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November 17, 2016 *** **VIA E-MAIL: michael.belveg@dec.ny.gov** ***

Mr. Michael Belveg
Environmental Engineer I
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation, Region 7
615 Erie Boulevard West
Syracuse, New York 13204-2400

RE: Former National Plating Site
1501 Brewerton Road
Town of Salina, Onondaga County, New York
DEC Site No. V00264
Project No. 2010150

Dear Mr. Belveg:

We offer the following in response to your September 13, 2016 letter requesting additional information and outlining additional tasks required for the Former National Plating Voluntary Cleanup Project (VCP) Site:

- A Site Summary Report outlining the work previously performed at the site, including the most recent field activities, is attached.

- A Chronological Listing of Relevant Documents, including all previous final reports and work plans prepared for this site, is attached.

- A Soil Vapor Intrusion Investigation Work Plan has been developed for the property border of the site in the direction where occupied buildings and the sidewalk are located, and a copy is attached.

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A Final Engineering Report (FER) with as-builts and an Operation, Maintenance and Monitoring (OM&M) Plan will be developed following completion of the Soil Vapor Intrusion Investigation, and submitted to the Department.

Thank you for your consideration in this matter. If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

PLUMLEY ENGINEERING, P.C.

Dale R. Vollmer, P.E.

DRV/cas
Attachments
cc: Mr. Dennis Hile (w/attachments) [via e-mail: Dennishile@aol.com]
Mr. Richard Jones, NYSDOH (w/attachments) [via e-mail: rej05@health.state.ny.us]

SITE SUMMARY REPORT

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SITE SUMMARY REPORT

for the

FORMER NATIONAL PLATING SITE
1501 Brewerton Road
Town of Salina, Onondaga County, New York
DEC Site No. V00264
Project No. 2010150

November 2016

BACKGROUND AND SITE DESCRIPTION

The former National Plating Company, Inc. (National Plating) site is located at 1501 Brewerton Road in the Town of Salina, Onondaga County, New York. The property consists of tax parcel 073.-01-04.0, owned by D.J.H. Realty Corporation. Onondaga County tax records indicate the property totals approximately 1 acre in size. The property is bordered to the north by Paratore Signs, Inc., to the south and west by the former Town of Salina Landfill, and to the east by Brewerton Road and residences. Ley Creek is located south of the former Town of Salina Landfill, which is a New York State Inactive Hazardous Waste Site (Site No. 734036). Refer to the attached *Figure 1 – Site Layout* for additional information, including metes and bounds.

National Plating, a metal plating facility specializing in decorative and industrial metal finishing, reportedly operated on the site from the early 1950's to 2002. Process wastewater was discharged to the municipal sanitary system, with pretreatment of the wastewater in the later years of operation. The business was sold in 1999 and operations were subsequently discontinued in 2002. The facility is currently used for light industrial purposes.

PRELIMINARY INVESTIGATIONS

Four surface soil samples were collected as part of an environmental compliance audit in 1987. The samples indicated elevated concentrations of cyanide, chromium, nickel, cadmium and zinc

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in the surface soils, especially off the western and northern edges of the pavement behind the building.

TAMS Consultants, Inc. prepared a Site Summary Report for the property in August 1997 as part of a broader investigation of the Onondaga Lake drainage basin. The report concluded the following:

- The most likely potential source of impacts to the Onondaga Lake system was from wastewater discharged to the municipal sanitary sewer system.

- Available data collected as part of the Salina Town Landfill investigation indicated contamination of soil and groundwater in the vicinity of National Plating was likely associated with the adjacent Landfill.

- Limited soil data collected from the edges of the National Plating property (apparently the previously discussed 1987 data) may have been caused from onsite operations.

O'Brien & Gere Engineers, Inc. prepared a Phase I Environmental Site Assessment (ESA) of the property on May 5, 1999 for a potential buyer. The Phase I ESA recommended a Phase II investigation be performed. It is unknown if any further investigation was conducted at that time.

VOLUNTARY CLEANUP PROGRAM INVESTIGATIONS

An application for inclusion in the New York State Department of Environmental Conservation (DEC) Voluntary Cleanup Program (VCP) was submitted to the DEC on May 6, 2003 on behalf of two volunteers, D.J.H. Realty Corporation (property owner) and BMH Liquidation, Inc. (former operator). The application was accepted by the DEC and Site No. V00264 was assigned.

