

Client:

J.P. Morgan Mortgage Capital Inc. 400 Perimeter Center Terrace, Suite 575 Atlanta, Georgia 30346 Ms. Tammie Creery

Phase I
Environmental Site Assessment
of
Fortress - New York
49-20 Fifth Street
Long Island City, New York 11101

EMG Project No.: 55661

Date of Report: June 15, 1999

On-site Date: April 23, 1999

Prepared by:

EMG

EMG Corporate Center 11011 McCormick Road Baltimore, Maryland 21031

(410) 785-6200

(410) 785-6220 (fax)



PROJECT SUMMARY

Fortress - New York 49-20 Fifth Street Long Island City, New York 11101

Assessment Component	Acceptable	Routine Solution	Phase III	Estimated Cost	Reference Section	Page
Historical Review	(1)			N/A	5	15
Operational Activities	✓				6.1	22
Hazardous Materials	✓				6.2	22
Waste Generation	✓				6.3	22
PCBs	✓				6.4	23
Asbestos	✓				6.5	23
Radon	✓				6.6	24
Lead-Based Paint	√				6.7	24
Lead in Water	√				6.8	24
Tanks/Pipelines	1				6.9	25
Surface Areas	1				6.10	25
Regulatory Database Review	✓				7	27
Adjacent Properties	, V				8	34

(1) The Project was historically utilized as a paint/varnish manufacturing facility (1903-1984), prior to the redevelopment of the current Project improvements into the current use in 1984. In addition, review of available information identified several bulk aboveground storage tanks (ASTs), two heating oil underground storage tanks (USTs), and an additional underground storage vessel associated with the historic paint/varnish manufacturing facility. Subsurface investigations conducted in 1996 and 1997 identified soil contamination associated with the heating oil USTs that had been previously removed. A Spills case was assigned to this contamination by the New York State Department of Environmental Conservation (NYSDEC). The contaminated soil and the underground storage vessel were removed, and the Spills case was granted closure by the NYSDEC. Based on this information, no further action or investigation appears warranted at this time.



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1. Certification

EMG has completed a Phase I Environmental Site Assessment of the Fortress - New York (the "Project"), located at 49-20 Fifth Street in Long Island City, New York 11101. The assessment was performed at the Client's request using the methods and procedures consistent with good commercial and customary practice designed to conform with acceptable industry standards.

Morgan Guaranty Trust Company of New York, and its affiliates (collectively, "Morgan"), rating agencies and certain limited investors in a securitization, may use and rely upon this appraisal (or engineering report, etc.) in connection with a planned loan securitization involving the subject property, including, without limitation, utilizing selected information in this report in Morgan's Offering Memorandum relating to the securitization and EMG agrees to cooperate in answering questions by any of the above parties in connection with the securitization.

This report is not for the use or benefit of, nor may it be relied upon by, any other person or entity without the advance written consent of EMG. In expressing the opinions stated in this report, EMG has exercised the degree of skill and care ordinarily exercised by a reasonable prudent environmental professional in the same community and in the same time frame given the same or similar facts and circumstances. Documentation and data provided by the Client, designated representatives of the Client or other interested third parties, or from the public domain, and referred to in the preparation of this assessment, have been used and referenced with the understanding that EMG assumes no responsibility or liability for their accuracy.

The independent conclusions represent our professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client or their representative have been assumed to be correct and complete. The conclusions presented are based on the data provided, observations, and conditions that existed on the date of the on-site visit.





If you have any questions regarding this report, please contact the Program Supervisor listed below at 1 (800) 733-0660, Ext. 2719.

Researched by:

David W. Barton, Project Manager

Surveyed by:

David W. Barton, Project Manager

Written by:

David W. Barton, Project Manager

Reviewed by:

John A. Katze

Program Supervisor



2. Summary

EMG performed a Phase I Environmental Site Assessment, that included on-site observations of the accessible areas of the Fortress – New York (the "Project"), on April 23, 1999. The Project is located at 49-20 Fifth Street in Long Island City, New York 11101, and consists of approximately 1.84 acres of land.

The Project, originally constructed in 1939 and 1945, was renovated in 1984, and is currently commercial storage facility. Historically, the Project was utilized as a paint/varnish manufacturing facility, prior to redevelopment of the Project into its current use. Properties in the general vicinity of the Project include are developed with industrial, commercial, and residential structures.

The following summarizes the independent conclusions representing EMG's best professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client, owner, or their representative have been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment.



2.1. Findings/Conclusions

Historical Data

- The review of the historical data available for the Project identified the following recognized environmental conditions (Section 5):
 - The Project was historically utilized as a paint/varnish manufacturing facility (1903-1984), prior to the redevelopment of the current Project improvements into the current use in 1984. In addition, review of available information identified several bulk aboveground storage tanks (ASTs), two heating oil underground storage tanks (USTs), and an additional underground storage vessel associated with the historic paint/varnish manufacturing facility. Subsurface investigations conducted in 1996 and 1997 identified soil contamination associated with the heating oil USTs that had been previously removed. A Spills case was assigned to this contamination by the New York State Department of Environmental Conservation (NYSDEC). The contaminated soil and the underground storage vessel were removed, and the Spills case was granted closure by the NYSDEC. Based on this information, no further action or investigation appears warranted at this time.

Operational Activities

■ EMG observed no recognized environmental conditions associated with the activities at the Project (Section 6.1). No further action or investigation is recommended regarding operational activities at the Project.

