# Draft Scope of Work for Preparation of an Environmental Impact Statement ECF East 96th Street

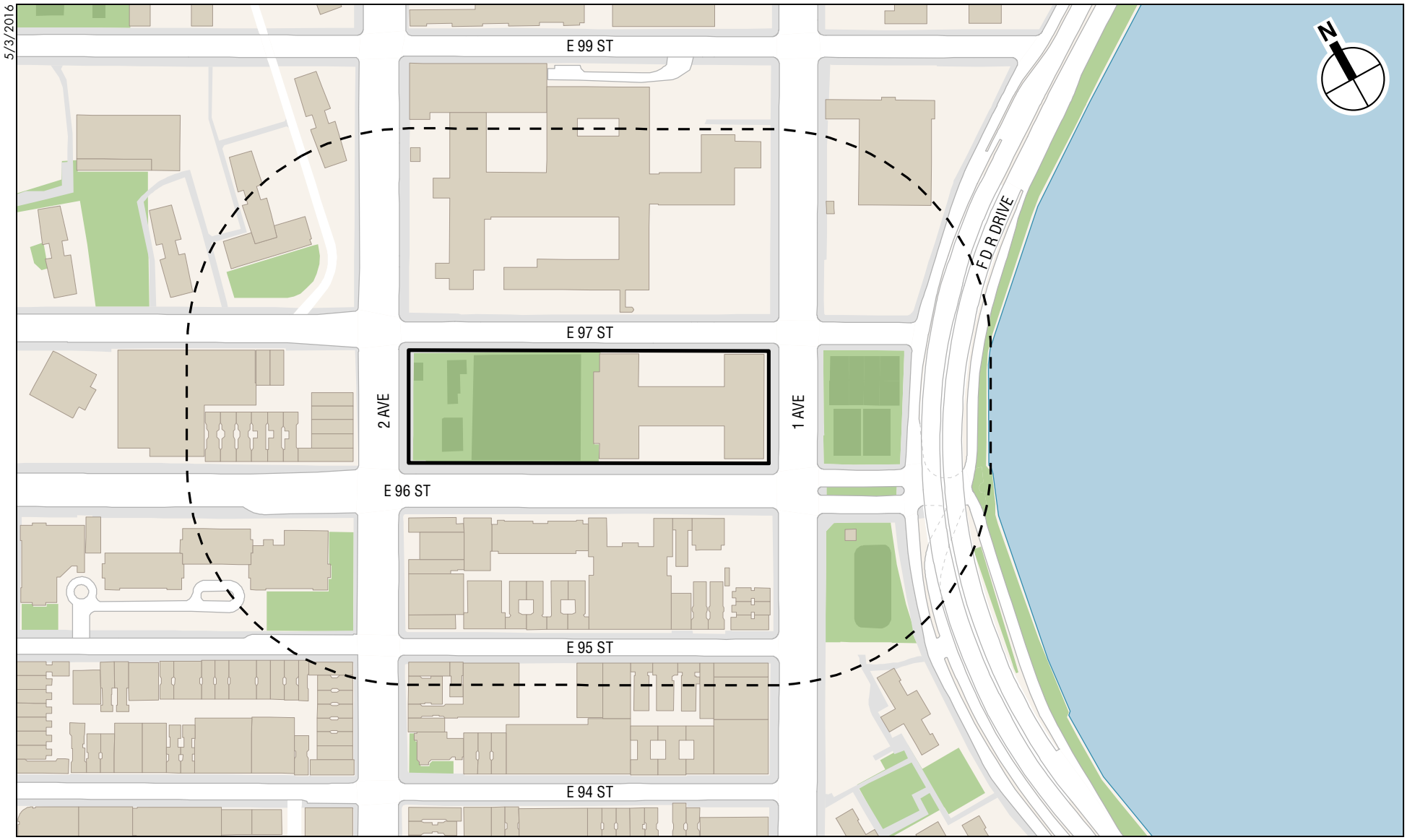
## A. INTRODUCTION

The co-applicants, the New York City Educational Construction Fund (ECF) and AvalonBay Communities, Inc. (AvalonBay), are seeking a rezoning and other actions to allow the construction of a mixed-use building, a replacement facility for an existing school, a new facility for the relocation of two existing neighborhood public high schools, and relocation of an existing jointly-operated playground on Block 1668, Lot 1, in the East Harlem neighborhood of Manhattan (see **Figures 1 and 2**). The proposed project involves the construction of a mixed use tower on Second Avenue containing a 135,000-gross square foot (sf) public technical school—a replacement facility for the existing School of Cooperative Technical Education on the project site—as well as approximately 25,000 gsf of retail space, and approximately 1,015,000 gsf of residential floor area (1,200 units[1]). Following the demolition of the existing School of Cooperative Technical Education, the co-applicants will construct a 135,000 gsf building on First Avenue that will house two public high schools. The jointly-operated playground currently on the western portion of the project site would be relocated to the center of the project block.

The project site is currently owned by the City of New York. The western portion of the project site is currently occupied by the Marx Brothers Playground, which is jointly operated by the Department of Education (DOE) and the New York City Department of Parks and Recreation (DPR). The portion of the playground area facing Second Avenue is currently in use by MTA as a staging area for Second Avenue Subway construction. The eastern portion of the project site is occupied by a 4-story, 103,498 gsf school building, currently in use by the School of Cooperative Technical Education.

The proposed project would require a zoning map amendment to change the portion 100' east of 2nd Avenue from R10A and R7-2 to a C2-8 District and the remainder of Block 1668 from R7-2 and R10A districts to a R10 district (see **Figure 3**), amendments to the Zoning Resolution to allow distribution of lot coverage and to establish a mandatory inclusionary housing designated area, a special permit to allow distribution of lot coverage and waiver of height and setback restrictions, a special permit to reduce parking requirements applicable to non-income restricted residences, certifications to modify restrictions on location of curb cuts, and a certification that a transit easement is not required.

[1] Depending on unit sizing, the project could contain between 1,100 and 1,200 dwelling units. For the purposes of a reasonable worst-case analysis, the EIS will assess potential project impacts based on 1,200 units.




