DECISION DOCUMENT

430 West 207th Street
Brownfield Cleanup Program
New York, New York County
Site No. C231144
May 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

430 West 207th Street
Brownfield Cleanup Program
New York, New York County
Site No. C231144
May 2022

Statement of Purpose and Basis

This document presents the remedy for the 430 West 207th Street 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 430 West 207th Street site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to

improve energy efficiency as an element of construction.

2. Excavation

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

In the Track 1 Area: Excavation and off-site disposal of all on-site soils which exceed unrestricted soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8.

In the Track 2 Area: Excavation and off-site disposal of all soils which exceed restricted residential SCOs, as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet.

Approximately 18,000 cubic yards of contaminated soil 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 as needed to replace the excavated soil and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

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

5. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the portions of the site that do not achieve a Track 1 unrestricted use cleanup which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential 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 NYCDOH; and
- require compliance with the Department approved Site Management Plan.

6. Site Management Plan

A Site Management Plan is required for all portions of the site that do not achieve a Track 1 unrestricted use cleanup which includes the following:

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

- Institutional Controls: The Environmental Easement for the Track 2 restricted residential area of the site discussed in Paragraph 5 above.

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 or 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;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.

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

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.

May 17, 2022

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

430 West 207th Street
New York, New York County
Site No. C231144
May 2022

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

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

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C231144

Inwood Library
4857 Broadway
New York, NY 10034
Phone: (212) 942-2445

Manhattan Community Board 12
530 West 166th Street
New York, NY 10032
Phone: (212) 568-8500

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 at 430 West 207th Street in the Inwood neighborhood of Manhattan encompassing Tax Block 2203, Lot 9. The site is bounded to the south by West 206th Street, to the north by West 207th Street, to the west by residential and commercial buildings, and to the east by a parking lot (BCP Site No. C231147).

Site Features: The 1.376-acre site is currently occupied by a vacant grocery store and a parking lot. The one-story grocery store contains a partial basement on the western side and rooftop parking.

Current Zoning and Land Use: The site is currently unoccupied and zoned as R8A for residential use with a C2-4 commercial overlay. The surrounding properties are residential and commercial with residential buildings immediately adjacent to the west.

Past Use of the Site: The site was undeveloped until 1926 when the Miramar Bath House was constructed, which had a three-story building on the eastern portion of the site, a large swimming pool on the northwest side, and an undeveloped sunbathing area to the south. The site remained unchanged until it was redeveloped into a supermarket in 1969 which remains on site today.

Site Geology & Hydrogeology: Site soils consist of urban fill materials to depths ranging from 3 to 11 feet below ground surface (bgs) which are underlain by native fine to coarse sand with some gravel and silt. Brown to dark grey organic-rich silt and clay lenses were observed at approximately 11 to 14 feet. Bedrock is present at depths ranging from 20 and 80 feet bgs, sloping downward to the Harlem River which is approximately 700 feet to the east. Groundwater is present at 9 to 12 feet bgs, flows easterly toward the Harlem River, and is likely influenced by subsurface utilities.

A site location map and site plan are attached as Figure 1 and 2, respectively.

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 that restricts the use of the site to restricted residential use as described in Part 375-1.8(g) was evaluated in addition to an alternative which would allow for unrestricted use of the site.

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

SECTION 5: ENFORCEMENT STATUS

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

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
chrysene
indeno(1,2,3-cd)pyrene
dibenz[a,h]anthracene
phenol
barium
cadmium
chromium
copper
lead
mercury
tetrachloroethene
methylene chloride
1,1,1-trichloroethane
trichloroethene
carbon tetrachloride
4,4'-DDE
4,4'-DDT

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

- soil

6.2: Interim Remedial Measures

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

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

6.3: Summary of Environmental Assessment

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

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. The primary contaminants of concern are SVOCs, specifically poly-cyclic aromatic hydrocarbons (PAHs), and metals.

