DECISION DOCUMENT

NM - Ballston Spa MGP
Voluntary Cleanup Program
Ballston Spa, Saratoga County
Site No. V00487
May 2013

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

DECLARATION STATEMENT - DECISION DOCUMENT

NM - Ballston Spa MGP
Voluntary Cleanup Program
Ballston Spa, Saratoga County
Site No. V00487
May 2013

Statement of Purpose and Basis

This document presents the remedy for the NM - Ballston Spa MGP site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the NM - Ballston Spa MGP site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the remedy are as follows:

Based on the results of the investigations at the site, and the evaluation presented here, the Department is proposing No Action with the implementation of Institutional Controls to restrict the use of the site and groundwater use with Site Management as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

1. Green remediation principles and techniques will be implemented to the extent feasible in the 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 gas 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;

2. A site cover currently exists and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required it will be a minimum of one foot of soil, meeting the

SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Imposition of an institutional control in the form of a Deed Restriction for the controlled property that:

-requires 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);

-allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

-restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and

-requires compliance with the Department approved Site Management Plan.

4. 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:

i)Institutional Controls: The Deed Restriction discussed in Paragraph 3 above;

ii)Engineering Controls: The soil cover discussed in Paragraph 2.

This plan includes but is not limited to:

-an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

-descriptions of the provisions of the deed restriction including any land use, and groundwater use restrictions;

-the management and inspection of the identified engineering controls;

-maintaining site access controls and Department notification; and

-the steps necessary for the periodic reviews and certification of the institutional and engineering controls.

b). a Monitoring Plan to assess the current conditions at the site. The plan includes, but may not be limited to:

-monitoring of groundwater to assess any change in the current conditions; and

-a schedule of monitoring and frequency of submittals to the Department.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

May 13, 2013
Date

George Heitzman, Director
Remedial Bureau C

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Site No. V00487
May 2013

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The Voluntary Cleanup Program (VCP) is a voluntary program. The goal of the VCP is to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfields." This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Ballston Spa Public Library
21 Milton Avenue
Ballston Spa, NY 12020
Phone: 518-885-5022

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, Voluntary 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 Ballston Spa-Milton Avenue former Manufactured Gas Plant (MGP) site is located at 130 Milton Avenue, Village of Ballston Spa. The site is approximately 0.164 acres in area and is bounded by a commercial parking lot to the north, residential properties to the south and east, and Milton Avenue to the west.

Site Features: The entire site is a paved parking area for 128 and 130-134 Milton Avenue, located along the west side of the site.

Current Zoning and Land Use: The site is currently zoned commercial, and is used as parking for two businesses and an apartment building. The surrounding parcels include a municipal parking lot and commercial and residential properties. The area is served by public water and sewer systems.

Past Use of the Site: A manufactured gas plant operated at the site from approximately 1861 to 1907. After the plant shutdown, the main building was used as a warehouse until approximately 1924, when all of the remaining structures were demolished. The site has been vacant since that time.

Site Geology and Hydrogeology: A fill layer was encountered at the site and ranged from 5 to 10 feet thick. Below this layer was a silt and sand unit that ranged from 5 to 12 feet in thickness. Underlying this layer is a till unit consisting of sand, silt and gravel, and was encountered between 6 and 16 feet below ground surface. The depth to groundwater was approximately 10 to 12 feet below ground surface, and generally flows to the north-northeast.

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, at a minimum, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in DER-10, Technical Guidance for Site Investigation and Remediation were/was evaluated.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The voluntary cleanup agreement is with a responsible party. The agreement requires the party

to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

The Department and Niagara Mohawk/National Grid entered into a Voluntary Cleanup Order, D0-0001-0011 on January 25, 2002, to address 25 former MGP sites under the Voluntary Cleanup Program. The Order obligates the responsible parties to implement a full remedial program.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil

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. 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 contaminant 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 below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

	BENZO(A)PYRENE
BENZENE	BENZO(B)FLUORANTHENE
TOLUENE	DIBENZ[A,H]ANTHRACENE
ETHYLBENZENE	BENZO[K]FLUORANTHENE
XYLENE (MIXED)	indeno(1,2,3-cd)pyrene
BENZ(A)ANTHRACENE	Chrysene

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

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 Decision Document.

There were no IRMs performed at this site during the RI.

