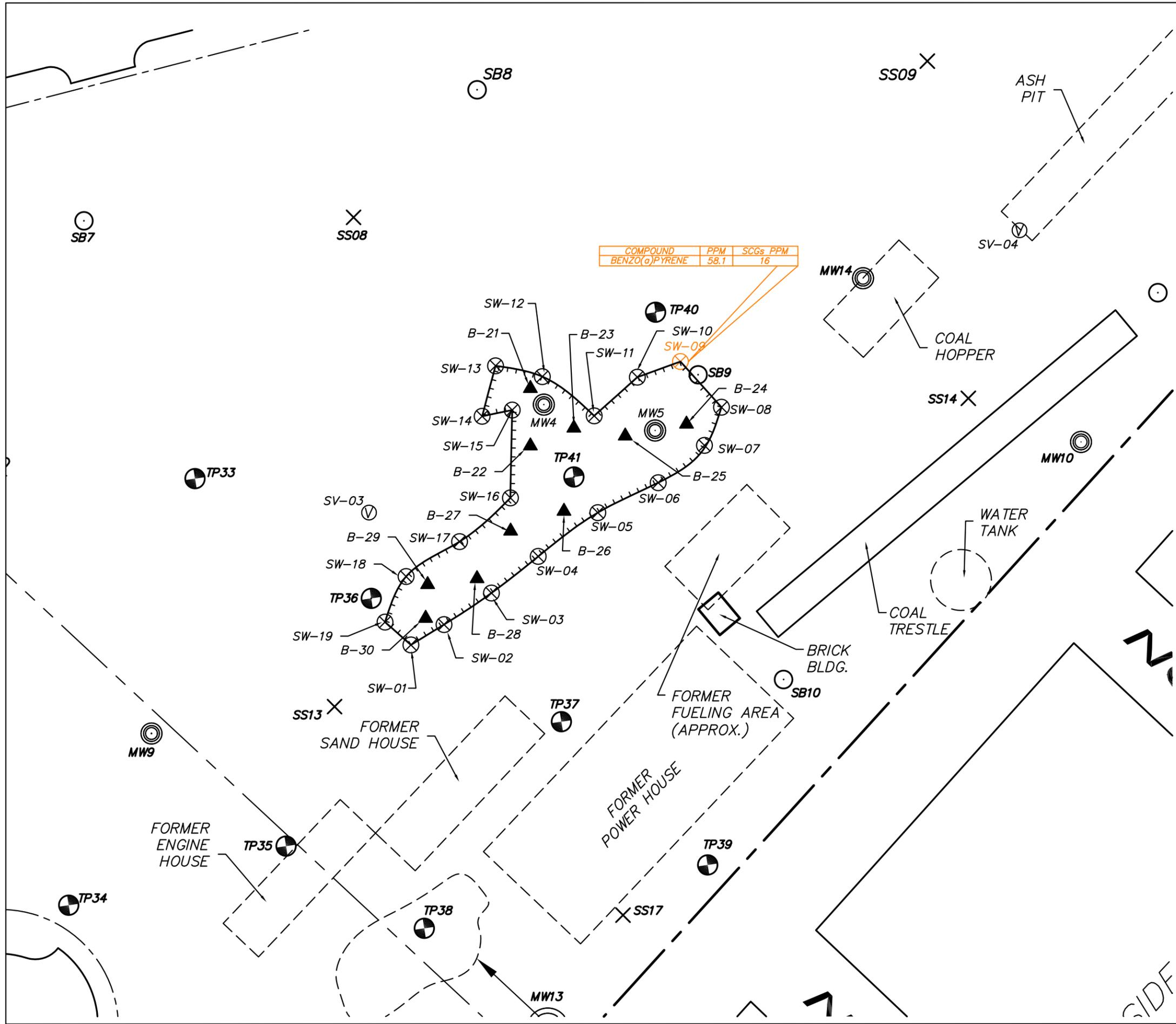
KEY

- X - SURFACE SOIL SAMPLE
- - SOIL BORING
- ⊕ - TEST PIT
- ⊙ - MONITORING WELL
- ⊖ - SOIL VAPOR POINT
- (dashed) - EXCAVATION AREA (2,291.53 TONS GROSSLY CONTAMINATED SOIL REMOVED)

