DECISION DOCUMENT

Rockfarmer 37th Avenue
Brownfield Cleanup Program
Jackson Heights, Queens County
Site No. C241212
April 2021

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

DECLARATION STATEMENT - DECISION DOCUMENT

Rockfarmer 37th Avenue
Brownfield Cleanup Program
Jackson Heights, Queens County
Site No. C241212
April 2021

Statement of Purpose and Basis

This document presents the remedy for the Rockfarmer 37th Avenue 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 Rockfarmer 37th Avenue 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. Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Vapor Mitigation (Sub-Slab Depressurization System)

Any on-site buildings will be required to have a Sub-Slab Depressurization System (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

4. 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 commercial 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 NYCMHDOH; and
- require compliance with the Department approved Site Management Plan.

5. Site Management Plan

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

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

Institutional Controls: The Environmental Easement discussed in Paragraph 4 above.

Engineering Controls: The Cover System discussed in Paragraph 2 and the Sub-Slab Depressurization System discussed in Paragraph 3.

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; which will include a provision to implement a

Community Air Monitoring Plan (CAMP) for any future ground-intrusive activity including utility work;

- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment;
- descriptions of the provisions of the environmental easement including any land use and/or groundwater water use restrictions;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- 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, groundwater, and soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department.

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.

April 21, 2021
Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Rockfarmer 37th Avenue
Jackson Heights, Queens County
Site No. C241212
April 2021

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 repositories:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C241212

Queens Library at Jackson Heights
35-51 37th Avenue
Queens, NY 11372
Phone: 718-899-2500

Queens Community Board 3
82-11 37th Avenue, Suite 606
Jackson Heights, NY 11372
Phone: 718-458-2707

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:
The site is located in an urban area in Jackson Heights, Queens. The property consists of two contiguous parcels identified as Block 1456, Lots 35 and 41. The site is located on the north side of 37th Avenue, between 82nd Street and 83rd Street.

Site Features:
The approximate site area is 20,000 square feet (0.46 acres), which is divided equally between the two tax lots, and is improved with an approximately 108,000 square foot, nine-story commercial office building, with ground floor retail (pharmacy, nail salon, and vacant space) and a two-level above grade parking garage. The site building is also improved with a basement, which is occupied by offices and storage space. The building is surrounded to the south, east, and west by a variety of commercial facilities, and residential housing to the north.

Current Zoning and Land Use:
The site is zoned C4-3 (commercial) and is currently used for commercial purposes. The C4 zone typically includes specialty and department stores, theaters, and other commercial and office uses. C4-3 districts are mapped in more densely built areas, with a required accessory parking of 1 per 400 square feet. The neighboring properties are currently used for a combination of commercial and residential uses.

Past Use of the Site:
The earliest identified use of the site included stores by at least 1930. Past uses include a dry cleaner and dyeing company, and two other dry cleaners through 1993. The current commercial office building, with ground floor retail and a parking garage, was constructed in 1993.

Site Geology and Hydrogeology:
Soils at the site generally consist of sands from approximately 1.0 foot below ground surface (bgs) to at least 40.0 feet bgs. Groundwater exists at depths ranging from approximately

32 to 34 feet bgs. Groundwater flows to the northwest.

A site location map is attached as Figure 1. Additionally, a figure showing the site boundary and the location of the three former dry-cleaning facilities are included as Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives that restrict the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were 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 Applicants under the Brownfield Cleanup Agreement is are Volunteers. The Volunteers do 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 and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

The Department will seek to identify any parties (other than the Volunteers) 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
- indoor air
- 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 contaminants of concern identified at this site are:

trichloroethene (TCE)	1,2,4-TMB
tetrachloroethene (PCE)	isopropylbenzene
1,2-dichloroethane	n-propylbenzene
ethylbenzene	naphthalene
carbon tetrachloride	

The contaminants 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.

The following IRM has been completed at this site based on conditions observed during the RI.

Interim Remedial Measure (IRM)

The description of the IRM performed at the site is as follows:

The IRM involved the excavation and off-site disposal of the soil source area of tetrachloroethene (PCE) located in the northeastern area of the site. Post-excavation sample results demonstrated that the soil source area was completely removed. A construction completion Report (CCR) was submitted to the Department on January 29, 2021.

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), and pesticides. Based upon the subsurface investigations conducted to date, the primary contaminants of concern for the site are chlorinated volatile organic compounds (CVOC), specifically tetrachloroethylene (PCE) and its degradation products, as well as petroleum-related VOCs.

Soil: PCE concentrations exceeded the applicable protection of groundwater soil cleanup objective (SCO) of 1.3 parts per million (ppm) in one of the twenty-one soil samples, at a concentration of 1.4 ppm. This contaminated soil was removed during the IRM. No SVOC, metals, pesticides or PCB concentrations exceeded the SCOs for commercial use. Data does not indicate any off-site impacts in soil related to this site.

