APPENDIX B

HAZARDOUS MATERIALS

Phase I Environmental Site Assessments (Excerpts)

Phase I
Environmental Site Assessment

Park Avenue Rezoning – Central Sector
86-88 Walworth Street (Projected Development Site 8); 520 Park Avenue and 82-84 Walworth Street (Projected Development Site 9); and 514 Park Avenue (Projected Development Site 10)
Brooklyn, NY 11205

Fleming-Lee Shue Project Number: 10013-028



May 2025

Prepared For:

Philip Habib & Associates
a Division of AKRF
432 Park Avenue S
New York, NY 10016

Prepared By:

Fleming Lee Shue

158 West 29th Street, 9th Fl.
New York, NY 10001
Phone: 212-675-3225
Fax: 212-675-3224

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

1.1 Study Area Historic Site Use 1
1.2 Historic Neighborhood Use 2
1.3 Summary of Findings, Opinions and Conclusions 2

2.0 INTRODUCTION 11

2.1 Purpose 11
2.2 Detailed Scope of Services 12
2.3 Limitations and Exceptions 14
2.4 Additions, Deviations, Deletions, and Data Gaps 14
3.1 Location and Legal Description 15
3.2 Current Use of the Study Area 15
3.3 Description of Structures, Roads and Other Improvements on the Site 15
3.4 Current Uses of Adjoining Properties 16

4.0 PHYSICAL SETTING 17

4.1 Topography 17
4.2 Geology and Soils 17
4.3 Hydrology 17
4.4 Wetlands 18
4.5 Radon 18

5.0 USER PROVIDED INFORMATION 19

5.1 Title Records 19
5.2 Environmental Liens or Activity and Use Limitations 20
5.3 Commonly Known or Reasonably Ascertainable Information 21
5.4 Valuation Reduction for Environmental Issues 21
5.5 Owner, Property Manager, and Occupant Information 21

6.0 RECORDS REVIEW 22

6.1 Standard Environmental Record Sources 22
6.2 Additional Environmental Record Sources 24
6.2.1 New York State Department of Environmental Conservation 24
6.2.2 New York City Department of Buildings 25
6.2.3 Previous Environmental Reports 25
6.3 Historical Use Information on Site and Adjoining Properties 28
6.3.1 Historical Sanborn Fire Insurance Maps 28
6.3.2 Historical City Directories 38
6.3.3 Historical Aerial Photographs 41
6.3.4 Historical Topographic Maps 41

7.0 SITE RECONNAISSANCE 42

7.1 Methodology and Limiting Conditions 42
7.2 Utilities 42
7.3 Toxic and/or Hazardous Materials 42
7.3.1 Petroleum Products Storage and Handling 42
7.4 Property Housekeeping 42
7.4.1 Interior Housekeeping 42
7.4.2 Exterior Housekeeping 43
7.5 Asbestos-Containing Material 43
7.6 Mold 43

7.7 LEAD-BASED PAINT 43
7.8 POLYCHLORINATED BIPHENYLS 43
7.8.1 Definitions *43*
7.10 INDICATIONS OF SOLID WASTE DISPOSAL 44
7.11 PITS, PONDS, LAGOONS, OR STANDING WATER 44
7.12 SURVEY OF SURROUNDING PROPERTIES 44

8.0 INTERVIEWS 45

8.1 CURRENT AND HISTORICAL USE INTERVIEWS 45
8.1.1 Current Property Owner *45*
8.1.2 Current Site Operator or Key Site Manager *45*
8.1.3 Site Occupants *45*
8.1.4 Past Owners, Operators and Occupants *45*
8.1.5 Report User *45*

9.0 VAPOR ENCROACHMENT EVALUATION 46

10.0 PFAS COMPOUNDS 47

11.0 CONCLUSIONS AND RECOMMENDATIONS 48

12.0 REFERENCES 57

13.0 QUALIFICATIONS AND SIGNATURE OF ENVIRONMENTAL PROFESSIONAL 58

13.1 QUALIFICATIONS 58
13.2 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL 58

14.0 DISCLAIMER 59

FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Plan

APPENDICES

Appendix A: Photograph Log

Appendix B: Tax Map

Appendix C: User Questionnaire

Appendix D: Regulatory Agency Database Report

Appendix E: Freedom of Information Act Response

Appendix F: Historical Sanborn Fire Insurance Maps

Appendix G: City Directory Abstract

Appendix H: Historical Aerial Photographs

Appendix I: Aerial Photos

Appendix J: Historical Topographical Maps

Report Utilization	
Inspection Date	5/16/2025
Radius Report Date	5/1/2025
Report Date	5/22/2025
Report Utilization Date	10/28/2025

1.0 EXECUTIVE SUMMARY

Fleming-Lee Shue, Inc. (FLS) has performed a Phase I Environmental Site Assessment (ESA) for Philip Habib & Associates a Division of AKRF (User) for the Central Sector (Site Area) of the Park Avenue Rezoning Study Area. The Site Area includes properties located at 86-88 Walworth Street (Projected Development Site 8), 520 Park Avenue and 82-84 Walworth Street (Projected Development Site 9), and 514 Park Avenue (Projected Development Site 10), in the Bedford-Stuyvesant neighborhood of Brooklyn, New York.

Projected Development Site 8 is located along the western side of Walworth Street near the southwestern corner of Walworth Street and Park Avenue, and consists of two (2) rectangular Lots with an area of approximately 7,500 square feet. Site 8 is identified as Block 1735, Lots 13 and 14 on the New York City Tax Map, and is currently developed with a parochial school/yeshiva.

Projected Development Site 9 is located at the southwestern corner of Walworth Street and Park Avenue, and consists of three (3) rectangular Lots with an area of approximately 15,725 square feet. Site 9 is identified as Block 1735: Lots 5, 11, and 12 on the New York City Tax Map, and is currently developed with a commercial building with multiple storefronts on Lot 5 (520 Park Avenue), and warehouse operations on Lots 11 and 12 (82-84 Walworth Street).

Projected Development Site 10 is located near the southwestern corner of Spencer Street and Park Avenue, and consists of one irregularly shaped Lot with an area of approximately 6,612 square feet. Site 10 is identified as Block 1735, Lot 3 on the New York City Tax Map, and is currently developed with a vacant lot and a storage garage.

All Projected Development Sites, with their individual New York City Tax Block and Lots and current development status are presented in Table 1. Figure 1 presents a Site Location Map and Figure 2 presents a Site Plan. Photographs of the Sites and the surrounding properties are included in Appendix A. This report was prepared in conformance with the American Society for Testing and Materials Standard Practice for Environmental Site Assessment Process (ASTM) E 1527-21, as well as the United States Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) requirements (November 2005).

1.1 Study Area Historic Site Use

Site 8 was first partially developed as early as 1887 with three small residential properties across its two Lots. By approximately 1947, the residences developed on Lot 14 were no longer in use, and by 1950, they had been replaced by two delivery service buildings. This Site use, with one residential property on Lot 13, and two delivery services on Lot 14, remained in place until at least 2007. By 2015, the Site was developed with a single residence and a warehouse. The current use of the Site is a parochial school/yeshiva, which has been in use since approximately 2018.

Site 9 was first developed into several lots with two storefronts by 1887 and then three dwellings by 1904. By 1918, a garage was developed on-Site, which was replaced by the Federal Paper Co. facility by approximately 1935. By 1947, the property was reverted back to a renting garage, which operated unaltered until as late as 1986, at which point it was redeveloped into a private garage. By 1987, this garage was altered to an unspecified commercial property, which remained in place until at least 2007. The current use of the Site is a commercial building with multiple storefronts including a fabric store, clothing store, post office, bakery, shoe store, and a warehouse operation.

Site 10 was first developed with multiple properties as early as 1887 as a bakery and dwelling. By 1904, multiple storefronts were developed, and the Site remained relatively unchanged until as late as 1950, at which point a small wood working operation was developed at 73 Spencer Street, in the western portion of the Site. By 1965, the wood working operation was redeveloped into a church, and from 1991 to at least 2007, the majority of the Site was generally used for storage/warehouse operations. It appears that the Site use following 2007 generally featured storage/warehouse operations and a parking lot, which is the current Site use.

1.2 Historic Neighborhood Use

The historical uses of the surrounding properties include residential, commercial, and industrial. Early in surrounding properties' history, multiple auto repair facilities, filling stations, machine shops, and manufacturing operations were developed.

1.3 Summary of Findings, Opinions and Conclusions

FLS found the following *recognized environmental conditions* (**RECs**) at all Sites.

Site	Recognized Environmental Conditions
86-88 Walworth Street Site 8	520-526 Park Avenue (Site 9) – On Site Auto Garage and Gasoline Storage Tank 90 Spencer Street – Off-Site Auto Repair 90, 92, 94 Spencer Street – Off-Site Manufacturing 79-85 Walworth Street (Site 6) – Auto Repair and Manufacturing 83 Spencer Street – Off-Site Auto Repair 81 Spencer Street – Off-Site Water Proofing Operation 101-103 Spencer Street – Off-Site Auto Repair
520 Park Avenue & 82-84 Walworth Street Site 9	520-526 Park Avenue (Site 9) – On Site Auto Garage and Gasoline Storage Tank 90 Spencer Street – Off-Site Auto Repair 90, 92, 94 Spencer Street – Off-Site Manufacturing 79-85 Walworth Street (Site 6) – Auto Repair and Manufacturing 83 Spencer Street – Off-Site Auto Repair 81 Spencer Street – Off-Site Water Proofing Operation

	528 Park Avenue (Site 5) – Manufacturing
514 Park Avenue Site 10	520-526 Park Avenue (Site 9) – On Site Auto Garage and Gasoline Storage Tank 90 Spencer Street – Off-Site Auto Repair 90, 92, 94 Spencer Street – Off-Site Manufacturing 79-85 Walworth Street (Site 6) – Auto Repair and Manufacturing 83 Spencer Street – Off-Site Auto Repair 81 Spencer Street – Off-Site Water Proofing Operation 801 Bedford Avenue – Off Site Filling Station and Spills 74-76 Spencer Street – Off-Site Manufacturing and Auto Repair

520-526 Park Avenue (Site 9) – On-Site Auto Garage and Gasoline Storage Tank
By 1918, an auto garage was developed on-Site at 520-526 Park Avenue, which was then replaced by the Federal Paper Co. facility as late as 1935. This facility featured a gasoline tank located near the northern Site boundary. By 1947, the property was reverted back to a renting garage with the installed gasoline tank still present. This garage operated unaltered until as late as 1986, at which point it was redeveloped to a private garage, and the gasoline tank is no longer depicted on the Sanborn Maps.

