

August 10, 2022

**Bryan Wong** NYSDEC - Region 2 1 Hunter's Point Plaza 47-40 21st Street, Long Island City, NY 11101

Re: **Supplemental Remedial Investigation Work Plan** 

1045-1065 Atlantic Avenue, Brooklyn, New York

BCP # C224305

Dear Mr. Wong,

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. (PWGC) has prepared this Supplemental Remedial Investigation Work Plan (SRIWP) to collect additional soil, groundwater, and soil vapor samples at the above referenced site. A Site Location Map is included as Figure 1.

A Remedial Investigation Report (RIR) was submitted to the New York State Department of Environmental Conservation (NSYDEC) March 2022. The remedial investigation identified a potential hotspot of soil impact in the northwest section of the subject property. This area contained four main compounds of concern (COCs) that were also observed in groundwater samples (collected from 70 to 72 feet below grade): cadmium, chromium (hexavalent and trivalent), tetrachloroethene (PCE), and trichloroethene (TCE). Soil vapor samples were collected in this area at a depth of approximately 10 feet and contained elevated concentrations of PCE and TCE. In addition, there was an elevated concentration of TCE in a soil sample (SB014) collected from 10 to 12 feet below grade that exceeded the Protection of Groundwater Soil Cleanup Objectives (SCOs).

The purpose of this additional sampling is:

- Delineate the COC impacts to the soil and soil vapor within the hotspot area in the northwest section of the subject property, as well as in the western basement setback.
- Reconfirm groundwater results and re-evaluate potential migration of up-gradient contaminants.
- Evaluate soil vapor concentrations at the proposed depth of the new building's foundation (21 feet below grade). If deemed necessary, this information will also be used to evaluate the potential need and/or design considerations of a soil vapor extraction (SVE) system or a sub-slab depressurization system (SSDS).

This SRIWP will follow the same procedures as the August 2021 Remedial Investigation Work Plan (RIWP), approved by the New York State Department of Environmental Conservation (NSYDEC) on August 13, 2021, contained, including the use of a Community Air Monitoring Plan, Quality Assurance Project Plan, and Health and Safety Plan.

Fifteen additional soil borings, six additional soil vapor samples, and one monitoring well are proposed to be installed. The table below summarizes the proposed sampling locations. A draft figure of the proposed additional sampling locations is included as Figure 2.

P.W. GROSSER CONSULTING. INC. P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, P.C. PWGROSSER.COM BOHEMIA, NY 11716

PHONE: 631.589.6353 630 JOHNSON AVENUE, STE 7



Based on the existing analytical data, analysis of these additional samples will be limited based on the COCs. Therefore, these new samples will be analyzed for one or more of the following, further detailed in the table below:

- TCL VOCs by USEPA method 8260, collected with terracore devices or equivalent.
- TCL SVOCs by USEPA method 8270.
- Trivalent & Hexavalent Chromium by USEPA method 7196.
- TAL Metals by USEPA method 6010/7471.

Soil vapor samples will be collected using batch certified 6.0-liter SUMMA vacuum canisters fitted with eight-hour control regulators with a flow rate of less than 0.2 liters/minute. Soil vapor samples will be analyzed for VOCs by USEPA Method TO-15.

Sample ID	Sample Depth (feet)	Sample Analyses					
SB046	2 to 4, 10 to 12, 15 to 17	VOCs, SVOCs, TAL Metals, Tri and Hex Chromium					
SB047	4 to 6, 8 to 10	VOCs, SVOCs, TAL Metals, Tri and Hex Chromium					
SB048	2 to 4, 6 to 8, 12 to 14	VOCs, SVOCs, TAL Metals, Tri and Hex Chromium					
SB049	12 to 14, 14 to 16	VOCs, SVOCs, TAL Metals, Tri and Hex Chromium					
SB050	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SB051	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SB052	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SB053	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SB054	21 to 23, 28 to 30	VOCs, TAL Metals, Tri and Hex Chromium					
SB055	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SB056	21 to 23, 28 to 30	VOCs, TAL Metals, Tri and Hex Chromium					
SB057	21 to 23, 28 to 30	VOCs, TAL Metals, Tri and Hex Chromium					
SB058	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SB059	21 to 23, 28 to 30	VOCs, TAL Metals, Tri and Hex Chromium					
SB060	21 to 23	VOCs, TAL Metals, Tri and Hex Chromium					
SV011	21	VOCs					
SV012	21	VOCs					
SV013	21	VOCs					
SV014	21	VOCs					
SV015	21	VOCs					
SV016	21	VOCs					
SV017	21	VOCs					
SV018	21	VOCs					
MW014	78 (bottom of well)	VOCs, TAL Metals (total and dissolved), Tri and Hex Chromium					

If evidence of contamination is observed at the bottom of a soil boring, that boring may be advanced further to delineate the extent of contamination.

