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Hazardous Materials

A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds, methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive or toxic).

Introduction

According to the *CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when:

- hazardous materials exist on a site;
- an action would increase pathways to their exposure; or
- an action would introduce new activities or processes using hazardous materials.

As indicated in the *CEQR Technical Manual*, the hazardous materials (E) Designation is an institutional control that may be placed on a site to establish a hazardous materials review and approval framework. It provides a mechanism to ensure that testing for and remediation of hazardous materials, if necessary, are completed prior to future development of an affected site, thereby eliminating the potential for a hazardous materials impact. (E) designated parcels are administered under the authority of the New York City Mayor's Office of Environmental Remediation (OER).

This section presents the findings of the hazardous materials assessment and identifies potential issues of concern with respect to workers, the community, and/or the environment during construction and after implementation of the proposed project.

Principal Conclusions

The Proposed Action would not result in significant adverse impacts related to hazardous materials with the placement of an (E) Designation ~~on the lots comprising the Project Site.~~(E-584) on a portion of the Project Site (Block 1279, Lots 23, 24, and 48). An (E) Designation would not be applied to Block 1279, Lot 25 since this lot would not be redeveloped as part of the Proposed Action.

Subsurface contamination may be present at the Project Site based upon the results of a Phase I Environmental Site Assessment (ESA). To address any concerns relating to hazardous materials on the Project Site, a subsurface investigation (Phase II ESA) would be warranted to identify potential subsurface contamination relating to the Recognized Environmental Conditions (RECs) identified in the Phase I ESA. A Phase II ESA would characterize the Project Site for contaminants relating to soil, groundwater and soil vapor conditions. Subsurface contaminants would subsequently be dealt with through the development and implementation of a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP), which would be prepared to mitigate potential risk and exposure relating to the presence of hazardous materials in the subsurface. However, given the presence of the existing building, accessibility constraints of the existing basement areas, limited basement height clearance and building slab space available in the on-site buildings, as well as utility and adjacent rail infrastructure, it is not practical to perform a subsurface investigation within the on-site buildings in their current condition. As such, the Proposed Action would include an (E) Designation for hazardous materials (E-584), which would be applied to Manhattan Block 1279, Lots 23, 24 and 48.

The implementation of the preventative and remedial measures required under the (E) Designation would avoid the potential for significant adverse hazardous materials impacts due to the Proposed Action. Environmental designations, or (E) Designations, are established on the zoning map by the New York City Department of City Planning (DCP) and the New York City Council as a part of a zoning change/action and are satisfied prior to issuance of a building permit by the New York City Department of Buildings (DOB).

Applying an (E) Designation to the Project Site provides a mechanism for regulatory oversight for the subsurface investigation and potential future remedial action as a pre-construction requirement (in this case, post-demolition) that would reduce or eliminate the potential for future risk or exposure as it relates to hazardous materials to the maximum extent practicable. Compliance in association with the hazardous materials (E) Designation on the Project Site would be conducted under the administration of OER. It should be noted that the existing ventilation building on Lot 25 currently under construction would remain in-place with no soil disturbance required. As the ventilation building would not be redeveloped under the Proposed Action, an (E) Designation for hazardous materials would not be applied to Lot 25.

In addition to applying an (E) Designation to a portion of the Project Site, regulatory requirements pertaining to any identified petroleum storage tanks and/or spills,

requirements for disturbance and handling of suspect lead-based paint (LBP), asbestos-containing materials (ACM) and polychlorinated biphenyl (PCB)-containing building materials would be followed. As such, implementation of the Proposed Action would not result in significant adverse impacts related to hazardous materials.

Methodology

The potential for hazardous materials at the Project Site was evaluated in a Phase I Environmental Site Assessment (ESA) prepared by VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB), dated July 15, 2020 (see **Appendix B**, **Hazardous Materials**). The Phase I ESA was prepared in accordance with the American Society for Testing and Materials (ASTM) Practice E1527-13, inclusive of the "All Appropriate Inquiry" requirement amended in the Federal Register on December 30, 2013.

The goal of a Phase I ESA process is to identify Recognized Environmental Conditions (RECs), which means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. Per the ASTM Standard, a Phase I ESA reviews a variety of information sources, including current and historic Sanborn Fire Insurance Maps and aerial photographs; state and federal environmental regulatory databases identifying listed sites; and local environmental records. The Phase I ESA summarized herein also included reconnaissance of the Development Site and surrounding neighborhood and interviews with the building manager.