- - - - - PROPERTY BOUNDARY
- · · · · PROPERTY USE BOUNDARY LINE
- - - - - PROPOSED SOFTBALL FIELD AREA

FIGURE 2
SITE PLAN
MECHANICVILLE INDUSTRIAL PARK
INDUSTRIAL PARK ROAD
MECHANICVILLE, NEW YORK
HRP # MEC2000.P2
ERP# E546050
SCALE 1" = 150'±

HRP Associates, Inc.
 Environmental/Civil Engineering & Hydrogeology
 Creating the Right Solutions Together
 Connecticut, New York, South Carolina, Florida, Indiana
 100 Saratoga Blvd, Suite 27
 Malta, New York 12020
 (518) 899-3011 FAX: (518) 899-8129
 www.hrpassociates.com



- KEY**
- X - SURFACE SOIL SAMPLE
 - - SOIL BORING
 - ⊙ - TEST PIT
 - ⊗ - MONITORING WELL
 - ⊕ - SOIL VAPOR POINT
 - ⊗ - SIDEWALL SAMPLE OF EXCAVATION
 - ⊖ - EXCAVATION AREA (2,291.53 TONS GROSSLY CONTAMINATED SOIL REMOVED)
 - ▲ - BOTTOM SAMPLE OF EXCAVATION
 - SW-09 ⊗ - EXCEEDANCE OF PART 375 INDUSTRIAL SCGS

FIGURE 2A
SITE PLAN SHOWING EXCEEDANCES
IN IRM EXCAVATED AREA
MECHANICVILLE INDUSTRIAL PARK
INDUSTRIAL PARK ROAD
MECHANICVILLE, NEW YORK
HRP # MEC2000.P2
ERP# E546050
SCALE 1" = 50'±

