LANGAN SITE OBSERVATION REPORT – Pile Installation Oversight – Day 18

PROJECT No.:	170390001	**CLIENT:**		**DATE:**	Friday, 6 October 2023
PROJECT:	141 3rd Street		Third Street Owner LLC and 155 Third St., LLC	**WEATHER:**	Sunny, 66-72 ^{0}F Wind: W @ 1.3–7.0 mph
LOCATION:	Brooklyn, New York			**TIME:**	7:00 a.m. – 4:15 p.m.
BCP SITE ID:	C224336				

EQUIPMENT:
Soilmec SR-75 ADV Hydraulic Rotary Rig
Liebherr LB36 410 Rotary Drilling Rig
Junttan PM 25H Pile Driving Rig
FES FR180X-IV Rotary Drill Rig
Specto Technology Aeroqual Air Monitoring Stations (2)
Hyundai HX520L Excavator
Kotmasu PC400 Excavator
CAT 966G Excavator

PRESENT AT SITE:
Langan: Andrew Ashley, Ali Reach
Monadnock Construction, Inc. (Construction Management):
Jim Spence – Superintendent
New Leaf Development (Pile Installation Contractor):
Jose Gomez – Foreman
WSP (NYSDEC Consultant): Christopher Disclafani

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) was present to oversee implementation of soil handling procedures and document installation of foundation displacement piles in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Excavation Work Plan, dated 17 February 2022, the associated Change of Use Notification, dated 09 August 2023, and the Treatability Study Work Plan for In-Situ Geochemical Stabilization (ISGS) and In-Situ Stabilization/Solidification (ISS), dated 28 September 2023.

Site Activities

- Langan performed groundwater sampling for the ISGS and ISS treatability studies. See sampling section for details.
    - All non-disposable sampling equipment was decontaminated using Alconox and water between each sampling location. Decontamination fluids and purged groundwater were captured and containerized into a labeled 55-gallon staged on-site, pending disposal at an off-site facility.
- New Leaf imported one truckload (approximately 23 tons) of ASTM #3 virgin stone (1.5-inch) and stockpiled the material in the central part of the site. The ASTM #3 virgin stone (1.5-inch) will be used for backfill to facilitate the installation of the pile load testing apparatus. See material tracking section for details.
- A representative from WSP conducted a site visit on behalf of the NYSDEC. No adverse conditions were noted as a result of the site visit and no further action was required.

Material Tracking

- One 55-gallon drum containing decontamination fluid and purged groundwater is staged in the eastern part of the site.
- New Leaf imported one truckload (approximately 23 tons) of ASTM #3 virgin stone (1.5-inch) from the Tilcon-Haverstraw quarry in Haverstraw, NY via Inwood Material Terminal (IMT).
- No material was exported.

Material Import Summary				
Facility	**NYSDEC Approved Quantity**	**Imported**	**Today**	**Total**
Tilcon - Haverstraw Haverstraw, NY ASTM #3 Virgin Stone (1.5-Inch)	200 CY (280 tons)	**No. Loads**	1	**3**
		Quantity (tons)	23	**70**

Sampling

- Langan collected the following groundwater samples for the ISGS and ISS treatability studies:
    - MW15-SW1_100623
        - The bulk groundwater sample was shipped to ReSolution Partners, LLC (ReS Partners), a testing laboratory in Madison, Wisconsin for use in the ISGS treatability study.
    - MW13-W1_100623 and DUP01_100623
        - Baseline groundwater samples were submitted to Alpha Analytical Laboratories, a New York State Department of Health (NYSDOH) Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols for Part 375/Target Compound List (TCL) volatile organic compounds (VOC), semivolatile organic compounds (SVOC), total and dissolved Target Analyte List (TAL) metals, total petroleum hydrocarbons (TPH) diesel range organics (DRO) and oil range organics (ORO), and total organic carbon (TOC) analysis.
        - Bulk groundwater samples were shipped to Langan's Treatability Facility at the New Jersey Institute of Technology (NJIT), located in Newark, New Jersey for use in the ISS treatability study.

Community Air Monitoring Plan (CAMP) Activities

- Langan implemented the CAMP at upwind and downwind locations to monitor VOC and particulate matter (PM10). 15-minute-average concentrations of VOCs and PM10 were not recorded above the action levels. No fugitive dust and odors associated with intrusive activities were observed migrating off site.