Environmental database review indicates that the property is listed for a closed in-place 2,000-gallon gasoline storage tank (PBS No. 2-483265). The tank is composed of steel with no secondary containment. The tank was closed in-place on October 1, 1990, the install date was not reported in the record, and there are no spills associated with this tank. The presence of a gasoline storage tank without secondary containment for an extended period of time could have adversely impacted the environmental quality of the Site Area and is therefore considered a REC for all Sites.

90 Spencer Street – Off-Site Auto Repair
The property located at 90 Spencer Street, approximately 150 feet up/cross-gradient west of Site 8, 175 feet up/cross-gradient southwest of Site 9, and 150 feet upgradient of Site 10, is listed in multiple environmental databases including the EDR Historic Auto and E-Designation databases. The property operated as Midway Automatic Transmission Co. from 1991-1996 and as John Transmission Shop from 2002-2005. The property is listed with an E-Designation for Hazardous Materials: Underground Gasoline Storage – testing protocol. The presence of an auto repair shop assigned an E-designation within the vicinity of the Site for at least 14 years could have adversely impacted the Site Area and is therefore considered a REC for all Sites.

90-94 Spencer Street – Off-Site Manufacturing
92 and 94 Spencer Avenue, each located approximately 160 feet upgradient of the Site Area, were first developed in as early as 1887 as wagon headquarters, by 1904 as a wagon storage and bottling works, and then by 1918 as a macaroni factory and storage area. By 1947, the properties were in operation as machine manufacturing and storage facilities, and by 1950, 92 Spencer Street was redeveloped into a dry-cleaning operation. By 1965, 94 Spencer Street and 90 Spencer Street (approximately 150 feet up/cross gradient of the Site

Area) were each in operation as wax candle/wax product manufacturers, while 92 Spencer Street was in operation as a machine shop. These businesses remained in operation until 2003-2005, at which point, operations at all three properties ceased. Manufacturing operations at these lots spanned approximately 86 years, including approximately 40 years (1965-2005) of wax manufacture. Paraffin wax manufacture is a petroleum byproduct, and is known for potentially emitting volatile organic compounds including benzene and toluene. The extended operation of these properties as manufacturers of various products, including predominantly wax, dry cleaning and other works could have impacted the environmental quality of the Site Area and are considered a REC for all Sites.

79-85 Walworth Street (Site 6) – Off-Site Auto Repair and Manufacturing
The properties at 79-85 Walworth Street (Site 6) were identified for various commercial and manufacturing uses throughout its history. The property was first developed for residential and some commercial use and then was redeveloped in 1935 as a garage and automotive repair with a gasoline tank of unknown volume. The Site's operation as a garage and automotive repair shop lasted until sometime before 1950 when the property was redeveloped as an unspecified delivery operation. The gasoline tank was also removed from the map depictions in 1950. This delivery operation lasted until sometime before 1977, at which point the property was redeveloped into an unidentified manufacturing operation along with the building adjacent north of it (75-77 Walworth Street). Given its close proximity to the Site Area, the historic operation of a garage and auto repair with the presence of a gasoline tank for at least 12 years, and the operation of an unspecified manufacturing facility for at least 30 years, this property could have impacted the environmental quality of the Site Area and is considered a REC for all Sites.

83 Spencer Street – Off-Site Auto Repair
By 1965, a small auto repair facility was developed at 83 Spencer Street, approximately 60 feet cross-gradient west of Site 8, 80 feet upgradient southwest of Site 9, and 100 feet upgradient south of Site 10. This facility remained in operation until 1986, and by 1987 it is no longer present. This auto repair facility operated for approximately 21 years, and its close proximity and upgradient location to the Site Area makes it more likely that contamination could have impacted the environmental quality of the Sites. For this reason, this finding is considered a REC for all Sites.

81 Spencer Street – Off-Site Water Proofing Operation
The property located at 81 Spencer Street, adjacent cross-gradient to Site 8, approximately 30 feet and 100 feet upgradient of Sites 9 and 10, respectively, operated as a waterproofing facility from 1989 to at least 2007. The nature of the waterproofing operations on Site is not clear. Considering the size of the building and lack of corroborating manufacturing records, it is considered unlikely that the facility manufactured waterproofing materials. However, as this cannot be ruled out, considering the close proximity and duration of operations, it is possible this finding could have impacted the environmental quality of all Sites and is therefore considered a REC.

FLS found the following *recognized environmental condition* (**REC**) at Site 8 only.

101-103 Spencer Street – Off-Site Auto Repair
By 1935, the property at 101-103 Spencer Street, located approximately 200 feet upgradient south of Site 8, operated as an Auto Painting and Repair facility, and featured one gasoline storage tank. By 1947, this was redeveloped into a motor freight (trucking) operation, though the gasoline storage tank remained on the property. By 1965, the property was reverted into an auto repair facility again. By 1991, this operation was replaced by an unspecified commercial facility that remained in use until at least 2007. The gasoline storage tank, initially depicted on the map in 1935, was removed from the map during this transition to commercial use in 1991. Given the distance to Site 8, the historic operation of an auto repair and trucking operation, including a gasoline storage tank, could have the potential to impact the environmental quality of the Site. For this reason, this finding is considered a REC for Site 8 specifically.

FLS found the following *recognized environmental condition* (**REC**) at Site 9 only.

528 Park Avenue (Site 5) – Off Site Manufacturing
Site 5, located at 528 Park Avenue, approximately 45 feet cross-gradient east of the Site Area, has been developed with various manufacturing operations over its history. The Site was first developed in 1887 as with large warehouse for a fur cutting operation under the Hatters' Fur Cutting Co., and later the Hitchcock Dermody & Co. Fur Cutters in 1918. By 1935, the property began use as a manufacturer of wooden children's toys under Chas & Victor Goldstein Inc. In 1947 the Site began operation as a leather tannery under the Moriarty Johnson Co. Inc. and later the Sandford Tanning Co. Inc. in 1950. From 1965 to 1977 the Site use was not specified and by 1979 the onsite building was demolished. The Site remained vacant until at least 2007. Historic fur, wood and tanning operations have been associated with the use and waste generation of acids, bleaches, dyes, heavy metals, lacquers, petroleum fuels and solvents. The operation of various manufacturing operations for at least 63 years could have adversely impacted the environmental quality of the subsurface and migrated to nearby properties. For this reason, this finding is considered a REC for Site 9.

FLS found the following *recognized environmental conditions* (**RECs**) at Site 10 only.

801 Bedford Avenue – Off-Site Filling Station and Spills
The property located at 801 Bedford Avenue, located approximately 150 feet cross-gradient west of Site 10, is listed in multiple environmental databases, including the VCP and E-Designation (Site No. 14TMP0289K, 14EHA289K, 17CVCP076K) databases. The property operated as Merit Oil and Amerada Hess Corp. from approximately 2000-2014. During its operation as a gasoline and auto-service station, there were a total of 50 USTs in use. During a tank removal, in which 36 tanks were closed-removed from the property, petroleum impacts to soil and groundwater were encountered. Approximately 1,400 tons of contaminated soil were removed from the property and subsequently, several spills were closed as of March 2014. The 14 remaining tanks were closed-in place. Current development at the property is in Site Management and contains engineering controls in the form of a vapor barrier and vapor mitigation system. The presence of a VCP Site up-to cross-gradient to the Site Area, with a history of automotive service operations including

a large number of USTs, petroleum impacts to soil, soil vapor and groundwater could have the potential to impact the environmental quality of the surrounding area. Contamination from the property at 801 Bedford Avenue, in particular soil vapor, could have migrated to the Site and is therefore considered a REC, specifically for Site 10.

74-76 Spencer Street – Off-Site Manufacturing and Auto Repair
The property located at 74-76 Spencer Street, approximately 50 feet cross-gradient west of Site 10 operated under various manufacturing and auto repair uses. By 1989, the site was listed with an unspecified manufacturing operation. In 1993, this was reportedly then converted to an auto repair facility, which remained in use until 2002. The operation of an unspecified manufacturing facility and auto repair within the vicinity of Site 10 could have impacted the environmental quality of the Site and are therefore considered a REC for Site 10.

FLS did not identify any *controlled recognized environmental conditions* (**CREC**s) at the Site.

FLS did not identify any *historic recognized environmental conditions* (**HREC**s) at the Site.

FLS identified the following *environmental business risks* (**BERs**) at the Site.

Non-ASTM Scope Items | Lead, Asbestos and Mold
Assessment of the presence of Asbestos Containing Materials (ACMs), Lead Based Paint (LBP), and mold is not included within the scope of a Phase I ESA. However, based on the age of the existing buildings and observations during Site Reconnaissance, it is possible these Sites contains the presence of ACM, mold and LBP. ACM, mold and LBP are considered BERs.

Potential Historic Fill
Historic fill is non-indigenous material that was previously placed on a property in order to raise the topographic elevation of the site. The fill material was typically imported from offsite, and generally contained mixtures of soil, coal ash, foundry sands, construction debris, and/or dredge spoils. Historic urban fill was historically used throughout New York City for development purposes and commonly contains environmental contaminants including arsenic, lead, cadmium, mercury, etc., as well as polycyclic aromatic hydrocarbons. Based on review of historical topographical maps and historical aerial imagery, there has been no change to the local topography indicating the import of historic fill since 1897. However, the presence of historic fill from prior to 1897 cannot be ruled out, and for this reason, historic fill is considered a BER.

FLS observed the below additional important **findings** not considered RECs, HRECs, CRECs, or BERs.

91-93 Walworth Street (Site 6) – Silk Oiling and Manufacturing
The property at 91-93 Walworth Street located approximately 65 feet cross-gradient southeast from the Site area was initially developed with a silk oiling operation in 1887 and later as a charcoal storage area in 1918. The property was intermittently a storage area for unspecified products until 1977 when the property was depicted as an unknown manufacturing operation. The property's operation as a manufacturing operation lasted until 2007. Silk oiling is a process in which silk products are waterproofed by boiling in oils. Historic silk operations have been linked with the use of hydrogen fluoride, hydrogen sulfide, bromine and solvents. The operation of a silk oiling and unidentified manufacturing operation for at least 30 years could have adversely impacted the environmental quality of the surrounding area, however the cross-gradient location of this operation makes it unlikely to have impacted the environmental quality of the Site Area. For this reason, this finding is not considered a REC.

86-90 Walworth Street (Site 8)
The properties at 86-90 Walworth Street (Site 8) were listed for various commercial uses including a delivery service. The site was first partially developed as early as 1887 with three small residential properties across its two Lots. By 1947, the residences developed on Lot 14 were longer in use, and by 1950, they had been replaced by two delivery service buildings. This Site use, with one residential property on Lot 13, and two delivery services on Lot 14, remained until at least 2007. Considering the nature of these uses, these findings are not considered RECS.

