NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
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May 21, 2020

Klauss Rekitt
c/o Ronald Hull, Esq.
Heisman Nunes & Hull, LLP
69 Cascade Drive, Suite 102
Rochester, New York 14614

Re: Ex-Eaton Site (#C819022)
22-40 Clinton Street, Batavia, Genesee County
Surficial Soil Sampling Work Plan
April 30, 2020

Dear Mr. Rekitt;

The New York State Departments of Environmental Conservation (NYSDEC) and Health (collectively referred to as the Departments) have completed their review of the document entitled *"Surficial Soil Sampling Work Plan"* (the Work Plan) dated April 30, 2020 and prepared by GHD for the Ex-Eaton site. In accordance with 6 NYCRR Part 375-1.6, the Departments have determined that the Work Plan substantially addresses the requirements of the Brownfield Cleanup Program. The Work Plan is herby approved.

The approved Master Schedule dated February 5, 2020 will be adhered to as part of the Work Plan. The schedule is enforceable under the Brownfield Cleanup Agreement and is not 'tentative'. Request for surficial soil sampling fieldwork to be revised to start May 26 to June 5 is hereby approved. Further extensions to the approved schedule must be requested in writing and approved by the NYSDEC.

Please notify me at least 7 days in advance of the start of field activities.

By June 21, 2020 or prior to the start of field activities, which ever comes first, please attach a copy of this letter to the Work Plan and distribute the approved Work Plan as follows:

- Tasha Mumbrue (1 hard copy with an original signature);
- Julia Kenney (NYSDOH, electronic file/CD)
- The document repository at the Richmond Memorial Library, located at

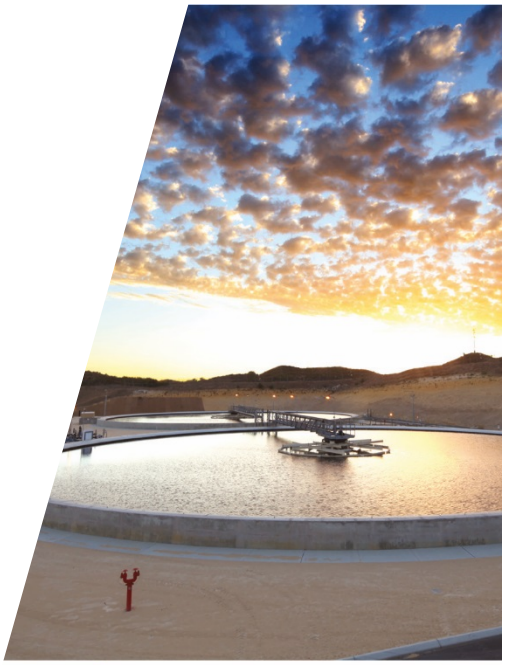
19 Ross Street, Batavia, NY14020 (1 bound hard copy).

If you have questions or concerns, please contact me at (585) 226-5459 or tasha.mumbrue@dec.ny.gov.

Sincerely,

Tasha Mumbrue
Geologist Trainee

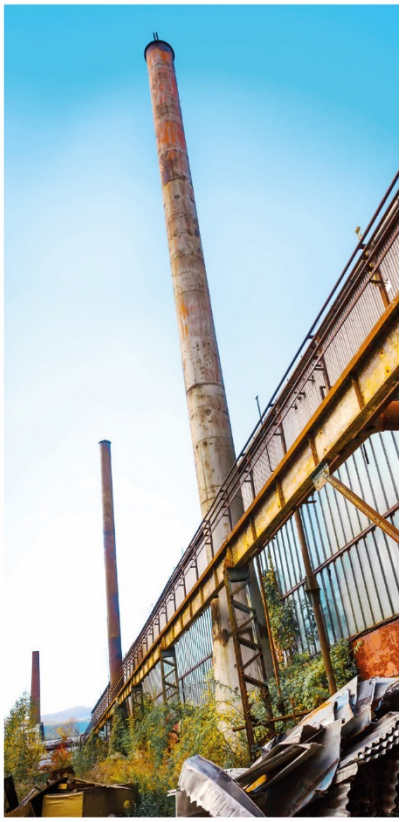
ec: Ronald Hull, HNH LLP
Dennis Hoyt, GHD
Margaret Popek, GHD
Julia Kenney, NYSDOH
Justin Deming, NYSDOH
Michael Cruden, NYSDEC
David Pratt, NYSDEC
Frank Sowers, NYSDEC
Lisa Schwartz, NYSDEC



Surficial Soil Sampling Work Plan

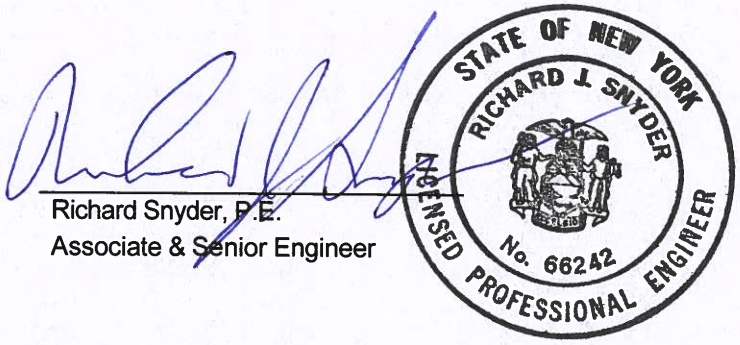
Ex-Eaton Site
34-40 Clinton Street
Batavia, New York
Site No. C819022

CNH Industrial Baumaschinen GmbH
Berlin, Germany



Certification Statement

I Richard J. Snyder certify that I am currently a New York State (NYS) registered professional engineer or Qualified Environmental Professional as in defined in 6NYCRR Part 375 and that this Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).



Richard Snyder, P.E.
Associate & Senior Engineer

April 29, 2020
Date

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1. Introduction

CNH Industrial Baumaschinen GmbH (CNH) has entered into the Brownfield Cleanup Program for the Ex-Eaton Site located at 34-40 Clinton Street in the City of Batavia, Genesee County, New York (Figure 1). The implementation of the remediation program is being completed in accordance with the Brownfield Cleanup Agreement (BCA) (Index Number C819022-03-19, New York State Department of Environmental Conservation (NYSDEC) Site No. C819022) between CNH and the NYSDEC. The Site was formerly in the Voluntary Cleanup Program (VCP). While in the VCP, CNH completed a number of on-Site and off-Site investigations to characterize the impacts resulting from historical operations at this Site. A Site plan is presented as Figure 2.

This Surficial Soil Sampling Work Plan (Work Plan) has been prepared on behalf of CNH to conduct surface and near-surface soil sampling activities at the Ex-Eaton Site. Dependent upon the location and depth, these surficial soil samples will be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), Target Analyte List (TAL) metals, poly-chlorinated biphenyls (PCBs), pesticides, herbicides, per- and polyfluoroalkyl substances (PFAS), and 1,4-dioxane. This sampling is being completed as part of the overall site-wide Remedial Investigation (RI) activities being conducted as part of the BCA.

The following documents, which detail surficial soil screening guidance and sampling techniques, were used as reference material for the preparation of this Work Plan:

- Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, December 2002, issued by the United States Environmental Protection Agency (USEPA)
- Region 4 Human Health Risk Assessment Supplemental Guidance, January 2014, issued by the USEPA
- ProUCL Version 5.1 User Guide, October 2015, issued by the USEPA
- Risk Assessment Guidance for Superfund Volume I, Human Health Evaluation Manuel, December 1989, issued by the USEPA

Per the reference documents, the USEPA distinguishes between surface and subsurface soils as follows: surface soils are located within two centimeters (0 to approximately 1-inch) of the ground surface, while subsurface soils are located more than two centimeters below the surface. During the work scope development discussions between the NYSDEC, NYSDOH, and CNH, the NYSDEC and NYSDOH communicated that the Departments define surface soil as 0 to 2-inches below ground surface and subsurface soil as soil greater than 2-inches below the ground surface. This Work Plan is based on the Department's definition for these two soil types since it would satisfy both the USEPA definition as well as the Departments' definitions. "Surface" and "subsurface" soils as defined above are collectively referred to as "surficial soils" in this Work Plan.

