DECISION DOCUMENT

Archer Ave Auto Repair and Coal Yard Site
Brownfield Cleanup Program
Jamaica, Queens County
Site No. C241283
December 2025

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

DECLARATION STATEMENT - DECISION DOCUMENT

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Statement of Purpose and Basis

This document presents the remedy for the Archer Ave Auto Repair and Coal Yard 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 (NYSDEC) for the Archer Ave Auto Repair and Coal Yard Site and the public's input to the proposed remedy presented by NYSDEC.

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 shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

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

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

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8 to depths ranging from 0 to 18.5 feet below grade. Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 13,150 cubic yards of contaminated soil will be removed from the site for remediation. Collection and analysis of confirmation 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 NYSDEC, submit the sample results and, in consultation with NYSDEC, 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.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling

will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

3. Backfill

As needed, 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 (SVI) 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 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 NYCDOHMH 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 environmental easement or site management plan is anticipated. If the remedial action objectives (RAOs) for groundwater and soil vapor intrusion are not achieved prior to completion of the Final Engineering Report, then a SMP and EE will be required, and a Track 1 cleanup can only be achieved if no engineering controls are needed and the RAOs are achieved within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 4 restricted residential cleanup at a minimum.

Contingent Remedial Elements

6. Cover System

A site cover will be required in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future restricted residential use of the site. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a

component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

7. Institutional Controls

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

- require the remedial party or site owner to complete and submit to the NYSDEC 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 NYSDEC approved SMP.

8. Site Management Plan (SMP)

A SMP 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 engineering controls remain in place and effective:

- Institutional Controls: The Environmental Easement discussed in Remedy Element 7 above.
- Engineering Controls: The Cover System discussed in Remedy Element 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 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;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Remedy Element 6 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and NYSDEC notification; and
- the steps necessary for the periodic reviews and certification of the

institutional and/or engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
   - monitoring of groundwater, soil vapor, and indoor air to assess the performance and effectiveness of the remedy;
   - a schedule of monitoring and frequency of submittals to the NYSDEC; 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.

December 22, 2025

Date

Scott Deyette, Director
Remedial Bureau B

DECISION DOCUMENT

Archer Ave Auto Repair and Coal Yard Site
Jamaica, Queens County
Site No. C241283
December 2025

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (NYSDEC), 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.

NYSDEC 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

NYSDEC 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 NYSDEC 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=C241283

Queens Community Board 12
90-28 161st Street
Queens, NY 11432
Phone: (718) 658-3308

Queens Public Library at Central
89-11 Merrick Boulevard
Queens, NY 11432
Phone: (718) 990-0700

Receive Site Citizen Participation Information By Email

Please note that NYSDEC'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 Archer Ave Auto Repair and Coal Yard Site is located in Jamaica, Queens. The site occupies Block 10151, Lot 65. The site is bounded to the north by mixed-use commercial properties followed by Jamaica Avenue, to the east by a vacant lot followed by a three-story parking structure, to the south by Archer Avenue, and to the west by a residential apartment tower followed by Guy R. Brewer Boulevard.

Site Features: The 0.853-acre site consists of a single vacant and fenced-in tax parcel. The former 8-story parking garage structure was demolished in 2019, and the site is covered with a gravel base.

Current Zoning and Land Use: The site is currently zoned as C6-3 commercial within a Special Overlay District classified as DJ - Downtown Jamaica. The site is currently a vacant lot. The surrounding properties are characterized by mixed-use residential and commercial uses.

Past Use of the Site: The site was used as a lumber, coal, and wood yard; a masons' supply yard; a bus terminal with a lubritorium to lubricate engines with motor oil; an 8-story parking garage; and for other commercial and retail uses.

Site Geology and Hydrogeology: The site stratigraphy includes an urban fill layer from the surface down to approximately 5 to 12 feet below the ground surface (ft bgs) consisting of brown/black/gray sand with varying amounts of silt, gravel, brick, and concrete. This fill layer is underlain by potentially native soils consisting of a layer of primarily dark brown sand, some gravel, trace clay, and trace silt (glacial till) presumed to extend beyond boring terminal depths of 20 ft bgs. Bedrock was not observed during previous investigations.

Groundwater was observed at approximately 32 to 40 ft bgs and generally follows the topography, flowing south and southeast across the site.

