DECISION DOCUMENT

YMCA - White Plains
Brownfield Cleanup Program
White Plains, Westchester County
Site No. C360206
July 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

YMCA - White Plains
Brownfield Cleanup Program
White Plains, Westchester County
Site No. C360206
July 2022

Statement of Purpose and Basis

This document presents the remedy for the YMCA - White Plains site a brownfield cleanup site. The remedial program was chosen in accordance with the 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 decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the YMCA - White Plains site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected 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 will include a vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction. The vapor barrier should be a minimum thickness of 20-mil, unless otherwise specified by local codes or the building design professional.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted soil cleanup objectives, as defined by 6 NYCRR Part 375-6.8. Approximately 3,913 cubic yards of contaminated soil will be removed from the site. If a Track 1cleanup is achieved, a Cover System will not be a required element of the remedy. Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. Local Institutional Controls

If no environmental easement or Site Management Plan is needed to achieve soil, groundwater or soil vapor intrusion remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Chapter 873 Article VII of the Laws of Westchester County, which prohibits potable use of groundwater without prior approval.

6. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion evaluation is not completed prior to completion of the Final Engineering Report, then a site management plan and environmental easement will be required to address the SVI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, including achievement of soil, groundwater and/or soil vapor remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 restricted residential cleanup.

7. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a site management plan, as described below, will be required. The remedy will achieve a Track 2 restricted residential cleanup at a minimum.

7a. 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 for restricted-residential, commercial or industrial uses 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 or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH (Chapter 873, Article VII of the Laws of Westchester County); and,
- require compliance with the Department approved Site Management Plan.

7b. Site Management Plan

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

i. 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 7a above.

Engineering Controls: Any engineering controls that may be required (e.g., sub-slab depressurization system or groundwater treatment).

This plan includes, but may not be limited to:

- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- o descriptions of the provisions of the environmental easement including any land use and/or groundwater restrictions;
- o provisions for the management and inspection of the identified engineering controls;
- o maintaining site access controls and Department notification; and
- o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

ii. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
   - o monitoring of groundwater and soil vapor to assess the performance and effectiveness of the remedy;
   - o a schedule of monitoring and frequency of submittals to the Department; and
   - o monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

iii. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:
   - o procedures for operating and maintaining the system(s); and
   - o compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

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.

7/14/2022
Date

Janet E Brown
Janet Brown, Director
Remedial Bureau C

DECISION DOCUMENT

YMCA - White Plains
White Plains, Westchester County
Site No. C360206
July 2022

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 New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. 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:

DECInfo Locator - Web Application
https://www.dec.ny.gov/data/DecDocs/C360206

White Plains Public Library
100 Martine Avenue
White Plains, NY 10601
Phone: (914) 422-1400

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 1.16-acre site is located in a suburban, mixed use (commercial/residential) area in White Plains, New York. The property is bounded by residential properties to the west, commercial properties (retail and offices) to the north, east, and south, a church to the east, and a health clinic to the southwest. The site is located 200 feet south of the intersection of Mamaroneck Avenue and Maple Avenue.

Site Features: The site has a prominent slope with elevations that decrease towards Mamaroneck Avenue to the east. The site is currently vacant with no existing buildings.

Current Zoning and Land Use: The site is zoned BR-2 (Business Residential-2). The zoning allows for both commercial and multi-family dwelling use. The surrounding parcels are currently zoned business residential or business.

Past Use of the Site: The property has historically been used for residential purposes from at least 1905 and up until at least 1911. By 1930, the White Plains YMCA, a recreational facility, occupied the existing building on the northern portion of the site with a small annex and boarding house on the southern portion of the site. Around 1971, the annex and boarding house were replaced with a 6-story building that was razed in 2021. Past uses of the site that led to the site becoming contaminated included the storage of heating oil for the YMCA in at least one underground storage tank (UST). A 12,000-gallon UST was removed in 2015 which included the removal of petroleum impacted soils adjacent to the UST, but not adjacent to the fuel oil lines where a leak appeared to occur. In 2018 oil was observed coming into the basement and reported as spill number 1709377. The spill is being addressed as part of the brownfield remediation.

