September 24, 2015

Mr. John Petrocelli
470 Manhattan Ave LLC
c/o Petrocelli Contracting, Inc.
100 Comac Street
Ronkonkoma, New York 11779

Re: Environmental Summary Report
   470 Manhattan Avenue, Brooklyn, New York
   AKRF Project Number 12306

Dear Mr. Petrocelli:

AKRF, Inc. is pleased to submit this Environmental Site Summary Report for the property located at 470 Manhattan Avenue in Brooklyn, New York, herein referred to as “the Property”. The Property is located within the Greenpoint neighborhood of Brooklyn and is legally defined as Block 2714, Lots 1, 30, 32, and 33. This report includes the findings of a reconnaissance of the Property, an evaluation of readily available historical information, and selected environmental databases and electronic records. This Environmental Summary Report is meant to supplement two previous Phase I ESAs performed by others for portions of the Property prior to conducting a Remedial Investigation (RI). This report is based on the findings of a reconnaissance of the Property, an evaluation of historical Sanborn insurance maps, and selected environmental databases.

The Property is bounded by residential buildings to the north and east, Newton Street followed by residential buildings to the south, and Eckford Street followed by a vacant building and Manhattan Avenue followed by John Ericsson Middle School and the Ericsson Playground to the west. The Property is relatively level and lies at an elevation of approximately 16 feet above sea level. Groundwater is expected to be encountered between approximately 10 and 15 feet below grade.

Currently, the Property is developed with one three-story residential building with a cellar, one one-story commercial building, one building undergoing demolition, two vacant lots, and an exterior concrete-paved courtyard. The proposed development project consists of the demolition of the remaining Property buildings and the construction of a seven-story building with mechanical space, amenities, and a lobby on the first floor, and 135 residential units above. The 142,115-square foot proposed building will occupy the southern and western portion of the Property with 57 tenant parking spaces on the northern and eastern portions of the Property. Excavation is expected to extend to approximately 3 to 4 feet below grade at the location of the proposed building and up to 8 feet in the central portion of the Property for the installation of an elevator pit. The northern and eastern portions of the Property will be graded for a parking lot.
Proposed development plans are included as Attachment A.

Property Reconnaissance

On September 21, 2015 Amy Jordan of AKRF conducted a reconnaissance of the Property. Neighboring properties were also viewed, but only from public rights-of-way. Mr. Richard Geckler of J. Petrocelli Contracting, Inc. accompanied AKRF personnel and answered pertinent questions. At the time of inspection, the weather was sunny and approximately 75 °F and the visibility was good. The Property was inspected for the presence of stained surfaces and soil, drums, leaking pipes, transformers, and other evidence of hazardous material usage and storage. The Property inspection included an inventory of any active or inactive storage tanks, and an inventory of stored materials. The Property was illuminated by natural sunlight, with the exception of the partial cellar on Lot 30, which was inspecting using a flashlight. The visibility of portions of the ground was inhibited due to construction and demolition (C & D) debris and demolition equipment. Lot 1 was inaccessible for inspection and was viewed from the sidewalk along Eckford Street.

At the time of reconnaissance, Lot 1 consisted of a three-story residential building with a partial cellar, a one-story commercial building, and an exterior concrete-paved courtyard. Lot 1 was observed from the sidewalk on Eckford Street, as no access was provided to this portion of the Property. The three-story residential building (18 Eckford Street) could be accessed via doors along Eckford Street and through the concrete-paved courtyard along the southern side of the building. Exterior built-up materials consisted of painted stucco siding, observed to be in good condition. A vent pipe and a fill port were observed on the southeastern portion of the building along the Eckford Street sidewalk, which were labeled “No. 2” (fuel oil). Minor staining was observed on the building wall surrounding the fill port.