As stated in Practice E1527-13, there may be environmental issues or conditions at the site, which may be requested by the user to be addressed as part of the Phase I ESA, which are not covered within the scope of ASTM Practice E1527-13. These additional environmental issues (or non-scope considerations) could evaluate for the potential present of radon, lead-based paint (LBP), asbestos-containing materials (ACM), wetlands, and mold and water damage.

As detailed in **Chapter 1, Project Description**, the Proposed Action would permit the redevelopment of the Project Site with the Proposed Project—a new, commercial office and retail building of up to 1,050 feet tall (including the bulkhead). The building would have a total floor area of 925,630 gsf. The building would contain primarily commercial office space, with retail, a circulation area to access the LIRR East Side Access (ESA) terminal located below the Project Site, and below-grade space (i.e., mechanical and back-of-house space).

Assessment

Existing Conditions

The Project Site is designated as Manhattan Block 1279, Lots 24, 23, and 48, which are identified by the street addresses of 341, 345, and 347 Madison Avenue. The Project Site consists of the western portion of Block 1279, fronting on Madison Avenue, and contains three 13- to 20-story buildings.

Phase I Environmental Site Assessment

Based on the Phase I ESA, a history of Project Site was established dating back to 1890. According to historical Sanborn maps, Lot 48 was previously improved with a six-story building that occupied the majority of the parcel and was previously utilized as an athletic club as early as 1890. At that time, Lot 23 was improved with two four-story buildings (likely mixed-use) that occupied portions of the parcels with frontage along Madison Avenue. Also at that time, Lot 24 was improved with a three-story and partial four-story (likely mixed-use) building that occupied the entire parcel. Based upon indications on the 1929 historical Sanborn maps, Lot 48 was improved with the existing building circa 1918, Lot 23 was improved with the existing building circa 1921, and Lot 24 was improved with the existing building circa 1925. The Project Site has remained of similar configuration since the development.

Lot 24 is improved with a 19-story commercial building with ground floor retail storefronts. The two ground floor storefronts are vacant with one fronting along Madison Avenue and the other along East 44th Street. The remaining portions of the first floor consist of a security and two passenger-elevator foyers that are accessible from Madison Avenue and East 44th Street. Vacant commercial office space occupies floors two through 19.

Lot 23 is improved with a 15-story commercial building with one ground floor retail unit that fronts solely along Madison Avenue. The ground floor retail unit is vacant and was most recently occupied by a Johnston & Murphy clothing store. The remaining portions of the first floor consist of a security and passenger elevator foyer that is accessible from Madison Avenue. Vacant commercial office space occupies floors two through 15.

Lot 48 is improved with a 20-story commercial building with two ground floor retail units that front along Madison Avenue and East 45th Street, both of which are vacant. The first, fronting along Madison Avenue, was most recently occupied by a J.Crew clothing store. The second, containing frontage along East 45th Street to the north of the first, was most recently occupied by a COSI coffee shop and bistro. The remaining portions of the first floor consist of a security and passenger elevator foyer and connecting corridor that provides access to the COSI retail unit and to the adjacent building to the east. A pedestrian passage that connects underground to Grand Central Terminal is present in the foyer. The building was formerly utilized as the MTA Headquarters. However, office space on the upper floors is also currently vacant.

Based upon the information provided in the Phase I ESA, the following findings and site features were identified:

- Groundwater beneath the Project Site is expected to be within approximately 59 feet below grade surface (bgs).
- Groundwater beneath Project Site was assumed to flow to the east, toward the East River.
- The Project Site was identified on several Federal and State listings contained within the Environmental Data Resources, Inc. (EDR) database report under the names “MTA Metro North Railroad” and “ConEd-Metro North Railroad.” Specifically, the Project Site was listed on the Resource Conservation and Recovery Act No Longer Regulated Hazardous Waste Generator (RCRA-NonGen) database, facility and manifest information database (MANIFEST) and Facility Index System database (FINDS). Although these database

listings indicate the historic generation of hazardous waste at the Project Site, it was determined that these listings may be administratively addressed due to the former presence of the MTA Headquarters. It should be noted that no violations were indicated in the EDR database report in association with these listings. As such, these listings were not considered of significant environmental concern. However, numerous EDR database listings were identified for the adjacent Grand Central Terminal.