Site Geology and Hydrogeology: The stratigraphy of the site, from the surface down, consists primarily of urban fill from grade ranging down to approximately 3 to 10 feet below ground surface (bgs.) The unconsolidated material beneath the urban fill material is composed of dense, grey fine-grained sands, silty sands, and clayey sands with gravel. The depth to bedrock varies between 30 to 50 feet bgs with a slope that generally matches surface topography. The groundwater table was encountered at approximately 6 to 12 feet bgs. Groundwater flow direction follows the topography and generally flows to the east.

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 (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

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 Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

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
- soil vapor

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:

n-propylbenzene
sec-butylbenzene
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
lead
mercury
copper
tri-valent chromium
perfluorooctanoic acid
perfluorooctane sulfonic acid
isopropylbenzene
naphthalene
indeno(1,2,3-cd)pyrene
benzene

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.

Nature and extent of contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Based upon investigations conducted to date, the primary contaminants of concern are certain VOCs, SVOCs, metals, and per- and poly fluoroalkyl substances.

Soil: To characterize surface and subsurface soil conditions, 60 samples for VOCs and SVOCs and 52 samples for metals, pesticides/PCBs and PFAS, were collected from 26 soil borings.

N-Propylbenzene was detected in soil at concentrations up to 15 parts per million (ppm), exceeding the unrestricted use soil cleanup objective (UUSCO) of 3.9 ppm. Sec-Butylbenzene was detected in soil at concentrations up to 18 ppm, exceeding the UUSCO of 11 ppm. The highest concentrations of these VOCs were found in the central-eastern portion of the site at a depth of approximately five feet below ground surface (bgs).

Benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were detected in soil at concentrations up to 2.22 ppm, 3.09 ppm and 2.69 ppm respectively, exceeding the UUSCO of 1 ppm for each compound. Indeno(1,2,3-cd)pyrene was detected at concentrations up to 2.35 ppm, exceeding the UUSCO of 0.5 ppm. The highest concentration of these SVOCs was found in the central-western portion of the site at a depth of approximately two feet bgs.

Lead was detected in soil at concentrations up to 483 ppm, exceeding the UUSCO of 63 ppm. Mercury was detected at concentrations up to 0.227 ppm, exceeding the UUSCO of 0.18 ppm. Copper was detected at concentrations up to 4,180 ppm, exceeding the UUSCO of 50 ppm. Trivalent chromium was detected at concentrations up to 153 ppm, exceeding the UUSCO of 30 ppm. The highest concentrations of metals were found in the sump pit located in the central-eastern portion of the site.

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic (PFOS) were detected in soil at concentrations up to 1.43 and 9.43 parts per billion (ppb), respectively, exceeding the proposed UUSCO of 0.66 ppb and 0.88 ppb, respectively.

Data do not indicate any off-site impacts in soil related to this site.

Groundwater: From 16 monitoring wells, 27 groundwater samples were collected for VOC and SVOC analysis. 21 groundwater samples were collected for metals, pesticides/PCBs and PFAS.

Benzene was detected in groundwater at concentrations up to 5.66 parts per billion (ppb), exceeding the Class GA standard (standard) of 1 ppb. N-Propylbenzene was detected in groundwater at concentrations up to 32.2 ppb (standard= 5 ppb). Sec-Butylbenzene was detected in groundwater at concentrations up to 18.7 ppb (standard= 5 ppb). N-Butylbenzene was detected in groundwater at concentrations up to 11 ppb (standard= 5 ppb). Isopropylbenzene was found in groundwater at concentrations up to 25.4 ppb (standard= 5 ppb). Naphthalene was found in groundwater at concentrations up to 25.4 ppb (guidance value = 10 ppb). Benzo(a)pyrene was detected up to 0.13 ppb (standard = not detected). Benzo(a)anthracene was detected up to 0.14 ppb, benzo(b)fluoranthene was detected up to 0.108 ppb, and chrysene was detected at 0.179; the guidance value for each of these compounds is 0.002 ppb. In general, these exceedances were in the vicinity of the former underground petroleum storage tank.

Dissolved tri-valent chromium was detected in groundwater up to 10 ppb, below the standard of 50 ppb. Dissolved copper and lead were not detected in groundwater; mercury was not detected in groundwater.

PFOA and PFOS were detected in groundwater samples at concentrations up to 48 and 86 parts per trillion (ppt), respectively, exceeding the 10 ppt drinking water maximum contaminant level for each compound. PFOA and PFOS were present in on-site monitoring wells as well as in upgradient monitoring wells, suggesting an off-site contribution.

