

Draft Scope of Work for Preparation of an Environmental Impact Statement Lambert Houses

A. INTRODUCTION

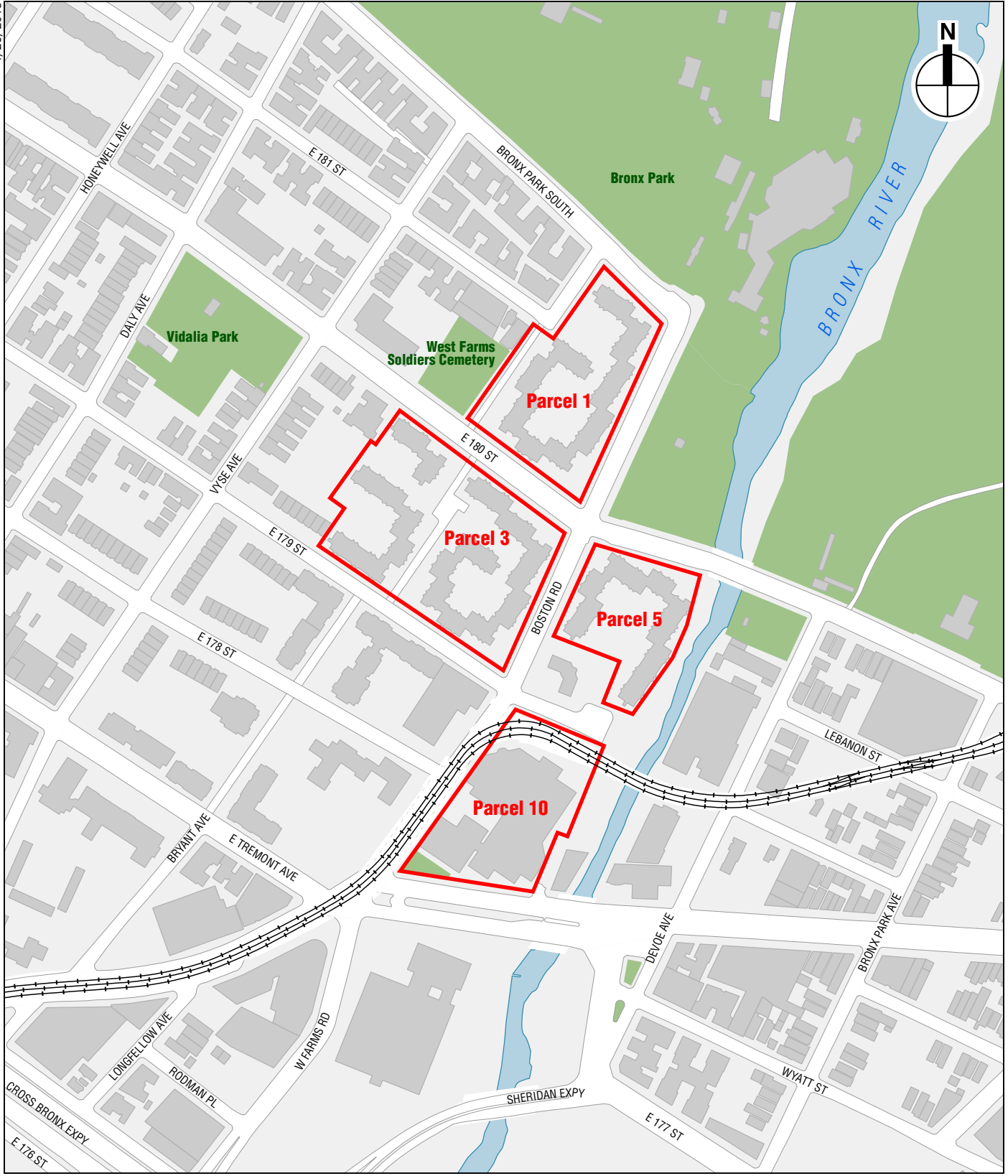
The New York City Department of Housing Preservation and Development (HPD) and Phipps Houses (the “Applicants”) are seeking disposition of city-owned property and designation as an Urban Development Action Area Project (UDAAP), establishment of a large-scale residential plan, and other discretionary actions, as well as certain funding actions to facilitate the demolition of the Lambert Houses buildings in the Bronx, and the redevelopment of the project area with a combination of affordable housing, retail, and a possible school.

The project area contains Parcels 1, 3, 5, and 10 of the Bronx Park South Large Scale Residential Development (LSRD) (see **Figure 1**).¹ Parcel 1 (Block 3138, Lot 1) is located along the west side of Boston Road between East 180th Street and Bronx Park South. Parcel 3 (Block 3132, Lot 1) is located directly south of Parcel 1, along the west side of Boston Road between East 179th and East 180th Streets. Parcel 5 (Block 3140, Lot 7) is located east of Parcel 3 across Boston Road. Parcel 10 (Block 3139, Lots 1 and 19) is located south of Parcel 5 on the east side of Boston Road between East Tremont Avenue and East 179th Street. The project area also contains a small City-owned triangular parcel at the intersection of East Tremont Avenue and Boston Road (Block 3139, Lot 50). The approximately 11.7-acre project area contains five groups of six-story buildings containing 731 residential units, and one two-story building containing approximately 39,490 square feet (sf) of retail use and 375 parking spaces.

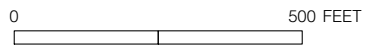
The proposed project would require the disposition of City-owned property on a portion of Parcel 10 and the designation as a UDAAP; a zoning map amendment to rezone Parcels 1, 3, 5, and 10; a zoning text amendment to eliminate the residential parking requirement; and zoning authorizations and special permits to allow distribution of total floor area and open space without regard for lot lines or zoning boundaries, variation in front height and setback regulations and the required rear yard setback, among other actions. **Figure 2** shows the existing and proposed zoning of the project area. **Figure 3** shows the existing LSRD and the proposed establishment of a new LSRD.

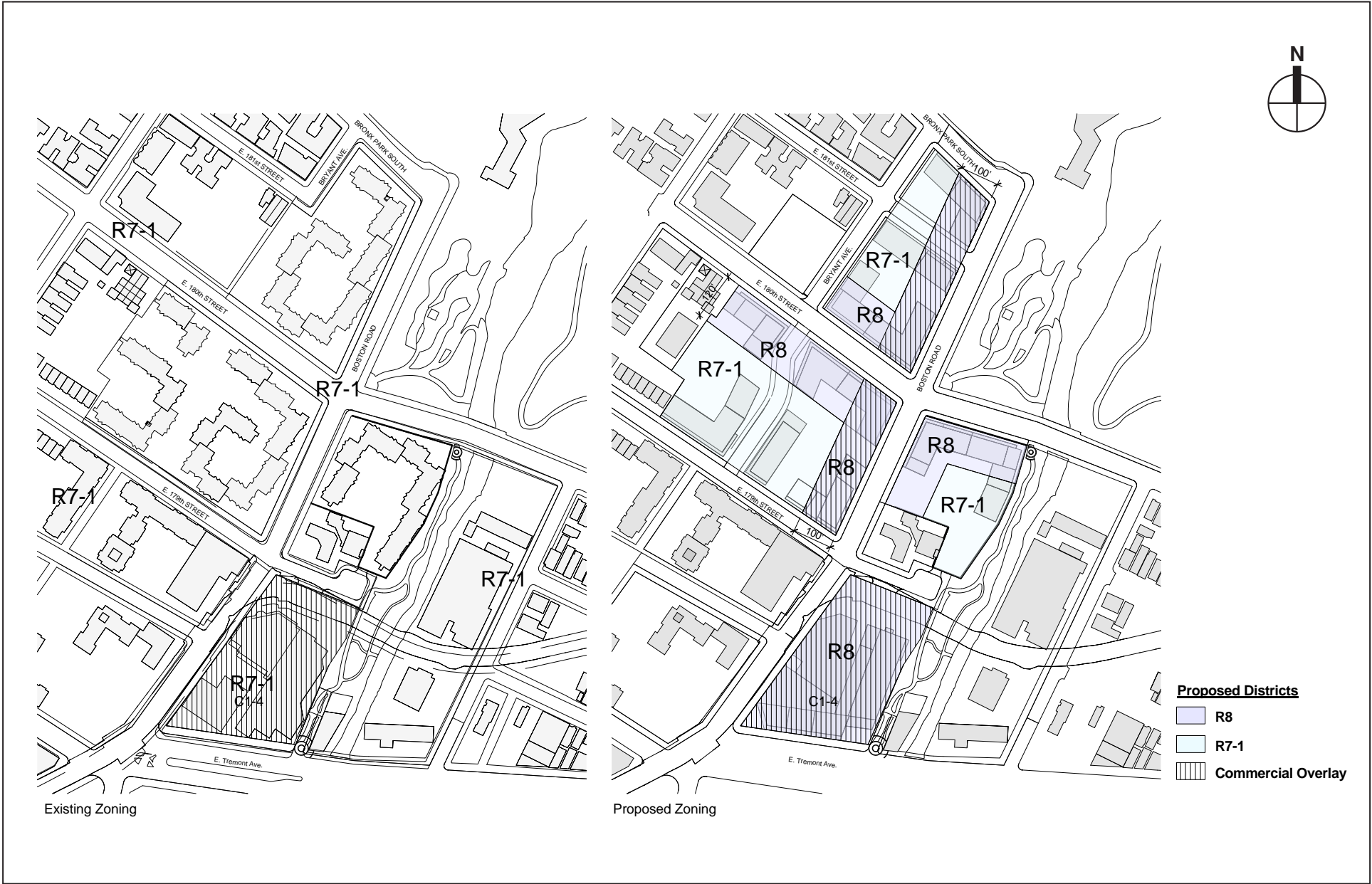
The proposed actions would facilitate the demolition of the existing Lambert Houses buildings and the redevelopment of the project area with approximately 1,665 affordable residential units at the completion of the project, approximately 61,100 sf of retail, and a new school of up to approximately 86,608 sf; parking would be reduced to 110 spaces. **Figures 4** and **5** show the proposed site plan and massing.