**ECF EAST 96TH STREET**

Project Site Location
**Figure 1**

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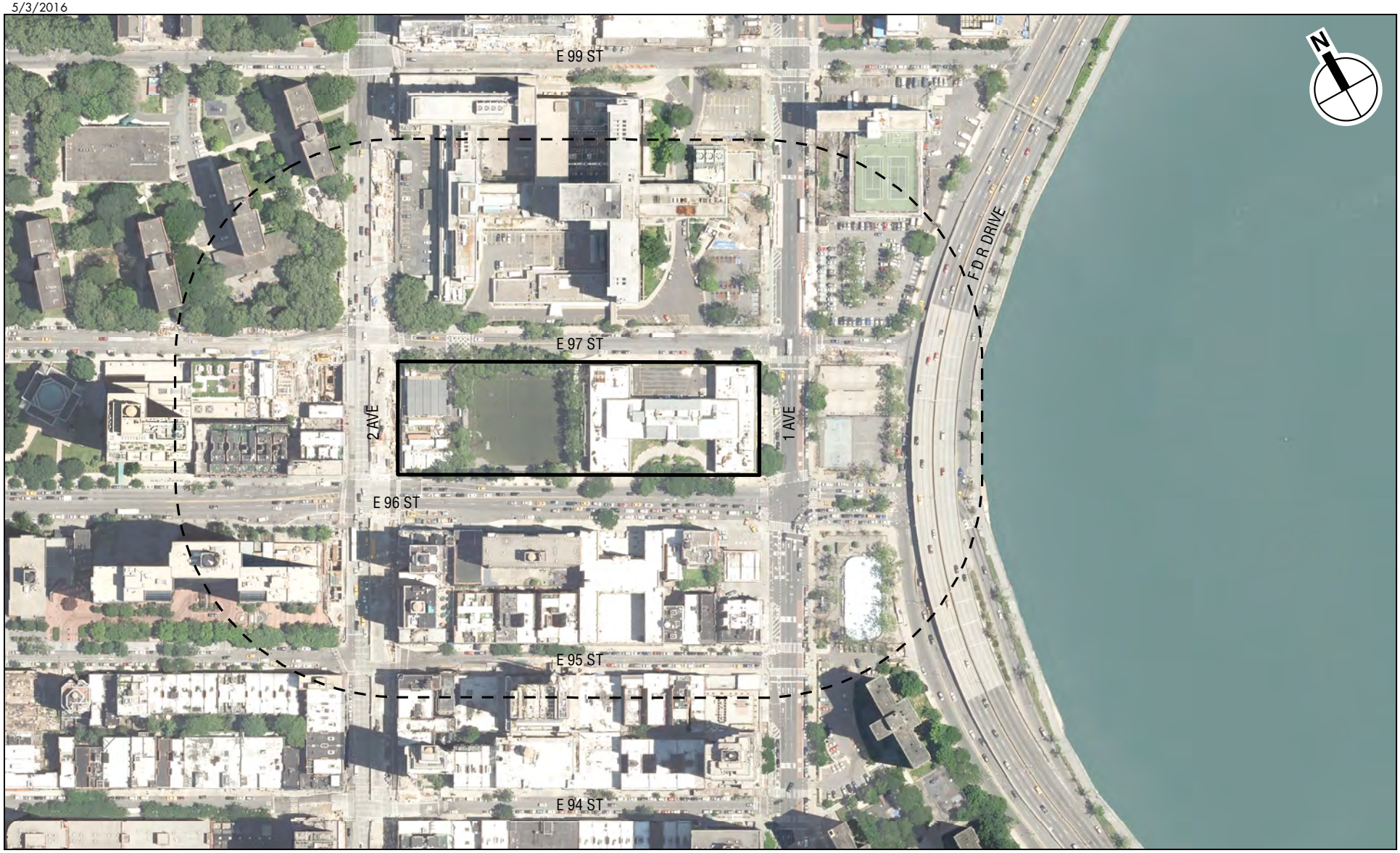


*Project Site*

*Study Area (400-foot boundary)*

0 400 FEET

**ECF EAST 96TH STREET**

Aerial

**Figure 2**

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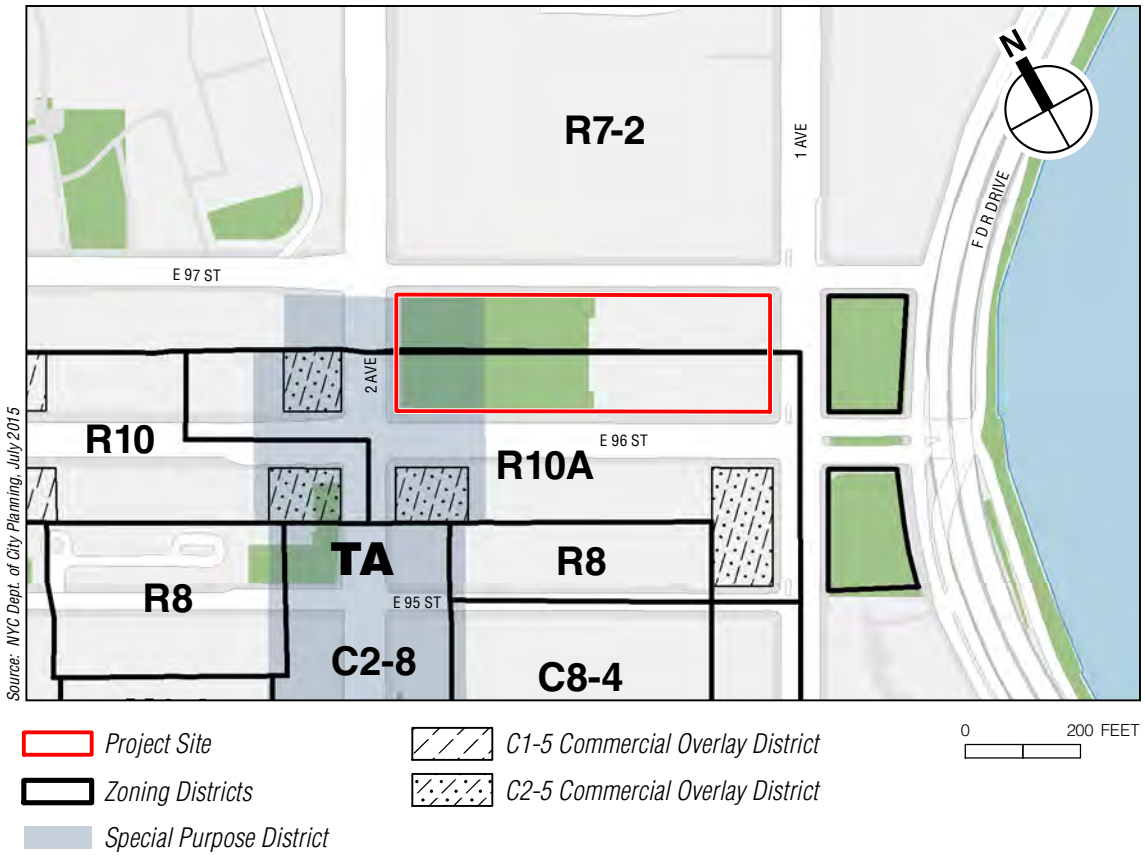
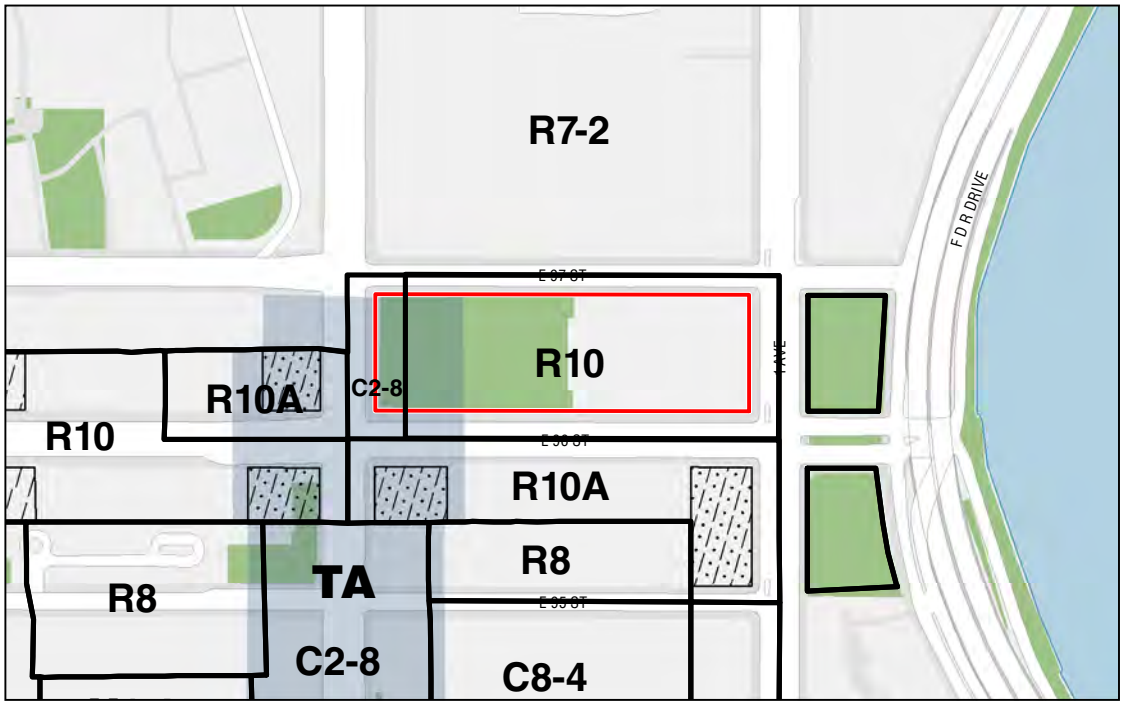
Existing