Hazardous Materials/Petroleum Products

The Project is involved in the use of hazardous materials in the form of routine janitorial and maintenance supplies (Section 6.2). The materials observed do not appear to pose a hazard to the Project, provided they continue to be used as designed, are properly handled, and all regulations regarding their use are followed. No further action or investigation is recommended regarding the use of hazardous materials or petroleum products at the Project.



Wastes

The Project does not generate, treat, store, or dispose of hazardous, medical, or regulated wastes (Section 6.3). The non-hazardous solid and liquid wastes generated at the Project appear to be disposed of properly. No further action or investigation is recommended regarding wastes at the Project.

Polychlorinated Biphenyls (PCBs)

The Project contains two elevators that use hydraulic fluid potentially containing PCBs (Section 6.4). No indication of leakage was observed in the areas of elevator operating equipment. The hydraulic elevator units at the Project should be periodically inspected for leakage. If leakage is identified, the unit should be repaired and any fluid or fluid-soaked waste disposed of in accordance with applicable federal, state, and local regulations. No further action or investigation is recommended regarding this equipment.

Asbestos-Containing Materials (ACM)

Suspect ACM in the form of roofing materials, resilient flooring and wallboard were not sampled as part of the assessment (Section 6.5). These materials are in good condition and should be sampled prior to repair, renovation, or demolition activities.

Radon Gas

Review of the United States Environmental Protection Agency (USEPA) Radon Map for the area of the Project identified that the Project is located in an area of low radon gas levels. In addition, based on the commercial use of the building, the type of construction, and the presence of commercial HVAC systems, there is reduced potential for the build-up of radon gas in the building (Section 6.6). No further action or investigation is recommended with regard to radon gas levels at the Project.

Lead-Based Paint (LBP)

Lead-based paint is beyond the Scope of Work unless the Project is a multifamily, congregate care, nursing home, or mobile home park property (Section 6.7). No further action or investigation is recommended regarding LBP at the Project.



Lead in Water

The Project is supplied with water from the City of New York, and based on conversations with utility personnel, the water at the Project is not expected to contain elevated levels of lead (Section 6.8). No further action or investigation is recommended regarding lead in drinking water at the Project.

Storage Tanks/Pipelines

No evidence of current storage tanks or pipelines (above or below ground) was identified (Section 6.9). However, several bulk ASTs and two heating oil USTs were identified at the Project during historic research. Refer to the Historical Data section of this report for more information pertaining to these tanks.

Surface Areas

- No issues associated with surface areas were identified (Section 6.10). No further action or investigation is recommended regarding surface areas at the Project.
- Visual observation of the storm water system did not identify any abnormal accumulation of petroleum run-off or foreign material (Section 6.10). No unusual blockages of the storm water control system were observed. No unusual ponding of storm waters was observed on the roof, parking, or surface areas. No further action or investigation is recommended regarding storm water systems at the Project.

Regulatory Review

Based on review of the regulatory database report, the Project is not located on any of the databases evaluated, and none of the sites listed are anticipated to have an impact on the Project (Section 7). In addition, the review does not suggest that the Project is involved in the generation, treatment, storage, or disposal of hazardous waste. No further action or investigation is recommended regarding the regulatory review.

Adjacent Properties

EMG identified no adjacent properties that are anticipated to have a negative impact on the environmental integrity of the Project (Section 8). No further action or investigation is recommended regarding the adjacent properties.





2.2. Recommendations

No further action or investigation is recommended at this time.



3. Survey Approach/Purpose

EMG conducted an on-site Environmental Site Assessment of the Project that consisted of a walk-through observation of the accessible areas and interviews with facility personnel and local agency representatives. On-site activities and/or interviews were conducted by Mr. David W. Barton, EMG Project Manager, with:

Mr. Alan Hansen, On-site Point of Contact and Facility Manager

Areas accessed included representative storage units; all common and exterior areas; and the Project boundaries.

According to Mr. Hansen, the storage units not inspected were similar in construction and conditions those inspected. Mr. Hansen also stated that he is unaware of any practices in the unaccessed storage units (such as the improper handling of hazardous materials or the generation of hazardous, medical, or regulated wastes) which would constitute a material threat or release to the environment, or a hazard to human health. Based on a review of tenant activities and interviews with knowledgeable personnel, it is unlikely that the operations in the unaccessed storage units have had an adverse impact on the environmental integrity of the Project.

Weather conditions at the time of the Project assessment were rainy, with temperatures in the mid 50s (°F) and light winds.

EMG reviewed available federal, state, and local records in an effort to identify sites of known or suspected hazardous waste activity located at or near the Project which could have an adverse impact on the Project. In an attempt to determine whether historical uses of the Project and surrounding area have had an environmental impact on the Project, EMG interviewed individuals knowledgeable about the Project and reviewed available pertinent records and documents. This assessment is based on the evaluation of the information gathered, laboratory analysis of samples collected (when required), and accessibility at the time of the assessment.



