PROPOSED REMEDIAL ACTION PLAN

Gibson Scrapyard
State Superfund Project
Gibson, Steuben County
Site No. 851058
January 2026

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

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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), is proposing a remedy for the above referenced site. The disposal of hazardous wastes at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of hazardous wastes at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. The proposed remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document 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. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

Southeast Steuben County Library
300 Nasser Civic Center Plaza
Corning, NY 14830
Phone: (607) 936-3713

A public comment period has been set from:

01/14/2026 to 02/13/2026

A public meeting is scheduled for the following date:

01/26/2026 at 5:00 pm

Public meeting location:

Southeast Steuben County Library
300 Nasser Civic Center Plaza
Corning, NY 14830

The U.S. Environmental Protection Agency (EPA) has proposed approving a polychlorinated biphenyl (PCB) cleanup plan submitted by the Department under the EPA's PCB Cleanup Program. This EPA program, governed by the Toxic Substances Control Act of 1976 (TSCA), focuses on cleaning up contaminated sites and returning them to beneficial use, where possible. If issued as drafted, EPA's approval will allow for the Department to issue its proposed remedy.

At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) will be presented along with a summary of the proposed remedy and the PCB cleanup plan. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP or the PCB cleanup plan.

Written comments may also be sent through **2/13/2026** to:

Anna Calderon
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233
anna.calderon@dec.ny.gov

The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP based on new information or public comments. NYSDEC, in consultation with EPA, will also consider any comments submitted during the comment period on the PCB cleanup plan before making the plan final. If EPA issues an approval, NYSDEC must subsequently accept the approval in writing. Therefore, the public is encouraged to review and comment on the proposed remedy and PCB cleanup plan identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

The PCB cleanup plan can be found at Index of /data/DecDocs/851058.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html.

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is a 3.2-acre site located at the north end of Main Street in the Hamlet of Gibson within the Town of Corning, Steuben County. The site is located on vacant commercial land. The site consists of three tax parcels: 318.11-01-001.000, 318.11-01-041.000, and 318.00-01-003.000.

Site Features: The site is relatively level, currently unoccupied, and contains a concrete slab associated with a former weigh station that is not currently used. The site is adjacent to a railroad track to the west, Narrows Creek to the south, vacant residential property to the southeast, and a steep wooded hillside to the north and east.

Current Zoning and Land Use: The site is currently zoned as commercial land and is vacant.

Past Use of the Site: The Site reportedly operated as an industrial waste landfill from about 1940 to 1950. The Corning Materials facility, a metal scrap recycler, then operated at the Site from 1950 to 1985, and accepted waste from industries including Ingersoll Rand, Corning Glass, Westinghouse, and General Electric. The Site was listed as a Resource Conservation and Recovery Information System large quantity generator for hazardous waste. Waste was reported to be buried at depths of up to 15 ft below ground surface (bgs). Previous investigations identified World War II munitions debris potentially from the Seneca Army Depot, polychlorinated biphenyls (PCBs) oil, drums of solvents, and lead powder as potential waste streams.

Site Geology and Hydrogeology: Native soils identified at the site consist of the Chenango channery silt loam and Lordstown-Arnot association, both well-drained to moderately well-drained soils. The Site is located within the West Falls Group and is part of the Upper Devonian Age Gardeau Formation. This formation consists of shale and siltstone. Bedrock outcrops of shale are visible on the eastern border of the Site. Bedrock beneath the Site ranges from roughly 12 to 15 ft bgs at the northern end to depths below 40 ft bgs at the southern end. The bedrock consists of shale, siltstone, and Roricks Glen shale. Bedrock outcrops of shale are visible on the eastern border of the Site.

There are no discernible channels or conduits on the Site that would otherwise collect and influence the flow of surface water runoff, and it is expected that for the majority of the Site, any precipitation or other surface water runoff infiltrates into the subsurface and recharges local groundwaters. It is expected that any off-site migration of surface water is limited to the areas at the southern terminus of the Site, where the land slopes down to Narrows Creek. Narrows Creek is a small, shallow, and

rocky perennial stream that flows to the southwest and drains into the Chemung River. Groundwater depths range from approximately 14-27 ft bgs. Groundwater flows predominately in the west-southwest direction toward the Chemung River.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives that restrict the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

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

The PRPs for the site, documented to date, include:

Corning Materials Inc.

United States Army

Corning Incorporated

CSX Transportation Inc.

Norfolk Southern Railway Company

Consolidated Rail Corporation

Westinghouse Electric Corporation

Ingersoll Rand

General Electric

Seneca County Economic Development Corporation

Seneca Iron Works, LLC

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- surface water
- soil
- sediment

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html.

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous

waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminants of concern identified at this site are:

PCB Aroclor 1260	nickel
PCB Aroclor 1242	selenium
PCB Aroclor 1248	silver
PCB Aroclor 1254	zinc
mercury	benzo(a)anthracene
lead	benzo(a)pyrene
chromium	benzo(b)fluoranthene
arsenic	benzo(k)fluoranthene
barium	chrysene
cadmium	dibenz[a,h]anthracene
copper	indeno(1,2,3-cd)pyrene

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil
- sediment

6.2: 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 issuance of the Record of Decision.

Interim Remedial Measure - UST Removal

An underground storage tank (UST) that was disposed of at the scrapyard was encountered at a depth of approximately 5 ft bgs. The tank was highly decomposed and filled with groundwater. Petroleum-related volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and total xylenes (BTEX), were detected in a water sample collected from the UST at concentrations greater than Class GA Ambient Water Quality Standards (AWQS). The tank was removed during RI activities on 10 and 11 November 2020. It appeared that the UST was disposed of at the Site as scrap metal waste, and not actually used in any capacity during prior Site operations. An endpoint soil sample was not taken from beneath the UST. The tank was cylindrical in shape and measured approximately 12 ft. in length and 5 ft. in width. Based on these measurements the volume of the UST was estimated to be about 2000 gallons. Approximately 900 gallons of groundwater that had infiltrated the tank were removed prior to removing the tank from the pit.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified in the Fish and Wildlife Resources Impact Analysis (FWRIA) and the toxicity of the contaminants at this site, concerns to ecological receptors are limited to onsite surface soils.

Groundwater, surface water, soil, and sediments were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, PCBs, pesticides, and emerging contaminants (ECs) including 1,4-dioxane. Based upon investigations conducted to date, the primary contaminants of concern for the site include PCBs, metals, and semi-volatile organic compounds, primarily polycyclic aromatic hydrocarbons (PAHs). See Exhibit A for details.

Munitions debris were observed in both surface and subsurface soil during the historical investigations. During the Phase II Site Investigation, spent small arms munitions debris (.50 caliber, 7.62 mm, etc.), spent medium caliber munitions debris (30 mm target practice rounds), and projectile fuse were observed. All munitions debris were verified by the unexploded ordinance (UXO) personnel as rendered safe scrap. During the RI, UXO technicians identified a rifle round, small arms shell casing, and an unspent 30 mm round of ammunition. Sample analysis for explosives via Method 8330 during the RI reported one sample with detected concentrations of total explosives; therefore, the presence of munition debris presents a safety concern with respect to future intrusive activities at the site.

Surface Soil: PCBs, also known as Aroclors, were detected in surface soil at concentrations exceeding the Unrestricted Use (UU) soil cleanup objective (SCO) of 0.1 parts per million (ppm) and the Commercial SCO of 1 ppm at numerous locations across the site. The maximum concentration of total Aroclor was 218 ppm, while the maximum concentrations of Aroclors 1260 and 1248 were 98 ppm and 120 ppm, respectively.

Various Target Analyte List (TAL) metals exceeded applicable soil cleanup objectives. Seven metals were detected at concentrations exceeding the Commercial SCOs, including arsenic (149 ppm; SCO 16 ppm), barium (2,250 ppm; SCO 400 ppm), cadmium (39.4 ppm; SCO 9.3 ppm), copper (4,010 ppm; SCO 270 ppm), lead (10,800 ppm; SCO 1,000 ppm), mercury (14.5 ppm; SCO 2.8 ppm), and nickel (917 ppm; SCO 310 ppm).

Surface soil analytical results reported SVOCs (primarily PAHs) at multiple sampling locations. Four PAHs were detected at concentrations greater than Commercial SCOs, including benzo[a]anthracene (7.2 ppm; SCO 5.6 ppm); benzo[a]pyrene (6.2 ppm; SCO 1 ppm); benzo[b]fluoranthene (6.4 ppm; SCO 5.6 ppm); and dibenz[a,h]anthracene (1.1 ppm; SCO 0.56 ppm).

No VOCs exceeded Commercial SCOs in surface soil.

One pesticide exceeded Commercial SCOs. Dieldrin was detected at 3.2 ppm, exceeding the Commercial SCO of 1.4 ppm.

No PFAS compounds exceeded Commercial SCOs in surface soil.

Subsurface Soil: Contamination in subsurface soil was found at depths ranging from 2-25 ft bgs. PCBs were detected at concentrations exceeding the Commercial SCO of 1 ppm at numerous locations across the site. The maximum concentration of total Aroclor was 206 ppm, while the maximum concentrations of Aroclors 1260, 1254, and 1242 were 160 ppm, 13 ppm and 46 ppm, respectively.

Various TAL metals exceeded Commercial soil cleanup objectives. Seven metals were detected at concentrations exceeding the Commercial SCOs, including arsenic (96.5 ppm; SCO 16 ppm), barium (671 ppm; SCO 400 ppm), cadmium (35.6 ppm; SCO 9.3 ppm), copper (2210 ppm; SCO 270 ppm), lead (77,900 ppm; SCO 1,000 ppm), mercury (23.6 ppm; SCO 2.8 ppm), and nickel (7,560 ppm; SCO 310 ppm).

Subsurface soil analytical results reported SVOCs (primarily PAHs) at multiple sampling locations. Four PAHs were detected at concentrations greater than Commercial SCOs, including benzo[a]anthracene (16 ppm; SCO 5.6 ppm); benzo[a]pyrene (8.7 ppm; SCO 1 ppm); benzo[b]fluoranthene (14 ppm; SCO 5.6 ppm); and dibenz[a,h]anthracene (1.4 ppm; SCO 0.56 ppm).

One pesticide exceeded Commercial soil cleanup objectives. Dieldrin was detected at 2.2 ppm, exceeding the Commercial SCO of 1.4 ppm.

No PFAS compounds exceeded Commercial SCOs in subsurface soil.

Site-related soil contamination is not expected to extend off-site.

Groundwater: No VOCs, SVOCs, cyanide, explosives, or PFAS were detected in groundwater at concentrations exceeding NYSDEC TOGS (1.1.1) Class GA groundwater standards (SCG); however, PCBs, metals, and pesticides exceeded their corresponding SCGs.

The maximum concentration of total Aroclor was 0.6 parts per billion (ppb), exceeding the standard of 0.09 ppb. Maximum concentrations of Aroclors 1260 (0.38 ppb) and 1248 (0.22 ppb) exceeded the standard of 0.09 ppb for both compounds.

Various metals exceeded applicable groundwater standards in one sample collected during the first groundwater sampling event. Maximum concentrations of arsenic (67 ppb; SCG 25 ppb), barium (2000 ppb; SCG 1000 ppb), beryllium (4.4 ppb; SCG 3 ppb), boron (1600 ppb; SCG 1000 ppb), chromium (total; 160 ppb; SCG 50 ppb), copper (340 ppb; SCG 200 ppb), iron (185,000 ppb; SCG 300 ppb), lead (1000 ppb; SCG 25 ppb), magnesium (52,700 ppb; SCG 35,000 ppb), manganese (4,700 ppb; SCG 300 ppb), mercury (0.93 ppb; SCG 0.7 ppb), nickel (220 ppb; SCG 100 ppb), selenium (18 ppb; SCG 10 ppb), and sodium (39,900 ppb; SCG 20,000 ppb) exceeded standards.

These exceedances were not replicated during future groundwater sampling events and are assumed to be the result of turbid water conditions during sampling.

The pesticide dieldrin was found at multiple locations at the site. The maximum concentration was 24 ppb, exceeding the standard of 4 ppb.

The groundwater is not used as a source of drinking water. The Town of Corning is connected to a public water supply that is not affected by this contamination.

Off-site groundwater is not expected to be contaminated with site-related COCs.

Sediment: A total of 8 surface sediment samples were collected; 5 samples were collected near the east shoreline of the Chemung River west of the Site and 3 samples were collected from Narrows Creek south of the Site. Samples were submitted for laboratory analysis of VOCs, SVOC, PCBs, TAL metals and mercury, cyanide, herbicides, pesticides, explosives, TOC, and PFAS. Analytical results for surface sediment samples were screened against the sediment guidance values provided in the NYSDEC Freshwater Sediment Class A and Class C Guidance Values.

Two metals were detected at concentrations greater than NYSDEC Freshwater Sediment Class A Guidance Values (SGVs), including arsenic (14.3 ppm; SGV 10 ppm) and nickel (30.9 ppm; SGV 23 ppm). Only lead was detected at a concentration (140 ppm) greater than its NYSDEC Freshwater Sediment Class C Guidance Value of 130 ppm. One sample location (NSED-02) had a total PCB concentration (0.39 mg/kg) over Class A criteria (0.1 mg/kg).

Surface Water: A total of 8 surface water samples were collected; 5 samples were collected near the east shoreline of the Chemung River west of the Site, and 3 samples were collected from Narrows Creek south of the Site. Surface water samples were submitted for laboratory analysis of VOCs, SVOCs, PCBs, total and dissolved TAL metals and mercury, total hardness, cyanide, herbicides, pesticides, explosives, PFAS, and 1,4-dioxane. Analytical results for surface water samples were compared to the NYSDEC AWQS Class C, Type A, surface water standards and guidance values (6 NYCRR Part 703.5 Water Quality Regulations, as presented in the Division of Water Technical and Operational Guidance Series 1.1.1, 1998, as amended). Only cyanide was detected at a concentration (2 ppb) greater than its NYSDEC Ambient Water Quality Guidance Value of 1 ppb.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

The site is not fenced and people who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil), may move into overlying buildings and affect the indoor air

quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The site is currently unoccupied, but soil vapor intrusion (SVI) should be evaluated on-site in the event that new buildings are constructed. Environmental sampling indicates that SVI is not a concern off-site.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

SECTION 7: SUMMARY OF THE PROPOSED REMEDY

To be selected, the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the FS report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which 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. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's proposed remedy is set forth at Exhibit D.