¹ The Bronx Park South Large Scale Residential Development also includes four additional parcels: 7, 8s, 8b, and 9.



 Proposed Development Parcel





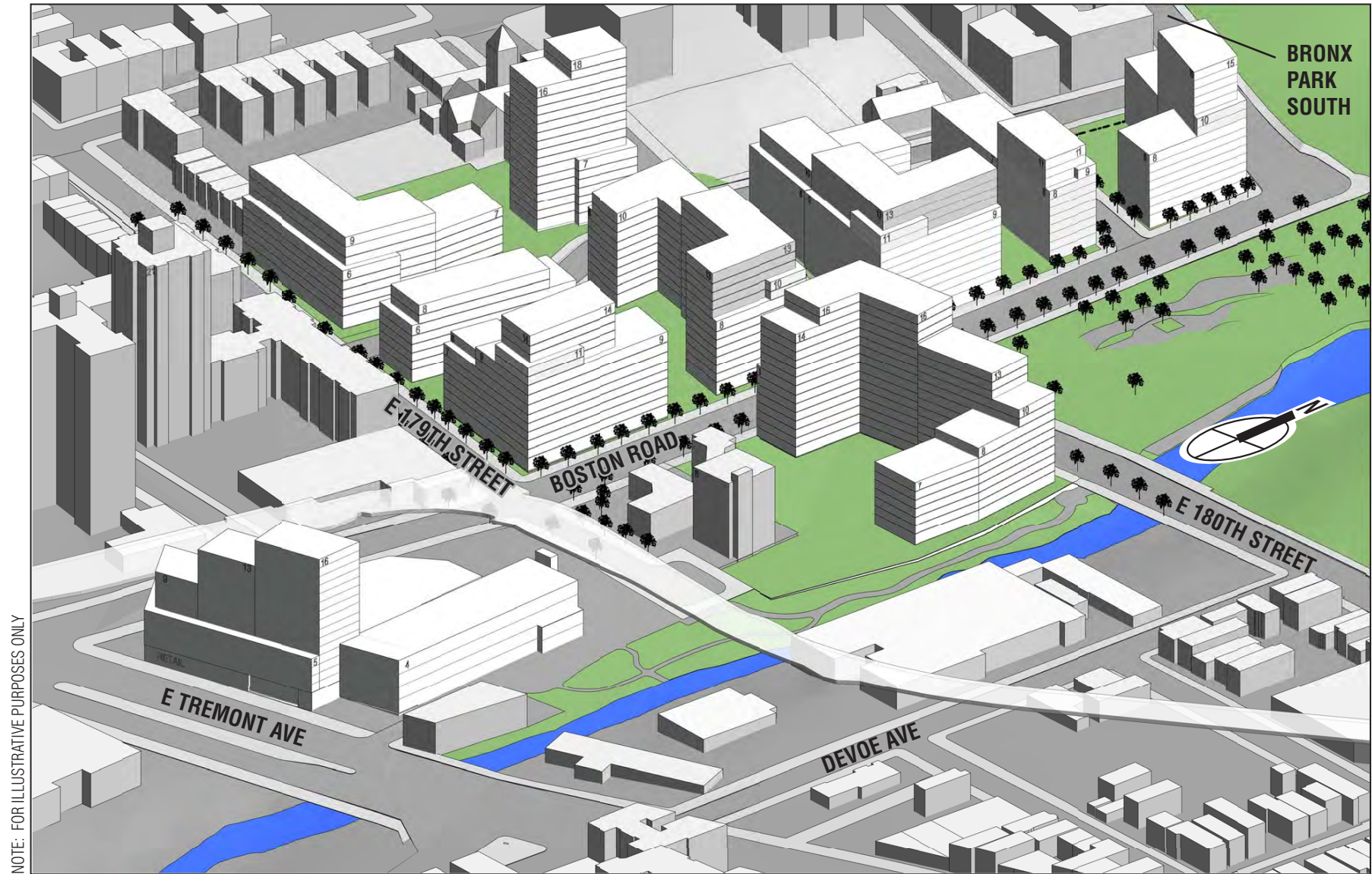
Existing and Proposed Zoning
Figure 2



Existing LSRD and Proposed Subdivision of LSRD
Figure 3



1.16.15



The proposed project may also use funding from City and/or State agencies including HPD, the New York City Housing Development Corporation (HDC), the New York State Housing Finance Agency (HFA), and/or NYS Homes and Community Renewal (HCR) for affordable housing construction. Development of the new school would require site plan approval by the Mayor and City Council pursuant to the requirements of the New York City School Construction Authority (SCA). In addition, the project would require approval by the U.S. Department of Housing and Urban Development (HUD) for the reassignment of project-based rental assistance contracts. The proposed project may also request HOME funds or other funding from HUD. The proposed discretionary actions and funding require review under City Environmental Quality Review (CEQR), the State Environmental Quality Review Act (SEQRA), and the National Environmental Policy Act (NEPA). HPD acts as a Responsible Entity for federal environmental reviews pursuant to 24 CFR Part 58. HPD and HUD therefore serve as Involved Agencies under CEQR.

The scoping process is intended to focus the EIS on those issues that are most pertinent to the proposed action. The process at the same time allows other agencies and the public a voice in framing the scope of the EIS. During the scoping period, those interested in reviewing the Draft Scope of Work and providing their comments to the lead agency may do so in writing or at a public scoping hearing to be held on Wednesday, October 21, 2015 beginning at 4 PM at the following location:

Daly Community Room
921 East 180th Street
Bronx, NY 10460

Comments received during the public hearing, and written comments received through the close of the comment period (which is held open a minimum of 10 days after the hearing), will be considered and incorporated as appropriate into a Final Scope of Work. The comment period will close on November 2, 2015. The Final Scope of Work will be used as a framework for preparing the Draft EIS (DEIS) for the proposed project. The DEIS will include NEPA areas of analysis, as appropriate, to satisfy federal environmental review requirements.

B. PROJECT DESCRIPTION AND PURPOSE & NEED

PROJECT AREA (EXISTING CONDITIONS)

The project area contains parcels 1, 3, 5, and 10—which represents the northern section of the Bronx Park South Large Scale Plan. Existing uses on the parcels are described below and in **Table 1**.

- Parcel 1, which contains Block 3138, Lot 1, is located along the west side of Boston Road between East 180th Street and Bronx Park South. A group of four interconnected six-story buildings containing 237 residential units and totaling approximately 274,045 gross square feet (gsf) is located on the 2.9-acre (126,395 sf) parcel.
- Parcel 3, containing Block 3132, Lot 1, is located along the west side of Boston Road between East 179th and East 180th Streets. The 4.5-acre (197,178 sf) parcel contains 325 residential units in seven interconnected six-story buildings in three groups totaling approximately 421,268 gsf.
- Parcel 5, containing Block 3140, Lot 7, is located at the southeast corner of Boston Road and East 180th Street. The 1.8-acre parcel (79,612 sf) contains 169 residential units in a group of three interconnected six-story buildings totaling approximately 188,471 gsf.

- Parcel 10, which contains Block 3139, Lots 1 and 19 is bounded to the west by Boston Road, to the south by East Tremont Avenue, to the east by the Bronx River Greenway, and to the north by East 179th Street. The 2.5-acre parcel (107,825 sf) contains one two-story building containing approximately 48,610 sf, including approximately 39,490 sf of retail use and 375 parking spaces. The 3,720-sf HPD-owned lot (Block 3139), Lot 50 just south of Parcel 10 would be conveyed to Phipps Houses and become part of Parcel 10.

Together, Parcels 1, 3, and 5 contain a total of 14 six-story buildings containing 731 residential units. The project area also contains a small City-owned triangular parcel at the intersection of East Tremont Avenue and Boston Road (Block 3139, Lot 50); this lot currently contains some seating and several trees.

Table 1
Existing Conditions

Parcel	Existing Conditions			
	Residential (units)	Retail (sf)	Community Facility (sf) ¹	Parking (spaces)
1	237	0	0	0
3	325	0	2,250	0
5	169	0	0	0
10	0	39,490	0	375
Total	731	39,490	2,250	375
Note: 1. There is an early education facility currently located on Parcel 3.				
Source: Phipps Houses				

PROPOSED PROJECT

Construction of the proposed project would occur over a build out period of approximately 13 years. During construction of the proposed project, current tenants would be relocated from buildings to be demolished to other locations within the Lambert Houses development. Once relocated, the unoccupied buildings would be demolished and construction of new buildings would proceed. Tenants of the next buildings to be demolished would be relocated within the Lambert Houses project area to the newly constructed buildings, and the demolition and new construction process would begin again. This process would be repeated through completion of the project. Overall, the proposed project would redevelop the project area with the following (see **Table 2**):

- A total of 1,665 residential units at the completion of the project, for an increment of 934 units over the No Action condition. The proposed residential units would all be affordable.
- Approximately 61,100 sf of retail, for an increment of 21,610 sf over the No Action condition.
- A new public school of approximately 86,608 sf on a portion of Parcel 10. It is expected that this school would be a 500-seat elementary school.
- A reduction in the amount of parking at the site, for a total of 110 spaces.

