

DECISION DOCUMENT

101 Fleet Place Redevelopment
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224345
January 2023



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

101 Fleet Place Redevelopment
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224345
January 2023

Statement of Purpose and Basis

This document presents the remedy for the 101 Fleet Place 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 101 Fleet Place 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at

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

2. Excavation

Excavation and off-site disposal of contaminant source areas, including:

- Soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead.

In addition, all on-site soils which exceed Unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8, will be excavated to depths of approximately 7 feet below grade across the majority of the site, to 10 feet below grade in the northwest portion of the site, and to depths of 15 to 30 feet at three hotspots. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify the Department, submit the sample results and, in consultation with the Department, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

Approximately 6,390 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 to replace the excavated soil and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

As part of the Track 1 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.

Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (SMP) is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code, which prohibits potable use of groundwater without prior approval.

Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use, therefore, no EE or SMP is anticipated. If the Vapor Intrusion (VI) Evaluation is not completed prior to completion of the Final Engineering Report, then an SMP and EE will be required to address the VI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

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

5. Institutional Control

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

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

6. 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 6 above.

This plan includes, but may not be limited to:

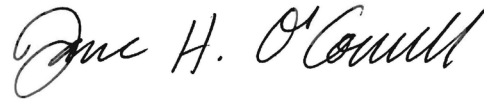
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - descriptions of the provisions of the environmental easement including any land use and/or groundwater restrictions;
 - a provision for evaluation of the potential for soil vapor 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 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 to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the Department; and
 - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering 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.

1/21/23

Date



Jane O'Connell, Regional Remediation Engineer
Region 2

DECISION DOCUMENT

101 Fleet Place Redevelopment
Brooklyn, Kings County
Site No. C224345
January 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=C224345>

Brooklyn Public Library - Walt Whitman Branch
93 Saint Edwards Street
Brooklyn, NY 11205
Phone: (718) 935-0244

Brooklyn Community Board 2
350 Jay Street, 8th Floor
Brooklyn, NY 11201
Phone: (718) 596-5410

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Site Location: The site is located at 101 Fleet Place, Brooklyn, NY 11201 and is designated as Tax Block 2061, Lot 100. As of December 2022, a former one-story slab-on-grade building on the site is still in the process of being demolished. The site is bounded to the north by a mixed-use residential and commercial development followed by Myrtle Avenue, to the east by a parking lot and residential development, to the south by parking and a residential development followed by Willoughby Street, and to the west by Fleet Place. The site is located within an urban area of Downtown Brooklyn characterized by multi-story institutional, commercial, and residential buildings. The Metropolitan Transit Authority (MTA) subway B, D, N and Q lines are located approximately 380 feet to the west below Flatbush Avenue.

Site Features: The 0.460-acre (20,000 square foot) site is an irregular-shaped parcel. Records for on-site historic bulk petroleum storage (PBS No. 2-344176) include one 1,200-gallon #2 fuel oil and five 550-gallon gasoline USTs. All six USTs were reportedly closed and removed in March 1993. A spill of an unknown quantity of gasoline was also reported to the NYSDEC in June 1989 (Spill No. 8902455) due to a tank test failure and reported air pressure loss. The spill case was closed by the NYSDEC on 23 June 2004.

Current Zoning and Land Use: According to the New York City Planning Commission Zoning Map 16c, the site is located within a residential and commercial zoning district (R6 and C6-4 DB). The proposed development of this property is consistent with the current zoning.

Past Use of Site: The site was developed in the late 1880s, as multiple lots with multiple residential-use buildings and a church. By 1915, the church was replaced with four residential buildings, and by 1938 the site was vacant. By 1969, the site was redeveloped with the existing one-story building identified as, "N.Y. Telephone Co. Garage." Records indicate the site operated as a garage from 1969 until 1993 when it was converted into a childcare center. The site operated as the Duffield Children Center from the early 1990s until early 2022.

