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June 28, 2024

Mr. Richard Mustico, EIT
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York, 12233-7016

Re: Supplemental Remedial Investigation Work Plan
Jamaica Works – NYSDEC BCP Site No. C241252
95-25 149th Street, Queens, NY

Dear Mr. Mustico,

This Supplemental Remedial Investigation (SRI) Work Plan (SRIWP) has been prepared by AKRF, Inc. (AKRF) on behalf of Radix 95-25 149th St LLC, 95-08 150th St LLC, and 95-12 150th St 11435 LLC (collectively, the "Volunteer") in connection with the former Jamaica Works site, located in the Jamaica section of Queens, New York, hereafter referred to as the "Site." The Site is currently enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) under Site No. C241252. The Site location is shown on Figure 1.

The purpose of this SRIWP is to present a proposed scope of work for additional environmental testing to further delineate the extent of contamination identified at the Site in accordance with NYSDEC's Remedial Investigation Report (RIR) comment letter dated June 21, 2023 and NYSDEC correspondence dated February 1 and 14, 2024 (provided in Appendix A). The scope of work documented herein will be conducted in accordance with the existing methodologies and appendices in the NYSDEC-approved Remedial Investigation Work Plan (RIWP) dated April 2022, including a Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) provided in Appendix A and B in the RIWP, respectively.

SUMMARY OF PREVIOUS INVESTIGATIONS

AKRF conducted a Remedial Investigation (RI) at the Site between July and August 2022 which was documented in a draft RI Report (RIR) dated January 2023. Based on the findings, additional soil and groundwater sampling was requested by NYSDEC to further delineate the extent of contamination in the southern portion of the Site.

This SRIWP includes additional soil sampling in the southern portion of the Site where exceedances of the NYSDEC Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) were detected at the deepest sample interval, and installation of permanent groundwater monitoring wells to provide additional groundwater data beneath the southern portion of the Site. Additionally, soil vapor samples will be collected from the southern portion of the Site to evaluate the potential for off-site soil vapor migration.

FIELD PROGRAM

Geophysical Survey

A geophysical survey, including ground-penetrating radar (GPR) and magnetometry, will be conducted around the proposed sampling locations to investigate the presence of underground utilities, and to clear the proposed boring locations. GPR uses electromagnetic wave propagation and scattering to image and identify changes in electrical and magnetic properties in the ground. Magnetometers measure irregularities in the magnetic field in a given area. Any anomalies indicative of UST(s) will be marked in the field, and measured off of fixed points in the field, and surveyed using GPS.

Soil Boring Advancement and Soil Sampling

A Geoprobe® Direct-Push Probe (DPP) drill rig will be used to advance 4 borings to approximately 15 feet below grade (denoted as RI-SB-12 through RI-SB-15 on Figure 2). Soil cores will be obtained in stainless steel, macrocore samplers with dedicated internal acetate liners and field-screened using a photoionization detector (PID), which measures relative levels of volatile organic compounds (VOCs). Three soil samples will be selected for laboratory analysis from each of the borings: one from the upper 2 feet beneath existing pavement and a second sample from 13 to 15 feet below grade. A third sample will be collected from an interval displaying the greatest evidence of contamination (e.g., odors, staining, or elevated PID readings). In the absence of contamination, a third sample will be collected from the bottom of the historic fill layer. At each boring, subsurface conditions would be documented in boring logs. After completion, boreholes will be backfilled with on-site materials (if not noticeably contaminated) in accordance with Section 3.3(e) of DER-10 and the surface patched by the drilling contractor to match existing surface material.

Soil samples slated for analysis will be placed in laboratory-supplied containers and shipped in accordance with appropriate Environmental Protection Agency (EPA) protocols to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory. The samples will be analyzed for Target Compound List (TCL) VOCs by EPA Method 8260, TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270, polychlorinated biphenyls (PCBs) by EPA Method 8082, TCL pesticides by EPA Method 8081, Target Analyte List (TAL) metals by EPA Method 6000/7000 series, hexavalent chromium by EPA Method 7196A, cyanide by EPA Method 9014, per- and polyfluorinated compounds (PFAS) by EPA Method 1633, and 1,4-dioxane by EPA Method 8270.