Proposed




**ECF EAST 96TH STREET**

Existing and Proposed Zoning
**Figure 3**

The proposed project will require approval of a home rule request by the New York City Council and legislation by the New York State Legislature to authorize the alienation and disposition to ECF of the existing jointly-operated playground, and its replacement with an equivalent size and proportion of jointly-operated playground on the project site. The project also involves a transfer of the City-owned property (the site) to ECF, which would lease a portion of the property to the designated developer, AvalonBay. ECF would convey the schools to the City (acting through DOE) and re-convey control of the jointly-operated playground to DOE and DPR. To facilitate construction of the schools, ECF would issue tax-exempt bonds.

The proposed discretionary actions require review under City Environmental Quality Review (CEQR), and the State Environmental Quality Review Act (SEQRA). The environmental review provides a means for decision-makers and other government agencies to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify, and mitigate where practicable, any significant adverse environmental impacts. As a disclosure document, the Draft EIS (DEIS) will also afford other stakeholders and the community the opportunity to meaningfully comment on the potential for significant adverse impacts. ECF will serve as the lead agency for this application. DCP will serve as an Involved Agency.

The scoping process is intended to focus the DEIS 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 DEIS. The proposed scope of work for each technical area to be analyzed in the DEIS follows. Analyses will be conducted for one build year, 2023, by which time the full build-out associated with the proposed actions is expected to be complete.

## B. PROJECT DESCRIPTION AND PURPOSE & NEED

### PROJECT AREA (EXISTING CONDITIONS)

The project site is Block 1668, Lot 1, in the East Harlem neighborhood of Manhattan. As shown in **Figures 1 and 2**, the project site is the full block bounded by East 96th and 97th Streets and First and Second Avenues. It is located in Manhattan Community District (CD) 11. The northern half of the project site is zoned R7-2; the southern half of the project site is zoned R10A (see **Figure 3**). The lot area within 150 feet of Second Avenue also is within the Special Transit Land Use District. The project site is currently owned by the City of New York. No lot mergers are required for the project. There are no (E) designations for the project site.

The western portion of the project site (approximately 64,150 square feet) is currently occupied by the Marx Brothers Playground, which is jointly operated by DOE and DPR. The playground includes a multi-purpose baseball and soccer field. The playground area facing Second Avenue (approximately 23,000 sf) is currently in use by MTA as a staging area for Second Avenue Subway construction. The eastern portion of the project site (approximately 66,396 sf) is occupied by a 4-story, 103,498 gsf school building, currently in use by the School of Cooperative Technical Education, a public technical high school.

### PROPOSED PROJECT

The proposed project would develop a 68-story building (760 feet in height, including bulkhead and mechanical equipment) with approximately 1,175,000 gsf on the western side of the project block, facing Second Avenue, and an 8-story building (185 feet in height, including bulkhead

and mechanical equipment) with approximately 135,000 gsf on the eastern side of the block, facing First Avenue. The western building would include approximately 1,015,000 gsf of residential use (approximately 1,200 residential units[2]); approximately 25,000 gsf of commercial retail use (Use Groups 6A/6C); and approximately 135,000 gsf of public school use (Use Group 3A, a technical school to replace the existing School of Cooperative Technical Education), as well as up to 120 parking spaces. The eastern building would house two additional public high schools that would relocate from nearby locations within Community Board 11. In total, the development on the site would be approximately 1,310,000 gsf (see **Figures 4 and 5**).

The proposed project would establish a Mandatory Inclusionary Housing (MIH) area at the project site. Thirty percent of the residential units will be affordable and will be targeted for incomes that are an average of 60 percent of Area Median Income (AMI).

The existing jointly-operated playground would be relocated to the middle of the block, between the two new buildings. The relocated jointly-operated playground would be of an equivalent size and proportion to the existing jointly-operated playground.

The proposed buildings would incorporate design elements to improve the site's resiliency, including elevating the first floor of the new buildings above the design flood elevation, and other measures to assist in protecting the lower levels of the buildings. Local retail would be provided on the western portion of the project site.

With the proposed project, the project site would be developed to an overall FAR of 9.7, as compared to the maximum permitted FAR under the proposed rezoning of 12.0. The agreements between ECF and AvalonBay will restrict the permitted development to that described in the EIS.

## DISCRETIONARY AND OTHER APPROVALS

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

- Amendment to the zoning map to change the 100-foot western portion of the project site, fronting upon Second Avenue, from a mix of R7-2 and R10A districts to a C2-8 district (R10 equivalent), and the remainder of the project site from a mix of R7-2 and R10A districts to a R10 district.
- A special permit pursuant to Section 74-75 of the Zoning Resolution to modify the following sections of the Zoning Resolution:
    - Section 24-11 to permit the distribution of lot coverage without regard for zoning lot lines, to allow the school at First Avenue (a community facility building) to have more than the permitted 75 percent lot coverage on corner lot;
    - 23-651(a)(1) to allow the tower of the mixed-use building on Second Avenue to occupy less than 30 percent of the lot area of the zoning lot;
    - 23-651(a)(3) to waive the requirement that 55 percent of the total zoning floor area permitted on the zoning lot be located below a height of 150 feet;

[2] Depending on unit sizing, the project could contain between 1,100 and 1,200 dwelling units. For the purposes of a reasonable worst-case analysis, the EIS will assess potential project impacts based on 1,200 units.

