

DECISION DOCUMENT

100 Union Avenue Redevelopment Site
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224274
October 2023



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

100 Union Avenue Redevelopment Site
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224274
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Statement of Purpose and Basis

This document presents the remedy for the 100 Union Avenue Redevelopment 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 100 Union Avenue Redevelopment 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; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 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.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar Department accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

All soils in the upper one or two feet which exceed the restricted residential SCOs will be excavated and transported off-site for disposal. The entire footprint of the new structure will be excavated to a depth of approximately 2 feet below grade and the remaining footprint of the Site (parking area) will be excavated to a depth of approximately 1 foot below grade for installation of the cover system discussed below. Approximately 700 cubic yards (1050 tons) of soil will be excavated and removed. Collection and analysis of documentation samples at the remedial excavation depth will be used to document the quality of soil remaining beneath the cover system.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

3. Site Cover

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper

six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

4. Monitored Natural Attenuation

Groundwater contamination remaining after active remediation will be addressed with monitored natural attenuation (MNA). Groundwater will be monitored for site related contamination and for MNA indicators which will provide an understanding of the biological activity breaking down the contamination. The current field measurements indicate reductive dechlorination is likely already happening at the site. Reports of the attenuation will be provided, and active remediation will be proposed if it appears that natural processes alone will not address the contamination.

5. Soil Vapor Extraction (SVE)

Soil vapor extraction (SVE) will be implemented to remove volatile organic compounds (VOCs) from the subsurface and to prevent off-site migration of contaminants in soil vapor. VOCs will be physically removed from the soil by applying a vacuum to wells that have been installed into the vadose zone (the area below the ground but above the water table). The vacuum draws air through the soil matrix which carries the VOCs from the soil to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

6. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

7. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require compliance with the Department approved SMP;
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- require the remedial party to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3); and
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH.

8. 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 7 above.
- Engineering Controls: The cover system discussed in Paragraph 3, the SVE system discussed in Paragraph 5 and the vapor mitigation discussed in Paragraph 6.

This plan includes, but may not be limited to:

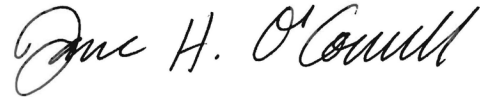
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - descriptions of the provisions of the environmental easement including any land use, and groundwater water use restrictions;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 3 above will be placed in any areas where the upper two 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 groundwater, indoor air 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, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- procedures for operating and maintaining the remedy;
 - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting,
 - maintaining site access controls and Department notification; and
 - providing the Department access to the site and O&M records.

The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

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.

October 5, 2023



Date

Jane H. O'Connell
Regional Remediation Engineer, Region 2

DECISION DOCUMENT

100 Union Avenue Redevelopment Site
Brooklyn, Kings County
Site No. C224274
October 2023

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 repositories:

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C224274>

Brooklyn Public Library - Williamsburg Branch
240 Division Ave.
Brooklyn, NY 11211
Phone: (718) 302-3485

Brooklyn Community Board 1
435 Graham Avenue
Brooklyn, NY 11211
Phone: (718) 389-0009

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 100 Union Avenue site is located in an urban area at 100 Union Avenue, Brooklyn, NY. It is bordered by Middleton Street to the north, a small parking area and multi-story residential building to the south/southeast, Union Avenue to the west, and a New York City Transit (NYCT) substation and multi-story residential buildings to the east.

Site Features:

The site is 10,566 square feet (0.24 acres) in area and is currently vacant. Surface cover is mostly concrete with patches of vegetation throughout the site, and it is surrounded by a plywood fence along the two bounding streets.

Current Zoning and Land Use:

The site is zoned R6A (residential district) with C2-4 commercial overlay and is currently vacant.

Past Use of the Site:

The site was historically occupied by a church and by residential dwellings from 1887 through 1935. The site was vacant by 1950. The site was used for auto sales between 1965 and 1991 and then as an auto repair shop and junk yard from 1992 until 2014.