The one-story commercial building on Lot 1 (16 Eckford Street) consisted of a one-story building occupied by Quick Fitness. The building could be accessed via doors along Eckford Street. Exterior built-up materials consisted of unpainted brick, observed to be in good condition. The exterior portion of Lot 1 consisted of a concrete-paved courtyard between the residential and commercial buildings, accessed via a metal roll-up door along Eckford Street. Roll-off dumpsters containing apparent residential garbage and potted plantings were observed in the courtyard.

Lots 30, 32, and 33 were fenced and locked and were accessed via gates on Eckford and Newton Streets. Lot 30 consisted of a partially demolished brick building with a partial cellar accessed via stairs on the northern portion of the lot. The cellar measured approximately 20 feet by 15 feet. A floor drain with an unknown discharge point was observed in the concrete floor at the base of the staircase. At the time of reconnaissance, the building did not have a roof. Built-up materials of the remaining portions of the building included painted and unpainted brick, wood, and metal walls and unpainted concrete floors. An oil burner switch was observed on the western wall of the building; however, no evidence of a tank was observed.

Lots 32 and 33 consisted of dirt lots being used a construction staging area for the demolition occurring on Lot 30. Portions of the concrete floor slabs of the former buildings were observed to be intact. Piles of C & D debris, including brick, wood, concrete, and rock and soil/fill were observed across the lots. Two roll-off dumpsters on Lot 33 were being used to dispose of the C & D material by a private hauler. Several five-gallon buckets of paint were observed on Lot 33. No evidence of a material release was noted in connection with the containers.

The surrounding area was developed predominantly with residential, education, parkland, and commercial properties. A groundwater monitoring well was observed west of the Property along Graham Avenue.

Photographic documentation of the Property reconnaissance is included as Attachment B.
Previous Reports

Previous environmental investigations for the Property include: a 2013 Phase I Environmental Site Assessment (ESA) for 470 Manhattan Avenue by URS Corporation; a 2013 Phase I ESA for 119-125 Newton Street by Hydrotech Environmental, Corp.; and a 2014 Asbestos Report for 470 Manhattan Avenue and 119-125 Newton Street by Jet Environmental Consulting, LLC. The Phase I ESAs included the findings of a reconnaissance, an evaluation of readily available historical information, and selected environmental databases and electronic records.

URS Corporation performed a Phase I ESA for Block 2714, Lot 33 in April 2013. Recognized Environmental Conditions (RECS) included: an (E) Designation on Lot 33 for hazardous materials listed in the Department of City Planning (E) Designation database established as part of the rezoning of nearby properties; and the historical use of the surrounding area as manufacturing facilities, including an electroplating facility, dry cleaners, a steel company, and Mobil Oil Corporation. These properties were listed in multiple databases with open and closed-status spills, hazardous waste generation, soil and groundwater contamination and remediation, chemical and petroleum bulk storage, and leaking storage tanks.

Hydrotech Environmental, Corp. performed a Phase I ESA for Block 2714, Lots 30 and 32 in April 2003. Recognized Environmental Conditions (RECS) included: (E) Designations on Lots 30 and 32 for hazardous materials listed in the Department of City Planning (E) Designation database established as part of the rezoning of nearby properties; the potential presence of underground storage tank(s) (USTs) on Lot 32 based on historic Sanborn maps from 1942-2007; and the historic usage of Lots 30 and 32 at the Property as a garage, a metal fabrication shop, and a scrap metal yard.

Jet Environmental Consulting LLC conducted an asbestos survey of the former buildings on Lots 30, 32, and 33 in July 2014. A total of 30 samples were collected for laboratory analysis. The findings of the asbestos investigation identified asbestos within the former building on Lot 33 at the following locations: entranceway sub-floor tile, cove base mastic, window glazing, and room membrane and flashing. Jet Environmental Consulting, LLC recommended removal of all ACM prior to demolition of the Site building.

Previous reports are included as Attachment C.