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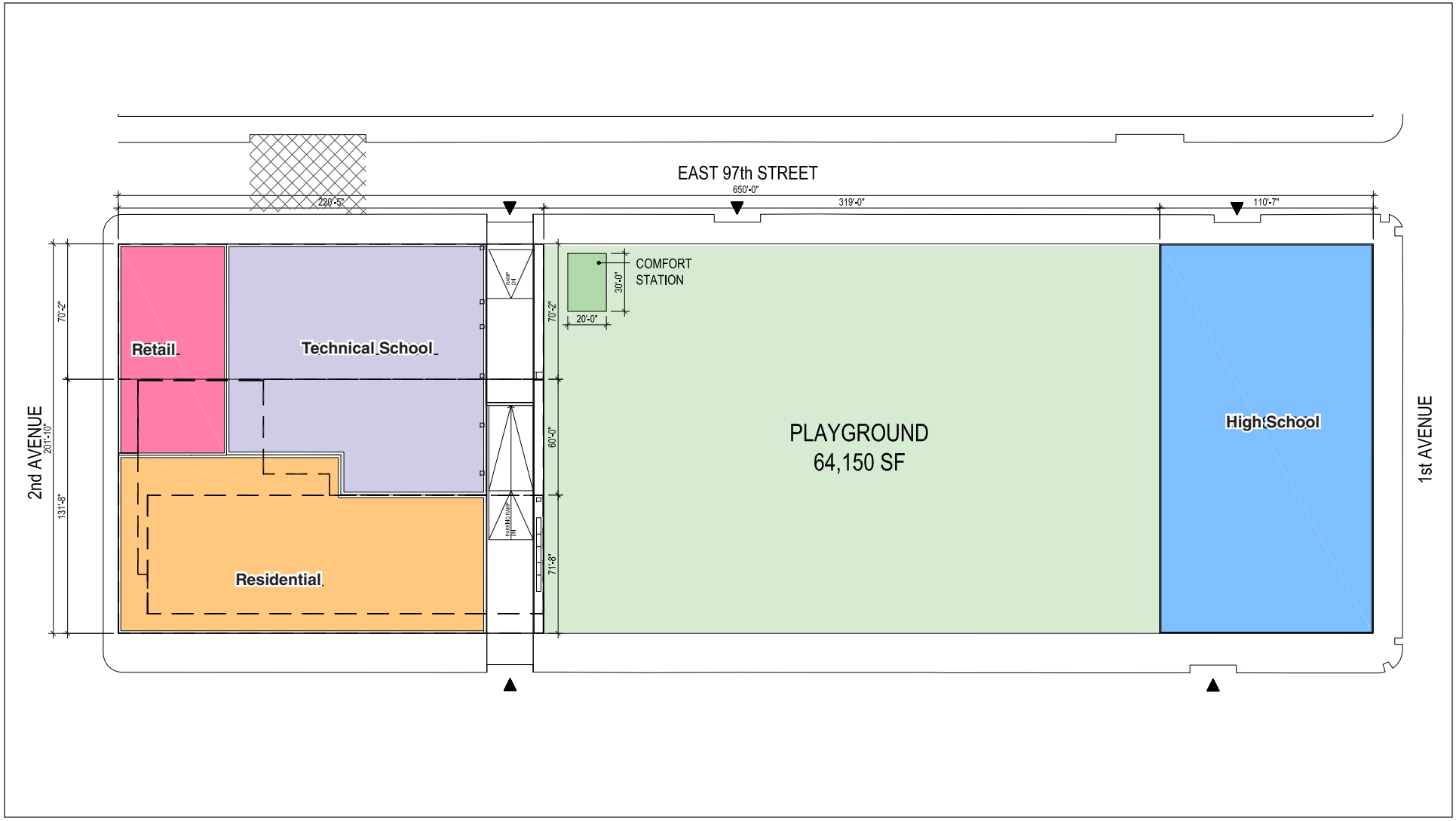


Proposed Ground Floor Plan

**ECF EAST 96TH STREET**

**Figure 4**

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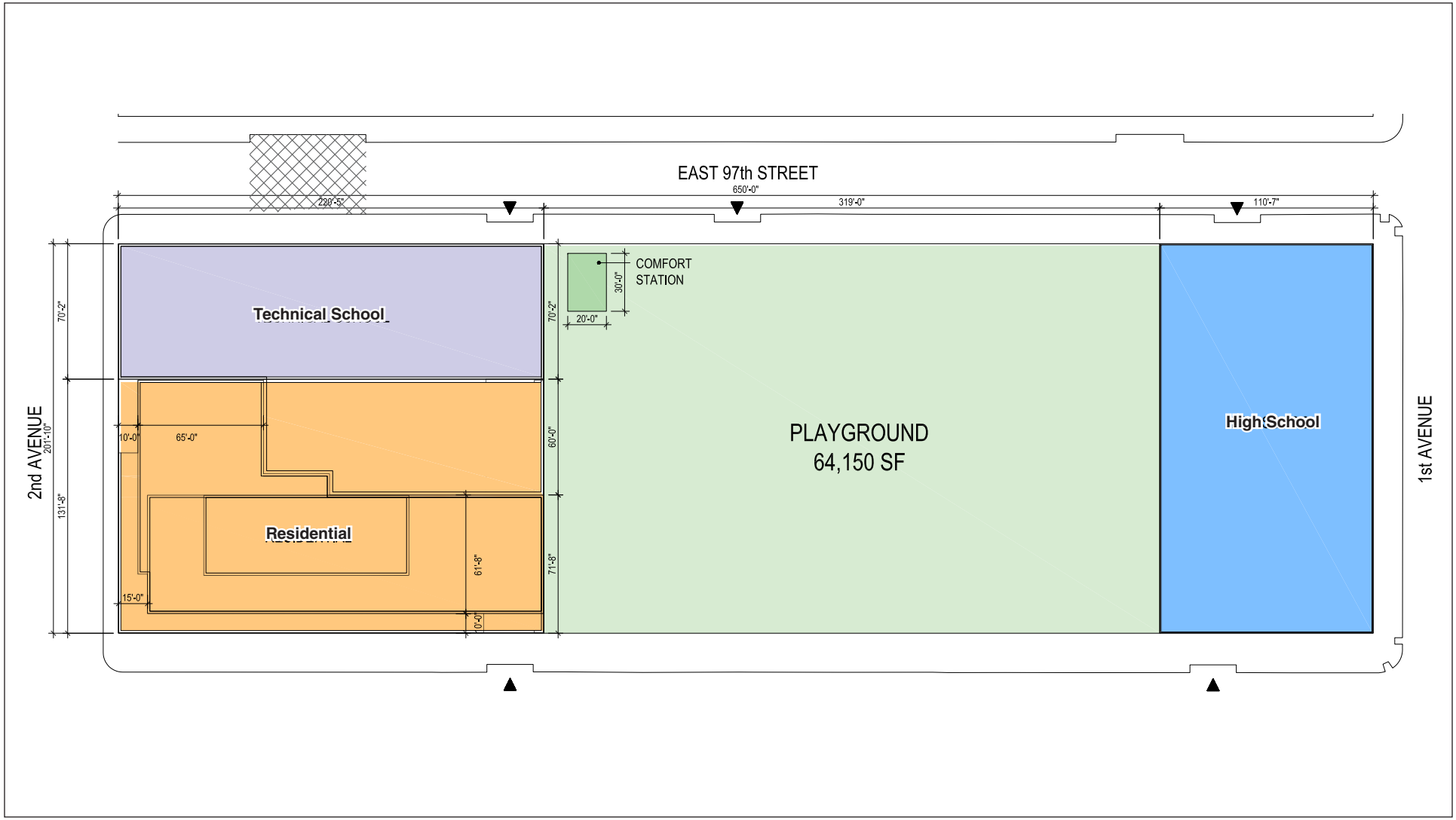
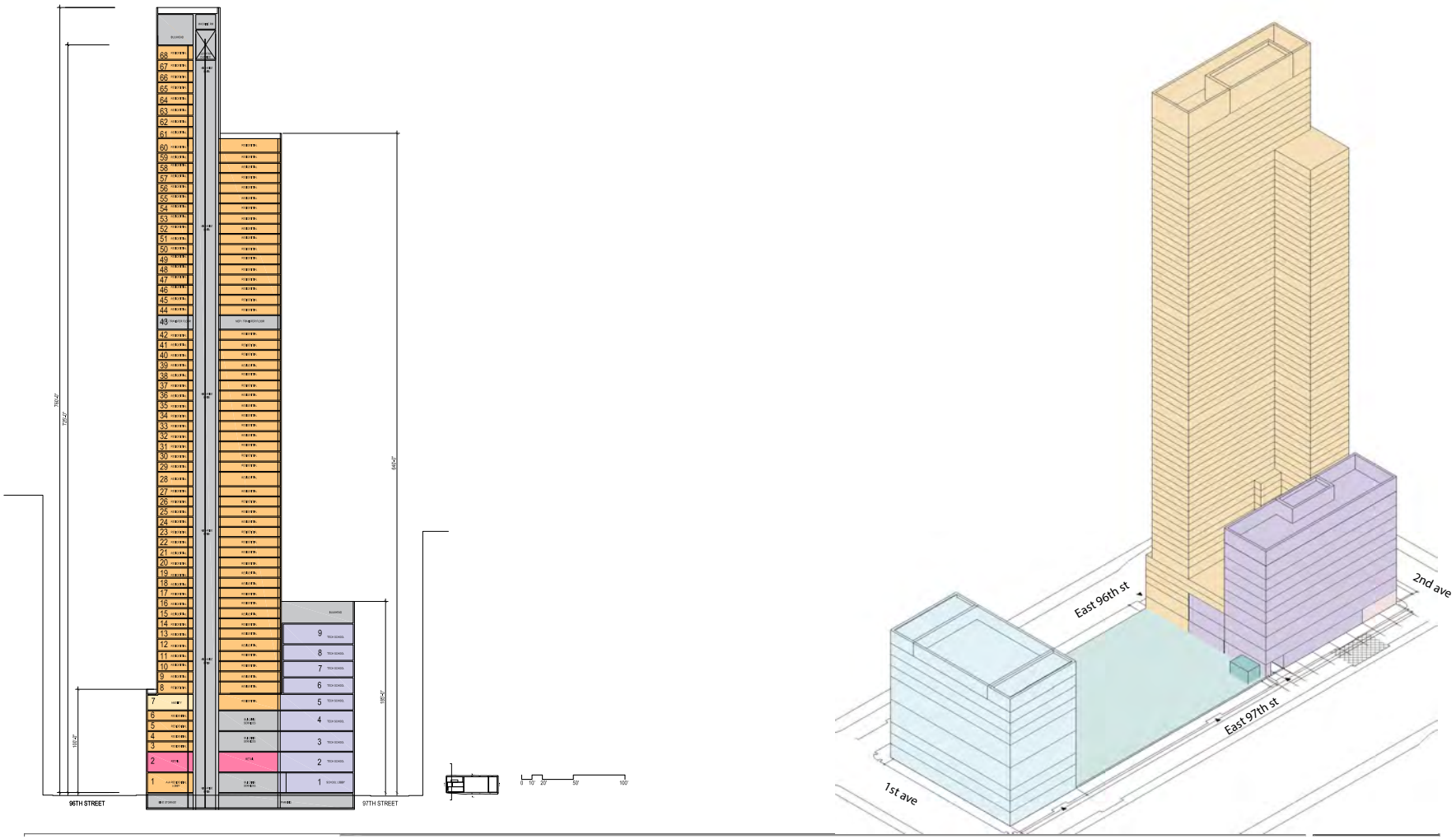