Soil – Several PAHs were detected to a depth of 12 feet below ground surface (bgs) at concentrations exceeding unrestricted use soil cleanup objectives (UUSCOs) and/or restricted residential SCOs including: benzo(a)anthracene up to 18 parts per million (ppm) (UUSCO and RRSCO is 1 ppm), benzo(a)pyrene up to 20 ppm (UUSCO and RRSCO is 1 ppm), benzo(b)fluoranthene up to 24 ppm (UUSCO and RRSCO is 1 ppm), benzo(k)fluoranthene up to 7.8 pm (UUSCO is 0.8 ppm), chrysene up to 15 ppm (UUSCO is 1 ppm), indeno(1,2,3-c,d)pyrene up to 8.9 ppm (UUSCO and RRSCO is 0.5 ppm), dibenz(a,h)anthracene up to 3.2 ppm (UUSCO and RRSCO is 0.33 ppm), and phenol up to 1.6 ppm (UUSCO is 0.33).

The following metals were detected to a depth of 18 feet bgs at levels exceeding UUSCOs: barium up to 967 ppm (UUSCO is 350 ppm), cadmium up to 94.1 ppm (UUSCO is 2.5 ppm), chromium up to 52.3 ppm (UUSCO is 30 ppm), copper up to 520 ppm (UUSCO is 50 ppm), lead up to 1,790 ppm (UUSCO is 63 ppm), and mercury up to 0.69 ppm (UUSCO is 0.18 ppm).

Limited VOCs were detected at levels exceeding UUSCOs, including a single detection of benzene at 0.23 ppm (UUSCO is 0.06 ppm), and a single detection of total xylenes at 0.75 ppm (UUSCO is 0.26 ppm).

For PFAS, perfluorooctanoic acid (PFOA) was detected up to 2.2 parts per billion (ppb) (Unrestricted Use Guidance Value (UUGV) of 0.66 ppb).

The following pesticides were detected at levels exceeding UUSCOs: 4,4'-DDE up to 0.041 ppm and 4,4'-DDT up to 0.015 ppm (UUSCO for both is 0.0033 ppm).

PCBs were detected at levels exceeding the UUSCO of 0.1 ppm up to 0.37 ppm.

The metals and PAHs detected in soil are related to historic fill. The data do not indicate any off-site impacts in soil related to this site.

Groundwater – The SVOC 1,4-dioxane was detected in one well at 1.4 parts per billion (ppb), above the Maximum Contaminant Level (MCL) of 1 ppb. The dissolved metals iron, magnesium, manganese, and sodium were detected above their respective Class GA Ambient Water Quality Standard (AWQS) but are considered to be naturally occurring and not site related.

For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations up 54 parts per trillion (ppt) and 3.47 ppt respectively, exceeding the MCL (drinking water standard) of 10 ppt each in groundwater. There are no public water supply wells within a half a mile and there is a municipal prohibition for use of groundwater at the site.

While no VOCs and only one SVOC was detected above standards/MCLs in the 2021 RI sampling, some VOCs and SVOCs were detected above standards during a 2018 subsurface investigation. However, the detections from 2018 are attributed to the wells being temporary in construction and not fully developed, likely resulting in entrained sediment.

No VOCs, pesticides or PCBs were detected above standards.

The data do not indicate any off-site impacts in groundwater related to this site.

Soil Vapor - Chlorinated VOCs were detected in soil vapor including: tetrachloroethene (PCE) up to 47 micrograms per cubic meter (µg/m³), methylene chloride up to 2.6 µg/m³, 1,1,1-trichloroethane up to 2.5 µg/m³, trichloroethene (TCE) up to 2 µg/m³, and carbon tetrachloride up to 0.84 µg/m³. Several petroleum-related VOCs were also detected in soil vapor including toluene at concentrations up to 1,600 µg/m³, and m,p-xylene up to 410 µg/m³. The data do not indicate any off-site impacts in soil vapor related to this site.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

The site is covered with a parking lot and a vacant building, and therefore it is not expected that people will come into contact with site related contamination. People are not drinking the contaminated groundwater because the area is served by a municipal 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. Since the on-site building is vacant and slated for demolition, soil vapor intrusion is not a current concern, however the potential exists for indoor air impacts in any future on-site development and occupancy. Environmental sampling indicates that soil vapor intrusion is not a current or future concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated 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 Multiple Cleanup Track remedy.

The selected remedy is referred to as the Excavation and Soil Vapor Intrusion Evaluation 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. Excavation

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

In the Track 1 Area: Excavation and off-site disposal of all on-site soils which exceed unrestricted soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8.

In the Track 2 Area: Excavation and off-site disposal of all soils which exceed restricted residential SCOs, as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet.