ENSR International completed a subsurface investigation under an approved work plan in 2004. Five soil borings and three groundwater monitoring wells were installed. The investigation results identified soil and groundwater impacts from metals and chlorinated solvents. A soil sample from beneath the former wastewater sump inside the building had the highest concentrations of volatile organic compounds (VOCs). Total VOCs was reported to be 38.7

milligrams per kilogram (mg/kg), with trichloroethene (TCE) and 1,2-dichloroethene (DCE) exceeding Protection of Groundwater soil cleanup objectives (SCOs), but below Restricted Industrial Use SCOs. Groundwater impacts were identified at the property line south of the building and downgradient of the former sump.

INTERIM REMEDIAL MEASURE AND FURTHER INVESTIGATIONS

The DEC approved a revised Supplemental Investigation Work Plan, a revised Interim Remedial Measures (IRM) Work Plan and an Employee Fact Sheet on September 30, 2011. The Supplemental Investigation Work Plan included the following proposed actions:

- An IRM was proposed to excavate impacted soils from beneath the sump structure and collect confirmation samples from the excavation rather than placing additional borings in the vicinity of the former sump. A groundwater monitoring well (MW-4) was also proposed to be installed in the excavation.

- Two additional groundwater monitoring wells (MW-5 and MW-6) were proposed to further investigate potential impacts to groundwater along the southern (downgradient) site boundary.

The IRM was implemented on November 18, 2011 and the operation was documented in the April 2012 Remedial Excavation Report. The concrete floor surrounding the former sump structure was saw-cut approximately 2 feet beyond the anticipated excavation limits. The sump structure was then removed and impacted soils were excavated to a depth of 9 feet below ground surface (bgs). The excavation area was limited by structural columns and heavy machinery. The progress of the excavation was monitored visually and with a photoionization detection (PID) meter. Excavated soil was placed on 10-mil polyethylene sheeting and covered with polyethylene sheeting at the end of the day. Two confirmation soil samples were collected, one from the bottom and one from the south sidewall of the excavation, and submitted for analyses for VOCs, semi-volatile organic compounds (SVOCs), metals and polychlorinated biphenyls (PCBs) and comparison to SCOs. The analytical results indicated no SVOCs, metals or PCBs were detected at concentrations greater than Restricted Commercial Use or Restricted Industrial Use SCOs. TCE was detected at a concentration of 198 mg/kg in the excavation bottom sample, which is close to the Restricted Commercial Use SCO of 200 mg/kg, but well below the

Restricted Industrial Use SCO of 400 mg/kg. Concentrations of metals were less than Restricted Industrial Use SCOs, but cadmium was reported at a concentration of 27 mg/kg in the excavation sidewall sample, which exceeds the Restricted Commercial Use SCO of 9.3 mg/kg.

Filter fabric was placed in the excavation following completion of the remedial excavation activities. A 4-inch diameter vertical well (MW-4) was installed in the excavation for future use in monitoring groundwater quality. Two perforated piping loops were then installed in the excavation for future remedial use, if deemed necessary. Both loops, a lower loop at approximately 8 feet bgs and an upper loop approximately 6 to 10 inches below floor level, were constructed of 4-inch Schedule 40 polyvinyl chloride (PVC) perforated piping and connected to 2-inch risers that were extended above the floor level and capped. The excavation was then backfilled with washed No. 2 rounded sandstone gravel.

Approximately 25 tons of impacted soil was removed from the excavation and transported to CWM Chemical Services Landfill in Model City, New York for disposal.

As recommended in the April 2012 Remedial Excavation Report and outlined in the March 2011 Supplemental Investigation Work Plan, additional investigation work was performed prior to determining a future course of action. This work was documented in a February 25, 2013 letter report, prepared as a supplement to the Remedial Excavation Report, and included the following:

- Monitoring wells MW-5 and MW-6 were installed downgradient of the former sump area on June 11, 2012 to investigate potential impacts to groundwater. One soil sample was collected at a depth between 6 to 8 feet bgs from the MW-5 boring, prior to installation of the well.

- Replacement well MW-3A and shallow soil borings SB-2 and SB-3 were also installed. Soil samples were collected from the two new soil borings from depths of 0 to 2 feet bgs and analyzed for site contaminant list VOCs.

- Plumley Engineering collected groundwater samples from monitoring wells MW-1 through MW-6 on June 22 and 25, 2012. The samples were analyzed for Target Compound List (TCL) VOCs. Groundwater samples from MW-2 and MW-4 were also analyzed for TCL SVOCs, Target Analyte List (TAL) metals and PCBs.