Site Plan

**Figure 5**

**ECF EAST 96TH STREET**




Proposed Massing and North-South Section

**ECF EAST 96TH STREET**

**Figure 6**


Proposed Massing and East-West Section

  - 23-651 (a)(5) to allow a portion of the tower of the mixed-use building on Second Avenue to be located on 97th Street (a narrow street) at a distance that is more than 100 feet from the intersection with a wide street;
  - 23-651(b)(1)(i) to allow the street wall on 96th Street to occupy less than the entire street frontage not occupied by existing buildings;
  - 23-651(b)(2) to allow the base of the mixed-use building on Second Avenue to exceed the maximum 85-foot height permitted before the initial setback; and
  - 24-522(a) to allow the proposed school at First Avenue to encroach the initial setback required above 85 feet and penetrate the sky exposure plane.
- Amendments to the Zoning Resolution to (i) modify Section 74-75 to allow distribution of allowable lot coverage without regard for zoning lot lines on a zoning lot containing the Co-op Tech School in Manhattan Community District 11, and (ii) establish a Mandatory Inclusionary Housing (MIH) area at the project site.
- Special permit pursuant to ZR Section 74-533 to reduce parking requirements applicable to approximately 840 non-income restricted units from 40 percent to 0, with an option to provide up to 13.2 percent, resulting in the reduction of total required parking for the development from 336 spaces to 0, with an option to provide up to 120 spaces.
- Certification pursuant to Section 95-04 of the Zoning Resolution from the Metropolitan Transit Authority (MTA) and the City Planning Commission (CPC) that no transit easement volume is required on the zoning lot.
- Certification pursuant to Section 26-15 to allow more than one curb cut on a narrow street.
- Certification pursuant to Section 26-17 to allow a curb cut on a wide street.

The proposed project also will require approval of a home rule request by the New York City Council and legislation by the New York State Legislature to authorize the alienation and disposition to ECF of the existing jointly-operated playground, and its replacement with an equivalent size and proportion of jointly-operated playground on the project site. The project also involves a transfer of the City-owned property (the site) to ECF, which would lease a portion of the property to the designated developer, AvalonBay. ECF would hold title to the entire site, until it conveys the schools to the City (acting through DOE) and re-conveys control of the jointly-operated playground to DOE and DPR. To facilitate construction of the schools, ECF would issue tax-exempt bonds.

## PURPOSE AND NEED OF THE PROPOSED PROJECT

ECF is a public benefit corporation established in 1967 by the New York State Legislature to provide funds for combined occupancy structures including school facilities in New York City. The Fund serves as a financing and development vehicle for the New York City Department of Education (DOE), encouraging the development of new public schools as part of mixed-use projects in which the public component (i.e., part of replacement playground) is financed by tax-exempt bonds. ECF uses ground rents, lease payments, and/or tax equivalency payments from the non-school portions of the development to pay the debt service on the bonds issued to finance the public facilities. Future revenues from the non-school portions of the development are used to pay the debt service of the new school facility.

The Fund enhances the ability of DOE to construct new school facilities, thereby increasing the number of seats for the entire school system. At the same, time the Fund encourages

comprehensive neighborhood development by facilitating new mixed-use developments that feature new school facilities. The current school facilities on the site date to the early 1940s and are outmoded. The proposed actions would result in the replacement of the existing School of Cooperative Technical Education with a new state-of-the-art facility, and the relocation of two neighborhood public high schools to the site in new, larger facilities. These improvements will help achieve a better learning environment by alleviating over-crowded conditions and providing modern educational facilities.

The proposed actions also would facilitate the productive use of the project site by creating a new residential development of approximately 1,200 units, 30 percent of which would be designated as affordable, pursuant to the Mandatory Inclusionary Housing (MIH) program. This affordable housing would advance a City-wide initiative to build and preserve 200,000 affordable units over 10 years in order to support New Yorkers with a range of incomes, from the very lowest to those in the middle class.