A site location map is attached as Figure 1 and a site layout is attached as Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The NYSDEC 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 (which allows for commercial use and industrial 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, NYSDEC, in consultation with NYSDOH, 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. NYSDEC 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:

aldrin
barium
chloroform
chromium
cis-1,2-dichloroethene
DDD
DDE
DDT
dieldrin
lead
m-xylene
mercury
methylene chloride
p-xylene
polychlorinated biphenyls (PCBs)
tetrachloroethene (PCE)
trichloromonofluoromethane

The contaminants 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), pesticides, per- and polyfluoroalkyl substances (PFAS), and 1,4- dioxane. Soil vapor was analyzed for VOCs. The primary contaminants of concern at the site include metals, pesticides, and PCBs in soil; metals, PFAS and VOCs in groundwater; and chlorinated VOCs in soil vapor.

Soil
Exceedances of the unrestricted use soil cleanup objectives (UUSCOs) were primarily found in the historic fill layer. In general, the highest concentrations were detected in the upper 3 feet of the historic fill layer with some deeper exceedances extending up to 20 ft bgs.

Metals detected at concentrations exceeding their respective UUSCOs include barium up to 359 parts per million (ppm) (UUSCO of 350 ppm), total chromium up to 30.5 ppm (UUSCO of 30 ppm), copper up to 55 ppm (UUSCO of 50 ppm), lead up to 1,280 ppm (UUSCO of 63 ppm), mercury up to 1.5 ppm (UUSCO of 0.18 ppm), and zinc up to 1,490 ppm (UUSCO of 109 ppm).

Total PCBs were detected at concentrations up to 0.2786 ppm (UUSCO of 0.1 ppm).

Pesticides detected at concentrations exceeding their respective UUSCOs include Aldrin up to 0.0428 ppm (UUSCO of 0.005 ppm), Dieldrin up to 0.0164 ppm (UUSCO of 0.005 ppm), 4,4'-DDD up to 0.0084 ppm (UUSCO of 0.0033 ppm), 4,4'-DDE up to 0.0583 ppm (UUSCO of 0.0033 ppm), and 4,4'-DDT up to 0.0065 (UUSCO of 0.0033 ppm).

PFAS detected at concentrations exceeding their respective unrestricted use guidance values (UUGVs) include perfluorooctanoic acid (PFOA) up to 1.04 parts per billion (ppb) (UUGV of 0.66 ppb), and perfluorooctanesulfonic acid (PFOS) up to 1.54 ppb (UUGV of 0.88 ppb).

No VOCs, SVOCs, or 1,4-dioxane were detected above their respective UUSCOs.

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

Groundwater
VOCs detected at concentrations exceeding Class GA Ambient Water Quality Standard and Guidance Values (AWQSGVs) include tetrachloroethene (PCE) up to 11.9 ppb (AWQSGV of 5 ppb), cis-1,2-dichloroethene up to 6.8 ppb (AWQSGV of 5 ppb), and chloroform up to 17.7 ppb (AWQSGV of 7 ppb).

PFAS detected at concentrations exceeding their respective AWQSGVs include PFOA up to 62 parts per trillion (ppt) (AWQSGV of 6.7 ppt), and PFOS up to 86.1 ppt (AWQSGV of 2.7 ppt).

No SVOCs, metals, pesticides, PCBs or 1,4-dioxane were detected above their respective AWQSGVs.

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

Soil Vapor

Various chlorinated VOCs were detected in soil vapor including PCE up to 163 micrograms per cubic meter (µg/m³), trichloroethene up to 4.1 µg/m³, methylene chloride up to 46.9 µg/m³, chloroform up to 43 µg/m³, and trichlorofluoromethane up to 187 µg/m³.

Various petroleum-related VOCs were also detected in soil vapor including m,p-xylene up to 45.6 µg/m³, hexane up to 33 µg/m³, and toluene up to 40.7 µg/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. However, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no on-site building, 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 the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Environmental sampling indicates soil vapor intrusion from site contaminants 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.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

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 Conditional Track 1 remedy.

The selected remedy is referred to as the Excavation 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 shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

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

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

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remediation. Collection and analysis of confirmation 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 NYSDEC, submit the sample results and, in consultation with NYSDEC, 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.

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

3. Backfill

As needed, 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 (SVI) 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 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 NYCDOHMH 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 environmental easement or site management plan is anticipated. If the remedial action objectives (RAOs) for groundwater and soil vapor intrusion are not achieved prior to completion of the Final Engineering Report, then a SMP and EE will be required, and a Track 1 cleanup can only be achieved if no engineering controls are needed and the RAOs are achieved within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 4 restricted residential cleanup at a minimum.

