

March 8, 2021

Mr. Charlie Stewart
UNP Site A Developer LLC
c/o St. Nicks Alliance
2 Kingsland Avenue
Brooklyn, New York 11211

Re: BCP Eligibility Soil Sampling Summary
Broadway Triangle Parcel A1 – Bartlett Crossing
663 to 667 Flushing Avenue (Block 2272, Lots 49, 51, 52, 53, 108)
Brooklyn, New York 11206

Dear Mr. Stewart:

Roux Environmental Engineering and Geology, D.P.C., (Roux) has prepared this letter to summarize the results of soil sampling activities completed on Lots 51 and 52 of the properties located at 663 to 667 Flushing Avenue (Block 2272, Lots 49, 51, 52, 53, 108) aka Parcel A1 in Brooklyn, New York (Site, Figure 1). On December 14, 2020, Roux performed a soil investigation to further characterize shallow soil conditions on Lots 51 and 52 within Parcel A1 to further evaluate the eligibility of the Site for acceptance into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP).

Site Background

The planned redevelopment of the Site entails the construction of affordable housing, community space, and retail space. In preparation for this investigation, Roux reviewed a Phase I Environmental Site Assessment (ESA) dated November 19, 2019 and Remedial Investigation Report (RIR) dated June 2020 prepared for Parcel A1. Based upon review of the aforementioned reports, contaminants were found to be present on Lots 49, 53, and 108 within Parcel A1 at concentrations in exceedance of the Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs), which would be the applicable environmental regulatory standard for the redevelopment of the Site.

Soil Sampling Investigation Methodology

Two borings were completed to a target depth of five feet below land surface (ft bls) using soft-dig techniques (i.e., air-knife and hand auger) to assess shallow soil conditions. One soil boring was advanced on each of the Lots 51 and 52 within Parcel A1; borings were identified as RXA-5101 and RXA-5201, respectively. Soil from each location was visually inspected for evidence of impacts and screened for the presence of organic vapors in the field using a photoionization detector (PID). Soil lithology was recorded according to the Unified Soils Classification System (USCS). One soil sample from each boring was collected for laboratory analysis from the two-foot interval exhibiting the greatest evidence of impacts (e.g., elevated PID detections, odors, or staining) or signs of urban fill. If no evidence of impacts was observed during soil boring advancement, the soil sample was obtained from the 0-2 ft bls interval. Quality assurance/quality control samples (i.e., field blank and duplicate) were also collected during sampling activities.

Two soil samples were analyzed for the following parameters based on the contamination encountered during the previous investigation:

- Target Compound List (TCL) semivolatile organic compounds (SVOCs) via United States Environmental Protection Agency (USEPA) Method 8270E; and
- Target Analyte List (TAL) metals including mercury via USEPA Method 6020B/7471B.

All samples were submitted to Eurofins TestAmerica of Edison, New Jersey, a New York State Department of Health (NYSDOH) Environmental Laboratory Approved Program (ELAP)-certified laboratory for analysis in an ice-filled cooler under chain of custody procedures.

Soil Results

Generally, the soil lithology consisted of brown sand with varying amounts of silt and urban fill material (e.g. brick). There was no evidence of odors or staining in any of the soil samples. No utilities or underground storage tanks (USTs) were encountered during soil sampling activities. The soil boring logs are included as Attachment 1.

Laboratory analytical data for soil was compared to NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs). Each sample contained at least 12 analytes at concentrations that exceeded UUSCOs and eight analytes that exceeded RRSCOs.

Soil samples RXA-5101(0-2 ft bls) and RXA-5201(0-2 ft bls) exceeded the RRSCOs for SVOCs, specifically for the polycyclic aromatic hydrocarbons (PAHs) benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno(1,2,3-c,d)pyrene.

Both soil samples also exceeded the RRSCOs for metals as follows:

- RXA-5101(0-2 ft bls) exceeded the RRSCOs for barium and lead; and
- RXA-5201(0-2 ft bls) exceeded the RRSCOs for arsenic, barium, lead, and mercury.

The soil sample laboratory analytical results are summarized on Tables 1 and 2. The laboratory report is included as Attachment 2. Soil boring locations and exceedances of UUSCOs and RRSCOs are shown on Figure 2.

Conclusions and Recommendations

Shallow soil throughout the Site is comprised of sand, silt, and urban fill material consistent with the past use and prior demolition at the Site. Soil samples collected on Lots 51 and 52 contained concentrations of PAHs and metals that exceeded applicable standards for the planned redevelopment of the Site as multifamily residential buildings. The PAHs and metals in exceedance of RRSCOs are consistent with historic Site activities and urban fill.

Based on the results of this soil sampling investigation, as well as the information contained in the previous RIR, PAHs and metals are present in soils on all lots within Parcel A1 at concentrations in exceedance of the threshold for eligibility in the BCP given the proposed residential redevelopment plans. Roux recommends that UNP Site A Developer LLC incorporate this data into the BCP application to supplement the existing data and show that all tax lots included in Parcel A meet the eligibility requirements for enrollment in the BCP.

Should you have any questions regarding these findings or recommendations, do not hesitate to contact the undersigned at (631) 232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Jessica L. Taylor, P.G.
Principal Hydrogeologist

Attachments