The purpose of this report is to provide the Client an assessment concerning environmental conditions (limited to those issues identified in the report) as they existed at the Project. The assessment was conducted utilizing generally accepted Phase I industry standards in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-97 and the J.P. Morgan Commercial Mortgage Origination and Securitization Program Scope of Work. The scope of work included an evaluation of:

- The Project history in an attempt to identify any possible ownership(s) and/or uses that would suggest an impact to the environmental integrity of the Project as identified through review of reasonably ascertainable standard historical sources.
- Physical characteristics of the Project as identified through review of reasonably ascertainable topographic, wetlands, flood plain, soils, geology, and ground water data.
- Current Project conditions (as applicable), including compliance with appropriate regulations as they pertain to the presence or absence of:
 - Facility storage tanks, drums, containers (above or below ground), etc.
 - Transformers and other electrical equipment which utilize fluid which may potentially contain PCBs
 - The use of hazardous materials/chemicals and petroleum products, and/or the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes
- A screening approach for the potential existence of:
 - Asbestos, including the identification of all suspect materials in accessible areas (interior and exterior) and the collection and analysis of three bulk samples from homogeneous areas of suspect ACM. Any materials not sampled are considered suspect until tested and proven otherwise. Friable materials are those which can be easily crumbled or pulverized by hand pressure. This screening approach is not a comprehensive (i.e., AHERA-Style) asbestos survey, but is intended to identify the potential for an asbestos hazard in accessible areas.

The basis for "suspect" determination is taken from the materials listed in Appendix G of the EPA publication *Managing Asbestos in Place* (the "Green Book"). Only materials listed in the Green Book which were installed prior to 1989 are considered suspect.

• Lead in water, based on information provided by the municipal water provider.





An evaluation of information contained in programs such as the NPL, CERCLIS, SHWS, RCRIS, SWF, LUST, and other governmental information systems within specific search distances of the Project. This evaluation was performed to identify any sites that would have the potential to impact the environmental integrity of the Project.

The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report is based on a radius search which focuses on both the Project and neighboring sites which may impact the Project. Neighboring sites listed in governmental environmental records are identified within a specific search distance. The search distance varies depending upon the particular government record being checked. The search is designed to meet the requirements of the J.P. Morgan Commercial Mortgage Origination and Securitization Program Scope of Work. The information provided is assumed to be correct and complete.

Visual observation of the adjacent properties to identify high-risk neighbors and the potential for known or suspected contamination to migrate onto the Project.



4. Project Location/Description

The Project is located at 49-20 Fifth Street in Long Island City, Queens County, New York 11101.

4.1. Project Description

The Project lands consist of approximately 1.84 acres.

The Project is currently a commercial storage facility and contains 145 units. The Project is currently 98 percent occupied. The Project was constructed in 1939 and 1945 in two phases and was gut-renovated in 1984. Project improvements consist of two unified two-story structures totaling approximately 74,920 square feet in size. Additional Project improvements consist of surface-level asphalt paved parking/drive areas, and minimal landscaping.

The Project is serviced by public water and sanitary sewer systems. The Project is supplied with water from the City of New York. According to utility representative Mr. Robert Kepich, the drinking water supplied to the Project is within federal, state, and local drinking water quality standards.

Hot water is generated by an electrically powered water heater. The associated piping was observed to be uninsulated.

HVAC systems observed consisted of the following:

Heat and air-conditioning are supplied to the Project from combination electrically-operated and natural gas-fired units. Water is heated by a natural gas-fired boiler, and is distributed via piping to fan units throughout the Project. Where observed, piping associated with the heating system was uninsulated. Air-conditioning is supplied to the Project via roof-mounted, electrically operated units. Conditioned air is distributed via thermostatically controlled, ducted supply systems. Where observed, duct work associated with the HVAC systems was uninsulated.

4.2. Miscellaneous Systems

■ Elevator — The Project is equipped with two hydraulic freight elevators (See Section 6.4 for a further discussion).



4.3. Environmental Setting

4.3.1. Topography

Review of the Brooklyn, New York Topographic Quadrangle, published by the United States Geological Survey (USGS) and dated 1967 (photorevised in 1979), indicated the following:

- The Project has an average elevation of approximately nine feet above mean sea level. Elevations range from approximately ten feet in the eastern portion of the Project to approximately eight feet in the western portion of the Project. The slope of the Project is estimated between approximately zero and three percent in a westerly direction
- The Project is shown to be improved with several outlined industrial structures with two storage tanks.
- Slope in the general area of the Project is estimated between approximately zero and three percent in a westerly direction. The nearest surface water feature is the East River, located approximately 500 feet west of the Project.

A copy of the topographic map is appended (Section 9).

4.3.2. Wetlands

Review of the New York State Freshwater Wetlands Map, published by the New York State Department of Environmental Conservation (NYSDEC) and dated 1985, indicated the following:

No wetland areas are indicated at the Project or adjacent properties.

A copy of the wetlands map was not available for reproduction.



4.3.3. Floodplain

Review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated November 16, 1983, indicated the following:

- The western and northern portions of the Project are located within Zone A5, defined as the 100-Year Flood Plain with a Base Flood Elevation of ten feet. Any development of flood plain areas may be subject to regulation by federal, state, and local agencies.
- The southeastern portion of the Project is located in Zone B, defined as areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood.

A copy of the flood plain map is appended (Section 9).

4.3.4. Soils/Geology

No Soil Survey of the Queens County, New York has been conducted by the United States Department of Agriculture Soil Conservation Service (USDA SCS) or Natural Resources Conservation Service (USDA NRCS). The Project is located in a densely developed area classified as Urban land. The Urban land complex indicates that 100 percent of the predominant soil type has been disturbed and covered with an impervious layer of buildings, sidewalks, and other structures. No capability sub-classifications are assigned to the Urban land complex.

