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Hazardous Materials

This chapter provides an evaluation of the potential presence of hazardous materials present in soil, groundwater, and/or soil vapor that could be encountered as a result of the Proposed Actions. As indicated in the *2021 CEQR Technical Manual*, the primary goal of a hazardous materials assessment is to determine whether a proposed action would lead to a potential increased exposure of hazardous materials to people or the environment, and furthermore whether the increased exposure would lead to significant public health impacts or environmental damage.

Introduction

The New York City Economic Development Corporation (NYCEDC), the Office of the Chief Medical Examiner (OCME), and the New York City Department of Citywide Administrative Services (DCAS) (collectively, the Applicants), in affiliation with the New York City Health and Hospitals Corporation (H+H), New York City Public Schools (NYCPS), the New York City School Construction Authority (SCA), and the City University of New York (CUNY), are seeking several Uniform Land Use Review Procedure (ULURP) and discretionary actions (collectively, the Proposed Actions) to facilitate the development of approximately 2.19 million gross square feet (gsf) of new construction of academic, healthcare, Life Sciences, and retail space and public realm improvements (the Proposed Project).

The public realm improvements would take the form of a new publicly accessible open space, a replacement bridge over Franklin D. Roosevelt (FDR) Drive at East 25th Street to make it ADA accessible, a tie-in to the ~~Kips Bay~~East Midtown Coastal Resiliency (~~KBCR~~EMCR) project's planned flood protection to the northeast along FDR Drive and protection along East 25th Street,[1] ~~including a~~

[1] Absent the ~~KBCR~~EMCR project, the Proposed Project would incorporate standalone flood protections with independent utility into the design. For conservative analysis purposes, a hypothetical scenario in which there is no EMCR was referenced in the DEIS. However, that outcome is unlikely, and there are no plans to discontinue the EMCR project.

~~connection to the existing floodwall at the U.S. Department of Veterans Affairs New York Harbor Healthcare System's Manhattan campus (U.S. Corbin VA Facility),~~ and a widening of the demapped portion of the former East 26th Street located between FDR Drive and First Avenue to accommodate two-way traffic flow.

Collectively, the new, approximately 2.19-million-gsf development and the public realm improvements are the Proposed Project, which would consist of multiple new buildings (illustratively shown as Buildings A, B1, and B2) (see **Figure 1-2**~~)~~), consisting of up to approximately 1,782,000 zsf (2.19 million gsf).[2] The Eastern Parcel would create an integrated educational campus within Building A, as described below, bringing together the Hunter College School of Nursing and departments of Physical Therapy, Speech-Language Pathology & Audiology (including the community clinic), and Medical Laboratory Sciences~~,~~; Borough of Manhattan Community College (BMCC) Health Sciences, Health Studies, and Nursing Programs~~,~~; and the CUNY Graduate School of Public Health & Health Policy,[3] along with a NYCPS high school focused on health care and sciences education. The Western Parcel would include two Life Sciences buildings, Building B1 and Building B2, and the one-story SPARC Square Pavilion within the open space. Building B1 would front on First Avenue, and include space dedicated to H+H. Building B2 would be located to the east of Building B1 and would include space for OCME.

Building A located on the Eastern Parcel would be comprised of approximately 698,570 gsf (561,500 zsf), containing approximately 606,450 gsf (559,185 zsf) of community facilities (UG III(B)) space and 2,600 gsf (2,300 zsf) of commercial retail (UG VI) space.

Building B1 would contain a total of approximately 810,980 gsf (667,700 zsf), including approximately 184,000 gsf (174,550 zsf) of community facility (UG III(B)), approximately 5,600 gsf (5,060 zsf) of local retail (UG VI), and approximately 530,900 gsf (488,060 zsf) of office and laboratories (UG VII).

Building B2 would contain a total of approximately 682,470 gsf (551,800 zsf), including approximately 217,300 gsf (200,340 zsf) of community facility (UG III(B)), approximately 3,000 gsf (2,760 zsf) of local retail (UG VI), and approximately 379,400 gsf (348,680 zsf) of office and laboratories (UG VII).