In order to address a projected shortfall of seats in the project area's public schools, the SCA will be given an option to acquire the site for proposed school for a nominal fee. If SCA were to decline to exercise this option and construct the school, a residential building with approximately 55 units would be constructed in its place. The environmental impacts of the scenario in which a residential building would replace the school will be analyzed in the Alternatives chapter of the EIS.

Table 2
Proposed Project

Parcel	Residential (units)		Retail (sf)		Community Facility (sf) ^{1,2}		Parking (spaces)	
	Proposed	Increment	Proposed	Increment	Proposed	Increment	Proposed	Increment
1	494	257	10,500	10,500	2,250	2,250	35	35
3	737	412	6,000	6,000	0	-2,250	25	25
5	301	132	0	0	0	0	0	0
10	133	133	44,568	5,078	86,608	86,608	50	-325
Total	1,665	934	61,100	21,610	88,858	86,608	110	-265
Notes: 1. The existing early education facility on Parcel 3 would be relocated to Parcel 1. 2. An approximately 86,608-sf school would be constructed on Parcel 10.								
Source: Phipps Houses								

DISCRETIONARY AND OTHER APPROVALS

Implementation of the proposed project would require the following discretionary actions:

- Disposition of City-owned property (Block 3139, Lot 50) and designation as an Urban Development Action Area Project (UDAAP). There may also be a change to the city map in order to remove this lot from a mapped street.
- Zoning Map Amendment to rezone Parcels 1, 3 and 5 from R7-1 and Parcel 10 from R7-1/C1-4 as follows (see **Figure 2**):
 - Parcel 1: R8 with a depth of 100 ft. parallel to Boston Road, Bronx Park South and East 180th Street. C1-4 overlay with a depth of 100 ft. parallel to Boston Road. R7-1 to remain on the balance of the parcel.
 - Parcel 3: R8 with a depth of 100 ft. parallel to Boston Road and a depth of 120 ft. parallel to East 180th Street. C1-4 overlay with a depth of 100 ft. parallel to Boston Road. R7-1 to remain on the balance of the parcel.
 - Parcel 5: R8 with a depth of 100 ft. parallel to Boston Road and East 180th Street. R7-1 to remain on the balance of the parcel.
 - Parcel 10: R8 / C1-4 overlay.
- Authorizations under ZR Section 78-311 and Special Permits under ZR Section 78-312:
 - To permit distribution of the total floor area, lot coverage and number of dwelling units permitted by the applicable district regulations to be distributed without regard for zoning lot lines or zoning district boundaries.
 - To permit the total open space required by the applicable district regulations to be distributed without regard for zoning lot lines or zoning district boundaries.
 - To permit variations in the front height and setback regulations including variation in the maximum height and number of stories of the front wall within the initial setback distance, modification of the initial setback distance, and to permit penetration of the sky exposure plane.
 - To modify the required rear yard setback for tall buildings per Section 23-663.
 - To permit an interim condition in which the minimum distance between buildings is waived between the new Building 3A and the existing building to the south.
- Special Permit pursuant to ZR 74-53 to permit the provision of off-street accessory parking spaces to be located in a parking lot on the roof of a building.

- Zoning text amendment consistent with the City's proposed Mandatory Inclusionary Housing text amendment.
- Zoning text amendment to modify ZR Section 78-42 to permit a reduction of parking requirements for affordable housing units in LSRDs in Community District 6 in the Borough of the Bronx.
- Potential zoning action related to Parcel 10 to provide legal windows along the lot line.
- Coastal zone consistency determination.
- Site plan approval by the Mayor and City Council pursuant to SCA requirements for the proposed school on Parcel 10.

The proposed project may also use funding from City and/or State agencies including HPD, HDC, HFA, and/or HCR for affordable housing construction. In addition, the project would require approval by HUD of the reassignment of project-based rental assistance contracts, and the proposed project may also request HOME funds or other funding from HUD.

As the project is built out over time, the landscape plans for each parcel will require certification from the Chair of the New York City Planning Commission (CPC).

PURPOSE AND NEED OF THE PROPOSED PROJECT

The proposed project is intended to improve the quality of life for current Lambert Houses residents while increasing the number of affordable housing units on the project area. The project area is underdeveloped, with less floor area than even the current zoning districts allow, and less density than much of the surrounding neighborhood. The buildings currently on the site were constructed between 1970 and 1973 and have antiquated and inefficient building systems. Furthermore, the configuration and circulation plan of the buildings, with multiple entrances and egresses, compromise building security by making control of access difficult. The retail space currently on the site is antiquated, with storefronts set back far from the street wall, poor frontage, and inadequate storage space for merchants.

The proposed new LSRD and associated special permits and authorizations, including waivers of height and setback requirements, are being requested in order to allow for the redistribution of floor area across the entire project area, creating a site plan and building layout and design superior to what would be allowed as-of-right under the current LSRD and proposed zoning districts.

The proposed project would increase density of development on the project area and more than doubling the number of affordable housing units, with ancillary commercial and community facility uses. By creating nearly 1,000 more affordable housing units than are currently located on the site, the proposed project would make a substantial contribution to the housing production goals of the Mayor's *Housing New York: A Five-Borough, Ten-Year Plan*.

The proposed site plan would allow for buildings with fewer, securable points of access/egress, better fire egress, and improved security. It would better integrate Lambert Houses into the surrounding neighborhood by creating a street wall with ground floor uses such as retail and maisonette apartments that activate the streetscape. The proposed project would include more and retail space with a more efficient configuration to better serve neighborhood needs. It would also result in improved open space for current and future residents, and would replace the existing inefficient building systems with modern, "greener" systems.

ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW

The *CEQR Technical Manual* will serve as a general guide on the methodologies and impact criteria for evaluating the proposed project's potential effects on the various environmental areas of analysis. In disclosing impacts, the EIS considers the proposed project's potential adverse impacts on the environmental setting. It is anticipated that the proposed project would be operational in 2029. Consequently, the environmental setting is not the current environment, but the future environment. Therefore, the technical analyses and consideration of alternatives first assess existing conditions and then forecast these conditions to 2029 ("Future Without the Proposed Project") for the purposes of determining potential impacts in the future with the proposed project ("Probable Impacts of the Proposed Actions").

THE FUTURE WITHOUT THE PROPOSED PROJECT

For the purposes of the EIS, it is assumed that in the future without the proposed project (the "No Action" condition), the proposed project area will continue in active use as in the existing condition. For each technical analysis in the EIS, the No Action condition will also incorporate approved or planned development projects within the appropriate study area that are likely to be completed by the analysis year.

THE FUTURE WITH THE PROPOSED PROJECT

For each of the technical areas of analysis identified in the *CEQR Technical Manual*, conditions with the proposed project will be compared to the No Action condition (see **Table 1**).

ENVIRONMENTAL REVIEW PROCESS

HPD has determined that the proposed actions and project have the potential to result in significant environmental impacts and, therefore, pursuant to CEQR procedures, has issued a Positive Declaration requiring that an EIS be prepared in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act (SEQRA), the City's Executive Order No. 91, CEQR regulations (August 24, 1977) and the guidelines of the *2014 CEQR Technical Manual*. The EIS will also be prepared pursuant to NEPA and its implementing regulations (40 CFR Parts 1500-1508) (collectively, NEPA), Executive Order 11988 (Floodplain Management), Executive Order 12898 (Environmental Justice), and the National Historic Preservation Act of 1966 and its implementing regulations (36 CFR Part 800) (collectively, NHPA). Furthermore, HPD, as Responsible Entity for the proposed reassignment of project-based rental assistance contracts, has issued a Notice of Intent to Prepare an EIS to satisfy NEPA procedural requirements in accordance with 24 CFR Part 1502. In addition, HPD has published this Draft Scope of Work and will hold a meeting on Wednesday, October 21, 2015 for the purpose of accepting comments on the Draft Scope. Comments received during the public hearing, and written comments received through the close of the comment period, will be considered and incorporated as appropriate into a Final Scope of Work. The Final Scope of Work will be used as a framework for preparing the DEIS.

Once HPD has determined that the DEIS is complete, a Notice of Completion (pursuant to CEQR) and a Notice of Availability (pursuant to NEPA) would be prepared and distributed/published in accordance with applicable regulations. The DEIS will then be subject to additional public review, in accordance with the Uniform Land Use Review Procedure (ULURP), CEQR, and NEPA procedures, with a public hearing and a period for public comment. A Final EIS (FEIS), and response to comments on the DEIS, would be accompanied by a Notice of Completion (pursuant to CEQR) and a Record of Decision (pursuant to NEPA).

The lead agency will then make CEQR findings based on the FEIS, before making a decision on project approval.

C. SCOPE OF WORK

TASK 1: PROJECT DESCRIPTION

The first chapter of the EIS introduces the reader to the proposed project and provides the project data for which impacts are assessed. The chapter will contain a brief history of the uses on the project area; the proposed development program; a description of the design of the proposed buildings; figures depicting the proposed development; and a discussion of the approvals required, procedures to be followed, and a description of the No Action condition. The role of the lead agency for CEQR will also be described as well as the environmental review process to aid in decision-making.

