# Draft Scope of Work for a Generic Environmental Impact Statement for the Seward Park Mixed-Use Development Project

## A. INTRODUCTION

The Office of the Deputy Mayor for Economic Development, in coordination with the New York City Economic Development Corporation (NYCEDC) and the New York City Department of Housing Preservation and Development (HPD) is sponsoring an initiative to allow for the implementation of an approximately 1.5 million-square-foot mixed-use development on 10 City-owned sites. These 10 sites are located in Manhattan Community District 3 generally along Delancey and Essex Streets on the Lower East Side (**see Figure 1**). Five of the sites (Sites 2, 3, 4, 5, and 6) are located within the former Seward Park Extension Urban Renewal Area (SPEURA), which was established in 1965 and expired in 2005. Four sites (Sites 7, 8, 9, and 10) are located within the 2008 East Village/Lower East Side Rezoning area. The tenth site (Site 1) is in neither. The project site also includes demapped sections of Broome and Suffolk Streets that would be mapped as City streets and sections of Clinton and Delancey Streets that would be demapped (**see Figure 2**). These 10 City-owned sites and the streets to be demapped and mapped encompass the project site.

The program for the proposed development on Sites 1–6 and 8–10 is expected to include a variety of residential and commercial uses, such as mixed-income residential, retail, other commercial uses such as office space, parking, and open space. Site 7 has been considered part of the project site since the community planning process commenced in 2008 and all City-owned properties in the area were identified. However, in the proposed development project, Site 7 would retain its current function as a municipal parking garage that supports the new development across all project sites.

The project site is the largest underdeveloped City-owned site south of 96th Street, and the purpose of adopting the proposed land use actions is to allow for the implementation of a mixed-use development on the project site, which has the following goals: (1) transform several underutilized City-owned properties into a thriving, financially viable, mixed-use development; (2) provide affordable and market-rate housing units, commercial and retail uses, and other neighborhood amenities, (e.g., parking, a new and expanded facility for the public Essex Street Market, and open space); and (3) knit these sites back into the larger, vibrant Lower East Side neighborhood.

To facilitate the redevelopment project, a number of discretionary actions would be required. Adoption of proposed Uniform Land Use Review Procedure (ULURP) actions would involve public review by a number of entities, which include, depending on the action, Manhattan Community Board 3, the Manhattan Borough President, the New York City Planning Commission (CPC), and the New York City Council. These actions include zoning map changes and zoning text amendments, zoning special permits, City map amendment, the disposition of City-owned property, and approval of one or more Urban Development Action Area Project(s)

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SCALE

*Seward Park Urban Renewal Area (URA)*

*Seward Park Extension URA*

1 *Proposed Development Sites*

* *Site 7 Would not be Redeveloped Under the Proposed Actions*

*2008 East Village/Lower East Side Rezoning Boundary*

Proposed Development Sites

**Figure 1**

8.8.11


**SEWARD PARK** MIXED-USE DEVELOPMENT PROJECT

Street Mapping and Demapping Actions
**Figure 2**

(UDAAP). Mayoral and Borough Board approval of the business terms with the developer or developers to be selected pursuant to Requests for Proposals (RFPs) would also be required, as applicable. Further details regarding the discretionary approvals for the proposed project are provided below.

Should the discretionary actions subject to ULURP be approved, an RFP(s) soliciting proposals for development under the approvals would be issued. In order to address the potential range of responses to the RFP(s), the environmental review analyzes a Reasonable Worst-Case Development Scenario (RWCDS) that conservatively considers for each impact category the reasonable worst-case potential for environmental effects. While the proposed discretionary actions have been defined, the development program and design specifics under those actions would be dependent on the RFP response. Thus, pursuant to City Environmental Quality Review (CEQR), a Generic Environmental Impact Statement (GEIS) will be prepared that will consider the environmental impacts based on the RWCDS.

A GEIS is a more general EIS that analyzes the impacts of a concept or overall plan rather than those of a specific project plan. The GEIS is useful when the details of a specific impact cannot be accurately identified, as no site-specific project has been proposed, but when a broad set of further projects that fit within the RWCDS is likely to result from the agency's action. It should be noted that the program analyzed in the RWCDS is being used for illustrative and analysis purposes only; a site-specific breakdown is required for the environmental review. This is not meant to indicate an actual development program.

In accordance with CEQR, the Office of the Deputy Mayor for Economic Development has prepared this draft scope of work for what the GEIS will analyze and made it available to agencies and the public for review and comment. The purpose of this scoping process is to receive input on the proposed analysis to be conducted in a GEIS to ensure that all appropriate areas are included and that the review is comprehensive. A Final Scope of Work will be prepared after consideration of relevant public comments.