The square footages described above for community facility, office and laboratories, and local retail include each programmatic element anticipated to be included on the site.[4]

This hazardous materials assessment will include a summary of a previous Phase I Environmental Site Assessment (ESA) for the Development Site. The results of the Phase I ESA would determine if any conditions are present at the Development Site that may warrant further investigation. The chapter includes a discussion of the Proposed Project's potential to result in significant adverse hazardous materials impacts and includes a description of any additional testing, remediation, or other measures that would be necessary to avoid impacts.

~~[2] As design progresses for the Proposed Project, it is likely that the building on the eastern portion of the Development Site (i.e., Building A) would be designed as two buildings with independent utility systems to accommodate separation between the public school and CUNY facilities.~~

[3] While the CUNY Hunter space on site currently contains dormitory space (711 beds, with 648 occupiable), the Proposed Project would not include dormitory space on site. CUNY Hunter intends to replace the ~~dorm~~dormitory space that would be lost as a result of the Proposed Project elsewhere (at 569 Lexington Avenue) so there would be no potential for displacement.

[4] Program areas are based on a conceptual site plan and are subject to future modification as each building is designed.

Principal Conclusions

There is a potential for adverse hazardous materials impacts associated with the excavation and construction activities of the Proposed Actions. Although these activities could increase pathways for human exposure, significant adverse impacts can be largely mitigated by the development and implementation of a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) during redevelopment.

The Phase I ESA and hazardous materials assessment identified environmental conditions at the Development Site and neighboring sites consistent with the listed uses and environmental conditions provided in Appendix A of Title 15, Chapter 24 of the Rules of the City of New York. However, the possibility of potential environmental impacts from hazardous materials would be greatly reduced by implementing standard preventative measures and best practices while performing demolition and construction. Under the Proposed Actions, the Development Site (Block 962, the southern portion of Lot 100) would be assigned an (E)-Designation, which would apply only to the portion of the lot south of former East 26th Street. By placing an (E)-Designation on the Development Site, any construction activity involving soil disturbance would be conducted in accordance with the oversight and best practices of the New York City Mayor's Office of Environmental Remediation (OER). The OER would provide regulatory oversight of the environmental scope, including investigations and remediation during the development process and prior to occupancy.

In summary, the Proposed Actions may increase exposure pathways for hazardous materials, however, assignment of an (E)-Designation on the Development Site would ensure investigation, mitigation, and remediation of any hazardous materials under the Proposed Actions would be completed in a safe, and comprehensive manner.

Methodology

In order to determine whether the Proposed Actions may increase the potential for significant impacts at the Development Site, a hazardous materials analysis was conducted in conformance with Chapter 12 of the *CEQR Technical Manual* (Hazardous Materials) and Section 24-04 of the Rules of the City of New York describe this review process, which includes reviewing historical documentation for past or current uses that may have affected the Development Site or an adjacent site.

The potential for hazardous materials was evaluated for the Development Site in a Phase I ESA for Hunter College Brookdale Campus at 425 East 25th Street, prepared by GEI Consultants, Inc., P.C. (GEI), dated March 2023.

Phase I ESA Methodology

The Phase I ESA was prepared in accordance with the American Society for Testing and Materials (ASTM) Practice E1527-21 and incorporates the All-Appropriate Inquiry (AAI). The United States Environmental Protection Agency (EPA) AAI requirement establishes specific regulatory requirements for conducting appropriate inquiries into the previous ownership, uses, and environmental conditions of a property for the purposes of qualifying for certain landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The goal of a Phase I ESA process is to identify Recognized Environmental Conditions (RECs), which is defined as (1) the presence of hazardous substances or petroleum products in, on, or at the subject

property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment."

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; local environmental records and a site reconnaissance investigation of the Development Site.

As stated in Practice E1527-21 (the Practice), 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 Practice. These additional environmental issues (or non-scope considerations) could evaluate for the potential presence of radon, lead-based paint (LBP), asbestos-containing materials (ACM), wetlands, and mold and water damage. Additional environmental issues, or non-scope considerations, are typically characterized in a Phase I ESA as Business Environmental Risks (BERs)—which are risks that can have a material environmental, or environmentally driven, impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated. 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 Development Site.

Preliminary Assessment

Existing Conditions

Phase I Environmental Site Assessment

The Phase I ESA prepared by GEI, dated March 2023, was completed for the Development Site and included analyses as specified in the ASTM Method E1527-21. The following is a summary of relevant findings and conclusions of the Phase I ESA.