The proposed remedy is referred to as the Cover System with an Institutional Control and Site Management Plan remedy.

The estimated present worth cost to implement the remedy is $1,050,515. The cost to construct the remedy is estimated to be $749,646 and the estimated average annual cost is $10,043.

The elements of the proposed remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise(TM) (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Construction of a Temporary Vehicle Traffic Bridge

A 40-ft by 16-ft modular steel bridge would be installed at Narrows Creek to provide physical access to the site.

3. Cover System

A site cover will be required across the entire 3.2-acre site. The soil cover will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to seed/plant and maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for commercial use, as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site development. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

4. Security Fencing

Security fencing will be installed and maintained to control access to the site. Signage will also be installed detailing site conditions and the nature of site activities.

5. Institutional Control

Imposition of an institutional control in the form of an Environmental Easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
- allow the use and development of the controlled property to commercial or industrial as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- require compliance with the NYDEC-approved Site Management Plan (SMP);
- state that EPA shall be, on behalf of the public, a third-party beneficiary of the benefits, rights and obligations contained in this instrument, provided that nothing in this instrument shall be construed to create any obligations on the part of EPA; and
- forbid occupation or development of the site with new permanent buildings without approval of the NYSDEC and EPA.

6. Site Management Plan

A Site Management Plan is required, which includes the following:

a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

   Institutional Controls: The Environmental Easement discussed in Paragraph 5 above.

   Engineering Controls: The soil cover, fencing and signage discussed in Paragraphs 3 and 4.

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination and unexploded ordnance;
- Due to the presence of unexploded ordnance, the cover and demarcation layer will be maintained to ensure the cover is not breached by burrowing animals;
- Explosives safety, cost, and/or technical limitations limited the ability to conduct a response and thereby limits the reasonably anticipated future land uses. Because of technical impracticability, inordinately high costs, and other reasons, complete clearance of the unexploded ordnance (UXO) was not possible to the degree that allows certain uses, especially unrestricted use, restricted residential or passive recreational uses. Land use controls are necessary to ensure protection of human health and public safety. Additionally, since complete UXO clearance was not possible, annual notifications will be provided to the current landowner and appropriate local authority of the potential presence of an explosives safety hazard;
- Descriptions of the provisions of the environmental easement, including any land use and/or groundwater use restrictions;
- A provision requiring a risk-based approval from the EPA prior to any change of use from commercial or industrial use as defined by 40 CFR 761.3;
- A provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 3 above will be placed in any areas where the upper two feet of exposed surface soil exceeds the applicable soil cleanup objectives (SCOs);
- A provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable due to unexploded ordnance will be immediately and thoroughly investigated pursuant to a plan approved by the NYSDEC. Based on the investigation results and the NYSDEC determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment;
- A provision for the management and inspection of the identified engineering controls;

- A provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- Maintaining site access controls and Department notification;
- The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and
- include a copy of the TSCA approval, appended as an attachment.

b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- A schedule of monitoring and frequency of submittal to the Department;
- Monitoring groundwater and surface water to assess the performance and effectiveness of the remedy; and
- Monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting soil.

Wastes are defined in 6 NYCRR Part 375-1.2 (aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375 (au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and Source areas were identified at the site include:

Waste/Source Areas – Munitions and Explosives of Concern (MEC)

MEC have been identified within the upper 5 ft of soil. MEC avoidance activities were conducted during all intrusive work (e.g., excavations, underground storage tank (UST) removal, well installation). MEC avoidance activities were performed under the full-time supervision of unexploded ordnance (UXO) technicians. The purpose of MEC screening and avoidance procedures was to ensure the safety and wellbeing of field personnel and equipment by detecting and identifying anomalies and potential MEC that might be disturbed during the RI field activities and UST removal. MEC avoidance procedures were performed using both visual inspection and handheld magnetometers.

Waste/Source Areas – Underground Storage Tank (UST)

A UST that was originally encountered during the 2010 Phase II Site Investigation at a depth of approximately 5 ft. below ground surface (bgs) was removed during Remedial Investigation (RI) activities on 10 and 11 November 2020. The UST appeared to have been disposed of as scrap metal waste and not used in any capacity during prior Site operations. The tank was cylindrical in shape and the volume was estimated to be about 2,000 gallons. A grab sample was taken from approximately 900 gallons of groundwater that had infiltrated the tank and was sent for off-site laboratory analysis for VOCs and SVOCs. Petroleum-related VOCs, including benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected at concentrations greater than Class GA Ambient Water Quality Standards (AWQS). Investigation derived wastes (IDW) were collected in drums and disposed of off-site.

Certain waste/source areas identified at the site were addressed by the IRM described in Section 6.2. The remaining waste/source area identified during the RI will be addressed in the remedy selection process.

Soil

Surface and subsurface soil samples were collected at the site during the RI. A total of 14 surface soil samples were collected from a depth of 0-2 inches to assess direct human exposure. In addition, 18 subsurface soil samples were collected from a depth of 2 - 25 feet to assess soil contamination impacts to groundwater. Figures 3 through 11 depict the surface and subsurface sample locations and concentrations, respectively. The results indicate that soils at the site exceed the unrestricted SCG for volatile and semi-volatile organics, PCBs, pesticides, PFAS, and metals. Several metals, PAHs, and pesticides were present above commercial soil cleanup objectives (SCOs), including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, arsenic, barium, cadmium, copper, lead, mercury, nickel, and dieldrin.

Table 2 - Surface Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Commercial SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Acetone	1.2-210	0.05	9/14	500	0/14
Methylene Chloride	0.047-0.073	0.05	1/14	500	0/14
SVOCs					
Benzo(a)Anthracene	0.035-7.2	1	4/14	5.6	1/14
Benzo(a)Pyrene	0.037-6.2	1	4/14	1.0	4/14
Benzo(b)Fluoranthene	0.055-6.4	1	6/14	5.6	1/14
Benzo(k)Fluoranthene	0.26-3.9	0.8	4/14	56	0/14
Chrysene	0.4-5.8	1	4/14	56	0/14
Dibenz(a,h)Anthracene	0.22-1.1	0.33	4/14	0.56	1/14
Indeno(1,2,3-c,d)Pyrene	0.027-3.2	0.5	6/15	5.6	0/14
Metals					
Arsenic	5.8-149	13	9/14	16	7/14
Barium	86.8-2,250	350	2/14	400	2/14
Cadmium	0.38-39.4	2.5	5/14	9.3	4/14
Copper	15.8-4,010	50	8/14	270	6/14
Lead	19.4-10,800	63	11/14	1,000	6/14
Manganese	378-3530	1600	3/14	10,000	0/14
Mercury	0.03-14.5	0.18	7/14	2.8	3/14
Nickel	22.1-917	30	8/14	310	4/14
Selenium	0.52-10.3	3.9	2/14	1,500	0/14
Silver	0.31-32.8	2	5/14	1,500	0/14
Zinc	67.9-4520	109	9/14	10,000	0/14
Pesticides/PCBs					
PCB-1248 (Aroclor 1248)	0.18-98	0.1	2/14	1	1/14
PCB-1260 (Aroclor 1260)	0.24-120	0.1	12/14	1	9/14
Total PCBs	0.24-218	0.1	12/14	1	9/14
Dieldrin	0.019-3.2	0.005	9/14	1.4	2/14
Endrin	0.036-0.51	0.014	7/14	89	0/14
P,P'-DDE	0.0042-1.7	0.0033	8/14	62	0/14
PFAS [results and SCGs are in parts-per-billion(ppb)]					
Perfluorooctanesulfonic acid (PFOS)	0.59-2.4	0.88	2/3	440	0/3

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.

Table 3 - Subsurface Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Commercial SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Acetone	0.038-1.3	0.05	5/18	500	0/18
Methylene Chloride	0.041-0.2	0.12	1/18	500	0/18
SVOCs					
Benzo(a)Anthracene	0.089-16	1	3/18	5.6	1/18
Benzo(a)Pyrene	0.061-8.7	1	3/18	1	3/18
Benzo(b)Fluoranthene	0.082-14	1	3/18	5.6	1/18
Benzo(k)Fluoranthene	0.039-7.1	0.8	3/18	56	0/18
Chrysene	0.11-19	1	3/18	56	0/18
Dibenz(a,h)Anthracene	0.036-1.4	0.33	1/18	0.56	1/18
Dibenzofuran	0.036-15	7	1/18	350	0/18
Indeno(1,2,3-c,d)pyrene	0.037-4.1	0.5	3/18	5.6	0/18
Naphthalene	0.051-13	12	1/18	500	0/18
Metals					
Arsenic	5.7-96.5	13	6/18	16	4/18
Barium	70.3-671	350	3/18	400	2/18
Cadmium	0.066-35.6	2.5	4/18	9.3	3/18
Copper	12.6-2,210	50	7/18	270	1/18
Lead	13.4-77,900	63	10/18	1,000	4/18
Manganese	285-2,610	1600	2/18	10,000	0/18
Mercury	0.011-23.6	0.18	7/18	2.8	3/18
Nickel	22.1-7,560	30	14/18	310	3/18
Selenium	1.8-39	3.9	5/18	1,500	0/18
Silver	0.22-284	2	4/18	1,500	0/18
Zinc	57.4-5,360	109	7/18	10,000	0/18
Pesticides/PCBs					
PCB-1242 (Aroclor 1242)	14-46	0.1	4/18	1	3/18
PCB-1254 (Aroclor 1254)	2.6-13	0.1	2/18	1	2/18
PCB-1260 (Aroclor 1260)	18-160	0.1	9/18	1	4/18
Total PCBs	18-206	0.1	11/18	1	6/18
Beta BHC	0.043	0.036	1/18	3	0/18
Dieldrin	0.0019-2.2	0.005	9/18	1.4	2/18
Endrin	0.00052-0.45	0.014	5/18	89	0/18
Gamma BHC (Lindane)	0.00051-0.2	0.1	1/18	9.2	0/18
Heptachlor	0.0005-0.24	0.042	2/18	15	0/18
P.P'-DDD	0.013-0.11	0.0033	3/18	92	0/18
P.P'-DDE	0.00064-0.99	0.0033	7/18	62	0/18
P.P'-DDT	0.00088-0.12	0.0033	2/18	47	0/18
PFAS [results and SCGs are in parts-per-billion (ppb)]					

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Commercial SCG[c] (ppm)	Frequency Exceeding Restricted SCG
Perfluorooctanesulfonic acid (PFOS)	0.39-2.5	0.88	2/3	440	0/3
Perfluorooctanoic acid (PFOA)	0.025-1.5	0.66	1/3	500	0/3

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.

The primary surface and subsurface soil contaminants are PCBs, metals, and SVOC (primarily polycyclic aromatic hydrocarbons, or PAHs). As noted on Figures 3 through 11, the primary soil contamination is associated with the operation of the site as an industrial waste landfill and metal scrap recycler.

It should be noted that while acetone and methylene chloride were detected at concentrations greater than established SCOs, these analytes are common laboratory contaminants and were detected in the laboratory QC samples. It is unlikely that the concentrations of acetone and methylene chloride observed are related to the Site.

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, arsenic, barium, cadmium, copper, lead, mercury, nickel, dieldrin, and PCBs.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions on and off-site. The results indicate that contamination in groundwater at the site exceeds the SCGs for PCBs, pesticides, and inorganics, including arsenic, barium, beryllium, boron, total chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, selenium, sodium, and dieldrin. Groundwater results exceeding criteria are shown on Figures 12 through 14.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
TARGET ANALYTE LIST METALS			
Arsenic	9.4-67	25	1/10
Barium	77-2000	1000	1/10
Beryllium	0.37-4.4	3	1/10
Boron	98-1600	1000	1/10
Chromium, total	1.2-160	50	1/10
Copper	8.3-340	200	1/10
Iron	19-185000	300	6/10
Lead	5.2-1000	25	1/10

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
Magnesium	4900-52700	35000	1/10
Manganese	2.4-4720	300	4/10
Mercury	0.93	0.7	1/10
Nickel	1.3-220	100	1/10
Selenium	18	10	1/10
Sodium	10200-39900	20000	5/10
Pesticides/PCBs			
Aroclor 1248	0.22	0.09	1/10
Aroclor 1260	0.38	0.09	1/10
Total PCBs	0.6	0.09	1/10
Dieldrin	0.012-0.024	0.004	2/10

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The majority of SCG exceedances were from one turbid groundwater sample, where the contaminants were sorbed into the particulate matter. Subsequent groundwater sampling results at this same location were not turbid and exhibited non-detect concentration results with the exception of iron and manganese, which were detected at much lower concentrations during the second sampling round. Based on the findings of the RI, the past disposal of hazardous waste has not resulted in the contamination of groundwater. Although metals, pesticides, and PCBs were detected in groundwater samples at concentrations exceeding the NYSDEC Class GA criteria, particularly in the one turbid sample from the first round of groundwater sampling, there is no current groundwater usage at or in the immediate vicinity of the Site (e.g., potable or industrial wells), and no expected future use of groundwater, as connection to a public water supply is available.

Sediments

Sediment samples were collected during the RI from each of the eight surface water sampling locations. The samples were collected to assess the sediment conditions off-site and to determine if site-related contaminants were migrating from the Site to Narrows Creek and/or the Chemung River. The results indicate that sediment at the junction of Narrows Creek and the Chemung River exceeds the Class B lower limit for some metals (arsenic, nickel, and lead) and exceeds the Class C lower limit for lead. One sample location exceeded Class A criteria for PCBs. Sediment results exceeding criteria are shown on Figure 15.

Table 5 - Sediment

Detected Constituents	Concentration Range Detected (ppm)[a]	SCG[a] (ppm)	Frequency Exceeding SCG[a]	SCG[b] (ppm)	Frequency Exceeding SCG[b]
Target Analyte List Metals					
Arsenic	3.5-14.3	10	3/8	33	0/8
Lead	12.6-140	36	4/8	130	1/8

Detected Constituents	Concentration Range Detected (ppm)[a]	SCG[a] (ppm)	Frequency Exceeding SCG[a]	SCG[b] (ppm)	Frequency Exceeding SCG[b]
Nickel	17.8-30.9	23	7/8	49	0/8
PCBs					
Aroclor 1260	0.39	0.1	1/8	1.0	0/8

a – SCG = Class B lower limit – sediment is Class A if below this level; Class B sediments "are slightly to moderately contaminated and additional testing is required to evaluate potential risk", NYSDEC Commissioner Policy-60, Screening and Assessment of Contaminated Sediment.
b - SCG = Class C lower limit – sediment is Class C if greater than this level; Class C sediments "are considered highly contaminated and are likely to pose a risk to aquatic life", NYSDEC Commissioner Policy-60, Screening and Assessment of Contaminated Sediment.