514-516 Park Avenue (Site 10)
The properties at 514-516 (Site 10) have historically been utilized for various commercial operations including use as a wood working operation and warehouse. The properties were first developed as early as 1887 as a bakery, and dwelling. By 1904, multiple storefronts were developed, and the Site remained relatively unchanged until as late as 1950, at which point a small wood working operation was developed at 73 Spencer Street, in the western portion of the Site. By 1965, the wood working operation was redeveloped into a church, and from 1991 to at least 2007, the majority of the Site was generally used for storage/warehouse use. Wood working operations are associated with the use of various solvents and lacquers, however, considering the short duration and size of these operations, the likelihood of impact to their environmental quality of the Site from this finding is considered low and these findings are not considered RECs.

95-97 Walworth Street – Off-Site Auto Yard and Charcoal Storage
As early as 1918, the property at 95-97 Walworth Street, located approximately 110 feet up/cross-gradient of the Site Area, was developed as an auto and wagon yard with charcoal storage. By 1935, this was identified as a private garage with charcoal storage that remained in use until at least 1950. By 1965, the building was redeveloped into a woodworking operation, and this operation remained until 1991. By 1992, the building was redeveloped into an unspecified warehouse which remained in use until at least 2007. The

prolonged operation of an auto yard with charcoal storage, in this case spanning approximately 47 years, could have the potential to impact the environmental quality of the surrounding area. However, considering the distance and cross-gradient location of this operation, it is considered unlikely that it has impacted the environmental quality of the Site Area. For this reason, this finding is not considered a REC.

99 Walworth Street – Off-Site Unidentified Manufacturing
From at least 1977 to 2007, the property at 99 Walworth Street, located approximately 160 feet up/cross-gradient of the Site Area, operated as an unspecified manufacturing operation. The prolonged operation of an unspecified manufacturing facility typically has the potential to impact the environmental quality of the surrounding area, however considering the distance and cross-gradient location of the property, it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

805-807 Bedford Avenue – Off-Site Auto Repair
As early as 1935, the properties at 805-807 Bedford Avenue located approximately 150 feet cross-gradient west from the Site Area operated as auto repair and wrecking facilities, respectively. By 1947, the wrecking operation at 807 Bedford Avenue likely ceased, however, by 1965, both addresses operated as auto repair facilities. Auto repair operations continued until 1987 and 2001 for 805 Bedford Avenue and 807 Bedford Avenue, respectively. The historic operation of an auto repair facility for approximately 66 years typically has the potential to impact the environmental quality of the surrounding area due to petroleum/solvent contact with soil and groundwater. However, considering their distance and cross-gradient location, these listings are considered unlikely to have impacted the environmental quality of the Site Area. For this reason, this finding is not considered a REC.

63 Walworth Street – Off-Site Filling Station
The property at 63 Walworth Street, located approximately 85 feet downgradient northeast of the Site Area, was first developed in 1935 as a filling station with three gasoline storage tanks. This filling station remained in operation until at least 2007, and the presence or number of associated gasoline tanks was not recorded after 1950. Typically, the extended operation of a gasoline filling station with known gasoline storage tanks would be considered a REC, however, considering distance and the downgradient location of this finding, it is considered unlikely that contamination could have migrated to the Site Area. Therefore, this finding is not considered a REC.

504 Park Avenue – Off-Site Plating Works, Auto Repair
The property located at 504 Park Avenue, approximately 120 feet cross-gradient west of the Site Area began operating as a plating works by approximately 1935. By 1947, this property was redeveloped into an auto repair facility that then remained in operation until at least 2007. The extended operation of both a plating works and an auto repair facility could have the potential to impact the environmental quality of the surrounding area. However, considering the distance and cross-gradient location, it is unlikely to have impacted the environmental quality of the Site Area. For this reason, this finding is not considered a REC.

77 Walworth Street – Off-Site Auto Wrecking
The property located at 77 Walworth Street, approximately 45 feet cross gradient east of the Site Area, operated as an auto wrecking facility from at least 1947 to 1950. The presence of a wrecking facility in the proximity of the Site Area would typically be considered a REC, however, the limited years of operation, distance and cross-gradient location, it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

505-511 Park Avenue / 789-791 Bedford Avenue – Off-Site Filling Station
The property located at 505-511 Park Avenue and 789-791 Bedford Avenue, approximately 190 feet cross-gradient northwest of the Site Area, operated as a filling station with four (4) gasoline tanks by 1947. This filling station remained in operation until at least 1965, and by 1977, its Lot was unoccupied and the four gasoline storage tanks no longer appeared on Sanborn Fire Insurance maps. The presence of a gasoline filling station within the vicinity of the Site Area for 18 years typically could be considered a REC, however, considering the distance, era of use, and cross-gradient location, it is considered unlikely the contamination from this property would have migrated and impacted the environmental quality of the Site Area. For this reason, this listing is not considered a REC.

62 Walworth Street (Site 7) – Auto Repair
The property located at 62 Walworth Street, approximately 140 feet downgradient north of the Site Area was developed as an auto repair facility from approximately 1965-1993. Typically, the presence of an auto repair facility within the vicinity of the Site Area would be considered a REC. However, given the distance and downgradient location of this listing, it is considered unlikely for contamination from this site to migrate to the Site Area. For this reason, this finding is not considered a REC.

543-545 Park Avenue – Off-Site Auto Repair
The property located at 543-545 Park Avenue, approximately 110 feet downgradient northeast of the Site Area, operated as an auto repair facility from 1965 to approximately 1993. Typically, the presence of an auto repair facility in the vicinity of the Site Area would be considered a REC. However, given the distance and downgradient location of this finding it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

517 Park Avenue (Site 1) – Manufacturing and Gasoline Storage Tank
The properties at 517 Park Avenue (within projected development Site 1), located approximately 100 feet downgradient northwest of the Site Area, were developed with various uses including manufacturing and gasoline storage. The Williamsburgh Brass Foundry was developed at 517 Park Avenue in as early as 1918. Operation as a brass foundry lasted until at least 1935 when the operation was redeveloped as a general good store. At the same time, the back end of the current lot was partially developed as a parking garage with access to the garage along Bedford Avenue. The 1935 Sanborn map depicts a gasoline tank of unknown volume within the property boundary of Site 1. This parking garage operated until at least 1947 when the Bowey's Cocoa and Chocolate Inc. began

manufacturing operations and used this area as a storage for raw materials. The Bowey's Cocoa and Chocolate Inc. operated until at least 1977 when the building was redeveloped into a plastic products manufacturing operation. This plastics manufacturing operated until 1993. Brass metal foundries and plastic product manufacturing have historically known to use and generate wastes such as heavy metals, acids, petroleum fuels, solvents accelerators, adhesives, oils, fuel oils, resins, soaps and solvents. The Site's operation as a brass foundry and plastic manufacturing operation for at least 33 years and the presence of at least one gasoline tank for an unknown amount of time could have adversely impacted the environmental quality of the surrounding area. However, considering the distance and downgradient location of these operations relative to the Site Area it is considered unlikely to have impacted the environmental quality within the Site Area. For this reason, this finding is not considered a REC.

533 Park Avenue (Site 3) – Auto Junkyard

The properties at 533 Park Avenue (Site 3), located approximately 65 feet downgradient north of the Site Area, were developed as an auto junkyard from 1965 to 1991. Automotive junkyards have been associated with heavy metal and petroleum runoff which can migrate to the subsurface and groundwater. The operation of an automotive junkyard for approximately 26 years could have adversely impacted the environmental quality of the surrounding area. However, given the distance and downgradient location of this listing it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

547 Park Avenue (Site 4) – Manufacturing and Filling Station

The property at 547 Park Avenue (Site 4) located 165 feet downgradient of the Site Area, operated as a manufacturing operation (approximately 1904 – 1918) and filling station (1965 – 1977). The site was initially separated into several lots with sparse development, including a machine shop and commercial store front along Park Avenue. By 1904, the D.W. Binns Foundry was developed at 547 Park Avenue. The D.W. Binns Foundry operated until sometime before 1918 when the onsite structures were demolished and the property began utilization as a lumber yard. The Site's use as a lumber yard lasted until 1950. By 1965, a filling station was constructed on the Site. There were no tanks depicted on the 1965 Sanborn map. The filling station operated onsite until sometime before 1977, the subsequent map, when the on-Site structure was demolished and the Site began its operation as a parking lot. The presence of a foundry and filling station operations could have adversely impacted the environmental quality of the surrounding area. However, considering the distance and down/cross gradient location of this property relative to the Site Area it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

FLS recommends the following for the property:

- Based on the results of the Phase I ESA, FLS recommends a Phase II ESA including the collection of soil, soil vapor, and groundwater samples being conducted at Sites 8, 9 and 10 to evaluate the potential impact from historical on and off-Site operations on the environmental quality of all Sites within the Site Area.

Phase I
Environmental Site Assessment

Park Avenue Rezoning – Eastern Sector

547 Park Avenue (Projected Development Site 4);
528 Park Avenue (Projected Development Site 5); and
76-78 Sandford Street, 82 Sandford Street, 96 Sandford Street, 79 Walworth Street, and 87-89 Walworth Street (Projected Development Site 6)
Brooklyn, NY 11205

Fleming-Lee Shue Project Number: 10013-028



May 2025

Prepared For:

Philip Habib & Associates
a Division of AKRF
432 Park Avenue S
New York, NY 10016

Prepared By:

Fleming Lee Shue

158 West 29th Street, 9th Fl.
New York, NY 10001
Phone: 212-675-3225
Fax: 212-675-3224

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

1.1 Study Area Historic Site Use 1
1.2 Historic Neighborhood Use 3
1.3 Summary of Findings, Opinions and Conclusions 3

2.0 INTRODUCTION 10

2.1 Purpose 10
2.2 Detailed Scope of Services 11
2.3 Limitations and Exceptions 13
2.4 Additions, Deviations, Deletions, and Data Gaps 13

3.0 STUDY AREA DESCRIPTION 14

3.1 Location and Legal Description 14
3.2 Current Use of the Study Area 14
3.3 Description of Structures, Roads and Other Improvements on the Site 14
3.4 Current Uses of Adjoining Properties 15

4.0 PHYSICAL SETTING 16

4.1 Topography 16
4.2 Geology and Soils 16
4.3 Hydrology 16
4.4 Wetlands 17
4.5 Radon 17

5.0 USER PROVIDED INFORMATION 18

5.1 Title Records 18
5.2 Environmental Liens or Activity and Use Limitations 20
5.3 Commonly Known or Reasonably Ascertainable Information 20
5.4 Valuation Reduction for Environmental Issues 20
5.5 Owner, Property Manager, and Occupant Information 21