Review of the "Potentiometric - Surface of the Water Table, Magothy, and Lloyd Aquifers on Long Island, New York, in 1984" (Water Resources Investigation Report 86-4189), published by the US Geological Survey and dated 1987, indicates the Project is located within the Atlantic Coastal Plains physiographic province of southeastern New York State, which consists of sedimentary materials and that the subsurface geology in the vicinity of the Project consists of the Upper Glacial deposits and bedrock. as follows:

The unconsolidated Upper Glacial deposits extends to a depth of approximately 110 feet below surface grade and consists of glacial till deposits consisting of clay, sand, gravel, boulders, and reworked deposits. The till has a permeability of approximately 135 feet per day.



The Upper Glacial deposits are underlain by bedrock consisting of metamorphic and metaigneous rocks (muscovite and biotite schist, gneiss, and metagranite). The bedrock is poorly to virtually impermeable and constitutes the lower boundary of the ground water reservoir.

4.3.5. Ground Water Hydrology

Review of the above-referenced Water Resources Report published by the US Geological Survey and dated 1987, indicated the following:

- The Project is located within the Upper Glacial aquifer formation with estimated ground water levels less than ten feet below ground surface and is likely to by tidally influenced. Estimated ground water levels may also vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations.
- Shallow ground water flow is shown to flow to the west toward the nearby East River.



5. Historical/Records Review

Review of information available from the New York City Tax Assessors Office indicated that the Project is shown on the Tax Map as Block 17, Lot 1.

5.1. Chain of Title

Review of the available deed records indicates that the Project has been owned by Fortress - New York Holding, Inc., since June 7, 1996. Deed records were researched back to 1939.

Review of available deed records identified that previous ownership of the Project revealed that the F.O. Pierce Company occupied the Project from 1939 until 1984. The F.O. Pierce Company was involved in the manufacture of varnish and paints.

Deeds and titles reviewed are listed in the table below:

Owner	Year Purchased
Fortress - New York Holding Company	1996
Judson Holdings II, Inc.	1984
F.O. Pierce Company et. al.	1955
H. R. Hillman Corporation	1954
F. O. Pierce Company-	1939
H.R. Hillman Corporation	Pre-1939

5.2. Prior Use Interviews

According to Mr. Alan Hansen, Property Manager and the On-site Point of Contact, the Project was redeveloped in 1984 into the current use. Mr. Hansen stated that prior to the current use, the Project was used as a paint and varnish factory. Mr. Hansen indicated that he has been associated with the Project since 1992.



5.3. Local Government Agency Record Review

EMG reviewed file information kept by the New York City Department of Planning for the Project address. Records dating back to 1915 are maintained by this department. According to the Records Clerk, no information was available for the Project address.

EMG file a Freedom of Information Act (FOIA) request with the New York City Fire Department (NYCFD) for UST information regarding the Project. EMG has not received a response to our request. EMG will forward any pertinent information to the Client upon receipt.

EMG reviewed building permits for the Project at New York City Building Department. Records dating back to 1921 are maintained by this department. This review indicated that the present buildings at the Project were built between 1939 and 1945. General building permits for the Project were on file, but did not reveal any information or condition that could impact the environmental integrity of the Project.

Review of the available zoning records from the New York City Department of Planning indicates that the Project is currently zoned for Heavy Industrial Use (M3-1). The Project has maintained the current zoning designation since 1961. Prior to the current zoning designation, the Project was zoned for unrestricted use. According to the records, no additional zoning changes were listed for the Project. Records dating back to 1915 are maintained by this department.

5.4. Historical Maps

EMG reviewed available Sanborn and E. Belcher Hyde Maps at the Queens Public Library and Queen Topographic Bureau. Historical maps are detailed scale drawings that show the location and use of buildings and structures that occupied a given area. EMG's map search revealed the following:

Review of the 1903 Hyde Map, indicated the following:

The Project is improved with residential and commercial buildings along West Avenue (currently Fifth Street). The western portion of the Project is developed with industrial buildings including the E. Callman & Company (varnish manufacturing) and E. Smith & Company (paint and varnish manufacturing). Vehicular access is available from West Avenue (currently Fifth Street), 5th Street (currently 49th Avenue), and 4th Street (currently 50th Avenue).



The area north of the Project is shown as developed with the C. Morris Varnish Works. The area east of the Project is shown as developed with commercial and residential buildings. The area south of the Project is shown as an undeveloped lot. The area west of the Project is shown as developed with the Pratt Lambert Varnish Factory.

The 1908 Hyde Map differs from the previous historical map in that:

- The above-referenced paint and varnish manufacturing buildings associated with the Callman and Smith Companies have been demolished. Project improvements consist of ten brick and wood-frame structures and two storage sheds.
- The area south of the Project is shown as undeveloped lot and a lot developed with the Queens County Electric Company Power House.

The 1915 Sanborn Map differs from the previous historical map in that:

The Project is shown as developed with the same structures as shown on the 1908 Hyde Map. Notations on the map indicate that the Project was developed with three dwellings and two stores along West Avenue (currently Fifth Street). The remainder of the Project consisted of three vacant building, a storage shed, and a carpenter shop owned by the New York & Long Island Rail Road.

The 1927 and 1934 Hyde Maps differ from the previous historical map in that:

The western portion of the Project is shown to be developed with five industrial buildings; the occupancy of which was not identified.