Concentrations observed in Narrows Creek sediment upstream of the Site were similar to concentrations observed adjacent to the Site, suggesting that metals are naturally elevated in the region or an unknown upstream source may exist.

Surface Water

Surface water samples were collected during the RI from three locations along Narrows Creek (located south of the site) and five locations along the Chemung River (located west of the site). There are no surface water bodies within the site boundary. The samples were collected to assess the surface water conditions off-site and to determine if site-related contaminants were migrating from the Site to Narrows Creek and/or the Chemung River. The results show an exceedance of dissolved cyanide above Ambient Water Quality Standards.

Table 4 - Surface Water

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Acetone	3.2-4.5	50	0/8
SVOCs			
2,6-Dinitrotoluene	1.2.-1.7	5	0/8
Total Metals/Dissolved Metals			
Aluminum	0.084	100	0/8
Copper	0.0016 – 0.0049	5.05	0/8
Nickel	0.0013	29.5	0/8
Aluminum (Dissolved)	0.08-0.084	100	0/8
Cyanide (Dissolved)	0.0057-2	1	1/8
Iron (Dissolved)	0.027-0.17	1.7	0/8
Zinc (Dissolved)	0.0015-0.0019	66.5	0/8
PFAS [results and SCGs in parts-per-trillion (ppt)]			
Perfluorooctanesulfonic acid (PFOS)	0.82-1.1	10	0/8
Perfluorooctanoic acid (PFOA)	0.58-0.67	10	0/8

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b-SCG: Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1) and 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards.

The surface water sample with the dissolved cyanide SCG exceedance was collected in the Chemung River, just downstream from the confluence with Narrows Creek. Because dissolved cyanide concentrations were less than the SCG in each of the surface water samples collected from Narrows Creek (which drains into the Chemung River), and the remaining surface water samples collected downstream in the Chemung River, dissolved cyanide in surface water is not considered an environmental concern.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Present Worth: $0
Capital Cost:..... $0
Annual Costs:..... $0

Alternative 2: No Further Action with Site Management

The No Further Action with Site Management Alternative recognizes the partial remediation of the site completed by the IRM described in Section 6.2; however, further institutional controls, engineering controls, and site management are necessary to protect public health and the environment. This alternative involves the construction of engineering controls (i.e., a chain-link fence, locking gate, and signage) along the perimeter of the Site to prevent access and exposure to remaining contamination and munitions. In addition, this alternative includes the establishment of institutional controls in the form of an environmental easement restricting the use of the site to low-occupancy commercial use, a site management plan, groundwater use restriction, and an excavation plan, all necessary to protect public health and the environment.

Present Worth: $457,786
Capital Cost:..... $156,916
Annual Costs:..... $10,043

Alternative 3: Full Removal of Fill to Unrestricted Use SCOs (Self-Implementing)

This alternative includes the excavation and off-site disposal of surface and subsurface contaminant source areas, including grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u) at a permitted facility. This alternative is aimed at removing all fill material to underlying clean, native soil, which includes on-site soil that exceeds unrestricted use (UU) SCOs for total PCBs (0.1 ppm) and metals (mainly arsenic [13 ppm], lead [63 ppm], mercury [0.18 ppm], nickel [30 ppm] and zinc [109 ppm]). This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A, with soil meeting the unrestricted soil cleanup objectives listed in Part 375-6.8(a).

Target removal depth will be confirmed and refined following a Pre-Design Investigation (PDI) consisting of PCB site characterization sampling pursuant to 40 CFR Part 761. This includes soil sample collection in a 10-ft by 10-ft grid across the site. A Sonic drill rig would be used to minimize generation of soil cutting during the PDI, and preference would be given to the closest certified laboratory that can fulfill analysis requirements to

minimize greenhouse gas (GHG) emissions associated with sample shipping. GHG emissions and costs associated with PDI activities could be greatly reduced by requesting EPA approval of a modified PCB site characterization sample spacing. Excavation of contaminated soils (up to 26 feet below ground surface) would produce approximately 68,700 cubic yards of material for disposal.

Current volume estimates were developed based on observed fill depth and PCB and metals contamination observed during the Phase II SI (The ARGO Team 2010) and RI (EA 2022). This alternative includes confirmation sampling following excavation to verify that soil exceeding UU SCOs has been removed. This alternative would be a self-implementing cleanup under 40 CFR Part 761.61 and would meet pre-disposal (unrestricted use) conditions as required under DER-10.

Due to the historic presence of munitions debris and low potential for Material Potentially Presenting an Explosive Hazard (MPPEH), UXO construction support would be implemented during sampling and excavation with a UXO technician present during all removal activities. If suspected MPPEH is identified by the UXO technicians, local Explosive Ordnance Disposal would be contacted for disposal, and UXO support would be evaluated with the stakeholders. It is assumed for this alternative that no MPPEH will be identified. As an additional safety measure, excavated material will be sifted to further screen for MEC and MPPEH prior to off-site disposal of the soil.

When soil/fill has been removed to target depths, and confirmation sample analytical results indicate all soils meet the SCGs, the Site would be restored with clean fill from a local offsite source meeting the requirements of 6 NYCRR Part 375-6.8(b) for unrestricted use, brought in as needed to backfill and achieve pre-remediation topography, restore the Site, and enable re-vegetation and stabilization.

The removal of all source material combined with natural attenuation of residual groundwater contamination will result in restoration to predisposal conditions; however, due to the remaining potential for contact with munitions debris and munitions of explosive concern, future use of the Site would still be limited. Limited monitoring will be conducted as part of the Gibson Scrapyard Site Management Plan to verify that any potentially remaining munitions have not surfaced due to erosion or frost. This remedy will have no annual cost, only the capital cost.

Capital Cost:..... $10,682,793

Alternative 4: Partial Removal of Fill with 40 CFR Part 761 Cap; Remove all Soil Exceeding 100 ppm PCBs; Full Cap (Self-Implementing)

This alternative would include the partial excavation and off-site disposal of contaminated soil at a permitted facility followed by installation of a 40 CFR Part 761 Cap and land-use controls across the Site. Because contaminants would remain on-site, a hydrologic and hydraulic analysis of various flood events would be conducted as part of a PDI to determine whether additional flood protection should be included in the cap design to address vulnerability to climate change.

As with Alternative 3, mechanical excavation will be used to remove the contaminated soil, with the same measure taken due to munitions debris (i.e., excavation in 1-2 ft lifts, and sifting of excavated materials). UXO technicians would be on-site during all intrusive activities. Based on samples collected during the Phase II SI (The ARGO Team 2010) and the RI (EA 2022), approximately 7,100 cubic yards (CY) of contaminated soil covering approximately 0.5 acres with a depth range of 0 to 12 ft within the parcels that exceed the criteria (100 ppm) for PCBs would be removed. Additional site characterization sampling would need to be conducted as part

of a PDI to meet the requirements set forth in 40 CFR Part 761.265, which includes soil sampling in a 10-ft by 10-ft grid across the site, as described under Alternative 3 in Section 6.3. Contaminated soil would be excavated in 1-2 ft lifts to accommodate for screening for munitions debris. The volume currently includes 100 percent contingency. Excavated soil/fill would be sifted for munitions debris removal prior to being characterized, staged separately based on waste steam, and transported offsite for disposal.

The engineered cap system will be required in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future commercial use of the site. The engineered cap system will be placed over the entire Site, as indicated in Figure 16 and will be designed, constructed, and maintained in conformance with the substantive requirements of 6 NYCRR Part 360 solid waste regulations. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be imported to replace the excavated soil and establish the designed grades at the Site.

This alternative includes the institutional controls described in Alternative 2 and the UXO construction support to address the historical presence of munitions debris as described in Alternative 3.

Present Worth: $3,710,868
Capital Cost:..... $3,409,998
Annual Costs:..... $10,043

Alternative 5: Partial Removal of Fill with 6 NYCRR Part 375 Soil Cover; Remove all Soil Exceeding 100 ppm PCBs; Full Soil Cover (Self-Implementing)

This alternative would include the partial excavation and off-site disposal of contaminated soil at a permitted facility followed by installation of a Part 375 Soil Cover and land-use controls across the Site. As with Alternative 4, the same volume of contaminated soil would be addressed, and a hydrologic and hydraulic analysis of various flood events would be conducted as part of a PDI.

As with Alternative 3, mechanical excavation will be used to remove the contaminated soil, with the same measure taken due to munitions debris (i.e., excavation in 1-2 ft lifts, and sifting of excavated materials). UXO technicians would be on-site during all intrusive activities. Based on samples collected during the Phase II SI (The ARGO Team 2010) and the RI (EA 2022), approximately 7,100 CY of contaminated soil covering approximately 0.5 acres with a depth range of 0 to 12 ft within the parcels that exceed the criteria (100 ppm) for PCBs would be removed. Additional site characterization sampling would need to be conducted as part of a PDI to meet the requirements set forth in 40 CFR Part 761.265, which includes collected soil sampling in a 10-ft by 10-ft grid across the site, as described under Alternative 3 in Section 6.3. Contaminated soil would be excavated in 1-2 ft lifts to accommodate for screening for munitions debris. The volume currently includes 100 percent contingency. Excavated soil/fill would be sifted for munitions debris removal prior to being characterized, staged separately based on waste steam, and transported offsite for disposal.

The soil cover will be required in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future commercial use of the site. Where a soil cover is to be used it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not

necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs. The soil cover will be placed over the entire Site, as indicated in Figure 16.

This alternative includes the institutional controls described in Alternative 2 and the UXO construction support to address the historical presence of munitions debris as described in Alternative 3.

Present Worth: $3,524,771
Capital Cost:..... $3,223,901
Annual Costs:..... $10,043

Alternative 6: 40 CFR Part 761 Cap with an Institutional Control and Site Management Plan (Risk-Based)

This alternative would include construction of a 40 CFR Part 761 cap across the entire site consisting of a 10-inch layer of clay and a 6-inch layer of topsoil and seed. This alternative would also involve a hydrologic and hydraulic analysis of various flood events as part of a PDI, consistent with Alternative 4. This alternative also includes the engineering and institutional controls described in Alternative 2.

Present Worth: $1,087,845
Capital Cost:..... $786,975
Annual Costs:..... $10,043

Alternative 7: 6 NYCRR Part 375 Soil Cover System with an Institutional Control and Site Management Plan (Risk-Based)

This alternative would include construction of a 6 NYCRR Part 375 soil cover across the entire site would include a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. All other elements of the soil cover placement will be consistent with Alternative 5. As with Alternative 4, a hydrologic and hydraulic analysis of various flood events would be conducted as part of a PDI. This alternative also includes the engineering and institutional controls described in Alternative 2.

Present Worth: $1,050,515
Capital Cost:..... $749,646
Annual Costs:..... $10,043

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
No Further Action	$0	$0	$0
No Further Action with Site Management (Risk-Based)	$156,916	$10,043	$457,786
Full Removal of Fill to Unrestricted Use SCOs (Self-Implementing)	$10,682,793	$0	$10,749,178
Partial Removal of Fill with 40 CFR Part 761 Cap; Remove all Soil Exceeding 100 ppm PCBs from Commercial Parcels, all Soil Exceeding 10 ppm PCBs for Residential Parcel; Full Cap (Self-Implementing)	$3,409,998	$10,043	$3,710,868
Partial Removal of Fill with 6 NYCRR Part 375 Soil Cover; Remove all Soil Exceeding 100 ppm PCBs from Commercial Parcels, all Soil Exceeding 10 ppm PCBs for Residential Parcel; Full Soil Cover (Self-Implementing)	$3,223,901	$10,043	$3,524,771
40 CFR Part 761 Cap with an Institutional Control and Site Management Plan (Risk-Based)	$786,975	$10,043	$1,087,845
6 NYCRR Part 375 Soil Cover System with an Institutional Control and Site Management Plan (Risk-Based)	$749,646	$10,043	$1,050,515

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 7, 6 NYCRR Part 375 Soil Cover System with an Institutional Control and Site Management Plan (Risk-Based) as the remedy for this site. Alternative 7 would achieve the remediation goals for the site by providing a site cover. The elements of this remedy are described in Section 7. The proposed remedy is depicted in Figure 16.

Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS 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.

The proposed remedy, Alternative 7, satisfies this criterion by containing the contaminated soil/fill under a soil cover, closing off the exposure pathway; thereby, preventing human and ecological contact to contaminated material. Neither Alternative 1 (No Further Action) nor Alternative 2 (No Further Action with Site Management) provide any protection to public health and the environment and will not be evaluated further. Alternative 3, by removing all soil contaminated above the Unrestricted soil cleanup objective, meets the threshold criteria. Alternatives 4 through 7 also comply with this criterion; however, subsurface soil contamination would remain on-site. In addition, Alternatives 4 through 7 rely on a groundwater use restriction at the site to protect human health. Alternative 3 may require a short-term restriction on groundwater use; however, it is expected the restriction will be able to be removed once the remedy is complete.

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.

Alternatives 4 through 7 comply with SCGs to the extent practicable. Alternatives 6 and 7 address source areas of contamination and comply with the commercial use soil cleanup objectives at the surface through construction of a cap or cover system. As Alternatives 4 through 7 satisfy the threshold criteria, the remaining criteria are particularly important in selecting a final remedy for the site. It is expected Alternative 3 will achieve soil and groundwater SCGs in less than 5 years, while soil and groundwater contamination above SCGs will remain on-site under Alternatives 4 through 7.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. 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.

Long-term effectiveness and permanence are directly related to the quantity of contaminant remaining on the Site and, therefore, are best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternatives 3 through 5). Alternative 3 removes both surface and subsurface soil and is more effective long term than Alternatives 4 and 5, which just address surface soil. For Alternatives 4 through 7, monitoring and institutional controls in the form of an environmental easement and a Site Management Plan would be an effective means of managing residual contamination. Alternatives 4 through 7 require a groundwater use restriction and a soil vapor intrusion investigation for any future habitable structures. Alternative 3 would result in no remaining contamination; however, due to the remaining potential for contact with munitions debris and munitions of explosive concern, future use of the Site would still be limited.

4. 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.

