LANGAN

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July 17, 2024

Steven Scharf
Project Manager, Remediation Section A
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Re: Non-Aqueous Phase Liquid Investigation Work Plan Addendum
145-165 Wolcott Street
Brooklyn, New York
NYSDEC BCP Site No. C224256
Langan Project No.: 170562203

Dear Mr. Scharf:

On behalf of NYM 145 Wolcott, LLC (the "Volunteer"), we request approval from the New York State Department of Environmental Conservation (NYSDEC) to conduct supplemental soil and groundwater sampling at 145-165 Wolcott Street ("site") in Brooklyn, New York (Figure 1). The proposed sampling plan is an addendum to the NYSDEC-approved May 22, 2024 Non-Aqueous Phase Liquid (NAPL) Investigation Work Plan. The sampling objective is to further evaluate for the potential presence of dense non-aqueous phase liquid (DNAPL) on the northern and central portion of the site. This supplemental sampling plan is provided in response to a request by NYSDEC during a July 17, 2024 telephone conversation with Langan.

NAPL Investigation Work Plan Implementation Status

The NAPL Investigation Work Plan proposed the advancement of six soil borings to a minimum depth of 85 feet below grade surface (bgs) in the northern and central parts of the site to evaluate potential DNAPL impacts. The work plan proposed the installation of up to three monitoring wells, pending observation of grossly-impacted material in the soil borings.

As part of work plan implementation, Langan advanced six borings (SBD01 through SBD06) to depths between 85 and 100 feet bgs between June 3 and June 12, 2024. Evidence of potential DNAPL (i.e., staining, odors, or photoionization [PID] readings above background) was not observed in the borings. Langan summarized the investigation findings in Daily Field Reports provided to NYSDEC.

During subsequent e-mail and telephone correspondence, NYSDEC stated that confirmatory soil and groundwater sampling would be required for DNAPL evaluation and conveyed that soil and groundwater samples should be collected from three additional soil borings and corresponding monitoring wells. This addendum describes the NYSDEC-requested additional scope.

Implementation of this sampling plan will adhere to the same protocols and procedures presented in the May 2024 NAPL Investigation Work Plan. The scope, findings, and analytical results of the supplemental sampling will be presented in the NAPL Evaluation Report.

Soil and Groundwater Sampling Plan

Soil Boring Advancement

An environmental driller will advance three soil borings (SBD07, SBD08, and SBD09) in the northern and central parts of the site to evaluate for potential DNAPL and to install deep groundwater monitoring wells. The borings will be advanced with a track-mounted sonic drill rig. Langan field personnel will document the work and screen the soil samples for environmental impacts. Soil will be screened continuously to the boring termination depth for organic vapors with a photoionization detector (PID) equipped with a 10.6 electron volt bulb, and for visual and olfactory indications of environmental impacts (i.e., staining and odors). Soil descriptions will be recorded in a field log.

The borings will be advanced to a depth of 90 feet bgs; however, if evidence of DNAPL is observed at a shallower depth, the boring will be terminated about 5 feet below the DNAPL-impacted interval. Potential DNAPL will be considered vertically delineated once a minimum of 5 feet of soil without DNAPL-related impacts is observed. Non-disposable, down-hole drilling equipment and sampling apparatus will be decontaminated between locations with Alconox (or similar) and water, as needed. The proposed soil boring locations are shown on Figure 2.

Soil Sampling

Soil samples will be collected from each soil boring at depth intervals that exhibit indications of DNAPL (i.e., smearing, sheen, and tar-like odors) and submitted for laboratory analysis. In the absence of indications of DNAPL, three soil samples will be collected from each boring from the following depth intervals: 65 to 70 feet; 75 to 80 feet; and 85 to 90 feet bgs. These correspond to the depth intervals that exhibited the highest volatile organic compound (VOC) and semivolatile organic compound (SVOC) concentrations during previous investigations and also include the deepest soil boring interval. Soil samples will be submitted for laboratory analysis of Target Compound List (TCL) volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

Monitoring Well Installation

The soil borings will be converted into three permanent groundwater monitoring wells (MW-01D, MW-02D, and MW-03D). The monitoring wells will be constructed, developed, and surveyed as described in the NAPL Investigation Work Plan, and will be screened at the depth of observed impacts with a 5-foot sump below the screen, or in the absence of apparent impacts, at a depth of 80 to 90 feet bgs. The sump will be installed at least 5 feet below the observed impacts or keyed within a clay layer, if present. The proposed well locations are shown on Figure 2.