6.0 RECORDS REVIEW 22

6.1 Standard Environmental Record Sources 22
6.2 Additional Environmental Record Sources 24
6.2.1 New York State Department of Environmental Conservation 24
6.2.2 New York City Department of Buildings 24
6.2.3 Previous Environmental Reports 25
6.3 Historical Use Information on Site and Adjoining Properties 28
6.3.1 Historical Sanborn Fire Insurance Maps 28
6.3.2 Historical City Directories 35
6.3.3 Historical Aerial Photographs 38
6.3.4 Historical Topographic Maps 38

7.0 SITE RECONNAISSANCE 40

7.1 Methodology and Limiting Conditions 40
7.2 Utilities 40
7.3 Toxic and/or Hazardous Materials 40
7.3.1 Petroleum Products Storage and Handling 40
7.4 Property Housekeeping 40
7.4.1 Interior Housekeeping 41
7.4.2 Exterior Housekeeping 41

7.5 ASBESTOS-CONTAINING MATERIAL 41
7.6 MOLD 41
7.7 LEAD-BASED PAINT 41
7.8 POLYCHLORINATED BIPHENYLS 41
7.8.1 Definitions *41*
7.10 INDICATIONS OF SOLID WASTE DISPOSAL 42
7.11 PITS, PONDS, LAGOONS, OR STANDING WATER 42
7.12 SURVEY OF SURROUNDING PROPERTIES 42

8.0 INTERVIEWS 43

8.1 CURRENT AND HISTORICAL USE INTERVIEWS 43
8.1.1 Current Property Owner *43*
8.1.2 Current Site Operator or Key Site Manager *43*
8.1.3 Site Occupants *43*
8.1.4 Past Owners, Operators and Occupants *43*
8.1.5 Report User *43*

9.0 VAPOR ENCROACHMENT EVALUATION 44

10.0 PFAS COMPOUNDS 45

11.0 CONCLUSIONS AND RECOMMENDATIONS 46

12.0 REFERENCES 53

13.0 QUALIFICATIONS AND SIGNATURE OF ENVIRONMENTAL PROFESSIONAL 54

13.1 QUALIFICATIONS 54
13.2 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL 54

14.0 DISCLAIMER 55

FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Plan

APPENDICES

Appendix A: Photograph Log

Appendix B: Tax Map

Appendix C: User Questionnaire

Appendix D: Regulatory Agency Database Report

Appendix E: Freedom of Information Act Response

Appendix F: Historical Sanborn Fire Insurance Maps

Appendix G: City Directory Abstract

Appendix H: Historical Aerial Photographs

Appendix I: Aerial Photos

Appendix J: Historical Topographical Maps

Report Utilization	
Inspection Date	5/15/2025
Radius Report Date	5/1/2025
Report Date	5/22/2025
Report Utilization Date	10/28/2025

1.0 EXECUTIVE SUMMARY

Fleming-Lee Shue, Inc. (FLS) has performed a Phase I Environmental Site Assessment (ESA) for Philip Habib & Associates a Division of AKRF (User) for the Eastern Sector (Site Area) of the Park Avenue Rezoning Study Area. The Site Area includes properties located at 547 Park Avenue (Projected Development Site 4); 528 Park Avenue (Projected Development Site 5); and 76-78 Sandford Street, 82 Sandford Street, 96 Sandford Street, 79 Walworth Street, and 87-89 Walworth Street (Projected Development Site 6), in the Bedford-Stuyvesant neighborhood of Brooklyn, New York.

Projected Development Site 4 is located on the northwest corner of Park Avenue and Warsoff Place. It consists of a single rectangular lot with an area of approximately 10,775 square feet. Site 4 is identified as Block 1717, Lot 60 on the New York City Tax Map, and is currently developed with an outdoor parking lot.

Projected Development Site 5 is located along the southern edge of Park Avenue between Walworth Street and Sandford Street, and consists of a single rectangular lot with an area of approximately 16,450 square feet. Site 5 is identified as Block 1736, Lot 1 on the New York City Tax Map, and is currently developed with a tire repair facility and a pallet construction and sale operation.

Projected Development Site 6 is located adjacent south of Site 5, and includes properties on both Walworth Street and Sandford Street. It consists of seven (7) rectangular lots with a total aggregate area of approximately 35,750 square feet. Site 6 is identified as Block 1736, Lots 10, 11, 13, 18, 61, 62, and 63 on the New York City Tax Map, and is currently developed with a private school and attached event space.

All Projected Development Sites, with their individual New York City Tax Block and Lots and current development status are presented in Table 1. Figure 1 presents a Site Location Map and Figure 2 presents a Site Plan. Photographs of the Sites and the surrounding properties are included in Appendix A. This report was prepared in conformance with the American Society for Testing and Materials Standard Practice for Environmental Site Assessment Process (ASTM) E 1527-21, as well as the United States Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) requirements (November 2005).

1.1 Study Area Historic Site Use

547 Park Avenue (Site 4) historically operated as a manufacturing operation (approximately 1904 – 1918) and filling station (1965 – 1977). The Site was initially separated into three lots with sparse development, including a machine shop and commercial store front along Park Avenue. The D.W. Binns Foundry was developed on Site and operated from approximately 1904 to 1918 when all onsite structures were demolished and the property began utilization as a lumber yard. The Site operated as a lumber yard from this time until approximately 1950. In approximately 1965, a gasoline filling station was constructed on the Site, which operated until sometime before 1977.

After this time the on-Site structure was demolished and the Site began use as a parking lot, which continues to present day.

Site 5 was first developed in 1887 as a large warehouse for a fur cutting operation under the Hatters' Fur Cutting Co., and later the Hitchcock Dermody & Co. Fur Cutters in 1918. By 1935, the property began use as a manufacturer of wooden children's toys under Chas & Victor Goldstein Inc. In 1947 the Site began operation as a leather tannery under the Moriarty Johnson Co. Inc. and later the Sandford Tanning Co. Inc. in 1950. In approximately 1960, the Site was operated by Bedford Plastics Inc, and from 1960 to at least 1976, the Site featured multiple miscellaneous commercial operations including storefronts for stationery and furniture. Around approximately 1979 the onsite building was demolished and the Site appears to have remained largely vacant until at least 2007. Review of historic aerial photos generally shows storage use until around 2012, followed by use as a truck parking lot. Around approximately 2020, the Site began its use as a tire repair and pallet construction and sale operation.

Site 6, encompassing multiple addresses, generally featured a combination of residential, commercial, and industrial uses throughout its history. Notable Site uses and addresses include the following:

The properties at 79-85 Walworth Street, within Site 6, were identified for various commercial and manufacturing uses throughout its history. The property was first developed for residential and some commercial use. By 1935, the property was redeveloped as a garage and automotive repair with a gasoline tank of unknown volume. The operation as a garage and automotive repair shop lasted until sometime before 1950 when the property was redeveloped as an unspecified delivery operation. The gasoline tank was also removed from the map depictions in 1950. This delivery operation lasted until sometime before 1977, at which point the property was redeveloped into an unknown manufacturing operation along with the building adjacent north of it (75-77 Walworth Street).

The property at 91-93 Walworth Street, within Site 6, was initially developed with a silk oiling operation in 1887 and later as a charcoal storage area in 1918. According to Sanborn map review, the property was intermittently a storage area for unspecified products until 1977 when the property was depicted as an unspecified manufacturing operation. Though based on available Certificates of Occupancy from this time period, it is likely that the property operated as a manufacturer of metal counter tops and metal sheets from at least 1966 to 1995. The property's operation as manufacturing operation lasted until at least 2007.

Other on-Site properties, including 76 Sandford Street and 87-89 Walworth Street, were also identified as featuring metal stamping manufacturing operations in 1970 and 1995, respectively. These were likely a part of the primary operation occurring at 91-93 Walworth Street.

The Site is currently used as a school and attached event space.

1.2 Historic Neighborhood Use

The historical uses of the surrounding properties include residential, commercial, and industrial. Early in surrounding properties' history, multiple auto repair facilities, filling stations, machine shops, and manufacturing operations were developed.

1.3 Summary of Findings, Opinions and Conclusions

(Projected Development Site 4 (Projected Development Site 5); and 76-78 Sandford Street, 82 Sandford Street, 96 Sandford Street, 79 Walworth Street, and 87-89 Walworth Street (Projected Development Site 6)

FLS found the following *recognized environmental conditions* (**RECs**) at all Sites.

Site	Recognized Environmental Conditions
547 Park Avenue Site 4	520-526 Park Avenue (Site 9) – Off-Site Auto Garage and Gasoline Storage Tank(s) 528 Park Avenue (Site 5) – On-Site Manufacturing 79-85 Walworth Street (Site 6) – On-Site Auto Repair and Manufacturing 77 Walworth Street – Off-Site Auto Wrecking & Manufacturing 547 Park Avenue (Site 4) – Manufacturing and Filling Station 63 Walworth Street – Off-Site Filling Station 543-545 Park Avenue – Off-Site Auto Repair
528 Park Avenue Site 5	520-526 Park Avenue (Site 9) – Off-Site Auto Garage and Gasoline Storage Tank(s) 528 Park Avenue (Site 5) – On-Site Manufacturing 79-85 Walworth Street (Site 6) – On-Site Auto Repair and Manufacturing 77 Walworth Street – Off-Site Auto Wrecking & Manufacturing 91-93 Walworth Street (Site 6) – Silk Oiling and Manufacturing 83 Spencer Street – Off-Site Auto Repair 81 Spencer Street – Off-Site Water Proofing Operation 547 Park Avenue (Site 4) – Manufacturing and Filling Station 63 Walworth Street – Off-Site Filling Station
76-78 Sandford Street 82 Sandford Street 96 Sandford Street 79 Walworth Street 87-89 Walworth Street Site 6	520-526 Park Avenue (Site 9) – Off-Site Auto Garage and Gasoline Storage Tank(s) 528 Park Avenue (Site 5) – On-Site Manufacturing 79-85 Walworth Street (Site 6) – On-Site Auto Repair and Manufacturing 77 Walworth Street – Off-Site Auto Wrecking & Manufacturing 91-93 Walworth Street (Site 6) – Silk Oiling and Manufacturing 83 Spencer Street – Off-Site Auto Repair 81 Spencer Street – Off-Site Water Proofing Operation 101-103 Spencer Street – Off-Site Auto Repair

	95-97 Walworth Street – Off-Site Auto Yard and Charcoal Storage 99 Walworth Street – Off-Site Manufacturing

520-526 Park Avenue (Site 9) – Off-Site Auto Garage and Gasoline Storage Tank(s)
By 1918, an auto garage was developed onsite 520-526 Park Avenue, approximately 45 feet cross gradient of Sites 5 and 6, and 160 feet upgradient of Site 4. This was then replaced by the Federal Paper Co. facility as late as 1935. This facility also featured a gasoline tank located near the northern Site boundary along Park Avenue. By 1947, the property was reverted back to a renting garage with the installed gasoline tank still present. This garage operated unaltered until as late as 1986, at which point it was redeveloped to a private garage, and the gasoline tank is no longer depicted on the Sanborn Maps. By 1987, this garage was altered to an unspecified commercial property, which remained until at least 2007.

