DECISION DOCUMENT

Former Mill Sanitary Wiping Cloth Site
Brownfield Cleanup Program
Bronx, Bronx County
Site No. C203146
April 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Mill Sanitary Wiping Cloth Site
Brownfield Cleanup Program
Bronx, Bronx County
Site No. C203146
April 2022

Statement of Purpose and Basis

This document presents the remedy for the Former Mill Sanitary Wiping Cloth site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former Mill Sanitary Wiping Cloth 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(s) 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.

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

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G; and
- any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

Excavation and off-site disposal of all on-site soils which exceed unrestricted use SCOs, as defined by 6 NYCRR Part 375-6.8. Approximately 10,100 cubic yards of soil will be removed from this area of the site. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and 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.

5. Local Institutional Controls

If no EE or 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 and local institutional controls.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

April 5, 2022

Date

Gerard Burke, Director
Remedial Bureau B
Division of Environmental Remediation

DECISION DOCUMENT

Former Mill Sanitary Wiping Cloth Site
Bronx, Bronx County
Site No. C203146
April 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=C203146

Bronx Communinty Board 1
3030 3rd Avenue
Bronx, NY 10455
Phone: (718) 585-7117

Mott Haven Library
321 East 140th Street
Bronx, NY 10454
Phone: (718) 665-4878

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 0.95-acre site is located in Bronx, NY in a primarily residential and commercial neighborhood. The site is comprised of one contiguous parcel with an associated address of 40 Bruckner Boulevard (Tax Block 2295, Lot 51). The site is bounded by Bruckner Boulevard to the north, commercial and residential buildings to the east, 132nd Street to the south, and Alexander Avenue to the west.

Site Features: The site is flat, irregularly shaped, and currently vacant. The site is improved with a one-story warehouse, a three-story former commercial use building, a one-story commercial building, and a partially paved parking area. The site is surrounded by fencing with a gated entrance.

Current Zoning and Land Use: The site is currently located in a M1-5/R8A zoning district which allows for residential, and industrial uses. The surrounding properties consists of residential and commercial uses including apartment buildings, various commercial and industrial buildings, and the Harlem River Yard.

Past Use of the Site: The site was first developed as early as the late 1800's as both a repair and machine shop. By the early 1900's, the site was further developed with an office and milk company adjacent to the machine shop. In the mid 1940's, both the repair and machine shops were demolished, and the milk company became a scrap and rubber storage facility. Beginning in the 1940's and continuing into the 1980's, the site was used for various industrial purposes including as a rag cleaning, sorting, and bailing facility, as well as a wastepaper processing facility. At some point in the 1990's, the buildings were converted for use as part of an auto repair operation which continued into the mid 2000's. Other commercial operations were present at the site in the late 2000's including the NYC Water Works Inc.

Site Geology & Hydrogeology: The stratigraphy of the site consists of a layer of fill material extending from ground surface to between 3 to 11 feet below ground surface (ft bgs). Based on soil borings, this fill layer consists of silty sands, brick, concrete, asphalt, glass, wood, and other miscellaneous materials. Beneath the fill, native sandy silts and coarse sands are present to at least 20 ft bgs. Bedrock was not encountered, however is expected to be present between 25 to 30 ft bgs.

Monitoring well data indicates groundwater flows from the northeast to the southwest towards the

Harlem River which is approximately 800 ft from the site. The depth to groundwater ranges from approximately 8 to 13 ft bgs. The variation in groundwater depth can be partially attributed to the surface elevation gradient on the site.

A site location and site boundary map are attached as Figures 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 restrict(s) 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) against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The 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 was also 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 contaminants of concern identified at this site are:

benzene	dibenz[a,h]anthracene
toluene	indeno(1,2,3-cd)pyrene
1,2,4-trimethylbenzene	arsenic
xylene (mixed)	barium
benzo(a)anthracene	lead
benzo(a)pyrene	mercury
benzo(b)fluoranthene	cadmium
benzo(k)fluoranthene	tetrachloroethene (PCE)
chrysene	trichloroethene (TCE)

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 was analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern include SVOCs and metals in soil and VOCs in soil vapor.

Soil:
VOCs were identified in soils at concentrations exceeding the 6NYCRR Part 375 unrestricted use soil cleanup objectives (UUSCOs) including tetrachloroethene (PCE) up to 2.6 parts per million (ppm) (UUSCO of 1.3 ppm), benzene up to 0.31 ppm (UUSCO of 0.06 ppm), toluene up to 2.1 ppm (UUSCO of 0.7 ppm), 1,2,4-trimethylbenzene up to 15 ppm (UUSCO of 3.6 ppm) and xylenes up to 4.2 ppm (UUSCO of 0.26 ppm). While VOCs were discovered in site soils, impacts at the subject site primarily are related to SVOCs, specifically polyaromatic hydrocarbons (PAHs), and metals, at concentrations exceeding the UUSCOs within the historic fill layer which extends to 12 feet below ground surface.