Alternatives 3 through 5 reduce toxicity and volume of on-site waste by transferring the material to an approved off-site location; however, depending on the disposal facility, the volume of material would not be reduced. Alternatives 4 and 5 require the excavation of approximately 7,100 cubic yards of contaminated soil, which significantly reduces the volume and mobility by removing additional subsurface soil sources. Alternatives 4 through 7, because of the cap or cover system, both significantly reduce the mobility of contamination; however, the remaining contamination will require restrictions on the use of the property, groundwater use restrictions, and long-term maintenance of the capped or cover system area. Alternative 3, through the removal of 68,700 cubic yards of contaminated surface and subsurface material, reduce the mobility and volume of more contamination than any other alternatives and does not require a cover system or cap.

5. Short-term Impacts and 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.

Alternatives 3 through 7 all have short-term impacts which could easily be controlled. Alternatives 3 through 7, which include excavation and/or grading of soil to varying degrees, require air and dust monitoring to protect local residents. As Alternative 3 transports the largest amount of soil (removal and backfill), it presents the greatest short-term impacts to the surrounding vicinity and to NYSDEC green remediation goals (in the form of air emissions). Alternatives 4 through 7 could all be constructed in less than a year, but Alternative 3 would require almost 3 years to complete.

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.

The technologies employed for Alternatives 3, 4, 5, 6, and 7 are conventional and reliable technologies for remediation; however, Alternatives 6 and 7 are more favorable and readily implementable because excavation is not required. Alternatives 3, 4, and 5, while also implementable, are more difficult to implement due to the unknown extent of subsurface munitions debris and munitions of explosive concern, which requires specialized

personnel duration excavation. Furthermore, the volume of soil excavated under Alternatives 3, 4, and 5 necessitate increased truck traffic on local roads for a much longer duration.

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 of the alternatives vary significantly. With its large volume of soil to be handled, Alternative 3 (excavation and off-site disposal) has the highest present worth cost. Consolidation and capping (Alternatives 4 through 7) would be much less expensive than Alternative 3. Alternatives 4 and 5, which involve limited removal of soil containing PCBs before capping, as well as MEC clearance costs associated with the fill removal component, would not be as cost effective as Alternatives 6 and 7, which require MEC clearance for surface soil only rather than the entire depth of fill, effectively minimizing risks to potential receptors at a lower cost than Alternatives 3 through 5. With a lower capital cost than Alternative 6, Alternative 7 has the best balance between cost and effectiveness.

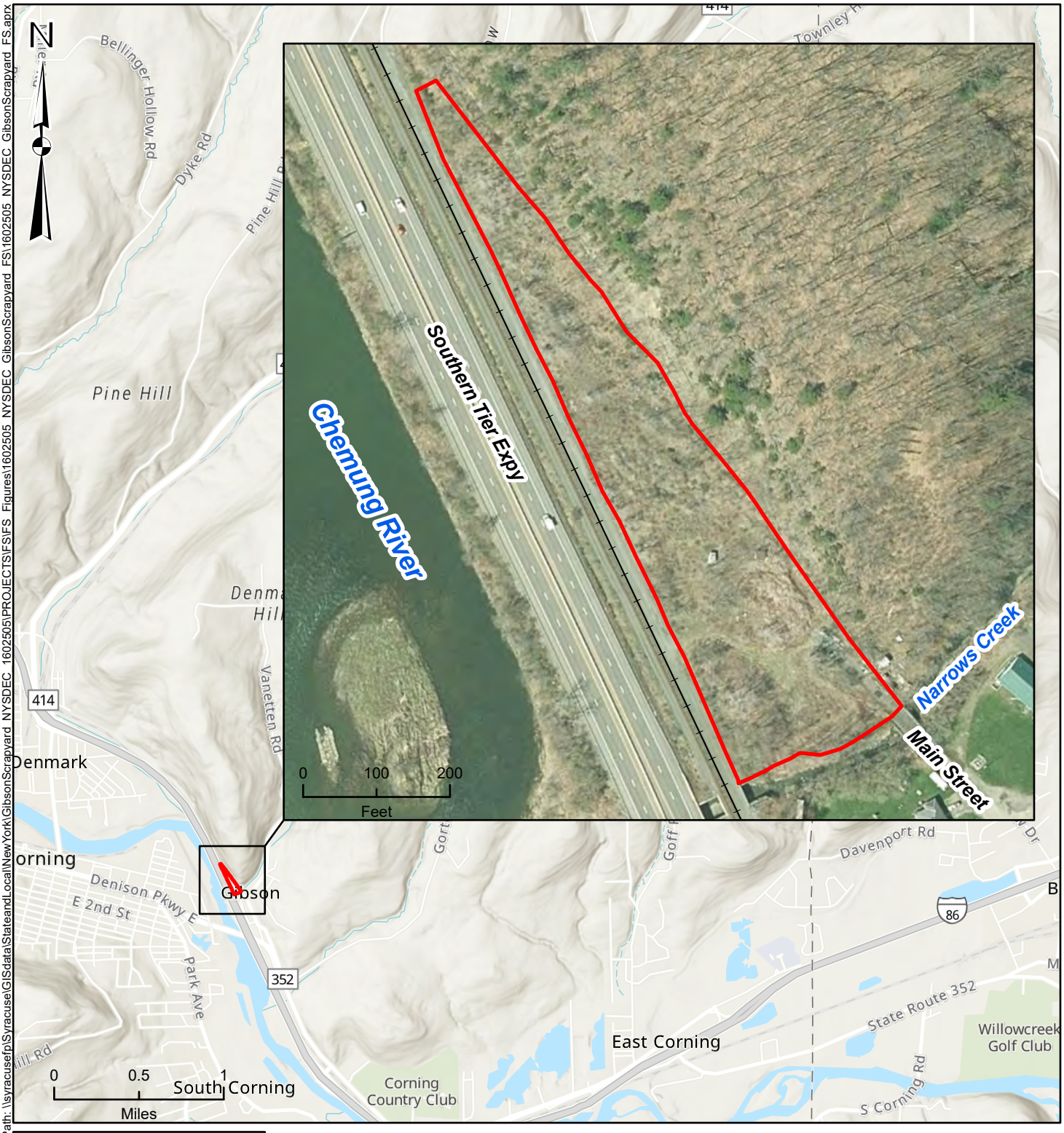
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Alternatives 3 through 7 require land use restrictions, such as environmental deed restriction, limiting future use of the Site since contamination would remain. Alternative 3 involves removal of soil and fill material; however, due to the potential for munitions debris and MEC to still be present at the site, the future use of the Site would still be limited, though not as limited as for Alternatives 4 through 7.

The final criterion, Community Acceptance, 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.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 7 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



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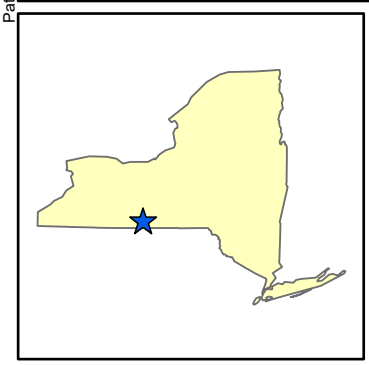

Legend

- Site Boundary
- Norfolk Southern Railroad
- Site Location

Figure 1
Site Location
Gibson Scrapyard (851058)
Gibson, New York

Notes:

Data Source: NYS GPO 2022, Imagery: ESRI 2018

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

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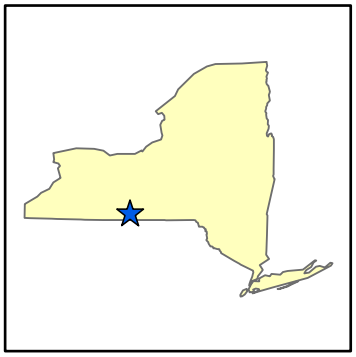

Legend

- Site Boundary
- Construction Waste/Fill Mounds
- Test Pit
- Site Location
- Concrete Foundation
- Norfolk Southern Railroad
- Former Underground Storage Tank

Figure 2
Site Features
Gibson Scrapyard (851058)
Gibson, New York

Notes:

Data Source: Imagery: ESRI 2018

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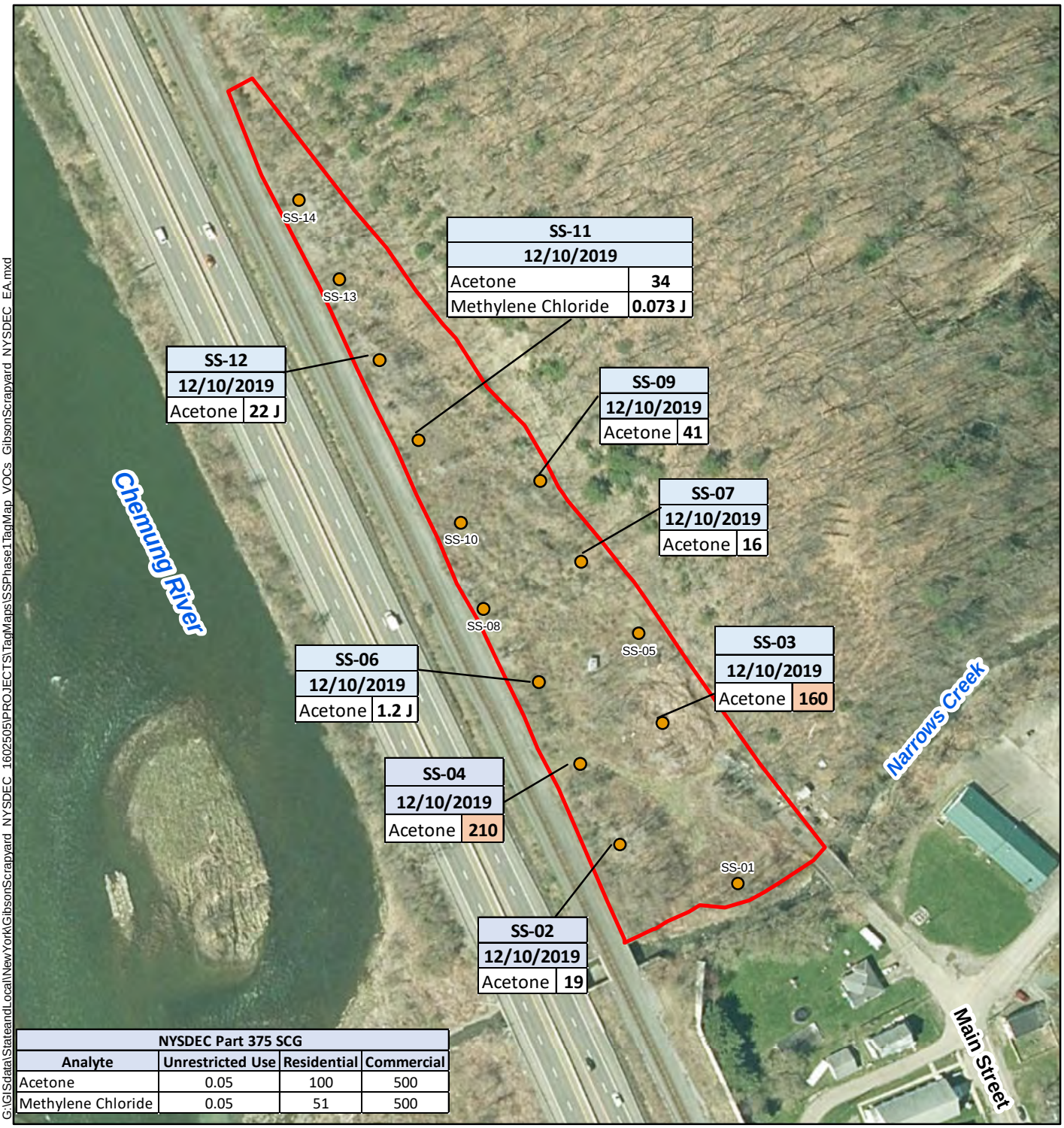

NYSDEC Part 375 SCG			
Analyte	Unrestricted Use	Residential	Commercial
Acetone	0.05	100	500
Methylene Chloride	0.05	51	500

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Legend

- Surface Soil Sampling Locations
- Site Boundary

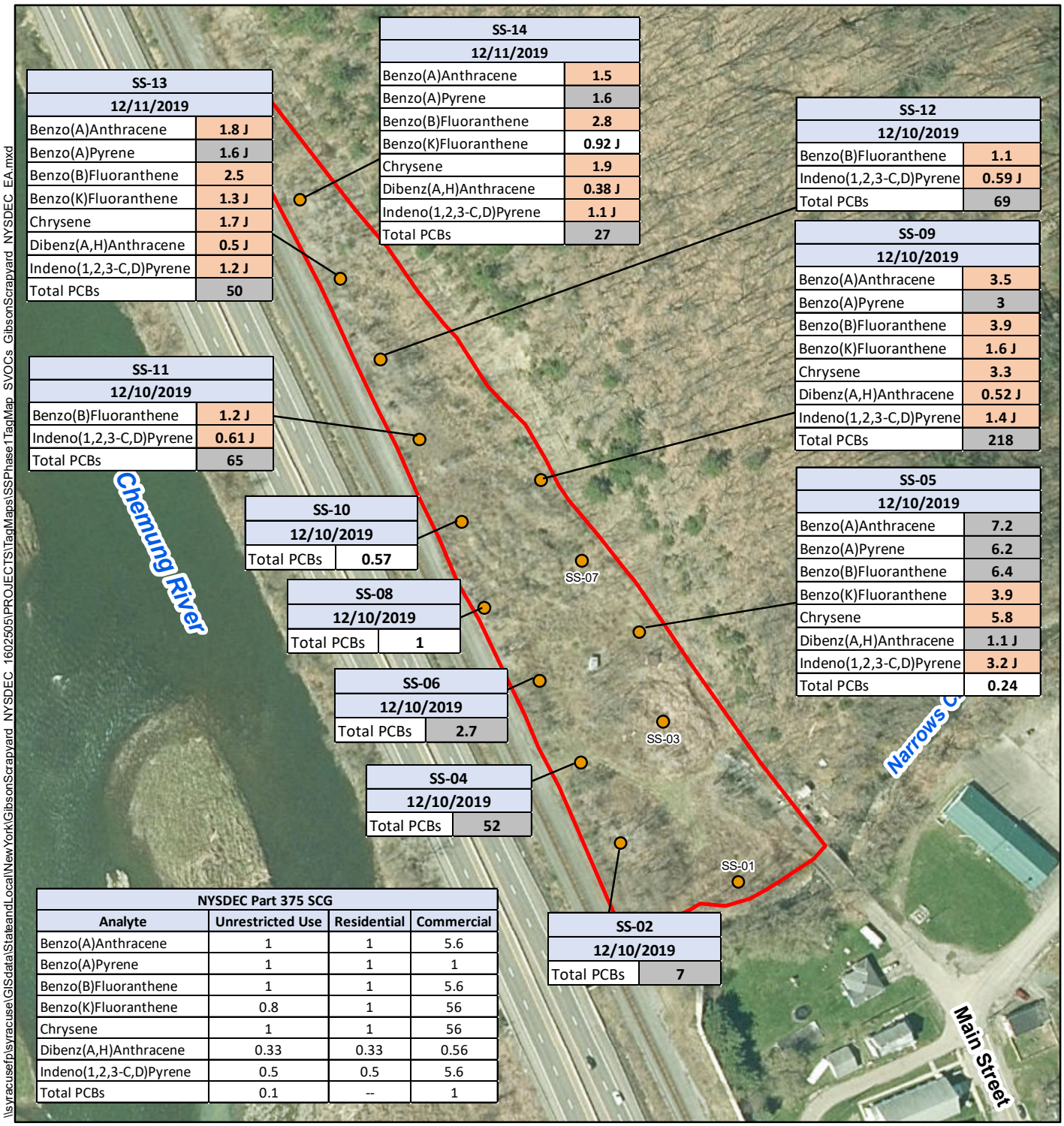
Figure **3**
VOC Exceedances (mg/kg)
in Surface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet

0 100 200
Feet

N

Note:
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) are shown.
Bold values indicate concentrations exceeding Unrestricted Use Soil Cleanup Objectives.
Orange shaded values indicate concentrations exceeding Residential Use Soil Cleanup Objectives.
Grey shaded values indicate concentrations exceeding Commercial Use Soil Cleanup Objectives.
J = Estimated value.