Site Geology and Hydrology:

The site is generally level and is at an elevation of approximately 16 feet above sea level. The topographic gradient of the site and the surrounding area gradually slopes west northwest towards the East River. Fill composed of brown medium sand, some medium gravel and cinders were identified throughout the site between 0 to 8 feet below ground surface (ft-bgs). Gray silty sand was also identified throughout the site between 8 and 15 ft-bgs. A layer of localized peat was identified in the northeastern area of the site at depths of 8 to 9.5 ft-bgs. A confining clay layer was observed at between 9 and 15 ft-bgs. Bedrock was not encountered. Groundwater was found to flow in a south/southeast direction. Groundwater was encountered between

approximately 6.76 and 8.49 ft-bgs.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives that restrict the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were 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 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 is the potential for off-site impacts that will require investigation.

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
- 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)	chrysene
trichloroethene (TCE)	dibenz[a,h]anthracene
benzo(a)anthracene	indeno(1,2,3-cd)pyrene
benzo(a)pyrene	lead
benzo(b)fluoranthene	mercury
benzo(k)fluoranthene	

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

- groundwater

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

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

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor samples were analyzed for VOCs. Based upon investigations conducted at the Site, the primary contaminants of concern are chlorinated solvents, specifically tetrachloroethylene (PCE) and trichloroethene (TCE).

Soil - No VOCs were detected at concentrations exceeding the restricted residential soil cleanup objectives (RRSCO) or the applicable protection of groundwater SCOs. SVOCs were detected at concentrations above RRSCOs in the upper 2 feet of soil only including benzo(a)anthracene at 7.47 parts per million (ppm), benzo(a)pyrene at 5.16 ppm and benzo (b) fluoranthene at 5.7 ppm, all above their respective RRSCO of 1 ppm. Indeno(1,2,3-cd)pyrene was detected at 2.2 ppm (RRSCO of 0.5 ppm), dibenz[a,h]anthracene at 0.95 ppm (RRSCO of 0.33 ppm), and chrysene and benzo(k)fluoranthene at 5.66 ppm and 5.07 ppm, respectively (RRSCO of 3.9 ppm).

Metals exceeding RRSCOs include lead detected at a maximum concentration of 900 ppm (RRSCO of 400 ppm) and mercury at a maximum of 7.28 ppm (RRSCO of 0.81 ppm).

Data does not indicate any off-site impacts in soil related to the site.

Groundwater - PCE exceeded the NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGV) with a maximum concentration of 19 parts per billion (ppb) compared to the AWQSGV of 5 ppb.

The SVOCs mentioned above exceeded AWQSGV in four samples with concentrations an order of magnitude higher than the standard of 0.002 ppb including benzo(a)pyrene at 0.03 ppm and benzo(b)fluoranthene at 0.02 ppm. Dissolved metal exceedances included iron, manganese, selenium, and sodium which are likely naturally occurring and are not considered to be site-specific contaminants. Perfluorooctanoic acid (PFOA) exceeded the AWQSGV of 6.7 parts per trillion (ppt) with a maximum concentration of 199 ppt and perfluorooctanesulfonic acid (PFOS) exceeded the AWQSGV of 2.7 ppt with a maximum concentration of 106 ppt.

Data does not indicate any off-site impacts in groundwater related to the site.

Soil Vapor - PCE and TCE were detected at elevated concentrations across the northern portion of the Site where groundwater exceedances were also identified. PCE concentrations ranged from 37 to 1450 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and TCE ranged from 1.34 to 61.3 $\mu\text{g}/\text{m}^3$.

Data indicates the potential for off-site impacts in soil vapor related to the 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*.

The site is completely fenced or boarded which restricts public access. Persons who enter the site can contact contaminants in the soil by walking through or digging below surface soil or otherwise disturbing soil beneath the concrete cover. Contaminated groundwater at the site is not used for drinking or other purposes, since the site is served by a public water supply that obtains its water from a source not affected by site 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. Soil vapor intrusion is not a current concern on-site because the site is vacant; however, the potential exists for the inhalation of site contaminants due to soil vapor intrusion in any future on-site buildings. Soil vapor intrusion is a potential exposure concern for site-related contaminants off-site.