A public meeting has been scheduled for October 11, 2011 to provide a forum for public comments on this Draft Scope of Work. The public meeting will be held at the University Settlement House 184 Eldridge Street, 2nd floor, at the corner of Rivington Street, New York, NY. The public scoping meeting will include both daytime and evening sessions. A daytime session will be held from 3:00 to 5:30 PM, and an evening session will begin at 6:30 PM. Written comments on the Draft Scope of Work will be accepted until 5:00 PM on Friday, October 21, 2011.

The preparation of this Draft Scope of Work ensures that the potential environmental impacts of the proposed project and required discretionary actions are fully identified and studied consistent with environmental law and regulations. Under those laws, public review of the proposed actions will not begin until the Office of the Deputy Mayor for Economic Development, which is the lead agency, has determined that the environmental issues have been adequately studied in the form of a Draft GEIS (DGEIS) in order to permit meaningful review by the public and decision-makers.

# B. PROJECT BACKGROUND

## HISTORY

The Seward Park Extension Urban Renewal Area is located in the historically economically and ethnically diverse Lower East Side (see Figure 1). By the turn of the 20th century, the Lower East Side was an immigrant neighborhood known for its bustling street-level commercial activity and its overcrowded tenement buildings. In the mid-1950s through the 1970s, large tracts of land on the Lower East Side were deemed appropriate for urban renewal under the City's Urban Renewal Law. Development in these urban renewal areas had typically taken the form of multi-tower residential buildings on large superblocks along the East River from East 14th Street to as far south as the Manhattan Bridge.

### *SEWARD PARK EXTENSION URBAN RENEWAL AREA*

Established in 1965, the SPEURA is bordered by Essex Street, Grand Street, Bialystoker Place, and Delancey Street (see Figure 1). It is located directly north of the original Seward Park Urban Renewal Area (SPURA) that was designated in 1955. In 1967, 14 blocks of tenements in the SPEURA were demolished and the land was cleared for new housing and commercial buildings. In addition, Broome Street between Norfolk and Clinton Streets and Suffolk Street between Grand and Delancey Streets were demapped (see Figure 2) although they continue to function as streets. The first new buildings in the SPEURA were completed in 1972. These buildings, Seward Park Extension East and West, included 360 units built by the New York City Housing Authority. An additional 600 units were built in the SPEURA by St. Mary's Roman Catholic Church. In the 1980s, the Chinatown Planning Council built 156 units and the United Jewish Council built 124 senior units. The SPEURA plan proposed largely commercial development on the remaining, currently vacant sites.

There were several attempts in the 1980s and 1990s to redevelop the remaining five SPEURA sites: a proposal in 1988 by the LeFrak Organization, a 1993 proposal by Kraus Enterprises, and a 2001 proposal by a joint partnership of the LeFrak Organization and Edward J. Minskoff Equities. The 1988 LeFrak proposal included a mix of affordable and market-rate housing units. Kraus Enterprises' proposal in 1993 included residential units, park space, retail, and a movie theater. The LeFrak/Minskoff proposal in 2001 also included a mix of affordable and market-rate housing units. In 2003, HPD and NYCEDC, for discussion purposes, proposed a program of affordable and market-rate residential units and commercial uses for the SPEURA. These plans and the proposal for discussion did not move forward because of a lack of community consensus.

The urban renewal area designation expired in 2005. Today, the former SPEURA comprises a mix of affordable housing, institutional, community, and cultural uses, and the five remaining underdeveloped sites. These five sites (Sites 2–6) remain underutilized and together currently comprise the largest, under-developed City-owned sites in Manhattan south of 96th Street; they include parking lots, a partially vacant former market building, a residential building with seven occupied units, a former fire station with a commercial tenant, and a building that is vacant except for a ground-floor retail tenant.

### 2011 COMMUNITY BOARD 3 PLANNING GUIDELINES

With the goal of gaining broad community consensus on a development program for the project site, Manhattan Community Board 3 (CB3) embarked on a planning process for these Sites starting in 2008, and invited the City to be part of the discussions. NYCEDC, HPD, and the New York City Department of City Planning (DCP) participated in the process, providing technical support and resources to facilitate the community's discussion and analysis. Over the course of more than two years, CB3 worked to develop a set of project guidelines that CB3 unanimously adopted in January 2011. CB3 subsequently worked with the City to understand the urban design opportunities of the project and passed a set of urban design guidelines in June 2011. Together, these program guidelines and design principles articulate the community's desired mixed-use, mixed-income characteristics of the program for the project site and urban design considerations related to the site's layout, height and density.

The community guidelines and urban design recommendations adopted by CB3 serve as a broad framework for defining essential elements of the current project proposal.