TASK 2: LAND USE, ZONING, AND PUBLIC POLICY

The proposed project requires the establishment of a new general large-scale plan from an existing, larger LSRD. Therefore, the EIS will include an assessment of the proposed project's consistency with land use, zoning, and public policy, in accordance with the *CEQR Technical Manual*. The analysis will include information on existing land use now and in the future without the proposed project to set the context in which many of the other technical tasks may be understood.

The assessment of land use, zoning, and public policy will consist of the following tasks:

- Describe conditions on the project area and in a 400-foot study area, including existing uses and the current zoning. The 400-foot study area will extend around Parcels 1, 3, 5, and 10 of the Bronx Park South Large Scale Plan.
- Describe predominant land use patterns in the study area. The study area will include the blocks immediately surrounding the project area and land uses within approximately 400 feet.
- Provide a zoning map and a summary of other public policies that may apply to the project area and study area.
- Prepare a list of other projects expected to be built in the study area that would be completed before or concurrent with the project (No Action projects), including a potential residential development within Parcels 6, 7, 8a, 8b, 9 of the LSRD. Describe the effects of these projects on land use patterns and development trends. Also, describe any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area, including plans for public improvements.
- Describe the proposed project and provide an assessment of the impacts of the proposed project on land use and land use trends, zoning, and public policy.
- Since the portion of the project area including Parcels 5 and 10 is located in the New York City Coastal Zone, this chapter will include an assessment of the project's consistency with the City's coastal zone policies.

If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 3: SOCIOECONOMIC CONDITIONS

This chapter will examine the effects of the proposed action on socioeconomic character of the study area, including its population characteristics, housing, and economic activity. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of an area. The purpose of the socioeconomic assessment is to disclose changes that would be created by a proposed action and identify whether they rise to a significant level.

According to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) indirect residential displacement; (3) direct business displacement; (4) indirect business displacement; and (5) adverse effects on specific industries.

The proposed project would not result in direct displacement of residents or businesses requiring analysis. The project area currently contains 731 residential units and approximately 39,490 sf of retail. During construction of the proposed project, Phipps Houses would relocate current tenants of buildings to be demolished to other locations within the Lambert Houses development, demolish the unoccupied buildings, and then construct new buildings. Tenants would then be relocated to the newly constructed buildings. While tenants would be temporarily relocated during the construction period, the relocation would be within project area. Further, there would be no permanent displacement, as tenants would be housed within the project area upon completion of the proposed project. Therefore, no analysis of direct residential or business displacement is warranted.

Indirect displacement (also known as secondary displacement) is the involuntary displacement of residents, businesses, or employees that results from a change in socioeconomic conditions created by a proposed project. The project's commercial (retail) component would fall well below the 200,000-square-foot threshold for analysis of potential indirect business displacement. However, the proposed project would introduce dwelling units in excess of the 200-unit threshold requiring analysis of the potential for indirect residential displacement. Therefore, a preliminary assessment of the potential for indirect residential displacement will be prepared, following the step-by-step methodology found in the *CEQR Technical Manual*.

The preliminary assessment will present sufficient information regarding the effects of the proposed project to either to rule out the possibility of significant impacts or to determine that more detailed analysis is required to make a determination as to impacts. Detailed analysis, if required, will be framed in the context of existing conditions and evaluations of the No Action condition and conditions with the proposed project, including any population and employment changes anticipated to take place. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 4: COMMUNITY FACILITIES AND SERVICES

As defined for CEQR analysis, community facilities are public or publicly funded schools, libraries, child care centers, health care facilities and fire and police protection. A project can affect community facility services directly, when it physically displaces or alters a community facility; or indirectly, when it causes a change in population that may affect the services delivered by a community facility. This chapter of the DEIS will evaluate the effects on community services due to the proposed project.

The proposed project would not have a direct effect on community facilities, as there would not be a physical displacement or alteration of any community facilities.² According to the *CEQR Technical Manual*, preliminary thresholds indicating the need for detailed analyses of indirect effects on community facilities are as follows:

- Public Schools: More than 50 new elementary/middle school or 150 high school students. For the Bronx, an increase of more than 90 units exceeds the threshold for elementary/middle school and more than 787 units for high school.
- Libraries: A greater than 5 percent increase in the ratio of residential units to libraries in the borough. For the Bronx, this is equivalent to residential population increase of 682 residential units.
- Health Care Facilities: The ability of health care facilities to provide services for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of health care facilities is included only if a proposed project would directly affect the physical operations of, or access to and from, a hospital or public health clinic, or if a proposed action would create a sizeable new neighborhood where none existed before.
- Child Care Facilities (publicly funded): More than 20 eligible children based on the number of new low/moderate-income residential units by borough. For the Bronx, an increase of 141 low/moderate-income residential units exceeds this threshold.
- Fire Protection: The ability of the fire department to provide fire protection services for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of fire protection services is included only if a proposed action would directly affect the physical operations of, or access to and from, a fire station house, or if a proposed action would create a sizeable new neighborhood where none existed before.
- Police Protection: The ability of the police department to provide public safety for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of police protective services is included only if a proposed action would directly affect the physical operations of, or access to and from, a precinct house, or if a proposed action would create a sizeable new neighborhood where none existed before.

Based on these thresholds, the proposed project is not expected to trigger detailed analyses of outpatient health care facilities or police and fire protection serving the project area. However, with an increment of nearly 1,000 affordable units, the proposed project will require analyses for public schools); group child care and head start centers; and libraries. This chapter will therefore include analyses of public schools, publicly funded day care, and libraries, following the guidance of the *CEQR Technical Manual*. These analyses would include the tasks described below.

PUBLIC ELEMENTARY AND MIDDLE SCHOOLS

The analysis of elementary/middle and high schools will include the following tasks:

² In the future with the proposed project, the existing early education facility on Parcel 3 would be relocated to Parcel 1. The early education facility would be relocated before Parcel 3 is demolished, and therefore there would be no temporary or permanent displacement of the facility.

Lambert Houses

- Identify schools serving the project area and discuss the most current information on enrollment, capacity, and utilization from the New York City Department of Education.
- Based on the data provided from the Department of Education and DCP, future conditions in the area without the proposed project will be determined.
- Based on methodology presented in the *CEQR Technical Manual*, the potential impact of students generated by the proposed project on schools will be assessed.

PUBLICLY FUNDED CHILD CARE

The analysis of child care will include the following tasks:

- Identify existing publicly funded group child care and Head Start facilities within approximately 1.5 miles of the project area.
- Describe each facility in terms of its location, number of slots (capacity), and existing enrollment. Care will be taken to avoid double-counting slots that receive both ACS and Head Start funding. Information will be based on publicly available information and/or consultation with the Administration for Children's Services' Division of Child Care and Headstart (CCHS).
- Any expected increases in the population of children under 12 within the eligibility income limitations, based on CEQR methodology, will be discussed as potential additional demand, and the potential effect of any population increases on demand for publicly funded group child care and Head Start services in the study area will be assessed. The potential effects of the additional eligible children resulting from the proposed project will be assessed by comparing the estimated net demand over capacity to the net demand over capacity estimated in the No Action condition.

LIBRARIES

The analysis of libraries will include the following tasks:

- Describe and map the local libraries and catchment areas in the vicinity of the project area.
- Identify the existing user population, branch holdings and circulation. Based on this information, estimate the holdings per resident.
- Determine conditions in the future without the proposed project based on planned developments and known changes to the library system.
- Based on the population to be added by the proposed project, estimate the holdings per resident and compare conditions with the proposed project to conditions in the future without the proposed project.

If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 5: OPEN SPACE

According to the *CEQR Technical Manual*, an open space assessment may be necessary if a project potentially has a direct effect on an area open space or an indirect effect through increased population size. The EIS will address the potential for the proposed project to result in direct effects on project area open spaces, such as through the introduction of new shadow on open spaces. The proposed project is not expected to exceed the CEQR threshold of 500 new workers. However, the proposed project would exceed the 200-resident *CEQR Technical*

Manual threshold requiring an open space analysis. Therefore, this chapter will include an assessment of the potential impacts of the proposed project on open space.

The open space assessment will begin with a preliminary assessment to determine the need for further analysis. If warranted, a detailed assessment will be prepared. The methodology set forth in the *CEQR Technical Manual* consists of establishing a study area for analysis, calculating the total population in the study area, and creating an inventory of publicly accessible open spaces within a ½-mile of the proposed project area. The inventory may include examining these spaces for their facilities (active vs. passive use), condition, identifying open space user groups, and use (crowded or not). The analysis will assess the adequacy of existing publicly accessible open space facilities, changes in future levels of adequacy based on planned development projects in the study area, and the project's effects on open space supply and demand, based on quantified ratios and qualitative factors. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 6: SHADOWS

The *CEQR Technical Manual* requires a shadows assessment for proposed projects that would result in new structures greater than 50 feet in height and/or adjacent to a sunlight-sensitive resource. A shadows assessment examines whether proposed structures could cast shadows on sunlight-sensitive resources, which include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features, and assesses the potential effects of any new shadows.

The proposed project would result in structures taller than 50 feet, in close proximity to several existing sunlight-sensitive resources including Bronx Park, Bronx River Park, and West Farms Park. Thus, an analysis of shadows is appropriate.