Site Geology and Hydrogeology: Based on findings from the October 2021 Limited Phase II ESI, the site is underlain by historic urban fill predominantly consisting of dark brown to olive, coarse to medium sand with varying amounts of glass, gravel, brick, asphalt, cinder, and silt. The urban fill was observed to extend to depths of 10 feet below ground surface (ft-bgs), however may extend further due to shallow boring refusal encountered in some areas of the site. The average depth to groundwater is approximately 30 ft-bgs. The inferred regional groundwater flow direction is to the west-northwest toward the East River.

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 are Volunteers. The Applicants do 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
- 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 contaminant(s) of concern identified at this site is/are:

| | |
|----------------------|-------------------------|
| benzo(a)anthracene | mercury |
| benzo(b)fluoranthene | chloroform |
| chrysene | benzo(a)pyrene |
| DDE | trichloroethene (TCE) |
| lead | tetrachloroethene (PCE) |
| barium | carbon tetrachloride |
| chromium | |

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

- groundwater
- 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.

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 to date, the primary contaminants of concern include SVOCs and metals in soil and groundwater, and VOCs in soil vapor.

Soil - One VOC, 2-butanone, was identified at a concentration of 0.19 parts per million (ppm), exceeding the unrestricted use soil cleanup objective (UUSCO) of 0.12 ppm. SVOCs were detected at concentrations exceeding UUSCOs in samples collected from shallow soil and historical fill, including benzo(a)anthracene at a maximum concentration of 31 ppm (UUSCO is 1 ppm), benzo(a)pyrene at a maximum concentration of 26 ppm (UUSCO is 1 ppm), benzo(b)fluoranthene at 29 ppm (UUSCO is 1 ppm), and chrysene at 27 ppm (UUSCO is 1 ppm). Pesticides were detected in historical fill 4,4'-DDE at 0.00789 ppm (UUSCO is 0.0033 ppm). Several metals were detected at concentrations exceeding UUSCOs in samples collected from historical fill and native material, including hexavalent chromium (max. 2.05 ppm, UUSCO is 1 ppm), trivalent chromium (max. 37 ppm, UUSCO is 30 ppm), barium (max. 460 ppm, UUSCO is 350 ppm), lead (max. 2,150 ppm, UUSCO is 63 ppm), and mercury (max. 1.69 ppm, UUSCO is 0.18 ppm). Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) were measured in historic fill at maximum concentrations of 2.3 parts per billion (ppb) and 2.88 ppb, respectively, exceeding the guidance values for unrestricted use of 0.88 ppb and 1.1 ppb. Data does not indicate any off-site impacts in soil related to this site.

Groundwater - For VOCs, chloroform was identified at concentrations above the Ambient Water Quality Standards (AWQS) at 21 ppb (AWQS is 7 ppb). SVOCs were identified at concentrations exceeding the AWQSs, including benzo(a)anthracene (max. 2 ppb), benzo(a)pyrene (max. 1.8 ppb), benzo(b)fluoranthene (max. 2.2 ppb), and chrysene (max. 1.9 ppb). All of the aforementioned analytes have an AWQS of 0.002 ppb, with the exception of benzo(a)pyrene, which has an AWQS of non-detect. Dissolved metals were identified at concentrations exceeding the AWQSs including dissolved sodium (max. 139,000 ppb, AWQS is 20,000 ppb). Sodium is a naturally occurring metal and is not considered to be a contaminant of

concern for this site. For PFAS, PFOA and PFOS were reported at concentrations of up to 125 and 217 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant Level (drinking water standard) of 10 ppt in groundwater. 1,4-dioxane did not exceed the Maximum Contaminant Level (drinking water standard) of 1 ppb with a maximum concentration of 0.081 ppb. Data does not indicate any off-site impacts in groundwater-related to this site.