The 1949 Hyde Map, differs from the previous historical maps in that:

- The Project is improved with previously identified residential and commercial buildings along Fifth Street and five industrial structures occupied by the F.O. Pierce & Company (Eaglo-Products). Notations on the map indicate that there were seven storage tanks located on the northwestern corner of the Project along 49th Avenue.
- The area north of the Project is shown as vacant lot. The area east of the Project is shown as developed with the existing residential and commercial buildings. The area south of the Project is shown as a vacant lot and the Pennsylvania Rail Road Power House.



The 1979 Hyde Map, differs from the previous historical maps in that:

- The Project is improved with the existing building, two ancillary structures, and surface-level parking and drive areas. Notations on the map indicate that the Project is occupied by the F.O. Pierce Company and the Eaglo Paint and Varnish Company.
- The area north of the Project is shown as developed with an industrial building occupied by the Hobart Company. The area south of the Project is shown as developed with the existing building along Fifth Street and the Schwartz Chemical Company building.

The 1998 Sanborn Map, differs from the previous historical maps in that:

- The Project is improved with the existing structures and surface-level parking and drive areas.
- The area north of the Project is shown as developed with the existing residential high-rise building public parking garage.

No other historical maps were identified. Based on a review of other historical information, the storage tanks shown at the Project on the above historic maps are likely bulk ASTs.

Copies of the above-referenced Hyde Maps are appended (Section 9). The above-referenced Sanborn Maps could not be duplicated due to copyright laws.

5.5. Historical City Directories

EMG attempted to review city directories at the Queens Public Library; However, according to the Reference Librarian, city directories are not readily available. EMG found no available directories for the area of the Project.



5.6. Aerial Photography

Review of the 1924 aerial photograph, available from the Queens Topographic Bureau, indicated the following:

- The Project is improved with several residential, commercial, and industrial structures. The buildings are primarily located on the north and eastern portions of the Project. The southwestern portion of the Project is primarily undeveloped with a small structure located along 50th Avenue. Vehicular access is available from Fifth Street, and 49th and 50th Avenues.
- The area north of the Project is shown as developed with industrial buildings. The area east of the Project is shown as developed with residential and commercial buildings. The area south of the Project is shown as a vacant lot and a lot developed with the existing industrial building. The area west of the Project is shown as developed with industrial buildings.

The 1938 aerial photograph, available from the Queens Topographic Bureau, differs from the 1924 aerial photograph in that:

In addition the structures previously identified in the 1924 aerial, the southwest portion of the Project is improved with an industrial building. Furthermore, two large ASTs are visible on the northwest portion of the Project.

The 1951 aerial photograph, available from the Queens Topographic Bureau, differs from the 1938 aerial photograph in that:

- The Project is developed with several residential, commercial, and industrial buildings. The buildings occupied approximately 90 percent of the Project. A parking lot is located on the southeastern corner of the Project. Furthermore, several large ASTs are visible on the northwest portion of the Project.
- The area north of the Project is shown as vacant land.

Copies of the aerial photographs are appended (Section 9).



5.7. Previous Investigations/Assessments

EMG was provided with a copy of a previous Phase II Environmental Site Assessment report for the Project, conducted by Impact Environmental Consulting, Inc. (IEC) and dated May 28, 1997. Pertinent information identified in that report is as follows:

- IEC conducted a subsurface investigation in 1996 to determine the potential for impacts to the Project from historic use as a paint and varnish manufacturer, and from two former heating oil USTs. No contamination was identified associated with the historic use as a varnish and paint manufacturer; however, soil contamination was identified in the area of the former heating oil USTs.
- Four soil borings were advanced, and soil samples were collected and laboratory analyzed to further delineate the horizontal extent of contamination previously identified. Soil samples were field screened and laboratory analyzed in accordance with the New York State Department of Environmental Conservation (NYSDEC) STARS Memorandum. Laboratory analysis indicated that petroleum contamination from the aforementioned USTs appeared to extend under the building located on the western portion of the Project.

EMG was also provided with a copy of a previous Corrective Action Plan report for the Project, conducted by IEC and dated August 14, 1997. Pertinent information identified in that report is as follows:

A Spills case number was assigned to the contamination previously identified at the Project (97-04425). Contaminated soil and an additional underground storage vessel were removed from the Project. Post-removal sampling of soil and ground water downgradient of the release area did not identify contamination above applicable regulatory action levels. As such, no further remedial work was recommended by IEC.

EMG was also provided with correspondence between IEC and the NYSDEC. The above Spills case was granted closure by NYSDEC on August 29, 1997. In addition, asbestos-containing pipe insulation was identified and recommended for removal by IEC. Refer to Section 6.5 for more information pertaining to the identified asbestos-containing pipe insulation.

5.8. Plans and Specifications

As-built or renovation-site plans, drawings, and specifications were not available for review.



5.9. Historical Summary

Based upon interviews and a review of chain of title information, local agency records, zoning records, historical maps, city directories, and aerial photographs; the previous Project uses include residential, commercial and paint/varnish manufacturing (1903-1984), prior to the redevelopment of the current Project improvements into the current use in 1984.



6. Project Reconnaissance

6.1. Operational Activities/Noteworthy Tenants

The Project is a commercial storage facility by Fortress – New York. No noteworthy tenants occupy the Project and no environmentally significant operations are conducted at the Project.

Considering the operations assessed at the Project, no environmental permits are required.