The following sections provide the proposed surficial sampling locations and sampling and reporting procedures that will be followed during the sampling event.

1.1 Work Plan Organization

The Work Plan is organized as follows:

- Section 1 - The purpose and organization of the Work Plan are presented in Section 1
- Section 2 - The project location, history, and project description are presented in Section 2
- Section 3 - The objectives of the Work Plan are presented in Section 3
- Section 4 - The Scope of Work is presented and described in Section 4
- Section 5 - The schedule for the implementation of the Work Plan is presented in Section 5
- Section 6 – The reporting format for the findings of the sampling event is presented in Section 6
- Section 7 - Health and safety requirements are discussed in Section 7
- Section 8 - The Quality Assurance Project Plan (QAPP) is discussed in Section 8

2. Site Description and History

2.1 Site Description

The Site is situated within the City of Batavia limits as shown on Figure 1. The Ex-Eaton facility/property encompasses approximately 27.7 acres of land of which 23.25 acres are included in the BCA. For the purposes of this Work Plan, the portion of the property entered into the BCP is referred to as the "Site." The Site is bordered to the north by Clinton Street (Route 33), to the south by the Erie Railroad, and to the east and west by residences. Properties south of the Erie Railroad are commercial/light industrial in nature with some residences intermixed. Two public water supply wells are located approximately 1 mile south of the Site and reportedly draw from the Tonawanda Creek Aquifer, which is located to the southeast of the Site.

A ditch runs along the northern and eastern property boundaries. The ditch originates north of the Site and receives stormwater runoff from both on and off-Site sources. The ditch flows east and then south along the Site boundary to a culvert beneath the former Erie Railroad (Figure 2). Due to frequent debris blockages at the culvert along the eastern boundary of the Site, the channel is wide and poorly defined.

A discussion of historical Site ownership and usage was presented in the July 25, 1996 *Site Inspection Prioritization (SIP) Findings* report prepared by Ebasco Services, Incorporated (Ebasco). According to the Ebasco report, the Site had been used to manufacture agricultural and highway equipment since the mid-1920s. The Site was owned and occupied by Contractor Machinery from 1927 until 1963, at which time the property was sold to the Trojan Division of Eaton Corporation. In 1979, Eaton Corporation sold the property to Faun-Werke, which merged with O&K Orenstein and Koppel, Inc. in 1987. In 1996, the Site was sold to the current owner, Willow Specialties (Willow), which operates a warehousing facility for baskets and novelty items.

The property contains three buildings. The main building at the Site is a two-story concrete block office building connected to a warehouse. Willow occupies the main building. North of the main

building is a second building, a former warehouse, also occupied by Willow and formerly occupied by Genesee County ARC, which was a recycling company. East of the main building is the former shipping building, which is currently used by Willow for storage. The eastern portion of the property was formerly a storage yard, while the western and northern portions of the property had been used for storage and parking. These areas are currently unused (vacant).

Soil and groundwater at the Site are impacted with chlorinated volatile organic compounds (such as 1,1,1-trichloroethane [TCA] and 1,2-dichloroethane [DCA]), along with petroleum-based contaminants. A number of subsurface investigations have been completed at the Site, and, as a result, in 2003, CNH entered into a Voluntary Cleanup Agreement (VCA) (#B8-0644-03-09) with the NYSDEC to investigate and remediate soil, groundwater, and soil vapor impacts. In 2019, CNH entered into a BCA with the NYSDEC.

2.2 Physical Setting

The Site is a relatively flat parcel of land and is located in a commercial and light industrial area of the City of Batavia.

2.2.1 Geology

According to the 1984 United States Geological Survey (USGS) survey, the surficial geology of most of the Site is morainal till. Site investigation activities indicate that the Site is underlain by fill materials ranging in thickness from 2 to 8 feet below ground surface (bgs). Fill materials are underlain by silty sand and fine sand deposits, which range in depth from 2 to 10 feet bgs. Underlying the silty sand and fine sand deposits is a clay and silt layer ranging in thickness from 0 to 24 feet. Underlying the clay and silt layer is a sand and gravel layer, which is up to 43 feet thick. Underlying the sand and gravel deposits is a till unit consisting of clay, small amounts of gravel, and trace silt. This till unit lies above bedrock. Bedrock, identified as Onondaga Limestone, is encountered beneath the till unit at approximately 71 feet bgs.

2.2.2 Topography/Hydrology

The Site is generally flat and is approximately 890 feet above mean sea level (AMSL). Based on the topography of the Site and Site investigation activities, groundwater flow appears to be generally to the southeast.

Figure 3 shows the various Site cover features within the BCA boundary and the approximate square footages of these various cover types in different areas of the Site. The main types of site covers within the BCA boundary (outside of building structures which comprise approximately 6-acres in combined coverage) are asphalt and concrete paved areas, grassy areas, and areas with limestone gravel cover. The area around the main building and ARC building is covered with asphalt pavement which comprises an area of approximately 4.1 acres, not including the footprint of Site structures. To the north of the main building, a former parking area (approximately 1.9 acres in size) is covered with an 8- to 12-inch thick limestone gravel cover (likely run-of-crush gravel or bank run gravel). A portion of the west section of the Site, as well as a rectangular-shaped area east of the main building, are also covered with similar limestone gravel. The limestone gravel cover on the west portion of the Site is approximately 9- to 11-inches thick and covers an area of approximately 1.5 acres. The limestone gravel cover in the rectangular area east of the main building is

approximately 12-inches thick and covers an area of approximately 0.16 acres. Concrete paving is present east of the ARC building, which has a combined area of approximately 0.16 acres. The thickness of the concrete is estimated to be 6- to 8-inches thick, however the concrete was not cored to confirm thickness. The concrete paving is less than five years old and is in good condition and considered to be impervious. The southwest corner of the Site is a grassy treed area covering approximately 0.66 acres. The grassy mowed areas north of the office area, at the guard house, and south of the main building cover approximately 0.06 acres, 0.04 acres, and 0.29 acres, respectively. East of the main building and the adjacent paved driveway is a grassy area that covers approximately 8.0 acres. In total, the portions of the Site with a grassy cover have a combined area of approximately 9.1 acres.

Figure 4 shows areas of known historical features that could have previously presented greater potential to have caused surficial soil contamination in the past. These features include a former storage yard, a former part staging area, previous soil piles, locations of staged oil drums, and other features. The features presented on Figure 4 represent previous site conditions over time (based on the NUS 1990 report), and do not reflect current conditions at the Site.

A stormwater drainage ditch located along the north and east property boundary of the Site is responsible for much of the surface drainage at the Site. The drainage ditch enters the Site on the north side of the property and flows from west to east, turning to the south for approximately 100 feet, and then turns east again and flows to the eastern corner of the Site. There it turns southward and parallels the eastern property line, exiting the Site on the southeast corner of the property. A review of historical maps and aerial photographs indicate the drainage ditch previously flowed diagonally across the Site and emptied into a former low-lying area located on the eastern portion of the property, now known as the former storage yard. Over the years, the drainage ditch was relocated at least seven times, eventually being relocated to its current position illustrated on Figure 2.