Groundwater: PCE was found in groundwater throughout the site in excess of its Ambient Water Quality Standard (AWQS) of 5 parts per billion, or ppb. The maximum concentration of PCE in the sidewalk (side gradient) well is 140 ppb and in the on-site well is 24 ppb. In downgradient wells, PCE concentrations were below the 5 ppb AWQS. TCE and cis-1,2-DCE were detected in only one MW at 6.8 ppb (AWQS is 5 ppb) and 18 ppb (AWQS is 5 ppb), respectively. Three sampling events have been completed at the site, and PCE has shown a decreasing trend in all wells. Low levels of other VOCs such as 1,2,4,5-tetramethylbenzene (21 ppb, AWQS 5 ppb) and n-propylbenzene (12 ppb, AWQS 5 ppb), ethylbenzene (29 ppb, AWQS 5 ppb), isopropylbenzene (6.9 ppb, AWQS 5 ppb) and naphthalene (63 ppb, AWQS 10 ppb) were also

detected above their respective AWQS. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were detected at a maximum concentration of 75.6 parts per trillion (ppt) and 79.3 ppt, respectively, exceeding the maximum contaminant limit of 10 ppt each. After the groundwater was resampled and only one well had PFOS (74 ppt) exceeding the standard. Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor: Twelve sub-slab vapor and ten indoor air samples were analyzed. CVOC soil vapor impacts were detected in most samples. PCE was detected in all sub-slab soil vapor samples at concentrations ranging from 0.997 to 10,100 micrograms per cubic meter (ug/m3). The highest concentration of PCE in sub-slab vapor was detected near the southeastern side of the building. TCE detections ranged from non-detect to 28.1 ug/m3. Carbon tetrachloride was also detected in some sub-slab vapor, ranging from non-detect to 767 ug/m3. Indoor air concentrations of carbon tetrachloride and PCE were identified at concentrations of 1.1 ug/m3 and 10.5 ug/m3, respectively, at co-located positions with the highest sub-slab vapor samples. Data indicates the potential for 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.*

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 soil vapor (air spaces within the soil) may move into 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 soil vapor intrusion impacts to both the onsite building and offsite properties.

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 chosen 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

- 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 Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Cover System and Sub-Slab Depressurization System remedy.

The elements of the selected remedy, as shown in Figure 3, 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. Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Vapor Mitigation (Sub-Slab Depressurization System)

Any on-site buildings will be required to have a Sub-Slab Depressurization System (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

4. 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 commercial 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 NYCMHDOH; and
- require compliance with the Department approved Site Management Plan.

5. Site Management Plan

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

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

Institutional Controls: The Environmental Easement discussed in Paragraph 4 above.

Engineering Controls: The Cover System discussed in Paragraph 2 and the Sub-Slab Depressurization System discussed in Paragraph 3.

This plan includes, but may not be limited to:

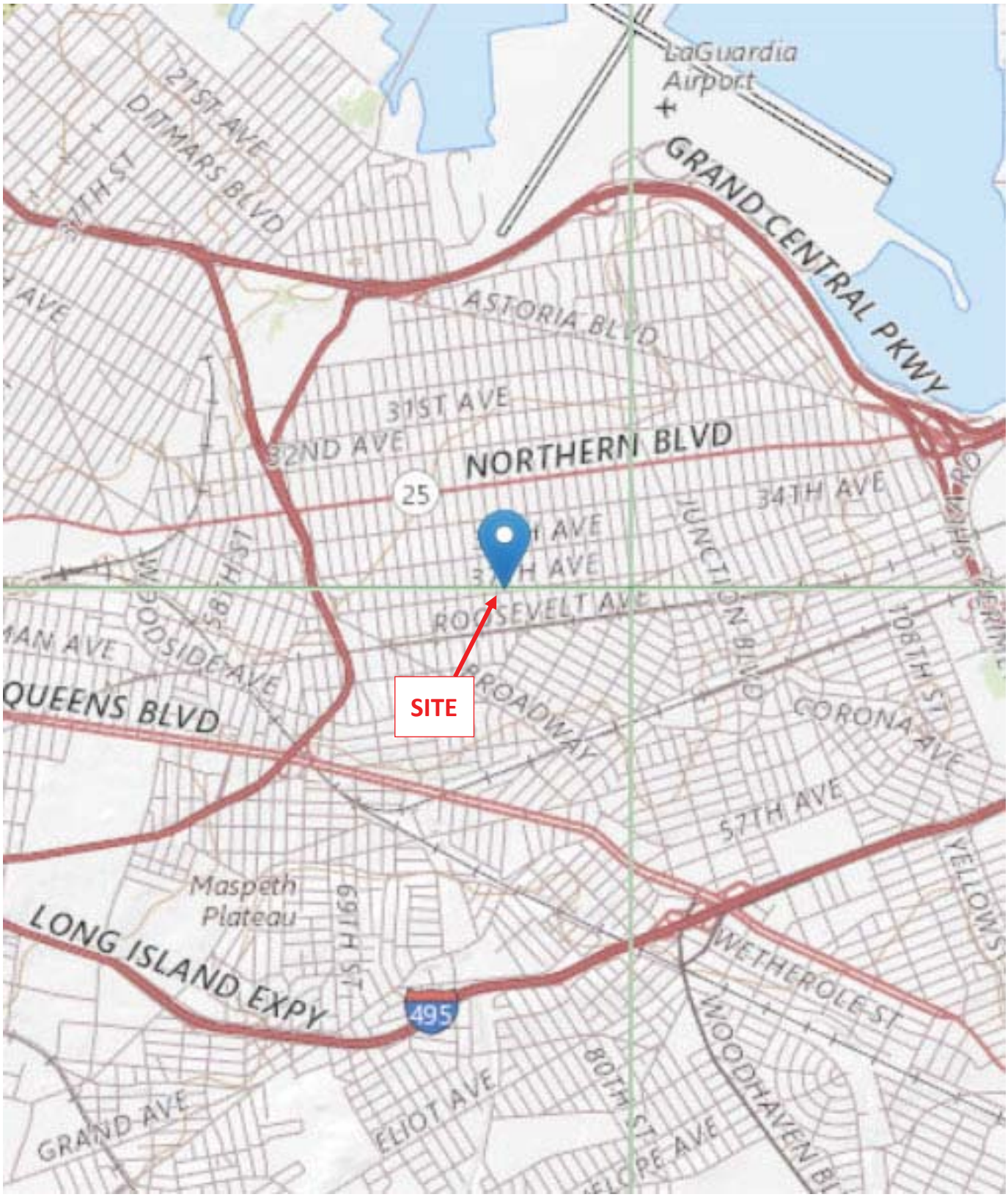
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; which will include a provision to implement a Community Air Monitoring Plan (CAMP) for any future ground-intrusive activity including utility work;
- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment;
- descriptions of the provisions of the environmental easement including any land use and/or groundwater water use restrictions;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- 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, groundwater, and soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department.

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.



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Source: USGS, 2013
Brooklyn, NY Quadrangle
Contour Interval: 50 feet

SITE LOCATION MAP

82-13 37th Avenue
Jackson Heights, Queens County, New York

VERTEX Project No. 48122

VERTEX ENGINEERING, PC

FIGURE NO. 1

FORMER DRYCLEANER LOCATIONS

Rockfarmer 37th Avenue—Site Code C241212
82-13 37th Avenue
Jackson Heights, Queens County, New York

VERTEX ENGINEERING, PC
147 WEST 35TH STREET, 19TH FLOOR
NEW YORK, NEW YORK 10001

FIGURE NO. 2

VERTEX Project Number
48122

STATE OF NEW YORK
RICHARD J TOSCA
095039-1
LICENSED PROFESSIONAL ENGINEER

4" Riser to Second Floor Parking Deck

4" Riser to First Floor Loading Dock

Alarm (1)

Blower w/4-inch Exhaust & silencer

Minihelic 0-10 in WC (typ. of 4)

Floor Valve (typ. of 3)

Sub-Slab Monitoring Point (typ. Of 6)

First Floor Loading Dock

Rite Aid

2" slotted PVC well screen (0.020") , 5 ft lengths, with socks, set in 3/4 inch clean stone, cap ends of each piping run.

4" Sch 40 Steel above-grade piping

2", 3" and 4" Sch 40 PVC below-grade piping

SSDS INSTALLATION COMPLETED IN SEPTEMBER 2020

- Design based on 14 2-inch buried slotted pipe, 5 ft in length at 15 cfm each @ 3 inches W.C. Four-inch riser up to open parking deck, blower with exhaust silencer to exterior of parking deck. Blower (200 cfm @ 5" WC). Valves to be installed in floor box (Acudor FT-8080 Aluminum Floor Door). One low-vacuum audible alarm mounted in utility room. Four (4) minihelic vacuum gauges 0-10 in WC at locations shown. Six (6) sub-slab monitoring points (Mini Vapor Pin). Duct silencer (McMaster Carr #2775K2).

Map Source: *Existing Basement Floor Plan*, Existing Conditions Surveys Inc., 11/30/2017

SCALE: 1" = 13.5' when printed 11"x17"

PROPOSED SSDS

ROCKFARMER 37TH AVENUE—SITE CODE C241212
82-13 37TH AVENUE—JACKSON HEIGHTS, QUEENS COUNTY, NEW YORK

VERTEX ENGINEERING, PC
147 WEST 35TH STREET, 19TH FLOOR
NEW YORK, NEW YORK 10001

FIGURE 3

VERTEX Project No. 48122