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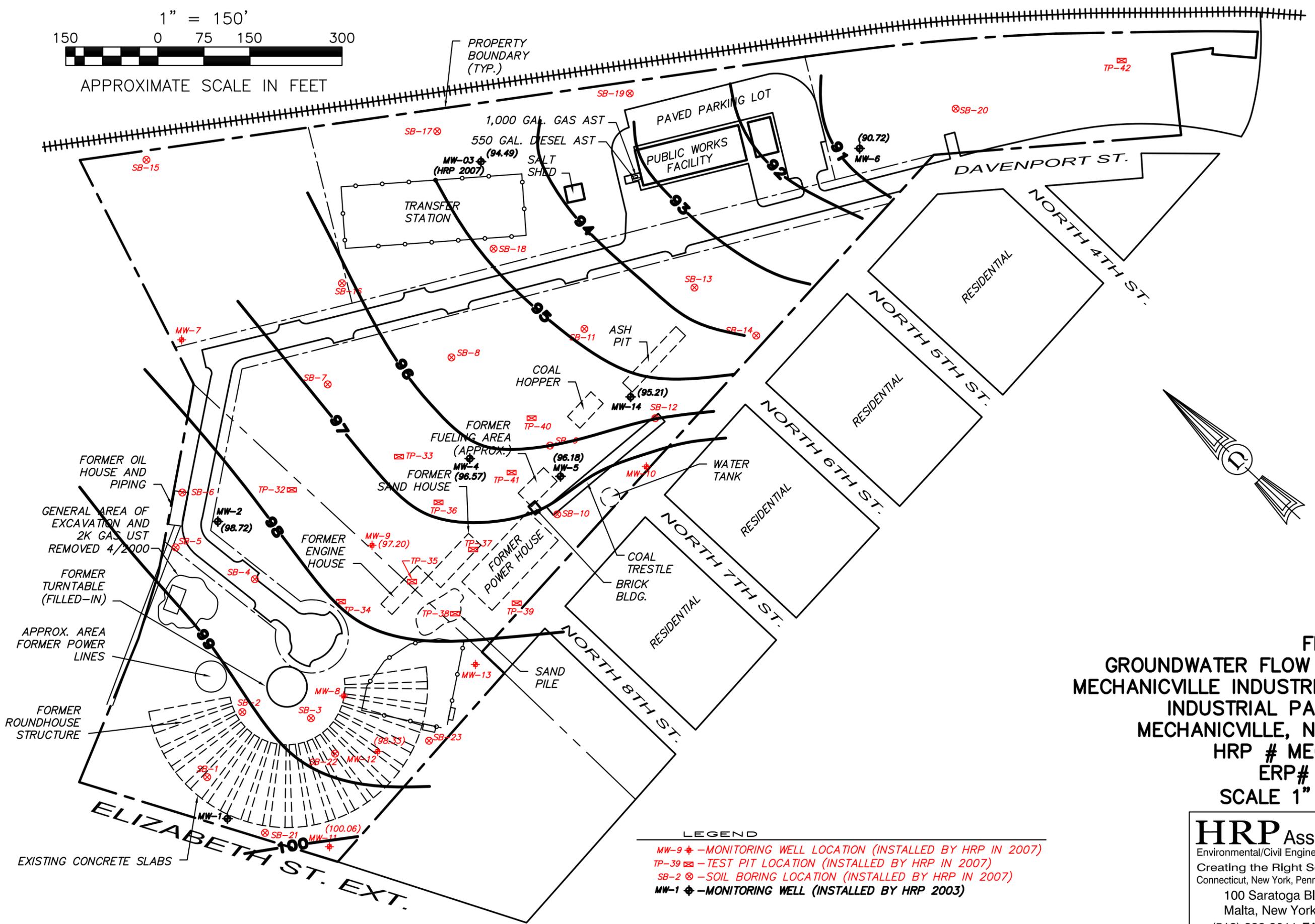
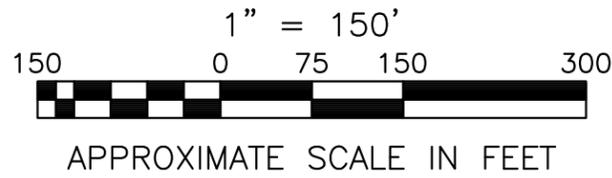
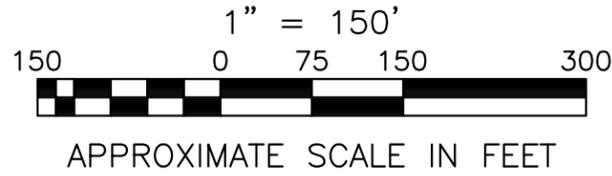


FIGURE 3
GROUNDWATER FLOW DIAGRAM
MECHANICVILLE INDUSTRIAL PARK
INDUSTRIAL PARK ROAD
MECHANICVILLE, NEW YORK
 HRP # MEC2001.P2
 ERP# E546050
 SCALE 1" = 150'±

- LEGEND**
- MW-9 + - MONITORING WELL LOCATION (INSTALLED BY HRP IN 2007)
 - TP-39 ⊠ - TEST PIT LOCATION (INSTALLED BY HRP IN 2007)
 - SB-2 ⊗ - SOIL BORING LOCATION (INSTALLED BY HRP IN 2007)
 - MW-1 ◆ - MONITORING WELL (INSTALLED BY HRP 2003)

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J:\M\MECHICVILLE\MECHANICVILLE INDUSTRIAL PARK, MECHANICVILLE, NY\MEC2001P2\CAD\GROUNDWATER CONTOURS.dwg, Layout1, 11/14/2008 2:27:13 PM, Adobe PDF, Plot stamp