6.2. Hazardous Materials/Petroleum Products Storage and Handling

Visual observation for the use and/or storage of hazardous materials and petroleum products was performed. The following products listed in the Observed Materials Table below were identified:

	Observe	d Materials	
Type of Material	Quantity	Storage Location	Üse
Routine janitorial and maintenance supplies	Routine	Utility closets	Project maintenance and upkeep

The identified chemicals, materials, and products were observed in their sealed, original containers and in designated storage areas. No evidence of spills or staining were observed in the area of product storage/usage. In addition, the concrete and wood floors appeared intact and no cracks were observed in the areas of product storage/usage.



6.3. Waste Generation, Treatment, Storage, and Disposal

Visual observation for the generation, treatment, storage, and disposal of wastes was performed. The Project is not involved in the treatment, storage, or disposal of hazardous, regulated, or medical wastes. EMG identified the following waste generation listed in the Waste Generation Table below:

Waste Generation				
Type of Waste	Generation Process	Pre-Disposal Storage	Disposal Method	
■ Non-Hazardous Solid				
Municipal trash	N/A	Dumpster	Contracted waste hauler	
■ Non-Hazardous Liquid				
Sewage	N/A	N/A	Municipal sanitary system	

No evidence of spills or staining was observed in the area of waste generation or predisposal storage. In addition, the asphalt pavement appeared intact and no cracks were observed in the areas of waste generation or pre-disposal storage.

No excessive odors or overflowing/excessive ground trash were noted in the vicinity of the dumpster. No hazardous, regulated, or medical wastes were noted in the dumpster.

6.4. Polychlorinated Biphenyls (PCBs)

The Project is supplied with underground secondary electrical service from off-site transformers.

Two hydraulic lift elevators are located at the Project. The elevator maintenance company servicing the elevators, Excell Elevator, Inc., was contacted regarding the hydraulic units. According to the maintenance records, no PCB-containing hydraulic oils have been used at the Project. No visual indication of leakage was observed in the areas of the elevator operating equipment. The hydraulic elevator units at the Project should be periodically inspected for leakage. If leakage is identified, the unit should be repaired and any fluid or fluid-soaked waste disposed of in accordance with applicable federal, state, and local regulations.

No additional equipment with the potential to utilize dielectric or hydraulic fluid was observed during the site assessment.



6.5. Asbestos-Containing Materials (ACM)

As-built or renovation-site plans, drawings, and specifications were not available for review.

As indicated in Section 5.7, asbestos-containing pipe insulation was identified during previous assessments conducted at the Project. This material was not observed during EMG's site inspection.

Suspect ACM in the form of roofing materials, resilient flooring and wallboard were identified. No suspect friable or damaged non-friable materials were observed at the Project during the assessment, therefore no samples were collected.

6.6. Radon Gas

Review of the USEPA's Radon Map for Queens County, New York, indicated that the Project is located in an area of low radon propensity. In addition, based on the commercial use of the building, the type of construction, and the presence of commercial HVAC systems, there is reduced potential for the build-up of radon gas in the building. Based on the Scope of Work, radon testing was not conducted.

6.7. Lead-Based Paint (LBP)

Lead-based paint is beyond the Scope of Work unless the Project is a multi-family, congregate care, nursing home, or mobile home park facility.

6.8. Lead in Water

According to a representative of the local water utility, the water supplied to the Project is within federal, state, and local drinking water quality standards (Section 4.1).



6.9. Facility Storage Tanks and Pipelines (above or below ground)

Visual observations for manways, vent pipes, fill connections, concrete pads, and saw cuts in paved areas did not identify any surface connections or disturbances that would indicate the potential for an underground storage tank (UST) installation at the Project. Furthermore, no aboveground storage tanks (ASTs) were observed at the Project.

The manways and surface caps observed at the Project were for site services (i.e., domestic water, storm water, and sanitary sewer system). Furthermore, review of currently installed mechanical equipment, and historical information concerning mechanical equipment, identified the use of alternate fuel sources (i.e., electric, natural gas) thereby eliminating the need for additional on-site fuel storage at the Project.

It must be noted that several bulk ASTs and two heating oil USTs were identified at the Project during historic research. Refer to the Historical Data section of this report.

Visual observations did not identify any surface markings indicating the existence of subsurface product pipelines at the Project.

6.10. Surface Areas

Observations during EMG's assessment identified that the Project lands are graded to provide slope and swale to direct storm water away from the on-site buildings. The land surface of the Project is relatively flat, with no significant changes in elevation.

Visual observation of the Project and adjacent properties did not identify any evidence of distressed vegetation, staining, or surface migration of petroleum releases or hazardous materials onto or off the Project.

Visual observations did not identify and evidence of on-site surface impoundment facilities, pits, dry wells, or dumping of apparent hazardous substances at the Project. Furthermore, visual observations did not identify any surface water features including lagoons, ponds or other bodies of water at the Project.

Parking facilities consist of surface level asphalt and concrete paved areas. Minor oil discharges were observed on the parking areas; however, the discharges are incidental in nature and corrective action is neither practical nor warranted.





Storm water from the roof is directed to the municipal sewer system via roof drains. Storm water from drive and parking surfaces is directed to the municipal storm system via catch basins. Storm water from vegetated surface areas is dissipated via natural percolation through the soil.