Soil cuttings displaying field evidence of contamination will be containerized in properly labeled Department of Transportation (DOT)-approved 55-gallon drums for off-site disposal as investigation derived waste at a permitted facility. Boreholes that require drill cutting disposal will be filled with bentonite chips (hydrated). Disposable sampling equipment that comes in contact with environmental media will be double bagged and disposed of as municipal trash as non-hazardous refuse.

Groundwater Monitoring Well Installation, Development, and Sampling

Two soil borings will be converted into 2-inch diameter permanent groundwater monitoring wells using a Geoprobe® DPP drill rig (denoted as RI-MW-06 and RI-MW-07 on Figure 2). The wells will be constructed with 15 feet of 2-inch diameter 0.002-inch slotted polyvinyl chloride (PVC) well screen set approximately 10 feet below the water table and 5 feet above the water table, which is expected to be encountered between approximately 16 and 20 feet below grade, and a 2-inch diameter solid PVC riser installed to grade. The boreholes will be at least 6 inches in diameter to allow for a minimum 2-inch annular space surrounding the monitoring well. A No. 02 morie sandpack will be installed from the base of the well to approximately 2 feet above the well screen. The annular space around the solid well riser above the sandpack will be sealed with approximately 2 feet of bentonite followed by a non-shrinking grout/cement mixture to approximately one foot below grade. Each of the wells will be finished with a locking j-plug and flush-mounted well cover with a concrete pad.

Following installation, each groundwater monitoring well will be developed via pumping and surging to remove any accumulated fines and establish a hydraulic connection with the surrounding aquifer. Development will continue until turbidity within the well is less than 50 nephelometric turbidity units (NTUs) for three successive readings; and until water quality indicators have stabilized to within 10% for

pH, temperature, and specific conductivity for three successive readings. In the event that 50 NTUs cannot be achieved, at least three well volumes will be purged from the well.

The groundwater monitoring wells will be surveyed by a New York State-licensed surveyor to determine their accurate location and elevation. Two elevation measurements will be taken at each well location: the at-grade elevation; and the elevation of the top of PVC casing (north side at marking), to facilitate preparation of a groundwater contour map and to determine the direction of groundwater flow. The elevation datum for the sampling points will be based on NAVD 88 Elevation Datum.

In accordance with EPA low-flow sampling protocols, the wells will be sampled one to two weeks following their development. Prior to sampling, an electronic interface meter will be used to measure water levels and a bailer will be used to measure any separate phase liquid. The purge water will be monitored for turbidity and water quality indicators [i.e., pH, dissolved oxygen, oxidation-reduction potential (ORP), temperature, and specific conductivity] with measurements collected approximately every five minutes. The criteria for stabilization will be three successive readings within ±10% for pH, temperature, and specific conductivity. Purge water displaying field evidence of contamination will be containerized in properly labeled, Department of Transportation (DOT)-approved 55-gallon drums for off-site disposal at a permitted facility.

Groundwater samples slated for laboratory analysis will be placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory. The samples will be analyzed for TCL VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, PCBs by EPA Method 8082, TCL pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, PFAS by EPA Method 1633, and 1,4-dioxane by EPA Method 8270 selected ion monitoring (SIM) using Category B deliverables. Filtering will occur in the field. Sampling for emerging contaminants will be conducted in accordance with the April 2023 NYSDEC-issued sampling protocol, with the exception that a low-density polyethylene (LDPE) bladder will be used as no industry-approved high-density polyethylene (HDPE) alternative currently exists.

Soil Vapor Sampling

Four soil vapor samples will be collected from temporary soil vapor points. The temporary soil vapor points will be installed by advancing an expendable drive point using a DPP drill rig to approximately 5 feet below grade. At each monitoring point, a 6-inch stainless steel screen implant, connected to Teflon tubing will be installed through the drilling rods and threaded into the drive point. The sampling tubing will extend from the end of the screen to above grade. The push probe rods will then be removed and the boring will be backfilled with clean silica sand to 3 to 6 inches above the screen. Hydrated bentonite will be used to fill the remaining void around the sampling tubing to the ground surface.