NYSDEC Part 375 SCG			
Analyte	Unrestricted Use	Residential	Commercial
Benzo(A)Anthracene	1	1	5.6
Benzo(A)Pyrene	1	1	1
Benzo(B)Fluoranthene	1	1	5.6
Benzo(K)Fluoranthene	0.8	1	56
Chrysene	1	1	56
Dibenz(A,H)Anthracene	0.33	0.33	0.56
Indeno(1,2,3-C,D)Pyrene	0.5	0.5	5.6
Total PCBs	0.1	--	1

Legend

- Surface Soil Sampling Locations
- Site Boundary

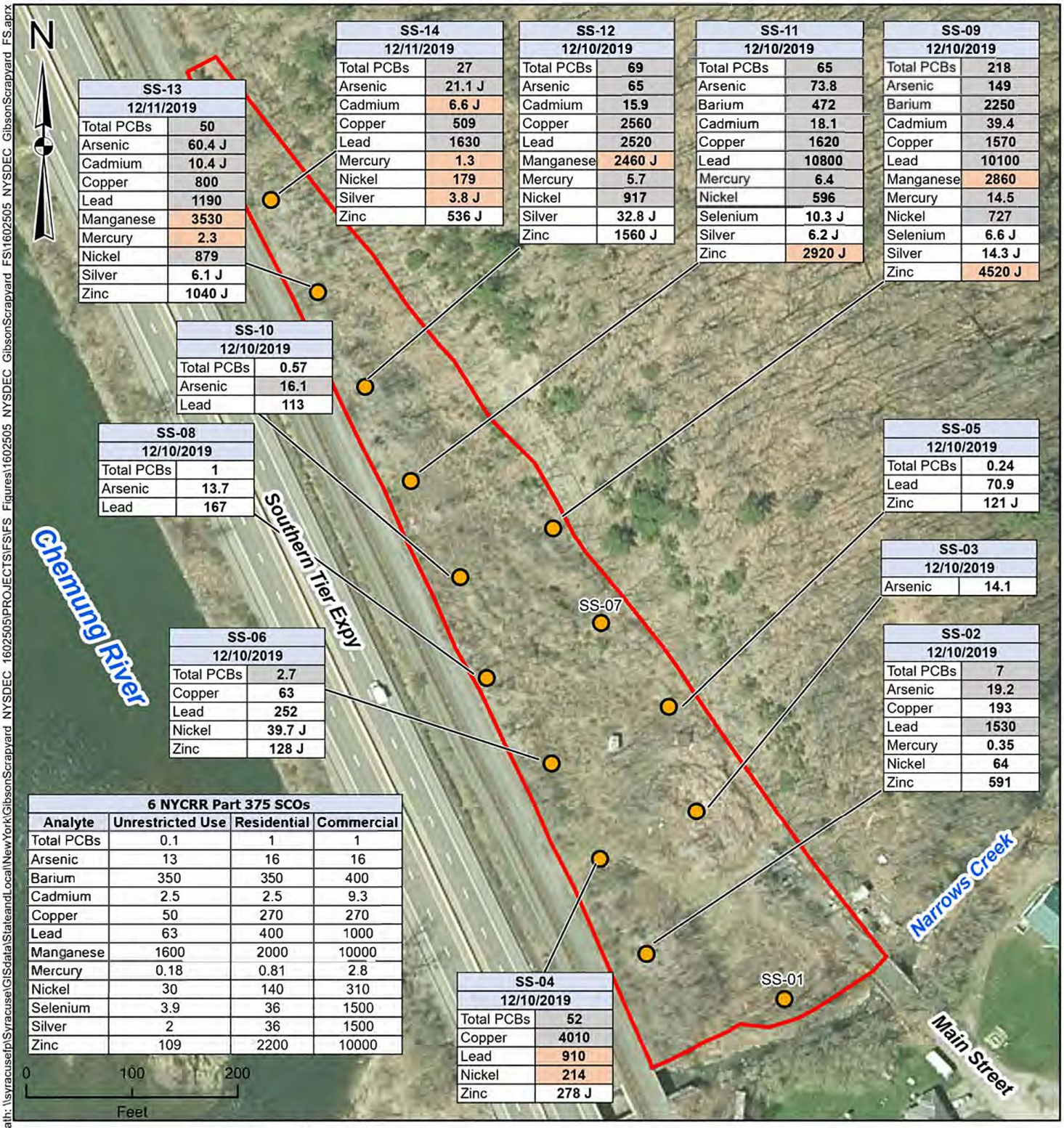
0 100 200
Feet

N

Note:
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) and the TSCA hazardous waste criterion for PCBs and are shown.
Bold values indicate concentrations exceeding Unrestricted Use SCOs.
Orange shaded values indicate concentrations exceeding Residential Use SCOs.
Grey shaded values indicate concentrations exceeding Commercial Use SCOs.
PCB = Polychlorinated biphenyl; TSCA = Toxic Substances Control Act;
J = Estimated value.

Figure 4
SVOC and PCB Exceedances (mg/kg) in Surface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 11/3/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet



6 NYCRR Part 375 SCOs			
Analyte	Unrestricted Use	Residential	Commercial
Total PCBs	0.1	1	1
Arsenic	13	16	16
Barium	350	350	400
Cadmium	2.5	2.5	9.3
Copper	50	270	270
Lead	63	400	1000
Manganese	1600	2000	10000
Mercury	0.18	0.81	2.8
Nickel	30	140	310
Selenium	3.9	36	1500
Silver	2	36	1500
Zinc	109	2200	10000

Legend

- Site Boundary
- Surface Soil Sampling Locations
- Site Location

Notes:
All concentrations in units of milligram per kilogram
Bold values indicate concentrations exceeding Unrestricted Use SCOs.
Orange shaded values indicate concentrations exceeding Residential Use SCOs.
Grey shaded values indicate concentrations exceeding Commercial Use SCOs.
J = Estimated value; NYCRR = New York Codes, Rules, and Regulations;
PCB = Polychlorinated biphenyl; SCO = Soil Cleanup Objective
Data Source: Imagery: ESRI 2018

Figure 5
Remedial Investigation
Surface Soil PCBs and Metals Exceedances
Gibson Scrapyard (851058)
Gibson, New York

NEW YORK STATE of OPPORTUNITY | Department of Environmental Conservation

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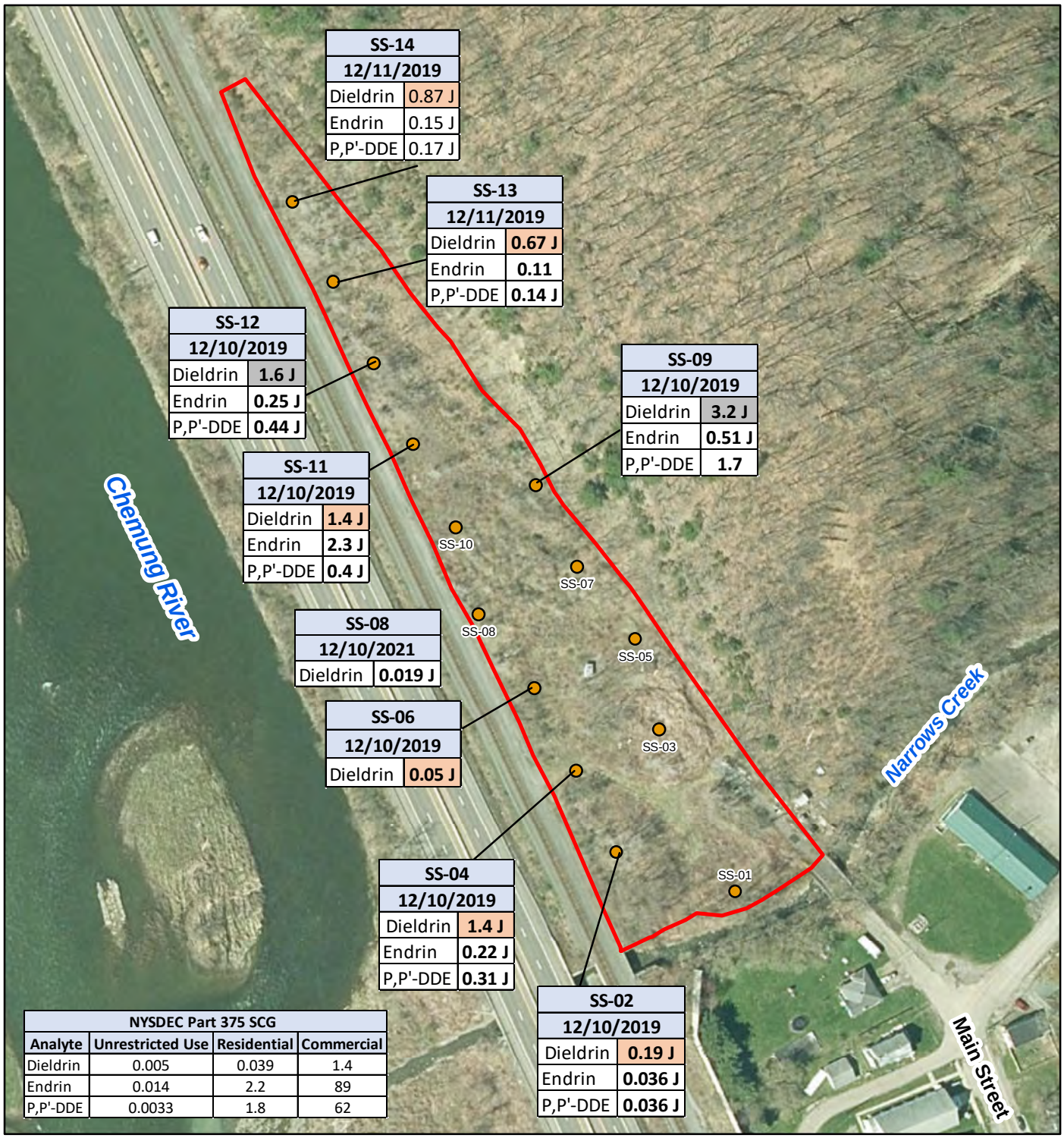


Legend

- Surface Soil Sampling Locations
- Site Boundary

Figure **6**
Pesticide Exceedances (mg/kg)
in Surface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet

0 100 200
Feet

N

Note:
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) are shown.
Bold values indicate concentrations exceeding Unrestricted Use Soil Cleanup Objectives.
Orange shaded values indicate concentrations exceeding Residential Use Soil Cleanup Objectives.
Grey shaded values indicate concentrations exceeding Commercial Use Soil Cleanup Objectives.
J = Estimated value.

