February 11, 2026
(Revised April 17, 2026)

Robert Strang
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233
robert.strang@dec.ny.gov

Re: Off-Site Soil Vapor Intrusion Study Work Plan
2409 Jerome Avenue
Bronx, New York
BCP Site No.: C203087
Langan Project No.: 170390601

Dear Mr. Strang:

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C (Langan) presents this Off-Site Soil Vapor Intrusion Study Work Plan on behalf of 2409 Jerome, Inc. for the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C203087 (the site). The site is located at 2409 Jerome Avenue in the Bronx, New York. A site location map is included as Figure 1.

SITE BACKGROUND

A remedial investigation (RI) was implemented between April 27 and May 22, 2018. Following the implementation of the initial RI scope of work, the NYSDEC requested an off-site soil vapor intrusion (SVI) study to be completed at the western adjoining properties, 2400 and 2410 Davidson Avenue, as part of the RI. This additional scope of work was presented in the February 25, 2019 Supplemental Remedial Investigation Work Plan (SRIWP) No. 1. The SRIWP No. 1 was approved by the NYSDEC and implemented at the adjoining properties between May 1 and 19, 2019. A Remedial Investigation Report (RIR) documenting the findings of Supplemental Remedial Investigation (SRI) No. 1 was submitted to and approved by the NYSDEC in March 2020. Previous attempts were made to complete an off-site SVI study at the western adjoining property located at 2390 Davidson Avenue; however, the property owner was unresponsive and an SVI study was not conducted at this adjoining property.

On January 3, 2025, a draft Remedial Action Work Plan (RAWP), which summarized the previous investigations completed at the site and adjoining properties and proposed remedial actions for

the BCP site, was submitted to the NYSDEC and New York State Department of Health (NYSDOH) for their review. The NYSDEC and NYSDOH provided a comment letter to the draft RAWP on June 18, 2025. The comment letter requested an additional SVI study of the western adjoining properties.

This work plan was developed to re-evaluate the potential migration of subsurface soil vapor to indoor air by the vapor intrusion exposure pathway at the western adjoining residential buildings located at 2400 and 2410 Davidson Avenue and to perform an initial evaluation at the western adjoining residential building located at 2390 Davidson Avenue (if access can be obtained). As requested by the NYSDEC and NYSDOH in their comment letter to the January 3, 2025 draft RAWP, this off-site SVI study will be conducted during the upcoming heating season pending completion of access negotiations/agreements with the adjoining property owners. The SVI will be completed in accordance with procedures set forth in this work plan, SRIWP No. 1, and the Quality Assurance Project Plan (QAPP) included in the September 22, 2017 Remedial Investigation Work Plan (RIWP).

SCOPE OF WORK

The off-site SVI study will include the following:

- Pre-investigation site reconnaissance at each building to determine the current site conditions at the adjoining properties and revisit the past sample locations to evaluate/select sampling locations for this additional sampling event.
- Completion of a geophysical survey within each building to clear boring locations and identify known and potential subsurface utilities and structures, including underground storage tanks (USTs), prior to commencing subsurface work.
- Completion of indoor air quality questionnaires, as provided in Appendix B of the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (NYSDOH Soil Vapor Guidance), including a building survey and product and materials inventory prior to the start of air sampling to identify potential sources of volatile organic compounds (VOCs) in indoor air.
- 2400 and 2410 Davidson Avenue: Installation of up to 4 sub-slab soil vapor points across the buildings using dedicated Vapor Pins® to facilitate continued access for sampling, if approved by the adjoining owner.

  Collection and analysis of 4 sub-slab soil vapor samples, up to 8 indoor air samples (co-located with the sub-slab vapor samples and spaced throughout the crawl spaces as practical based on accessibility), and 2 outdoor ambient air samples.

- 2390 Davidson Avenue: Installation of 4 sub-slab soil vapor points throughout the building using dedicated Vapor Pins® to facilitate continued access for sampling, if approved by the adjoining owner.

  Collection and analysis of 4 sub-slab soil vapor samples, 4 co-located indoor air samples, and 1 outdoor ambient air sample.