2.3 Previous Soil Investigations

Comprehensive Site Investigation Report (URS-July 2003)

URS completed a Comprehensive Site Investigation (CSI) in July 2003. As part of the CSI, URS summarized previous soil investigation activities at the site. The previous investigations summarized by the URS CSI Report included the completion of ten test pits and the collection of five surficial soil samples in 1997. The surficial soil samples were collected along the western and eastern property boundaries, each from an interval of 0- to 12-inches. One surficial soil sample (from location SS-1, located in the southwest corner of the site) had a detection of arsenic and benzo(b)fluoranthene above NYSDEC Part 375 Protection of Public Health – Commercial soil cleanup objectives (SCOs). Location SS-4 had detections of arsenic, cadmium, and various semi-volatile organic compounds (SVOCs) above Protection of Public Health – Commercial SCOs. Of the ten test pits that were completed, only two were sampled near the ground surface, both from intervals of 0 to 4-feet bgs. Both test pits were located on the east side of the property and neither sample exceed the Commercial SCOs. Although this historical data exists, CNH does not propose using the data for its evaluations due to the sampling approach. Development of the sampling locations for this work plan did not consider this historical data.

3. Objectives

The objectives of this Work Plan are to:

i) Collect surficial soil samples at 31 locations across the Site. Among the 31 locations, surface samples will be collected from the 0- to 2-inch interval below ground surface (bgs), and subsurface samples will be collected from the 2- to 12-inch, 2- to 6-inch, and 6- to 12-inch bgs intervals. The intervals to be sampled at each location are detailed in Section 4.

ii) Surface samples collected from the 0- to 2-inch bgs interval will be analyzed for TCL SVOCs, TAL metals, and PCBs. In addition, per the Departments' request, a minimum of 20 percent of the samples will also be analyzed for pesticides, herbicides, PFAS, and 1,4-dioxane.

iii) Subsurface soils collected from the 2- to 12-inch bgs interval will be analyzed for the same parameters as the surface samples from the 0- to 2-inch bgs interval. In addition, per the Departments' request, a minimum of 20 percent of the samples will also be analyzed for pesticides, herbicides, PFAS, and 1,4-dioxane.

iv) Subsurface soils collected from the 2- to 6-inch and 6- to 12-inch bgs intervals will be analyzed for TCL VOCs. VOCs were not selected for analysis for the 0- to 2-inch bgs depth interval as any VOC impacts from historical Site operations, which ceased nearly 40 years ago, are no longer expected to be present at the surface.

v) The data generated by the surficial soil sampling event will be used to conduct a qualitative human health exposure assessment, as described in Section 3.5.1(b) of *NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation (DER-10)*.

vi) The data generated by the surficial soil sampling event will also be used to document that the upper one foot of soil at the Site meets the Commercial SCOs, as required by *DER-10* for an anticipated Track 2 Commercial remediation (cover system evaluation).

4. Scope of Work

The following Scope of Work has been developed to meet the objectives in Section 3.0 and was developed based on discussions with the NYSDEC and NYSDOH.

4.1 Surficial Soil Sample Collection

4.1.1 Surficial Soil Sample Locations

Surface and subsurface soil samples will be collected from the 31 locations indicated on Figure 5. Analytical parameters to be sampled for at each location are included on Table 1. Samples will be collected and packaged for laboratory analysis as follows:

Surface Soils

- **0- to 2-Inch BGS**: Discrete samples collected from locations 1 through 17, and composite samples created from discrete samples collected from locations 18 through 23 (composite 1), 24

through 26 (composite 2), 27 through 29 (composite 3), and 30 and 31 (composite 4) will be analyzed for TCL SVOCs, TAL metals, and PCBs ("regular suite"). In addition, discrete samples collected from locations 9, 11, 15, 16, and composite sample 2 will also be analyzed for pesticides, herbicides, PFAS, and 1,4-dioxane ("full suite plus emerging contaminants"). One blind field duplicate sample and one matrix spike/matrix spike duplicate (MS/MSD) sample will be collected for this depth interval and analyzed for the regular suite. One additional blind field duplicate sample and one additional MS/MSD sample will be collected for this depth interval and analyzed for the full suite plus emerging contaminants. As dedicated equipment will be used to collect samples from this interval, collection of an equipment blank will not be necessary.

Subsurface Soils

- **2- to 12-Inch BGS**: Discrete samples collected from locations 1 through 17, and composite samples created from discrete samples collected from locations 18 through 23 (composite 1), 24 through 26 (composite 2), 27 through 29 (composite 3), and 30 and 31 (composite 4) will be analyzed for TCL SVOCs, TAL metals, and PCBs ("regular suite"). In addition, discrete samples collected from locations 9, 11, 15, 16, and composite sample 2 will also be analyzed for pesticides, herbicides, PFAS, and 1,4-dioxane ("full suite plus emerging contaminants"). One blind field duplicate sample, one MS/MSD sample, and two equipment blanks will be collected for this depth interval and analyzed for the regular suite. One additional equipment blank will be collected for this soil interval and analyzed for the full suite plus emerging contaminants.
- **2- to 6-Inch BGS**: Discrete samples collected from locations 1 through 17, 19, 22, 24, 28, and 30 will be analyzed for TCL VOCs. One blind field duplicate sample, one MS/MSD sample, and one equipment blank will be collected for this depth interval and analyzed for TCL VOCs.
- **6- to 12-Inch BGS**: Discrete samples collected from locations 1 through 17, 19, 22, 24, 28, and 30 will be analyzed for TCL VOCs. One blind field duplicate sample, one MS/MSD sample, and one equipment blank will be collected for this depth interval and analyzed for TCL VOCs.

The 31 sample locations provide full coverage of the Site. Areas in which surface and subsurface soils are anticipated to be disturbed as part of the Site remedy have not been included in this sampling plan. These areas consist of Areas of Concern (AOCs) #1 and #2. If necessary, the need for surficial soil sampling in these areas will be addressed as part of the remedial action.

4.1.2 Surficial Soil Sample Collection Method

Samples will be collected by using the method described below:

1. At each location, a sample will first be collected from the 0- to 2-inch bgs interval using a dedicated stainless steel spoon. Care will be taken to ensure that only soil material from the 0- to 2-inch bgs interval is collected for this sample. Soil material will be placed directly into the laboratory-supplied sample jar(s), labeled, and placed on ice in a cooler. Samples for PFAS analysis will be placed in their own cooler. Refer to Section 4.2 for additional procedures that will be followed for the collection of samples for PFAS analysis.

   Discrete samples that will be used for creating composite samples will be temporarily stored in high-density polyethylene (HDPE) zipper-seal bags and composited in dedicated stainless steel bowls. Each composite sample will be mixed in its dedicated bowl using a dedicated stainless steel spoon until the sample appears to be homogenized upon visual inspection.

Aliquot(s) of the sample will be transferred into the laboratory-supplied sample jar(s), labeled, and placed on ice in a cooler.

2. After the sample from the 0- to 2-inch bgs interval has been collected, a sample will be collected from the 2- to 12-inch bgs interval. The sample will be collected down to 12 inches bgs using a small steel hand shovel or a large spade. A hand auger may also be used if appropriate. Care will be taken to ensure that only soil material from the 2- to 12-inch bgs interval is collected for this sample. Soil material will be placed directly into the laboratory-supplied sample jar(s), labeled, and placed on ice in a cooler. Samples for PFAS analysis will be placed in their own cooler. Refer to Section 4.2 for additional procedures that will be followed for the collection of samples for PFAS analysis. Sampling equipment will be decontaminated between each sampling location using Alconox™ mixed with deionized water.

   Discrete samples that will be used for creating composite samples will be temporarily stored in HDPE zipper-seal bags and composited in dedicated stainless steel bowls. Each composite sample will be mixed in its dedicated bowl using a dedicated stainless steel spoon until the sample appears to be homogeneous upon visual inspection. Aliquot(s) of the sample will be transferred into the laboratory-supplied sample jar(s), labeled, and placed on ice in a cooler.