The shadows analysis will focus on the relation between the incremental shadows created by the proposed project's buildings on any sun-sensitive landscape or activities in the open spaces on and near the project area. These analyses will include the following tasks:

- Identify sun-sensitive landscapes and historic resources within the path of the proposed project's shadows. In coordination with a survey for the open space and historic analyses, map and describe any sun-sensitive areas. For open spaces, map active and passive recreation areas and features of the open spaces such as benches or play equipment.
- Prepare shadow diagrams for time periods when shadows from the new buildings could fall onto existing open spaces as well as open space created as a result of the project. The analysis will also take into account any historic resources identified in the area that may have significant sunlight dependent features such as stained glass windows. These diagrams will be prepared for up to four representative analysis days (March 21/September 21, May 6, June 21, December 21) if shadows from the proposed building would fall onto any of the open spaces or sun-sensitive historic resources on that day.
- Map the shadows from the existing buildings, No Build buildings, and the proposed project. Describe the effect of the incremental shadows from the proposed project on publicly accessible open spaces, project open spaces, and natural features, as well as any historic resources with significant sunlight dependent features based on the shadow diagrams for each of the analysis dates.

- Create a duration table that will show the entering and exiting times when an incremental shadow will fall on each of the affected sun-sensitive features and characterize whether the extent and duration of shadows will result in significant adverse impacts.

If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 7: HISTORIC AND CULTURAL RESOURCES

The *CEQR Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. Historic resources include designated New York City Landmarks (NYCLs) and Historic Districts (NYCHDs); properties calendared for consideration as NYCLs by the Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation; properties listed on the State and National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing, or properties contained within a S/NR listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; and National Historic Landmarks (NHLs).

The project area is located in proximity to a number of historic resources, including the Old West Farms Soldiers Cemetery. Therefore, pursuant to CEQR, Section 14.09 of the New York State Historic Preservation Act (SHPA), Section 106 of the National Historic Preservation Act (NHPA), and 36 CFR Part 800 (Protection of Historic Resources), the LPC and New York State Office of Parks, Recreation and Historic Preservation (OPRHP) will be contacted regarding the project area's archaeological sensitivity. An assessment of architectural resources will be provided to identify any architectural resources that could be affected by the proposed project. The analysis will include the following tasks:

- Consult with LPC and OPRHP regarding the site's potential archaeological sensitivity. A Phase 1A Archaeological Study will be prepared if requested by LPC and/or OPRHP and summarized in the EIS.
- Within a 400-foot study area surrounding the project area, identify if there are any known architectural resources. Conduct a field survey to identify if there are any potential architectural resources that could be impacted by the proposed project. Potential architectural resources comprise properties that appear to meet the eligibility criteria for NYCL designation and/or S/NR listing. Seek determinations of eligibility from LPC and OPRHP for any potential architectural resources. Map and briefly describe any identified architectural resources.
- Evaluate the project's potential to result in direct, physical effects on any identified architectural and archaeological resources pursuant to CEQR, Section 14.09, and Section 106 of the NHPA. Assess the Proposed Project's potential to result in any visual and contextual impacts on architectural resources. Potential effects will be evaluated through a comparison of the future no-action condition and the future with-action condition. The analysis will include a description of the consultation undertaken with OPRHP and LPC.
- Identify any measures that would be necessary to mitigate and/or reduce any potential significant adverse effects on historic or cultural resources, in consultation with LPC and OPRHP.

If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 8: URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, if a project requires actions that would result in physical changes to a project site beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources should be prepared.

The proposed project would require a modification of the large scale plan; therefore, a preliminary assessment of urban design and visual resources will be prepared as part of the EIS. The preliminary assessment will determine whether the proposed project, in comparison to the No Action condition, would create a change to the pedestrian experience that is significant enough to require greater explanation and further study. The study area for the preliminary assessment of urban design and visual resources will be consistent with that of the study area for the analysis of land use, zoning and public policy. The preliminary assessment will include a concise narrative of the existing area, the No Action condition, and the future with the proposed project. The analysis will draw on information from field visits to the study area and will present photographs, zoning and floor area calculations, building heights, project drawings and site plans, and view corridor assessments.

A detailed analysis will be prepared if warranted based on the preliminary assessment. As described in the *CEQR Technical Manual*, examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline. The detailed analysis would describe the urban design and visual resources of the project area and the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the proposed project, in comparison to the No Action condition, focusing on the changes that could potentially adversely affect a pedestrian's experience of the area. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 9: NATURAL RESOURCES

While the project site is developed, it does contain landscaped areas with trees and other vegetation and is adjacent to parkland and the Bronx River. Therefore, this analysis will characterize the existing natural resources within and in the vicinity of the project area, and assess the potential for impacts to these resources in the future with and without the proposed project. The assessment will evaluate the potential for construction (e.g., building demolition and clearing and grading activities) and operation of the project (e.g., landscaping, possible tree replacement, and stormwater management measures) to affect natural resources consistent with the CEQR Technical Manual and with federal acts and executive orders, such as:

- Review the proposed project for compliance with the Endangered Species Act of 1973, as amended, and HUD's implementing regulations at 50 CFR Part 402. The USFWS Information, Planning, and Conservation System (IpaC, <http://ecos.fws.gov/ipac/>) will be consulted for information on federally-listed threatened or endangered species or critical habitat, and the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program (NYNHP) on state listed threatened or endangered species and species of special concern, within the vicinity of the project area. The project will include further consultation and coordination with USFWS as required.
- Review the project area for the presence of wetlands identified on the National Wetlands Inventory (NWI) and on the NYSDEC freshwater wetlands maps and in consultation with

the USFWS (i.e., riverine wetlands of the Bronx River). Executive Order 11990 (Protection of Wetlands) requires federal activities to avoid adverse impacts to wetlands where practicable. The potential for the project to result in any short- or long-term adverse impacts associated with both on- and off-site wetlands will be assessed.

- If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

Other HUD environmental review requirements related to natural resources, such as the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.), as amended, particularly Sections 7(b) and (c), and the Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.) and HUD's implementing regulations at 7 CFR Part 658, and Executive Order 11988 (Floodplain Management) would be screened out from analysis in the EIS.

TASK 10: HAZARDOUS MATERIALS

This section will address the potential presence of hazardous materials, petroleum products and/or other environmental conditions at the project area. The EIS will summarize a Phase I Environmental Site Assessment (ESA) for the site (consistent with ASTM-E1527-13), which will include a vapor encroachment screen conducted in accordance with ASTM 2600-10. The EIS will include recommendations for subsurface testing and/or other activities that would be required either prior to or during construction and/or operation of the project, including a discussion of any necessary remedial or related measures. The EIS will include a general discussion of the health and safety measures that would be implemented during project construction to protect site workers and the surrounding community. The appropriate remediation measures specific to the proposed end use of the site will be provided in the EIS.

TASK 11: WATER AND SEWER INFRASTRUCTURE

The *CEQR Technical Manual* outlines thresholds for analysis of a project's water demand and its generation of wastewater and stormwater. A preliminary water supply and projected water demand analysis is warranted if a project would result in an exceptionally large demand for water (greater than one million gallons), or would be located in an area that experiences low water pressure (e.g., Rockaway Peninsula or Coney Island). A preliminary wastewater and stormwater infrastructure analysis is warranted if a proposed project exceeds the thresholds outlined in Section 220, "Wastewater and Stormwater Conveyance and Treatment." These thresholds include location of the proposed project, cumulative rezonings and/or development in the project area, proposed increase in density and proposed increase in impervious surfaces. For the proposed project, an analysis of water supply is not warranted since the project would not result in a demand of more than 1 million gpd nor is it located in an area that experiences low water pressure.

An analysis of the project's effects on wastewater and stormwater infrastructure is warranted, however, since the project would exceed the *CEQR Technical Manual* threshold of 400 residential units in the Bronx. Therefore, this chapter will include an analysis of the proposed project's potential effects on wastewater and stormwater infrastructure. This preliminary analysis would include, among other elements, the following:

- A description of the existing wastewater and stormwater conveyance systems and the affected Hunts Point Wastewater Treatment Plant (WWTP) for the latest 12-month period;
- A determination of the existing sanitary flows, the No Action sanitary flows, and sanitary flows as a result of the proposed project;

- An analysis of the effects of the incremental flows from the proposed project on the capacity of the Hunts Point WWTP;
- A description of existing surface types, No Action surface types, and surface types as a result of the proposed project;
- A determination of volume and peak discharge rates of stormwater expected from the project area in the existing condition, the No Action condition, and the future with the proposed project;
- Completion of the DEP flow calculations matrix; and
- An assessment of existing and future stormwater generation from the proposed project and its potential for impacts. The assessment will include a stormwater best management practice (BMP) concept plan, which will illustrate potential opportunities to incorporate onsite stormwater source controls and will also include a plan identifying potential locations of onsite stormwater source controls.

Based on the results of the preliminary analysis, a detailed assessment may be conducted if warranted. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 12: TRANSPORTATION

The *CEQR Technical Manual* states that a quantified transportation analysis may be warranted if a proposed action results in more than 50 vehicle-trips and/or 200 transit or pedestrian trips during a given peak hour. Quantified analyses of traffic, transit, parking, and pedestrian conditions will be conducted to assess the potential impacts that project-generated trips may have on key traffic intersections, pedestrian locations, nearby transit services, and the area's parking resources. In addition, an assessment of vehicular and pedestrian safety based on recent crash data would accompany the traffic and pedestrian analyses. The transportation chapter will include the tasks outlined below.