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. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

The primary contaminants of concern at the site include benzene, toluene, ethylbenzene, xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs).

Soil: The Remedial Investigation Report (RI) indicated that the contaminants of concern are present in subsurface soil at the site. Samples taken from within the on-site holder had no detections of BTEX constituents. There were five PAH constituents detected that exceeded the commercial SCOs within the former holder (at 6.5-8 feet below ground surface): Benzo(a)pyrene, Dibenz(a,h)anthracene, Benz(a)anthracene, Benzo(b)fluoranthene, and Indeno(1,2,3-cd)pyrene. Although there were individual PAH constituents that exceeded the commercial SCOs, the maximum sum of all PAH constituents (total PAH) concentration was

165 ppm, which does not exceed the SCO of 500 ppm for total PAHs specified in the Department's Commissioners Policy (CP) 51 for non-residential properties.

Outside of the holder, BTEX constituents were found to exceed the commercial SCOs and protection of groundwater SCOs at three soil borings, ranging from 9 ppm to 81 ppm of total BTEX at depths between 7.5 feet and 11.5 feet below ground surface. Individual PAH constituents exceeded commercial SCOs at two locations, but total PAHs exceeded the 500 ppm SCO in only one sample (750 ppm at 7.5 to 8 feet below ground surface).

At the adjacent residential lot to the east, benzene was found to exceed the residential SCO at concentrations ranging from 3.7 to 6.3 ppm at one location, at depths of 11.25 to 12.25 feet below ground surface. There were no visual impacts noted, only a slight odor. Based on the depth of sample and the lack of further benzene detections surrounding this location, it was determined not to require further investigation and/or remediation. The maximum total PAH concentration was 60 ppm at 12.75 to 13 feet below ground surface.

At the nearby municipal parking lot, total BTEX was found in two locations at a depth of 5.5 to 6.5 feet below ground surface, with the highest concentration of 19 ppm. Total PAHs were found at four locations, with the highest concentration of 398 ppm at 5.5-6.5 feet below ground surface.

Surface soils were sampled on site and at the adjacent parking lot (north) and residential lot (east). BTEX constituents were not detected in any of the samples. There were only slight detections of PAH constituents, with the maximum total PAH concentration of 28 ppm, found on the hillside between the site and the parking lot. This location is considered off-site, and most likely a remnant of runoff from the parking lot.

Groundwater: During the groundwater monitoring program, BTEX constituents and PAHs were found to exceed Ambient Water Quality Standards (AWQS) and Guidance Values at the site. Total BTEX concentrations in groundwater ranged from non-detect to 100 ppb, with exceedances for all of the BTEX constituents. Total PAHs in groundwater ranged from non-detect to 41 ppb.

Groundwater concentrations found in the municipal parking lot showed exceedances for benzene at one location, with a maximum concentration of 47 ppb. There were no exceedances for PAHs in the parking lot. On the residential lot there were no exceedances of either BTEX or PAH constituents.

Gordon Creek, which lies north of the municipal lot and down gradient of the site, was visually inspected for possible impacts related to the former MGP operations. There were no observations of impacts noted. Also, there are two groundwater monitoring wells between the parking lot and the creek which are non-detect for all constituents.

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.*

Contact with contaminated soil or groundwater is unlikely unless persons dig below the ground surface. 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.

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:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation.

The selected remedy is referred to as the Institutional Controls and Site Management remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

Based on the results of the investigations at the site, and the evaluation presented here, the Department is proposing No Action with the implementation of Institutional Controls to restrict the use of the site and groundwater use with Site Management as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

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b). a Monitoring Plan to assess the current conditions at the site. The plan includes, but may not be limited to:

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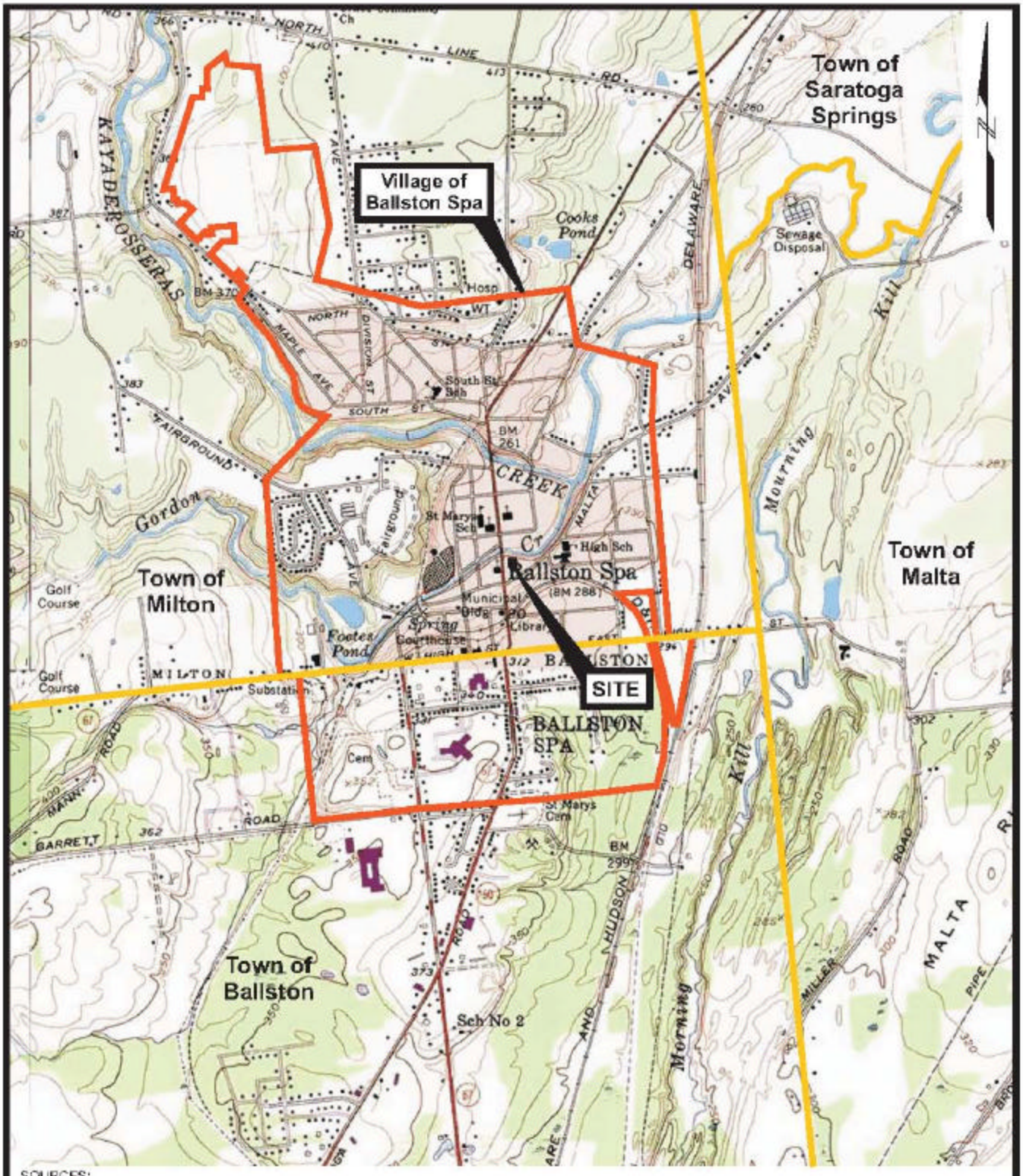


SOURCES:

1. MAP CREATED WITH TOPO! ®©2001 NATIONAL GEOGRAPHIC (www.nationalgeographic.com/topo)
2. NEW YORK STATE ORTHOS ONLINE (http://www.orthos.dhses.ny.gov/) ACCESSED 12/16/2011