3. Following collection of the samples from the 0- to 2-inch and 2- to 12- inch bgs intervals at a location, a sample will be collected from the 2- to 6- inch bgs interval for analysis of VOCs at the specific locations outlined in Table 1 and identified on Figure 5. Due to the potential volatilization of VOCs from the hole dug for sampling the 0- to 2-inch and 2- to 12-inch bgs intervals during the sampling and labeling process, a new hole will be dug for collection of samples for VOC analysis. The new hole will be within one foot of the original hole. Soil material present from 0 to 2 inches bgs will be carefully removed and then a sample will be collected from the 2- to 6-inch bgs interval using a small steel hand shovel. Care will be taken to ensure that only soil material from the 2- to 6-inch bgs interval is collected for this sample. Soil material will be placed directly into the laboratory-supplied sample jar(s), labeled, and placed on ice in a cooler.

4. After the sample from the 2- to 6-inch bgs interval has been collected, a sample will be collected from the 6- to 12-inch bgs interval. The sample will be collected down to 12 inches bgs using a small steel hand shovel or a large spade. A hand auger may also be used if appropriate. Care will be taken to ensure that only soil material from the 6- to 12-inch bgs interval is collected for this sample. Soil material will be placed directly into the laboratory-supplied sample jar(s), labeled, and placed on ice in a cooler. Sampling equipment will be decontaminated between each sampling location (and after collection of the sample from the 2- to 6-inch bgs interval if necessary) using Alconox™ mixed with deionized water.

The 31 sample locations will have their corresponding latitude, longitude and surface elevation (for EDD submission) recorded using either a hand-held Global Positioning System (GPS) device or survey grade GPS unit. The locations will be marked in the field with removable flags and/or stakes. Each location will be photographed.

The soil samples will be placed into pre-cleaned, new, laboratory-supplied sample bottles. Terra Core™ sample kits will not be used for VOC analysis. The soil samples will be submitted to a New

York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for analysis of the following parameters:

- TCL VOCs via USEPA SW-846 Method 8260
- TCL SVOCs via USEPA SW-846 Method 8270
- TAL Metals via USEPA SW-846 Method 6010/7471
- PCBs via USEPA SW-846 Method 8082A
- Pesticides via USEPA SW-846 Method 8081B
- Herbicides via USEPA SW-846 Method 8151A
- PFAS via USEPA Method 537
- 1,4-Dioxane via USEPA SW-846 Method 8270 SIM

All samples will be collected in accordance with the Site Field Sampling Plan (FSP, 2008), Site Health and Safety Plan (HASP, 2016), and Site Quality Assurance Project Plan (QAPP, 2015) previously submitted to the Departments. The laboratory will provide a Category B data deliverable. All analytical data generated will be validated by a GHD Data Validator/Chemist per the QAPP and a Data Usability Summary Report (DUSR) will be generated. An electronic data deliverable (EDD) with the sample locations and results will then be submitted to the NYSDEC for upload to the EQuIS™ database.

4.2 Additional Procedures for PFAS Sampling

Due to the prevalence of PFAS in consumer products, additional considerations will be taken to minimize the potential for cross-contamination during the sampling event. A full list of prohibited and acceptable items for use during the sampling event and a field checklist to be completed by the field technician(s) who will be sampling for PFAS are included in this Work Plan as Appendix A. The major considerations are discussed below.

4.2.1 Order of Sample Collection

Due to the Teflon®-lined lids used in some laboratory-supplied sample bottles, samples being collected for PFAS analysis from a given depth interval at a given location, including quality control samples, will be collected, sealed, labeled, and packaged in the designated PFAS cooler before samples for all other analyses are collected from that depth interval. Following collection of the samples for all other analyses, the field technician will wash his hands and don new nitrile gloves in accordance with the procedures in Section 4.2.3 prior to preparing to collect samples for PFAS analysis from the next depth interval at the given location.

4.2.2 Sample Coolers

Containers for PFAS sampling will be delivered to the field technician in a separate cooler, will be kept separate from the sample bottles for all other analyses for the duration of the sampling event, and will be returned to the laboratory in their own cooler, separate from all other samples.

Each sample cooler will be filled with ice to maintain a sample temperature of no more than 6 degrees C. Ice will be "regular" ice (not blue ice) and will be double bagged.

4.2.3 Hand Washing and Nitrile Glove Use

Nitrile gloves will be worn during the entire sampling event. Each field technician performing PFAS sampling will wash his hands with laboratory-provided analyte-free water and either Alconox® or Liquinox® prior to handling any sampling equipment or containers or putting on nitrile gloves when PFAS sampling is to be performed. If a material suspected to contain PFAS is touched during the sampling event, the field technician will wash his hands again and put on a fresh pair of nitrile gloves. Hands will also be washed and new gloves will be donned prior to PFAS sample collection, prior to and following PFAS sample labeling, prior to and following handling the PFAS sample cooler, and upon arrival at a new soil interval or sample location. Nitrile gloves will also be worn when labeling bottles and preparing coolers for shipment in order to avoid contact with adhesives that are necessary to perform these procedures, which could lead to contamination of the PFAS samples.

5. Schedule

The schedule for implementation of the Work Plan has been previously provided in the approved Master Schedule dated February 5, 2020. The schedule provides approximate periods for completion of the work beginning with the submittal of the Work Plan on the new NYSDEC-approved submittal date of February 21, 2020. As a result of the new submittal date, the schedule for subsequent associated activities has shifted accordingly on the master schedule. However, it is the intention of CNH to compress the schedule where possible in an attempt to restore the schedule as close to the original schedule as possible. The project schedule is subject to change only with the approval of the NYSDEC. Per the current projected schedule, the surficial soil sampling event would be performed in May 2020, however CNH plans to schedule the field work as soon as possible after NYSDEC approval of the work plan. The NYSDEC will be notified at least seven calendar days prior to the start of field activities. The raw, non-validated analytical data package from the sampling event will be provided to the NYSDEC within 2 weeks of data package delivery to GHD or as an attachment to the monthly progress report. It is anticipated that the draft letter report will be submitted to the NYSDEC in June 2020 (or earlier).