DNAPL Evaluation

Following the initial well gauging, one sample of DNAPL, if encountered, will be collected and submitted to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) approved laboratory for analysis for petroleum hydrocarbon identification by gas chromatography with flame ionization detector (GC/FID) by SW-846 Method 8015D(M). DNAPL recharge/transmissivity will then be evaluated via a DNAPL drawdown test, if DNAPL is encountered, one week after well installation. During the drawdown test, DNAPL will be recovered from the bottom of a deep well by pumping, and DNAPL thickness will be measured on a daily basis to document the recovery rate until the DNAPL level stabilizes. If DNAPL is not observed in the deep wells following installation, Langan will conduct daily gauging of the wells for four days following installation and collect a DNAPL sample for laboratory analysis as summarized above, if DNAPL is observed.

The results of periodic gauging and product recovery will indicate the rate of DNAPL recharge and recoverability, which will inform the selected remedial alternative in the RAWP.

Groundwater Sampling

One groundwater sample will be collected from each of the three groundwater monitoring wells (MW-01D, MW-02D, and MW-03D). Prior to sampling, each well will be gauged with an interface probe to record a depth to groundwater and the thickness of DNAPL, if present. If DNAPL is identified in a well, a groundwater sample will not be collected. The wells will be purged and sampled as described in the NAPL Investigation Work Plan. Groundwater samples will be analyzed for TCL VOCs and SVOCs.

Community Air Monitoring Plan (CAMP) and Reporting

Community air monitoring during all ground-intrusive activities and reporting will conform with NAPL Investigation Work Plan.

Schedule

Langan will implement this NAPL Investigation Work Plan Addendum on July 23, 2024 and anticipates completing the borings and monitoring wells within 3 drilling days. Well gauging and sampling will occur 7 days following well installation. A NAPL Evaluation Report will be submitted to NYSDEC in August 2024.

Closing

We look forward to your response and proceeding with the investigation. Please contact the undersigned with questions.

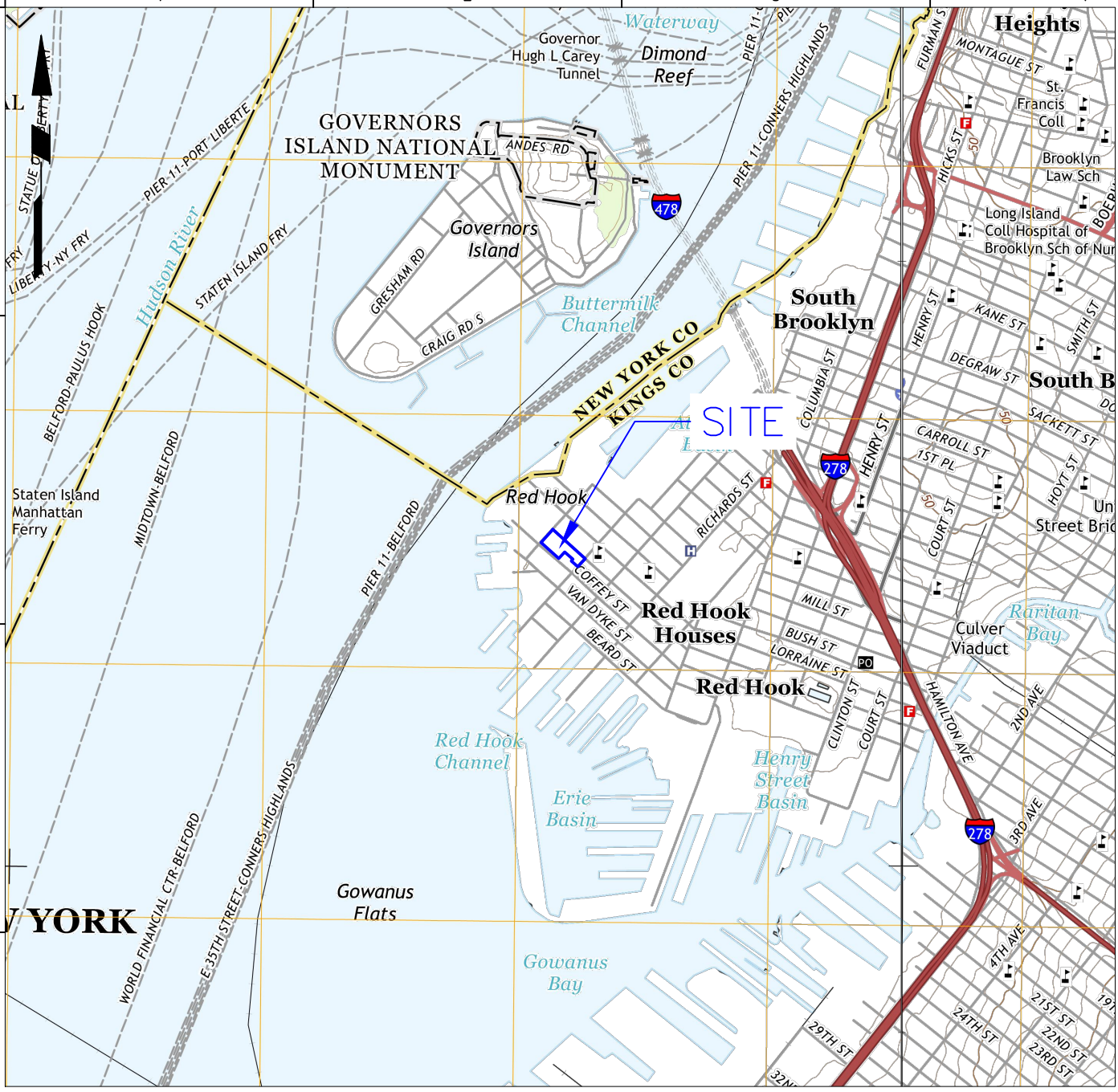
Sincerely,
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