TRAVEL DEMAND PROJECTIONS AND SCREENING ASSESSMENTS

Travel demand projections will be prepared for development components associated with the proposed project, as described below. The estimates will be used to prepare screening assessments and identify transportation elements that would be subject to further detailed analyses.

- Prepare travel demand estimates and transportation analysis screening. Detailed trip estimates will be prepared using standard sources, including the *CEQR Technical Manual*, U.S. census data, approved studies, and other references. The trip estimates (Level-1 screening assessment) will be summarized by peak hour (weekday AM, midday, and PM peak hours), mode of travel, and person vs. vehicle trips. The trip estimates will also identify the number of peak hour person trips made by transit and the number of pedestrian trips traversing the area's sidewalks, corner reservoirs, and crosswalks. The results of these estimates will be summarized in a Travel Demand Factors (TDF) memorandum for review and concurrence by the lead agency and involved expert agencies, such as the DOT and/or New York City Transit (NYCT).
- In addition to trip estimates, detailed vehicle, transit, and pedestrian trip assignments (Level-2 screening assessment) will be prepared to determine if quantified operational analyses are warranted for traffic, transit, and pedestrians. As part of the vehicle trip assignment effort, an

evaluation of the area's parking supply and utilization, as described below, will be conducted.

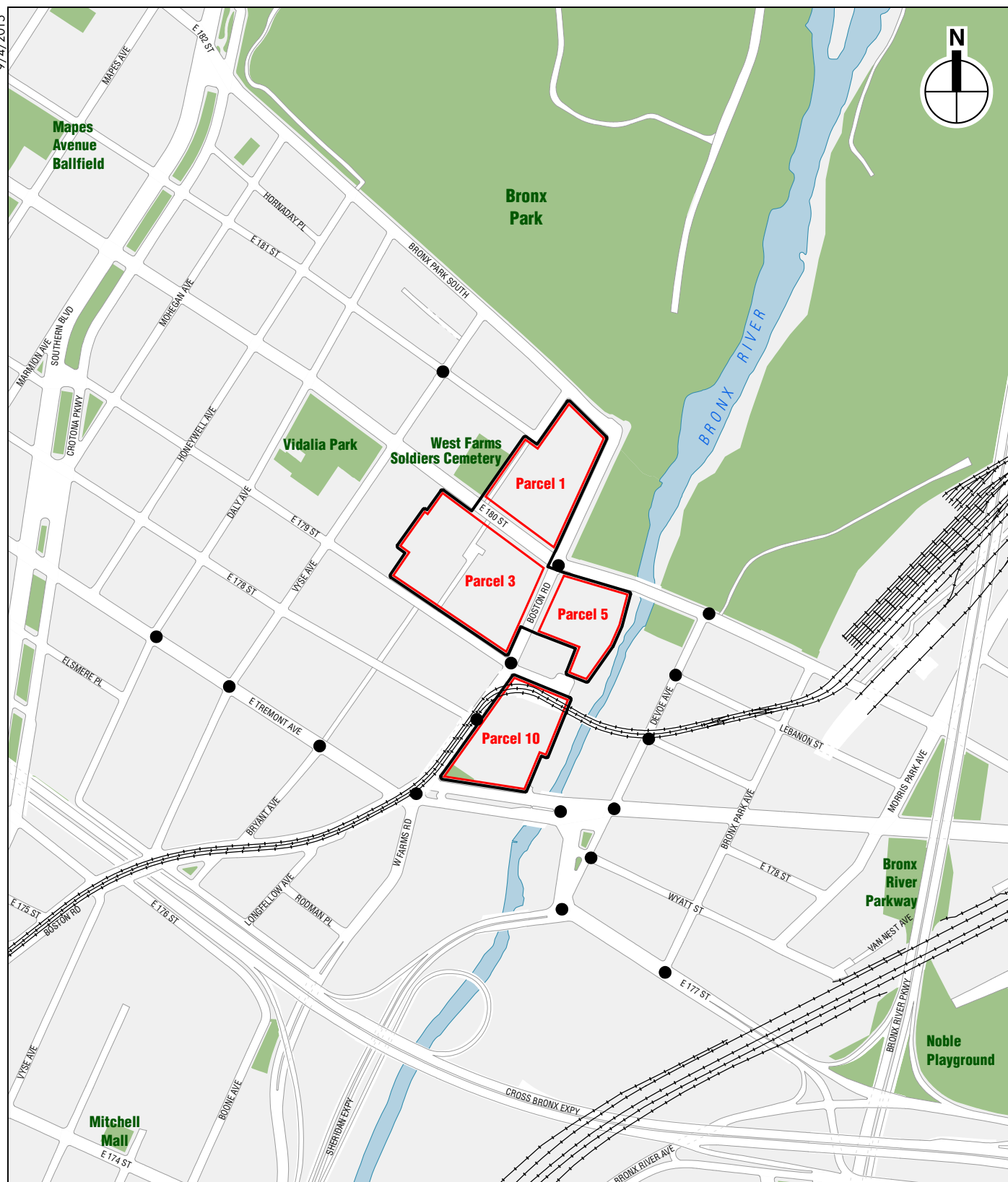
TRAFFIC

As discussed above, the proposed project is expected to yield traffic increments that would require a detailed analysis of area intersections. This analysis will be prepared for the weekday AM, midday, and PM peak hours to identify potential significant adverse traffic impacts. Where necessary, feasible traffic mitigation measures will be explored for DOT approval and implementation.

- Define traffic study area. The traffic study area will include the intersections surrounding the project area and those situated along the area's major travel corridors. Based on the preliminary travel demand assessment and in consultation with DOT, sixteen (16) intersections have been selected for detailed analysis (see **Figure 6**).
- Traffic data collection. Traffic volumes and relevant data at the study area intersections will be collected following CEQR guidelines via a combination of manual and machine counts. Manual turning movement and vehicle classification counts will be conducted for the weekday AM, midday, and PM analysis peak periods. These manual counts will be supplemented with continuous (nine-day) automatic traffic recorder (ATR) counts at key locations to identify temporal and daily traffic variations. Information pertaining to street widths, traffic flow directions, lane markings, parking regulations, and bus stop locations at study area intersections will be inventoried. Traffic control devices (including signal timings) in the study area will be recorded and verified with official signal timing data from DOT.
- Conduct existing conditions analysis. Balanced peak hour traffic volumes will be prepared for the capacity analysis of study area intersections. This analysis will be conducted using the 2000 *Highway Capacity Manual* (HCM) methodology with the latest approved Highway Capacity Software (HCS). The existing volume-to-capacity (v/c) ratios, delays, and levels of service (LOS) for the peak hours will be determined.
- Develop the future No Action condition. Future No Action traffic volumes will be estimated by adding a background growth, in accordance with CEQR guidelines, to existing traffic volumes, and incorporating incremental changes in traffic resulting from other projects in the area. Physical and operational changes that are expected to be implemented independent of the proposed project, if any, will also be incorporated into the future traffic analysis network. The No Action v/c ratios, delays, and LOS at the study area intersections will be determined.
- Perform traffic impact assessment for the proposed project. Incremental project-generated vehicle trips will be overlaid onto the future No Action traffic network. The potential impact on v/c ratios, delays, and LOS will then be evaluated in accordance with *CEQR Technical Manual* criteria. Where impacts are identified, feasible improvement measures, such as signal retiming, phasing modifications, roadway restriping, addition of turn lanes, revision of curbside regulations, turn prohibitions, and street direction changes, etc. will be explored for DOT approval and implementation.

TRANSIT

Available public transportation near the project area includes subway service at the West Farms Square/East Tremont Avenue Station (No. 2 and 5 trains) and East 180th Street Station (No. 2



 *Project Site*
 *Traffic Analysis Location*

A horizontal number line with a box at 0 and a box at 1,000 FEET.

and 5 trains), and local bus service along East 180th Street (Bx9 and Bx36), East Tremont Avenue (Bx40 and Bx42), Boston Road (Bx21), and Southern Boulevard (Bx19). Based on preliminary travel demand estimates, detailed analyses of subway and bus line-haul conditions would not be warranted.

Subway Station Analysis

An analysis of the key circulation and control area elements will be prepared for the West Farms Square/East Tremont Avenue Station. This effort would be conducted using similar data collection and analysis procedures described above for the traffic impact analysis. However, since subway station capacities are most constrained during peak commuter peak periods, this analysis would be prepared only for the weekday AM and PM peak periods. Where impacts are identified, feasible improvement measures will be explored for NYCT approval and implementation.

PEDESTRIANS

Project-generated pedestrian trips are expected to concentrate at the project area and along primary routes to area transit facilities. A quantified pedestrian analysis will be conducted for a study area of pedestrian elements determined by the Level 2 screening assessment. It is anticipated that an equivalent of up to four intersections (i.e., up to 16 corner reservoirs and 16 crosswalks) and their adjoining sidewalks (i.e., up to 32 sidewalks) for the weekday AM, midday, and PM peak periods will be analyzed for the existing, No Action, and With Action conditions per CEQR guidelines, similar to the procedures described above for the traffic analyses. Where impacts are identified, feasible improvement measures will be explored for DOT approval and implementation.

VEHICULAR AND PEDESTRIAN SAFETY

This chapter will include an assessment of vehicular and pedestrian safety issues. Crash data for the study area intersections and other nearby sensitive locations from the most recent three-year period will be obtained from the New York State Department of Transportation (NYSDOT). These data will be analyzed to determine if any of the studied locations may be classified (using CEQR criteria) as high vehicle crash or high pedestrian/bike accident locations and whether trips and changes resulting from the proposed project would adversely affect vehicular and pedestrian safety at these locations. If any high accident locations are identified, feasible improvement measures will be explored to alleviate potential safety issues.