Sub-Slab, Indoor and Ambient Air Sampling and Analysis

Based on the previous investigation conducted at the Davidson Avenue properties, a total of eight residential units are located on the lowest level in the eastern portion of the 2400 and 2410 Davidson Avenue buildings. Each building contains four residential units consisting of two units on the northern portion (A-side) and two units on the southern portion (B-side). Each unit overlies a crawl space. Up to eight indoor air samples will be collected within these crawl spaces underlying the residential units. The samples will be co-located with the sub-slab vapor samples and spaced throughout the crawl spaces as practical based on accessibility. Two outdoor ambient air samples will be collected in the courtyard area concurrently with the indoor air and sub-slab soil vapor samples.

Details on the layout of the building at 2390 Davidson Avenue are unknown, as access to the property was not granted during the previous off-site sampling event. If access is granted, sub-slab soil vapor points will be spaced throughout the building footprint, based on accessibility and observed site conditions. One outdoor ambient air sample will be collected to the east of the building.

An environmental drilling subcontractor will advance up to 4 sub-slab soil vapor points at the 2400 and 2410 Davidson Avenue properties and 4 sub-slab soil vapor points at the 2390 Davidson Avenue property using Vapor Pins® to allow for sample collection immediately beneath the concrete building slab. A hammer drill will be used to drill a 1.5-inch-diameter hole at least 1.75 inches into the slab, then a 5/8-inch-diameter hole will be drilled from the base of the first hole through the concrete slab and approximately 1 to 2 inches into underlying soil to form a void. Loose debris and concrete dust will be cleared from the hole using a bottle brush and shop vacuum. Each Vapor Pin® will be fitted with a silicone sleeve and installed within the inner 5/8-inch diameter hole using a dead-blow hammer until bulging of the silicone sleeve is observed, indicating an air-tight seal. These points will be finished with a 2-inch-diameter stainless steel integrated flush-mount cover. If Vapor Pins® are not accepted by the adjoining property owners, the sub-slab vapor points will be constructed in accordance with the procedures set forth in SRIWP No. 1.

The proposed sub-slab soil vapor, indoor air, and ambient air sample locations are shown on Figure 2; actual sample locations will be dependent on accessibility and the current site conditions observed during the pre-investigation site reconnaissance.

The SVI study will be completed during the 2026 to 2027 heating season pending completion of access negotiations/agreements with the adjoining property owner. Samples will be collected in accordance with procedures set forth in this work plan, SRIWP No. 1, and the QAPP. Weather conditions at the time of field sampling will be documented and included in the report. Sub-slab soil vapor and air samples will be collected into laboratory-supplied, batch-certified, 6-liter Summa® canisters with calibrated flow controllers over a 24-hour sampling period. The samples will be analyzed for VOCs by the United States Environmental Protection Agency (USEPA) Method TO-15. A sample summary is included as Table 1.

REPORTING

Following completion of the SVI study, an SVI Assessment Report will be prepared that will summarize sampling methodology, observations, sampling logs, results, and conclusions. Validated and tabulated sampling results will be included in the monthly progress report (MPR) after the data is validated and submitted electronically as an electronic data deliverable (EDD).