## C. PROJECT DESCRIPTION

### SITE DESCRIPTION

As shown on **Table 1**, the project site contains a mix of parking, vacant and partially vacant commercial uses, and a residential building with 7 occupied units. Within the project area, Suffolk Street is demapped between Grand and Delancey Streets and Broome Street is demapped between Norfolk and Clinton Streets. Sites 1, 3, 4, and 6 are each entirely occupied by surface parking. Sites 1, 3, and 6 contain a total of 285 public parking spaces and Site 4 contains 125 commercial parking spaces for neighborhood businesses. Sites 2 and 5 also contain surface parking; Site 2 has 90 spaces for City vehicles and Site 5 has 90 public parking spaces. The remainder of Site 2 is occupied by one of the four former Essex Street Market buildings; the former market section of the building at 78-92 Essex Street is vacant, while the storefronts on Delancey Street contain a diner and a liquor store. In addition to surface parking, Site 5 contains three buildings: a walk-up residential building at 400 Grand Street that is under the jurisdiction of HPD and also contains a ground-floor visitor center for the Lower East Side Jewish Conservancy; a three-story building that is mostly vacant except for a ground-floor shoe repair store at 402 Grand Street; and a former fire station at 185 Broome Street that houses a film prop company. Site 7 is a 365-space municipal public parking garage and would retain its current function as a municipal parking garage. Sites 8, 9, and 10 contain the other three Essex Street Market buildings, only one of which now operates as a retail market. The building at 130-144 Essex Street (on Site 8) is vacant and used for the storage of refuse generated by the market in the building on Site 9. The Essex Street Market building on Site 9 (96-124 Essex Street) is approximately 20,000 square feet, of which approximately 15,000 square feet are the public market. The market currently has 21 vendors. The building, constructed in 1939–1940 to provide an indoor retail market space for pushcart vendors, also contains retail and restaurant space on the Delancey and Rivington Street frontages. The building at 150-156 Essex Street (on Site 10) contains a health clinic run by the Community Healthcare Network.

**Table 1**
**Proposed Development Sites – Existing Conditions**

| Site No. | Block | Lot(s) | Address | Lot Area (sf) | Building Area (sf) | Residential Area (sf) | Commercial and Community Facility Area | No. Stories | Zoning |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 409 | 56 | 236 Broome Street | 21,784 | — | — | 65 public parking spaces | — | C6-1 |
| 2 | 352 | 1, 28 | 80 Essex Street, 85 Norfolk Street | 43,206 | 17,995 | — | 15,265 sf vacant; 1,300-sf diner; 1,430-sf liquor store; 90 City parking spaces | 1 | C6-1 |
| 3 | 346 | 40 | 135 Delancey Street | 40,100 | — | — | 170 public parking spaces | — | R8 |
| 4 | 346 | 40 | 155 Delancey Street | 34,400 | — | — | 125 commercial parking spaces | — | R8 |
| 5 | 346 | 40 | 400 Grand Street | 51,256 | 3 buildings: 8,400; 12,500; 5,700 | 12,500 (7 tenants) | 9,450 sf vacant; 4,200-sf movie prop co.; 450-sf non-profit cultural org.; 450-sf shoe repair; 90 public parking spaces | 2, 5, 3 | R8 |
| 6 | 347 | 71 | 178 Broome Street | 21,132 | — | — | 50 public parking spaces | — | R8 |
| 8 | 354 | 1 | 140 Essex Street | 11,163 | 11,163 | — | vacant | 1 | C4-4A |
| 9 | 353 | 44 | 116 Delancey Street | 20,365 | 20,750 | — | 15,000-sf market, 5,750 sf retail and restaurant | 2 | C4-4A, C6-2A |
| 10 | 354 | 12 | 121 Stanton Street | 6,812 | 6,812 | — | 6,812-sf health clinic | 1 | C4-4A |
| **Total** | | | | **250,218**[1] | **83,320** | **12,500** | **35,392 sf; 35,878 sf vacant; 375 public parking spaces; 215 other parking spaces** | | |
| 7[2] | 410 | 38 | 112 Ludlow Street | 22,402 | 132,750 | — | 356 public parking spaces (garage) | 5 | C4-4 |

**Notes:**
1. All numbers above are best estimates; square footages to be confirmed by survey. This total does not include the demapped sections of Suffolk and Broome Streets that would be mapped and that total approximately 22,400 square feet. It also does not include the mapped sections of Clinton and Delancey Streets that would be demapped and that total approximately 12,900 square feet.
2. Site 7—a public parking garage—would not be redeveloped under the proposed actions, but is included for informational purposes.