Contingent Remedial Elements

6. Cover System

A site cover will be required in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future restricted residential use of the site. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

7. Institutional Controls

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

- require the remedial party or site owner to complete and submit to the NYSDEC 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 NYSDEC approved SMP.

8. Site Management Plan (SMP)

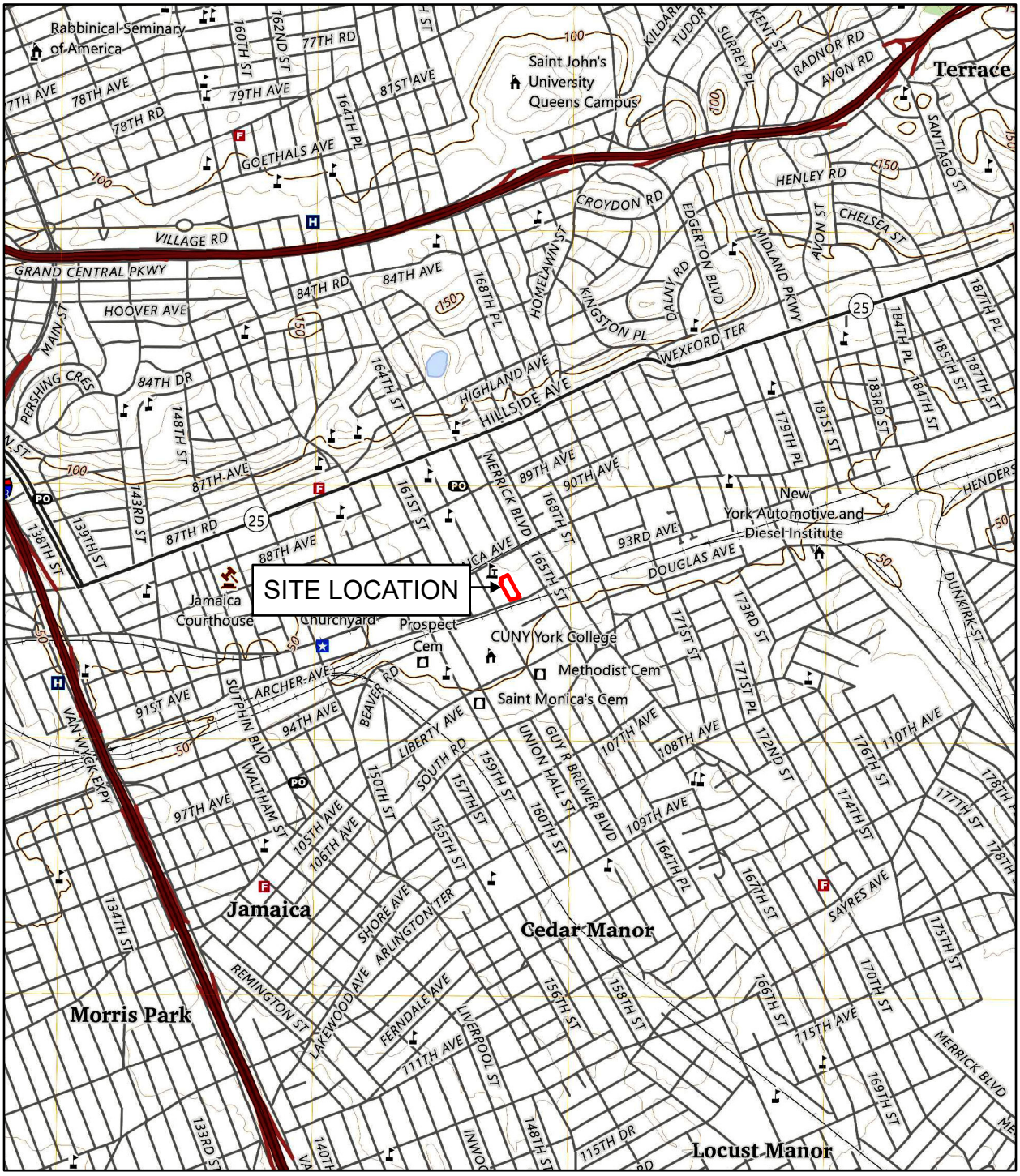
A SMP is required, which includes the following:

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 engineering controls remain in place and effective:
   - Institutional Controls: The Environmental Easement discussed in Remedy Element 7 above.
   - Engineering Controls: The Cover System discussed in Remedy Element 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 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;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Remedy Element 6 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and NYSDEC notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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



REFERENCE:

UNITED STATES GEOLOGICAL SURVEY (USGS)
JAMAICA, NY USGS QUADRANGLE - 2023

LEGEND:

SITE LOCATION

SCALE: 1" = 2,000'

0 1,000 2,000 4,000 FEET

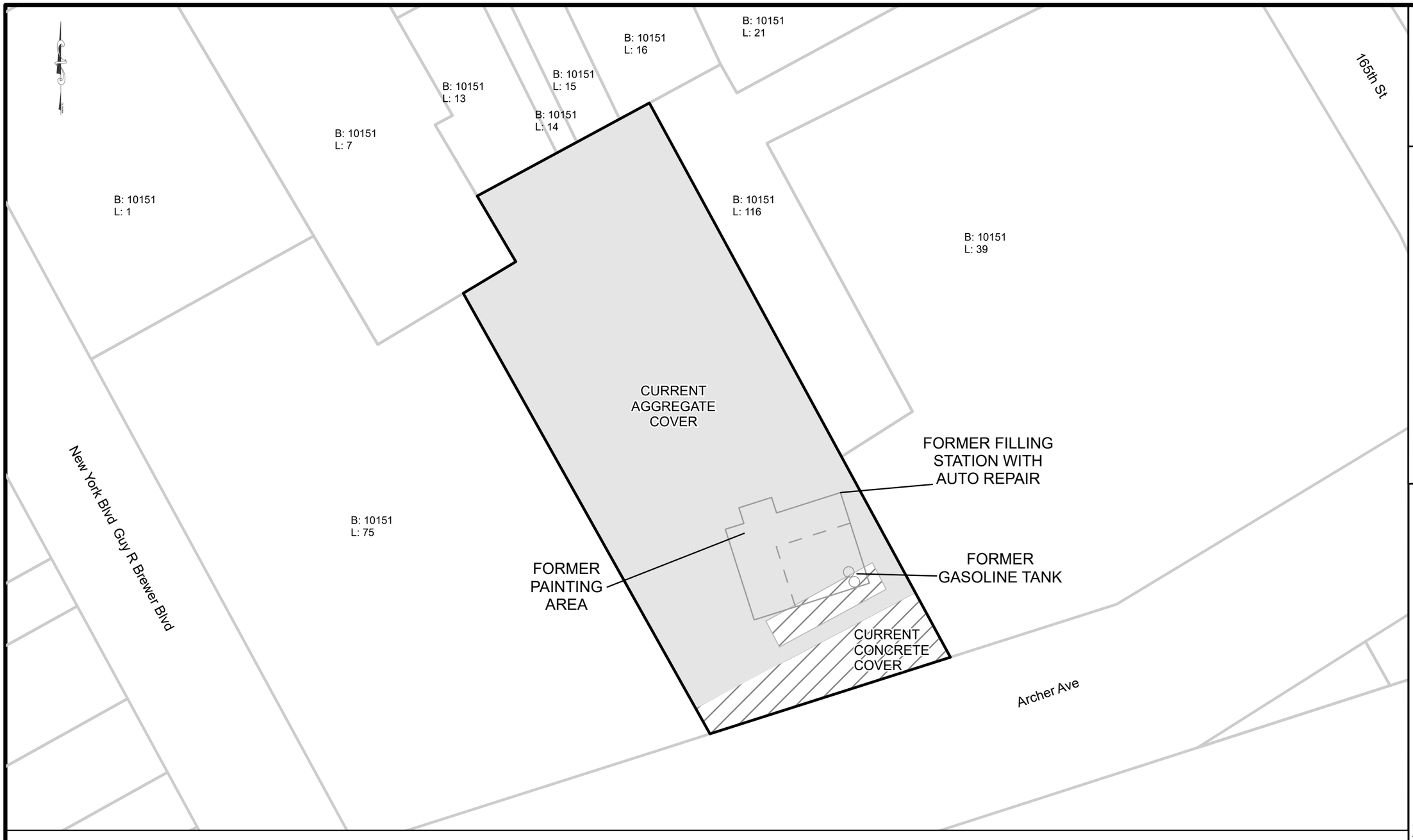
REMEDIAL INVESTIGATION WORK PLAN
C241283--ARCHER AVENUE AUTO REPAIR AND COAL YARD SITE
JAMAICA, NEW YORK

SITE LOCATION MAP

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL
959 ROUTE 46E, 3RD FLOOR, PARSIPPANY, NJ 07054 PH: 973.808.9050