Sincerely,

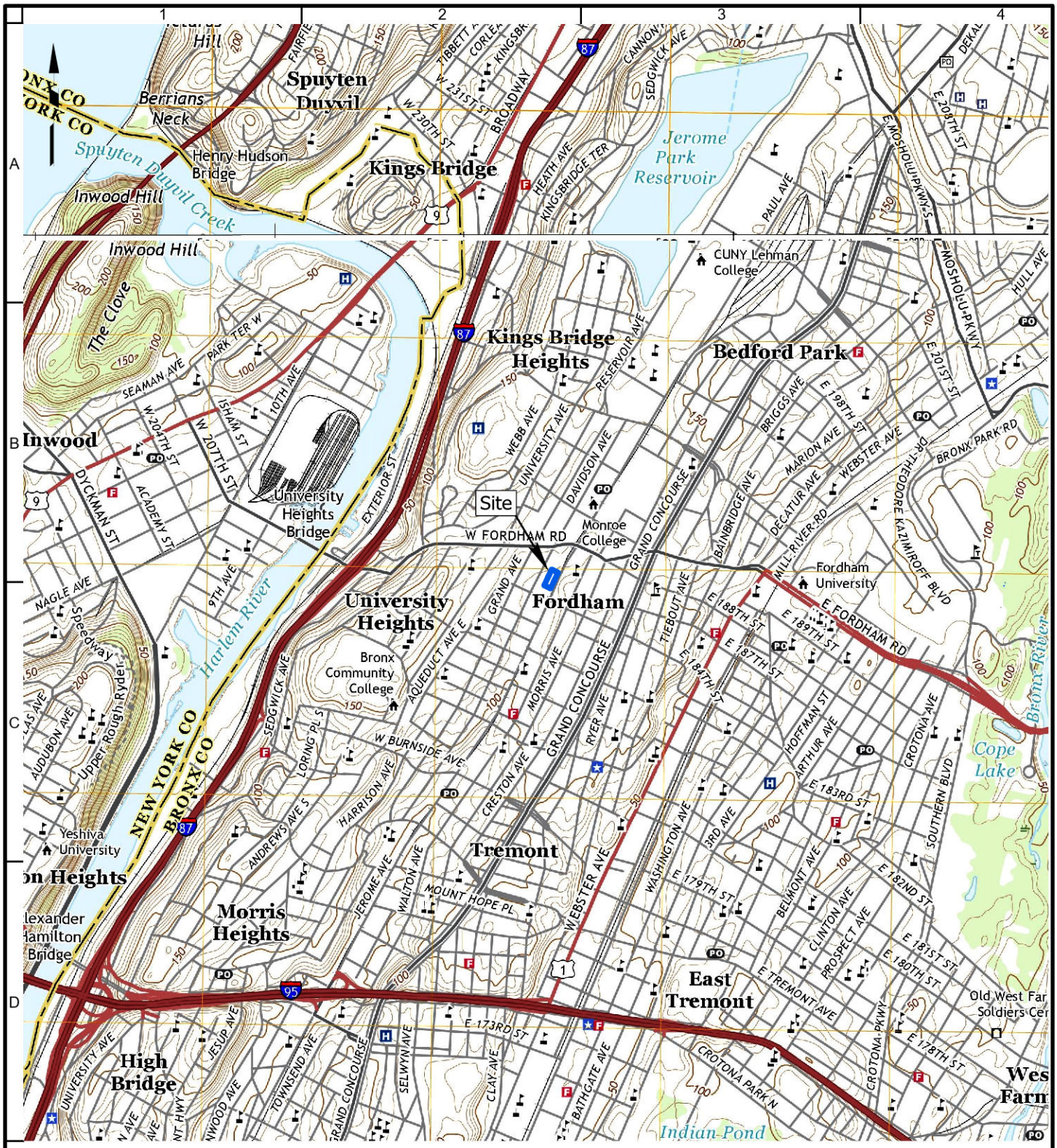
Langan Engineering, Environmental, Surveying
Landscape Architecture and Geology, D.P.C

Michael D. Burke, PG, CHMM
Managing Principal

cc: D. Gardner, S. Deyette, J. O'Connell (NYSDEC)
S. Bogardus, A. Keegan, J. Deming (NYSDOH)
David Dimond (2409 Jerome, Inc.)
C. Leas (SPR)
G. Wyka, K. Wexler (Langan)

Enclosures: Figure 1 – Site Location Map
Figure 2 – Proposed Sample Location Plan
Table 1 – Sample Summary

FIGURES



WARNING: It is a violation of the NYS Education Law Article 145 for any person, unless acting under the direction of a licensed professional engineer, land surveyor or geologist, to alter this item in any way.

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SCALE IN FEET

NOTES:
1. BASEMAP ADAPTED FROM UNITED STATES GEOLOGICAL SURVEY (USGS) 7.5-MINUTE SERIES TOPOGRAPHICAL MAPS, CENTRAL PARK, YONKERS, NEW YORK, QUADRANGLE, DATED 2016.

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Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International LLC