It is anticipated that monitoring well MW014 will be installed following building demolition. Following installation of MW014, the entire monitoring well network will be resampled for the same parameters as MW014 is proposed for in the above table.

P.W. GROSSER CONSULTING, INC.

PHONE: 631.589.6353 630 JOHNSON AVENUE, STE 7 P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, P.C. PWGROSSER.COM BOHEMIA, NY 11716

LONG ISLAND • MANHATTAN • SARATOGA SPRINGS • SYRACUSE • SHELTON



The QA/QC sampling will follow the same procedures and frequency as the August 2021 RIWP. Assuming that the 36 above listed samples are the only samples collected, it is assumed that the following QA/QC samples will be collected:

- Blind Duplicates one per 20 soil samples (2 blind duplicate proposed).
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) one per 20 soil samples (2 MS/MSD proposed).
- Equipment Blank one per day (4 samples proposed).
- Trip Blank one per day (4 samples proposed).

Daily reports will be submitted for the additional investigation effort and following receipt of analytical results, a Supplemental Remedial Investigation Report will be submitted to NYSDEC for review.

A schedule to implement the SRI is included as Attachment A. A certification page is included as Attachment B.

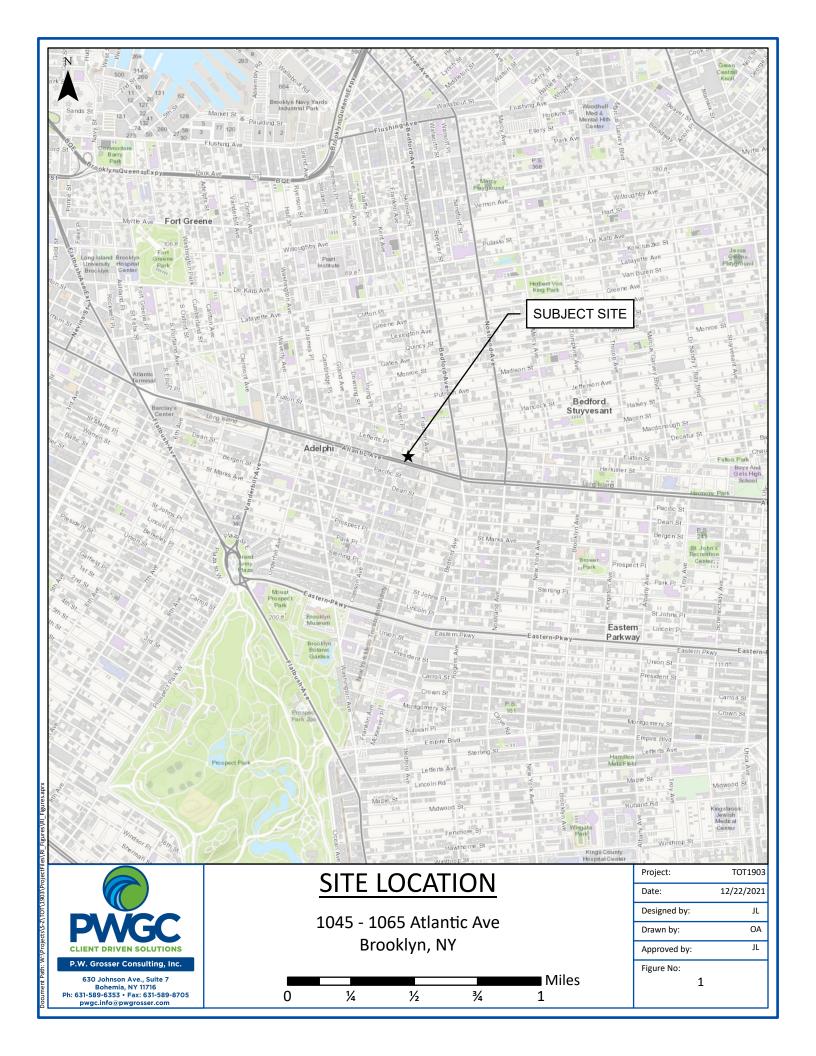
Sincerely,

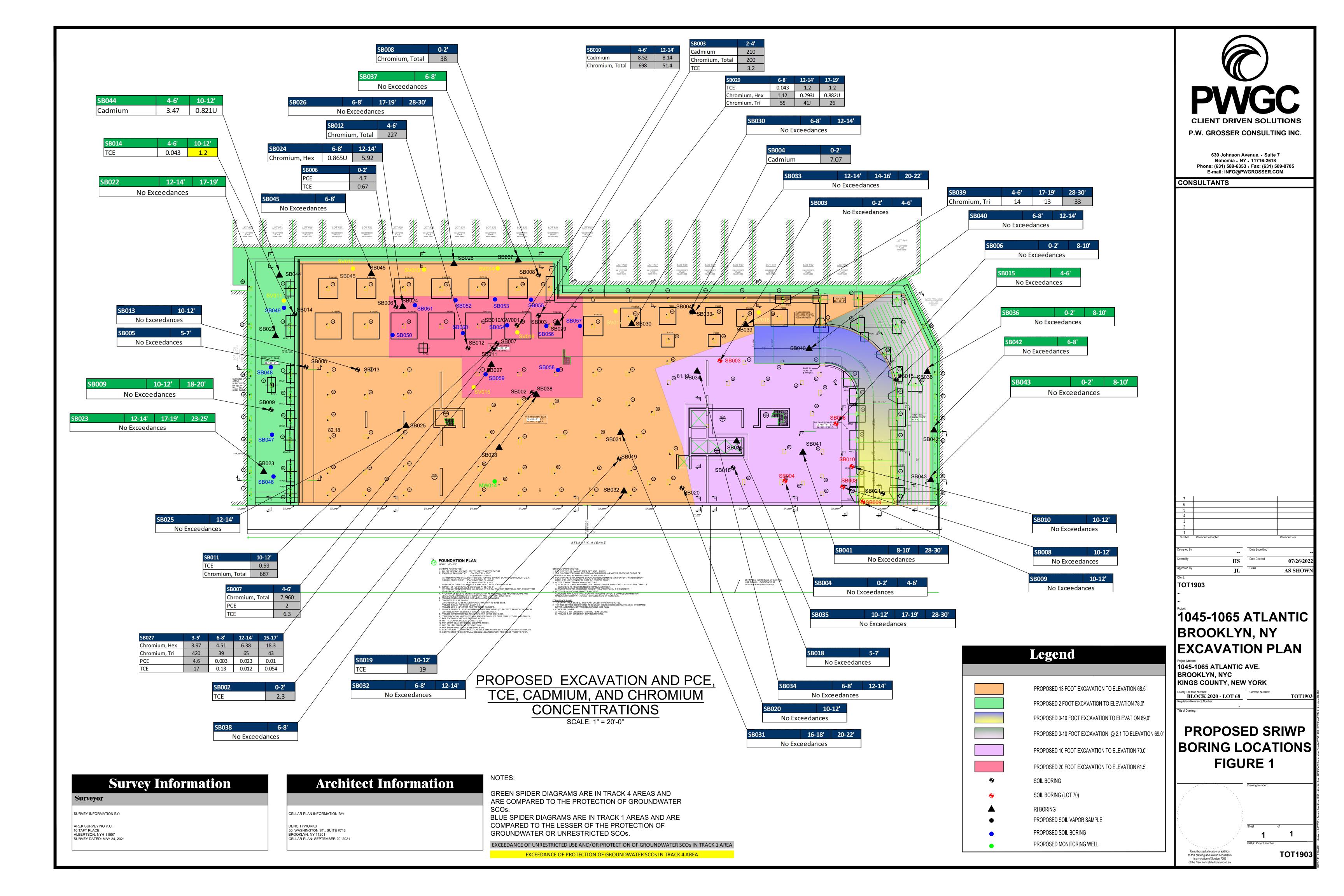
P.W. Grosser Consulting

Jennifer Lewis, PG Vice President



# **FIGURES**







# **ATTACHMENT A**

### **SRI Project Schedule**

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Task																	
NYSDEC Approval of RIWP																	i
Field Activities (Soil and Soil Vapor)																	I
Laboratory Analysis (Soil and Soil Vapor)																	I
Preparation of Partial SRI Report																	I
Submission of Partial, Draft SRI Report to NYSDEC																	
Building Demolition																	1
Field Activities (Groundwater)																	I
Laboratory Analysis (Groundwater)																	1
Data Validation																	1
Preparation of SRI Report																	
Submission of Full, Draft SRI Report to NYSDEC																	ii
NYSDEC Internal Review of SRI Report																	



# **ATTACHMENT B**



#### CERTIFICATION

I, Jennifer Lewis, PG, certify that I am currently a Qualified Environmental Professional (QEP) as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and that this Supplemental Remedial Investigation Work Plan (RIWP) was prepared in accordance with applicable statutes and regulations and in substantial conformance with the New York State Department of Environmental Conservation's (NYSDEC's) Division of Environmental Remediation's (DER's) Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that the information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.