Additionally, the environmental database review indicated that the property is listed for a closed in-place 2,000-gallon gasoline underground storage tank (PBS No. 2-483265). The tank is listed with no secondary containment. The presence of a gasoline storage tank without secondary containment for an extended period of time could have adversely impacted the environmental quality of the Site Area and is therefore considered a REC for all Sites.

528 Park Avenue (Site 5) – On-Site Manufacturing
Site 5, located at 528 Park Avenue, has been developed with various manufacturing operations over its history. The Site was first developed in 1887 with a large warehouse for a fur cutting operation under the Hatters' Fur Cutting Co., and later the Hitchcock Dermody & Co. Fur Cutters in 1918. By 1935, the property began use as a manufacturer of wooden children's toys under Chas & Victor Goldstein Inc. In 1947 the Site began operation as a leather tannery under the Moriarty Johnson Co. Inc. and later the Sandford Tanning Co. Inc. in 1950. By approximately 1979 the on-Site building was demolished. Historic fur, wood and tanning operations have been associated with the use and waste generation of acids, bleaches, dyes, heavy metals, lacquers, petroleum fuels and solvents. The operation of various manufacturing operations for at least 63 years could have adversely impacted the environmental quality of the Site, and the surrounding area. For this reason, this finding is considered a REC for all Sites.

79-85 Walworth Street (Site 6) – On-Site Auto Repair and Manufacturing
The properties at 79-85 Walworth Street (Site 6) were identified for various commercial and manufacturing uses throughout its history. The property located at 79-85 Walworth Street was developed as a garage and automotive repair with a gasoline tank from in 1935 to approximately 1950. At this time the Site was redeveloped into a delivery operation, which operated on Site until sometime before 1977, at which point the property was redeveloped into an unspecified manufacturing operation in conjunction with building adjacent north of it (75-77 Walworth Street). Given the historic on-Site operation of an auto repair with the presence of a gasoline tank for at least 12 years, and the operation of an unspecified manufacturing facility onsite for at least 30 years, it is possible that these

operations could have impacted the environmental quality of the Site and the surrounding Site Area. For this reason, this finding is considered a REC for all Sites.

77 Walworth Street – Off-Site Auto Wrecking & Manufacturing
The property located at 77 Walworth Street, located adjacent up/cross-gradient of Site 6, adjacent upgradient of Site 5, and approximately 150 feet upgradient of Site 4, operated as an auto wrecking facility from at least 1947 to 1950. Subsequently from 1977 to at least 2007, the property operated as a single unspecified manufacturing operation in conjunction with the adjacent property at 79 Walworth Street. Due to the presence of an auto wrecking facility and manufacturing operation in the direct proximity of the Sites, it is considered possible contamination from these operations could have migrated to the Sites and impacted the environmental quality of the Site Area including groundwater and soil vapor. For this reason, this finding is considered a REC for all Sites.

FLS found the following *recognized environmental conditions* (**RECs**) at Sites 5 and 6 only:

91-93 Walworth Street (Site 6) – Silk Oiling and Manufacturing
The property at 91-93 Walworth Street, within Site 6, was initially developed with a silk oiling operation in 1887 and later as a charcoal storage area in 1918. The property was intermittently a storage area for unspecified products until 1977 when the property began operating an unspecified manufacturing operation until 2007. Silk oiling is a process in which silk products are waterproofed by boiling in oils. Historic silk operations have been linked with the use of hydrogen fluoride, hydrogen sulfide, bromine and solvents. The operation of a silk oiling and other manufacturing operations on-Site for at least 30 years could have impacted the environmental quality of the Site and is therefore considered a REC for both Sites 5 and 6.

83 Spencer Street – Off-Site Auto Repair
By 1965, a small auto repair facility was developed at 83 Spencer Street, approximately 145 feet cross/upgradient west of Site 6, and 195 feet upgradient southwest of Site 5. This facility remained in operation until approximately 1986. The presence of an auto repair facility within the vicinity of the Site Area for approximately 21 years, indicates that contamination could have migrated to both Sites 5 and 6 and impacted the environmental quality of these Sites. For this reason, this finding is considered a REC for both Sites 5 and 6.

81 Spencer Street – Off-Site Water Proofing Operation
The property located at 81 Spencer Street, approximately 180 feet upgradient southwest from Site 5 and 145 feet cross/upgradient of Site 6, operated as a waterproofing facility from 1989 to at least 2007. The nature of the waterproofing operations on Site is not clear. Considering the size of the building and lack of corroborating manufacturing records, it is considered unlikely that the facility manufactured waterproofing materials. However, as this cannot be ruled out, considering the close proximity, upgradient location, and duration

of operations, it is possible this finding could have impacted the environmental quality of the Sites. For this reason, this finding is considered a REC for both Site 5 and Site 6.

FLS found the following *recognized environmental conditions* (**RECs**) at Sites 4 and 5 only:

547 Park Avenue (Site 4) – Manufacturing and Filling Station
The property at 547 Park Avenue (Site 4) operated as a manufacturing operation (approximately 1904 – 1918) and filling station (1965 – 1977). The Site was initially separated into several lots with sparse development, including a machine shop and commercial store front along Park Avenue. By 1904, the D.W. Binns Foundry was developed at 547 Park Avenue. The D.W. Binns Foundry operated until sometime before 1918 when the on-Site structures were demolished and the property began utilization as a lumber yard. The Site's use as a lumber yard lasted until 1950. By 1965, a filling station was constructed on the Site, which operated on-Site until sometime before 1977.

In December 2018, a Phase II Subsurface Investigation was conducted by Environmental Business Consultants, Inc. (EBC), and soil sampling results indicated the presence of mercury and petroleum contamination beneath the Site. Petroleum-related Volatile Organic Compounds (VOCs) were reported above Unrestricted and Residential Use Soil Cleanup Objectives within the shallow and deep soil intervals. Similarly, PID readings peaked at 939 ppm and some visual and olfactory indications of contamination were noted. The presence of stained soil with notable suspect odors, elevated levels of petroleum-related VOC and high PID response indicates that a petroleum spill may have occurred on-Site and is localized in this area on-Site. At the time of the investigation, it was recommended by EBC that a spill case be reported to the NYCDEC Spill Hotline, though at this time it does not appear that this has been conducted.

The presence of a foundry, machine shop, filling station and known petroleum impacts on-Site could have adversely impacted the environmental quality of the Site and potentially migrated to surrounding Sites. Therefore, this finding is considered a REC for both Sites 4 and 5.

63 Walworth Street – Off-Site Filling Station
The property at 63 Walworth Street, located approximately 65 feet cross/downgradient west/southwest of Site 4, 65 feet downgradient north of Site 5, and 165 feet cross/upgradient of Site 6, was first developed in 1935 as a filling station with three gasoline storage tanks. This filling station remained in operation until at least 2007. The operation of a gasoline filling station with known gasoline storage tanks within the vicinity of the Site Area could have impacted the subsurface and migrated to the Site Area is considered a REC for Site 4 and Site 5.

FLS found the following *recognized environmental condition* (**REC**) at Site 4 only:

543-545 Park Avenue – Off-Site Auto Repair
The property located at 543-545 Park Avenue, located adjacent up/cross-gradient west/southwest of Site 4, approximately 65 feet downgradient north of Site 5, and 150 feet downgradient north of Site 6, operated as an auto repair facility from 1965 to approximately 1993. The presence of an auto repair facility within close proximity and upgradient from a Site has the potential to impact the environmental quality of that property. For this reason, this finding is considered a REC for Site 4.

FLS found the following *recognized environmental conditions* (**RECs**) at Site 6 only:

101-103 Spencer Street – Off-Site Auto Repair
By 1935, the property at 101-103 Spencer Street, located approximately 180 feet upgradient southwest of Site 6, operated as an Auto Painting and Repair facility, and featured one gasoline storage tank. By 1947, this was redeveloped into a motor freight (trucking) operation, though the gasoline storage tank remained on the property. The property was reverted into an auto repair facility again in approximately 1965 until 1991. Given the distance and upgradient location relative to Site 6, the historic operation of an auto repair and trucking facility including the presence of a gasoline storage tank could have the potential to impact the environmental quality of the surrounding area. For this reason, this finding is considered a REC for Site 6, specifically.

95-97 Walworth Street – Off-Site Auto Yard and Charcoal Storage
As early as 1918, the property at 95-97 Walworth Street, located adjacent upgradient south of Site 6 and approximately 250 feet upgradient south of Site 5, was developed as an auto and wagon yard with charcoal storage. By 1935, this was identified as a private garage with charcoal storage that remained in use until at least 1950. The presence of an auto yard with charcoal storage within the direct vicinity of the Site Area for approximately 47 years could have the potential to impact the environmental quality of the adjacent Site. For this reason, this finding is considered a REC for Site 6.

99 Walworth Street – Off-Site Manufacturing
From at least 1977 to 2007, the property at 99 Walworth Street, located approximately 40 feet upgradient south of Site 6 and approximately 300 feet upgradient south of Site 5, operated as an unspecified manufacturing operation. The prolonged operation of a manufacturing facility has the potential to impact the environmental quality of the surrounding area. Given the close proximity relative to Site 6 it is considered possible contamination from this property could have migrated to the Site through groundwater or soil vapor, and for this reason, this finding is considered a REC for Site 6.

FLS did not identify any *controlled recognized environmental conditions* (**CRECs**) at any Site.

FLS did not identify any *historic recognized environmental conditions* (**HRECs**) at any Site.

FLS identified the following *environmental business risks* (**BERs**) at the Site Area.

Non-ASTM Scope Items | Lead, Asbestos and Mold
Assessment of the presence of Asbestos Containing Materials (ACMs), Lead Based Paint (LBP), and mold is not included within the scope of a Phase I ESA. However, based on the age of the existing buildings and observations during Site Reconnaissance, it is possible these Sites contains the presence of ACM, mold and LBP. ACM, mold and LBP are considered BERs.

