

DECISION DOCUMENT

Cottage-Garden Auto Repair Site
Brownfield Cleanup Program
New Rochelle, Westchester County
Site No. C360180
November 2019



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

DECLARATION STATEMENT - DECISION DOCUMENT

Cottage-Garden Auto Repair Site
Brownfield Cleanup Program
New Rochelle, Westchester County
Site No. C360180
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Statement of Purpose and Basis

This document presents the remedy for the Cottage-Garden Auto Repair 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 Cottage-Garden Auto Repair 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, at a

minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

Excavation and off-site disposal of all on-site soils above bedrock which exceed unrestricted SCO's, as defined by 6 NYCRR Part 375-6.8 and the removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination. Approximately 22,130 cubic yards of contaminated soil and remaining building slabs will be removed from the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil.

3. Natural Attenuation of Groundwater

Groundwater contamination will be addressed with natural attenuation (MNA). Groundwater will be monitored for site related contamination. It is anticipated that contamination will be below standards within 5 years. Reports of the attenuation will be provided annually, and active remediation will be proposed if it appears that natural processes alone will not address the contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that liquid activated carbon injections and/or enhanced bioremediation, in-situ chemical reduction (zero valent iron), or in-situ oxidation would be the expected contingency remedial action.

4. Vapor Intrusion Evaluation

As part of the 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.

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 (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) 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 groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 restricted residential cleanup.

If no EE or SMP is needed to achieve soil or soil vapor 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.

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 for restricted-residential, commercial, or industrial use 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; and
- require compliance with the Department approved Site Management Plan.

6. Site Management Plan

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

1. 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: Any engineering controls that may be required following the five-year conditional Track 1 evaluation period (e.g., sub-slab depressurization system, active groundwater treatment).

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 (if any);
- descriptions of the provisions of the environmental easement including any land use and/or groundwater restrictions;
- a provision for evaluation of the potential for soil vapor intrusion in future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls, if any are required following the 5-year conditional Track 1 evaluation period;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

- monitoring of groundwater to assess the performance and effectiveness of the remedy
- monitoring for vapor intrusion for any future buildings developed on the site, as may be

required by the Institutional and Engineering Control Plan discussed above and

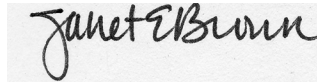
- a schedule of monitoring and frequency of submittals to the Department.

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.

11/29/2019

Date

A handwritten signature in black ink that reads "Janet Brown". The signature is written in a cursive style with a large initial "J".

Janet Brown, Director
Remedial Bureau C

DECISION DOCUMENT

Cottage-Garden Auto Repair Site
New Rochelle, Westchester County
Site No. C360180
November 2019

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, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

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://gisservices.dec.ny.gov/gis/dil/index.html?rs=C360180>

New Rochelle Public Library
Attn: Tom Geoffino
1 Library Plaza
New Rochelle, NY 10801
Phone: (914) 632-7878

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

Site Location:

The site is located at 26 and 30 Garden Street in a commercial and residential area of New Rochelle, New York. Residential development is present along Cottage Place, which borders the northeast side of the site; commercial development is present along Garden Street, which borders the southeast side of the site. Interstate I-95 runs along the west side of the site.

Site Features:

The site consists of three tax parcels totaling approximately one acre. The site was historically occupied by four commercial buildings and one residential building. All on-site buildings were demolished between late 2017 and mid-2018. The site is currently vacant with partial remains of the concrete foundations and pavement and some areas of exposed soil with sparse vegetation. Site access is restricted with chain-link fencing.

Current Zoning and Land Use:

The site is currently located in the Neighborhood Business District (NB District). Allowable uses in NB Districts include business, professional, or governmental offices, retail stores, dry cleaners, banks, restaurants, houses of worship, animal hospitals, and dwelling units located on or above the second floor only. The site has been most recently used for a variety of commercial and residential uses, including appliance retail, vehicle and tire repair, parking, and an apartment building. The site is currently vacant. All prior buildings were demolished by the BCP applicant upon acquisition in 2017.