SVOCs detected at levels exceeding the UUSCOs include benzo(a)anthracene up to 38 parts per million (ppm), benzo(a)pyrene up to 33 ppm, and benzo(b)fluoranthene up to 42 ppm, all with an UUSCO of 1 ppm. Additional SVOCs detected include benzo(k)fluoranthene up to 12 ppm (UUSCO of 0.8 ppm), chrysene up to 33 ppm (UUSCO of 1 ppm), dibenzo(a,h)anthracene up to 5.6 ppm (UUSCO of 0.33 ppm), and indeno(1,2,3-cd)pyrene up to 23 ppm (UUSCO of 0.5 ppm).

Metals detected at levels exceeding UUSCOs including arsenic up to 34.6 ppm (UUSCO of 13 ppm), barium up to 748 ppm (UUSCO of 350 ppm), copper up to 1,210 ppm (UUSCO of 50 ppm), lead up to 1,590 ppm (UUSCO of 63 ppm), mercury up to 10.2 ppm (UUSCO of 0.18 ppm), cadmium up to 10.8 ppm (UUSCO of 2.5 ppm), nickel up to 221 ppm (UUSCO of 30 ppm), and zinc up to 1,440 ppm (UUSCO of 109 ppm).

Pesticides were detected above UUSCOs including: 4,4'-DDD up to 0.00919 ppm, 4,4'-DDT up to 0.0169 ppm, and 4,4'-DDE up to 0.00383 ppm, all with an UUSCO of 0.0033 ppm. Three PCBs were detected at concentrations above their respective UUSCOs including the following PCB aroclors: 1254 at a maximum concentration of 0.0.145 ppm, aroclor 1260 up to 0.104 ppm, and the aroclor 1242 up to 0.519 ppm, all exceeding their respective UUSCOs of 0.1 ppm.

The PFAS compound perfluorooctanoic acid (PFOA) was detected at a maximum concentration of 0.552 parts per billion (ppb), below its UU guidance value of 0.66 ppb. Perfluorooctanesulfonic

acid (PFOS) was detected in soil at concentrations up to 3.92 ppb, above its respective unrestricted use guidance values of 0.88 ppb.

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

Groundwater:
One VOC, trichloroethene (TCE), was detected above Class GA Ambient Water Quality Standards (AWQS) at a maximum concentration of 5 ppb (AWQS of 5 ppb). No other VOCs were detected above AWQS. No SVOCs, pesticides, or PCBs were detected above AWQS. Excluding naturally occurring minerals, no metals were detected above their respective AWQS.

For PFAS compounds, PFOA and PFOS were reported at concentrations up to 92.6 parts per trillion (ppt) and 62.7 ppt respectively, exceeding the Maximum Contaminant Levels (MCLs) (drinking water standard) of 10 ppt each in groundwater. The compound 1,4- dioxane was not detected above the MCL of 1 ppb. 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.

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

Soil Vapor:
The total cumulative maximum concentration for benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds was 149 micrograms per cubic meter (ug/m3). Multiple VOCs were detected in soil vapor samples collected throughout the site including tetrachloroethene (PCE) up to 209 ug/m3, 1,1,1-trichloroethene up to 557 ug/m3, and trichloroethene (TCE) up to 59.1 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.*

Direct contact with contaminants in the soil is unlikely because the site is covered with buildings, asphalt, or pavement. Contaminated groundwater is not used for drinking and the site and surrounding areas are served by a public water supply that obtains water from a different source 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. Because the on-site building is vacant, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition, however, the potential exists for any future on-site development. Environmental sampling indicates soil vapor intrusion associated with this site 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.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

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, Backfill, and SVI Evaluation remedy.

The elements of the selected remedy, as shown in Figures 3 and 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:

- 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(s) 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.

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

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G; and
- any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

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3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and 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.

5. Local Institutional Controls

If no EE or 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 and local institutional controls.