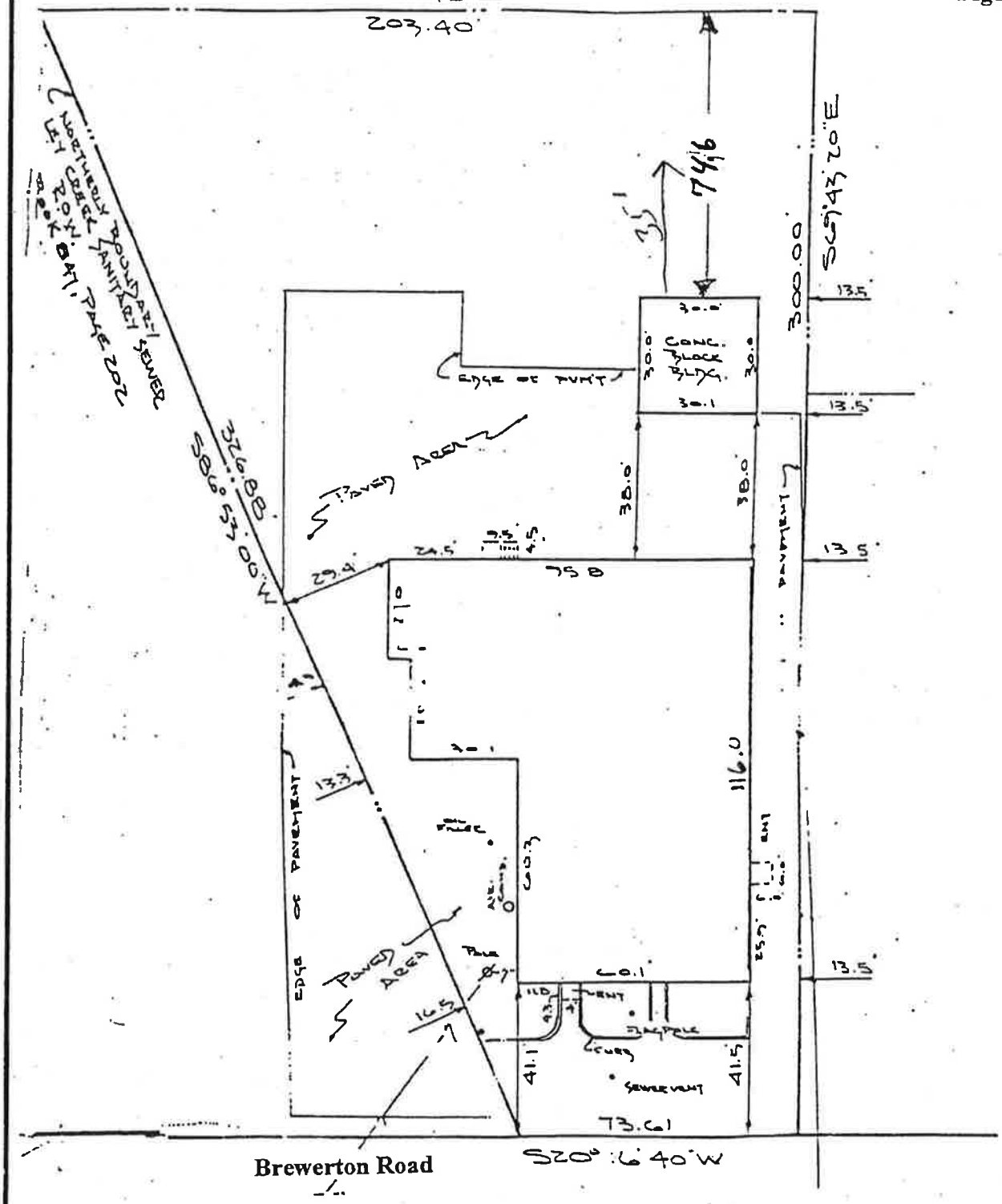
Analytical results from the soil samples indicated no VOC concentrations greater than the laboratory method detection limit (MDL). All detected metals were found at concentrations less than Unrestricted Use SCOs.

Groundwater samples collected from the well located in the remedial excavation, MW-4, contained the highest concentrations of VOCs, including TCE at 105,000 micrograms per liter (µg/L). The groundwater sample from the closest downgradient well, MW-2, had the second highest concentrations of VOCs. Upgradient well MW-1 and cross-gradient well MW-3A contained no VOCs greater than laboratory MDLs.