7. Regulatory Database Review

NPL, RCRA-TSD, RCRA-CORRACTS, SHWS, CERCLIS, NFRAP, SWF, LUST, MOSF, CBS, PBS, RCRIS-Generators, and ERNS listings were reviewed. Based on review of the regulatory database report, and by cross-referencing name, address, and zip code, EMG concludes that the Project is not a listed site. Furthermore, the area search of the Project for sites listed in these databases identified various sites outlined in the Regulatory Agency Data Report Findings included in the Appendices, Section 9. Information about the listed sites is included in the following database discussions.

EMG reviewed the unmappable sites in the database report, cross-referencing addresses and site names. Unmappable sites are environmental risk sites that cannot be plotted with confidence, but can be located by zip code or city name. In general, a site cannot be geocoded because of inaccurate or missing location information in the record provided by the agency. Any identified unmappable site is included in the corresponding database discussion that follows.

- NPL Listing: The National Priorities (Superfund) List is United States Environmental Protection Agency (USEPA's) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program.
 - Based on review of the regulatory database report, neither the Project nor any sites within 1.0 mile of the Project were identified on the NPL database.
- RCRA-TSD Facilities Listing: The USEPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA-TSD database is a compilation by the USEPA of reporting facilities that transport, treat, store or dispose of hazardous waste.
 - Based on review of the regulatory database report, neither the Project nor any sites within 0.5 mile of the Project were identified on the RCRA-TSD database.



- RCRA-CORRACTS Facilities Listing: The USEPA's Resource Conservation and Recovery Act (RCRA) Corrective Action-sites Listing contains information pertaining to hazardous waste treatment, storage, and disposal facilities (RCRA TSD) which have conducted, or are currently conducting, a corrective action(s) as regulated under RCRA.
 - Based on review of the regulatory database report, the Project was not identified on the RCRA-CORRACTS database; however, one RCRA-CORRACTS site was identified within 1.0 mile of the Project:
 - Accurate Associates
 05-35 46th Road
 Distance: 0.20 mile

Direction: North-northeast

The above site is located approximately 0.20 mile north-northeast of the Project. Furthermore, ground water flow in the vicinity of this site is to the west, away from the Project. Based on distance from the Project and local ground water flow patterns, this site is not anticipated to impact the Project.

- SHWS Listing: This database is a comprehensive listing of sites which are considered to be a threat to the public health and welfare by the NYSDEC. Further, this is the ASTM equivalent of a State Hazardous Waste Sites List.
 - Based on review of the regulatory database report, neither the Project nor any sites within 1.0 mile of the Project were identified on the SHWS database.
- CERCLIS Listing: This database is a compilation of sites which the USEPA has investigated or is currently investigating for a release or threatened release of hazardous substances.
 - Based on review of the regulatory database report, neither the Project nor any sites within 0.5 mile of the Project were identified on the CERCLIS database.



- NFRAP Listing: This database contains information regarding sites which have been removed from the USEPA CERCLIS database.
 - Based on review of the regulatory database report, the Project was not identified on the NFRAP database. However, one NFRAP site was identified within 0.5 mile of the Project. The identification of a site on the NFRAP database indicates that the regulatory agency with oversight required no further action (i.e., a case-closed status). The regulatory agency awards a case-closed status only when contamination, if any, has been investigated and/or remediated in accordance with currently accepted regulatory standards. As such, this site is not anticipated to adversely impact the environmental integrity of the Project. Therefore, no further action or investigation appears warranted.
- SWF Listing: This database is a comprehensive listing of all State Permitted Solid Waste Landfills.
 - Based on review of the regulatory database report, neither the Project nor any sites within 0.5 mile of the Project were identified on the SWF database.
- **■** Leaking Underground Storage Tanks (LUST)
 - Based on review of the regulatory database report, the Project was not identified on the LUST database; however, 25 LUST sites were identified within 0.5 mile of the Project. The following five LUST sites reportedly impacted ground water within 0.50 mile of the Project:
 - ➤ Hobart Industrial Building 48-48 Fifth Street Distance: Adjacent

Direction: North

The above adjacent LUST site was located directly across 49th Avenue from the Project. Of importance, this site was remediated and was granted Closure status by the NYSDEC on April 24, 1989. Closure status indicates that the LUST was remediated to the satisfaction of the NYSDEC and no longer poses a threat to human health or the environment. Furthermore, the site of this LUST has been completely redeveloped with the existing residential high-rise building and public parking garage. Based on its remedial status, this LUST site is not anticipated have had an adverse impact on the environmental integrity of the Project.



Norval

52-00 Second Street Distance: 0.20 mile Direction: Southwest

The above LUST site is located approximately 0.20 mile southwest of the Project. Of importance, ground water flow in the vicinity of this site is to the west, away from the Project. Based on distance and local ground water flow patterns, this LUST site is not anticipated have had an adverse impact on the environmental integrity of the Project.

➤ 11-15 47th Avenue

Distance: 0.33 mile Direction: East

The above LUST site is located approximately 0.33 mile east of the Project. Of importance, this site was remediated and was granted Closure status by the NYSDEC on October 7, 1992. Based on distance and its remedial status, this LUST site is not anticipated have had an adverse impact on the environmental integrity of the Project.

➤ Universal / Brooklyn

29 Ash Street

Distance: 0.42 mile

Direction: South-southeast

The above LUST site is located approximately 0.42 mile south-southeast of the Project. Of importance, the English Kills, located between this site and the Project, forms a hydrologic barrier for any contamination originating from this site. Based on distance and the presence of an intervening hydrologic barrier, this LUST site is not anticipated have had an adverse impact on the environmental integrity of the Project.