Soil Vapor, Sub-Slab Soil Vapor, and Indoor Air - TCE and carbon tetrachloride were detected in sub-slab soil vapor at concentrations of up to 48 micrograms per cubic meter (ug/m³) and 1,990 ug/m³, respectively, and PCE was detected in soil vapor at a maximum of 67 ug/m³. Carbon tetrachloride was also detected in indoor air samples at a maximum concentration of 0.503 ug/m³. Data does 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 completely fenced which restricts public access. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. Volatile organic compounds in the soil vapor (air spaces within the soil) can 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. Because the site is vacant, soil vapor intrusion is not a current concern; however, it may be a concern for future on-site buildings. Environmental sampling indicates soil vapor intrusion is not a 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.

- 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 1: Unrestricted use 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 Figures 2 and 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

Excavation and off-site disposal of contaminant source areas, including:

- Soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead.

In addition, all on-site soils which exceed Unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8, will be excavated to depths of approximately 7 feet below grade across the majority of the site, to 10 feet below grade in the northwest portion of the site, and to depths of 15 to 30 feet at three hotspots. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify the Department, submit the sample results and, in consultation with the Department, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

Approximately 6,390 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 to replace the excavated soil and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

As part of the Track 1 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.

Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (SMP) is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code, which prohibits potable use of groundwater without prior approval.

Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use, therefore, no EE or SMP is anticipated. If the Vapor Intrusion (VI) Evaluation is not completed prior to completion of the Final Engineering Report, then an SMP and EE will be required to address the VI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