The February 25, 2013 letter report concluded that VOC concentrations in downgradient well MW-2 had decreased since the 2004 sample event. The report further recommended a pilot test consisting of three injections of a chemical oxidant into the former sump location (MW-4) in March, June and August 2013, and the collection of groundwater samples from MW-2, MW-4 and MW-6 in October 2013.

Per DEC and Environmental Protection Agency (EPA) approvals, injections of sodium permanganate were made through the perforated piping installed during the remediation of the former sump. These injections occurred on April 28 and May 27, 2015. Water in the former sump area excavation was recirculated on September 15, 2015. Monitoring wells MW-2, MW-5 and MW-6 were sampled following each of these events. Total VOCs have decreased from 411 to 6 µg/L in downgradient well MW-2 and to less than detection limits in MW-5. Concentrations varied from 15 to 36 µg/L in samples from MW-6 during this time period. Refer to the attached *Table 1 – Summary of Historical Groundwater Analytical Results* for a summary of historical total VOC data.

Figure 1



National Plating, Inc.
1501 Brewerton Road
Syracuse, New York

SITE LAYOUT

10062/23640

5/20/99

063397

FORMER NATIONAL PLATING SITE
1501 Brewerton Road
Town of Salina, Onondaga County, New York
DEC Site No. V00264

TABLE 1 - SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TOTAL VOCs (µg/L) - EPA METHOD 8260

SAMPLE DATE	MW-1	MW-2	MW-3/3A	MW-4	MW-5	MW-6
	Upgradient	Downgradient	Crossgradient	Source Area	Downgradient	Downgradient
12/01/2004	ND<	411	4	NI	NI	NI
11/18/2011	Remedial Excavation of Source Area					
06/22/2012	ND<	26	ND	145,631	4	29
04/28/2015	NS	6	NS	716	NS	31
04/28/2015	Sodium Permanganate Chemox Injection to Source Area					
05/27/2015	NS	6	NS	NS*	ND<	15
05/27/2015	Sodium Permanganate Chemox Injection to Source Area					
06/22/2015	NS	NS	NS	NS*	NS	NS
07/06/2015	NS	10	NS	NS*	ND<	15
09/14/2015	Recriculation of Excavation (Former Sump Area) Water					
07/14/2016	NS	6	NS	NS	NS	36

Notes:

VOCs Volatile organic compounds
µg/L micrograms per liter, equivalent to parts per billion (ppb)
ND< Not detected, less than detecion limit
NI Not installed
* Residual permangante present

CHRONOLOGICAL LISTING OF RELEVANT PROJECTS

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CHRONOLOGICAL LISTING OF RELEVANT DOCUMENTS

for the

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Project No. 2010150

November 2016

June 26, 1987 .....Environmental Audit – O'Brien & Gere Engineers, Inc.

January 4, 1996 .....EPA/DEC Joint Request for Information

January 12, 1996 .....EPA/DEC Joint Request for Information

January 23, 1996 .....Response to January 4 and 12, 1996 Joint Requests for Information

August 1997 .....Site ID 251: National Plating, Inc. Site Summary Report, Revision 1 – TAMS Consultants, Inc.

May 5, 1999 .....Phase I Environmental Site Assessment – O'Brien & Gere Engineers, Inc.

May 6, 2003 .....VCP Application

July 2004.....VCP Investigation Work Plan - ENSR

February 2005 .....Site Investigation Report -

March 2011 .....Revised IRM Work Plan

September 20, 2011 ...Supplemental Investigation Work Plan approved by DEC

September 30, 2011 ...Revised IRM Work Plan approved by DEC

April 2012 .....Remedial Excavation Report (IRM Report) – Plumley Engineering

February 25, 2013 .....Supplemental Investigation Report – Plumley Engineering

September 13, 2016 ...DEC Project Response Letter

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SOIL VAPOR INTRUSION INVESTIGATION WORK PLAN

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SOIL VAPOR INTRUSION INVESTIGATION WORK PLAN

for the

FORMER NATIONAL PLATING SITE
1501 Brewerton Road
Town of Salina, Onondaga County, New York
DEC Site No. V00264
Project No. 2010150

November 2016

The Former National Plating Site, located at 1501 Brewerton Road in the Town of Salina, Onondaga County, New York, has been investigated and remediated through the New York State Department of Environmental Conservation (DEC) Voluntary Cleanup Program (VCP). The investigation and remediation phases of the VCP process have been largely completed.