Approximately 18,000 cubic yards of contaminated soil 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 as needed to replace the excavated soil and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

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

5. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the portions of the site that do not achieve a Track 1 unrestricted use cleanup which will:
- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential 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 NYCDOH; and
- require compliance with the Department approved Site Management Plan.

6. Site Management Plan

A Site Management Plan is required for all portions of the site that do not achieve a Track 1 unrestricted use cleanup which includes the following:

c. an Institutional Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following

institutional controls remain in place and effective:

- Institutional Controls: The Environmental Easement for the Track 2 restricted residential area of the site discussed in Paragraph 5 above.

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 or 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;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.

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

- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring of vapor intrusion for any buildings on the site, as may be required by the Institutional Control Plan discussed above.

QUADRANGLE LOCATION

N

1,000 0 1,000'

Title:

SITE LOCATION MAP

430 WEST 207TH STREET
MANHATTAN, NEW YORK

Prepared for:

INWOOD LOT 9 ASSOCIATES LLC

ROUX

Compiled by: D.M.	Date: 12/10/21
Prepared by: M.S.R.	Scale: AS SHOWN
Project Mgr: V.S.	Project: 2477.0008Y000
File: 2477.0008Y130.1.mxd	

FIGURE 1

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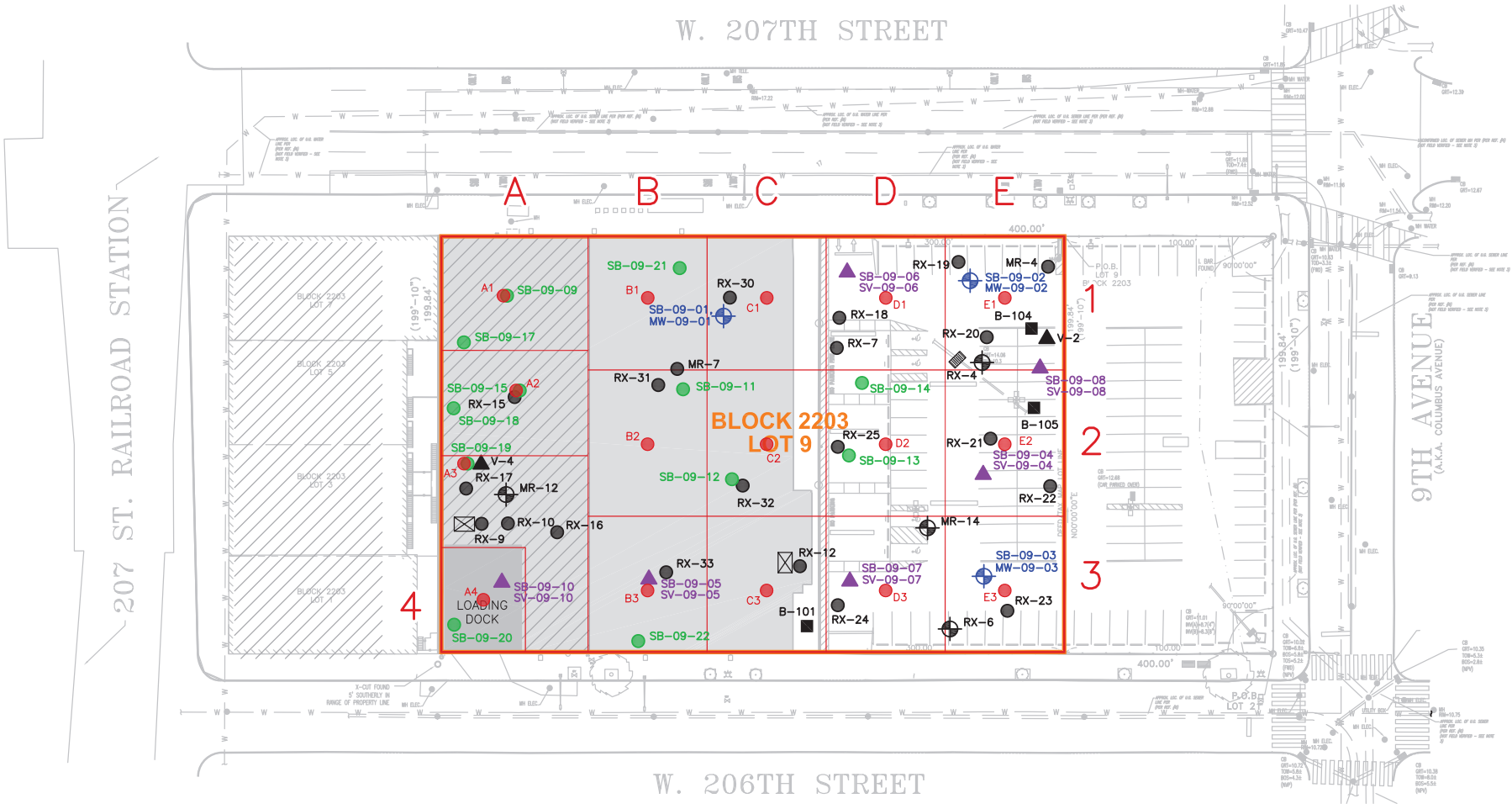