Particulate Monitoring ($\mu g/m^3$)		Organic Vapor Monitoring (ppm)	
Daily Background	14.3	Daily Background	0.00
Minimum 15-min Average	0.0	Minimum 15-min Average	0.00
Maximum 15-min Average	0.0	Maximum 15-min Average	0.01

$\mu g/m^3$= micrograms per cubic meter ppm= parts per million

Anticipated Activities

- Langan will collect soil samples for the ISGS and ISS treatability studies.
- New Leaf will continue setting up for pile load testing.

SITE PHOTOGRAPHS:



Photo 1: General site view (facing north).

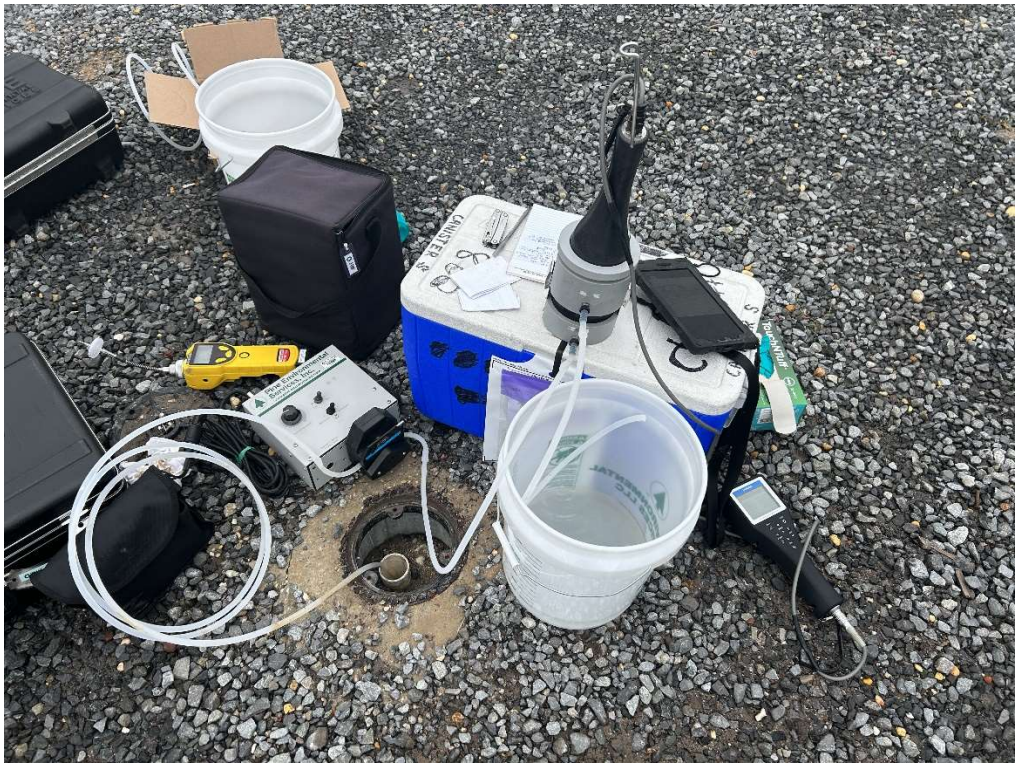
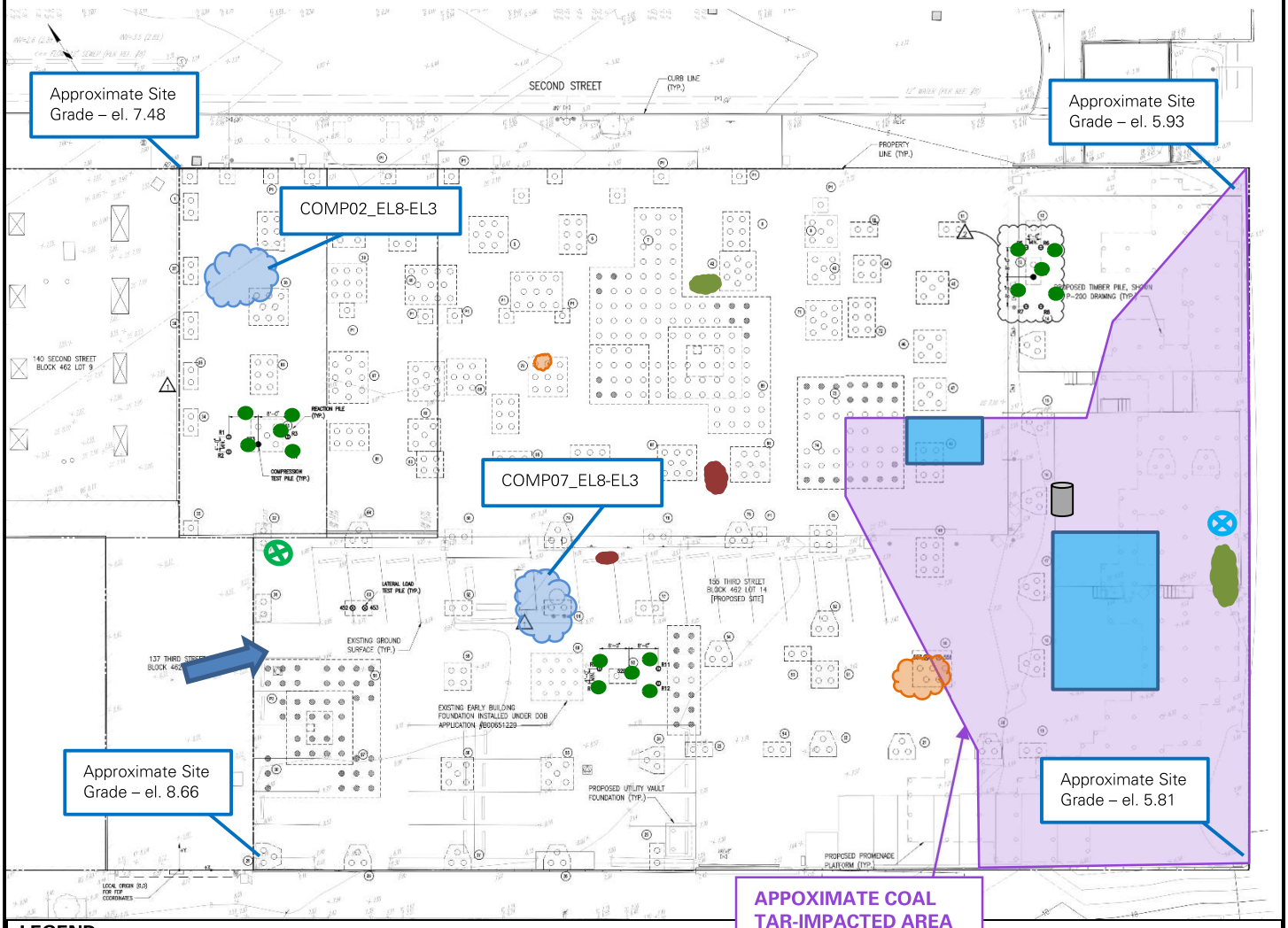