As noted above, the proposed project would relocate the jointly-operated Marx Brothers Playground to the midblock—a move which is desired by DPR in order to buffer the playground use from the active First Avenue and Second Avenue corridors—and would include improvements to the playground.

## ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW

The EIS analyses will be undertaken pursuant to SEQRA, consistent with ECF practices. The *New York City Environmental Quality Review (CEQR) Technical Manual* will generally serve as a guide with respect to environmental analysis methodologies and impact criteria for evaluating the effects of the proposed project. 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 2023. 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 2023 ("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 project area will continue as in the existing condition, except that the MTA will vacate the western portion of the jointly-operated Marx Brothers Playground and the entire playground will be reconstructed for recreation uses. 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**).

**Table 1**
**Comparison of No Action and With Action Scenarios**

| Use (GSF) | Existing Conditions/No Action Scenario | With Action Scenario | Increment |
|---|---|---|---|
| **Use Group 2 (Residential)** | 0 | 1,015,000 gsf | +1,015,000 gsf |
| **Residential Units** | 0 | 1,200[1] | +1,200 |
| ***Affordable Unit Count*** | 0 | 360 | +360 |
| **Use Group 6A/6C (Retail)** | 0 | 25,000 gsf | +25,000 gsf |
| **Use Group 3A (Public School)** | 103,498 gsf<br>(1 public technical school) | 270,000 gsf<br>(1 public technical school<br>2 public high schools) | +166,502 gsf<br>2 public high schools |
| **Accessory Parking** | 34 *surface* | 0 *surface*<br>*120 enclosed* | +86 |
| **Jointly-Operated Playground** | 64,150 sf | 64,150 sf | No change in size; change in location on site |
| **Notes**: [1]Depending on unit sizing, the project could contain between 1,100 and 1,200 dwelling units. For the purposes of a reasonable worst-case analysis, the EIS will assess potential project impacts based on 1,200 units. | | | |

### ENVIRONMENTAL REVIEW PROCESS

ECF has determined that the proposed actions and project have the potential to result in significant environmental impacts and, therefore, pursuant to SEQRA 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*. In addition, ECF has published this Draft Scope of Work 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 ECF has determined that the DEIS is complete, a Notice of Completion will be prepared and distributed/published in accordance with applicable regulations. The DEIS will then be subject to additional public review, in accordance with CEQR and SEQRA 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. The lead agency will then make SEQRA 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 SEQRA 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 will require a number of city and state discretionary actions, including a city land use approval for a rezoning. 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*. A detailed assessment will be conducted. 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:

- Provide a brief development history of the project site and study area. The study area will include the blocks immediately surrounding the project site and land uses within an approximately ¼-mile radius.
- Based on existing studies, information included in existing geographic information systems (GIS) databases for the area and field surveys, identify, describe, and graphically present predominant land use patterns and site utilization on the project site and in the ¼-mile study area. Recent land use trends and major factors influencing land use trends will be described.
- Describe and map existing zoning and any recent zoning actions on the project site and in the ¼-mile study area.
- Summarize other public policies and plans that may inform development of the project site and study area, including the 2015 East Harlem Neighborhood Plan, the Mayors Housing New York ten-year plan, the Waterfront Revitalization Program, and any other formal neighborhood or community plans that include the project site 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. 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.
- Describe the proposed actions and provide an assessment of the impacts of the proposed project on land use and land use trends, zoning, and public policy. Consider the effects related to issues of compatibility with surrounding land uses, consistency with zoning and other public policy initiatives, and the effect of the project on development trends and conditions in the area.

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

## TASK 3: SOCIOECONOMIC CONDITIONS

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

The proposed project would not result in direct residential or business displacement since there are no residences or businesses on the project site. With respect to indirect business displacement, the proposed project would not exceed the CEQR threshold warranting assessment (commercial development of 200,000 sf or more). An analysis of adverse effects on specific industries would not be required. However, with respect to indirect residential displacement, the

proposed project would exceed the CEQR threshold of more than 200 units, and thus an analysis of indirect residential displacement will be prepared.

*INDIRECT RESIDENTIAL DISPLACEMENT*

The analysis will start with a preliminary assessment that presents demographic and residential market trends and conditions for the study area using U.S. Census data, American Community Survey data, New York City Department of Finance Real Property Assessment Data (RPAD) data, as well as current real estate market data. Following *CEQR Technical Manual* guidelines, the preliminary assessment will perform the following step-by-step evaluation:

- **Step 1:** Determine if the proposed project would add new population with higher average incomes compared to the incomes of the study area population and any new population expected to reside in the study area in the future without the project. If the expected average incomes of the new population would be similar to the average incomes of the study area populations and the population added by any planned development projects in the future, no further analysis is necessary. According to CEQR methodology, if the project would introduce a more costly type of housing compared to existing housing such that the expected average incomes of the new population would exceed the average incomes of the study area population, then Step 2 of the analysis will be conducted.
- **Step 2:** Determine if the proposed project population is large enough to affect real estate market conditions in the study area. If the population increase is greater than 5 percent in the study area as a whole or within any identified subareas, then Step 3 will be conducted.
- **Step 3**: Consider whether the study area has already experienced a readily observable trend toward increasing rents and the likely effect of the action on such trends.

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 involve the construction of a replacement facility for the technical school and two neighborhood public high schools on the project site. Therefore, an analysis of the project's effects on public schools will be provided.

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 Manhattan, an increase of more than 310 units exceeds the threshold for elementary/middle school and more than 2,492 units for high school.
- Libraries: A greater than 5 percent increase in the ratio of residential units to libraries in the borough. For Manhattan, this is equivalent to residential population increase of 901 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 Manhattan, an increase of 170 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, the proposed project's number of anticipated residential units will require analyses for publicly funded child care facilities and libraries. This chapter will therefore include analyses of public schools, publicly funded child care, and libraries, following the guidance of the *CEQR Technical Manual*. These analyses would include the tasks described below.

*PUBLIC SCHOOLS*

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

- 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

The project would develop a new structure on the existing jointly-operated playground and provide an equal- or larger-sized playground in the midblock, to be operated jointly by DOE and DPR. This chapter will discuss those project elements and their timing, as well as undertake an analysis of the potential impact on area open space resources from the project's introduction of additional residential, student, and worker populations to the project site.

According to the *CEQR Technical Manual*, the project site is located in an area that is considered to be neither underserved nor well-served by open space. The proposed project would exceed the 200-resident CEQR threshold requiring a residential open space analysis of indirect effects, but not the 500-worker threshold requiring a non-residential open space analysis of indirect effects.

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 project site; this inventory will include examining these spaces for their facilities (active vs. passive use), condition, and use (crowded or not).

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 actions that would result in new structures or additions to existing structures greater than 50 feet in incremental height, or of any height if the project site is 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 (such as Stanley Isaacs Playground, which is adjacent to the project site), sunlight-sensitive features of historic resources, and natural features.

The proposed project will result in new structures more than 50 feet taller than what would exist on the site in the No Action condition. 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 (the summer and winter solstices [June 21 and December 21], the spring/fall equinox [March 21/September 21], and the day halfway between the summer solstice and the equinoxes [May 6/August 6]) 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).

According to the *CEQR Technical Manual*, a historic and cultural resources assessment is required if a project would have the potential to affect either archaeological or architectural resources. Consistent with the *CEQR Technical Manual*, the historic and cultural resources analysis will include the following tasks:

- Consult with LPC regarding the site's potential archaeological sensitivity. A Phase 1A Archaeological Study will be prepared if requested by LPC 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 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. 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 LPC.
- If necessary, mitigation measures to avoid or reduce potential significant adverse impacts on historic or cultural resources will be identified, in consultation with LPC.