FIG-1
DRAWN BY: KBV
CHECKED BY: CM
SCALE: AS NOTED
DATE: 6/17/2025
JOB NO: 12914

Y:\GIS\Project_Numbers\12914\FINAL_MAPS, 6/17/2025 12:50 PM, Kim Vanderklein, LAYOUT: FIG-1.2



REFERENCE:

PARCELS: NYS OFFICE OF INFORMATION TECHNOLOGY SERVICES - GIS PROGRAM OFFICE, NYS DEPT OF TAXATION AND FINANCE'S OFFICE OF REAL PROPERTY TAX SERVICES

LEGEND:

- CURRENT AGGREGATE COVER
- CURRENT CONCRETE COVER
- PROPERTY BOUNDARY
- NY TAX PARCELS

SCALE: 1" = 50'

0 25 50 100 FEET

dwg by: KBV
chk by: JM
scale: AS NOTED
date: 6/17/2025

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL
959 route 46e, 3rd floor, parsippany, nj 07054 ph: 973.808.9050

project: REMEDIAL INVESTIGATION WORK PLAN
C241283--ARCHER AVENUE AUTO REPAIR
AND COAL YARD SITE
JAMAICA, NEW YORK

title: **CURRENT SITE PLAN**

job no.: 12914
drawing no: FIG-2

Y:\GIS\Project_Numbers\12914\FINAL_MAPS, 6/17/2025 12:59 PM, Kim Vanderklein, LAYOUT: FIG-2.1

N

Sample ID:	UNITS	R1-SB-02 (2.5-3.0)	R1-SB-02 (7.5-8.0)	R1-SB-02 (12.5-13.0)	R1-SB-02 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
4,4'-DDE	mg/kg	0.0068	ND (0.00064)	ND (0.00062)	ND (0.00067)

Sample ID:	UNITS	RI-SB-04 (1-1.5)	RI-SB-04 (8.5-9)	RI-SB-04 (13.5-14)	RI-SB-04 (18-18.5)
Date:		8/13/2025	8/13/2025	8/13/2025	8/13/2025
PCBs (SW846 8082A)					
Aroclor 1242	mg/kg	0.138	ND (0.033)	ND (0.033)	ND (0.033)
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0038	ND (0.00068)	ND (0.00068)	ND (0.00067)
TOTAL METALS (SW846 6010D)					
Mercury	mg/kg	0.24	ND (0.028)	ND (0.029)	ND (0.028)
Zinc	mg/kg	423	9.7	23.9	11.4

Sample ID:	UNITS	RI-SB-05 (2.5-3.0)	RI-SB-05 (7.5-8.0)	RI-SB-05 (12.5-13.0)	RI-SB-05 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
PESTICIDES (SW846 8081B)					
4,4'-DDT	mg/kg	0.0049	ND (0.00061)	ND (0.00064)	ND (0.00061)
TOTAL METALS (SW846 6010D)					
Copper	mg/kg	55	9	13	7.4
Lead	mg/kg	243	ND (3.9)	9.5	2.5
Mercury	mg/kg	1.5	ND (0.030)	ND (0.032)	ND (0.032)
Zinc	mg/kg	154	14	27	13.4

Sample ID:	UNITS	R1-SB-07 (2.5-3.0)	R1-SB-07 (7.5-8.0)	R1-SB-07 (12.5-13.0)	R1-SB-07 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
PFAS (EPA 1633)					
PFOA	ppb	0.718	0.131 J	0.154 J	0.194 J
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0122	ND (0.00064)	0.00094	ND (0.00065)
Aldrin	mg/kg	0.0054	ND (0.00064)	ND (0.00067)	ND (0.00065)
Dieldrin	mg/kg	0.0062	ND (0.00064)	0.00093	ND (0.00065)
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	236	67.4	33	19.8

Sample ID:	UNITS	R1-SB-08 (2.5-3.0)	R1-SB-08 (7.5-8.0)	R1-SB-08 (12.5-13.0)	R1-SB-08 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0099	ND (0.00063)	0.0012	ND (0.00068)
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	369	18.8	16.5	18.3

Sample ID:	UNITS	RI-SB-10 (4-4.5)	RI-SB-10 (6.5-7)	RI-SB-10 (11-11.5)	RI-SB-10 (19-19.5)
Date:		8/13/2025	8/13/2025	8/13/2025	8/13/2025
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0158	0.0101	ND (0.00068)	ND (0.00068)
4,4'-DDT	mg/kg	0.005	0.0022	ND (0.00068)	ND (0.00068)
Dieldrin	mg/kg	0.0057	0.0041	ND (0.00068)	ND (0.00068)
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	127	68.8	13.1	15.9