Prior to sample collection, the sampling points will be purged of three sample volumes using a GilAir low-flow air sampling pump. During purging, a shroud will be placed over the sampling point and helium gas will be introduced to saturate the atmosphere around the sample port with helium gas. Purged vapors will be collected into a Tedlar™ bag and field-screened for organic vapors using a PID. The purged air will also be monitored using a portable helium detector to check for short-circuiting of ambient air into the vapor sampling point. If the purged soil vapor contains greater than 10% helium, additional bentonite will used to enhance the surface seal, and the point will be retested. The soil vapor samples will be collected in 6-liter stainless steel SUMMA® canisters with flow controllers calibrated for sample collection over 2-hours. All samples will be analyzed for VOCs by EPA Method TO-15 using Category B deliverables.

Quality Assurance/Quality Control (QA/QC)

The soil, groundwater, and soil vapor analytical results will be reported using Category B deliverables. As required by the Category B sampling techniques, additional analysis will be included for QC measures. One set of soil and groundwater QA/QC samples will be submitted for every 20 field samples collected for laboratory analysis. Each set of QA/QC samples will include a trip blank, field blank, blind duplicate, matrix spike/matrix spike duplicate (MS/MSD). The QA/QC samples will be analyzed for the same parameters as the soil samples except for the trip blank, which will be analyzed for VOCs only.

Upon receipt of the analytical data from the laboratory, it will be reviewed by a third-party data validator, who will prepare a Data Usability Summary Report (DUSR). The QAPP, included as Appendix B of the RIWP, describes the QA/QC protocols and procedures that will be followed during implementation of this SRIWP.

REPORTING

Remedial Investigation Report

Upon completion of all field work and receipt of laboratory analytical results, the draft RIR will be updated in compliance with Section 3.14 of DER-10 that will: document field activities; present field and laboratory data; evaluate exposure pathways in an exposure assessment; identify and characterize the source(s) of contamination; offer a summary of the overall nature and extent of contamination using the applicable standards, criteria, and guidance; and discuss conclusions and recommendations drawn from the results of the RI.

PROPOSED SCHEDULE

The proposed project schedule is provided below and is subject to change.

Activity	Time To Complete
Submit Revised SRIWP to NYSDEC	June 2024
NYSDEC Approves SRIWP	August 2024
Implement SRIWP Field work	September 2024
Update Draft RIR, Including Data Validation	November 2024
Submit Revised RIR to NYSDEC	November 2024
NYSDEC Approves RIR	January 2025
Neighborhood Rezoning Action Finalized	December 2025 through February 2026 (estimated)
Draft RAWP Submitted to NYSDEC	April 2026
NYSDEC Issues Comments on RAWP	June 2026
Submit Revised RAWP	August 2026
45-Day Public Comment Period for RAWP is Initiated	September 2026
Public Comment Period for RAWP Ends	October 2026
Submittal of Final RAWP	December 2026
Issuance of Decision Document	February 2027
Volunteer Initiates Building Permit Process	March 2027
Issue Remedial/Construction Notice Fact Sheet	August 2027
Building Demolition Begins	October 2027
Begin Redevelopment (Construction) with Implementation of RAWP	April 2028
Submit Draft Environmental Easement	March 2029
Execution of Environmental Easement	July/August 2029
Draft SMP Submitted to NYSDEC	August 2029
Remedial Activities Completed	By September 30, 2029
Draft FER and Fact Sheet	September 2029
Certificate of Completion and Fact Sheet	December 2029

We look forward to your approval of this SRIWP. If you have any questions regarding the information presented herein, please contact Steve at (631) 574-3724 or Adrianna at (646) 388-9576.

Sincerely,
AKRF, Inc.

Stephen Malinowski, QEP
Senior Vice President

Adrianna Bosco
Technical Director

cc (electronic copy only):
W. Bennett – NYSDEC
J. Kenney, S. McLaughlin – NYSDOH
P. Davidson, E. Deutsch, M. Effren, D. Ridoutt– Radix 95-25 149th St LLC, 95-08 150th St LLC, and 95-12 150th St 11435 LLC
S. Furman – Sive, Paget & Riesel, PC
R. Kinal, M. Sanchez – AKRF

Enc.