Past Use of the Site:

The lots were historically comprised of four commercial buildings, one residential building, and asphalt parking lots. The residential parcel was constructed in the early 1990s, with conversion to multiple apartments over the years. The remaining commercial buildings have been used as a kitchen and bath dealer, warehouses, retail tire and auto repair facility, a gasoline station with tanks that were closed in place in 2001, and various other commercial, retail, and light manufacturing uses. The auto repair facility, former plastic works manufacturing and/or metal stripping company on the site were likely responsible for the volatile organic compounds (VOCs) and metals contamination.

Site Geology and Hydrogeology:

The subsurface conditions consist of brown to gray fine to coarse sand, mixed with traces of silt

and gravel to depths 20 to 24 ft below ground surface (bgs). Fractured bedrock was encountered on the eastern side of the site at approximately 21 ft bgs. The subsurface conditions of the region do not exhibit unusual geologic conditions to the subject property or to adjoining site properties. The subject parcels are connected to the public water supply system and the property uses the public sewage treatment system for the sanitary waste disposal. Groundwater was encountered at depths of approximately 15 ft to 18 ft bgs in soil borings. Groundwater flows to the west across the site.

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, an alternative which allows for unrestricted use of the site was evaluated.

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

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities. As a Volunteer, the Applicant does not have an obligation to address off-site contamination.

The Department will seek to identify any parties (other than the Volunteer(s)) known or suspected to be responsible for contamination at or emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department will bring an enforcement action against the PRPs. If an enforcement action cannot be brought, or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

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:

tetrachloroethene (PCE)	benzo(a)pyrene
trichloroethene (TCE)	benzo(b)fluoranthene
1,1,2-trichloroethane	indeno(1,2,3-CD)pyrene
cadmium	dibenz[a,h]anthracene
lead	carbon tetrachloride
methyl-tert-butyl ether (MTBE)	benzo(a)anthracene
mercury	benzo(k)fluoranthene
barium	cis-1,2-dichloroethene
zinc	methylene chloride
nickel	

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

- groundwater
- soil
- soil vapor intrusion

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.

Soil and groundwater samples were analyzed for Target Compound List (TCL) and Target Analyte List (TAL) plus 30 tentatively identified compounds (TICs), Total Petroleum Hydrocarbons (TPH), cyanide, hexavalent chromium, and the emerging contaminants PFAS and 1,4-dioxane. Soil vapor samples were analyzed for volatile organic compounds (VOCs). Based on investigations conducted to date, the primary contaminants of concern include VOCs, metals, and polycyclic aromatic hydrocarbons (PAHs) in soil; VOCs and PFAS in groundwater; and VOCs in soil vapor.

Soil – The following PAHs were identified at concentrations that exceed their Unrestricted Soil Cleanup Objectives (USCOs): benzo[a]anthracene (2 parts per million (ppm) vs. USCO of 1 ppm), benzo[b]fluoranthene (1.2 – 3.2 ppm vs. USCO of 1 ppm), benzo(k)fluoranthene (1.3 ppm vs. USCO of 0.8 ppm), benzo(a)pyrene (1.2 – 2 ppm vs. USCO of 1 ppm), chrysene (1.2 – 2.3 ppm vs. USCO of 1 ppm), dibenzo(a,h)anthracene (0.4 ppm vs. USCO of 0.33 ppm) and indeno(1,2,3-cd)pyrene (0.56 – 1.6 ppm vs. USCO of 0.5 ppm). The depth of PAH impacts is within the top 3 ft below ground surface (bgs).

The following metals were identified at concentrations that exceed their Unrestricted Soil Cleanup Objectives (USCO): barium (396 ppm vs. USCO of 350 ppm), cadmium (7.6 – 22.9 ppm vs. USCO of 2.5 ppm), copper (95.8 – 227 ppm), lead (68.9 – 1900 ppm vs. USCO of 63 ppm), mercury (0.23 – 5 ppm vs. USCO of 0.18 ppm), nickel (39 – 252 ppm vs. USCO of 30 ppm), and zinc (115 – 706 ppm vs. USCO of 109 ppm). The depth of metals exceeding their respective USCOs ranged from 1.5 feet to 24 feet bgs.