➤ Andrea Electronics

11-40 45th Drive

Distance: 0.42 mile

Direction: East-northeast

The above LUST site is located approximately 0.42 mile east-northeast of the Project. Of importance, ground water flow in the vicinity of this site is to the west, away from the Project. Based on distance and local ground water flow patterns, this LUST site is not anticipated have had an adverse impact on the environmental integrity of the Project.



The remaining 20 sites listed in LUST Section of the regulatory report are located over 0.06 mile from the Project. Furthermore, none of these LUST sites have reportedly impacted ground water. Based on distance and the lack of ground water impact, these LUST sites are not anticipated have had an adverse impact on the environmental integrity of the Project.

- Major Oil Storage Facilities (MOSF) and Chemical Bulk Storage (CBS)
 - No MOSF or CBS sites were identified within 0.25 mile of the Project.
- Petroleum Bulk Storage (PBS) Facilities
 - Based on review of the regulatory database report, the Project was not identified on the PBS inventory. However, two adjoining properties, were identified on the PBS inventory:
 - ➤ Hobart Corporation 48-48 Fifth Street Distance: Adjacent Direction: North

The above adjacent PBS facility was located directly across 49th Avenue from the Project. According to the regulatory report, this facility had one 4,000-gallon UST utilized for the storage of unleaded gasoline that was removed in December 1992. Of importance, this site was also listed as a LUST site. The LUST was remediated and was granted Closure status by the NYSDEC on April 24, 1989. Furthermore, this facility was demolished and the lot completely redeveloped with the existing residential high-rise building and public parking garage. Based on its remedial status, this former PBS facility is not anticipated have had an adverse impact on the environmental integrity of the Project.

➤ Schwartz Chemical Company, Incorporated 50-01 Second Street

Distance: Adjacent
Direction: Southeast

The above adjacent PBS facility was located directly across 50th Avenue from the Project. According to the regulatory report, this facility had seven 1,500-gallon USTs that were removed in July 1994. Of importance, this site is not listed as any database that reports releases such as the LUST database. Based on its Closed status and the lack of any reported contamination, this former PBS facility is not anticipated have had an adverse impact on the environmental integrity of the Project.



Two of the three remaining facilities included in the PBS section of the regulatory report were also identified on the LUST Listing and were previously discussed in the LUST findings. The remaining site listed in the PBS section of the regulatory report does not appear on any database, such as the LUST inventory, which reports releases, spills or other incidents. The PBS inventory is merely a listing of all facilities that are required to register their storage tanks for tracking purposes and are not necessarily sites with reported contamination incidents. Considering the absence of reported releases and current regulatory status, this facility is not anticipated to have an adverse impact on the environmental integrity of the Project.

- RCRIS-Generator Listing: The USEPA identifies and tracks hazardous waste from the point of generation to the point of disposal through the Resource Conservation and Recovery Information System (RCRIS). The RCRIS-Generators database is a compilation by the USEPA of facilities that report hazardous waste generation.
 - Based on review of the regulatory database report, the Project was not identified on the RCRIS-Generator listing. However, one adjoining property was identified on the RCRIS-Generator listing:
 - Hobart Corporation
 48-48 Fifth Street
 Distance: Adjacent
 Direction: North

The above adjacent facility was located directly across 49th Avenue from the Project. According to the regulatory report, this facility was a registered Small-Quantity Generator of hazardous wastes under RCRA. Of importance, this site was also listed as a LUST site. The LUST was remediated and was granted Closure status by the NYSDEC on April 24, 1989. Furthermore, this facility was demolished and the lot completely redeveloped with the existing residential high-rise building and public parking garage. Based on its remedial status, this former PBS facility is not anticipated have had an adverse impact on environmental integrity of the Project.



The remaining facility listed in the RCRIS-Generator section of the regulatory report does not appear on any database which reports releases, spills or other incidents such as the NPL, CERCLIS, or SHWS databases. The RCRIS-Generator listing is merely a listing of all facilities that, due to the amount of hazardous waste generated, are required to register with the USEPA for tracking purposes and are not necessarily sites with reported contamination incidents. This facility is reported as being compliant with the requirements of the RCRA regulations. Considering the current regulatory status and the absence of reported releases, this facility is not anticipated to have an adverse impact on the environmental integrity of the Project.

- Emergency Response Notification System (ERNS): The ERNS is a national database used to collect information on reported releases of oil or hazardous substances.
 - Based on review of the regulatory database report, the Project was not identified on the ERNS database.



8. Adjacent Properties

The general vicinity of the Project consists of residential, commercial, and industrial land use. The following adjacent properties were observed:

- North The Project is bordered to the north by 49th Avenue. Further north is a residential high-rise and a public parking garage.
- East The Project is bordered to the east by Fifth Street. Further east is an auto body shop, and office building, a residence, and a parking lot.
- South The Project is bordered to the south by 50th Avenue. Further south is the Columbus Loose Leaf Company, and the former Schwartz Chemical Company Building occupied by lofts and the Long Island City Indoor Tennis Club.
- West The Project is bordered to the west by a New York City Transit Authority shaft-accessway and a vacant industrial building.

The adjacent property use is not anticipated to impact the environmental integrity of the Project.