Stuart Knoop, P.G.
Senior Project Manager

Gerald F. Nicholls, P.E. CHMM
Associate Principal

Figure 1 – Site Location Map
Figure 2 – Proposal Soil Boring and Monitoring Well Location Map

cc: S. Yu (NYM 145 Wolcott, LLC); N. Palumbo (Langan)



LEGEND

APPROXIMATE SITE BOUNDARY

NOTES

1. BASE MAP IS REFERENCED FROM THE UNITED STATES GEOLOGICAL SURVEY 7.5 MINUTE SERIES QUADRANGLE MAPS OF BROOKLYN, NEW YORK AND JERSEY CITY, NEW JERSEY, NEW YORK, DATED 2016 AND 2014, RESPECTIVELY.

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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, LAND SURVEYOR OR GEOLOGIST, TO ALTER THIS ITEM IN ANY WAY.

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Project

145-165 WOLCOTT STREET

BLOCK No. 574 LOT Nos. 1, 23, & 24
BROOKLYN
KINGS NEW YORK

Figure Title

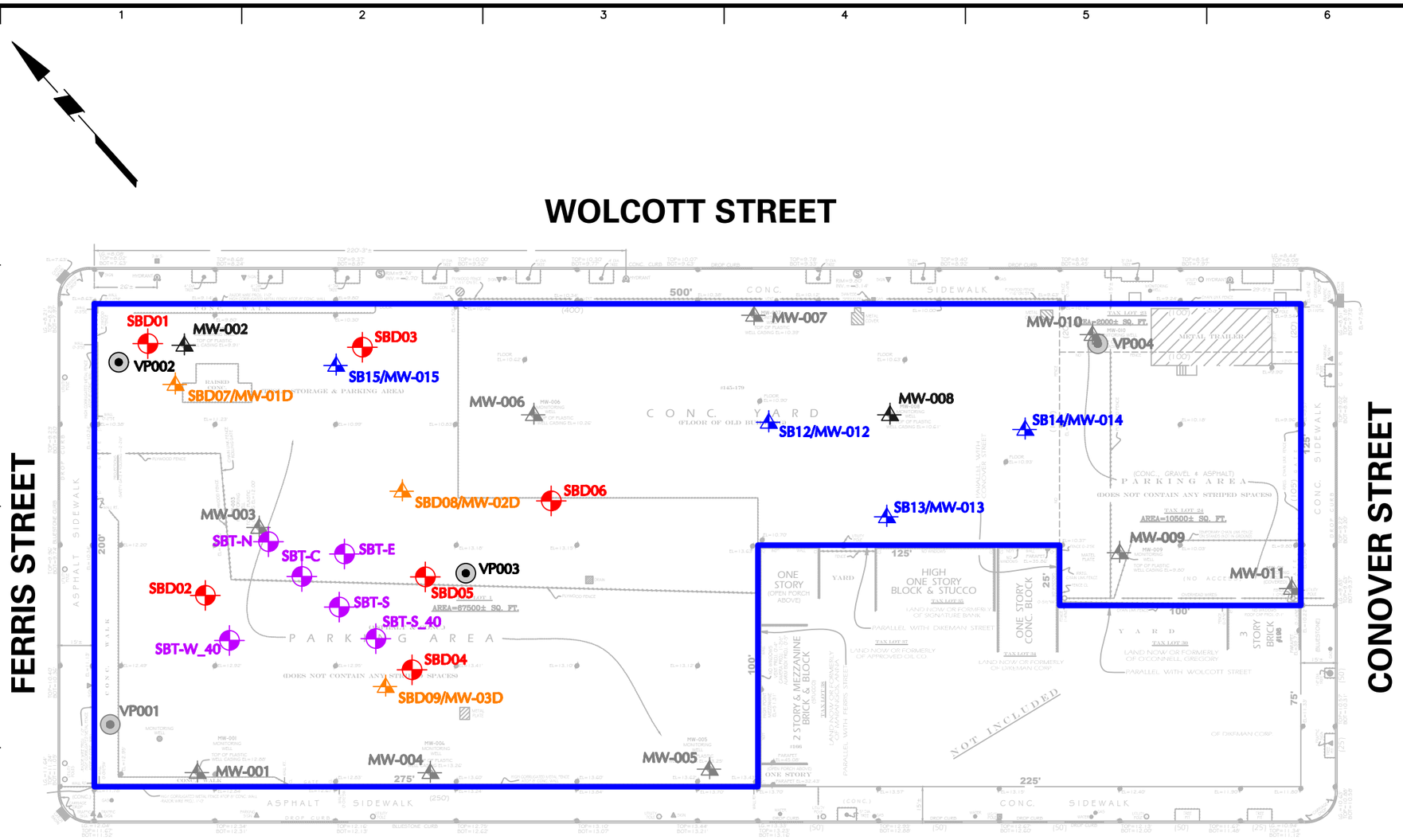
SITE LOCATION MAP

Project No.	170562203
Date	3/7/2024
Drawn By	LG
Checked By	NP

Figure No. **1**

Sheet 1 of 2

Filename: \\langan.com\data\NYC\data2\170562203\Project Data\CAD-Environmental\Figure 1 - Site Location Map.dwg Date: 3/7/2024 Time: 18:39 User: lgrose Style Table: Langan.stb Layout: ANSIA-BP



LEGEND

- SITE BOUNDARY
- MW-001 — MONITORING WELL LOCATION (PHASE I RI)
- MW-002 — MONITORING WELL LOCATION WITH OBSERVED LNAPL (PHASE II RI)
- VP001 — APPROXIMATE TEMPORARY VERTICAL PROFILE WELL LOCATION (PHASE I RI)
- VP001 — APPROXIMATE TEMPORARY VERTICAL PROFILE WELL LOCATION WITH VOC AND SVOC IMPACTS BELOW 60 FEET BGS (PHASE I RI)
- NNE — APPROXIMATE SOIL BORING LOCATION (2015 ESA, VOLUMETRIC)