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

5. Institutional Control

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

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

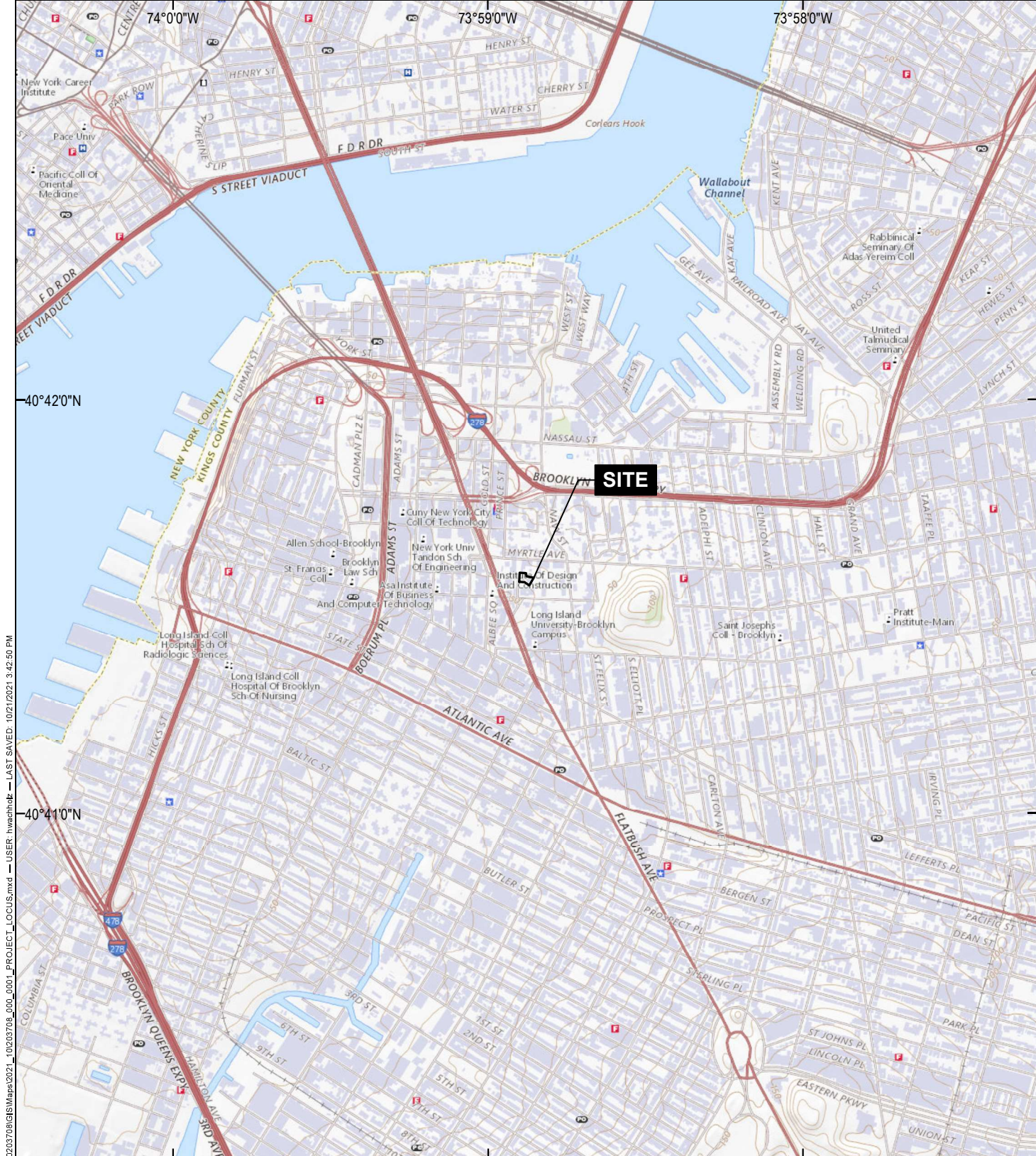
6. Site Management Plan

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



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MAP SOURCE: ESRI
SITE COORDINATES: 73°58'52"N, 40°41'33"W