ANALYTE	UNITS	NY RRSCO	NY UUSCO	NY POTGWSCO
PFAS (EPA 1633A)				
PFOS	ppb	44	0.88	1
Total PFOA	ppb	33	0.66	0.8
TCL VOCs (SW846 8260D)				
No Compounds Exceeding NYSDEC SCOs				
TCL SVOCs (SW846 8270E)				
No Compounds Exceeding NYSDEC SCOs				
PCBs (SW846 8082A)				
Aroclor 1242	mg/kg	1	0.1	NS
Aroclor 1248	mg/kg	1	0.1	NS
Aroclor 1254	mg/kg	1	0.1	NS
PESTICIDES (SW846 8081B)				
4,4'-DDE	mg/kg	8.9	0.0033	NS
4,4'-DDT	mg/kg	7.9	0.0033	NS
Aldrin	mg/kg	0.097	0.005	NS
Dieldrin	mg/kg	0.2	0.005	NS
TOTAL METALS (SW846 6010D)				
Barium	mg/kg	400	350	NS
Chromium	mg/kg	180*	30*	NS
Copper	mg/kg	270	50	NS
Lead	mg/kg	400	63	NS
Mercury	mg/kg	0.81	0.18	NS
Zinc	mg/kg	10000	109	NS

Sample ID:	UNITS	RI-SB-11 (0.5-1)	RI-SB-11 (5-5.5)	RI-SB-11 (10-10.5)	RI-SB-11 (15-15.5)
Date:		8/13/2025	8/13/2025	8/13/2025	8/13/2025
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0016	0.0111	0.0013	ND (0.00066)
4,4'-DDT	mg/kg	0.0039	0.0035	0.00096	ND (0.00066)
Aldrin	mg/kg	ND (0.00065)	0.0038	0.0017	ND (0.00066)
Dieldrin	mg/kg	0.0014	0.0071	0.001	ND (0.00066)
TOTAL METALS (SW846 6010D)					
Lead	mg/kg	96.7	52.3	45.4	2.6
Zinc	mg/kg	105	84.3	113	14

Sample ID:	UNITS	R1-SB-13 (2.5-3.0)	R1-SB-13 (7.5-8.0)	R1-SB-13 (12.5-13.0)	R1-SB-13 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
PFAS (EPA 1633)					
PFOS	ppb	0.356	0.372	1.20	0.200
PFOA	ppb	0.685	0.591	0.278	0.290
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	646	233	28.6	9

Sample ID:	UNITS	RI-SB-14 (2-2.5)	RI-SB-14 (6-6.5)	RI-SB-14 (10.5-11)	RI-SB-14 (16-16.5)
Date:		8/13/2025	8/13/2025	8/13/2025	8/13/2025
PFAS (EPA 1633)					
PFOA	ppb	0.0353 J	0.704	0.153 J	0.219
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0583	0.0046	0.0026	ND (0.00068)
4,4'-DDT	mg/kg	0.0059	0.0022	0.0056	ND (0.00068)
TOTAL METALS (SW846 6010D)					
Lead	mg/kg	84.6	19.4	12.2	ND (2.2)
Zinc	mg/kg	193	360	22.5	6.5

Sample ID:	UNITS	RI-SB-16N (15.5-16)
Date:		8/15/2025
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	ND (0.00072)
TOTAL METALS (SW846 6010D)		
Barium	mg/kg	30.1
Lead	mg/kg	8.1
Mercury	mg/kg	ND (0.031)
Zinc	mg/kg	22.8

Sample ID:	UNITS	RI-SB-16W (15.5-16)
Date:		8/14/2025
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	ND (0.00067)
TOTAL METALS (SW846 6010D)		
Barium	mg/kg	ND (22)
Lead	mg/kg	7
Mercury	mg/kg	ND (0.032)
Zinc	mg/kg	88.1

Sample ID:	UNITS	RI-SB-17 (3.5-4)	RI-SB-17 (5.5-6)	RI-SB-17 (12.5-13)	RI-SB-17 (17.5-18)
Date:		8/13/2025	8/13/2025	8/15/2025	8/15/2025
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0052	0.0046	ND (0.00064)	ND (0.00067)
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	290	476	39.5	14.6