**Sources:** EDC; http://gis.nyc.gov/doitt/nycitymap/;http://gis.nyc.gov/dof/dtm/index.jsf; http://a810-bisweb.nyc.gov/bisweb/bispi00.jsp

## DISCRETIONARY ACTIONS SUBJECT TO CEQR AND SEQRA

The proposed mixed-use development would require multiple City approvals. Some of these are discretionary actions requiring review under the CEQR process. The Office of the Deputy Mayor for Economic Development (ODMED) will be the lead agency for CEQR. The potential discretionary actions that would be required for the proposed project include:

- Disposition of Sites 1–6 and 8–10 by the City of New York for the purpose of subsequent development;
- Disposition of a project site or sites as Urban Development Action Areas and approval of the proposed project(s) as UDAAP(s);
- Special permit from CPC pursuant to Section 74-74 of the Zoning Resolution (ZR) of the City of New York for an LSGD, applicable to Sites 1-6;
- Special permit from CPC pursuant to Section 74-743 for bulk modifications within a LSGD;
- Special permit from CPC pursuant to Section 74-745 for location of accessory parking spaces and loading berths within a LSGD;

- Mapping of the demapped section of Suffolk Street between Grand and Delancey Streets and the demapped section of Broome Street between Norfolk and Clinton Streets as new streets through the project site (see Figure 2);
- Demapping of sections of Delancey Street between Norfolk and Clinton Streets and of Clinton Street between Delancey and Grand Streets that were previously mapped to widen Delancey and Clinton Streets, thereby making the mapped street widths consistent within the project site (see Figure 2);
- Zoning map amendment for a C2-5 commercial overlay on Sites 3, 4, 5, and 6;
- Zoning text amendment to modify commercial uses for the C2-5 zoning within the boundaries of this LSGD;
- Special permits from CPC pursuant to ZR Sections 13-562 and 74-52 for public parking facilities; and
- Mayoral and Borough Board approval of the business terms with the developer or developers to be selected pursuant to a Request for Proposals, pursuant to New York Charter Section 384(b)(4).

In addition, NYCEDC and HPD will coordinate with the Metropolitan Transportation Authority/New York City Transit (NYCT) regarding subway easement areas. Construction financing for the residential buildings may come from a variety of private and public (local, state, and federal sources), including, but not limited to funding from HPD, the New York City Housing Development Corporation, and the United States Department of Housing and Urban Development. In addition, potential construction funding may be provided by New York State Homes & Community Renewal (HCR) and the New York State Housing Finance Agency (HFA).

## SITE PLAN, URBAN DESIGN, AND SUSTAINABILITY CONSIDERATIONS

As currently contemplated, the program for the proposed project would include up to approximately 1.5 million square feet of mixed-use residential and commercial development with approximately 60 percent of the floor area allocated to residential use and approximately 40 percent allocated to non-residential use (i.e., retail, other commercial, and community facility). The proposed development would also allow for approximately 350 parking spaces.

The proposed development includes relocating the existing Essex Street Market to a new, larger facility. The new public market would be approximately 25,200 square feet and would accommodate 35 to 65 vendors (depending on the size of each stall). The larger space would create entrepreneurship opportunities for new vendors and would allow for a variety of vendor price points. The new, modern market building would address many of the physical limitations of the existing facility, as it would be energy efficient, be fully compliant with the Americans with Disabilities Act, and have improved storage capabilities, garbage handling, and climate control, as well as expand common gathering areas for public seating and market events. In addition, the new facility would be expected to have an improved internal layout and better connections with the street. The City would give existing vendors the first opportunity to relocate their business to the new market facility, when the new facility (currently identified as being located on Site 2) is complete and ready for occupancy.

The urban design for the proposed development builds on the framework laid out in the CB3 guidelines. The preliminary concept for the massing incorporates elements from the building forms of the surrounding neighborhood that vary from low-rise walk-ups to large towers-in-the-

park. The project will incorporate a connected street grid, and all new buildings will have retail and residential entrances on multiple sides to create ground-floor activity and provide necessary access. The buildings will incorporate urban streetwalls to activate the pedestrian realm and setback towers permitting access to light and air. The ground-level frontages will consist of retail uses, and the development project will maximize street-level uses that support pedestrian activity throughout the development. A public open space of approximately 10,000 square feet with a mix of active and passive recreation uses would be incorporated into the development as well.

The preliminary massing of the buildings contemplates base heights of between 60 and 85 feet (6–8 stories), with varying heights above. The upper portions of all buildings will be set back at least 10 feet from Delancey, Essex, and Grand Streets, and 15 feet from any side streets. The preliminary massing includes potential towers on Sites 2 and 4 of up to 24 stories, and building heights of up to 14 stories on Sites 1, 3, 5, and 6. Sites 8, 9, and 10 would be consistent with massing requirements and maximum heights allowable under existing zoning.

The proposed land uses and massing plans are intended to be illustrative of a possible configuration of the proposed uses and the possible interactions among those proposed uses across the project site, based on a set of urban design principles and formulated for the purpose of conducting an environmental review based on a RWCDS. The eventual built configuration of uses will be subject to change based on the results of the environmental review, the results of the developer's response to the RFP, market factors, and input from stakeholders, among other things.

The City is currently in the process of considering how sustainability measures might be implemented as part of the project.