Collectively known as Langan

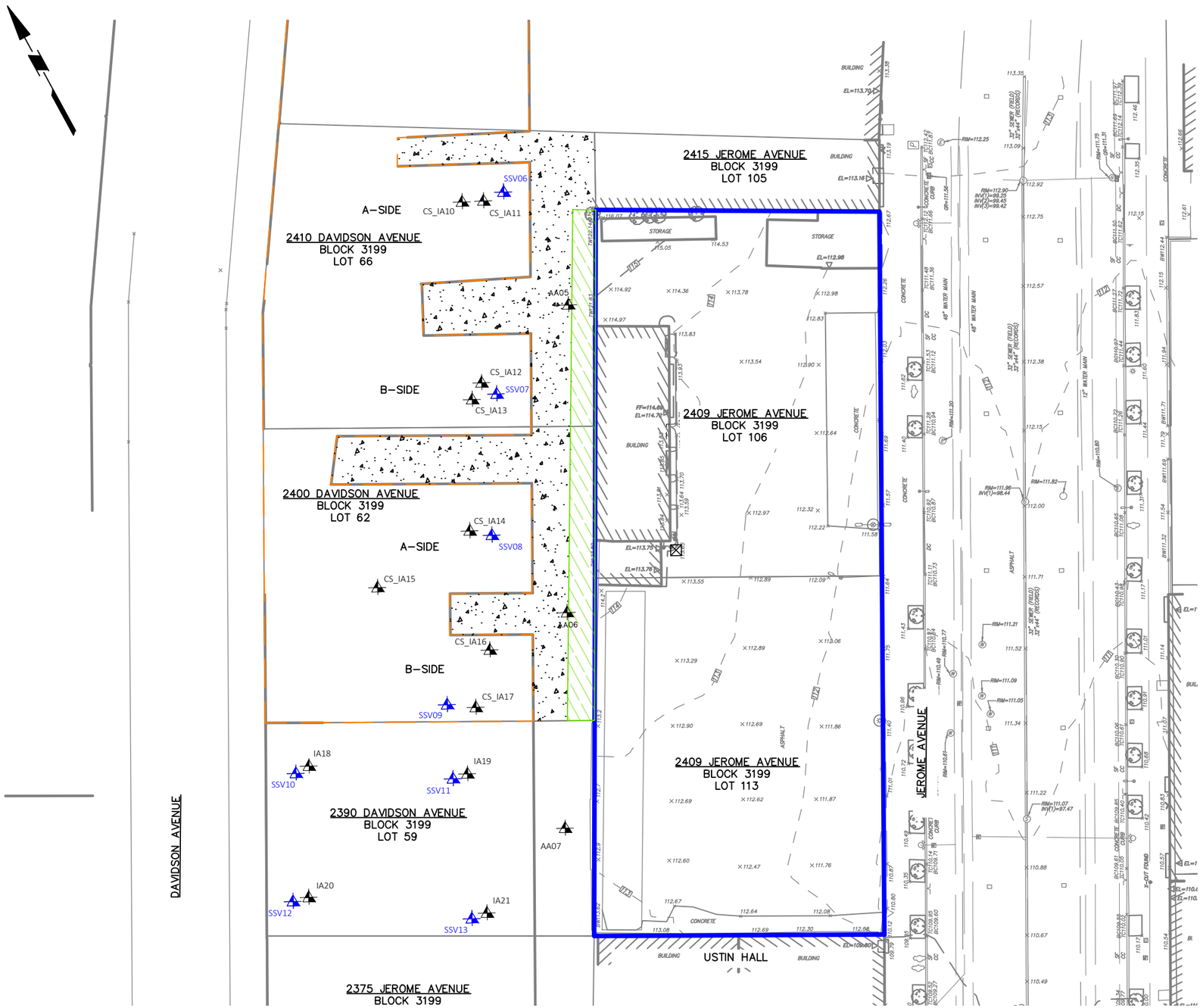
Project
2409 JEROME AVENUE
BLOCK No. 3199, LOT No. 106 & 1113
NEW YORK
BRONX NEW YORK

Figure Title
SITE LOCATION MAP

Project No. 170390601	Figure No. 1
Date 1/31/2022	
Scale 1"=2,000'	
Drawn By TZ	
Submission Date	Sheet 1 of 3

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LEGEND:

- APPROXIMATE SITE BOUNDARY (2409 JEROME AVENUE)
- APPROXIMATE TAX LOT BOUNDARY
- APPROXIMATE ADJOINING BUILDING FOOTPRINT
- APPROXIMATE OUTDOOR LANDSCAPED AREA
- APPROXIMATE OUTDOOR CONCRETE PAVEMENT AREA
- PROPOSED SUB-SLAB SOIL VAPOR LOCATION
- PROPOSED AMBIENT AIR/INDOOR AIR LOCATION

NOTES:

1. BASE MAP SOURCE: SITE SURVEY COMPLETED IN DECEMBER 2015 BY LANGAN.
2. ELEVATIONS SHOWN IN THE FIGURE ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), WHICH IS APPROXIMATELY 1.1 FEET ABOVE MEAN SEA LEVEL DATUM AT SANDY HOOK, NEW JERSEY AS DEFINED BY THE NEW YORK STATE GEOLOGICAL SURVEY (USGS NVGD 1929).
3. NORTH ARROW SHOWS TRUE NORTH.
4. AA= AMBIENT AIR
5. IA = INDOOR AIR
6. SSV = SUB-SLAB SOIL VAPOR
7. PROPOSED LOCATIONS AT THE 2400 AND 2410 DAVIDSON AVENUE PROPERTIES ARE SIMILAR TO THE LOCATIONS COMPLETED FOR THE SUPPLEMENTAL REMEDIAL INVESTIGATION (SRI) No. 1 IN MAY 2019, WHICH WERE DETERMINED BASED ON ACCESSIBILITY AND EXISTING SITE CONDITIONS AT THE TIME OF THE SRI. DETAILS ON THE LAYOUT OF THE BUILDING AT 2390 DAVIDSON AVENUE ARE UNKNOWN, AS ACCESS TO THE PROPERTY WAS NOT PREVIOUSLY GRANTED. ACTUAL SAMPLE LOCATIONS FOR THE SOIL VAPOR INTRUSION STUDY THROUGOUT ALL ADJOINING BUILDINGS WILL BE DEPENDENT ON ACCESSBIIITY AND THE CURRENT SITE CONDITIONS OBSERVED DURING THE PRE-INVESTIGATION SITE VISITS.

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

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LANGAN
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Project	2409 JEROME AVENUE BLOCK No. 3199 LOT Nos. 106 & 113 BRONX NEW YORK
Figure Title	PROPOSED SAMPLE LOCATION MAP
Project No.	170390601
Date	11/18/2025
Drawn By	KW
Checked By	GW
Figure No.	2

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Filename: \\langan.com\data\NY\data6\170390601\Cadd Data - 170390601\SheetFiles\Environmental\Off-Site SVI Study Work Plan\Figure 2 - SVI Proposed Sample Location Map.dwg Date: 12/4/2025 Time: 09:58 User: kwexler Style Table: ---- Layout: ANSIB-BL

TABLES

Table 1
Proposed Sample Summary
Off-Site SVI Study Work Plan

2409 Jerome Avenue
Bronx, New York
Langan Project No.: 170390601
NYSDEC BCP No. C203087

No.	Proposed Sample ID	Location	Anticipated Sampling Depth	Analysis
Indoor Air Samples				
1	CS_IA10_DATE	2410 Davidson Avenue, A-Side	Within the crawl space; about 1 foot above concrete building slab	VOCs via USEPA Method TO-15
2	CS_IA11_DATE			
3	CS_IA12_DATE	2410 Davidson Avenue, B-Side		
4	CS_IA13_DATE			
5	CS_IA14_DATE	2400 Davidson Avenue, A-Side		
6	CS_IA15_DATE			
7	CS_IA16_DATE	2400 Davidson Avenue, B-Side		
8	CS_IA17_DATE			
9	IA18_DATE	2390 Davidson Avenue	About 3 feet above grade	
10	IA19_DATE			
11	IA20_DATE			
12	IA21_DATE			
Sub-Slab Soil Vapor Samples				
1	SSV06_DATE	2410 Davidson Avenue, A-Side	2 inches below bottom of existing building slab	VOCs via USEPA Method TO-15
2	SSV07_DATE	2410 Davidson Avenue, B-Side		
3	SSV08_DATE	2400 Davidson Avenue, A-Side		
4	SSV09_DATE	2400 Davidson Avenue, B-Side		
5	SSV10_DATE	2390 Davidson Avenue		
6	SSV11_DATE			
7	SSV12_DATE			
8	SSV13_DATE			
QA/QC Samples				
1	AA05_DATE	Outdoor Courtyards	About 3 feet above grade	VOCs via USEPA Method TO-15
2	AA06_DATE			
3	AA07_DATE			

Notes:

1. VOC = Volatile Organic Compound
2. TO-15 = Toxic Organics - 15
3. QA/QC = Quality Assurance/Quality Control
4. USEPA = Untied States Environmental Protection Agency