Historical Fire Insurance Maps


The maps indicated that the Property was undeveloped between 1887 and 1905. By 1916, Lot 1 was developed as an unspecified factory building and Lot 33 was developed with a barrel shed, a carriage garage, and a cooperage with an office. By 1942, Lot 1 was developed with a sash and door storage and a woodworking shop associated with the north-adjacent I. Feldman & Son Inc. Sash & Door Manufacturer. Lot 30 was developed with a two-story building with illegible uses. A gasoline tank was shown on the southwestern portion of Lot 32. Lot 32 was labeled as “barrels, boxes, and automobile”. Lot 33 was developed with a cooperage and an office. By 1951, Lot 1 was developed with a metal container manufacturer and an enameling works with a baking oven and spray booths and Lot 30 was labeled “to be: garage”. Lot 1 was developed with a new factory building in 1963 and with a spray booth and storage on the eastern portion by 1965. By 1965, Lot 30 was developed as a garage and as a factory by 1978. By 1983, Lot 32 was used for freight storage and for motor freight storage between 1986 and 1991.
The surrounding area was developed historically with residential, commercial, educational, manufacturing, automotive, and woodworking uses, including the Joseph Goetz Manhattan Cabinet Works, the I. Feldman Sash and Door Manufacturer, unspecified manufacturing and warehouses, textile printing, cloth combining, a wire spring manufacturer, a cabinet finisher, a tin smith, a fuel oil company, a blacksmith, the George N. Gardiner & Son Marine Paint Manufacturer, a beverage bottling, junk storage, Mesisel Danowitz & Company with associated planing and molding facilities, lumber storage and yards, kilns, cooperages, Atlantic Hardwood Company, an iron pipe warehouse, a metal works, lacquer spraying, a machine shed and shop, a motor grinder, a motor freight station, garages with gasoline tanks, trucking and parking facilities, tractor storage, a truck bay, and automotive repair, washing, and filling stations.

Historical fire insurance maps are included as Appendix D.

Environmental Database Review

The regulatory database, included as Attachment E, was obtained from Environmental Data Resources (EDR) as part of the 2013 Phase I ESAs performed for the Property. The introduction of Attachment C includes summaries of the databases searched, their radii around the Property, and limitations of the data.

Database findings with potential to affect subsurface conditions at the Property, included:

- 424 Leonard Street, located southwest of the Property across Manhattan Avenue, was listed in the RCRA Conditionally Exempt Small Quantity Generator (CESQG) database as a generator of chromium (D007), non-listed reactive wastes (D003), non-listed corrosive wastes (D002), nicotine and salts (P075), non-listed ignitable wastes (D001), and various unlisted waste streams between 2003 and 2013. This property was also listed in the Petroleum Bulk Storage (PBS) database with two 10,000-gallon No. 4 fuel oil tanks installed in 1966 and two 10,000-gallon No 1, 2, or 4 fuel oil AST.

- 126 Newton Street, located south of the Property across Newton Street, was listed in the spills database when a fire at a former chlorine factory resulted in a release to the subsurface in October 1998. No further details were listed. The spill was closed in February 2003.

- Forty-seven E designation listings were identified within 1/8-mile of the Property.

The main objective of this Environmental Summary Report was to identify recognized environmental conditions (RECs), vapor encroachment concerns (VECs), and other environmental concerns that may affect the suitability of the Property for development as a residential building by 470 Manhattan Ave LLC. RECs are defined in ASTM International (ASTM) Standard Practice E 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a site. Note that controlled recognized environmental conditions (CRECs) are considered to be RECs.

This Phase I Summary Report has revealed the following RECs associated with the Property:

- Lots 30, 32, and 33 at the Site contain (E) Designations for hazardous materials listed in the Department of City Planning (E) Designation database established as part of the rezoning of nearby properties.