## D. FRAMEWORK FOR ENVIRONMENTAL REVIEW

The proposed actions would change the regulatory controls governing land use and development on the project sites and would allow the project sites to be developed over the long-term. The GEIS will analyze the proposed actions' potential to generate significant adverse environmental impacts as the redevelopment takes place. The GEIS will consider alternatives that would reduce or eliminate impacts identified in the technical analyses and propose mitigation for such impacts, to the extent practicable. The proposed actions would permit a range of development options; from among these, the GEIS will examine the anticipated "reasonable worst-case development scenario." The approach to the analysis framework is further discussed below.

### REASONABLE WORST-CASE DEVELOPMENT SCENARIO

The proposed actions would change the development potential of the project site, which would allow for a range of new developments. While the actual development will depend on developer proposals and future market conditions, the City has developed a maximum development envelope, or RWCDS. The RWCDS was developed by taking the maximum buildable floor area allowed under zoning (approximately 1,500,000 square feet), and assigning approximately 60 percent of the floor area ratio (FAR) for the residential program and approximately 40 percent of the FAR for the commercial program. The number of residential dwelling units was determined using a standard assumption of 1,000 square feet per unit. To the extent that actual development proposals exceed the analysis envelope of the RWCDS, they would be subject to additional environmental review as appropriate. This RWCDS will be used as a framework to assess potential impacts.

Under a reasonable worst-case development scenario, it is assumed that the proposed actions would result in approximately 900,000 square feet of residential development (comprising approximately 900 dwelling units, of which up to half would be affordable units); up to approximately 600,000 square feet of commercial space (of which some could be community facility uses); approximately 350 parking spaces; and an approximately 10,000-square-foot public open space. The commercial space would include up to approximately 195,000 square feet of ground-floor retail, an approximately 25,200-square-foot public market, an approximately 105,000-square-foot hotel, and approximately 274,800 square feet of non-specific commercial uses. See **Table 2** and Figure 1. Note that the site-specific program shown in Table 2 is illustrative only and for analysis purposes only; and this is not meant to indicate an actual development program. Some of the 274,800 square feet currently allocated toward non-specific commercial uses could become community facility uses. Pursuant to the proposed project, the existing Essex Street Market, which is located on Site 9, would be relocated to a new, expanded public market facility.

As described above, a preliminary massing scenario for the proposed development has been defined, and it considers higher density along Delancey and Essex Streets with lesser density and lower heights on sites fronting other smaller streets. In addition, some variations to that massing scenario are being explored. Therefore, the GEIS technical impact analysis areas, where appropriate, will consider the potential impacts from floor area transfers and variations in the arrangement of bulk across the project site.

It is assumed that the proposed actions would be approved by 2012. Based on a feasible development timeline, design and construction would be undertaken in a continuous manner and is assumed to span 10 years with a full build-out anticipated to be by 2022. In the Future without the Proposed Actions, it is expected that existing uses on the projected development sites would remain. In addition, the Future without the Proposed Actions would account for other development projects that are planned to be in place by 2022 absent the proposed actions.

## Table 2
## Reasonable Worst-Case Development Scenario (RWCDS) for the Proposed Development Sites

| | | | | | Existing/No Action | | | | | | With Action | | | Increment | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site No. | Block | Lot(s) | Address | Lot Area (sf) | Building Area (sf) | Residential Area (sf) | Commercial and Community Facility Area | Parking | No. Stories | Zoning | Residential Area (sf) | Commercial and Community Facility Area | Parking | Residential Area (sf) | Commercial and Community Facility Area | Parking |
| 1 | 409 | 56 | 236 Broome Street | 21,784 | 0 | 0 | 0 | 65 public parking spaces | 0 | C6-1 | 75,000 | 55,800 | | 75,000 | 55,800 | |
| 2 | 352 | 1, 28 | 80 Essex Street, 85 Norfolk Street | 43,206 | 17,995 | 0 | 15,265 sf vacant; 1,300-sf diner; 1,430-sf liquor store | 90 City parking spaces | 1 | C6-1 | 0 | 259,400 sf, including: Retail (107,550 sf), Public Market (25,200 sf), Office (26,700 sf), and Hotel (100,000 sf) | | 0 | 241,405 | |
| 3 | 346 | 40 | 135 Delancey Street | 40,100 | 0 | 0 | 0 | 170 public parking spaces | 0 | R8 | 170,300 | 96,750 | | 170,300 | 96,750 | |
| 4 | 346 | 40 | 155 Delancey Street | 34,400 | 0 | 0 | 0 | 125 commercial parking spaces | 0 | R8 | 229,550 | 96,050 | | 229,550 | 96,050 | |
| 5 | 346 | 40 | 400 Grand Street | 51,256 | 3 buildings: 8,400; 12,500; 5,700 | 12,500 (7 tenants) | 9,450 sf vacant; 4,200-sf movie prop co.; 450-sf non-profit cultural org.; 450-sf shoe repair | 90 public parking spaces | 2, 5, 3 | R8 | 224,250 | 38,100 | | 211,750 | 23,550 | |
| 6 | 347 | 71 | 178 Broome Street | 21,132 | 0 | 0 | 0 | 50 public parking spaces | 0 | R8 | 73,600 | 19,900 | | 73,600 | 19,900 | |
| 8 | 354 | 1 | 140 Essex Street | 11,163 | 11,163 | 0 | 11,163 vacant | 0 | 1 | C4-4A | 35,900 | 8,800 | | 35,900 | -2,363 | |
| 9 | 353 | 44 | 116 Delancey Street | 20,365 | 20,750 | 0 | 15,000-sf market, 5,750 sf retail and restaurant | 0 | 2 | C4-4A, C6-2A | 70,300 | 18,900 | | 70,300 | -1,850 | |
| 10 | 354 | 12 | 121 Stanton Street | 6,812 | 6,812 | 0 | 6,812-sf health clinic | 0 | 1 | C4-4A | 21,100 | 6,300 | | 21,100 | -512 | |
| **Total** | | | | **250,218**[1] | **83,320** | **12,500** | **35,392 sf; 35,878 sf vacant** | **375 public parking spaces; 215 other parking spaces** | | | **900,000** | **600,000** | **Approx. 350 parking spaces** | **887,500** | **528,730** | **Approx. 25 public parking spaces; -215 other parking spaces** |
| 7 [2] | 410 | 38 | 112 Ludlow Street | 22,402 | 132,750 | — | 356 public parking spaces (garage) | | 5 | C4-4 | | | | | | |

