# **DECISION DOCUMENT**

281-301 Warner Ave LLC
Brownfield Cleanup Program
Roslyn, Nassau County
Site No. C130238
December 2021



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

281-301 Warner Ave LLC Brownfield Cleanup Program Roslyn, Nassau County Site No. C130238 December 2021

# **Statement of Purpose and Basis**

This document presents the remedy for the 281-301 Warner Ave LLC 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 281-301 Warner Ave LLC 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 would be implemented to provide the details necessary for the construction, operation, 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:

- 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;
- 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

The existing on-site building will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

Most of the areas required to be excavated to meet unrestricted soil cleanup objectives (SCOs) onsite as part of the remedy are beneath the existing building footprint and in the adjacent parking lot areas. The majority of the impacted soil is anticipated to be located in the vicinity of the former dry cleaner building and areas immediately around it.

The remedy includes excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 3,000 cubic yards of contaminated soil (*i.e.*, soil with concentrations exceeding the SCOs for unrestricted use) will be removed from the site.

#### 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 to establish the design grades at the site.

# 4. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion (SVI) 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 remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Nassau County Public Health Ordinance, Article 4. The referenced Ordinance prohibits the installation of private water system wells in those areas served by a public water system. The area is served by public water and therefore, no groundwater use for potable purposes is expected.

#### **Conditional Remedial Elements are as follows:**

#### 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 (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 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 residential cleanup at a minimum.

Institutional Controls - 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 residential 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.

## 8. Site Management Plan

A Site Management Plan (SMP) 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 7 above.

Engineering Controls: If necessary, as determined by the SVI evaluation described in paragraph 4 above, the operation of a vapor mitigation system.

This plan includes, but may not be limited to:

- a provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basins or infiltration structures;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- 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;

- provisions for 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/or engineering controls.
- a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan В. includes, but may not be limited to:
  - monitoring of soil vapor/indoor air to assess the performance and effectiveness of
  - a schedule of monitoring and frequency of submittals to the Department; and
  - monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- C. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:
  - procedures for operating and maintaining the system(s); and
  - 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.

Richard a. Martin December 1, 2021

Date Richard A. Mustico, Director Remedial Bureau A

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# **DECISION DOCUMENT**

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# **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 <a href="https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C130238">https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C130238</a>

The Bryant Library 2 Paper Mill Road Roslyn, NY 11576 Phone: 516-621-2240

# **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 <a href="http://www.dec.ny.gov/chemical/61092.html">http://www.dec.ny.gov/chemical/61092.html</a>.

# **SECTION 3: SITE DESCRIPTION AND HISTORY**

Location: The site is located to the north of Warner Avenue and to the west of Main Street in the Town of Roslyn, Nassau County. The 0.85-acre site is identified on the Nassau County Tax Map as Section 7, Block F, Lot 636 and is currently developed with a single-story L shaped building. Adjacent to the site are a restaurant and child daycare to the north, a Long Island Rail Road (LIRR) parking lot to the south, LIRR rail road tracks to the east, and a commercial building to the west.

Site Features: The on-site building is subdivided into eleven individual rectangular storefront units. Two open corridors are located in the basement of the building. The corridors run in an east/west direction and are located along the northern and southern perimeter of the building. The building has remained unoccupied since the site was entered into the Brownfield Cleanup Program in 2018.

Current Zoning and Land Use: Zoning for the site was historically commercial. The owner of the site obtained approval from the Town of Roslyn to rezone the site from commercial to residential. The area surrounding the site is suburban and developed with residential buildings, commercial buildings, public facilities and the LIRR. The nearest residential area is approximately 225 feet east of the site.

Past Use of the Site: The site was developed sometime between 1947 and 1951. Various commercial tenants have occupied the individual storefront units since the building was constructed.

A dry cleaner operated at the address of 289 Warner Ave from approximately 1974 to 2010. Other noted operators of the site include a laundromat, a textile company, a nail spa, an auto parts retailer, and printing studio.

Prior to the site entering the BCP in 2018, several petroleum spills were reported to the Department in connection with an above-ground storage tank containing fuel oil. These spills (9500536, 9500563, 9208897, 1008432) were closed by the Department prior to 2018. In 2017 limited investigation activities were performed at the site that revealed soil vapor contamination beneath the former dry-cleaning building at 289 Warner Avenue.

Site Geology and Hydrogeology: The land surface elevation varies across the site, with the lowest elevation at approximately 158 feet above mean sea level (ft amsl) and the highest elevation at approximately 168 ft amsl. The site sits on top of the Harbor Hill Terminal Moraine, which are

comprised of sands, gravels, and cobbles. A fill layer consisting of asphalt subbase was observed directly below the asphalt parking lot during site investigation work.

Based on the most recent investigation work, depth to groundwater is 90-102 feet below grade surface, with groundwater flow direction determined to be to the north. The aquifer underlying the site is the Upper Glacial Aquifer. The site is not located in, or adjacent to, regulated wetlands. The closest surface water bodies are Roslyn Pond and Hempstead Bay, which are located approximately a half-mile to the northwest. The site is not within the 100-year or 500-year flood zone.

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 Volunteer does not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment but the existence or absence of off-site impacts that would require remedial activities has yet to be confirmed.

The Department will seek to identify any parties (other than the Volunteer) 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
- sub-slab 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 of concern identified at this site is:

tetrachloroethene (PCE)

The contaminant of concern exceeds the applicable SCGs for:

- 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, groundwater and soil vapor were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides, and poly- and perfluorinated alkyl substances (PFAS). Based upon investigations conducted to date, the primary contaminant of concern for the site is tetrachloroethylene (PCE).