0 2000 4000

SCALE, FEET

REMEDIAL INVESTIGATION
BALLSTON SPA NON-OWNED FORMER MGP SITE
MILTON AVENUE, BALLSTON SPA, NEW YORK

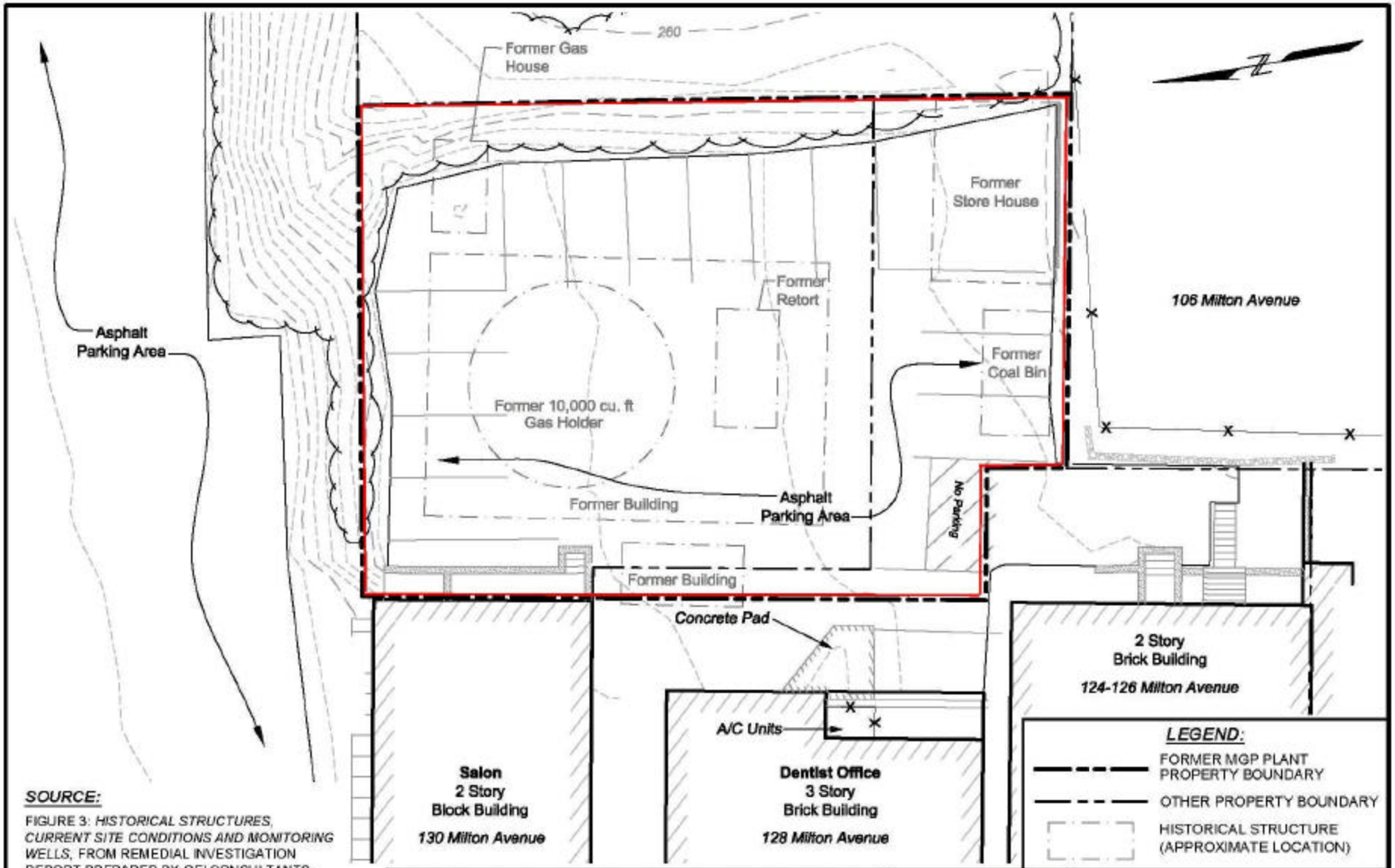
nationalgrid

GEI Consultants

SITE LOCATION MAP

Project 045400-1-1112 | September 2012 | Figure 1

I:\Project\National Grid\ formerly NIMO\Ballston Spa\045400.R1\DRAWINGS\2012-09\Ballston-Site Location.dgn



SOURCE:

FIGURE 3: *HISTORICAL STRUCTURES, CURRENT SITE CONDITIONS AND MONITORING WELLS*, FROM REMEDIAL INVESTIGATION REPORT PREPARED BY GEI CONSULTANTS, INC., SEPTEMBER 2012, SCALE: 1" = 20'.

0 20 40

SCALE, FEET

BALLSTON SPA NON-OWNED FORMER MGP SITE
MILTON AVENUE
BALLSTON SPA, NEW YORK

nationalgrid

GEI Consultants

FORMER MGP PLANT BOUNDARY

Project 045400-1-1102 | December 2012 | Figure 1

I:\Project\National Grid_formerly NIMO\Ballston Spa\045400\Presentation\2012-12\Ballston Spa-Site.dwg