**Notes:**
Table is for illustrative purposes only; it does not represent an actual development program.
1. This total does not include the demapped sections of Suffolk and Broome Streets that would be mapped and that total approximately 22,400 square feet. It also does not include the mapped sections of Clinton and Delancey Streets that would be demapped and that total approximately 11,037 square feet. With those streets, the total directly affected area under the proposed actions is approximately 283,655 square feet.
2. Site 7—a public parking garage—would not be redeveloped under the proposed actions, but is included for informational purposes.
3. See Figure 1 for location of each site.
**Sources:** EDC; http://gis.nyc.gov/doitt/nycitymap/;http://gis.nyc.gov/dof/dtm/index.jsf; http://a810-bisweb.nyc.gov/bisweb/bispi00.jsp

## E. SCOPE OF WORK

The GEIS for the Seward Park Mixed-Use Development Project will be prepared pursuant to CEQR and the *CEQR Technical Manual*. Based on City and State rules, the *CEQR Technical Manual* provides guidance for the assessment of an action's potential environmental effects and the criteria for determining impact significance. The environmental review provides a means for decision-makers 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. The Office of the Deputy Mayor for Economic Development will act as the lead agency for CEQR review.

The first step in preparing the GEIS document is the public scoping process. "Scoping," or creating the scope of work, is the process of focusing the environmental impact analysis on the key issues that are to be studied in the GEIS. The proposed scope of work for each technical area to be analyzed in the Seward Park Mixed-Use Development Project GEIS follows. Analyses will be conducted for one Build year, 2022, by which time the full build-out associated with the proposed actions is expected to be complete.

### TASK 1: PROJECT DESCRIPTION

The first chapter of the GEIS introduces the reader to the project and sets the context in which to assess impacts. The chapter contains a project identification (brief description and location of the project); the background and/or history of the project; a statement of the public purpose and need for the project; key planning considerations that have shaped the current proposal; a detailed description of the project; and discussion of the approvals required, procedures to be followed, and the role of the GEIS in the process. This chapter is the key to understanding the project and its impact, and gives the public and decision-makers a base from which to evaluate the project against both Build and No Build options.

The project description will present the planning background and rationale for the proposed rezoning actions and how they will facilitate the project. In addition, the project description will summarize the reasonable worst-case development scenario for analysis in the GEIS and present its rationale.

The section on approval procedures will explain the set of proposed discretionary actions to be taken, as well as the ULURP process that involves review by Manhattan Community Board 3, the Manhattan Borough President's office, the City Planning Commission, and the New York City Council. The role of the GEIS as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

### TASK 2: LAND USE, ZONING, AND PUBLIC POLICY

The proposed actions would directly affect the land use on nine of the 10 parcels comprising the project site. Site 7 would remain as a municipal parking garage. The land use, zoning, and public policy analysis will assess the potential impacts of the expected changes in land uses resulting from the proposed actions. The study area encompasses the region within roughly a ¼- mile radius of the project site boundaries, a distance that, based on *CEQR Technical Manual* guidelines, defines the area in which the proposed actions could reasonably be expected to create potential direct and indirect impacts (See **Figure 3**).