LEGEND

- SB-09-02, MW-09-02 — SOIL BORING AND MONITORING WELL LOCATION AND DESIGNATION
- SB-09-15 — SOIL BORING LOCATION AND DESIGNATION
- SB-09-05, SV-09-05 — SOIL BORING AND SOIL VAPOR SAMPLING LOCATION AND DESIGNATION
- B-101 — SOIL BORING AND TEMPORARY MONITORING WELL LOCATION AND DESIGNATION (INSTALLED BY STANTEC, 2011)
- MR-12 — SOIL BORING AND TEMPORARY MONITORING WELL LOCATION AND DESIGNATION PREVIOUSLY INSTALLED
- V-4 — SOIL VAPOR SAMPLING LOCATION AND DESIGNATION PREVIOUSLY INSTALLED BY ROUX
- RX-7 — SOIL BORING LOCATION AND DESIGNATION PREVIOUSLY INSTALLED BY ROUX
- B3 — WASTE CHARACTERIZATION SOIL BORING LOCATION AND DESIGNATION
- WASTE CHARACTERIZATION GRID
- GROCERY STORE FOOTPRINT
- GROCERY STORE BASEMENT
- ELEVATOR
- CATCH BASIN
- SITE BOUNDARY

REFERENCE:
CONTROL POINT SURVEY V-001.00 DATED 7/10/2018

Title:

SITE PLAN WITH SAMPLING LOCATIONS

430 W 207TH STREET
NEW YORK, NEW YORK

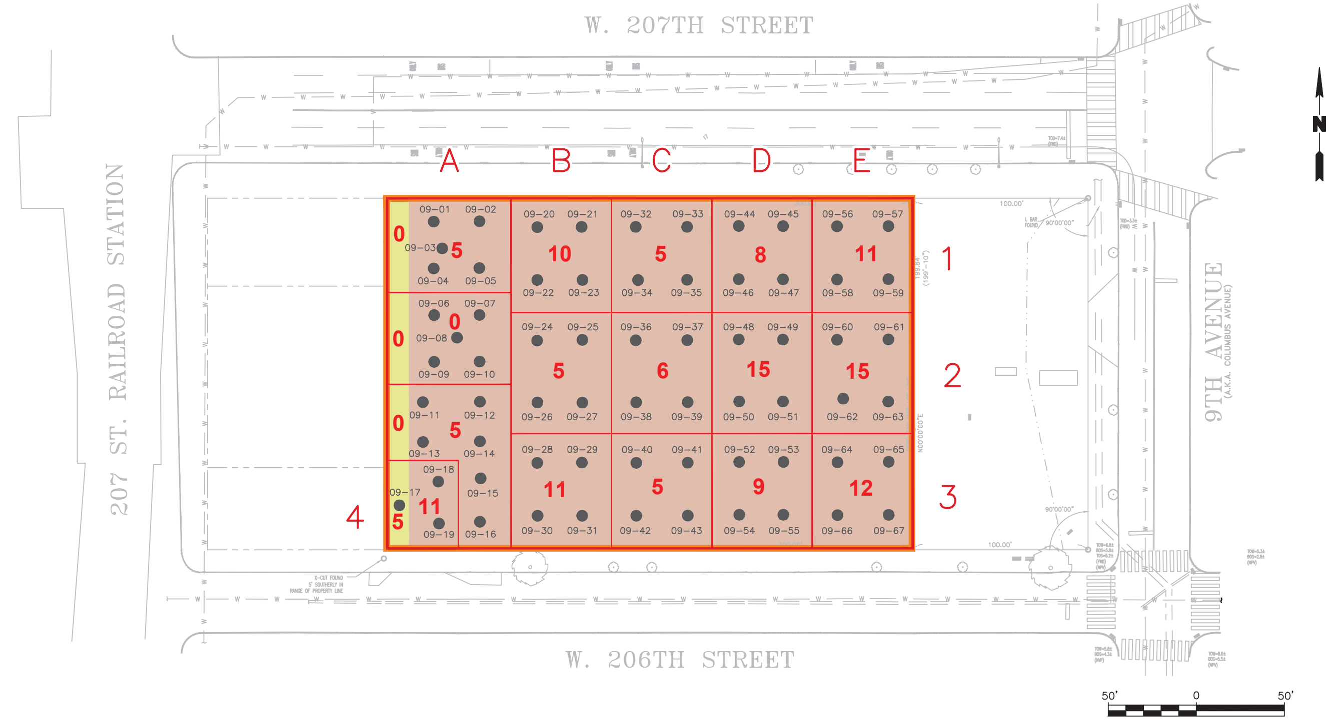
Prepared for:
INWOOD LOT 9 ASSOCIATES LLC