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.

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

The selected remedy is referred to as the Excavation, Vapor Mitigation, Cover System and MNA remedy.

The elements of the selected remedy, as shown in Figures 2 through 4, 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;

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- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 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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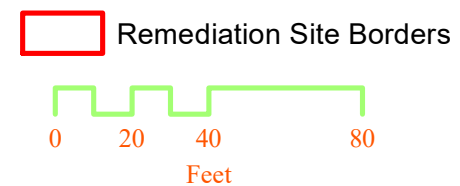
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- monitoring of groundwater, indoor air and soil vapor to assess the performance and effectiveness of the remedy;
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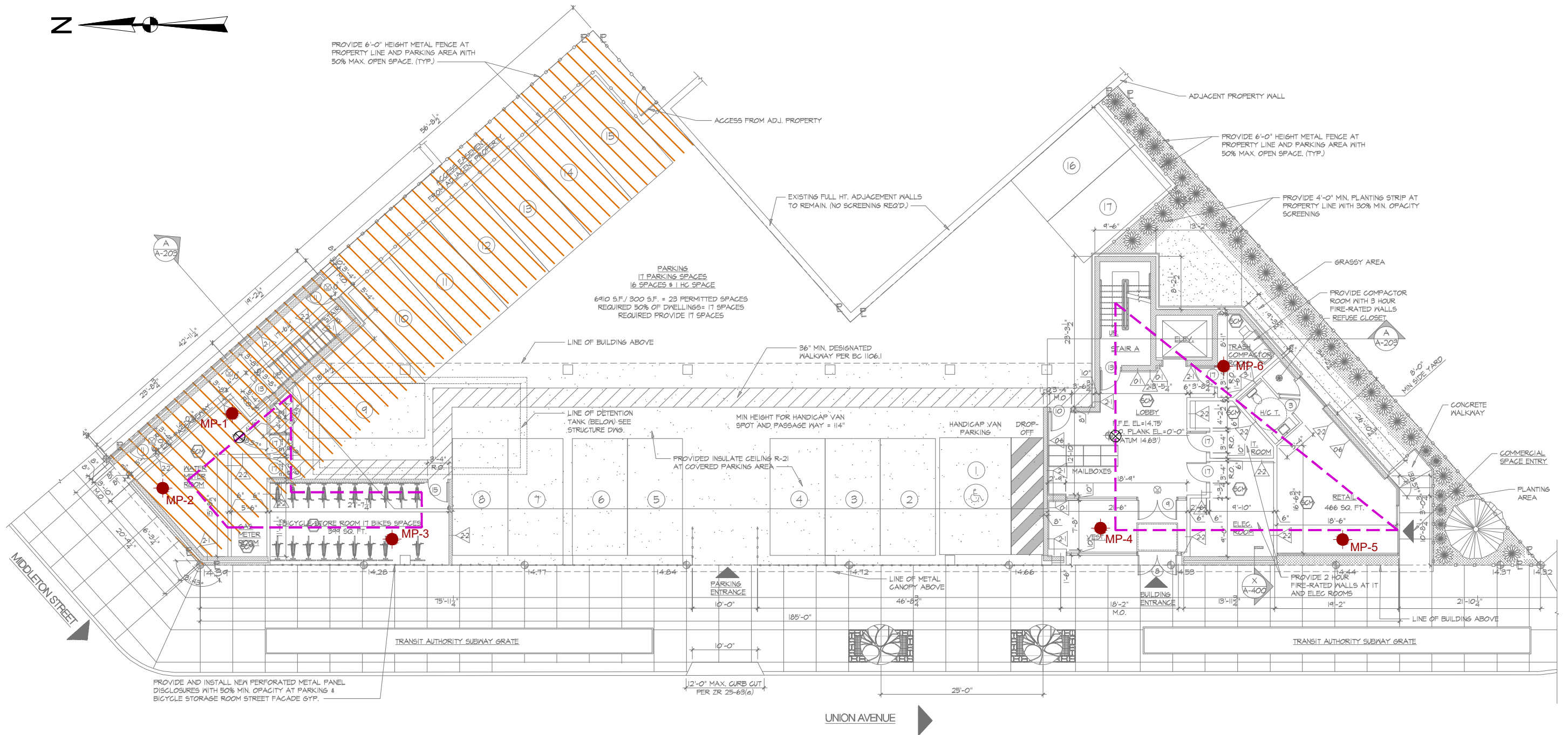