- LB-10 — APPROXIMATE SHALLOW GEOTECHNICAL BORING (LANGAN, 2024)
- LB-11 — APPROXIMATE DEEP GEOTECHNICAL BORING (LANGAN, 2024)
- SBD01 — DNAPL DELINEATION SOIL BORING LOCATION
- SBT-S_40 — SHALLOW TAR-LIKE MATERIAL DELINEATION SOIL BORING LOCATION
- SB07/MW-07 — LNAPL MONITORING WELL LOCATION
- SBD07/MW-01D — PROPOSED DNAPL DELINEATION SOIL BORING AND DEEP MONITORING WELL LOCATION

NOTES

1. BASE MAP REFERENCED FROM SEPTEMBER 2023 ALTA SURVEY PREPARED BY BORO LAND SURVEYING, P.C.
2. PREVIOUS MONITORING WELL LOCATIONS AND TEMPORARY VERTICAL PROFILE WELL LOCATIONS REFERENCED FROM FIGURE 6B OF THE 31 MAY 2022 DRAFT REMEDIAL ACTION WORK PLAN, PREPARED BY LANGAN.
3. BGS - BELOW GRADE SURFACE
4. DNAPL - DENSE NON-AQUEOUS PHASE LIQUID
5. LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID
6. RI - REMEDIAL INVESTIGATION
7. VOC - VOLATILE ORGANIC COMPOUNDS
8. SVOC - SEMI VOLATILE ORGANIC COMPOUNDS
9. ESA - ENVIRONMENTAL SITE ASSESSMENT

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SCALE: 1 INCH = 50 FEET

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Project	145-165 WOLCOTT STREET
	BLOCK No. 574 LOT Nos. 1, 23, & 24 BROOKLYN
	KINGS NEW YORK
Figure Title	PROPOSED SOIL BORING / MONITORING WELL LOCATION PLAN
Project No.	170562203
Date	7/17/2024
Drawn By	NP
Checked By	SK
Figure No.	2
Sheet	2 of 2

Filename: C:\Users\npalumbo\OneDrive - Langan Engineering And Environmental Services, Inc\Desktop\Figure 2 - Soil Boring and Monitoring Well Location Plan.dwg Date: 7/17/2024 Time: 13:44 User: npalumbo Style Table: Langan.stb Layout: ANSIB-BL