6. Reporting

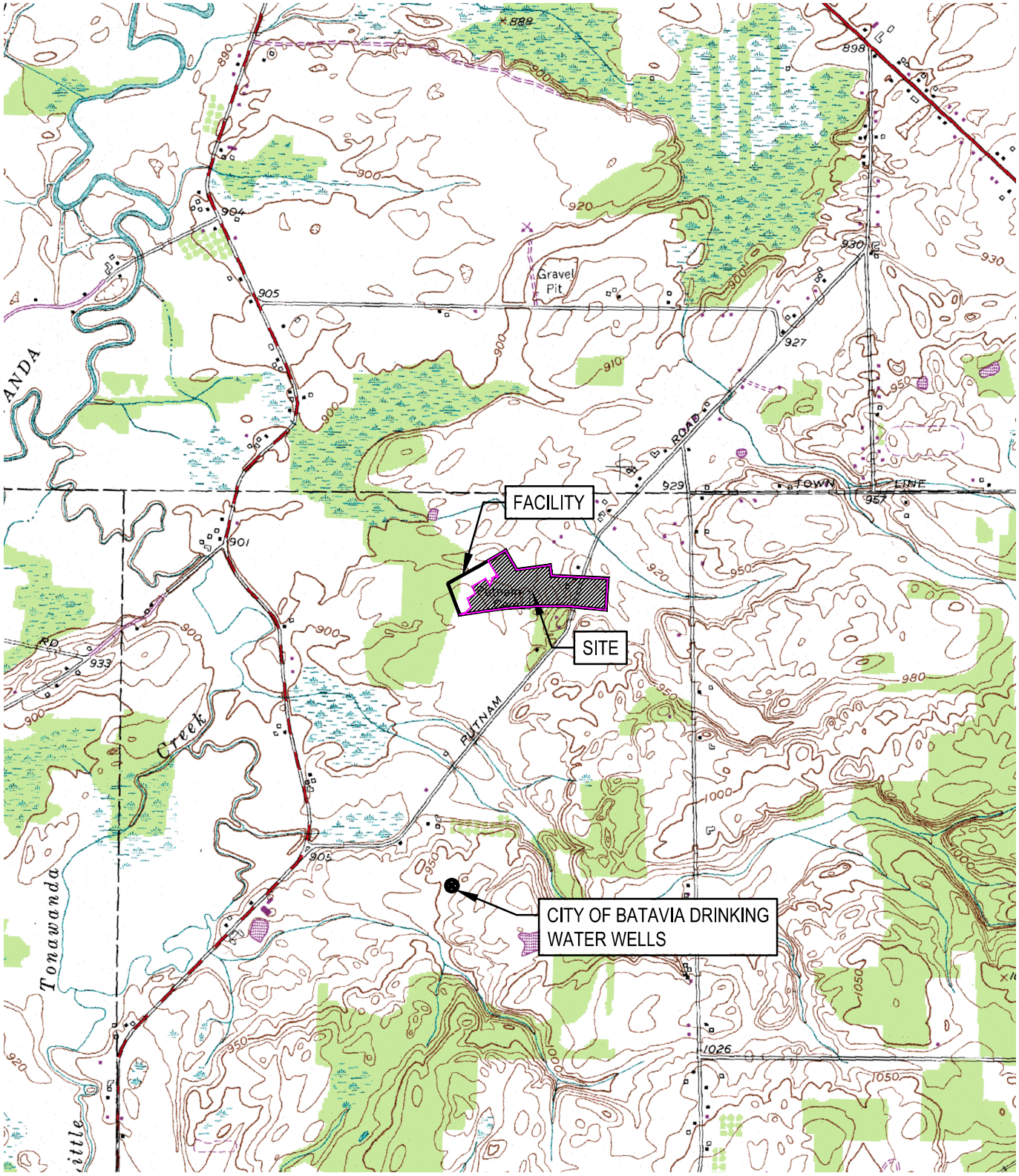
Following receipt and validation of the samples, a summary letter will be prepared describing the work performed, sample locations, and results. The data will also be presented in the Remedial Investigation Report/Alternatives Analysis Report (RIR/AAR) as a component of the ecological risk assessment and cover system evaluation. The summary letter, including the DUSR, will be submitted to the NYSDEC in June 2020. The RIR/AAR is anticipated to be submitted in June/July 2020 depending on how well CNH can compress the surface soil sampling schedule. Should an extension be necessary for the RIR/AAR, CNH will submit a request for NYSDEC approval.

7. Health and Safety

A HASP has been prepared for the Site in accordance with 29 Code of Federal Regulations (CFR) Part 1910 and 29 CFR 1926 and has been reviewed and signed by a health and safety professional. The HASP specifies protective measures and procedures to be followed during the completion of field activities to minimize exposure of workers and the surrounding community to hazardous Site-related materials. The HASP is a separate Site-specific document and was previously submitted and approved by the NYSDEC on March 3, 2008. The HASP was updated in 2016 to reflect more current information and safety-related policies/procedures and is reviewed annually. No changes to the document have occurred since the 2016 update.

8. Quality Assurance Project Plan

A QAPP has been prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Quality Assurance Project Plan Guidance, NYSDEC, March 1991 and "EPA Guidance for Quality Assurance Project Plans", USEPA QA/G-5, USEPA/600/R-98/018, February 1998. The QAPP describes protocols necessary to achieve specified data quality objectives and is a separate Site-specific document. The QAPP was previously submitted in 2008 and approved by the NYSDEC. It was updated in 2015.



SOURCE: USGS QUADRANGLE MAPS; BATAVIA NORTH AND BATAVIA SOUTH, NEW YORK, 2015

NOTE: SITE BOUNDARIES ARE APPROXIMATE.

N

0 2000'

EX-EATON SITE (C819022)
SURFICIAL SOIL SAMPLING WORK PLAN
BROWNFIELD CLEANUP PROGRAM

SITE LOCATION AND VICINITY MAP

Project No. **048547**
Report No. **032**
Date **APR 2020**

FIGURE 1

Filename: N:\US\Niagara Falls\Legacy\Drawings\48000s\48547\48547-REPORTS\48547-00(032)\48547-00(032)\Figures\48547(032) - Figure 1.dwg
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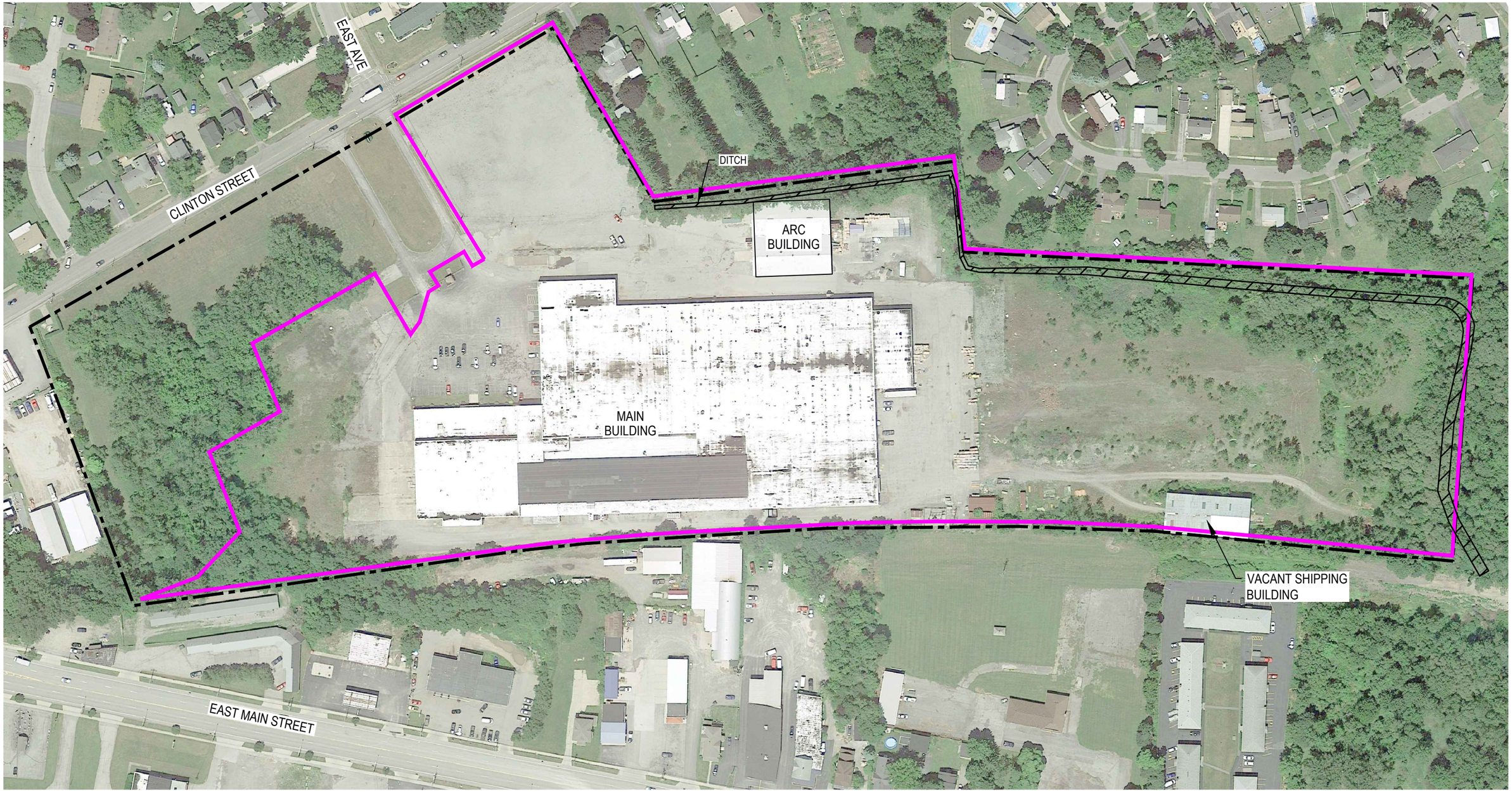