***** *NOTE: This Site (#7) Would not be Redeveloped Under the Proposed Actions*

Land Use Study Area
**Figure 3**

The land use assessment will include a description of existing conditions and evaluations of the future with and without the proposed actions in 2022. Subtasks for the land use, zoning, and public policy analysis include:

- Provide a detailed description of land use at the project site and throughout the project area. This task will be closely coordinated with Task 3, "Socioeconomic Conditions," which will provide an analysis of the project's effect on businesses and employment on the project site. Recent development and land use trends in the project site will be noted.
- Based on field surveys, identify, describe, and graphically portray predominant land use patterns for the balance of the ¼-mile land use study area. Based on discussions with DCP and other public or private agencies and local real estate brokers, describe recent land use trends in the study area and identify major factors influencing land use trends. Describe and map existing zoning and recent zoning actions in the study area.
- Prepare a list of future development projects in the study area that would be expected to influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area. Based on these changes, assess future conditions in land use and zoning with and without the project.
- Assess the potential land use changes in the rezoning area based on the reasonable worst-case development scenario.
- Assess impacts of the development on land use and land use trends, public policy, and zoning, resulting from the rezoning. Project impacts related to issues of compatibility with surrounding land use, the consistency with zoning and other public policy, and the effect of the project on ongoing development trends and conditions in the area will be discussed.

The project site is not located within the New York City Coastal Zone and thus would not affect or be affected by the City's Waterfront Revitalization Program and Policies. Therefore, the preparation of a Consistency Assessment Form will not be required.

## TASK 3: SOCIOECONOMIC CONDITIONS

Socioeconomic impacts can occur when a proposed project directly or indirectly changes economic activities in 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. The socioeconomic chapter will examine the effects of the proposed actions on socioeconomic conditions on the project site and in the surrounding neighborhood.

The analysis will follow the guidelines of the *CEQR Technical Manual* in assessing the proposed project's effects on socioeconomic conditions. The analysis will present sufficient information regarding the effects of the project to make a preliminary assessment 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. According to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed project would result in significant impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on a specific industry.

Additionally, the project could introduce a substantial amount of neighborhood retail, possibly leading to another area of concern: (6) indirect business displacement due to retail market saturation. Regarding this concern, the 2010 *CEQR Technical Manual* states that projects resulting in less than 200,000 square feet of local-serving or regional-serving retail on a single

development site would not typically result in socioeconomic impacts. Since the proposed project may introduce local- and regional-serving retail in excess of this 200,000-square-foot threshold, a preliminary assessment of indirect business displacement due to retail market saturation will be undertaken.

Detailed analyses will be conducted for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. The detailed assessments will be framed in the context of existing conditions and evaluations of the future with the proposed actions and the future without the proposed actions in 2022.

## TASK 4: COMMUNITY FACILITIES AND SERVICES

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the proposed actions. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. The proposed actions would not result in direct displacement of public schools, libraries, child care centers, or police or fire facilities, and analysis of direct effects on these facilities is not warranted. However, the proposed actions would directly displace a public health care facility so an analysis of the proposed actions' direct effects on health care facilities will be provided. The proposed actions would not have the potential to result in any significant adverse impacts due to indirect effects to public high schools, public libraries, police and fire services, or health care facilities, and no further analysis of indirect effects is warranted.

This chapter of the GEIS will evaluate the effects on community services due to the proposed actions, including indirect effects on public elementary and intermediate schools and publicly funded day care facilities, and direct effects on public health care facilities. The community facilities and services assessment will include a description of existing conditions, and evaluations of future conditions in 2022 with and without the proposed actions. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. Tasks will include:

- Identify public schools serving the project area. Assess conditions in terms of enrollment and utilization during the current school year, noting any specific problems with school capacity. Identify conditions that will exist in the future without the project, taking into consideration projected increases in future enrollment and plans to increase school capacity either through administrative actions on the part of the Department of Education or as a result of the construction of new school space. Assess the impacts by estimating the number of new students generated as a result of the project, relative to available capacity that may exist in the future without the project.
- Identify existing publicly funded group child care and Head Start facilities within approximately 1.5 miles of the project site and describe each facility in terms of its location, number of slots (capacity), and existing enrollment. Estimate potential additional demand for publicly funded child care facilities in the study area in the future without the project. Assess the potential effects of the additional eligible children resulting from the project by comparing conditions without and with the project.
- Identify the health care facility that would be displaced by the project, including its location, type, size, and hours of operation. Describe the population and/or area served by the facility and its capacity and approximate utilization. Determine the extent to which service may be

disrupted or precluded, and whether the elimination or disruption of service would place additional demand on other nearby facilities. If necessary, examine the potential for indirect effects on nearby facilities due to the initial direct effect. This analysis would be coordinated with the agency overseeing the affected facility, as appropriate.