Soil - Based on the historical and most recent investigation activities, several SVOCs were detected at one location from zero to two feet below grade, including benzo(a)anthracene, at 1.3 parts per million (ppm) and benzo(a)pyrene at 1.3 ppm, which is above their respective unrestricted use soil cleanup objectives (UUSCOs) of 1 ppm. The maximum concentration of PCE was detected at 15 ppm, which is above the UUSCO of 1.3 ppm. PCE soil impacts are limited to the former dry cleaner area. Based on the data, PCE impacts are limited to the vicinity of the former dry cleaner building from zero to two feet below grade surface.

There were no detections of 1,4-dioxane above the UUSCO of 0.1 ppm. Maximum concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) were 0.46 and 0.059 ppb, respectively. PFOS and PFOA are below the current unrestricted use guidance values of 0.88 ppb and 0.66 ppb, respectively. The on-site data indicates that there are likely no off-site soil impacts of SVOCs, VOCs and PFAS in relation to identified site impacts.

Groundwater - Based on the investigation results, no contaminants of concern were identified above the ambient water quality standards (AWQS). The metals sodium, iron and manganese were detected in samples above their respective AWQS; however, these concentrations are consistent with regional groundwater concentrations. 1,4-dioxane was not detected in groundwater.

For PFAS, PFOA was detected up to 15.6 parts per trillion (ppt), above the Maximum Contaminant Level (drinking water standard of 10 ppt). PFOA concentrations ranged from 1.49 ppt upgradient to 15.6 ppt downgradient of the site. PFOS was not detected above the Maximum Contaminant Level of 10 ppt. Given the site's location close to an inlet of the Long Island sound, there are no public water supplies downgradient of the site, and these concentrations are not considered to be significantly impacting groundwater.

The on-site data indicates that there are likely no off-site impacts in groundwater-related to this site.

Soil Vapor and Indoor Air - Historically, PCE was detected in the sub-slab soil vapor at a concentration as high as 16,000 ug/m3. Indoor air data were not collected as part of the RI because the site was vacant. Based on the most recent soil vapor testing data, PCE was detected in all seven soil vapor samples, ranging in concentration from 19.3 ug/m3 to 7,660 ug/m3, with a maximum detection in soil vapor beneath the former dry cleaner. There is a potential for off-site vapor intrusion based on available data. Vapor intrusion is also a concern for any future on-site building.

# 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*.

Persons who dig below the ground surface may come into contact with contaminants in subsurface 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 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. The potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion in any future onsite building development and occupancy. Sampling data indicates that there is a potential for site related soil vapor contamination to impact offsite 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.

#### 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.

# 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 Track 1: Unrestricted use remedy.

The selected remedy is referred to as the Excavation remedy.

The elements of the selected remedy, as shown in Figure 3, are as follows:

# 1. Remedial Design

A remedial design program would be implemented to provide the details necessary for the construction, operation, 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:

- 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;
- 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

The existing on-site building will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

Most of the areas required to be excavated to meet unrestricted soil cleanup objectives (SCOs) onsite as part of the remedy are beneath the existing building footprint and in the adjacent parking lot areas. The majority of the impacted soil is anticipated to be located in the vicinity of the former dry cleaner building and areas immediately around it.

The remedy includes excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 3,000 cubic yards of contaminated soil (*i.e.*, soil with concentrations exceeding the SCOs for unrestricted use) will be removed from the site.

#### 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 to establish the design grades at the site.

# 4. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion (SVI) 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 remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Nassau County Public Health Ordinance, Article 4. The referenced Ordinance prohibits the installation of private water system wells in those areas served by a public water system. The area is served by public water and therefore, no groundwater use for potable purposes is expected.

#### **Conditional Remedial Elements are as follows:**

#### 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 (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 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 residential cleanup at a minimum.

Institutional Controls - 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 residential 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.

# 8. Site Management Plan

A Site Management Plan (SMP) 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 7 above.

Engineering Controls: If necessary, as determined by the SVI evaluation described in paragraph 4 above, the operation of a vapor mitigation system.

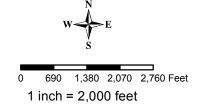
This plan includes, but may not be limited to:

- a provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basins or infiltration structures;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- 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;
- provisions for 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/or engineering controls.
- B. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - monitoring of soil vapor/indoor air to assess the performance and effectiveness of the remedy;
  - a schedule of monitoring and frequency of submittals to the Department; and
  - monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- C. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:
  - procedures for operating and maintaining the system(s); and
  - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

# Greenvale Map Area Suffolk Brooklyn HEATHER DR Roslyn Roslyn OAK DR Roslyn SITE LOCATION Roslyn SHERRARD ST Heights CIRCLEDA NORTHERN C HAYLOFT LN CLUB DA ARM LN Roslyn Heights

# SITE LOCATION MAP



Topographic map provided by the USGS at: https://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer/WMTS/1.0.0/WMTSCapabilities.xml

# 281-301 Warner Avenue

Coordinate System: NAD 1983 UTM Zone 18N Projection: Transverse Mercator Datum: North American 1983

FIGURE 1

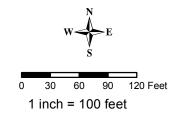


# SITE PLAN

# Legend

- Tax Parcels Nassau County (2019)
- 2016 Orthoimagery Boundary
  - Remediation Site Borders

# 281-301 Warner Avenue



Coordinate System: NAD 1983 UTM Zone 18N Projection: Transverse Mercator

Datum: North American 1983

FIGURE 2