A September 13, 2016 letter from the DEC requested that a Soil Vapor Intrusion Investigation Work Plan be prepared for the property border of the site in the direction where occupied buildings and the sidewalk are located. A building adjacent to the site to the north is occupied by Paratore Signs. Although a public sidewalk is not present at the site, a common paved driveway to the east provides access to both the site and Paratore Signs. This access drive is separated from Brewerton Road by a narrow lawn area.

As noted in DEC Program Policy *DER-13 / Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York*, the first step in determining the potential for soil vapor intrusion conditions is to perform a suitable site evaluation. DER-13 presents several weighting factors for evaluating volatile organic compounds (VOCs) in both soils and groundwater. The weighting factors place a priority on sites where chlorinated VOCs (CVOCs) are present, such as the Former National Plating Site.

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SOIL

For soils, weighting factors include the following:

- CVOC concentrations
- Depth to soil contamination
- Soil characteristics
- Land use above contaminated soil

CVOC Concentration

As noted in the April 2012 Remedial Excavation Report, soil samples from the bottom and south sidewall of the completed excavation did not contain VOCs exceeding Restricted Commercial Use soil cleanup objectives (SCOs). The highest concentration identified was for the CVOC trichloroethene (TCE), reported at 198 milligrams per kilogram (mg/kg) in the bottom sample collected from a depth of 9 feet below ground surface (bgs). This concentration is slightly less than the Restricted Commercial Use SCO of 200 mg/kg and based on a scale of 1 to 6, results in a weighting factor of 3.

Depth to Soil Contamination

The sidewall sample was collected from the excavation following the removal of impacted soil from a depth of 6 feet bgs, resulting in a weighting factor of 4.

Soil Characteristics

The boring logs from on-site soil borings indicate a layer of fill is present across much of the site, with larger depths of fill toward the southern areas. Silty clay layers underlie the fill, resulting in a weighting factor of 2.

Land Use Above Contaminated Soil

The groundwater flow direction, based on groundwater elevation data collected July 6, 2015, is shown on the attached *Figure 1 – Site Plan*. Groundwater flows to the southwest away from the Paratore Signs building to the north. Pedestrian traffic can occur along the access driveway located to the east, in a side-gradient location. Land use above contaminated soil results in a weighting factor of 3.

GROUNDWATER

For groundwater, weighting factors include the following:

- CVOC concentrations
- Depth to groundwater
- Soil characteristics
- Land use above contaminated groundwater

CVOC Concentration

Monitoring well MW-1 is located upgradient of the remedial excavation and is the closest well to the adjacent occupied building. No detectable concentrations of CVOCs were reported in groundwater samples collected from MW-1 in 2004 and 2012, resulting in a weighting factor of 1. Monitoring wells are not present in the immediate area of the access drive between the site building and Brewerton Road.

Depth to Groundwater

Although CVOCs have not been detected in monitoring well MW-1, the depth to groundwater of approximately 4 feet results in a weighting factor of 6.

Soil Characteristics

Fill material is not noted on the boring log for MW-1, other than 4 inches of asphalt. Underlying soils near the adjacent occupied building are noted as clays and silts. These soil characteristics result in a weighting factor of 2.