COMPOUND	PPM	SCGs PPM
ARSENIC	24.1	16

COMPOUND	PPM	SCGs PPM
BENZO(a)PYRENE	2.2	1.1
ARSENIC	35.4	16

COMPOUND	PPM	SCGs PPM
BENZO(a)PYRENE	1.6	1.1
ARSENIC	22	16

COMPOUND	PPM	SCGs PPM
ARSENIC	65.3	16

COMPOUND	PPM	SCGs PPM
BENZO(a)PYRENE	58.1	16

COMPOUND	PPM	SCGs PPM
BENZO(a)PYRENE	2.5	1.1

COMPOUND	PPM	SCGs PPM
ARSENIC	51.5	16

COMPOUND	PPM	SCGs PPM
ARSENIC	27	16

COMPOUND	PPM	SCGs PPM
ARSENIC	16.4	16

- KEY**
- X - SURFACE SOIL SAMPLE
 - - SOIL BORING
 - ⊕ - TEST PIT
 - ⊙ - MONITORING WELL
 - ⊖ - SOIL VAPOR POINT
 - (dashed) - EXCAVATION AREA (2,291.53 TONS GROSSLY CONTAMINATED SOIL REMOVED)
 - - PROPERTY BOUNDARY
 - - - - - PROPERTY USE BOUNDARY LINE
 - - - - - PROPOSED SOFTBALL FIELD AREA
 - SS13 X - EXCEEDANCE OF PART 375 INDUSTRIAL SCGs