LEGEND

- DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- PROPERTY BOUNDARY

N

0 150'

GHD

EX-EATON SITE (C819022)
SURFICIAL SOIL SAMPLING WORK PLAN
BROWNFIELD CLEANUP PROGRAM

SITE PLAN

Project No. **048547**
Report No. **032**
Date **FEB 2020**

FIGURE 2

Filename: N:\US\Niagara Falls\Legacy\Drawings\48000s\48547\48547-REPORTS\48547-00(032)\48547-00(032)\Figures\48547(032) - Figure 2.dwg
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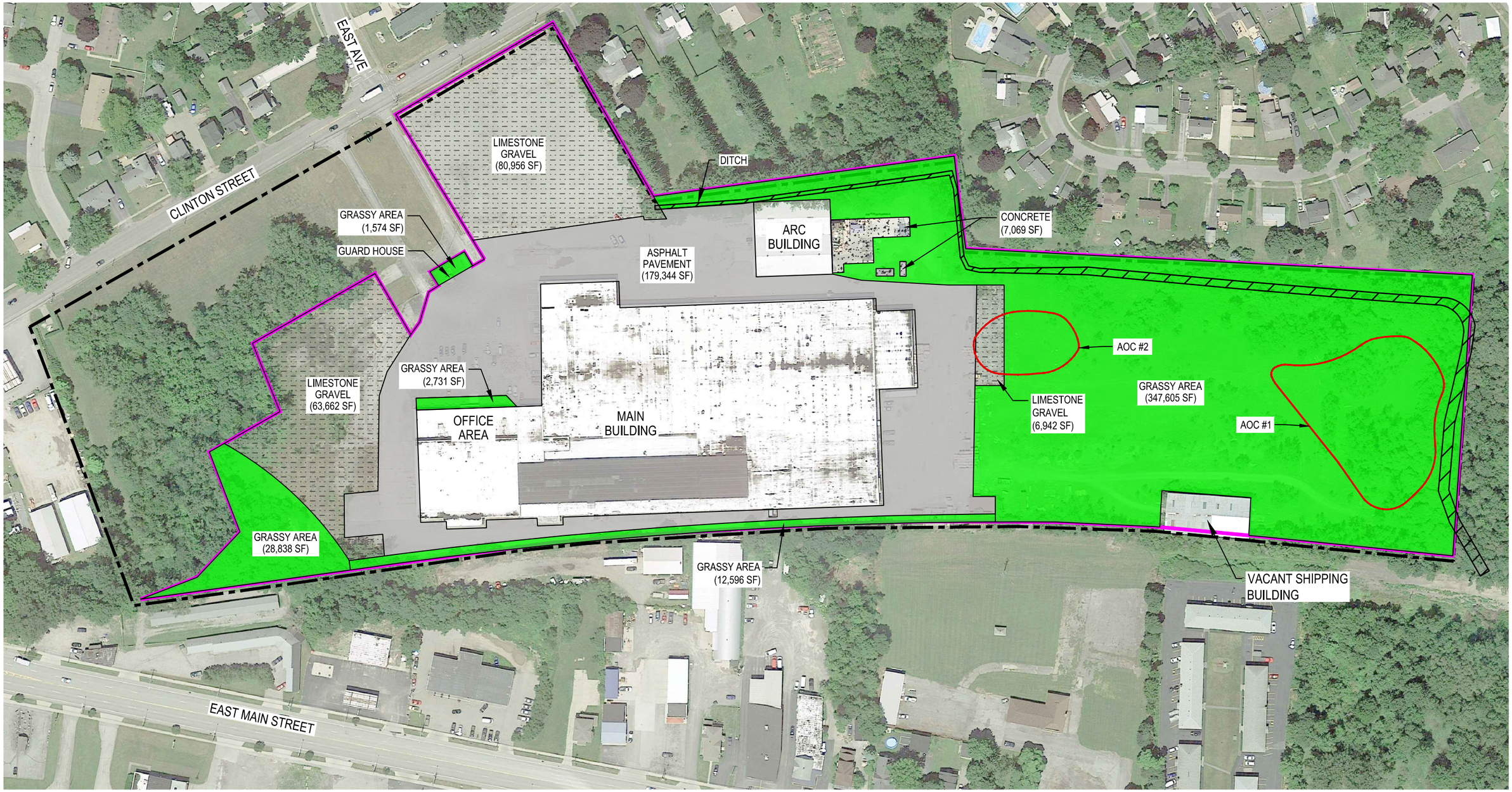


LEGEND

- DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- PROPERTY BOUNDARY
- LIMIT OF AREA OF CONCERN (AOC)
- SF — SQUARE FEET
- GRASSY AREA
- LIMESTONE GRAVEL
- ASPHALT PAVEMENT
- CONCRETE

NOTE:

ALL SQUARE FOOTAGES ARE APPROXIMATE

N

0 150'

GHD

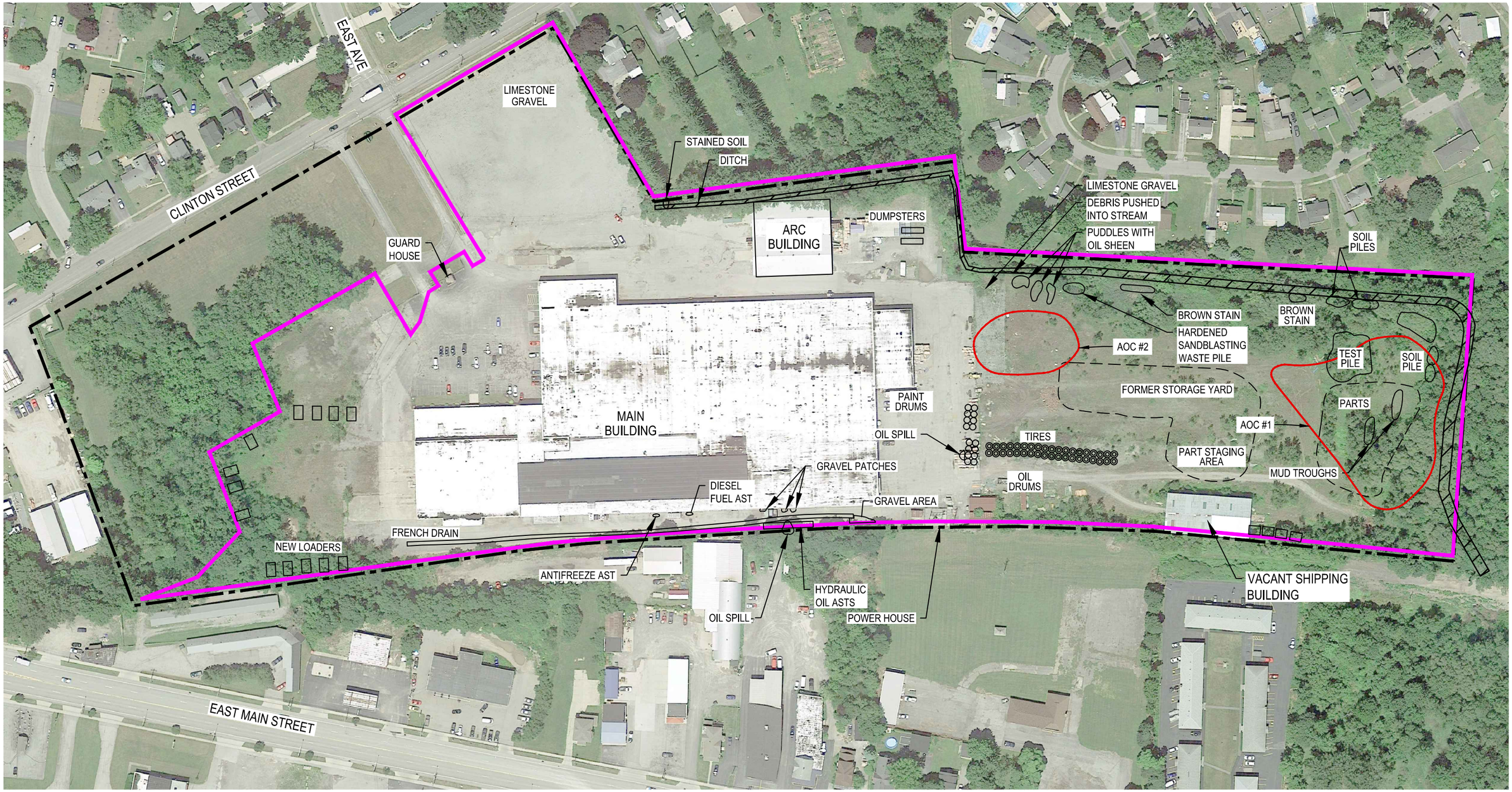
EX-EATON SITE (C819022)
SURFICIAL SOIL SAMPLING WORK PLAN
BROWNFIELD CLEANUP PROGRAM