Photo 2: Groundwater purge setup at monitoring well MW15-SW1.

Site Map:



LEGEND

- Approximate Location of Displacement Pile Advanced Today
- Approximate Location of Displacement Pile Advanced Previously
- Approximate Location of Displacement Pile Load Testing
- Approximate Work Area
- Approximate location of upwind CAMP Station
- Approximate location of downwind CAMP Station
- Approximate location of Soil Stockpile
- Approximate location of C&D Debris Stockpile
- Approximate location of Timber Stockpile
- Approximate location of ASTM #3 Virgin Stone (1.5-Inch) Stockpile
- Prevailing Wind Direction
- Drum Location

Basemap is referenced from Drawing FO-099.01, titled "Deep Foundations Plans and Details" prepared by Dattner Architects D.P.C, dated 12/27/2022.

Elevations (el.) are in feet and referenced to the North American Vertical Datum of 1988 (NAVD88).

Drawing Shown Not to Scale

LANGAN	Air Monitoring Report	170390002 - 141 3rd Street	
		Report Period	
		From:	10/6/2023 06:00
		To:	10/6/2023 18:00
		PM10 Action Level:	150.0 µg/m³
		VOC Action Level:	5.00 ppm

Daily Environmental Summary	Windspeed (mph)	Prevailing wind direction
10/6/2023	1.3-7	W

Daily Monitoring Summary	PM10 (µg/m³)	Time	VOC (ppm)	Time
Min Contribution (15 min avg.) - 10/6/2023	0.0	07:33	0.00	07:33
Max Contribution (15 min avg.) - 10/6/2023	0.0	07:33	0.01	07:50