ROUX

Compiled by: V.S.	Date: 27DEC21
Prepared by: B.H.C.	Scale: AS SHOWN
Project Mgr: V.S.	Project: 2477.0008Y000
File: 2477.0008Y136.01.DWG	

FIGURE 2

V:\CAD\PROJECTS\2477Y\0008Y\136\2477.0008Y136.01.DWG


W. 207TH STREET
W. 206TH STREET
207 ST. RAILROAD STATION
9TH AVENUE
(A.K.A. COLUMBUS AVENUE)
N
A
B
C
D
E
1
2
3
4
09-01 09-02 09-03 09-04 09-05
0
5
09-20 09-21 10 09-22 09-23
09-32 09-33 5 09-34 09-35
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09-60 09-61 15 09-62 09-63
09-11 09-12 09-13 09-14
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09-28 09-29 11 09-30 09-31
09-40 09-41 5 09-42 09-43
09-52 09-53 9 09-54 09-55
09-64 09-65 12 09-66 09-67
09-17 09-18 09-15 09-19 09-16
5
11
100.00'
50'
0
50'

LEGEND

(pink fill)	PROPOSED TRACK 1 UNRESTRICTED USE AREA
(yellow fill)	PROPOSED TRACK 2 RESTRICTED RESIDENTIAL USE AREA
11'	PROPOSED REMEDIAL EXCAVATION DEPTH TO MEET UUSCOS FOR TRACK 1 AREA OR RRSCOS FOR TRACK 2 AREA (FT BLS) (SEE NOTE 1)
09-01 ●	PROPOSED BOTTOM CONFIRMATION SAMPLE LOCATION AND DESIGNATION (SEE NOTE 2)
(red line)	WASTE CHARACTERIZATION GRID
(orange line)	SITE BOUNDARY
NAVD88	NORTH AMERICAN VERTICAL DATUM 1988
RRSCO	RESTRICTED RESIDENTIAL SOIL CLEANUP OBJECTIVE
UUSCO	UNRESTRICTED USE SOIL CLEANUP OBJECTIVE
PGWSCO	PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE
BCS	BOTTOM CONFIRMATION SAMPLE
FT BLS	FEET BELOW LAND SURFACE
RAWP	REMEDIAL ACTION WORK PLAN