## 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 requires a rezoning as well as height and setback waivers; 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: 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, as well as any other available hazardous materials studies for the site. 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 10: 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 1,000 residential units in Manhattan. 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 Wards Island 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 Wards Island 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 11: TRANSPORTATION

The transportation studies for the proposed project encompass five distinct analysis topics—traffic, transit, pedestrians, vehicular and pedestrian safety, and parking. The *CEQR Technical Manual* states that quantified transportation analyses may be warranted if a proposed action results in 50 or more vehicle-trips and/or 200 or more transit/pedestrian trips during a given peak hour. Based on the types and scale of incremental development that could result from the proposed project, quantified analyses of the above technical areas are expected to be warranted. In addition, an assessment of vehicular and pedestrian safety based on recent crash data will accompany the traffic and pedestrian analyses, and an off-street parking study will be conducted to inventory the area's existing supply and utilization, and assess the potential for a parking shortfall resulting from added demand generated by the proposed project.

### *TRAVEL DEMAND PROJECTIONS AND SCREENING ASSESSMENTS*

Travel demand projections will be prepared for the proposed project using standard sources, such as the *CEQR Technical Manual*, U.S. census data, approved studies, and other references. The estimates will be used to prepare the Level 1 and Level 2 screening assessments prescribed in the *CEQR Technical Manual*. As part of this effort, an inventory of the area's existing parking supply and utilization (within ¼-mile from the project site boundaries) will be undertaken to determine likely locations where project-generated auto trips would be accommodated. The projected trips (by auto/taxi, transit, or walk/bike, and deliveries, etc.) will be assigned to the area's transportation network to identify specific transportation elements that would be subject to further detailed analyses. The findings, along with relevant documentation and graphics, will then be summarized in a Travel Demand Factors (TDF) memo for review and concurrence by

the lead agency and involved expert agencies, such as the New York City Department of Transportation (NYCDOT) and/or New York City Transit (NYCT).

*TRAFFIC*

The proposed project's potential impacts will be evaluated at traffic study area intersections during the weekday AM, midday, PM peak hours. Ten preliminary traffic analysis intersections near the project site have been identified, including:

- East 99th Street and First Avenue;
- East 97th Street and First Avenue;
- East 96th Street and First Avenue;
- East 96th Street and the York Avenue extension/FDR Drive north service road;
- East 96th Street and the FDR Drive south service road;
- East 97th Street and Second Avenue;
- East 96th Street and Second Avenue;
- East 95th Street and Second Avenue;
- East 97th Street and Third Avenue; and
- East 96th Street and Third Avenue.

Following the review of the TDF memo with the relevant agencies, traffic data will be collected pursuant to *CEQR Technical Manual* guidelines to establish the existing baseline for analysis. Future conditions without the proposed project, which account for background growth, trip-making from other projects in the area, and physical/operational changes of the study area intersections, will also be determined and used as the future baseline against which potential impacts from the proposed project will be assessed. 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 NYCDOT approval and implementation.

*TRANSIT*

The project site is served by the New York City Transit (NYCT) Lexington Avenue line at East 96th Street, the M15 bus route along First and Second Avenues, and the crosstown M96 bus route along East 96th Street. By the end of 2016, the first phase of the Second Avenue Subway is scheduled to be completed, and many subway riders in the area are expected to shift from the Lexington Avenue line to the new Second Avenue line. Future subway riders from the project site are similarly expected to take advantage of the shorter walk to Second Avenue. Based on discussions with NYCT, it is expected that project-generated subway trips would be evenly distributed between the two East 96th Street subway stations. An analysis of potential impacts on the new Second Avenue station, the 96th Street station (No. 6 train), and subway line haul on both lines will be undertaken, for the weekday AM and PM peak hours. Since the Second Avenue subway station is not yet completed, existing data on its operations cannot be collected. Instead, coordination with NYCT will be undertaken to develop an impact analysis that would be suitable for this environmental review. For the two area bus routes, NYCT ridership data will be requested to assess for potential line-haul impacts. Where impacts are identified, feasible

improvement measures, such as increasing bus service frequency, will be explored for NYCT approval and implementation.

*PEDESTRIANS*

Project-generated pedestrian trips are expected to concentrate at the project site and along primary routes to area transit facilities, primarily gravitating toward the Second Avenue Subway entrances on the west side of Second Avenue at East 96th Street. Pedestrian elements at intersections near the project site and area transit facilities which incur over 200 pedestrian trips will be analyzed for the weekday peak periods, similar to the procedures described above for the traffic analysis. Based on the Level 2 screening assessment described above under "Travel Demand Projections and Screening Assessments," it is anticipated that 5 sidewalks, 12 corner reservoirs, and 6 crosswalks would be included for a detailed pedestrian analysis. Where impacts are identified, feasible improvement measures, such as crosswalk widening, removal/relocation of street furniture, and corner bulb-out, will be explored for NYCDOT approval and implementation.

*VEHICULAR AND PEDESTRIAN SAFETY*

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 (per 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, in consultation with the lead agency and NYCDOT, to alleviate potential safety issues.

*PARKING*

A special permit is being sought to waive the proposed project's parking requirements. An off-street parking supply and utilization analysis will be performed for an area within ¼-mile of the project site. This analysis will involve an inventory of existing parking levels, projection of future No Action and With Action utilization levels, and comparison of these projections to the future anticipated parking supply to determine the potential for a parking shortfall.

## TASK 12: AIR QUALITY

The proposed actions are not expected to exceed the 2014 *CEQR Technical Manual* carbon monoxide (CO) mobile source screening threshold of 170 new vehicle trips during a peak traffic hour at a single intersection. The proposed actions are also unlikely to exceed the particulate matter (PM) emission screening thresholds discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. If screening levels are exceeded, a microscale analysis would be required at one or more intersections. Potential carbon monoxide CO and PM impacts associated with the proposed on-site parking facilities will be analyzed. Information on the design of any parking garage will be employed to determine potential off-site impacts from emissions ventilated from the enclosed portions of the garage. Following the *CEQR Technical Manual*, a point source screening analysis will be used to model emissions from the garage vent, assuming peak times of parking usage. Cumulative impacts from on-street sources and emissions from the parking facilities will be calculated, where appropriate. Predicted levels will be compared with

standards and applicable *de minimis* criteria, to assess the potential for significant adverse impacts.

A stationary source air quality analysis will be undertaken to determine the potential effects of emissions from any proposed fossil fuel-fired heating, ventilation and air conditioning (HVAC) systems on pollutant levels. A screening analysis will be performed to determine whether emissions from any on-site fuel-fired HVAC system equipment (e.g., boilers/hot water heaters) are significant. The screening analysis will use the procedures outlined in the *CEQR Technical Manual*. 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 ($NO_2$) NAAQS and the City's $PM_{2.5}$ *de minimis* criteria and, if fuel oil is proposed to be used, the 1-hour sulfur dioxide ($SO_2$) NAAQS. In addition, potential air emissions associated with vocational studies with the existing school will be examined (e.g., automotive repair). A quantitative analysis will be performed if warranted based on the results of the screening analysis.