PARKING

The proposed project would reduce on-site parking spaces overall. A detailed assessment will be conducted to determine whether the parking demand from the displaced parkers and the proposed project's parking demand could be adequately accommodated by the study area's parking resources. A parking survey will be performed to collect information on on-street and off-street parking supply and utilization within 1/4-mile of the project area. The on-street and off-street parking resources will be evaluated, together with the on-site supply and in consideration of the displaced parkers' and the proposed project's parking demand, to determine if there is a potential for a parking shortfall. The information will also inform on how project-generated auto trips could be assigned locally through the area intersections.

TASK 13: AIR QUALITY

The number of project-generated trips will likely exceed the *CEQR Technical Manual* carbon monoxide (CO) analysis screening threshold of 170 vehicles in the peak hour at a number of locations throughout the study area. In addition, the projected number of heavy-duty trucks or equivalent vehicles will likely exceed the applicable fine particulate matter (PM_{2.5}) screening thresholds in the *CEQR Technical Manual*. Therefore, a microscale analysis of CO and PM mobile source emissions at affected intersections will be provided.

The stationary source air quality impact analysis will determine the effects of emissions from the proposed buildings' fossil-fuel fired heating and hot water systems to significantly impact existing land uses, or the proposed buildings' themselves (i.e., project-on-project impacts). The proposed project is also located within 400 feet of areas that are currently zoned for manufacturing uses. Therefore, a screening analysis will be performed to examine the potential for impacts from those industrial uses on the proposed project. In addition, large and major sources of emissions within 1,000 feet will be examined for their potential impact on the proposed project.

MOBILE SOURCE ANALYSIS

The analysis of potential impacts from mobile source CO and PM_{2.5} emissions would consider locations where the incremental increase of project-generated vehicle traffic over conditions without the proposed project would be greatest. The mobile source analyses will consist of the following tasks:

- Collection and summary of existing ambient air quality data for the study area. Specifically, ambient air quality monitoring data published by the New York State Department of Environmental Conservation (NYSDEC) will be compiled for the analysis of existing and future conditions. Appropriate background levels will be selected.
- Selection of analysis and receptor locations. Critical intersections in the study area will be selected based on the traffic analysis. CO and PM_{2.5} levels at multiple receptor locations sites will be analyzed in accordance with *CEQR Technical Manual* guidelines. At each intersection, multiple receptor sites will be analyzed in accordance with CEQR guidelines.
- Selection of the dispersion model. The U.S. Environmental Protection Agency (EPA)'s first-level CAL3QHC model will be used for the CO analysis and the refined CAL3QHCR intersection model will be used for the PM_{2.5} analysis.
- Selection of emission calculation methodology and "worst-case" meteorological conditions. Vehicular emission factors for the dispersion modeling will be computed using EPA-developed MOVES2014 model and applicable assumptions based on guidance by EPA, NYSDEC and DEP. Re-suspended road dust emission factors will be computed using the EPA procedure defined in AP-42 and the latest *CEQR Technical Manual* guidance. For the PM_{2.5} analysis, five recent years of meteorological data from LaGuardia Airport and concurrent upper air data from Brookhaven, New York will be used for the simulation program.
- At each mobile source microscale receptor site, calculate for each applicable peak period the maximum 1- and 8-hour average CO concentrations for: (i) Existing conditions, (ii) No Action conditions; and (iii) the With Action conditions, and calculate maximum 24-hour and annual average PM_{2.5} concentrations for the No Action and With Action conditions.

- Comparison of modeled CO and PM_{2.5} levels with guidance criteria. Future pollutant levels with and without the proposed project will be compared with the National Ambient Air Quality Standards (NAAQS) to determine compliance with standards, and the City's CO *de minimis* criteria, and the City's PM_{2.5} *de minimis* criteria, to determine the potential mobile source impacts of the proposed project.
- Mitigation. For locations where significant adverse impacts are predicted, identify and analyze appropriate mitigation measures.

STATIONARY SOURCE ANALYSIS

Heat and Hot Water System Analysis

A screening analysis will be performed to determine whether emissions from any on-site fuel-fired heat and hot water systems (for example, boilers or hot water heaters) are significant. The screening analysis will use the procedures outlined in the *CEQR Technical Manual* that consider the distance of the heat and hot water system exhaust to the nearest building of equal or greater height, the proposed building size, the height of the exhaust and the type of fuel used. A screening analysis will also be performed to determine whether there are any potential significant adverse impacts with respect to the 1-hour nitrogen dioxide (NO₂) NAAQS, as well as the CEQR *de minimis* criteria for PM_{2.5}, and, if fuel oil is proposed to be used, the 1-hour sulfur dioxide (SO₂) ambient air quality standard.

If the project's heat and hot water system fails the screening analysis, a detailed stationary source analysis will be performed using EPA's AERMOD dispersion model, using available design information and five years of meteorological data. Five years of recent meteorological data, consisting of surface data from a LaGuardia, and concurrent upper air data from Brookhaven, New York, will be used for the simulation modeling. Concentrations of the air contaminants of concern (i.e., PM, NO₂ and SO₂) will be determined at ground level receptors as well as elevated receptors representing floors on the proposed building. Predicted values will be compared with NAAQS, and if required, the City's PM_{2.5} *de minimis* criteria.

Industrial Source Screening Assessment/Large and Major Sources

The proposed project would be located within 400 feet of areas zoned for manufacturing (M1-1). Therefore, a field survey and a review of land uses in the study area will be conducted to identify the potential sources of industrial emissions. The NYCDEP's Bureau of Environmental Compliance (BEC) files will be examined to determine if there are permits to construct or certificates to operate for any industrial facilities that are identified. A review of federal and state air permits and registrations will also be conducted. An industrial source analysis will be performed using the screening procedures detailed in the *CEQR Technical Manual*. Predicted worst-case impacts on the project will be compared with the short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in NYSDEC's DAR-1 AGC/SGC Tables guidance document to determine the potential for a significant adverse impact. If an exceedance of standards is predicted, a detailed stationary source analysis will be performed using EPA's AERMOD dispersion model and five years of meteorological data.

If existing major sources (those located at Title V facilities that require Prevention of Significant Deterioration permits) or large sources (those located at facilities that require a State facility permit) are identified within 1,000 feet of the proposed project, a stationary source assessment would be performed to determine whether the emissions from such existing sources would have the potential for a significant adverse impact on the air quality on the proposed project.

An evaluation will also be performed to determine whether existing or proposed sources of emissions in the vicinity of the project area require an analysis to determine the potential for air quality impacts on the proposed project. Large and major emission sources (as defined in the *CEQR Technical Manual*) will be evaluated within 1,000 feet of the project area. If emission sources are identified, a refined analysis will be performed using the EPA AERMOD dispersion model.

TASK 14: GREENHOUSE GAS EMISSIONS

According to the *CEQR Technical Manual*, a greenhouse gas (GHG) consistency assessment is appropriate for projects being reviewed in an EIS that would result in development of 350,000 square feet or greater. Therefore, GHG emissions generated by the proposed project will be quantified and an assessment of consistency with the City's established GHG reduction goal will be prepared. Project-related GHG emissions will be estimated for the analysis year and reported as carbon dioxide equivalent (CO₂e) metric tons per year. GHG emissions other than carbon dioxide (CO₂) will be included if they would account for a substantial portion of overall emissions, adjusted to account for the global warming potential.

Relevant measures to reduce energy consumption and GHG emissions that could be incorporated into the proposed project will be discussed, and the potential for those measures to reduce GHG emissions from the proposed project will be assessed to the extent practicable. In addition, should HPD funding be sought for the proposed project, the design would be subject to the energy requirements of the Enterprise Green Communities Criteria.

Since the proposed site is within the flood hazard zone, the potential impacts of climate change on the proposed project and its infrastructure will be evaluated. The discussion will focus on sea level rise and changes in storm frequency projected to result from global climate change and the potential future impact of those changes on project uses.

The GHG chapter will include the following tasks:

- The potential effects of climate change on the proposed project will be evaluated based on the best available information. The evaluation will focus on potential future sea and storm levels and the effect on project infrastructure and uses. The discussion will focus on early integration of climate change considerations into the project design to allow for uncertainties regarding future environmental conditions resulting from climate change.
- Direct Operational Emissions—emissions from on-site fossil fuel use – for example for heat and hot water – will be quantified. Emissions will be based on available project specific information regarding the expected energy and fuel use or the carbon intensity factors specified in the *CEQR Technical Manual*.
- Indirect Operational Emissions—emissions from purchased electricity and/or steam generated off-site and consumed on-site during the project's operation will be estimated.
- Indirect Mobile Source Emissions—emissions from vehicle trips to or from the proposed project will be quantified using trip distances and emission factors provided in the *CEQR Technical Manual*.
- Emissions from construction and emissions associated with the extraction or production of construction materials will be qualitatively discussed. Opportunities for reducing GHG emissions associated with construction will be considered.
- Features of the proposed project that reduce energy use and GHG emissions will be discussed and quantified to the extent that information is available.

- Consistency with the City's GHG reduction goal will be assessed. While the City's overall goal is to reduce GHG emissions by 30 percent below 2005 level by 2030, individual project consistency is evaluated based on proximity to transit, incentives for sustainable transportation, building energy efficiency, on-site production of renewable or clean energy, efforts to reduce carbon fuel intensity or improve vehicle efficiency for project-generated vehicle trips, and other efforts to reduce the project's carbon footprint.