Groundwater analyzed from monitoring wells along the downgradient edge of the site did not exceed the groundwater standards or guidance values for the contaminants of concern with the exception of PFOA and PFOS. The finding of these compounds in groundwater upgradient, as well as in site soil, suggest both on-site and off-site contributions.

Soil Vapor: Soil vapor samples were collected from 10 locations throughout the site at a depth of two feet above the groundwater table. Petroleum related compounds, such as benzene (maximum 55.2 micrograms per cubic meter (mcg/m3), toluene (maximum 222 mcg/m3), ethylbenzene (maximum 24.2 mcg/m3), and xylenes (maximum 140.9 mcg/m3), were detected in each soil vapor sample. Carbon tetrachloride was detected up to 0.605 mcg/m3, cis-1,2-dichloroethene was detected up to 1.33 mcg/m3, trichloroethene was detected up to 6 mcg/m3 and tetrachloroethene was detected up to 47 mcg/m3.

Data do not indicate any off-site impacts in soil vapor related to this site.

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.*

Since the site is completely fenced and covered by asphalt or concrete, people will not come in contact with site related soil and groundwater contamination unless they dig below the surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the

groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect 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. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

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.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

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.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

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 and 6 NYCRR Part 375.

The selected remedy is a Conditional Track 1 remedy.

The selected remedy is referred to as the excavation and contingent site management remedy.

The elements of the selected remedy, as shown in Figure 2, 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 will include a vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction. The vapor barrier should be a minimum thickness of 20-mil, unless otherwise specified by local codes or the building design professional.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted soil cleanup objectives, as defined by 6 NYCRR Part 375-6.8. Approximately 3,913 cubic yards of contaminated soil will be removed from the site. If a Track 1cleanup is achieved, a Cover System will not be a required element of the remedy. Collection and analysis of confirmation and

documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. Local Institutional Controls

If no environmental easement or Site Management Plan is needed to achieve soil, groundwater or soil vapor intrusion remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Chapter 873 Article VII of the Laws of Westchester County, which prohibits potable use of groundwater without prior approval.

6. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion evaluation is not completed prior to completion of the Final Engineering Report, then a site management plan and environmental easement will be required to address the SVI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, including achievement of soil, groundwater and/or soil vapor remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 restricted residential cleanup.

7. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a site management plan, as described below, will be required. The remedy will achieve a Track 2 restricted residential cleanup at a minimum.

7a. 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 for restricted-residential, commercial or industrial uses 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 or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH (Chapter 873, Article VII of the Laws of Westchester County); and,
- require compliance with the Department approved Site Management Plan.

7b. Site Management Plan

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

i. 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 7a above.

Engineering Controls: Any engineering controls that may be required (e.g., sub-slab depressurization system or groundwater treatment).