In terms of existing sources, Metropolitan Hospital currently has a State DEC-issued facility air permit for air emissions from its temporary boilers. Such permit indicates that the existing boilers have been shut down and the facility is currently operating using temporary boilers. As per the *CEQR Technical Manual* an analysis of the potential effects of air emissions is required. Therefore, consultation with the New York City Health and Hospitals Corporation may be required to understand what the long-term plans are for supply of energy services to the hospital. We will review the existing air permit and other relevant information to identify the types and locations of emission sources, and perform an initial screening analysis. A refined analysis will be performed if warranted based on the results of the screening analysis.

## TASK 13: GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

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. Emissions will be estimated for the analysis year and reported as carbon dioxide equivalent ($CO_2e$) metric tons per year. GHG emissions other than carbon dioxide ($CO_2$) 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.

Since the proposed site is located in a flood hazard zone, the potential impacts of climate change on the proposed project 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 infrastructure and uses.

The analysis will consist of the following subtasks:

*CLIMATE CHANGE RESILIENCY ASSESSMENT*

- The potential effects of climate change on the proposed development will be evaluated based on the best available information. The evaluation will focus on potential future sea and storm levels and the interaction with 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.

*GREENHOUSE GAS EMISSIONS EVALUATION*

- Direct Emissions—GHG emissions from on-site boilers used for heat and hot water, natural gas used for cooking, and fuel used for on-site electricity generation, if any, will be quantified. Emissions will be based on project-specific information regarding the project's expected fuel use or, if estimates cannot be provided, on carbon intensity factors specified in the *CEQR Technical Manual*.
- Indirect Emissions—GHG emissions from purchased electricity and/or steam generated off-site and consumed on-site during the project's operation will be estimated. Emissions will be based on project-specific information regarding the project's expected fuel use or, if estimates cannot be provided, on carbon intensity factors specified in the *CEQR Technical Manual*.
- Indirect Mobile Source Emissions—GHG emissions from vehicle trips to and from the project site will be quantified using trip distances and vehicle emission factors provided in the *CEQR Technical Manual*.
- Emissions from project 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.
- Design features and operational measures to reduce the proposed project's 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 2025, individual project consistency is evaluated based on building energy efficiency, proximity to transit, on-site renewable power and distributed generation, efforts to reduce on-road vehicle trips and/or to reduce the carbon fuel intensity or improve vehicle efficiency for project-generated vehicle trips, and other efforts to reduce the project's carbon footprint.

**TASK 14: 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.

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 will examine the potential increases in noise level at nearby noise receptors resulting from traffic associated with the proposed project, the level of building attenuation necessary to meet CEQR interior noise level requirements, and the noise exposure at the publicly accessible playground included in the proposed project.

Specifically, the noise analysis 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 noise analysis. Other noise descriptors including the $L_1$, $L_{10}$, $L_{50}$, $L_{90}$, $L_{min}$, and $L_{max}$ levels will be examined when appropriate.

- Based on the traffic studies, perform a screening analysis for each analysis year 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.
- Select receptor locations for noise exposure analysis purposes. Four (4) receptor locations will be selected. The receptor locations will be located adjacent to the sites of the proposed development, including on Second Avenue between East 97th and East 96th Streets, East 97th Street between First and Second Avenues, First Avenue between East 97th and East 96th Streets, and East 96th Street between First and Second Avenues.
- At each of the receptor locations, perform 20-minute measurements at each receptor location during typical weekday AM, midday, and PM peak periods. $L_1$, $L_{10}$, $L_{50}$, $L_{90}$, $L_{min}$, and $L_{max}$ values will be recorded.
- 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 criteria. The level of building attenuation necessary to satisfy CEQR requirements is a function of exterior noise levels and will be determined. Measured values will be compared to appropriate standards and guideline levels. As necessary, recommendations regarding general noise attenuation measures needed for the proposed project to achieve compliance with standards and guideline levels will be made.
- Open Space Noise Analysis. Predicted noise levels at the jointly-operated playground associated with the project will be compared to *CEQR Technical Manual* noise exposure guidelines for open space.
- School Playground Noise Analysis. Noise levels resulting from use of the relocated jointly-operated playground will be determined at surrounding existing noise receptors as well as the proposed project buildings. This analysis will be based upon measurements made at a series of New York City school playgrounds for the SCA. The projected playground noise levels, combined with the results of existing noise level measurements at the proposed project site, will be used to analyze the potential noise effects of the relocated playground.

## TASK 15: 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 16: 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 17: 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.

According to the *CEQR Technical Manual*, a proposed project with an overall construction period lasting longer than two years and that is near sensitive receptors (i.e., residences, open spaces, etc.) should undergo a construction impact assessment. Since the construction activities for the proposed project would far exceed 24 months and would occur near sensitive receptor locations, including across the street from Metropolitan Hospital as well as adjacent to the completed portions of the project during the latter part of construction, a construction assessment would be warranted. The construction assessment will focus on areas where construction activities may pose specific environmental concerns. This assessment will describe the construction schedule and logistics, discuss anticipated on-site activities, and provide estimates of construction workers and truck deliveries.

Technical areas to be assessed include the following:

- ***Transportation Systems.*** This assessment will consider losses in lanes, sidewalks, off-street parking on the project sites, and effects on other transportation services (i.e., transit and pedestrian circulation) during the construction periods, 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. Based on the trip projections of activities associated with peak construction for the proposed project and those from project components that would have been completed and operational during peak construction, an assessment of potential impacts during construction will be provided. If this effort identifies the need for a separate detailed analysis due to an exceedance of the *CEQR Technical Manual* quantified transportation analyses thresholds (50 or more vehicle-trips and/or 200 or more transit/pedestrian trips during a given peak hour), it would be prepared.
- ***Air Quality.*** The construction air quality impact section will contain a detailed qualitative discussion of emissions from construction equipment, worker and delivery vehicles, as well as fugitive dust emissions. The analysis will qualitatively review the projected activity and equipment in the context of intensity, duration, and location of emissions relative to nearby sensitive locations, and identify any project-specific control measures (i.e., diesel equipment reduction; clean fuel; best available tailpipe reduction technologies; utilization of equipment that meets specified emission standards; and fugitive dust control measures, etc.) required to

further reduce the effects of construction and to ensure that significant impacts on air quality do not occur.

- ***Noise and Vibration.*** In the detailed construction noise analysis, existing noise levels will be determined by noise measurements performed at at-grade receptor locations. During the most representative worst-case time periods, noise levels due to construction activities at each sensitive receptor will be predicted. Based on the results of the construction noise analysis, if necessary, the feasibility, practicability, and effectiveness of implementing measures to mitigate significant construction noise impacts will be examined.

  Construction activities have the potential to result in vibration levels that may result in structural or architectural damage, and/or annoyance or interference with vibration-sensitive activities. A construction vibration assessment will be performed. This assessment will determine critical distances at which various pieces of equipment may cause damage or annoyance to nearby buildings and the Second Avenue subway line based on the type of equipment, the building construction, and applicable vibration level criteria. Should it be necessary for certain construction equipment to be located closer to a building than its critical distance, vibration mitigation options will be proposed.

***Other Technical Areas.*** As appropriate, discuss other areas of environmental assessment for potential construction-related impacts, including but not limited to: historic and cultural resources, hazardous materials, open space, socioeconomic conditions, community facilities, and land use and neighborhood character.

## TASK 18: 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 19: 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 SEQRA, will be considered, which in this case assumes that the existing uses would continue. 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 20: 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, which 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. ✷