Sample ID:	UNITS	RI-SB-16 (0.5-1)	RI-SB-16 (8.5-9)	RI-SB-16 (11.5-12)	RI-SB-16 (15.5-16)
Date:		8/12/2025	8/12/2025	8/14/2025	8/14/2025
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0081	0.00092	ND (0.00067)	ND (0.00063)
TOTAL METALS (SW846 6010D)					
Barium	mg/kg	49.9	99.9	ND (21)	359
Lead	mg/kg	34.1	215	2.1	1280
Mercury	mg/kg	0.043	0.25	ND (0.027)	ND (0.030)
Zinc	mg/kg	325	328	13.4	41.7

Sample ID:	UNITS	RI-SB-16S (15.5-16)
Date:		8/12/2025
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	ND (0.00069)
TOTAL METALS (SW846 6010D)		
Barium	mg/kg	ND (21)
Lead	mg/kg	3.1
Mercury	mg/kg	ND (0.029)
Zinc	mg/kg	18.5

Sample ID:	UNITS	RI-SB-18 (2.5-3)	RI-SB-18 (7.5-8)	RI-SB-18 (12.5-13)	RI-SB-18 (17.5-18)
Date:		8/18/2025	8/18/2025	8/18/2025	8/18/2025
PESTICIDES (SW846 8081B)					
4,4'-DDD	mg/kg	0.0084	ND (0.00069)	ND (0.00065)	ND (0.00067)
4,4'-DDE	mg/kg	0.004	ND (0.00069)	ND (0.00065)	ND (0.00067)
TOTAL METALS (SW846 6010D)					
Lead	mg/kg	351	ND (2.1)	ND (1.9)	2
Mercury	mg/kg	0.45	ND (0.031)	ND (0.029)	ND (0.028)
Zinc	mg/kg	182	13.6	10.4	11.3

Sample ID:	UNITS	RI-SB-16E (15.5-16)
Date:		8/15/2025
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	ND (0.00066)
TOTAL METALS (SW846 6010D)		
Barium	mg/kg	ND (21)
Lead	mg/kg	3.6
Mercury	mg/kg	ND (0.030)
Zinc	mg/kg	15.1

Sample ID:	UNITS	RI-SB-03 (2.5-3.0)	RI-SB-03 (7.5-8.0)	RI-SB-03 (12.5-13.0)	RI-SB-03 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
PFAS (EPA 1633)					
PFOA	ppb	1.04	0.0741 J	0.134 J	0.262
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0079	ND (0.00063)	ND (0.00066)	ND (0.00066)
Aldrin	mg/kg	0.0428	ND (0.00063)	ND (0.00066)	ND (0.00066)
Dieldrin	mg/kg	0.0164	ND (0.00063)	ND (0.00066)	ND (0.00066)

Sample ID:	UNITS	RI-SB-13N (7.5-8)
Date:		8/14/2025
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	327

Sample ID:	UNITS	RI-SB-13W (7.5-8)
Date:		8/14/2025
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	123

Sample ID:	UNITS	RI-SB-13E (7.5-8)
Date:		8/14/2025
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	1330

Sample ID:	UNITS	RI-SB-13S (7.5-8)
Date:		8/14/2025
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	417

Sample ID:	UNITS	R1-SB-06 (2.5-3.0)	R1-SB-06 (7.5-8.0)	R1-SB-06 (12.5-13.0)	R1-SB-06 (17.5-18.0)
Date:		8/8/2025	8/8/2025	8/8/2025	8/8/2025
PFAS (EPA 1633)					
PFOS	ppb	1.54	ND (0.176)	ND (0.180)	0.0956 J
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0073	ND (0.00064)	ND (0.00066)	ND (0.00067)

Sample ID:	UNITS	RI-SB-09 (2.5-3)	RI-SB-09 (7.5-8)	RI-SB-09 (12-12.5)	RI-SB-09 (17-17.5)
Date:		8/13/2025	8/13/2025	8/13/2025	8/13/2025
PFAS (EPA 1633)					
PFOA	ppb	0.855	0.183 J	0.327	0.334
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0075	0.0099	ND (0.00066)	0.0062
4,4'-DDT	mg/kg	0.0023	0.0034	ND (0.00066)	0.001
Dieldrin	mg/kg	0.0028	0.0069	ND (0.00066)	0.001
TOTAL METALS (SW846 6010D)					
Chromium	mg/kg	30.4	19.2	12.4	27.1
Lead	mg/kg	30.8	86.2	3.6	11.2
Zinc	mg/kg	375	396	27.7	89.3

Sample ID:	UNITS	RI-SB-12W (7.5-8)
Date:		8/14/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.037)
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	480

Sample ID:	UNITS	RI-SB-12N (7.5-8)
Date:		8/14/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.037)
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	248