Site History

The Development Site was initially developed in the late 1800s with several multi-story mixed-use store fronts and manufacturing operations including a mineral water factory, lumber and coal yards, a furniture upholstery factory, a grease company, building material store house, an auto house and a gasoline filling station. In addition to historic multi-use operations, the most eastern extents of the Development Site were originally occupied by the East River. By the early 1900s the eastern end of the property began utilization for health services and health education associated with the Bellevue Hospital. By the mid-1950s the Development Site's current buildings were constructed, including back filling in the eastern portions of the Development Site originally occupied by the East River for construction of FDR Drive. The Development Site currently operates as the CUNY Hunter College Brookdale Campus, which includes education services and residential dormitories.

Topography, Geology, and Groundwater

According to the USGS 7.5-Minute Quadrangle Topographic Map, the Development Site is located on an easterly slope, toward the East River. Elevation varies greatly from approximately 15 feet above mean sea level (ft. amsl.) at the west end of the Development Site to approximately 3.5 ft. amsl. at the east end of the Development Site. Topographic elevation in the general vicinity of the Development Site is more gradually sloped upward toward the west to the center of Manhattan.

Generally, the geology in the area of the Development Site in Manhattan is historic fill material underlain by sandy to clayey native soils followed by bedrock, the Manhattan schist. Due to the Development Site's history of backfilling on its easternmost half, historic fill may be found in thicker layers and larger quantities in this area. Groundwater elevation is variable across the Development Site but is estimated to be at approximately 10 to 12 feet below ground surface. Shallow groundwater flow generally follows topography. Based on the surface topography at the Development Site, it is inferred that groundwater flow direction across the Development Site is from west to east toward the East River. It must be noted that precise groundwater depths and flow direction can only be determined through installation and survey of groundwater monitoring wells.

Recognized Environmental Conditions

The Phase I ESA identified the following RECs in connection with the Development Site that warrant additional investigation as follows:

- **Historic Fill –** According to historic Sanborn fire insurance maps, the eastern portion of the Development Site was originally a part of the waterfront of the East River and included dock and pier infrastructure. During development of FDR Drive, this portion of the Development Site was backfilled. Historically, fill material in New York City was known to contain ash from wood and coal combustion, slag, construction debris, dredged soils, and is currently a regulated solid waste in the State of New York. The potential for historic fill material used as backfill in the eastern portion of the Development Site as a part of construction of FDR Drive may have impacted the Development Site and is therefore considered a REC.
- **Historic On-Site 550-Gallon Underground Storage Tank (UST) –** A review of historic Sanborn fire insurance maps indicated that the Development Site operated as the C.H. Schultz Mineral Water Factory auto house in 1929. The auto house is depicted with a 550-gallon gasoline UST. The Development Site's historic operations as an auto house with a 500-gallon gasoline UST could have impact the environmental quality of the Development Site and is considered RECs.
- **Former On-Site Gasoline Filling Station –** A review of the historic Sanborn fire insurance maps indicated that a filling station operated at the southwest corner of the Development Site from sometime after 1929 until construction of the on-site buildings in the 1950s. The filling station is depicted with a total of eight (8) USTs located generally along First Avenue. The presence of a gasoline filling station with USTs could have impacted the environmental quality of the Development Site, and is therefore considered a REC.

Non-ASTM Scope Concerns

The Phase I ESA identified the following Non-ASTM Scope Concerns for the Development Site that should be considered in future development plans:

- **Suspect Asbestos Containing Materials (SACM) –** Given the buildings construction in the 1950s, it is possible that asbestos-containing building and insulation materials were used. SACM

observed during site reconnaissance included vinyl floor tiles and associated mastic, various sized ceiling tiles, roofing materials. SACM may also be present in the form of pipe insulation behind walls and ceilings that were not visually observed during site reconnaissance.

- **Lead-Based Paint –** Consumer sale of lead-based paint (containing over 0.06 percent metallic lead) was banned by the United States Consumer Products Safety Commission in 1977. Given the buildings construction in the 1950s, it is possible that they contain lead-based paints or remnants of lead-based paints. Painted surfaces in the buildings were observed to be in good condition during site reconnaissance.