Potential Historic Fill
Historic fill is non-indigenous material that was previously placed on a property in order to raise the topographic elevation of the site. The fill material was typically imported from offsite, and generally contained mixtures of soil, coal ash, foundry sands, construction debris, and/or dredge spoils. Historic urban fill was historically used throughout New York City for development purposes and commonly contains environmental contaminants including arsenic, lead, cadmium, mercury, etc., as well as polycyclic aromatic hydrocarbons. Based on review of historical topographical maps and historical aerial imagery, there has been no change to the local topography indicating the import of historic fill since 1897. However, the presence of historic fill from prior to 1897 cannot be ruled out, and for this reason, historic fill is considered a BER.

FLS observed the below additional important **findings** not considered RECs, HRECs, CRECs, or BERs.

528 Park Avenue (Site 5) – Con Edison Service Box
Site 5, located at 528 Park Avenue, is listed in the NY Manifest database, and is associated with a Con Edison service box located on-Site. As is typical of Con Edison service boxes, the manifests identify the use and transport of lead waste. There is no evidence of improper storage or handling, and this finding is not considered a REC.

62 Walworth Street (Site 7) – Auto Repair
The property located at 62 Walworth Street, approximately 150 feet cross/downgradient north of the Site Area was developed as an auto repair facility from approximately 1965-1993. Typically, the presence of an auto repair facility within the vicinity of the Site Area would be considered a REC. However, given the distance and downgradient location of this listing, it is considered unlikely for contamination from this Site to migrate to the Site Area. For this reason, this finding is not considered a REC.

533 Park Avenue (Site 3) – Auto Junkyard
The properties at 533 Park Avenue (Site 3), located approximately 115 feet cross-gradient northwest of the Site Area, were developed as an auto junkyard from 1965 to 1991. Automotive junkyards have been associated with heavy metal and petroleum runoff which

can migrate to the subsurface and groundwater. The operation of an automotive junkyard for approximately 26 years could have adversely impacted the environmental quality of the surrounding area. However, given the distance and cross-gradient location of this listing it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

79-85 Walworth Street (Site 6) – On-Site AST
During Site reconnaissance, a historic AST of approximately 500-gallons equipped with secondary concrete containment was identified within the cellar storage room in the basement of 79-85 Walworth Street. It was not clear at this time whether the tank remains in use, but no active fill port was identified at the property during Site Reconnaissance. There was no evidence of spills associated with this AST. The presence of an AST alone does not constitute a REC, given the secondary containment and no evidence of spills, this finding is not considered a REC. If the AST is inactive, this tank should be registered and closed with the PBS.

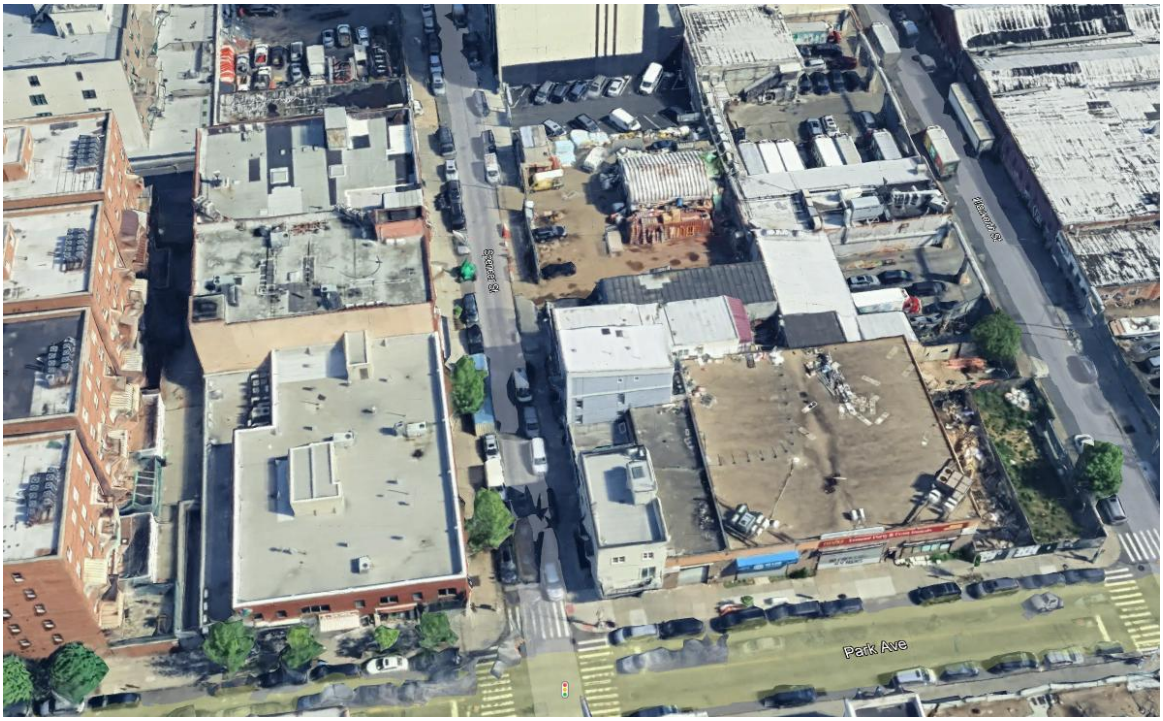
FLS recommends the following for the property:

- Based on the results of the Phase I ESA, FLS recommends a Phase II ESA including the collection of soil, soil vapor, and groundwater samples being conducted to evaluate the potential impact from historical on and off-Site operations on the environmental quality of all Sites within the Site Area.

Phase I
Environmental Site Assessment

Park Avenue Rezoning – Northern Sector
517 Park Avenue (Projected Development Site 1), 41-49 Spencer Street (Projected Development Site 2), and 57 Spencer / 525-535 Park Avenue (Projected Development Site 3)
Brooklyn, NY 11205

Fleming-Lee Shue Project Number: 10013-028



May 2025

Prepared For:

Philip Habib & Associates
a Division of AKRF
432 Park Avenue S
New York, NY 10016

Prepared By:

Fleming Lee Shue

158 West 29th Street, 9th Fl.
New York, NY 10001
Phone: 212-675-3225
Fax: 212-675-3224

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

1.1 Study Area Historic Site Use 1
1.2 Historic Neighborhood Use 2
1.3 Summary of Findings, Opinions and Conclusions 2

2.0 INTRODUCTION 10

2.1 Purpose 10
2.2 Detailed Scope of Services 11
2.3 Limitations and Exceptions 13
2.4 Additions, Deviations, Deletions, and Data Gaps 13
3.1 Location and Legal Description 14
3.2 Current Use of the Study Area 14
3.3 Description of Structures, Roads and Other Improvements on the Site 14
3.4 Current Uses of Adjoining Properties 14

4.0 PHYSICAL SETTING 16

4.1 Topography 16
4.2 Geology and Soils 16
4.3 Hydrology 16
4.4 Wetlands 17
4.5 Radon 17

5.0 USER PROVIDED INFORMATION 18

5.1 Title Records 18
5.2 Environmental Liens or Activity and Use Limitations 19
5.3 Commonly Known or Reasonably Ascertainable Information 19
5.4 Valuation Reduction for Environmental Issues 19
5.5 Owner, Property Manager, and Occupant Information 19

6.0 RECORDS REVIEW 20

6.1 Standard Environmental Record Sources 20
6.2 Additional Environmental Record Sources 22
6.2.1 New York State Department of Environmental Conservation 22
6.2.2 New York City Department of Buildings 22
6.2.3 Previous Environmental Reports 23
6.3 Historical Use Information on Site and Adjoining Properties 24
6.3.1 Historical Sanborn Fire Insurance Maps 24
6.3.2 Historical City Directories 31
6.3.3 Historical Aerial Photographs 35
6.3.4 Historical Topographic Maps 35

7.0 SITE RECONNAISSANCE 36

7.1 Methodology and Limiting Conditions 36
7.2 Utilities 36
7.3 Toxic and/or Hazardous Materials 36
7.3.1 Petroleum Products Storage and Handling 36
7.4 Property Housekeeping 36
7.4.1 Interior Housekeeping 37
7.4.2 Exterior Housekeeping 37
7.5 Asbestos-Containing Material 37
7.6 Mold 37

7.7 LEAD-BASED PAINT 37
7.8 POLYCHLORINATED BIPHENYLS 37
7.8.1 Definitions *37*
7.10 INDICATIONS OF SOLID WASTE DISPOSAL 38
7.11 PITS, PONDS, LAGOONS, OR STANDING WATER 38
7.12 SURVEY OF SURROUNDING PROPERTIES 38

8.0 INTERVIEWS 39

8.1 CURRENT AND HISTORICAL USE INTERVIEWS 39
8.1.1 Current Property Owner *39*
8.1.2 Current Site Operator or Key Site Manager *39*
8.1.3 Site Occupants *39*
8.1.4 Past Owners, Operators and Occupants *39*
8.1.5 Report User *39*

9.0 VAPOR ENCROACHMENT EVALUATION 40

10.0 PFAS COMPOUNDS 41

11.0 CONCLUSIONS AND RECOMMENDATIONS 42

12.0 REFERENCES 50

13.0 QUALIFICATIONS AND SIGNATURE OF ENVIRONMENTAL PROFESSIONAL 51

13.1 QUALIFICATIONS 51
13.2 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL 51

14.0 DISCLAIMER 52

FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Plan

APPENDICES

Appendix A: Photograph Log

Appendix B: Tax Map

Appendix C: User Questionnaire

Appendix D: Regulatory Agency Database Report

Appendix E: Freedom of Information Act Response

Appendix F: Historical Sanborn Fire Insurance Maps

Appendix G: City Directory Abstract

Appendix H: Historical Aerial Photographs

Appendix I: Aerial Photos

Appendix J: Historical Topographical Maps

Report Utilization	
Inspection Date	5/15/2025
Radius Report Date	5/1/2025
Report Date	5/22/2025
Report Utilization Date	10/28/2025

1.0 EXECUTIVE SUMMARY

Fleming-Lee Shue, Inc. (FLS) has performed a Phase I Environmental Site Assessment (ESA) for Philip Habib & Associates a Division of AKRF (User) for the Northern Sector (Site Area) of the Park Avenue Rezoning Study Area. The Site Area includes properties located at 517 Park Avenue (Projected Development Site 1), 41-49 Spencer Street (Projected Development Site 2), and 57 Spencer / 525-535 Park Avenue (Projected Development Site 3), in the Bedford-Stuyvesant neighborhood of Brooklyn, New York.