NOTES

1. REMEDIAL EXCAVATION DEPTHS ARE SHOWN AND ARE BASED ON THE DEPTH INTERVAL OF THE DEEPEST REMEDIAL INVESTIGATION SAMPLE EXCEEDANCE OF UUSCOS FOR THE TRACK 1 AREA OR RRSCOS FOR THE TRACK 2 AREA WITHIN EACH GRID. IT SHOULD BE NOTED THAT THE ENTIRE SITE, EXCLUDING THE 12 FOOT WIDE PORTION ALONG THE WESTERN BOUNDARY (TRACK 2 AREA), WILL BE EXCAVATED TO ELEVATION −1.5 FT NAVD88 FOR REDEVELOPMENT PURPOSES. THEREFORE, THERE WILL BE NO INTERNAL SIDEWALLS BETWEEN THE GRIDS SINCE NO SOIL WILL REMAIN. DEPTHS SHOWN IN GRIDS A1 THROUGH A3 ARE FROM THE TOP OF EXISTING CELLAR SLAB.
2. BOTTOM CONFIRMATION SAMPLES ARE SHOWN. SAMPLE IDENTIFICATION NUMBERS WILL BE DENOTED AS BCS−09−01 THROUGH BCS−09−67 ("BCS" WAS NOT SHOWN ON THE MAP FOR CLARITY OF LABELING). REFER TO SECTION 10.2.1 OF THE RAWP FOR A DESCRIPTION OF SAMPLING FREQUENCIES AND ANALYTES. LOCATIONS ARE APPROXIMATE AND WILL BE BIASED TOWARD IMPACTS OBSERVED, IF ANY.
3. AN ENVIRONMENTAL EASEMENT AND SITE MANAGEMENT PLAN WILL BE PUT IN PLACE FOR THE PROPOSED TRACK 2 AREA.
4. BOTTOM CONFIRMATION SAMPLES IN GRIDS A1 THROUGH A3 ARE IN THE CURRENT BASEMENT AREA. EXCAVATION DEPTHS SHOWN FOR THESE ENDPOINTS ARE FROM THE TOP OF THE BASEMENT SLAB.
5. THE REMEDIAL EXCAVATION WILL BE EXTENDED TO APPROXIMATELY 7.5 FT BLS AT THE LOCATION OF RI SAMPLE SB−09−09 WHICH HAD A MINOR UUSCO EXCEEDANCE OF CHROMIUM AT THE 5−7 FT BELOW THE CELLAR SLAB DEPTH INTERVAL. A NEW BOTTOM CONFIRMATION SAMPLE WILL BE COLLECTED (BCS−09−01). THE REMAINDER OF GRID A1 WILL BE EXCAVATED TO 5 FT BELOW THE CELLAR SLAB.
6. THE REMEDIAL EXCAVATION WILL BE EXTENDED TO APPROXIMATELY 17 FT BLS AT THE LOCATION OF RI SAMPLE SB−09−04 WHICH HAD A MINOR UUSCO EXCEEDANCE OF CHROMIUM AT THE 14.5−16.5 DEPTH INTERVAL. A NEW BOTTOM CONFIRMATION SAMPLE WILL BE COLLECTED (BCS−09−62). THE REMAINDER OF GRID E2 WILL BE EXCAVATED TO 15 FT BLS.
7. IF UUSCOS ARE NOT MET ACROSS ALL OR PART OF THE TRACK 1 PORTION OF THE SITE, THE REMEDY WILL REVERT TO TRACK 2 RESTRICTED RESIDENTIAL CLEANUP AND AN ENVIRONMENTAL EASEMENT AND SITE MANAGEMENT PLAN WILL BE PUT IN PLACE FOR THESE AREAS.
8. THE TOPOGRAPHY OF THE SITE IS SLOPED TO THE EAST.
9. BACKFILL, IF REQUIRED, WILL MEET UUSCOS FOR THE TRACK 1 AREA AND THE LOWER OF RRSCOS OR PGWSCOS FOR THE TRACK 2 AREA. FILL MATERIALS WITH LESS THAN 10 PERCENT PASSING THE NUMBER 80 SIEVE (I.E., VIRGIN STONE, VIRGIN GRAVEL, ETC.) DO NOT REQUIRE SAMPLING.

REFERENCE:
CONTROL POINT SURVEY V−001.00 DATED 7/10/2018. ALL 2021 REMEDIAL INVESTIGATION SAMPLE LOCATIONS SURVEYED BY MEGA ENGINEERING AND LAND SURVEYING, P.C. IN NOVEMBER 2021.

STATE OF NEW YORK · Noelle M. Clarke · No. 072489 · LICENSED PROFESSIONAL ENGINEER · Signature

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Roux Environmental Engineering and Geology, D.P.C.
209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

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PROJECT FOR:
INWOOD LOT 9 ASSOCIATES, LLC

TITLE:
REMEDIAL ALTERNATIVE 2:
COMBINED TRACK 1 UNRESTRICTED USE/TRACK 2 RESTRICTED RESIDENTIAL USE CLEANUP

FIGURE
3