SITE COVER FEATURES

Project No. **048547**
Report No. **032**
Date **APR 2020**

FIGURE 3

Filename: N:\US\Niagara Falls\Legacy\Drawings\48000s\48547\48547-REPORTS\48547-00(032)\48547-00(032)\Figures\48547(032) - Figure 3.dwg
Plot Date: 29 April 2020 - 9:13 AM



LEGEND

- DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- PROPERTY BOUNDARY
- LIMIT OF AREA OF CONCERN (AOC)

HISTORICAL FEATURES (NUS CORPORATION, 1990) DO NOT REFLECT CURRENT SITE CONDITIONS

N

0 150'

GHD

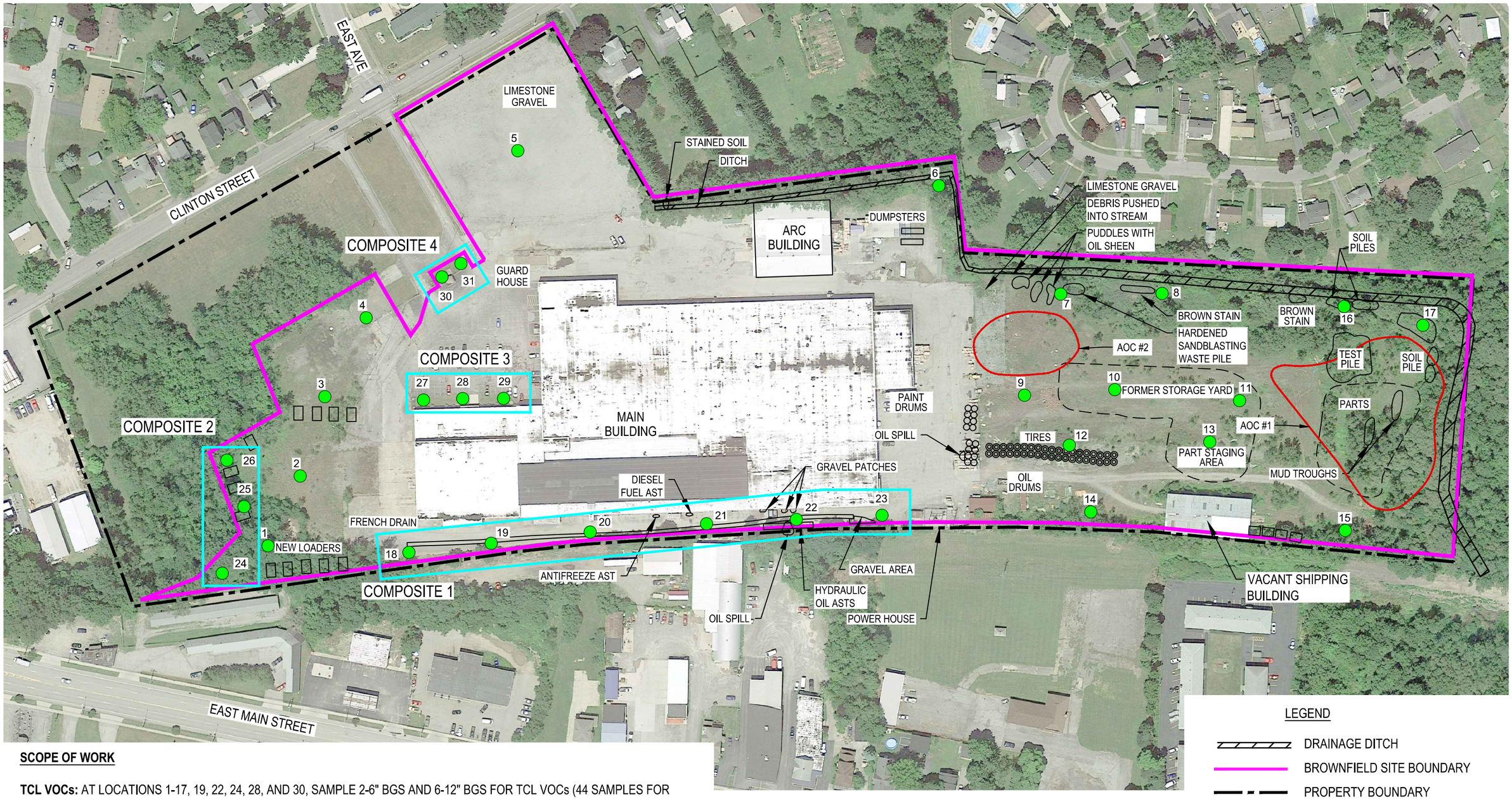
EX-EATON SITE (C819022)
SURFICIAL SOIL SAMPLING WORK PLAN
BROWNFIELD CLEANUP PROGRAM

HISTORICAL SITE FEATURES

Project No. **048547**
Report No. **032**
Date **APR 2020**

FIGURE 4

Filename: N:\US\Niagara Falls\Legacy\Drawings\48000s\48547\48547-REPORTS\48547-00(032)\48547-00(032)\Figures\48547(032) - Figure 4.dwg
Plot Date: 24 April 2020 - 9:19 AM



SCOPE OF WORK

TCL VOCs: AT LOCATIONS 1-17, 19, 22, 24, 28, AND 30, SAMPLE 2-6" BGS AND 6-12" BGS FOR TCL VOCs (44 SAMPLES FOR TCL VOCs, PLUS 2 DUPLICATES, 2 MS/MSD, AND 2 EQUIPMENT BLANKS)

FULL SUITE + EMERGING CONTAMINANTS (EC): AT LOCATIONS 9, 11, 15, AND 16, AND A COMPOSITE MADE FROM LOCATIONS 24-26 (COMPOSITE 2), SAMPLE 0-2" BGS AND 2-12" BGS FOR TCL SVOCs, TAL METALS, PCBs, PESTICIDES, HERBICIDES, PFAs, AND 1-4 DIOXANE
(10 SAMPLES FOR FULL SUITE + EC, PLUS 1 DUPLICATE, 1 MS/MSD, AND 1 EQUIPMENT BLANK)

REGULAR SUITE: AT LOCATIONS 1-8, 10, 12-14, 17, AND COMPOSITES MADE FROM LOCATIONS 18-23 (COMPOSITE 1), 27-29 (COMPOSITE 3), AND 30 AND 31 (COMPOSITE 4), SAMPLE 0-2" BGS AND 2-12" BGS FOR TCL SVOCs, TAL METALS, AND PCBs (32 SAMPLES FOR REGULAR SUITE, PLUS 2 DUPLICATES, 2 MS/MSD, AND 2 EQUIPMENT BLANKS)

LEGEND

- DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- PROPERTY BOUNDARY
- LIMIT OF AREA OF CONCERN (AOC)
- PROPOSED SAMPLE LOCATIONS