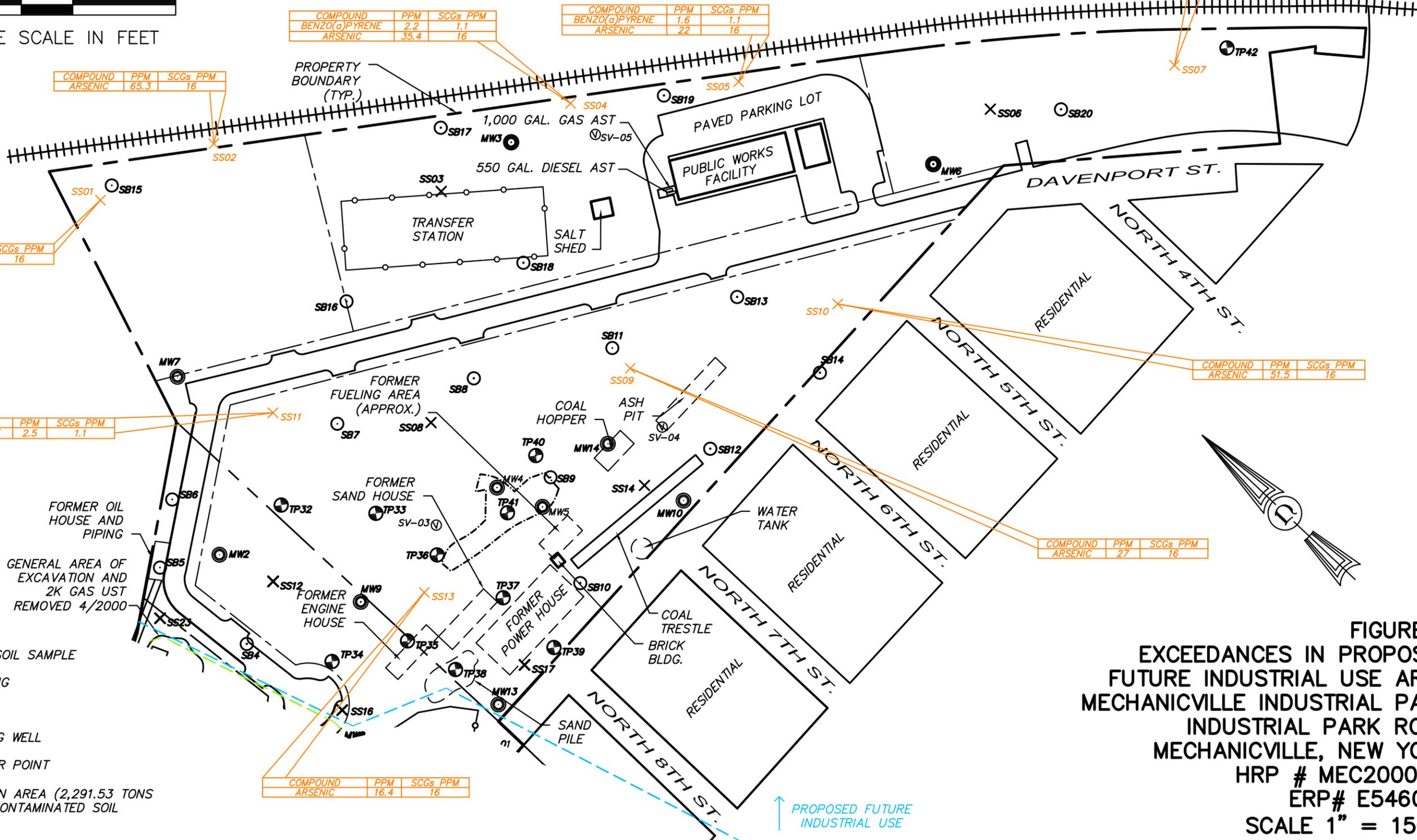


FIGURE 4
EXCEEDANCES IN PROPOSED
FUTURE INDUSTRIAL USE AREA
MECHANICVILLE INDUSTRIAL PARK
INDUSTRIAL PARK ROAD
MECHANICVILLE, NEW YORK
HRP # MEC2000.P2
ERP# E546050
SCALE 1" = 150'±

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COMPOUND	PPB	SCGs PPB
BENZO(A)ANTHRACENE	1800	1000
BENO(B)FLUORANTHENE	3600	1000
BENZO(A)PYRENE	2300	1000
INDEND(1,2,3-CD)PYRENE	1100	500

COMPOUND	PPB	SCGs PPB
BENZO(A)ANTHRACENE	8900	1000
CHRYSENE	8500	3900
BENO(B)FLUORANTHENE	11000	1000
BENZO(A)PYRENE	7400	1000
INDEND(1,2,3-CD)PYRENE	320	500
DIBENZ(A,H)ANTHRACENE	710	330

COMPOUND	PPB	SCGs PPB
PHENANTHRENE	120000	100000
FLOURANTHENE	130000	100000
PYRENE	110000	100000
BENZO(A)ANTHRACENE	78000	1000
CHRYSENE	61000	3900
BENO(B)FLUORANTHENE	63000	1000
BENZO(A)PYRENE	19000	1000
INDEND(1,2,3-CD)PYRENE	32000	500
DIBENZ(A,H)ANTHRACENE	3000	330

COMPOUND	PPB	SCGs PPB
MANGANESE	5570	2000

KEY

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- ⊙ - TEST PIT
- ⊕ - MONITORING WELL
- ⊖ - SOIL VAPOR POINT