Legend

- Surface Soil Sampling Locations
- Site Boundary

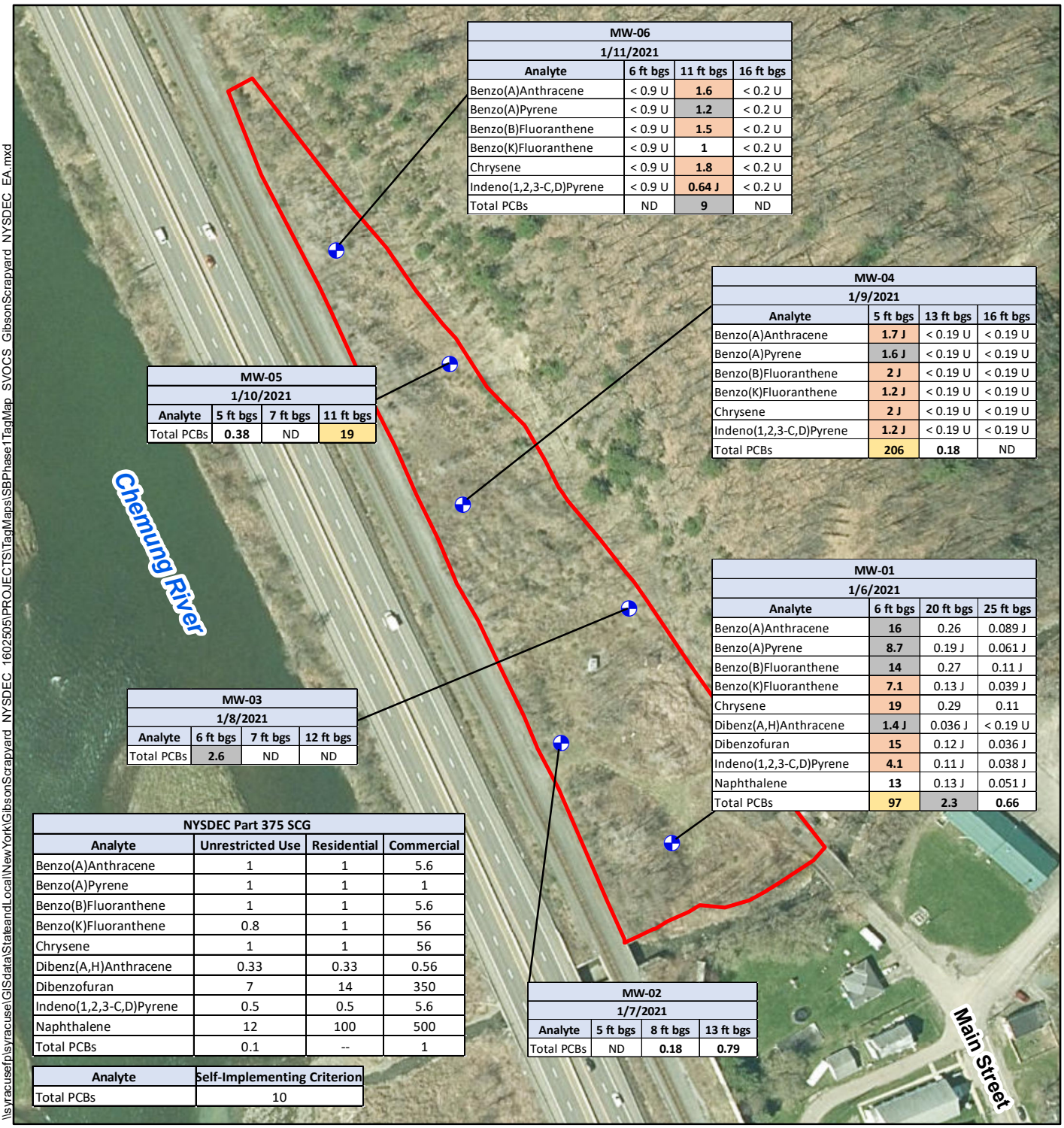
Figure **7**
PFAS Exceedances (µg/kg)
in Surface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet

0 100 200
Feet

N

Note:
A subset of samples from three surface soil sampling locations (highlighted with a green circle) were submitted for analysis of PFAS.
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) are shown.
Bold values indicate concentrations exceeding Unrestricted Use Soil Cleanup Objectives.
PFAS = Per- and polyfluoroalkyl substances
J = Estimated value.



MW-06			
1/11/2021			
Analyte	6 ft bgs	11 ft bgs	16 ft bgs
Benzo(A)Anthracene	< 0.9 U	**1.6**	< 0.2 U
Benzo(A)Pyrene	< 0.9 U	**1.2**	< 0.2 U
Benzo(B)Fluoranthene	< 0.9 U	**1.5**	< 0.2 U
Benzo(K)Fluoranthene	< 0.9 U	**1**	< 0.2 U
Chrysene	< 0.9 U	**1.8**	< 0.2 U
Indeno(1,2,3-C,D)Pyrene	< 0.9 U	**0.64 J**	< 0.2 U
Total PCBs	ND	**9**	ND

MW-04			
1/9/2021			
Analyte	5 ft bgs	13 ft bgs	16 ft bgs
Benzo(A)Anthracene	**1.7 J**	< 0.19 U	< 0.19 U
Benzo(A)Pyrene	**1.6 J**	< 0.19 U	< 0.19 U
Benzo(B)Fluoranthene	**2 J**	< 0.19 U	< 0.19 U
Benzo(K)Fluoranthene	**1.2 J**	< 0.19 U	< 0.19 U
Chrysene	**2 J**	< 0.19 U	< 0.19 U
Indeno(1,2,3-C,D)Pyrene	**1.2 J**	< 0.19 U	< 0.19 U
Total PCBs	**206**	**0.18**	ND

MW-05			
1/10/2021			
Analyte	5 ft bgs	7 ft bgs	11 ft bgs
Total PCBs	**0.38**	ND	**19**

MW-01			
1/6/2021			
Analyte	6 ft bgs	20 ft bgs	25 ft bgs
Benzo(A)Anthracene	**16**	0.26	0.089 J
Benzo(A)Pyrene	**8.7**	0.19 J	0.061 J
Benzo(B)Fluoranthene	**14**	0.27	0.11 J
Benzo(K)Fluoranthene	**7.1**	0.13 J	0.039 J
Chrysene	**19**	0.29	0.11
Dibenz(A,H)Anthracene	**1.4 J**	0.036 J	< 0.19 U
Dibenzofuran	**15**	0.12 J	0.036 J
Indeno(1,2,3-C,D)Pyrene	**4.1**	0.11 J	0.038 J
Naphthalene	**13**	0.13 J	0.051 J
Total PCBs	**97**	**2.3**	**0.66**

MW-03			
1/8/2021			
Analyte	6 ft bgs	7 ft bgs	12 ft bgs
Total PCBs	**2.6**	ND	ND

NYSDEC Part 375 SCG			
Analyte	Unrestricted Use	Residential	Commercial
Benzo(A)Anthracene	1	1	5.6
Benzo(A)Pyrene	1	1	1
Benzo(B)Fluoranthene	1	1	5.6
Benzo(K)Fluoranthene	0.8	1	56
Chrysene	1	1	56
Dibenz(A,H)Anthracene	0.33	0.33	0.56
Dibenzofuran	7	14	350
Indeno(1,2,3-C,D)Pyrene	0.5	0.5	5.6
Naphthalene	12	100	500
Total PCBs	0.1	--	1

Analyte	Self-Implementing Criterion
Total PCBs	10

MW-02			
1/7/2021			
Analyte	5 ft bgs	8 ft bgs	13 ft bgs
Total PCBs	ND	**0.18**	**0.79**

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Legend

- Monitoring Well/Soil Boring Locations
- Site Boundary

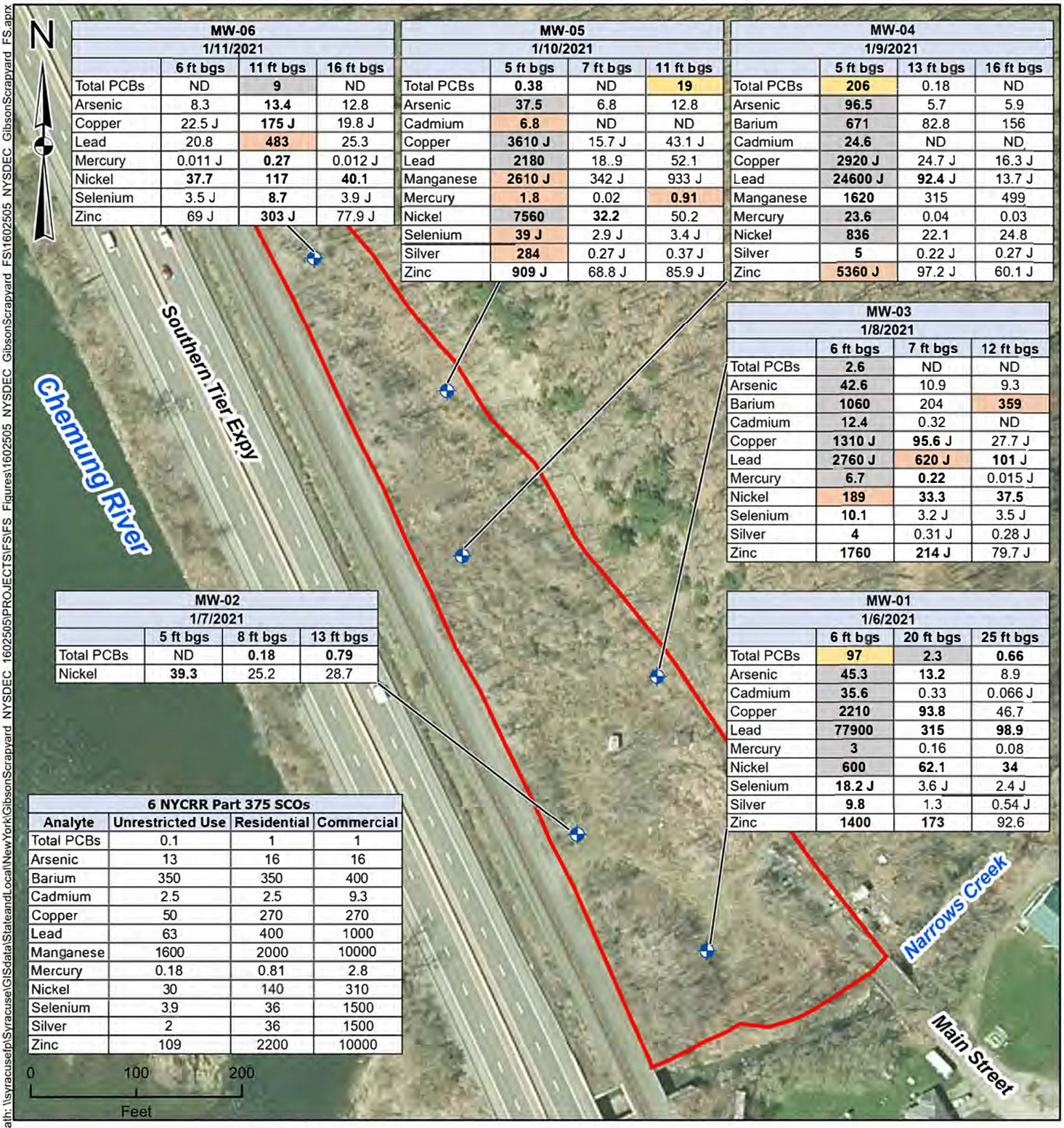
0 100 200
Feet

N

Note:
Subsurface soil samples coincide with monitoring well and groundwater sampling locations.
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) and the TSCA hazardous waste criterion for PCBs and are shown.
Bold values indicate concentrations exceeding Unrestricted Use SCOs.
Orange shaded values indicate concentrations exceeding Residential Use SCOs.
Grey shaded values indicate concentrations exceeding Commercial Use SCOs.
Yellow shaded values indicate PCB concentrations exceeding the TSCA self-implementing PCB criterion of 10 mg/kg in subsurface soil.
PCB = Polychlorinated biphenyl; TSCA = Toxic Substances Control Act;
ND = Non-detect; J = Estimated value; U = Not detected.

Figure 8
SVOC and PCB Exceedances (mg/kg) in Subsurface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 11/3/2021
Projection: NAD83 State Plane New York Central FIPS 3102 Feet



MW-06 1/11/2021	6 ft bgs	11 ft bgs	16 ft bgs
Total PCBs	ND	**9**	ND
Arsenic	8.3	**13.4**	12.8
Copper	22.5 J	**175 J**	19.8 J
Lead	20.8	**483**	25.3
Mercury	0.011 J	**0.27**	0.012 J
Nickel	**37.7**	**117**	**40.1**
Selenium	3.5 J	**8.7**	3.9 J
Zinc	69 J	**303 J**	77.9 J

MW-05 1/10/2021	5 ft bgs	7 ft bgs	11 ft bgs
Total PCBs	**0.38**	ND	**19**
Arsenic	**37.5**	6.8	12.8
Cadmium	**6.8**	ND	ND
Copper	**3610 J**	15.7 J	43.1 J
Lead	**2180**	18..9	52.1
Manganese	**2610 J**	342 J	933 J
Mercury	**1.8**	0.02	**0.91**
Nickel	**7560**	**32.2**	50.2
Selenium	**39 J**	2.9 J	3.4 J
Silver	**284**	0.27 J	0.37 J
Zinc	**909 J**	68.8 J	85.9 J

MW-04 1/9/2021	5 ft bgs	13 ft bgs	16 ft bgs
Total PCBs	**206**	0.18	ND
Arsenic	**96.5**	5.7	5.9
Barium	**671**	82.8	156
Cadmium	**24.6**	ND	ND
Copper	**2920 J**	24.7 J	16.3 J
Lead	**24600 J**	**92.4 J**	13.7 J
Manganese	**1620**	315	499
Mercury	**23.6**	0.04	0.03
Nickel	**836**	22.1	24.8
Silver	**5**	0.22 J	0.27 J
Zinc	**5360 J**	97.2 J	60.1 J

MW-03 1/8/2021	6 ft bgs	7 ft bgs	12 ft bgs
Total PCBs	**2.6**	ND	ND
Arsenic	**42.6**	10.9	9.3
Barium	**1060**	204	**359**
Cadmium	**12.4**	0.32	ND
Copper	**1310 J**	**95.6 J**	27.7 J
Lead	**2760 J**	**620 J**	**101 J**
Mercury	**6.7**	**0.22**	0.015 J
Nickel	**189**	**33.3**	**37.5**
Selenium	**10.1**	3.2 J	3.5 J
Silver	**4**	0.31 J	0.28 J
Zinc	**1760**	**214 J**	79.7 J

MW-02 1/7/2021	5 ft bgs	8 ft bgs	13 ft bgs
Total PCBs	ND	**0.18**	**0.79**
Nickel	**39.3**	25.2	28.7

MW-01 1/6/2021	6 ft bgs	20 ft bgs	25 ft bgs
Total PCBs	**97**	**2.3**	**0.66**
Arsenic	**45.3**	**13.2**	8.9
Cadmium	**35.6**	0.33	0.066 J
Copper	**2210**	**93.8**	46.7
Lead	**77900**	**315**	**98.9**
Mercury	**3**	0.16	0.08
Nickel	**600**	**62.1**	**34**
Selenium	**18.2 J**	3.6 J	2.4 J
Silver	**9.8**	1.3	0.54 J
Zinc	**1400**	**173**	92.6

6 NYCRR Part 375 SCOs			
Analyte	Unrestricted Use	Residential	Commercial
Total PCBs	0.1	1	1
Arsenic	13	16	16
Barium	350	350	400
Cadmium	2.5	2.5	9.3
Copper	50	270	270
Lead	63	400	1000
Manganese	1600	2000	10000
Mercury	0.18	0.81	2.8
Nickel	30	140	310
Selenium	3.9	36	1500
Silver	2	36	1500
Zinc	109	2200	10000

Legend

- Site Boundary
- Monitoring Well/Soil Boring Locations
- Site Location

Notes:
All concentrations in units of milligram per kilogram (mg/kg)
Bold values indicate concentrations exceeding Unrestricted Use SCOs.
Orange shaded values indicate concentrations exceeding Residential Use SCOs.
Grey shaded values indicate concentrations exceeding Commercial Use SCOs.
Yellow shaded values indicate PCB concentrations exceeding the TSCA self-implementing PCB criterion of 10 mg/kg in subsurface soil.
bgs = below ground surface; ft = feet; J = Estimated value; ND = Non-detect;
NYCRR = New York Codes, Rules, and Regulations; PCB = Polychlorinated biphenyl;
SCO = Soil Cleanup Objective; TSCA = Toxic Substances Control Act