- Historic uses at the Site include unspecified manufacturing, a sash and door storage and a woodworking shop associated with the I. Feldman & Son Inc. Sash & Door Manufacturer, a metal container manufacturer, and an enameling works with a baking oven and spray booths on Lot 1; a garage and an unspecified factory on Lot 30; freight and motor freight storage with a gasoline tank on Lot 32; and a barrel shed, a carriage garage, and a cooperage on Lot 33. These historic uses may have affected subsurface conditions at the Property.
• A vent pipe and fill port were observed on the northeastern exterior wall of the three-story residential building on Lot 1 fronting Eckford Street. The fill port was labeled “No. 2” fuel oil. Minor staining was observed around the fill port. An oil burner switch was observed on the wall of the remaining portion of the building on Lot 30; however, no evidence of a tank was observed. Undocumented discharges from petroleum storage and/or usage may have affected subsurface conditions at the Property.

This Environmental Summary Report has revealed the following off-site RECs:

• The surrounding area was developed historically with residential, commercial, educational, manufacturing, automotive, and woodworking uses, including the Joseph Goetz Manhattan Cabinet Works, the I. Feldman Sash and Door Manufacturer, unspecified manufacturing and warehouses, textile printing, cloth combining, a wire spring manufacturer, a cabinet finisher, a tin smith, a fuel oil company, a blacksmith, the George N. Gardiner & Son Marine Paint Manufacturer, a beverage bottling, junk storage, Mesisel Danowitz & Company with associated planing and molding facilities, lumber storage and yards, kilns, cooperages, Atlantic Hardwood Company, an iron pipe warehouse, a metal works, lacquer spraying, a machine shed and shop, a motor grinder, a motor freight station, garages with gasoline tanks, trucking and parking facilities, tractor storage, a truck bay, and automotive repair, washing, and filling stations. These past uses may have affected subsurface conditions at the Property.

• Several properties in the surrounding area were listed in the RCRA Generator, PBS, Spills, and (E) Designation databases. A groundwater monitoring well was observed east of the Property on the western Graham Avenue sidewalk. The purpose of the monitoring well is not known, but may be related to current or historical off-site uses, which may have affected the Property subsurface.

Recommendations

Based on the results of this Environmental Summary Report, the following recommendations are made:

• The Property may have been affected by current on- and off-site uses. AKRF recommends a Remedial Investigation (RI) to characterize subsurface conditions of soil, groundwater, and soil vapor throughout the Property prior to redevelopment.

• A fill port and a vent pipe were observed on the northeastern wall of the three-story residential building. The fill port was labeled “No.2” (fuel oil) and minor staining was observed on the building wall. An oil burner switch was observed on one of the remaining walls of the building on Lot 30. No tanks were observed during the Property inspection; however, portions of the Property were inaccessible. If tanks exist at the Property, they should be properly assessed, closed, and removed in accordance with state and local regulations and the regulatory database should be updated accordingly.

• Future development entailing soil disturbance could encounter contaminated soil/fill. AKRF recommends that, if evidence of contaminated soil (e.g., stains or odors) is encountered, these materials should be disposed of in accordance with applicable federal, state, and local regulations. Any encountered spills should be reported and remediated in accordance with applicable regulatory requirements. Soil intended for off-site disposal should be tested in accordance with the requirements of the receiving facility. Transportation of material leaving the Property for off-site disposal should be in accordance with federal, state, and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc.

• Any containers of chemicals including paints should be properly disposed of in accordance with all federal, state, and local regulations.
• Unless there is labeling or test data that indicates that fluorescent lights, other electrical equipment, and hydraulic fluid are not mercury- and/or PCB-containing, if disposal is required, it should be performed in accordance with applicable federal, state, and local regulations and guidelines.

• Any renovation or demolition activities with the potential to disturb lead-based paint must be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62—Lead Exposure in Construction).

• If dewatering will be necessary during redevelopment, the discharge must meet applicable New York City Department of Environmental Protection (NYCDEP) regulations or be transported for off-site disposal at a permitted facility.

We appreciate the opportunity to provide you with our services. If you should have any questions, please do not hesitate to contact Marc Godick at mgodick@akrf.com or at (914) 922-2356.

Sincerely,

AKRF, Inc.

Marc Godick, LEP
Senior Vice President

Amy Jordan
Environmental Scientist

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