FIGURES

Figure 1 – Site Location
Figure 2 – Proposed SRI Sampling Plan

APPENDICES

Appendix A – NYSDEC RIR Comment Letter and Correspondence

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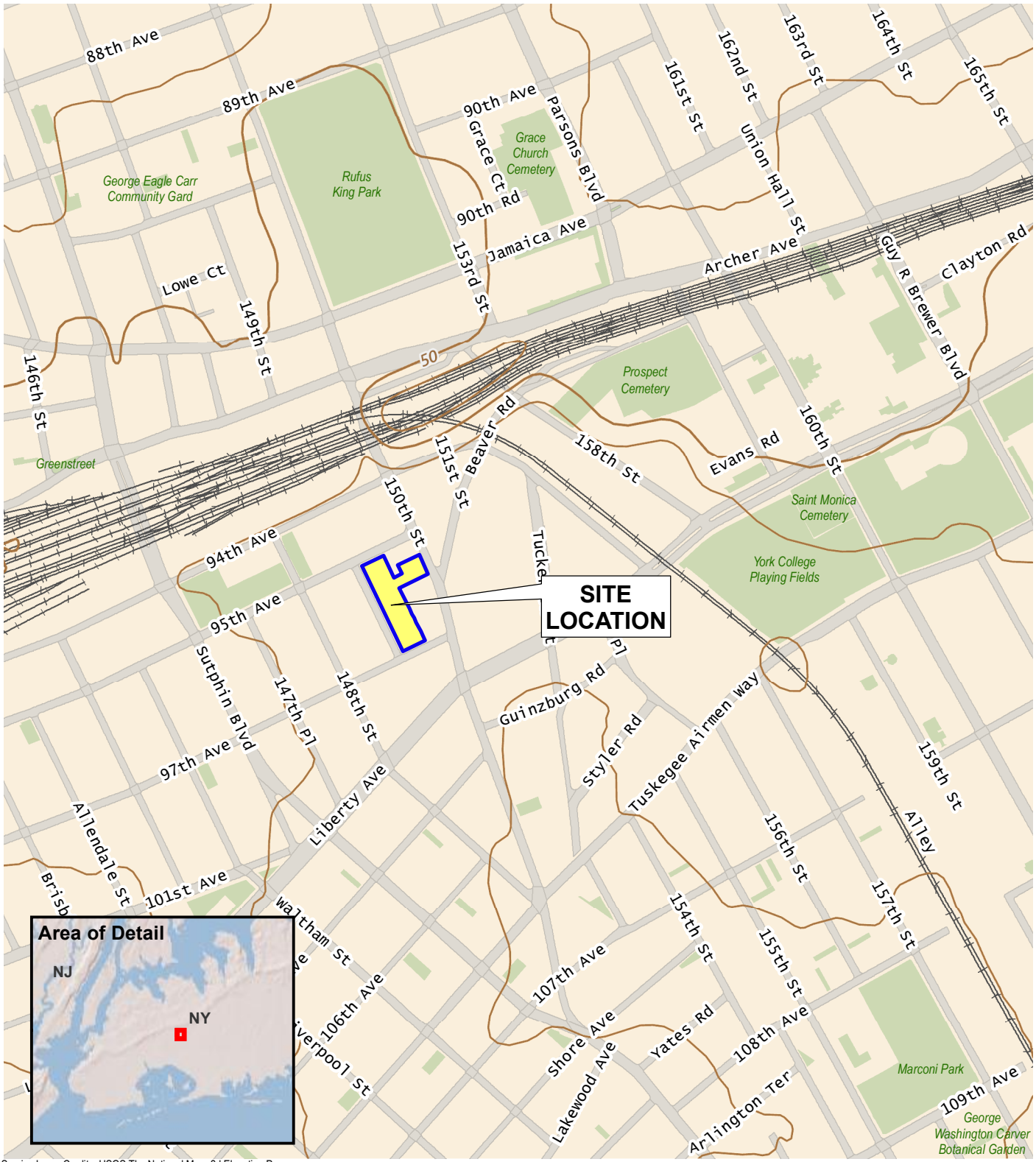
FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed July, 2021