Additional Areas of Concern

In addition to the RECs identified in the Phase I ESA, the following additional Areas of Concern (AOCs) were identified as a part of the Hazardous Materials Assessment. These AOCs were not identified as RECs under the March 2023 Phase I ESA, however, their site use is identified in Appendix A of Title 15, Chapter 24 of the Rules of the City of New York (Contamination of Tax Lot by Hazardous Materials or Hazardous Waste), which provides a list of types of facilities, activities, or conditions that could lead to an environmental condition considered the equivalent of a REC, as defined under the ASTM E1527-21. The following AOCs were identified for the Development Site:

- **Medical Campus Laboratories –** According to the historic Sanborn fire insurance maps, the Development Site operated as a medical college equipped with several laboratories from 1890 to present. Historically, medical laboratories and facilities have been known to use detergents, disinfectants, various petroleum products, soaps, stains, and solvents. The operation of various medical laboratories for at least a century could have impacted the environmental quality of the Development Site and is therefore, considered an Area of Concern.
- **Coal Yard –** According to the historic Sanborn fire insurance maps, several coal yards operated on the eastern portion of the Development Site in its early history from 1890 to sometime prior to 1910. Historically, coal has been associated with various materials and wastes such as acids, metals, solvents, and creosote. The presence of coals yards in the late 1800s, could have impacted the environmental quality of the Development Site, and is therefore, considered an Area of Concern.
- **Grease Manufacture –** According to the historic Sanborn fire insurance maps, the Krupp Grease Company operated along the southern boundary of the Site in 1890. Historically, grease and lubricant manufacturing has been associated with metals including arsenic, lead, molybdenum and nickel. The operation of a grease manufacturer in the late 1800s for an unknown amount of time could have impacted the environmental quality of the Development Site and is therefore, considered an Area of Concern.
- **Furniture Manufacture –** According to historic Sanborn fire insurance maps, a furniture upholstery factory operated at the Development Site during the late 1920s. The factory is depicted with several rooms, including a fuel oil room. No tanks are depicted or associated with this operation. Historically, furniture upholstery operations are known to have used paints, polishes, glues, solvents and stains. The operation of a furniture upholstery factory could have impacted the environmental quality of the Development Site and is therefore, considered an Area of Concern.
- **Dirt-Bottomed Sump –** During site reconnaissance on October 5, 2023, a dirt-bottom sump was identified in the equipment room on the lowest level of the western building. FLS did not identify any sources of contamination in the vicinity of the sump or evidence of a release. Various

mechanical equipment is stored in the space, including pumps for operation of the pool on the floor above. Maintenance staff mentioned the room has historically flooded and water drained through the sump. The presence of a dirt-bottom sump provides a vector for potential historical contamination to migrate to the subsurface and is considered an Area of Concern.

No-Action Condition

Absent the approval of the Proposed Actions (the No-Action condition), it is anticipated that the existing buildings would remain and the Development Site and would continue in the future to accommodate uses similar to the existing on-site uses. Additionally, the existing East 25th Street pedestrian bridge would remain in its current, non-ADA compliant condition. Any subsurface contamination at the Development Site, including any petroleum products, chlorinated solvents and heavy metals, would remain largely in place, and any hazardous source material would generally migrate with groundwater flow.