**HALEY
ALDRICH**

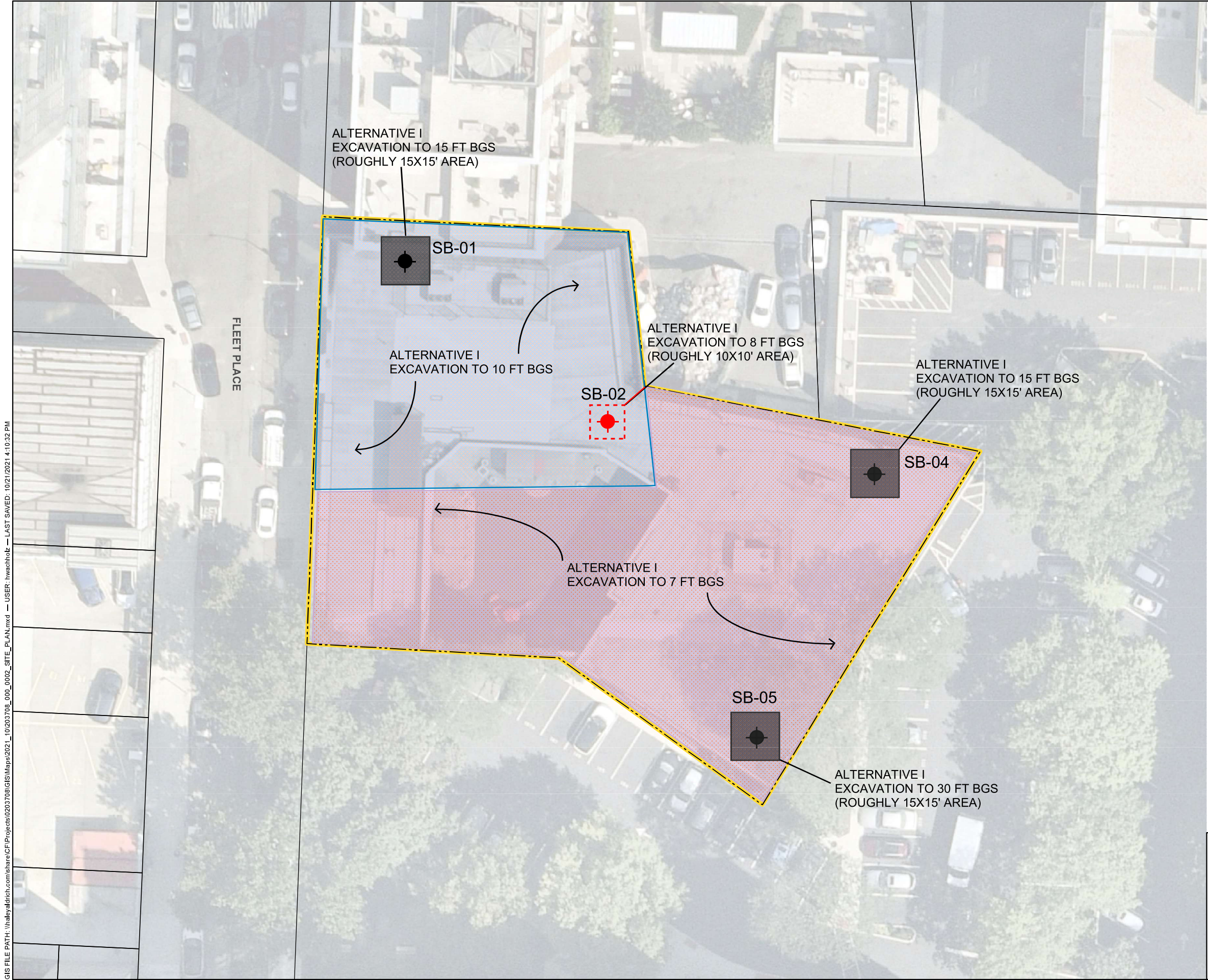
101 FLEET PLACE
BROOKLYN, NEW YORK

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
OCTOBER 2021

FIGURE 1

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LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- ALTERNATIVE I / TRACK 1 REMEDIAL EXCAVATION TO 10 FEET BELOW GROUND SURFACE
- ALTERNATIVE I / TRACK 1 REMEDIAL EXCAVATION TO 7 FEET BELOW GROUND SURFACE
- ALTERNATIVE I / TRACK 1 REMEDIAL EXCAVATION TO 15-30 FEET BELOW GROUND SURFACE (15X15 FT AREA CENTERED ON RI BORINGS SB-01, SB-04, AND SB-05)
- APPROXIMATE EXTENT OF HAZARDOUS LEAD-IMPACTED SOIL
- APRIL 2022 RI SOIL BORING LOCATION
- APRIL 2022 RI SOIL BORING LOCATION WITH HAZARDOUS LEAD-IMPACTED SOIL

NOTES

- ALL LOCATIONS ARE APPROXIMATE.
- ASSESOR PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING GIS
- AERIAL IMAGERY SOURCE: NEARMAP, 12 AUGUST 2021
- THE VERTICAL AND HORIZONTAL EXTENTS OF THE HAZARDOUS LEAD-IMPACTED AREA CENTERED ON REMEDIAL INVESTIGATION SOIL BORING SB-02 WILL BE DELINEATED IN A FORTHCOMING WASTE CHARACTERIZATION SOIL EVENT PERFORMED DURING IMPLEMENTATION OF THE REMEDY.



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101 FLEET PLACE
BROOKLYN, NEW YORK

ALTERNATIVE I (TRACK 1)
CLEANUP PLAN




APRIL 2022

FIGURE 2

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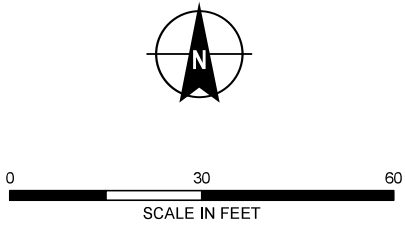


LEGEND

-  SITE BOUNDARY
-  PARCEL BOUNDARY
-  PROPOSED CONFIRMATION SAMPLE LOCATION

NOTES

1. ALL LOCATIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING GIS
3. AERIAL IMAGERY SOURCE: NEARMAP, 12 AUGUST 2021



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101 FLEET PLACE
BROOKLYN, NEW YORK

**PROPOSED CONFIRMATION
SAMPLE LOCATION PLAN**

APRIL 2022

FIGURE 3