- - - - - PROPERTY BOUNDARY
- - - - - PROPERTY USE BOUNDARY LINE
- - - - - PROPOSED SOFTBALL FIELD AREA

SS24 X - SVOC COMPOUNDS EXCEEDING PART 375 RESTRICTED RESIDENTIAL SCGs

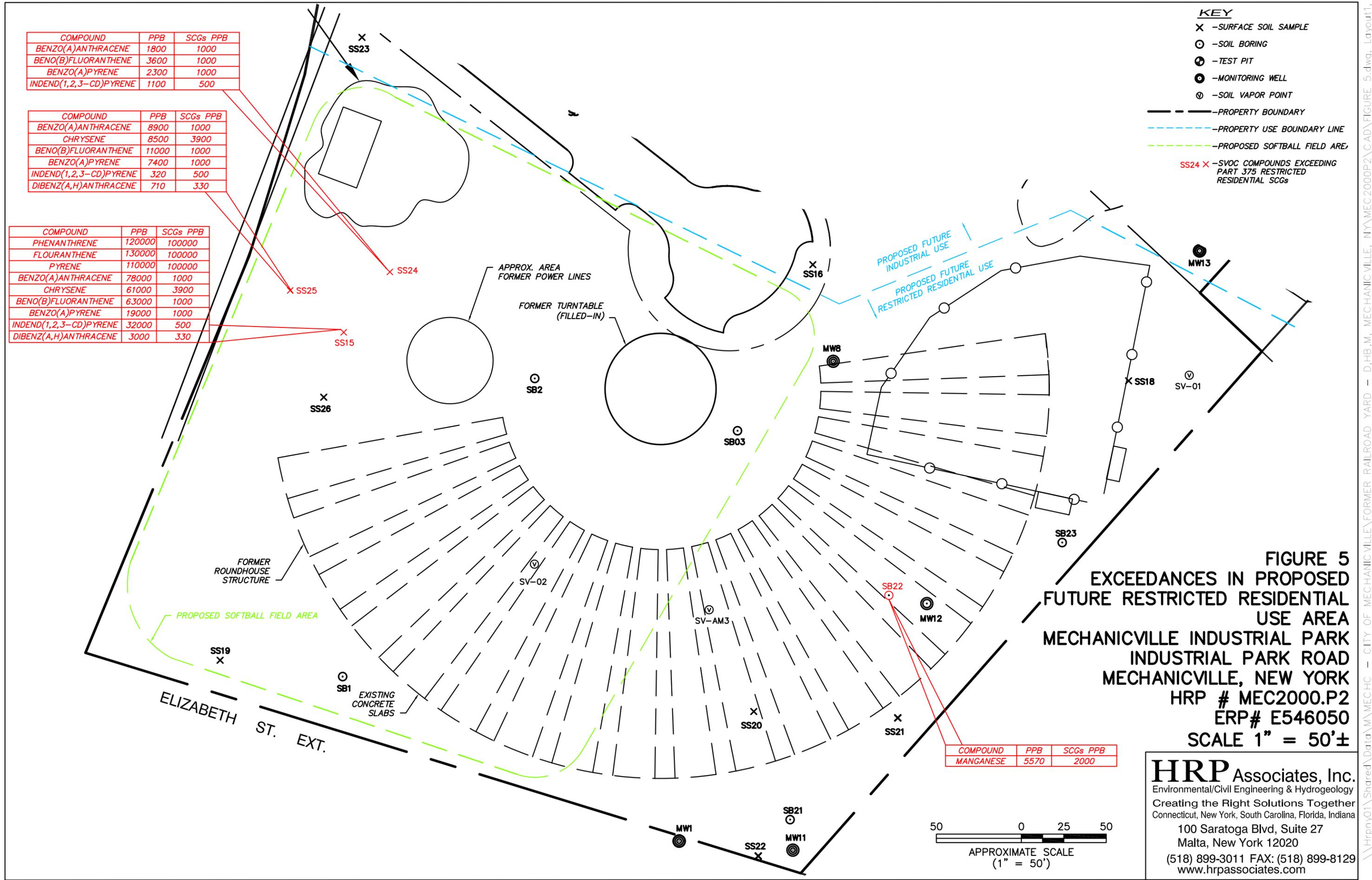


FIGURE 5
EXCEEDANCES IN PROPOSED
FUTURE RESTRICTED RESIDENTIAL
USE AREA
MECHANICVILLE INDUSTRIAL PARK
INDUSTRIAL PARK ROAD
MECHANICVILLE, NEW YORK
HRP # MEC2000.P2
ERP# E546050
SCALE 1" = 50'±

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