Figure 1 - Site Location Map
100 Union Avenue Redevelopment Site
Site No. C224274

Legend



**Department of
Environmental
Conservation**



LEGEND:

- SOIL VAPOR EXTRACTION SYSTEM TARGET AREA
- 4-INCH SCH. 40 PERFORATED PVC PIPING FOR SSDS
- PROPOSED 6" CAST IRON RISER TO ROOF - LOCATION TO BE DETERMINED (TYP.)
- PROPOSED APPROXIMATE MONITORING POINT

GENERAL NOTES:

- BASEMAP DEVELOPED FROM AN ELECTRONIC FILE PROVIDED BY: AUFANG ARCHITECTS, ENTITLED: FIRST FLOOR PLAN.

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100 UNION AVENUE
BROOKLYN, NEW YORK

**REMEDIATION PLAN - SUB-SLAB
DEPRESSURIZATION SYSTEM AND SVE
SYSTEM**

PREPARED BY:
 GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
100 UNION HOLDINGS, LLC

PROJ MGR: ZS
DESIGNED BY: MH
DATE: MAY 2023

REVIEWED BY: ZS
DRAWN BY: MT
PROJECT NO. 12.0076932.00

CHECKED BY: MH
SCALE: NOT TO SCALE
REVISION NO. 1

FIGURE
3

© 2018 - GZA GeoEnvironmental of NY, GZA-\\gisham\Users\786932\12.0076932.dwg (\\gisham\Users\786932\12.0076932.dwg) [2] May 17, 2023 - 3:25pm Miranda.Bendall

LEGEND:



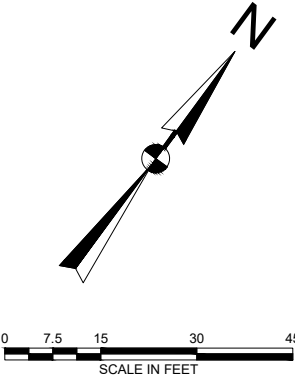
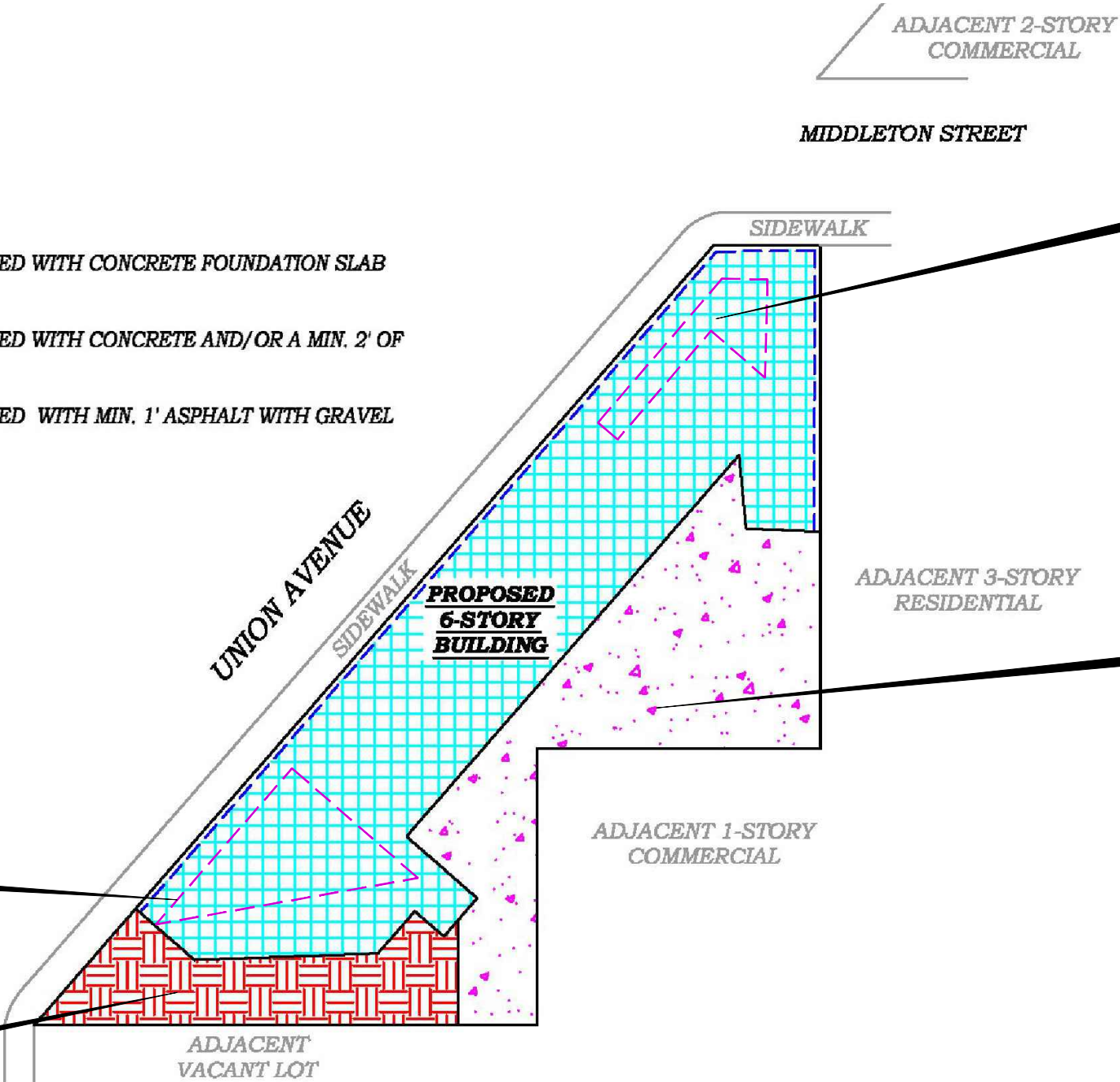
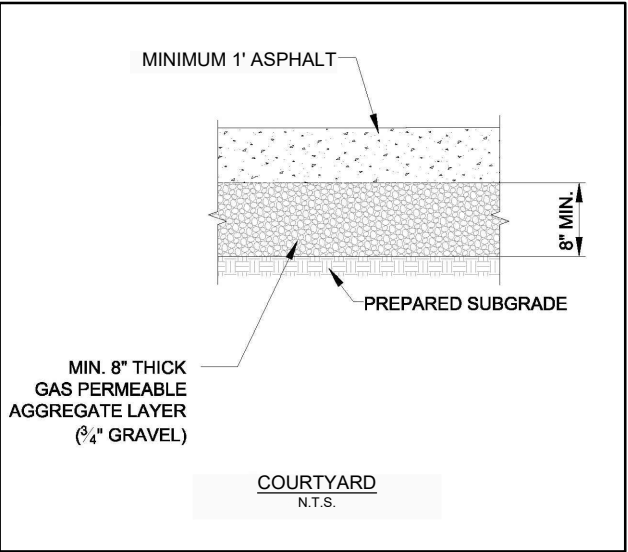
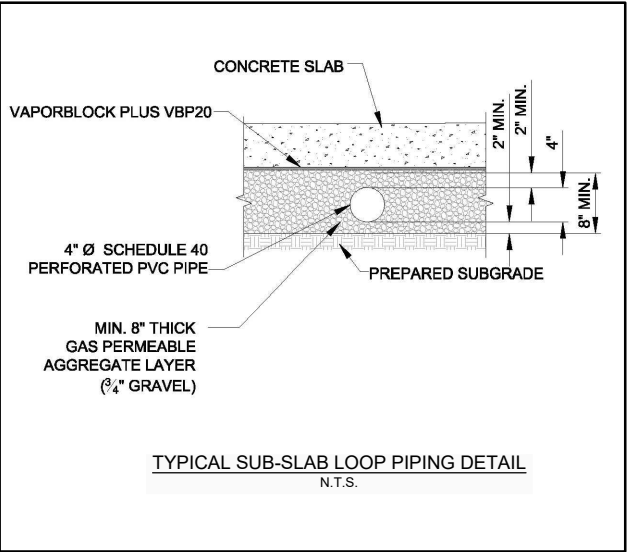
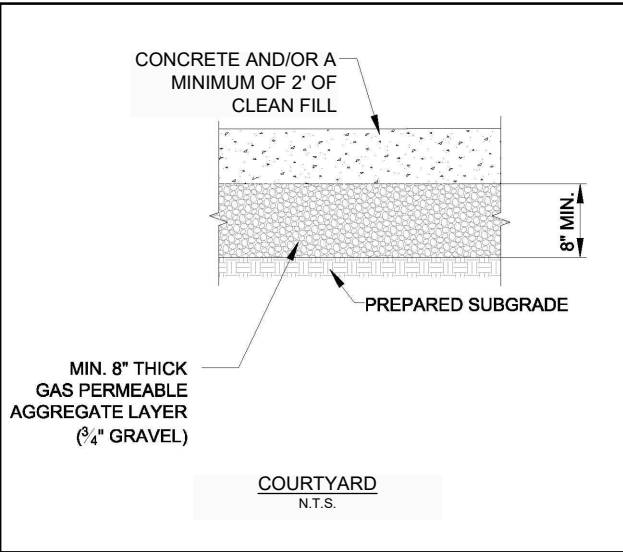
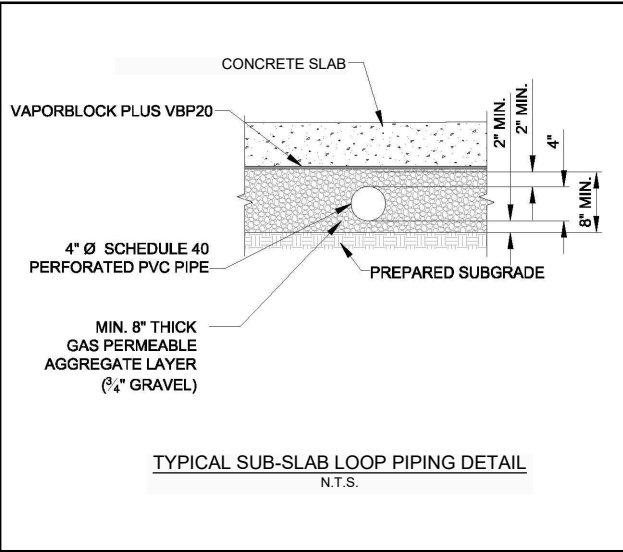
AREA TO BE COVERED WITH CONCRETE FOUNDATION SLAB



AREA TO BE COVERED WITH CONCRETE AND/OR A MIN. 2' OF CLEAN FILL



AREA TO BE COVERED WITH MIN. 1' ASPHALT WITH GRAVEL SUB-BASE



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100 UNION AVENUE BROOKLYN, NEW YORK			
SITE COVER SYSTEM - EXTENT OF FOUNDATION SLAB AND FOUNDATION SLAB CROSS-SECTION			
PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: 100 UNION HOLDINGS, LLC	
PROJ MGR: ZS	REVIEWED BY: ZS	CHECKED BY: DW	FIGURE 4
DESIGNED BY: ZS	DRAWN BY: MT	SCALE: 1" = 15'	
DATE: MAY 2023	PROJECT NO. 12.0076932.00	REVISION NO. 1	