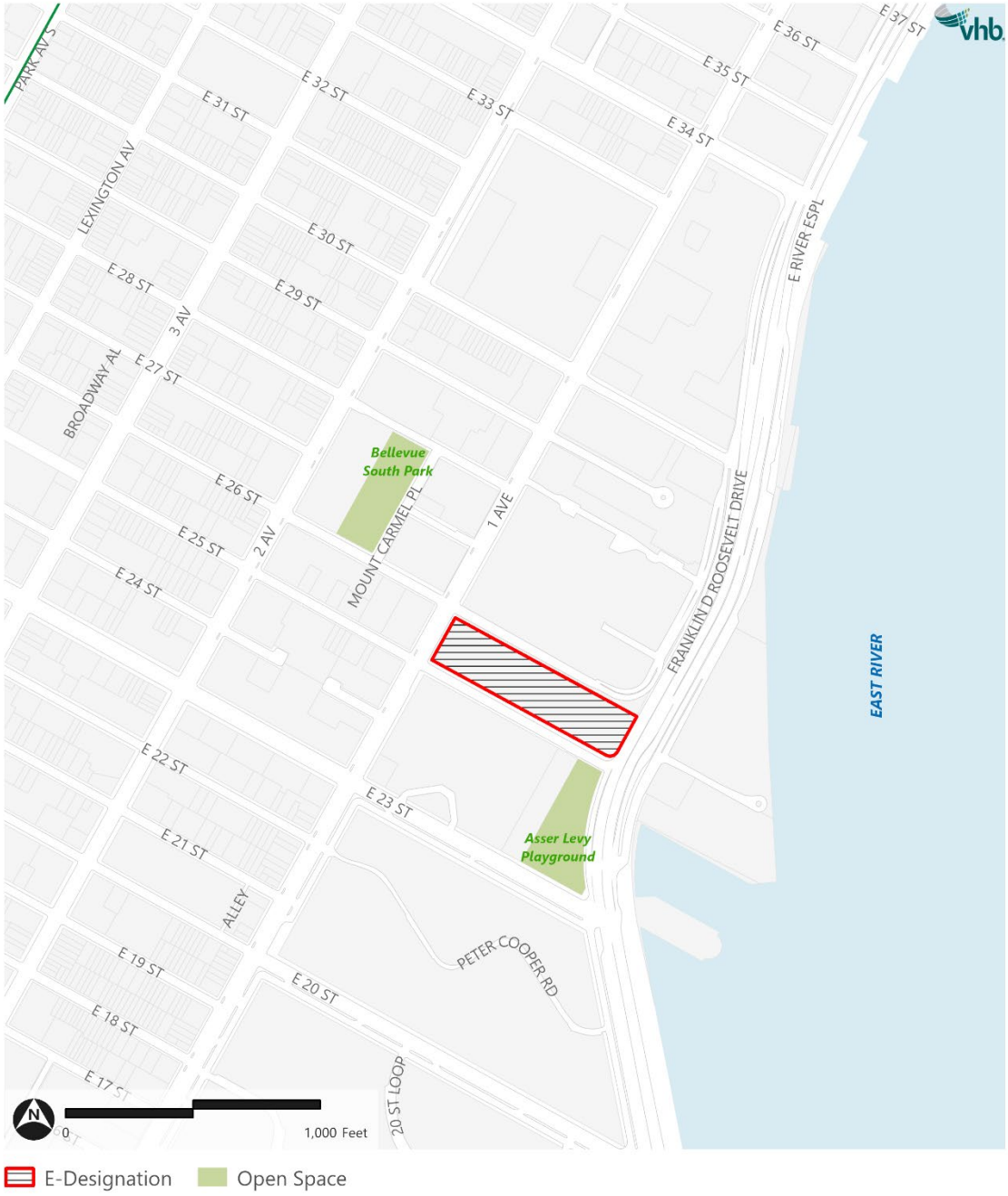
With-Action Condition

There is a potential for adverse hazardous materials impacts associated with the excavation and construction activities of the Proposed Actions. Although these activities could increase pathways for human exposure, significant adverse impacts can be largely mitigated by the development and implementation of standard preventative measures and best practices while performing demolition and construction. Under the Proposed Actions, the southern portion of Block 962, Lot 100 would be assigned an (E)-Designation (E-~~1006~~776), which would apply only to the Development Site portion of the lot south of former East 26th Street (see **Figure 8-1**).

By placing an (E)-Designation on the Development Site, any construction activity involving soil disturbance would be conducted in accordance with the best practices and procedures of OER. These procedures include preparation of a Phase II ESA, a Remedial Investigation Report (RIR), Remedial Action Work Plan (RAWP), Construction Health and Safety Plan (CHASP), and site remediation conducted with the regulatory oversight of OER. These measures would ensure investigation, mitigation, and remediation of any hazardous materials under the Proposed Actions would be completed in a safe and comprehensive manner.

In the event of subdivision of Block 962, Lot 100 as a part of the Proposed Actions, the (E)-Designation would apply only to the Development Site portion of the tax lot south of former East 26th Street.

Figure 8-1 (E)-Designation Map



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