Data Source; Imagery: ESRI 2018

Figure 9
Remedial Investigation
Subsurface Soil PCBs and Metals Exceedances
Gibson Scrapyard (851058)
Gibson, New York

NEW YORK STATE of OPPORTUNITY. Department of Environmental Conservation

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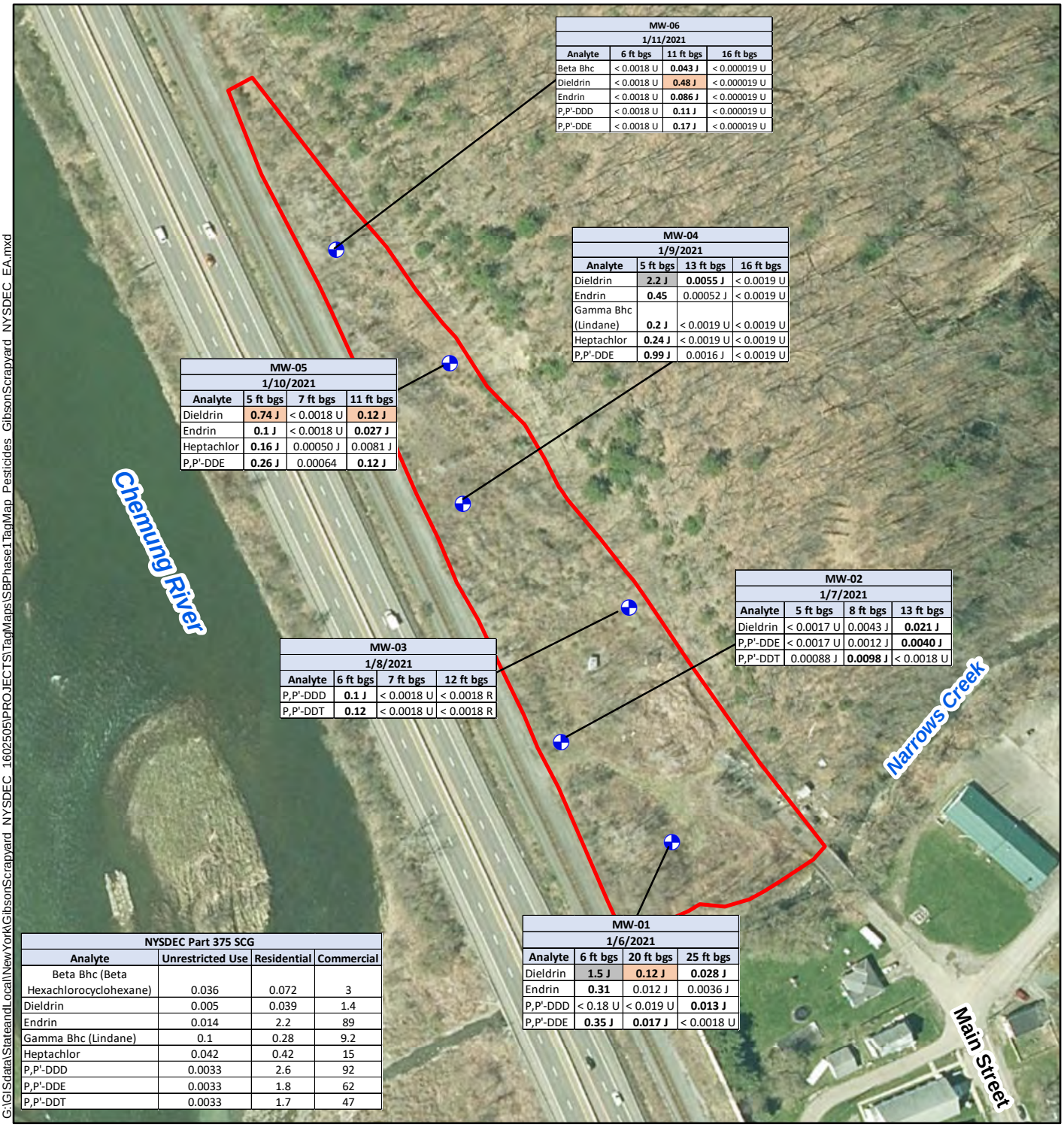

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Legend

- Monitoring Well/Soil Boring Locations
- Site Boundary

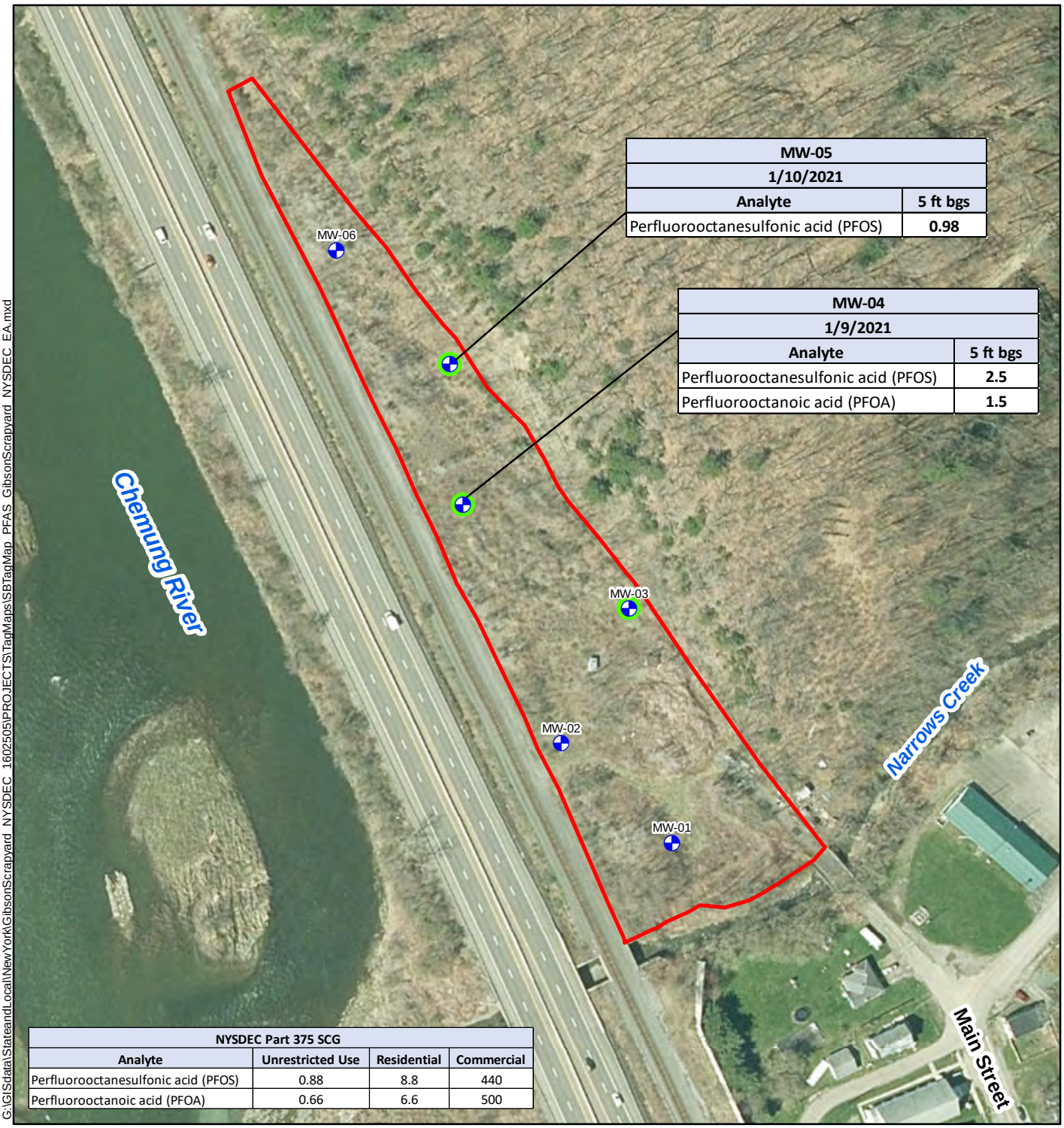
Figure **10**
Pesticide Exceedances (mg/kg)
in Subsurface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/7/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet

0 100 200
Feet

N

Note:
Subsurface soil samples coincide with monitoring well and groundwater sampling locations.
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) are shown.
Bold values indicate concentrations exceeding Unrestricted Use SCOs.
Orange shaded values indicate concentrations exceeding Residential Use SCOs.
Grey shaded values indicate concentrations exceeding Commercial Use SCOs.
J = Estimated value; U = Not detected; R = Rejected.



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Legend

- Monitoring Well/Soil Boring Locations
- Site Boundary

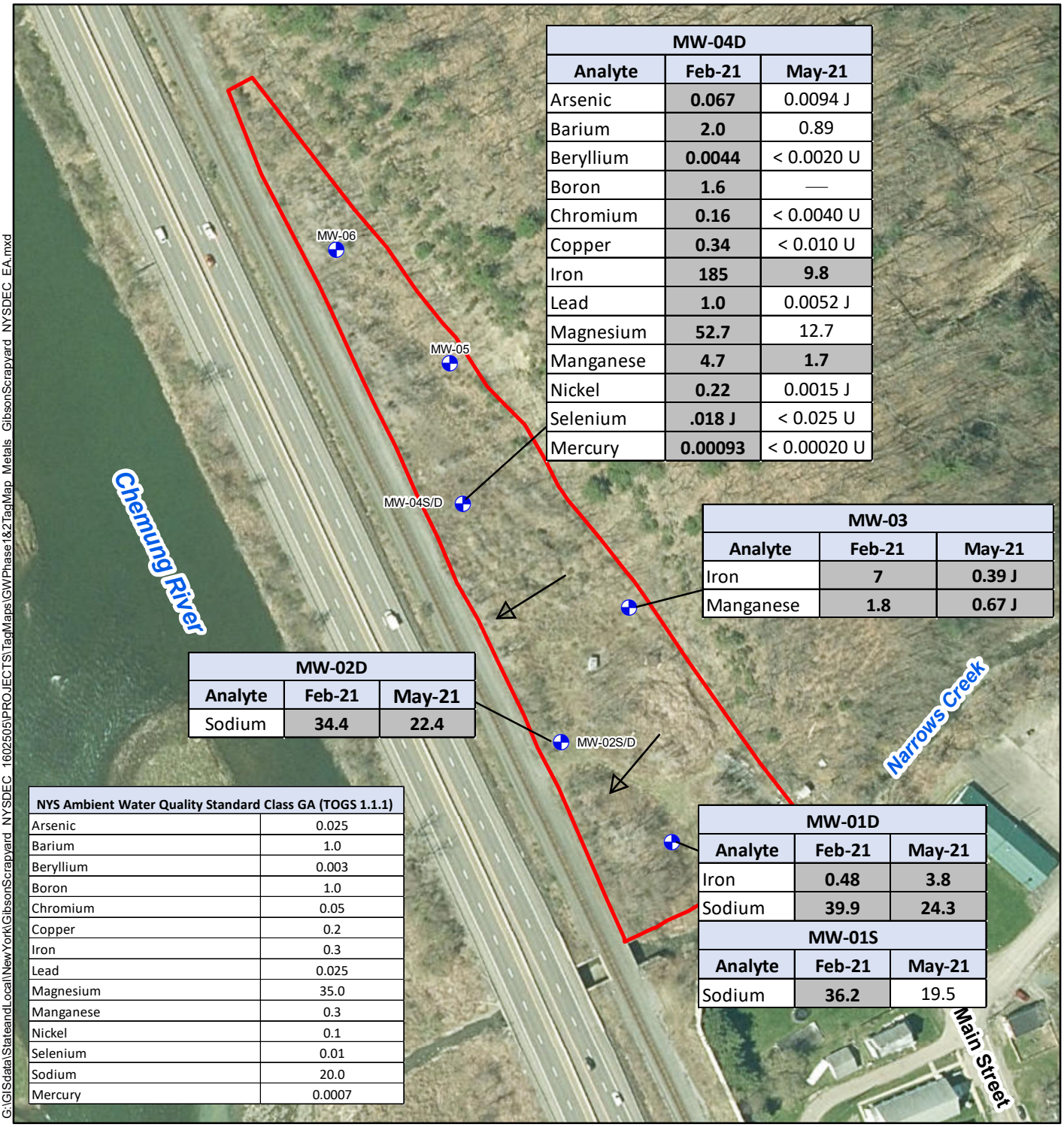
Figure 11
PFAS Exceedances (µg/kg)
in Subsurface Soil
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet

0 100 200
Feet

N

Note:
A subset of samples from three subsurface soil sampling locations (highlighted with a green circle) were submitted for analysis of PFAS.
Only concentrations exceeding applicable Soil Cleanup Objectives (SCOs) are shown.
Bold values indicate concentrations exceeding Unrestricted Use Soil Cleanup Objectives.
PFAS = Per- and polyfluoroalkyl substances



MW-04D		
Analyte	**Feb-21**	**May-21**
Arsenic	**0.067**	0.0094 J
Barium	**2.0**	0.89
Beryllium	**0.0044**	< 0.0020 U
Boron	**1.6**	—
Chromium	**0.16**	< 0.0040 U
Copper	**0.34**	< 0.010 U
Iron	**185**	**9.8**
Lead	**1.0**	0.0052 J
Magnesium	**52.7**	12.7
Manganese	**4.7**	**1.7**
Nickel	**0.22**	0.0015 J
Selenium	**.018 J**	< 0.025 U
Mercury	**0.00093**	< 0.00020 U

MW-03		
Analyte	**Feb-21**	**May-21**
Iron	**7**	**0.39 J**
Manganese	**1.8**	**0.67 J**

MW-02D		
Analyte	**Feb-21**	**May-21**
Sodium	**34.4**	**22.4**

MW-01D		
Analyte	**Feb-21**	**May-21**
Iron	**0.48**	**3.8**
Sodium	**39.9**	**24.3**

MW-01S		
Analyte	**Feb-21**	**May-21**
Sodium	**36.2**	19.5

NYS Ambient Water Quality Standard Class GA (TOGS 1.1.1)	
Arsenic	0.025
Barium	1.0
Beryllium	0.003
Boron	1.0
Chromium	0.05
Copper	0.2
Iron	0.3
Lead	0.025
Magnesium	35.0
Manganese	0.3
Nickel	0.1
Selenium	0.01
Sodium	20.0
Mercury	0.0007