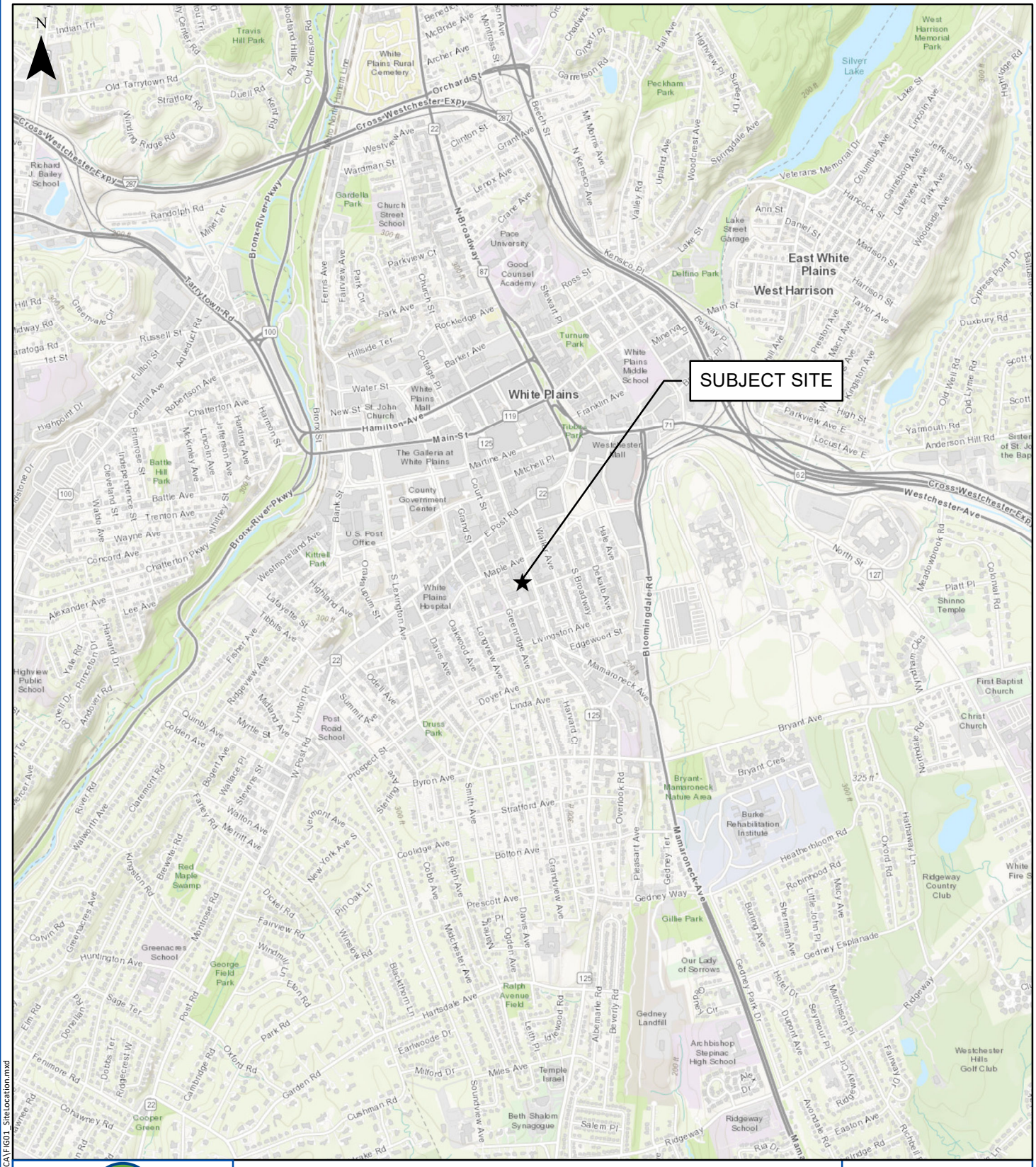
This plan includes, but may not be limited to:

- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- o descriptions of the provisions of the environmental easement including any land use and/or groundwater restrictions;
- o provisions for the management and inspection of the identified engineering controls;
- o maintaining site access controls and Department notification; and
- o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

ii. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- o monitoring of groundwater and soil vapor to assess the performance and effectiveness of the remedy;
- o a schedule of monitoring and frequency of submittals to the Department; and
- o monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

iii. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:

- o procedures for operating and maintaining the system(s); and
- o compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.



Document Path: W:\Projects\S-Z\SLC\2003\maps\BCA\FIG01_SiteLocation.mxd

PWGC
CLIENT DRIVEN SOLUTIONS

P.W. Grosser Consulting, Inc.
630 Johnson Ave., Suite 7
Bohemia, NY 11716
Ph: 631-589-6353 • Fax: 631-589-8705
pwgc.info@pwgrosser.com

SITE LOCATION

250 Mamaroneck Ave
White Plains, NY

Miles
0 ¼ ½ ¾ 1

Project:	SLC2003
Date:	9/30/2020
Designed by:	JLL
Drawn by:	TJS
Approved by:	JLL
Figure No:	1

Document Path: W:\Projects\S-Z\SLC\2003\ArcProProject\SLC2003Figures\RAWP.aprx

PWGC
CLIENT DRIVEN SOLUTIONS
P.W. Grosser Consulting Engineer & Hydrogeologist, PC
630 Johnson Ave., Suite 7
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Ph: 631-589-6353 • Fax: 631-589-8705
pwgc.info@pwgrosser.com

DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

Project:	SLC2003	Designed by:	MG
Date:	6/3/2022	Drawn by:	PH
Scale:	AS SHOWN	Approved by:	MG

Track 1 - Excavation Area

250 Mamaroneck Ave
White Plains, NY

FIGURE NO:

4