TASK 15: NOISE

The *CEQR Technical Manual* requires that the noise chapter address whether the proposed project would result in a significant increase in noise levels (particularly at sensitive land uses such as residences) and what level of building attenuation is necessary to provide acceptable interior noise levels.

The proposed project will generate vehicular trips but given the background conditions and the anticipated project-generated traffic, it is not expected that project-generated traffic would be likely to result in significant noise impacts. It is assumed that outdoor mechanical equipment would be designed to meet applicable regulations and that no detailed analysis of potential noise impacts due to outdoor mechanical equipment will be performed. Consequently, the noise analysis in the EIS will examine the level of building attenuation necessary to meet CEQR interior noise level requirements. Additionally, HUD interior noise guidelines will be examined for the proposed buildings. The building attenuation study will be an assessment of noise levels in the surrounding area associated primarily with traffic and rail noise and nearby uses and their potential effect on interior noise levels.

Specifically, the chapter will include the following tasks:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the existing noise environment will be selected. The L_{eq} and L_{10} levels will be the primary noise descriptors used for the EIS analysis. Other noise descriptors including the L_{dn} , L_1 , L_{10} , L_{50} , L_{90} , L_{min} , and L_{max} and 1/3 octave band frequency levels will be examined when appropriate.
- Based on the traffic studies, perform a screening analysis to determine whether there are any locations where there is the potential for the proposed project to result in significant noise impacts (i.e., doubling of Noise PCEs) due to project generated traffic. If the results of the screening analysis indicate that a doubling of Noise PCEs would occur, a mobile source noise analysis would be performed using either proportional modeling or the Traffic Noise Model (TNM), where appropriate.
- Select receptor locations for building attenuation analysis purposes. Seven (7) receptor locations will be selected. Receptor locations will include locations adjacent to the project area (see **Figure 7**).
- Perform noise level measurements at each receptor location during typical weekday AM, midday, and PM peak periods as well as a late-night period. L_{dn} , L_1 , L_{10} , L_{50} , L_{90} , L_{min} , and L_{max} values will be recorded on both the A-weighted and 1/3-octave band scales.
- Data analysis and reduction. The results of the noise measurement program will be analyzed and tabulated.
- Determine the level of attenuation necessary to satisfy CEQR and HUD criteria. The level of building attenuation necessary to satisfy these requirements is a function of exterior noise levels and will be determined. Projected future noise levels will be compared to appropriate standards and guideline levels. As necessary, recommendations regarding general noise



attenuation measures needed for project buildings to achieve compliance with standards and guideline levels will be made. Due to the relatively high ambient noise levels in the area, any new development would be expected to require acoustically rated windows together with the provision for some kind of alternate ventilation (which does not degrade the acoustical performance of the façade) to achieve acceptable interior noise levels.

TASK 16: PUBLIC HEALTH

According to the *CEQR Technical Manual*, a public health analysis is not warranted if a project does not result in a significant unmitigated adverse impact in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If an unmitigated significant adverse impact is identified in the relevant technical areas of the EIS, a public health analysis will be performed.

TASK 17: NEIGHBORHOOD CHARACTER

Neighborhood character is determined by a number of factors, such as land use, urban design, visual resources, historic resources, socioeconomic conditions, traffic, and noise. Methodologies outlined in the *CEQR Technical Manual* will be used to provide an assessment of neighborhood character. This chapter will include the following tasks:

- Based on other technical analyses, the chapter will project a description of the predominant factors that contribute to defining the character of the neighborhood surrounding the project area.
- Based on planned development projects, public policy initiatives, and planned public improvements, the chapter will provide a summary of changes that can be expected in the character of the area in the future without the proposed project.
- The chapter will provide an assessment of the proposed project's effect on neighborhood character using the other pertinent analyses (such as urban design and visual resources, historic resources, socioeconomic conditions, traffic, and noise).

TASK 18: CONSTRUCTION

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity could affect traffic conditions, community noise patterns, air quality conditions, and mitigation of hazardous materials.

The proposed project is anticipated to be built out over a 13-year construction period. However, the construction duration for each of the proposed buildings is anticipated to be approximately 24 months. The proposed project would result in the construction of a number of new buildings with overlapping construction schedules over a 13-year construction period. In addition, nearby sensitive receptor locations (i.e., residential buildings, houses of worship, academic buildings etc.) would not be subject to the full effects of the construction for the entire construction period because construction activities would move throughout the project parcels over time. During construction of the proposed project, Phipps Houses would relocate current tenants of buildings to be demolished to other locations within the Lambert Houses development, demolish the unoccupied buildings (approximately 3-month duration per building), and then construct the proposed new buildings (approximately 21-month duration per building). Tenants would then be relocated to the newly constructed buildings.

This chapter will describe the construction schedule and logistics, discuss anticipated on-site activities, and provide estimates of construction workers and truck deliveries for the proposed project. The chapter will describe the applicable laws, regulations, and codes that govern construction activities, such as New York City Department of Transportation-required Maintenance and Protection of Traffic (MPT) Plans for any curb-lane and/or sidewalk closures, the New York City Air Pollution Control Code regulating construction-related dust emissions, and the New York City Noise Control Code regulating construction noise. Accordingly, the construction assessment for the proposed project will generally be qualitative, focusing on areas where construction activities may pose specific environmental problems.

The construction chapter will include analyses of the following technical areas.

- **Transportation Systems.** This assessment will consider losses in lanes, sidewalks, off-street parking within the project area, and effects on other transportation services, if any, during the construction of the proposed project, and identify the increase in vehicle trips from construction workers and equipment. Issues concerning construction worker parking and truck delivery staging will also be addressed. Level-1 (Trip Generation) screening assessments will be conducted to determine if the analysis thresholds will be exceeded. If the *CEQR Technical Manual* Level 1 screening threshold of 50 or more peak hour vehicle trips is exceeded, a Level 2 (trip assignment) screening analysis will be conducted.
- **Air Quality.** The construction air quality impact section will contain a discussion of emissions from construction equipment, worker and delivery vehicles, as well as fugitive dust emissions. The analysis will identify any project-specific control measures (i.e., clean fuel; best available tailpipe reduction technologies; and fugitive dust control measures, etc.) required to reduce the effects of construction and to ensure that significant impacts on air quality do not occur.
- **Noise.** The construction noise impact section will contain a discussion of noise from the proposed project's construction activity. Appropriate recommendations will be made to comply with DEP Rules for Citywide Construction Noise Mitigation and the New York City Noise Control Code.
- **Hazardous Materials.** In coordination with the hazardous materials summary, the analysis will determine whether the construction of the project has the potential to expose construction workers to contaminants.
- **Open Space.** The construction open space impact section will contain a discussion of potential impacts on public open spaces, including the Bronx River Greenway, during construction.
- **Other Technical Areas.** As appropriate, other areas of environmental assessment will be discussed for potential construction-related impacts.

TASK 19: MITIGATION MEASURES

Where significant impacts have been identified in the analyses discussed above, measures will be described to mitigate those impacts. If the EIS identifies any significant impacts for which no mitigation can be implemented, they will be presented as unavoidable adverse impacts.

TASK 20: ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the proposed project. The specific alternatives to be analyzed are typically finalized

as project impacts become clarified during the preparation of the EIS. A No Action Alternative, as required under CEQR, will be considered, which in this case assumes that the existing uses would continue. In addition, the alternatives chapter will consider an all-residential scenario with no school. If significant adverse impacts are identified in the EIS, a No Unmitigated Adverse Impacts Alternative will be included to describe the modifications to the project needed to avoid any such impacts. The analyses will be primarily qualitative. However, where a significant impact of the proposed project has been identified, it is usually appropriate to quantify the impact of the alternative so that a comparison may be meaningful. Quantification is accomplished by applying the same methodology used for assessment of the proposed project.

TASK 21: CONCEPTUAL ANALYSIS

The proposed zoning text amendment could result in the waiver of parking requirements for new affordable housing developments within both portions of the Bronx Park South LSRD without the need to apply for a new special permit or authorization. The waiver would require discretionary approval of modification to the LSRD. Therefore, a conceptual analysis will be provided to generically assess the potential environmental effects that could result from the elimination of parking requirements for new affordable housing developments within the LSRD.

TASK 22: EIS SUMMARY CHAPTERS

EXECUTIVE SUMMARY

Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will use relevant material from the body of the EIS to describe the proposed project, environmental impacts, measures to mitigate those impacts, and alternatives to the proposed project.

UNAVOIDABLE ADVERSE IMPACTS

Those impacts, if any, that could not be avoided and could not be practicably mitigated will be described in this chapter.

GROWTH-INDUCING ASPECTS OF THE PROPOSED PROJECT

This chapter will focus on whether the proposed project would have the potential to induce new development within the surrounding area.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed should the proposed project be built.

TASK 23: ENVIRONMENTAL JUSTICE

Executive Order 12898 requires federal agencies to consider whether actions they might fund or approve may have any disproportionately high and adverse environmental or human health effects on low-income or minority populations. Due to the proposed HUD approval subject to review under NEPA, the EIS will consider the project's potential for disproportionately high and adverse impacts on minority and low-income populations following the guidance and methodologies outlined in the Council on Environmental Quality's *Environmental Justice Guidance under the National Environmental Policy Act* (December 1997). *