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Legend

- Monitoring Well Locations
- Site Boundary
- Estimated Groundwater Flow Direction

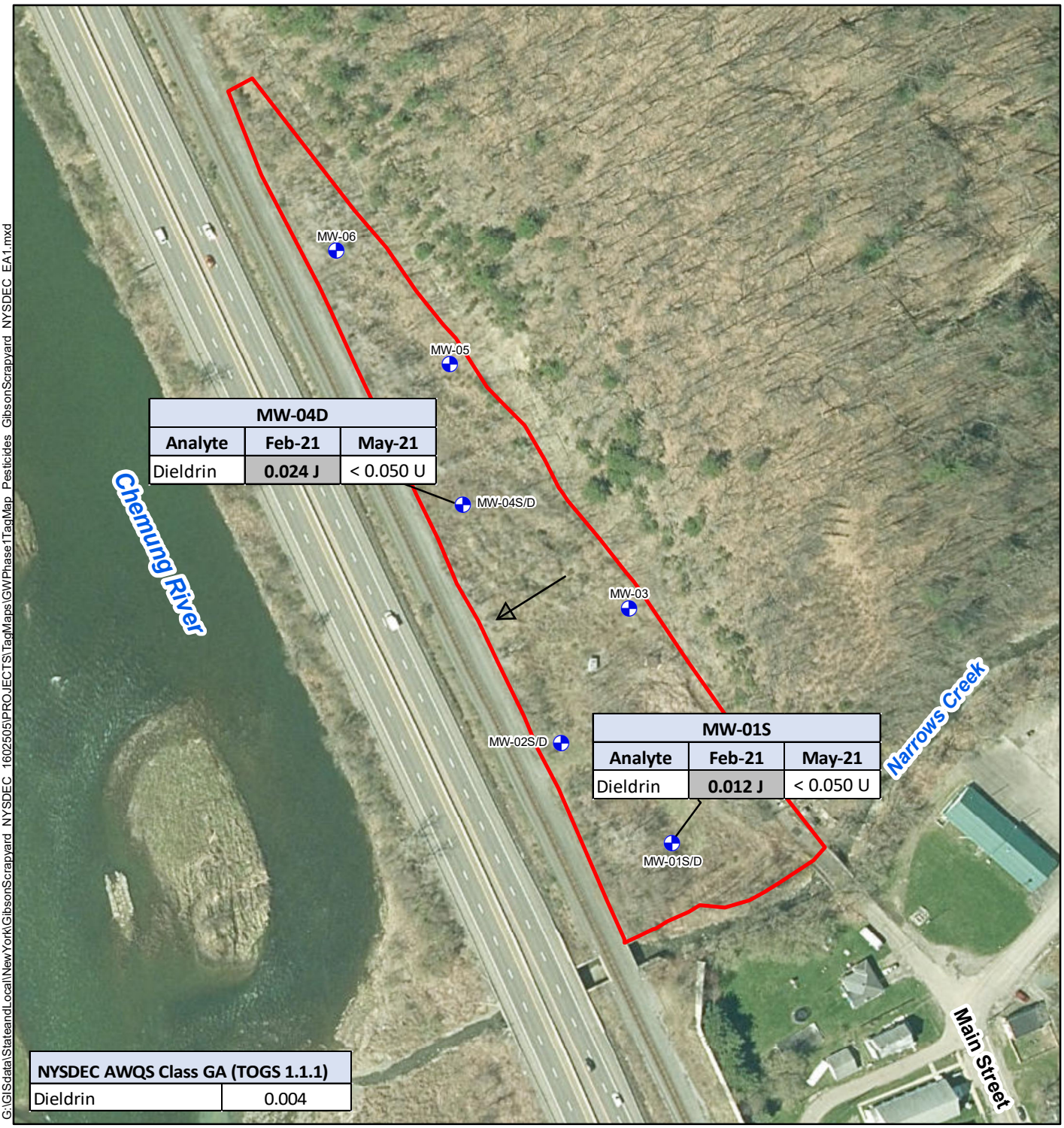
0 100 200
Feet

N

Note:
Only analytes with concentrations exceeding NYSDEC Ambient Water Quality Standard Class GA values are shown.
Concentrations exceeding SCG values are bolded and shaded.
J = Estimated value; U = Not detected.
— = Not analyzed.

Figure 12
Total Metal Exceedances (mg/L) in Groundwater
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central FIPS 3102 Feet



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Legend

- Monitoring Well Locations
- Site Boundary
- Estimated Groundwater Flow Direction

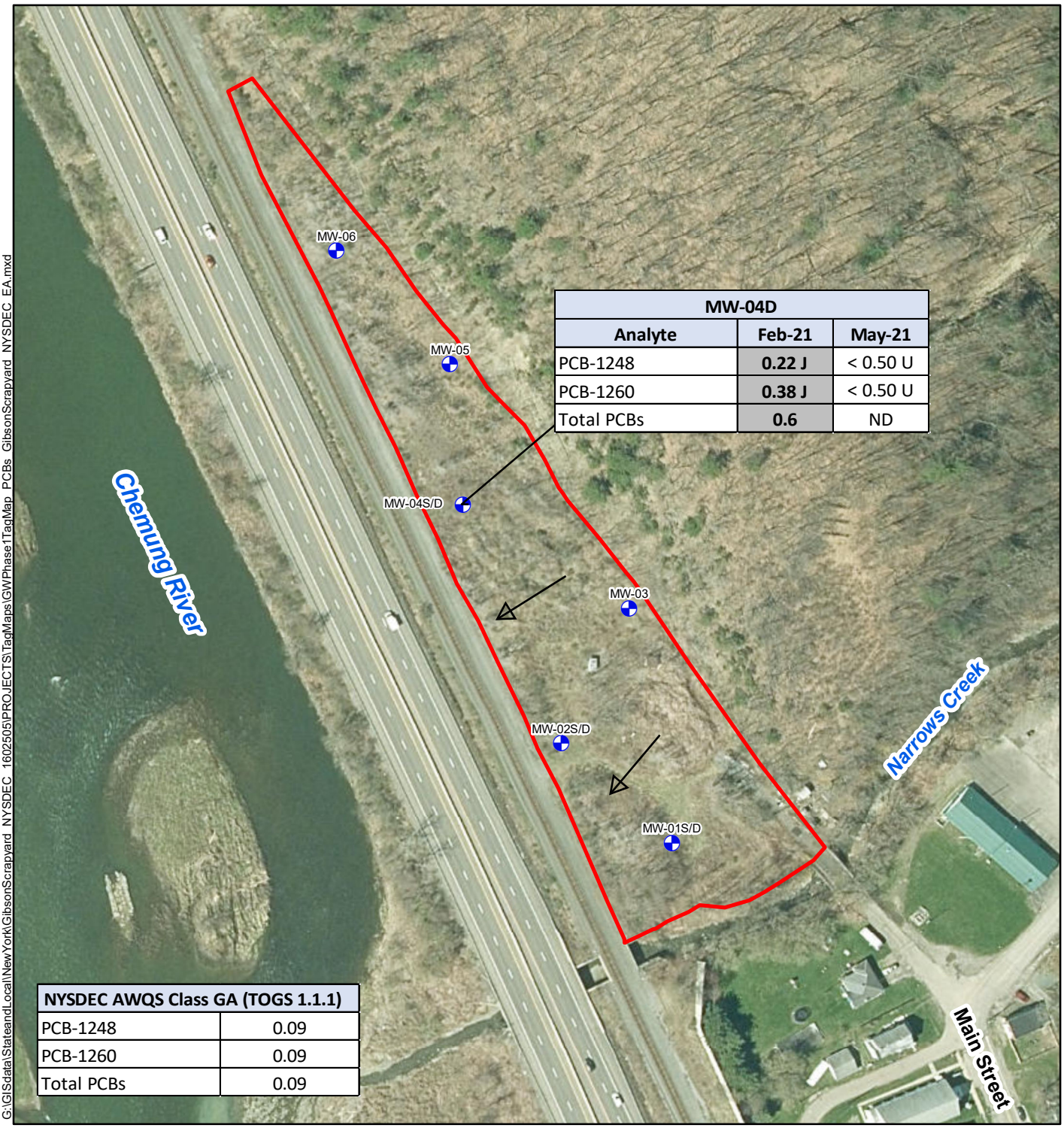
0 100 200
Feet

N

Note:
Only analytes with concentrations exceeding NYSDEC Ambient Water Quality Standard Class GA values are shown.
Concentrations exceeding SCG values are bolded and shaded.
J = Estimated value; U = Not detected.

Figure 13
Pesticide Exceedances (ug/L)
in Groundwater
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet



MW-04D		
Analyte	Feb-21	May-21
PCB-1248	**0.22 J**	< 0.50 U
PCB-1260	**0.38 J**	< 0.50 U
Total PCBs	**0.6**	ND

NYSDEC AWQS Class GA (TOGS 1.1.1)	
PCB-1248	0.09
PCB-1260	0.09
Total PCBs	0.09

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Legend

- Monitoring Well Locations
- Site Boundary
- Estimated Groundwater Flow Direction

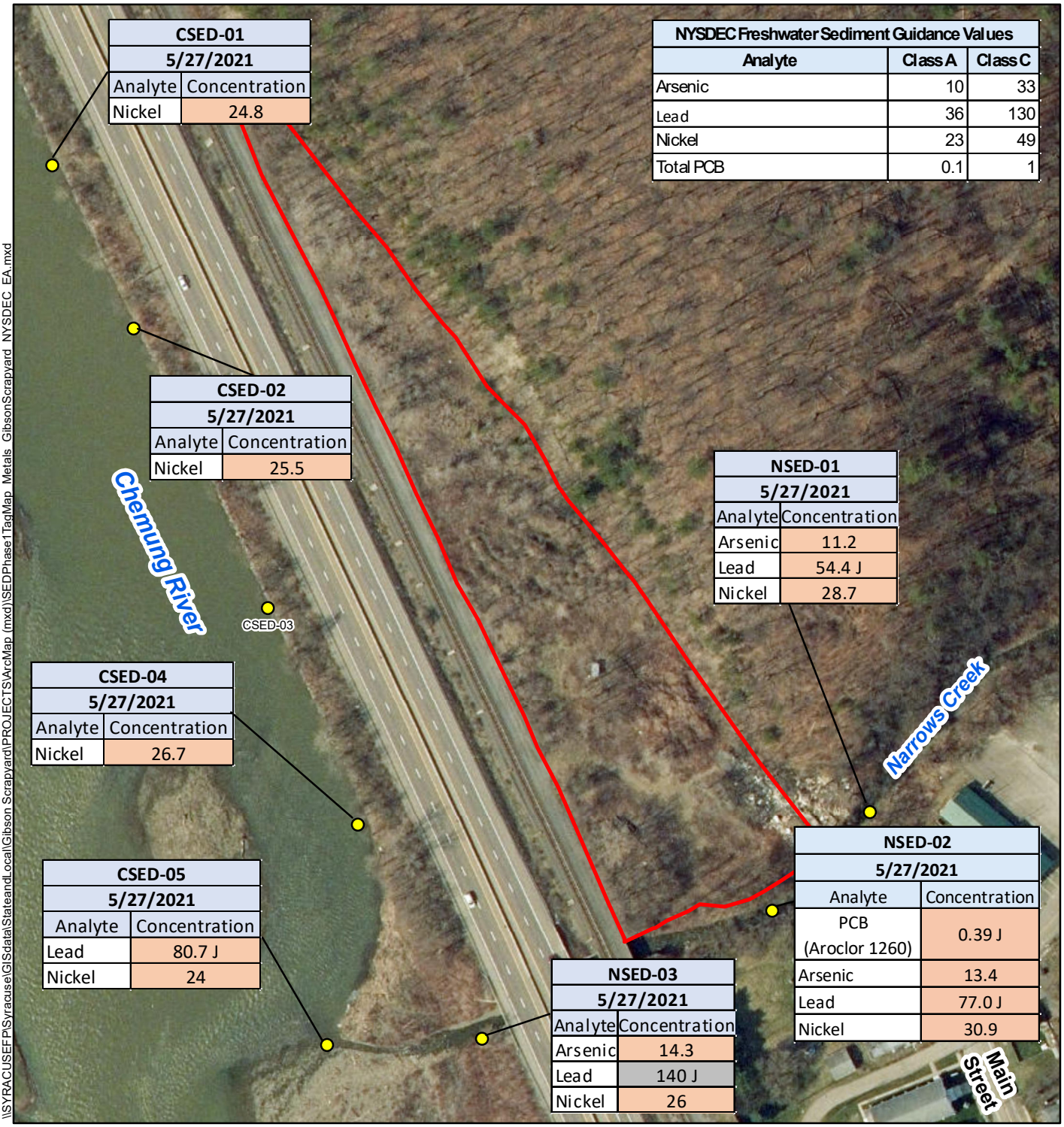
0 100 200
Feet

N

Note:
Only analytes with concentrations exceeding NYSDEC Ambient Water Quality Standard Class GA values are shown.
Concentrations exceeding SCG values are bolded and shaded.
PCB=Polychlorinated Biphenyl.
ND = Non-detect; J = Estimated value; U = Not detected.

Figure 14
PCB Exceedances (ug/L)
in Groundwater
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 9/15/2021
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet



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Legend

- Sediment Sampling Locations
- Site Boundary

Figure 15
Metals and PCB Exceedances (mg/kg) in Sediment
Gibson Scrapyard (NYSDEC Site 851058)
Gibson, NY

Map Date: 10/8/2025
Projection: NAD83 State Plane New York Central
FIPS 3102 Feet

0 100 200
Feet

N

Note:
Only analytes with concentrations exceeding NYSDEC Freshwater Sediment Guidance Values are shown.
Orange shaded values indicate concentrations exceeding Class A Guidance Values.
Grey shaded values indicate concentrations exceeding Class C Guidance Values.

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Data Source: Imagery: ESRI 2018

Legend

- Site Boundary
- Fence Line
- Gate
- 40 CFR Part 761 Cap or 6 NYCRR Part 375 Soil Cover
- Site Location

Notes:
CFR = Code of Federal Regulations
NYCRR = New York Codes, Rules, and Regulations

Figure 16
Alternative 7—No Removal with 6 NYCRR Part 375 Soil Cover (Risk-Based)
Gibson Scrapyard (851058)
Gibson, New York

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