- There were no relevant local government/agency records received through the Freedom of Information Law (FOIL) regarding the Project Site that were of significant environmental concern relating to hazardous materials.
- Flammable liquids storage was present within the basement areas of the building located at 347 Madison Avenue. Maintenance products, including paints, thinners, cleaners and other items were observed within designated maintenance shops located throughout the basements of the buildings. Pallets of building maintenance supplies were also observed on the second floor of the former MTA Headquarter building (Lot No. 48). Furthermore, although not observed, it is likely that toners, office maintenance supplies and other such items exist throughout the building in association with typical commercial operations. Observed items were noted to be in good condition, with no evidence of leaks or release.
- Buildings located on the Project Site are heated via ConEd steam. There are no in-service natural gas connections at the Project Site.
- Two rooftop diesel-fired emergency backup generators are located on Lot 23. The diesel generators have a reported capacity of 250 gallons each and service the building on Lot 23. The rooftop generators were observed to be in good condition, with no evidence of leaks or releases.
- Sanitary waste generated at the Project Site discharge into the New York City municipal sewer system. Generated stormwater runoff discharges to curbside storm rains.
- Condensate floor drains were present within the basement areas of the Project Site buildings. These basement drains reportedly discharge to sump pits. The contents of the sump pits are reported ejected to the municipal sewer.
- Passenger elevators within the buildings at the Project Site are cable-operated with the exception of one freight elevator on Lot No. 48, which is hydraulically driven. The presence of PCB-containing hydraulic fluid associated with the freight elevator was unlikely given the relatively new condition of the equipment observed in the mechanical room.
- No significant debris, dumping or surficial staining was observed within the basement or common portions of the buildings.
- Based upon the development history of the Project Site, there may be urban fill materials present associated with former redevelopment and regrading activities.
- Based upon the ages of the buildings on the Project Site, building materials have the potential to be considered asbestos-containing materials or contain PCBs (in caulking or in fluorescent light ballasts). Furthermore, there is a potential for lead-based painted surfaces throughout the Project Site Buildings.

Based upon the results of the Phase I ESA, the following REC was identified for the Project Site:

- Given the numerous database listings, New York State Department of Environmental Conservation (NYSDEC) spill incidents and petroleum bulk storage registries associated with the adjacent and surrounding properties~~,~~ and, given the presence of Grand Central Terminal proximate to the east of the Project Site, there is a potential for subsurface impacts, including soil, groundwater and soil vapor impacts beneath the Project Site. These potential impacts were considered a REC in the Phase I ESA.
- Based upon a review of historical Sanborn maps, an adjacent rail depot was identified to the north on Sanborn maps as early as 1890 through at least 1910. The adjacent buildings to the east, northeast, and southeast are also depicted on Sanborn maps as constructed overhead of subgrade railroad tracks. The current and historical presence of rail tracks adjacent to the Project Site are attributed to Grand Central Terminal located to the east of Vanderbilt Avenue. Given the current and historical presence of adjacent mass transit rail spurs, there is a potential for subsurface impacts at the Project Site associated with these adjacent rail uses. These potential impacts were considered a REC in the Phase I ESA.

Based upon the results of the Phase I ESA, the following additional conditions were identified for the Project Site:

- Soils in New York City are typically classified as "urban fill" with the potential to be impacted based on the grading activities prior to development. Given these conditions, there is a potential for urban fill to be present at the Project Site.
- Given the ages of the buildings on the Project Site, there is a potential for ACM to be present in pipe insulation, roofing, and other building materials. Based upon the age of the buildings, the potential exists for LBP to be present.
- Fluorescent light fixtures were present throughout the building spaces. Given the ages of the buildings, there is a potential for ballasts associated with same to be contain PCBs. Furthermore, given the age of the buildings, there is a potential for building materials (i.e., window caulking, mastics, etc.) to contain PCBs. PCBs are subject to federal disposal restrictions.

The three buildings on the Project Site (lots 23, 24, and 48) are currently vacant and are set to undergo demolition as approved by the MTA in 2018. They once contained a total of 351,871 gsf of mixed commercial office and retail use. The fourth structure on Lot 25 contains a 2,482 gsf ventilation structure for ESA. It is assumed that demolition of the three vacant buildings would occur over 16-month period from November 2020 to February 2022 prior to the start of construction for this project. This demolition was approved by the MTA through a separate action in 2018.