0 600 1,200

SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

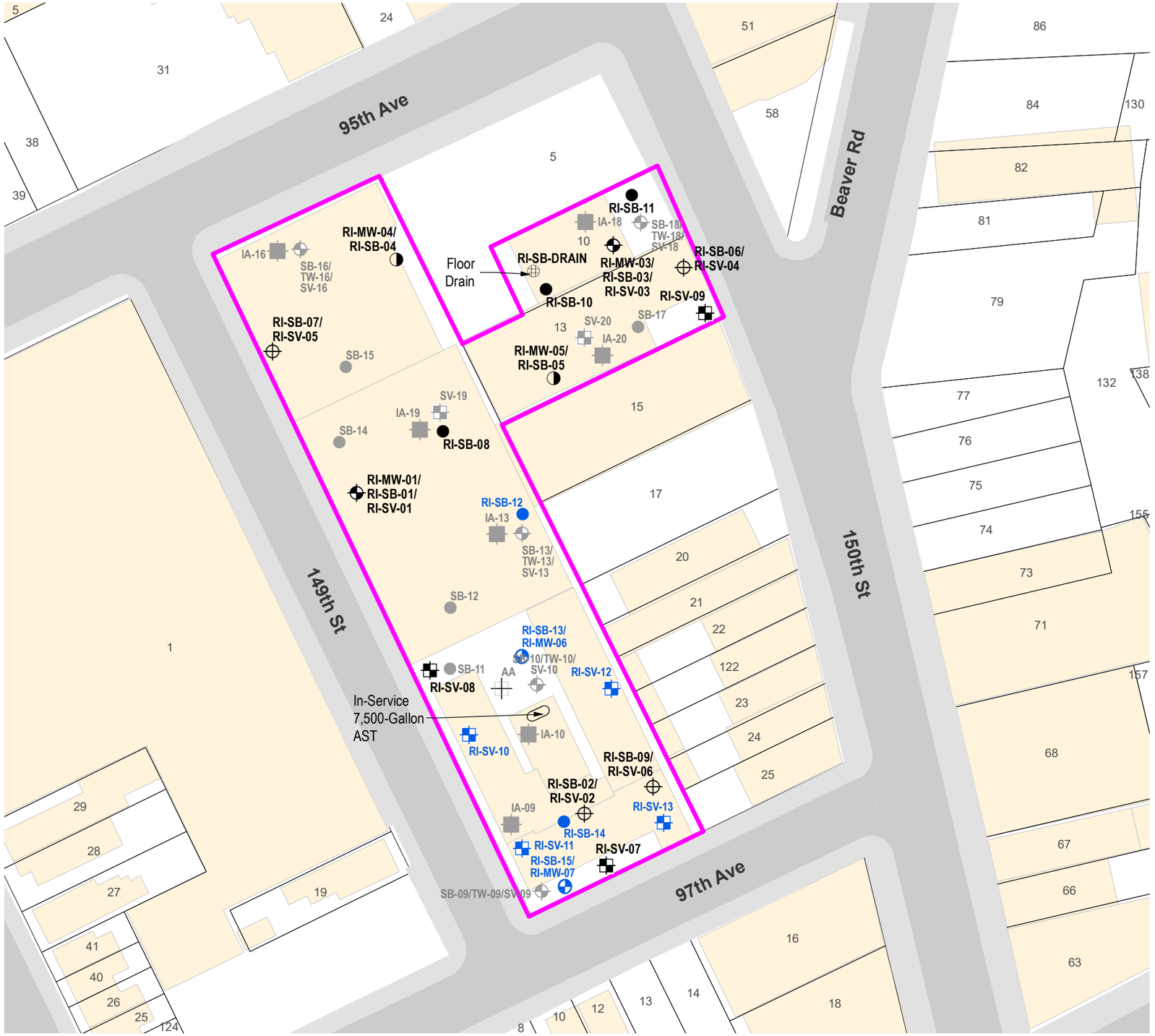
Jamaica Works
95-25 149th Street
Queens, New York