HISTORICAL FEATURES (NUS CORPORATION, 1990) DO NOT REFLECT CURRENT SITE CONDITIONS

N

0 150'

GHD

EX-EATON SITE (C819022)
SURFICIAL SOIL SAMPLING WORK PLAN
BROWNFIELD CLEANUP PROGRAM

PROPOSED SURFICIAL SOIL SAMPLING LOCATIONS

Project No. **048547**
Report No. **032**
Date **APR 2020**

FIGURE 5

Filename: N:\US\Niagara Falls\Legacy\Drawings\48000s\48547\48547-REPORTS\48547-00(032)\48547-00(032)\Figures\48547(032) - Figure 5.dwg
Plot Date: 29 April 2020 - 9:42 AM

Table 1

Surficial Soil Sampling Matrix
Surficial Soil Sampling Work Plan
Ex-Eaton Site (C819022)
Brownfield Cleanup Program

Sample Location	Sample Depth (inches bgs)	Parameters	Sample Type	Instructions	QA/QC Samples
1	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		1 equipment blank
2	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
3	0-2	SVOCs, Metals, PCBs	DG		1 duplicate, 1 MS/MSD
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
4	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
5	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		1 equipment blank
6	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
7	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
8	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
9	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		1 duplicate, 1 MS/MSD
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		
10	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		1 duplicate, 1 MS/MSD
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
11	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		1 equipment blank

Table 1

Surficial Soil Sampling Matrix
Surficial Soil Sampling Work Plan
Ex-Eaton Site (C819022)
Brownfield Cleanup Program

Sample Location	Sample Depth (inches bgs)	Parameters	Sample Type	Instructions	QA/QC Samples
12	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		1 duplicate, 1 MS/MSD
13	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
14	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		1 equipment blank
	2-12	SVOCs, Metals, PCBs	DG		
15	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		
16	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		
	2-6	VOCs	DG		
	6-12	VOCs	DG		1 duplicate, 1 MS/MSD
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	DG		
17	0-2	SVOCs, Metals, PCBs	DG		
	2-6	VOCs	DG		1 equipment blank
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	DG		
18	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 18 through 23 ("composite 1")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 18 through 23 ("composite 1")	
19	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 18 through 23 ("composite 1")	
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 18 through 23 ("composite 1")	
20	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 18 through 23 ("composite 1")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 18 through 23 ("composite 1")	
21	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 18 through 23 ("composite 1")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 18 through 23 ("composite 1")	
22	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 18 through 23 ("composite 1")	
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 18 through 23 ("composite 1")	

Table 1

Surficial Soil Sampling Matrix
Surficial Soil Sampling Work Plan
Ex-Eaton Site (C819022)
Brownfield Cleanup Program

Sample Location	Sample Depth (inches bgs)	Parameters	Sample Type	Instructions	QA/QC Samples
23	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 18 through 23 ("composite 1")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 18 through 23 ("composite 1")	
24	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	C	Composite with 0-2" samples from locations 24, 25, and 26 ("composite 2")	
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	C	Composite with 2-12" samples from locations 24, 25, and 26 ("composite 2")	
25	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	C	Composite with 0-2" samples from locations 24, 25, and 26 ("composite 2")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	C	Composite with 2-12" samples from locations 24, 25, and 26 ("composite 2")	
26	0-2	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	C	Composite with 0-2" samples from locations 24, 25, and 26 ("composite 2")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS, 1,4-Dioxane	C	Composite with 2-12" samples from locations 24, 25, and 26 ("composite 2")	
27	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 27, 28, and 29 ("composite 3")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 27, 28, and 29 ("composite 3")	
28	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 27, 28, and 29 ("composite 3")	
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 27, 28, and 29 ("composite 3")	
29	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 27, 28, and 29 ("composite 3")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 27, 28, and 29 ("composite 3")	
30	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 30 and 31 ("composite 4")	
	2-6	VOCs	DG		
	6-12	VOCs	DG		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 30 and 31 ("composite 4")	
31	0-2	SVOCs, Metals, PCBs	C	Composite with 0-2" samples from locations 30 and 31 ("composite 4")	
	2-6	None	---		
	6-12	None	---		
	2-12	SVOCs, Metals, PCBs	C	Composite with 2-12" samples from locations 30 and 31 ("composite 4")	

Notes:

QA/QC = Quality Assurance/Quality Control
VOCs = Target Compound List (TCL) Volatile Organic Compounds (VOCs)
SVOCs = Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs)
Metals = Target Analyte List (TAL) Metals
PCBs = Polychlorinated Biphenyls
PFAS = Per- and Polyfluoroalkyl Substances
MS/MSD = Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
C = Composite Sample, see instruction notes
DG = Discrete Grab sample

Appendices

Appendix A
PFAS Sampling Checklist and PFAS Sampling-Prohibited and Acceptable Items

PFAS Sampling Checklist

Date: _____

Weather (temp./precipitation): _____ Site Name: _____

Field Clothing and PPE:

- ☐ No clothing or boots containing Gore-Tex™
- ☐ All safety boots made from polyurethane and PVC
- ☐ No materials containing Tyvek®
- ☐ Field crew has not used fabric softener on clothing
- ☐ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☐ Field crew has not applied unauthorized sunscreen or insect repellant

Field Equipment:

- ☐ No Teflon® or LDPE containing materials on-site
- ☐ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☐ No waterproof field books on-site
- ☐ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☐ No adhesives (Post-It Notes) on-site
- ☐ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☐ All sample containers made of HDPE
- ☐ Caps are unlined and made of HDPE

Wet Weather (as applicable):

- ☐ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☐ "PFAS-free" water on-site for decontamination of sample equipment. No other water sources to be used
- ☐ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☐ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with Field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

_____

_____

_____

_____

Field Lead Name: _____

Field Lead Signature: _____ Time: _____

PFAS Sampling
Prohibited and Acceptable Items

Prohibited	Acceptable
Field Equipment	
Teflon® containing materials	High-density polyethylene (HDPE) materials
Low density polyethylene (LDPE) materials	Acetate Liners
Waterproof field books	Silicon Tubing
Plastic clipboards, binders, or spiral hard cover notebooks	Loose paper (non-waterproof)
Post-It Notes®	Aluminum field clipboards or with Masonite
Chemical (blue) ice packs	Sharpies®, pens
	Regular ice
Field Clothing and PPE	
New cotton clothing or synthetic water resistant, waterproof, or stain-treated clothing, clothing containing Gore-Tex™	Well-laundered clothing made of natural fibers (preferable cotton)
Clothing laundered using fabric softener	No fabric softener
Boots containing Gore-Tex™	Boots made with polyurethane and PVC
Tyvek®	Cotton clothing
No cosmetics, moisturizers, hand cream, or other related products as part of personal cleaning/showering routine on the morning of sampling	**Sunscreens** - Alba Organics Natural Sunscreen, Yes To Cucumbers, Aubrey Organics, Jason Natural Sun Block, Kiss my face, Baby sunscreens that are “free” or “natural” **Insect Repellents** - Jason Natural Quit Bugging Me, Repel Lemon Eucalyptus Insect repellant, Herbal Armor, California Baby Natural Bug Spray, BabyGanics **Sunscreen and insect repellant -** Avon Skin So Soft Bug Guard Plus – SPF 30 Lotion
Sample Containers	
LDPE or glass containers	HDPE
Teflon-lined caps	Unlined HDPE caps
Rain Events	
Waterproof or resistant rain gear	Gazebo tent that is only touched or moved prior to and following sampling activities
Equipment Decontamination	
Decon 90®	Alconox® and/or Liquinox®
Water from an on-site well	PFAS-free water
Food Considerations	
All food and drink, with exceptions noted on right	Bottled water and hydration fluids (i.e., Gatorade® and Powerade®) to be brought and consumed only in the staging areas

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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