Future No-Action Condition

Absent the Proposed Project, in the future No-Action condition, the RWCDS assumes that after the current buildings are demolished, a 15-FAR, 474,532-gsf commercial office and retail building would be constructed. It would also include an easement for a possible future EAS circulation, to be built by the MTA. The ventilation structure on Lot 25 would remain under existing conditions. In the No-Action condition, an (E) Designation for Hazardous Materials would not be placed on the Project Site. Consequently, potential soil, groundwater, and/or soil vapor contamination relating to urban fill materials, the adjacent Grand Central

Terminal, and other RECs identified would go unmitigated and regulatory oversight from OER would not be provided.

In addition to the above, regulatory requirements pertaining to building materials containing ACM and LBP would be addressed under prevailing regulations as part of standard demolition and redevelopment practices.

Future With-Action Condition

In the future With-Action condition, a new 30 FAR commercial office and retail building with a total of 925,630 gsf would be constructed at the site. A portion of the building would cantilever over the existing ventilation structure at Manhattan Block 1279, Lot 25, but no soil disturbance would occur on that portion of the Project Site. The building would also contain a circulation area to access the ESA terminal located below the Project Site and below-grade space (i.e., mechanical and back-of-house space).

To address any concerns relating to hazardous materials on Project Site, a subsurface investigation (Phase II ESA) would be warranted to identify potential subsurface contamination relating to the RECs identified in the Phase I ESA. A Phase II ESA would characterize the Project Site for contaminants relating to soil, groundwater and soil vapor conditions at the Project Site. Subsurface contaminants would subsequently be dealt with through the implementation of a Remedial Action Plan and Construction Health and Safety Plan (CHASP), which would be prepared to mitigate potential exposure and risk relating to the presence of hazardous materials in the subsurface. However, given the presence of the existing building, accessibility constraints of the existing basement areas, limited basement height clearance and building slab space available in the on-site buildings, as well as utility and adjacent rail infrastructure, it is not practical to perform a subsurface investigation within the on-site buildings in their current condition. As such, the Proposed Action would include an (E) Designation for hazardous materials (E-584), which would be applied to Manhattan Block 1279, Lots 23, 24 and 48 (see also New York City Department of Environmental Protection correspondence in **Appendix B**).

Applying an (E) Designation to a portion of the Project Site provides a mechanism for regulatory oversight for the subsurface investigation and potential future remedial action as a pre-construction requirement (in this case, post-demolition) that would reduce or eliminate the potential for future risk or exposure as it relates to hazardous materials to the maximum extent practicable. Compliance in association with the hazardous materials (E) Designation on the Project Site would be conducted under the administration of OER. It should be noted that, as previously indicated, the existing ventilation building on Lot 25 currently under construction would remain in-place with no soil disturbance required under the With-Action condition. As the ventilation building would not be redeveloped under the Proposed Action, an (E) Designation for hazardous materials would not be applied to Lot 25.

The (E) Designation process generally begins with the evaluation of RECs and/or areas of concern (AOCs) that may require additional investigation based upon the results of a Phase I ESA. Any potential RECs or AOCs identified would follow the (E) Designation protocol for additional investigation and potential remedial action. The applicable text for the (E) Designation to be applied to Manhattan Block 1279, Lots 23, 24 and 48 (E-584) would be as follows:

Task 1: Sampling Protocol

Prior to construction, the applicant submits to OER, for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

No sampling should begin until written approval of a protocol is received from OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2: Remediation Determination and Protocol

A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from the test results, a proposed Remedial Action Work Plan (RAWP) must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER in accordance with the approved RAWP. The applicant should then provide proper documentation that remedial action has been satisfactorily completed.

An OER-approved construction-related Health and Safety Plan (CHASP) would be implemented during evacuation and construction and activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

Under the (E) Designation program, remedial action measures would be determined based upon the results of the remedial investigation. However, based upon the results of the Phase I ESA, it is anticipated that remedial measures that could be implemented may include proper handling and off-site disposal of historic urban fill materials and soil vapor mitigation (i.e., below slab soil vapor and/or chemical barrier, or sub-slab depressurization system [SSDS]). Given these conditions, the With-Action condition would not result in any significant adverse impacts with respect to hazardous materials for the Project Site.