SITE LOCATION

DATE
4/22/2024

PROJECT NO.
200278

FIGURE
1



LEGEND

- PROJECT SITE BOUNDARY
- 1 LOT BOUNDARY AND TAX LOT NUMBER
- 10002 BLOCK NUMBER
- BUILDING
- PROPOSED SRI SOIL BORING
- PROPOSED SRI SOIL BORING/MONITORING WELL
- PROPOSED SRI SOIL VAPOR POINT
- RI SOIL BORING
- RI SEDIMENT SAMPLE
- RI SOIL BORING/MONITORING WELL
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR POINT
- RI SOIL BORING/SOIL VAPOR POINT
- RI SOIL VAPOR POINT
- SOIL BORING (PHASE II, NOVEMBER 2020)
- SOIL BORING/TEMPORARY WELL/SOIL VAPOR POINT (PHASE II, NOVEMBER 2020)
- SUPPLEMENTAL SOIL VAPOR POINT (PHASE II, NOVEMBER 2020)
- INDOOR AIR SAMPLE LOCATION (PHASE II, NOVEMBER 2020)
- AMBIENT AIR SAMPLE LOCATION (PHASE II, NOVEMBER 2020)
- ABOVEGROUND STORAGE TANK (AST)

0 30 60 120

SCALE IN FEET

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

AKRF
440 Park Avenue South, New York, NY 10016

PROPOSED SRI SAMPLING PLAN

Jamaica Works
95-25 149th Street
Queens, New York

DATE
4/22/2024

PROJECT NO.
200278

FIGURE
2

APPENDIX A
NYSDEC Remedial Investigation Report Comment Letter

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B
625 Broadway, 12th Floor, Albany, NY 12233-7016
P: (518) 402-9767 I F: (518) 402-9773
www.dec.ny.gov

Sent via e-mail

June 21, 2023

Eric J. Deutsch
Radix 95-25 149th St LLC
347 Fifth Avenue, 16th Floor
New York, NY 10016
eric@dl-development.com

Re: Jamaica Works
BCP Site ID No. C241252
Queens, New York
Remedial Investigation Report

Dear Eric Deutsch:

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has reviewed the Remedial Investigation Report (RIR) for the Jamaica Works site submitted on behalf of Abott Wire Productions Inc. (Volunteer) by AKRF dated January 2023. Based on this review, the Department has the following comments to offer:

1. **Applicant Status:** Please clarify, in the text, whether the Applicant is a Volunteer or Participant.

2. **Constituents of Concern, Volatile Organic Compounds (VOCs):** Historical environmental data indicated elevated concentrations of volatile organic compounds (VOCs) which were not encountered during the RI. The RI Report must address this difference. If it is possible to properly validate historic environmental data in accordance with DER-10 to supplement RI data, this should be considered.

3. **Nature and Extent of Groundwater Contamination:** Analytical and observational groundwater data is needed for the southern portion of the site to inform on the nature and extent of groundwater contamination and potential for groundwater contamination to migrate off-site. If it is possible to properly validate historic environmental data in accordance with DER-10 to supplement RI data to this end, this should be considered. However, more recent groundwater analytical and observational data may still be needed for the southern portion of the site.

4. **Section 1.0, Certification:** Ensure the final report is certified in accordance with DER-10.

5. **Section 2.0, Site History:** Please update this section with the most recent indoor air data from February 2023.

6. **Section 4.7.5, Soil Vapor Sampling, Table D:** Please note that soil vapor samples collected at depths shallower than five feet may be prone to negative bias due to the infiltration of outdoor air.

7. **Section 4.7.10, Deviations from the Remedial Investigation Work Plan (RIWP):** A supplemental remedial investigation is recommended to characterize the nature and extent of contamination in the Southern portion of the site.

8. **Section 6.0, Qualitative Human Health Exposure Assessment:** Please include a section discussing the potential for off-site exposures via soil vapor intrusion.

9. **Figure 2:** Please provide additional information in the report about the floor drain (i.e. prior uses) due to elevated metals detected in the soils located here.

The Department's Project Manager, Richard P. Mustico, can be contacted at 518-402-9647 or richard.mustico1@dec.ny.gov if you have any questions or wish to discuss.

Sincerely,

Richard P. Mustico, E.I.T.
Project Manager
Remedial Section B

ec:
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