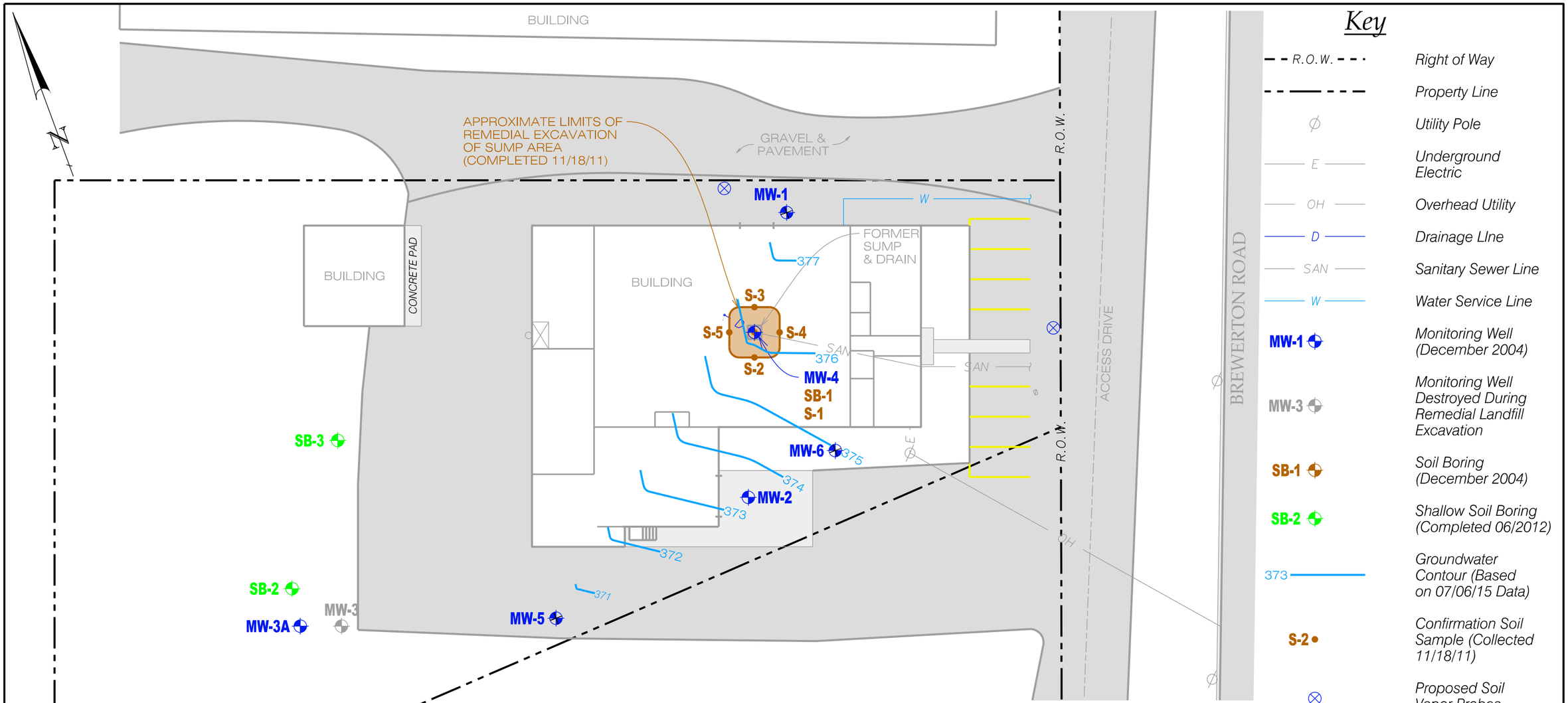
Land Use Above Contaminated Groundwater

Monitoring well MW-1 is located between the remediated area and the Paratore building to the north. No detectable quantities of VOCs have been identified. Land use above contaminated groundwater results in a weighting factor of 1.

SUMMARY

Due to the upgradient and side-gradient locations of the adjacent Paratore Signs building and paved access road, the potential for soil vapor issues at these locations are considered to be low. Soil vapor probes will be installed at two locations to more definitively investigate whether soil vapor issues exist in the direction where occupied buildings and the paved access drive are located. The probes will be installed along the north property line directly between the remediated area and the Paratore Signs building, and along the eastern property line closest to the remediated area. Refer to the attached *Figure 1 – Site Plan* for additional information.

The probes will be installed and sampled in accordance with the New York State Department of Health *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. New York State does not have standards, criteria or guidance values for concentrations of volatile compound in subsurface vapors. However, for guidance purposes, the analytical results will be compared to the Ambient Air Guideline for Trichloroethene of 2 micrograms per cubic meter.



Basemap References:

1. *"Groundwater Flow Map, Former National Plating Facility, 1501 Brewerton Road, Syracuse, New York" Prepared by: ENSR International; Dated: February 10, 2005; Project No.: 10160-004.*

2. *"National Plating, Inc., 1501 Brewerton Road, Syracuse, New York, Site Layout" Dated: May 20, 1999.*

Plan View

1" = 30' SCALE — 15 0 15 30 FEET

DEC SITE: VCP00265-7

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REVISIONS: DATE: BY:

PROJECT: FORMER NATIONAL PLATING

DWG. TITLE: SITE PLAN

CLIENT: D.H.J. REALTY CORP.

LOCATION: TOWN OF SALINA, ONONDAGA COUNTY, NEW YORK

PROJECT No.: 2010150
FILE NAME.: GWC_11-11-16
SCALE: AS NOTED
DATE: OCT. 2016
ENG'D BY: DKM
DRAWN BY: MGT
CHECKED BY: DRV

SHEET NO.:

FIGURE 1