Projected Development Site 1 is located at the northwestern corner of Park Avenue and Spencer Street, and consists of a single rectangular Lot with an area of approximately 12,270 square feet. Site 1 is identified as Block 1715, Lot 3 on the New York City Tax Map, and is currently developed with numerous retail storefronts, a doctor's office, and a storage/warehouse area.

Projected Development Site 2 is located on the eastern side of Spencer Street, approximately 150 feet north of the Park Avenue and Spencer Street intersection. It consists of a single rectangular Lot with an area of approximately 12,500 square feet. Site 2 is identified as Block 1716, Lot 3 on the New York City Tax Map, and is currently developed with an outdoor storage lot and garage bay.

Projected Development Site 3 is located on the northern side of Park Avenue, approximately 25 feet east of the Park Avenue and Spencer Street intersection and approximately 50 feet west of the Park Avenue and Walworth Street intersection. It consists of a single nearly rectangular Lot with an area of approximately 11,657 square feet. Site 3 is identified as Block 1716, Lot 61 on the New York City Tax Map, and is currently developed with a large warehouse building.

All Projected Development Sites, with their individual New York City Tax Block and Lots and current development status are presented in Table 1. Figure 1 presents a Site Location Map and Figure 2 presents a Site Plan. Photographs of the Sites and the surrounding properties are included in Appendix A. This report was prepared in conformance with the American Society for Testing and Materials Standard Practice for Environmental Site Assessment Process (ASTM) E 1527-21, as well as the United States Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) requirements (November 2005).

1.1 Study Area Historic Site Use

Site 1 was first developed by 1918 as the Williamsburgh Brass Operation, a brass foundry, which operated until at least 1935 when the Site was redeveloped as a general goods store. At the same time, the northwestern portion of the current lot was developed as a parking garage with access along Bedford Avenue. The 1935 Sanborn Fire Insurance map depicts a gasoline tank of unknown volume within the northeast portion of the Site. The onsite parking garage operated until at least 1947 when the Bowey's Cocoa and Chocolate Inc. began manufacturing operations and used this area as a storage for raw materials. The Bowey's Cocoa and Chocolate Inc. operated until at least 1977 when the building was

redeveloped into a plastic products manufacturing operation, which remained in use until approximately 1993, although warehouse storage use continued until at least 2009. By 2011, the Site was redeveloped into a commercial property that later featured multiple storefronts, a doctor's office, and a storage area.

Site 2 was first developed by at least 1918 with seven (7) residential buildings and three (3) storefronts. This Site use remained generally unchanged until 1977, when the Site was vacant aside from a single residence on the northern border. By 1981, the entire Site was vacant and remained so until at least 2007. By 2009 the lot was partially redeveloped with a warehouse, though this was demolished by 2016. Since then, the Site has been used as an outdoor storage area.

Site 3 was first developed with residential and commercial use in the late 1800s and early 1900s. In 1965, these developments were demolished and an automotive junkyard began operation at 533 Park Avenue. The Site's operation as a junkyard lasted until approximately 1991 when the existing building was developed and the Site was utilized as a building supplies storage operation. The Site is currently used for storage for a party supply rental company and appliance storefront. (Projected Development Site 1 (Projected Development Site 2), and 57 Spencer / 525-535 Park Avenue (Projected Development Site 3)

1.2 Historic Neighborhood Use

The historical uses of the surrounding properties include residential, commercial, and industrial. Early in surrounding properties' history, multiple auto repair facilities, filling stations, machine shops, and manufacturing operations were developed.

1.3 Summary of Findings, Opinions and Conclusions

FLS found the following *recognized environmental conditions* (**RECs**) at all Sites.

Site	Recognized Environmental Condition
517 Park Avenue Site 1	517 Park Avenue (Site 1) – Manufacturing and Gasoline Storage Tank 801 Bedford Avenue – Off-Site Service Station and Spill 504 Park Avenue – Off-Site Plating Works, Auto Repair 517-519 Park Avenue (Site 1) – On Site Historic Auto Repair 505-511 Park Avenue / 789-791 Bedford Avenue – Off-Site Filling Station 74-76 Spencer Street – Off-Site Manufacturing and Auto Repair
41-49 Spencer Street Site 2	517 Park Avenue (Site 1) – Manufacturing and Gasoline Storage Tank 801 Bedford Avenue – Off-Site Service Station and Spill 504 Park Avenue – Off-Site Plating Works, Auto Repair 517-519 Park Avenue (Site 1) – On Site Historic Auto Repair 505-511 Park Avenue / 789-791 Bedford Avenue – Off-Site Filling Station
57 Spencer	517 Park Avenue (Site 1) – Manufacturing and Gasoline Storage Tank

525-535 Park Avenue Site 3	801 Bedford Avenue – Off-Site Service Station and Spill 504 Park Avenue – Off-Site Plating Works, Auto Repair 517-519 Park Avenue (Site 1) – On Site Historic Auto Repair 74-76 Spencer Street – Off-Site Manufacturing and Auto Repair 533 Park Avenue (Site 3) – On Site Auto Junkyard 520-526 Park Avenue (Site 9) – Off Site Auto Garage and Gasoline Storage Tank 528 Park Avenue (Site 5) – Off-Site Manufacturing 63 Walworth Street – Off-Site Filling Station 512 Park Avenue – Off-Site Venetian Blinds Manufacturer

517 Park Avenue (Site 1) – Manufacturing and Gasoline Storage Tank
The properties at 517 Park Avenue (within projected development Site 1), were developed with various uses including manufacturing and gasoline storage. The Williamsburgh Brass Foundry operated on-Site at 517 Park Avenue from 1918 to at least 1935. At the same time, the northwestern portion of the current lot was developed as a parking garage with access along Bedford Avenue. The 1935 Sanborn map depicts a gasoline tank of unknown volume within the northeast portion of the Site. The Bowey's Cocoa and Chocolate Inc. operated on Site from approximately 1947 to at least 1977, which was then converted to a plastics manufacture (1977-1993). Brass metal foundries and plastic product manufacturing have historically known to use and generate wastes such as heavy metals, acids, petroleum fuels, solvents, accelerators, adhesives, oils, fuel oils, resins, soaps and solvents. The Site's historic manufacturing operations including as a brass foundry and plastic manufacturing operation for at least 33 years, and the presence of at least one gasoline tank for an unknown amount of time could have adversely impacted the environmental quality of the Site Area. For this reason, this finding is considered a REC for all Sites.

801 Bedford Avenue – Off-Site Service Station
The property located at 801 Bedford Avenue, located approximately 65 feet upgradient south/southwest of the Site Area, is listed in multiple environmental databases, including the VCP and E-Designation (Site No. 14TMP0289K, 14EHA289K, 17CVCP076K) databases. The property operated as Merit Oil and Amerada Hess Corp. from approximately 2000-2014, though Sanborn map and Google Earth review indicate that a filling station operated at this location from at least 1977 to 2015. During its operation as a gasoline and auto-service station, there were a total of 50 USTs in use. During a tank removal, in which 36 tanks were closed-removed from the property, petroleum impacts to soil and groundwater were encountered. Approximately 1,400 tons of contaminated soil were removed from the property and subsequently, several spills were closed as of March 2014. The 14 remaining tanks were closed-in place. Current development at the property is in Site Management and contains engineering controls in the form of a vapor barrier and vapor mitigation system. The presence of a large petroleum storage facility with known environmental contamination has the potential for contamination to migrate to the Site Area including through groundwater and soil vapor. This finding is therefore considered a REC for all Sites.

504 Park Avenue – Off-Site Plating Works, Auto Repair
The property located at 504 Park Avenue, approximately 65 feet upgradient south of the Site Area began operating as a plating works by approximately 1935. By 1947, this property was redeveloped into an auto repair facility that then remained in operation until at least 2007. The extended operation of both a plating works and an auto repair facility could have the potential to impact the environmental quality of the surrounding area. Considering the close proximity and upgradient location, it is considered possible that contamination from this finding could have migrated and impacted the environmental quality of the Site Area. This finding is considered a REC for all three Sites.

517-519 Park Avenue (Site 1) – On-Site Historic Auto Repair
Review of the Historic City Directory identified entries for SIDNEYS AUTO BODY SHOP (1934), Dicks Auto Repairs (1940), and Schopps Richard Auto Repairs (1940) at 517 and 519 Park Avenue. The operation of auto repair facilities in Site 1 has the potential to have impacted the environmental quality of the Site Area and is considered a REC for all Sites.

FLS found the following *recognized environmental condition* (**REC**) at Sites 1 and 2 only:

505-511 Park Avenue / 789-791 Bedford Avenue – Off-Site Filling Station
The property located at 505-511 Park Avenue and 789-791 Bedford Avenue, adjacent west of Site 1 and 175 upgradient southwest of Site 2, operated as a filling station with four (4) gasoline tanks from 1947 to approximately 1965. No closure records for the tanks were identified. The presence of a gasoline filling station and underground storage tanks within the vicinity of the Site for 18 years could have impacted the environmental quality of these Sites and is therefore considered a REC for Sites 1 and 2.

FLS found the following *recognized environmental condition* (**REC**) at Sites 1 and 3 only:

74-76 Spencer Street – Off-Site Manufacturing and Auto Repair
The property located at 74-76 Spencer Street, approximately 150 feet upgradient south of the Site Area has been utilized for various manufacturing and auto repair uses throughout its history. Starting in approximately 1989 the Site was listed with an unspecified manufacturing operation. In 1993, this was reportedly then converted to an auto repair facility, which remained in use until 2002. The operation of a manufacturing facility and auto repair within the vicinity of the Site Area could have impacted the environmental quality of these sites and are therefore considered a REC for Site 1 and Site 3.

FLS found the following *recognized environmental condition* (**REC**) at Site 3 only:

533 Park Avenue (Site 3) – On-Site Auto Junkyard
The property at 533 Park Avenue (Site 3), was developed as an auto junkyard from approximately 1965 to 1991. Automotive junkyards have been associated with heavy

metal and petroleum runoff which can migrate to the subsurface and groundwater. The operation of an automotive junkyard on-Site for approximately 26 years could have adversely impacted the environmental quality of the Site and is considered a REC for Site 3.

520-526 Park Avenue (Site 9) – Off-Site Auto Garage and Gasoline Storage Tank
By 1918, an auto garage was developed at 520-526 Park Avenue (Site 9), approximately 65 feet upgradient south of Site 3, which was then replaced by the Federal Paper Co. facility as late as 1935. This facility featured a gasoline tank located near the northern Site boundary. By 1947, the property was reverted back to a renting garage with the installed gasoline tank still present. This garage operated unaltered until as late as 1986, at which point it was redeveloped to a private garage, and the gasoline tank is no longer depicted on the Sanborn Maps. The operation of a garage and gasoline tank within the direct vicinity of the Site could have impacted the environmental quality and is therefore considered a REC for Site 3.