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HALEY ALDRICH

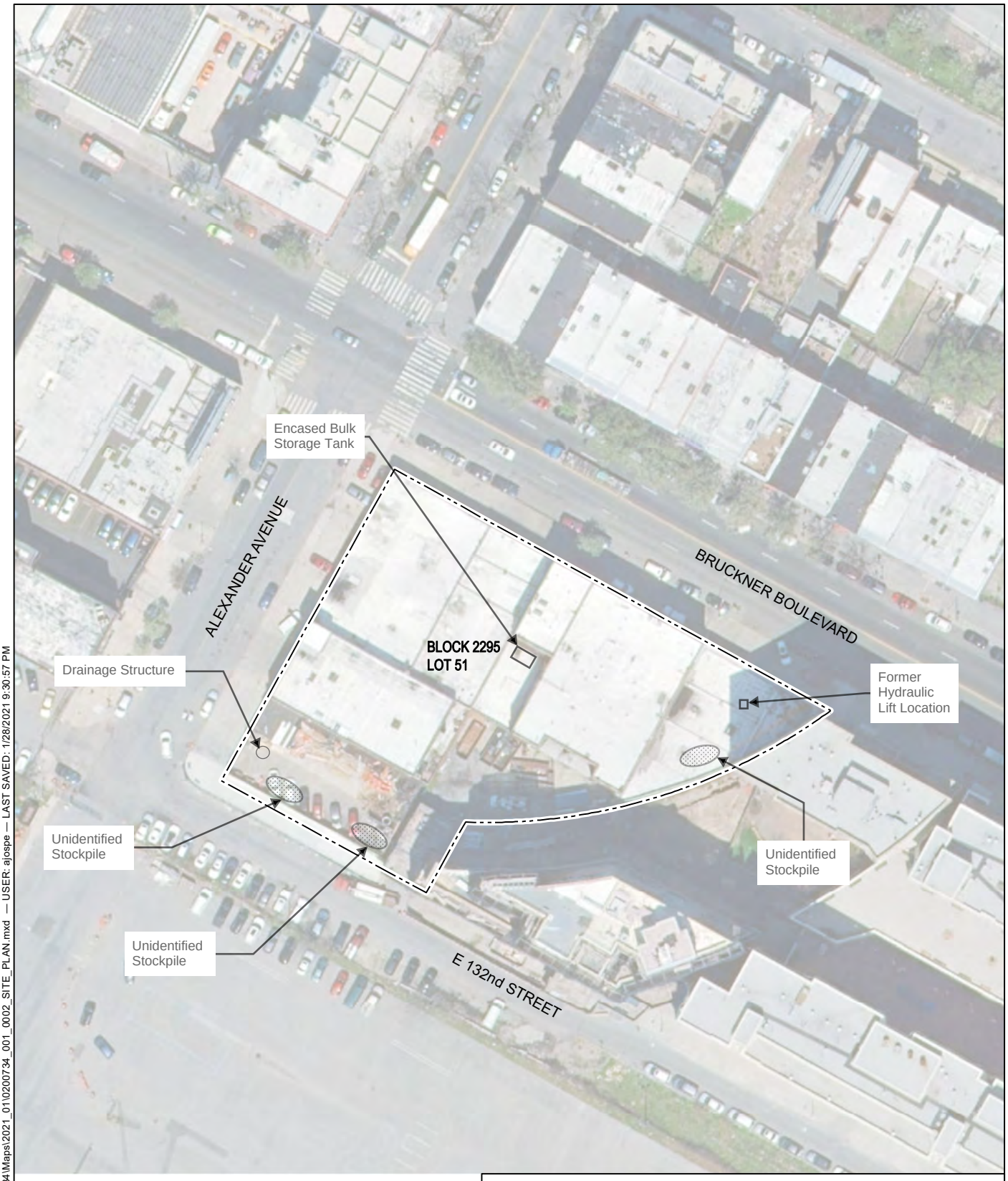
40 BRUCKNER BOULEVARD
BRONX. NEW YORK

PROJECT LOCUS

MAP SOURCE: ESRI
SITE COORDINATES: 73°55'38"W 40°48'23"N

APPROXIMATE SCALE: 1 IN = 2000 FT
SEPTEMBER 2021

FIGURE 1



LEGEND

APPROXIMATE SITE BOUNDARY

N

NOTE
AERIAL IMAGERY SOURCE: ESRI

0 40 80
SCALE IN FEET

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40 BRUCKNER BOULEVARD
BRONX, NEW YORK

SITE MAP

SEPTEMBER 2021

FIGURE 2

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LEGEND

- APPROXIMATE SITE BOUNDARY
- PRE-DESIGN INVESTIGATION SOIL BORING LOCATION
- PROPOSED 8 FT BGS REMEDIAL EXCAVATION
- PROPOSED 4 FT BGS REMEDIAL EXCAVATION
- PROPOSED 10 FT BGS REMEDIAL EXCAVATION

N

0 40 80

SCALE IN FEET

NOTE
AERIAL IMAGERY SOURCE: ESRI
LOCATIONS ARE APPROXIMATE

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40 BRUCKNER BOULEVARD
BRONX, NEW YORK

ALTERNATIVE I EXAVATION MAP

JANUARY 2022

FIGURE 3

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LEGEND

SITE BOUNDARY

PROPOSED ENDPOINT SAMPLE LOCATION

NOTES

1. ALL LOCATINS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: NEARMAP, 12 AUGUST 2021

N

0 40 80

SCALE IN FEET

HALEY ALDRICH

40 BRUCKNER BOULEVARD
BRONX, NY

PROPOSED CONFIRMATION SAMPLE LOCATION MAP

OCTOBER 2021

FIGURE 4

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\0200734\GIS\Maps\2021_10\0200734_001_0002_SITE_PLAN.mxd — USER: hwachholz — LAST SAVED: 10/15/2021 9:30:50 AM