Sample ID:	UNITS	RI-SB-12 (2.5-3.0)	RI-SB-12 (7.5-8.0)	RI-SB-12 (11-11.5)	RI-SB-12 (17.5-18)
Date:		8/8/2025	8/8/2025	8/14/2025	8/14/2025
PCBs (SW846 8082A)					
Aroclor 1242	mg/kg	ND (0.034)	0.26	ND (0.032)	ND (0.032)
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	452	1490	26	22.7

Sample ID:	UNITS	RI-SB-12E (7.5-8)
Date:		8/14/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.037)
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	246

Sample ID:	UNITS	RI-SB-12S (7.5-8)
Date:		8/14/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.037)
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	407

Sample ID:	UNITS	RI-SB-15N (7-7.5)
Date:		8/12/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.036)
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	0.0036
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	204

Sample ID:	UNITS	RI-SB-15E (7-7.5)
Date:		8/12/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.038)
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	0.0041
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	321

Sample ID:	UNITS	RI-SB-15 (4.5-5)	RI-SB-15 (7-7.5)	RI-SB-15 (10-10.5)	RI-SB-15 (16-16.5)
Date:		8/12/2025	8/12/2025	8/15/2025	8/15/2025
PCBs (SW846 8082A)					
Aroclor 1248	mg/kg	0.174	0.14	ND (0.035)	ND (0.035)
PESTICIDES (SW846 8081B)					
4,4'-DDE	mg/kg	0.0029	0.0037	ND (0.0007)	ND (0.00068)
TOTAL METALS (SW846 6010D)					
Zinc	mg/kg	289	239	36.5	17.7

Sample ID:	UNITS	RI-SB-15S (7-7.5)
Date:		8/12/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.037)
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	0.0022
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	595

Sample ID:	UNITS	RI-SB-15W (7-7.5)
Date:		8/12/2025
PCBs (SW846 8082A)		
Aroclor 1248	mg/kg	ND (0.037)
PESTICIDES (SW846 8081B)		
4,4'-DDE	mg/kg	0.0063
TOTAL METALS (SW846 6010D)		
Zinc	mg/kg	225

NOTES:
1. Results are measured in mg/kg, with the exceptoion of PFAS species which are measured
2. Results are compared to NYSDEC UUSCOs, NYSDEC RSCO and NYSDEC RRSCOs.
3. Sample Depth is reported in feet below ground surface.
4. Chromium SCOs are based on trivalent chromium.

= concentration exceeds UUSCO
= concentration exceeds RRSCO
= concentration exceeds PGWSCO

ABBREVIATIONS:
NYSDEC = New York State Department of Environmental Conservation.
UUSCO = NYSDEC Unrestricted Use Soil Cleanup Objectives
RRSCO = NYSDEC Restricted Use Soil Cleanup Objectives
PGWSCO = NYSDEC Protection of Groundwater Soil Cleanup Objectives
PFAS = Per- and Polyfluoroalkyl Substances
PCBs = Polychlorinated Biphenyls
mg/kg = Milligram per kilogram
ppb = Parts per billion
ND = Non-Detect
NS = No Standard

LEGEND:
RI-SB-12N — SOIL BORING NO. AND APPROX. LOCATION (DELINEATION SAMPLE)
RI-SB-01 — SOIL BORING NO. AND APPROX. LOCATION
— SITE LOCATION
NY TAX PARCELS
3.5 FT — PROPOSED EXCAVATION DEPTH (FT)
(+- 52.0) — PROPOSED EXCAVATION ELEVATION (FT AMSL)

PROPOSED EXCAVATION GRID DEPTHS
0 FT
2.5 FT
4 FT
7 FT
8 FT
8.5 FT
9 FT
11.5 FT
12 FT
14 FT
17 FT
18.5 FT

SCALE: 1" = 20'
0 10 20 40 60 80 FEET

Y:\GIS\Project_Numbers\12914\FINAL_MAPS, 12/17/2025 11:08 AM, Kim Vanderlelin, LAYOUT: FIG-4.2

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL
959 route 46e, 3rd floor, parsippany, nj 07054 ph: 973.808.9050

dwg by: KBV
chk by: MKC
scale: AS NOTED
date: 12/17/2025

project: REMEDIAL INVESTIGATION WORK PLAN
16305-16325 ARCHER AVENUE AUTO REPAIR AND COAL YARD SITE (NO. C241283)
JAMAICA, NEW YORK

title: TRACK 1 SOIL EXCAVATION PLAN

job no.: 12914
drawing no: FIG-3