Perfluorooctanesulfonic acid (PFOS), an emerging contaminant, was detected in site soils at concentrations ranging from 0.72-4.18 parts per billion (ppb).

No exceedances of the VOCs or PCB SCO were identified in any of the soil samples collected.

Based on the on-site soil investigation, it does not appear that soil contamination is migrating off-site.

Groundwater - The following VOCs were identified at concentrations that exceed the Ambient Water Quality Standards for groundwater (AWQS): trichloroethene (TCE) (8.8 – 9.8 parts per billion (ppb) vs. 5 ppb groundwater standard) and benzene (1.1 ppb vs. 1 ppb groundwater standard), 1,1,2-trichloroethane (1,1,2-TCA) (1.3 ppb vs. 1 ppb groundwater standard), methyl-tertiary-butyl-ether (MTBE) (29 ppb vs. 10 ppb groundwater standard), and methylene chloride (5.4 ppb vs. 5 ppb groundwater standard).

The following SVOCs were identified at concentrations that exceed the Ambient Water Quality Standards for groundwater (AWQS): benzo(a)anthracene (0.017 ppb) at a concentration exceeding its AWQS of 0.002 ppb; this may be an artifact of suspended solids in the sample.

PFOS was detected at concentrations ranging from 7.68 – 72.3 parts per trillion (ppt); one sample exceeded the Environmental Protection Agency's (EPA) lifetime health advisory level (HAL) of 70 ppt., and several samples exceeded the New York Drinking Water Quality Council's proposed maximum contaminant level (MCL) of 10 ppt. Perfluorooctanoic acid (PFOA), another emerging contaminant, was detected in site groundwater at concentrations ranging from 7.27-35.7 ppt; these concentrations are below the EPA HAL of 70 ppt, but above the NYS proposed MCL of 10 ppt.

No pesticides or PCBs were detected in any of the groundwater samples. None of the metal contaminants of concern were above the AWQS in any of the groundwater samples.

Based on the on-site groundwater investigation, there is a potential for contamination to migrate off-site.

Soil Vapor - Elevated levels of chlorinated volatile organic compounds (CVOCs) including, tetrachloroethene (PCE) (45 – 200 micrograms per cubic meter (ug/m³)), carbon tetrachloride (41 – 630 ug/m³), trichloroethylene (TCE) (31 – 810 ug/m³), cis-1,2-dichloroethene (13 - 110 ug/m³), were identified in soil vapor samples collected from the site. Recent soil vapor data was available for an adjacent property on Garden Street with lower detections of CVOCs than the site soil vapor results, indicating that the vapor contamination has likely migrated off-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*.

Access to the site is restricted by a locked fence. Contact with contaminated soil or groundwater is unlikely unless people 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. 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 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. Because there is no onsite building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future onsite development. Additional evaluation is needed to determine the potential for soil vapor intrusion offsite.

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.

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 Groundwater Natural Attenuation 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;
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- 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, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

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If no EE or SMP is needed to achieve soil or soil vapor 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.

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

5. Institutional Control

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- 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 use 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; and

- require compliance with the Department approved Site Management Plan.

6. Site Management Plan

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

1. 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: Any engineering controls that may be required following the five-year conditional Track 1 evaluation period (e.g., sub-slab depressurization system, active groundwater treatment).

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 (if any);
- descriptions of the provisions of the environmental easement including any land use and/or groundwater restrictions;
- a provision for evaluation of the potential for soil vapor intrusion in future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls, if any are required following the 5-year conditional Track 1 evaluation period;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

- monitoring of groundwater to assess the performance and effectiveness of the remedy
- monitoring for vapor intrusion for any future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above and
- a schedule of monitoring and frequency of submittals to the Department.