528 Park Avenue (Site 5) – Off-Site Manufacturing
528 Park Avenue located approximately 115 feet cross-gradient southeast of the Site Area, has been developed with various manufacturing operations over its history. The Site was first developed in 1887 with a large warehouse for a fur cutting operation under the Hatters' Fur Cutting Co., and later the Hitchcock Dermody & Co. Fur Cutters in 1918. By 1935, the property began use as a manufacturer of wooden children's toys under Chas & Victor Goldstein Inc. In 1947 the Site began operation as a leather tannery under the Moriarty Johnson Co. Inc. and later the Sandford Tanning Co. Inc. in 1950. From 1965 to 1977 the Site use was not specified and by 1979 the on-Site building was demolished. The Site remained vacant until at least 2007. Historic fur, wood and tanning operations have been associated with the use and waste generation of acids, bleaches, dyes, heavy metals, lacquers, petroleum fuels and solvents. The operation of various manufacturing operations for at least 63 years could have adversely impacted the environmental quality of the surrounding area, and is considered a REC for Site 3.

63 Walworth Street – Off-Site Filling Station
The property at 63 Walworth Street, located approximately 100 feet cross-gradient east of the Site Area, was first developed in 1935 as a filling station with three gasoline storage tanks. This filling station remained in operation until at least 2007. The operation of a gasoline filling station for approximately 72 years with known gasoline storage tanks could have impacted the environmental quality of the surrounding area and is considered a REC for Site 3.

512 Park Avenue – Off-Site Venetian Blinds Manufacturer
Historic City Directory review identified "GE MFG Co Venetian Blinds Supplies" as a Site use for at 512 Park Avenue located approximately 65 feet upgradient south of Site 3, from approximately 1949 to 1965. Venetian blinds manufacturers are typically associated with the use of various solvents and other chemicals. Considering the close proximity and upgradient location from Site 3 it is considered possible contamination from this finding could migrate to the Site and is therefore considered a REC for Site 3.

FLS did not identify any *controlled recognized environmental conditions* (**CREC**s) at any Site.

FLS did not identify any *historic recognized environmental conditions* (**HREC**s) at any Site.

FLS identified the following *environmental business risks* (**BERs**) at the Site Area.

Non-ASTM Scope Items | Lead, Asbestos and Mold
Assessment of the presence of Asbestos Containing Materials (ACMs), Lead Based Paint (LBP), and mold is not included within the scope of a Phase I ESA. However, based on the age of the existing buildings and observations during Site Reconnaissance, it is possible these Sites contains the presence of ACM, mold and LBP. ACM, mold and LBP are considered BERs.

Potential Historic Fill
Historic fill is non-indigenous material that was previously placed on a property in order to raise the topographic elevation of the site. The fill material was typically imported from offsite, and generally contained mixtures of soil, coal ash, foundry sands, construction debris, and/or dredge spoils. Historic urban fill was historically used throughout New York City for development purposes and commonly contains environmental contaminants including arsenic, lead, cadmium, mercury, etc., as well as polycyclic aromatic hydrocarbons. Based on review of historical topographical maps and historical aerial imagery, there has been no change to the local topography indicating the import of historic fill since 1897. However, the presence of historic fill from prior to 1897 cannot be ruled out, and for this reason, historic fill is considered a BER.

FLS observed the below additional important **findings** not considered RECs, HRECs, CRECs, or BERs.

805-807 Bedford Avenue – Off-Site Auto Repair
As early as 1935, the properties at 805-807 Bedford Avenue located approximately 225 feet upgradient southwest from the Site Area operated as auto repair and wrecking facilities, respectively. By 1947, the wrecking operation at 807 Bedford Avenue likely ceased, however, by 1965, both addresses operated as auto repair facilities. Auto repair operations continued until 1987 and 2001 for 805 Bedford Avenue and 807 Bedford Avenue, respectively. The historic operation of an auto repair facility for approximately 66 years typically has the potential to impact the environmental quality of the surrounding area due to petroleum/solvent contact with soil and groundwater. However, considering their distance and cross-gradient location to the Site Area, these listings are considered unlikely to have impacted the environmental quality of the Site Area. For this reason, this finding is not considered a REC.

79-85 Walworth Street (Site 6) – Auto Repair and Manufacturing
The properties at 79-85 Walworth Street (Site 6), approximately 225 feet cross-gradient southeast of the Site Area, were identified for various commercial and manufacturing uses throughout its history. The property was first developed for residential and some commercial use. The property located at 79-85 Walworth Street was redeveloped in 1935 as a garage and automotive repair with a gasoline tank of unknown volume. The Site's operation as a garage and automotive repair shop lasted until sometime before 1950 when the property was redeveloped as an unspecified delivery operation. The gasoline tank was also removed from the map depictions in 1950. This delivery operation lasted until sometime before 1977, at which point the property was redeveloped into an unknown manufacturing operation along with the building adjacent north of it (75-77 Walworth Street). Despite the historic operation of a garage and auto repair with the presence of a gasoline tank for at least 12 years, and the operation of an unspecified manufacturing facility for at least 30 years, it is unlikely that there could be impacts to the environmental quality of the Site Area due to its distant, cross-gradient location. For this reason, this finding is not considered a REC.

81 Spencer Street – Off-Site Water Proofing Operation
The property located at 81 Spencer Street, approximately 250 feet upgradient south of the Site Area, operated as a waterproofing facility from 1989 to at least 2007. The nature of the waterproofing operations is not clear. Considering the size of the building and lack of corroborating manufacturing records, it is considered unlikely that the facility manufactured waterproofing materials. This, and the distance from the Site Area, make it unlikely to have impacted the environmental quality of the Site Area. For this reason, this finding is not considered a REC.

514-516 Park Avenue (Site 10)
The properties at 514-516 (Site 10), approximately 65 feet upgradient south of the Site Area, have historically been utilized for various commercial operations including use as a wood working operation and warehouse. The properties were first developed as early as 1887 as a bakery, and dwelling. By 1904, multiple storefronts were developed, and the Site remained relatively unchanged until as late as 1950, at which point a small wood working operation was developed at 73 Spencer Street, in the western portion of the Site. By 1965, the wood working operation was redeveloped into a church, and from 1991 to at least 2007, the majority of the Site was generally used for storage/warehouse use. Wood working operations are associated with the use of various solvents and lacquers, however, considering the short duration and size of these operations, the likelihood of impact to their environmental quality of the Site Area is considered low and these findings are not considered RECs.

77 Walworth Street – Off-Site Auto Wrecking
The property located at 77 Walworth Street, approximately 175 feet cross-gradient southeast of the Site Area, operated as an auto wrecking facility from at least 1947 to 1950. The presence of a wrecking facility in the proximity of the Site Area would typically be considered a REC, however, the limited years of operation, distance and cross-gradient

location from the Site Area indicates it is unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

62 Walworth Street (Site 7) – Auto Repair
The property located at 62 Walworth Street, approximately 140 feet downgradient north of the Site Area was developed as an auto repair facility from approximately 1965-1993. Typically, the presence of an auto repair facility within the vicinity of the Site Area would be considered a REC. However, given the distance and downgradient location of this listing, it is considered unlikely for contamination from this operation to migrate to the Site Area. For this reason, this finding is not considered a REC.

543-545 Park Avenue – Off-Site Auto Repair
The property located at 543-545 Park Avenue, approximately 110 feet downgradient northeast of the Site Area operated as an auto repair facility from 1965 to approximately 1993. Typically, the presence of an auto repair facility in the vicinity of the Site Area would be considered a REC. However, given the distance and downgradient location of this finding it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

547 Park Avenue (Site 4) – Manufacturing and Filling Station
The property at 547 Park Avenue (Site 4) located 165 feet downgradient of the Site Area, operated as a manufacturing operation (approximately 1904 – 1918) and filling station (1965 – 1977). The site was initially separated into several lots with sparse development, including a machine shop and commercial store front along Park Avenue. By 1904, the D.W. Binns Foundry was developed at 547 Park Avenue. The D.W. Binns Foundry operated until sometime before 1918 when the on-Site structures were demolished and the property began utilization as a lumber yard. The Site's use as a lumber yard lasted until 1950. By 1965, a filling station was constructed on the Site. There were no tanks depicted on the 1965 Sanborn map. The filling station operated on-Site until sometime before 1977, the subsequent map, when the on-Site structure was demolished and the Site began its operation as a parking lot. The presence of a foundry and filling station operations could have adversely impacted the environmental quality of the surrounding area. However, considering the distance and down/cross-gradient location of this property relative to the Site Area it is considered unlikely to have impacted the Site Area. For this reason, this finding is not considered a REC.

521 Park Avenue (Site 1) – Potential Manufacturing Operation
The City Directory entries for "Mil An Mfg Corp Vac Cleaners Supplies" at 521 Park Avenue, indicates that a potential manufacturing operation was present within Site 1 in at least 1949. This finding is not corroborated by any other environmental resource, and the address is found to be occupied by a storefront was present in both 1947 and 1950. For this reason, it is unlikely that a manufacturing operation was actually present on-Site, and for that reason, this finding is not considered a REC.

529 Park Avenue (Site 3) – Potential Manufacturing Operation
The City Directory entry for "Keystone Metal Bed Co" at 529 Park Avenue indicates that a potential metal bed manufacturer was present within Site 3 in at least 1928. This finding is not corroborated by any other environmental resource, and the address is found to be occupied by a movie theater in 1918 and a vacant chapel in 1935. Nearby properties each indicate storefront presence, and none indicate the presence of a manufacturing operation. If Keystone Metal Bed Co truly operated at this address, it was likely only involved with storage or selling, and not manufacturing. For this reason, this finding is not considered a REC.

51 Spencer Street – Off-Site Auto Repair
The City Directory entry for "Infiniti Auto Works" at 51 Spencer Street, adjacent south from Site 2, 25 feet north of Site 3, and 50 feet east of Site 1, indicates that there was an auto repair facility operating near each Site in at least 1995. This finding is not corroborated in any other environmental resource, and is only present for a single year. For these reasons, this finding is not considered a REC.

FLS recommends the following for the property:

- Based on the results of the Phase I ESA, FLS recommends a Phase II ESA including the collection of soil, soil vapor, and groundwater samples being conducted to evaluate the potential impact from historical on and off-Site operations on the environmental quality of all Sites within the Site Area.