Figure 1. Site Location map

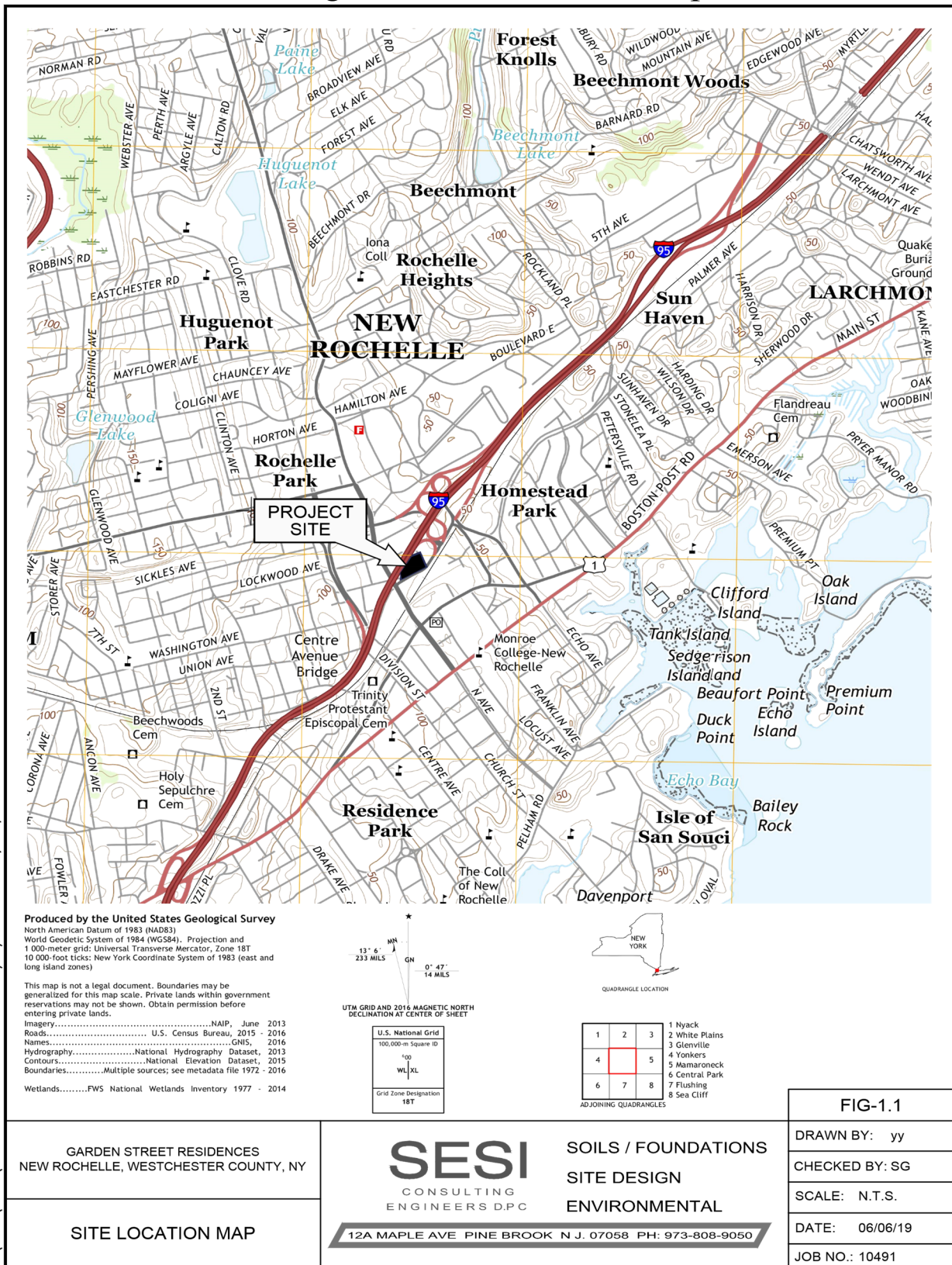


Figure 2. Elements of the Selected Remedy Map