## TASK 5: OPEN SPACE AND RECREATIONAL FACILITIES

The proposed actions involve the potential construction of approximately 1.5 million square feet of new mixed-use development and will exceed CEQR thresholds for a detailed open space analysis. In addition, the creation of a new publicly accessible open space within the project site is part of the RWCDS to be analyzed. Therefore, a detailed analysis of open space will be conducted. This analysis will determine whether the project will affect the quantitative and qualitative measures of open space adequacy within the ¼- and ½-mile study areas recommended for commercial and residential projects in the *CEQR Technical Manual*. Subtasks include:

- Establish the study area boundaries, specifically: a study area of ½-mile around the project site for the residential population, and a study area of ¼-mile around the project site for the worker population. All Census block groups with at least 50 percent of their area falling within these study areas will be included in the open space study areas.
- Inventory existing passive open space and recreational facilities within two study areas: ¼-mile radius from the project site and ½-mile radius from the project site. Both areas are adjusted for census tract boundaries. Describe the condition and use of existing facilities based on the inventory.
- Prepare a demographic analysis of the commercial open space study area worker and residential population, and residential population in the residential open space study area including information available from the 2010 Census.
- In conformance with *CEQR Technical Manual* methodologies, assess the adequacy of existing publicly-accessible open space facilities. Based on the inventory of facilities and worker population, calculate the open space ratio and compare to City guidelines to assess adequacy.
- Assess expected changes in future levels of open space supply and demand in the Build Year, 2022. Develop open space ratios for future conditions and compared with existing ratios to determine changes in future levels of adequacy.
- Based on the population and open space resources added by the project, assess its effects on open space supply and demand. Assess project impacts based on a comparison of open space ratios with the project and open space ratios in the future without the project.
- If the results of the impact analyses identify a potential for a significant impact, discuss potential mitigation measures.

## TASK 6: SHADOWS

The *CEQR Technical Manual* requires a shadow analysis for proposed projects that have the potential for new shadows long enough to reach an existing publicly-accessible open space, important natural feature, or historic resource with sun-sensitive features. Based on the height and bulk of the development envelope as described in the RWCDS, the proposed actions could result in new buildings that would be greater than 50 feet in height. Therefore, a screening-level analysis will be performed to identify the project's potential to have shadow impacts on light-

sensitive resources, including public open space as well as historic resources with light-sensitive features. If project-generated shadows would reach any existing open spaces, natural features, or historic resources with sun-sensitive features, a full shadows analysis would be performed for those resources. The analyses performed for this task would follow the methodology recommended in the *CEQR Technical Manual*, and focus on the relation between the proposed project's incremental shadow and any sun-sensitive landscape elements or activities.

## TASK 7: HISTORIC AND CULTURAL RESOURCES

This section of the GEIS will assess the potential of the proposed actions to affect any historic and cultural resources in and around the project site, either directly through construction activities or indirectly by altering the context in which the resources are located. 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; properties calendared for consideration as NYCLs by the New York City Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation (NYCL-eligible); properties listed on the State and National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing (S/NR-eligible), 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; National Historic Landmarks (NHLs); and potential historic resources (i.e., properties not identified by one of the programs listed above, but that appear to meet their eligibility requirements).

All four buildings of the Essex Street Market, which are located on Sites 2, 8, 9, and 10, have been determined eligible for S/NR listing. Sites 1 and 7 are located within the boundaries of the S/NR-listed Lower East Side Historic District. Consultation with LPC and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), as directed by the lead agency, will be undertaken as part of the historic and cultural resources task.

In an Environmental Review Letter dated August 16, 2011, LPC determined that there appears to be the potential for recovering remains from 19th-century occupation on Block 346, Lot 40 (Sites 3, 4, and 5), Block 347, Lot 71 (Site 6), and Block 352, Lot 28 (part of Site 2). Accordingly, LPC recommended that an archaeological documentary study be performed for those locations to clarify those initial findings and provide the threshold for the next level of review, if necessary.

The following tasks will be undertaken:

- Prepare an archaeological documentary study for Block 346, Lot 40 (Sites 3, 4, and 5), Block 347, Lot 71 (Site 6), and Block 352, Lot 28 (part of Site 2). If the documentary study determines that any of the lots have the potential to contain significant archaeological resources that may be impacted by future development, and LPC concurs, then subsequent archaeology will be completed as outlined in the *CEQR Technical Manual*. The archaeological documentary study will be summarized in the DGEIS, which will assess the potential for archaeological impacts for the future without and the future with the proposed actions.
- Within a 400-foot study area, map and briefly describe known historic resources. Longer contextual views available beyond the 400-foot area will also be considered as appropriate.

- Conduct a field survey of the study area to identify any potential historic resources that could be affected by the proposed actions. Map and briefly describe any potential historic resources.
- Qualitatively discuss any impacts on historic resources that are expected in the future without the proposed actions as a result of other expected development projects.
- Describe the proposed project and the potential impacts it would have on historic resources, including visual and contextual impacts and impacts relating to significant new shadows on sunlight-sensitive resources.
- If applicable, develop measures to avoid, minimize, or mitigate any adverse impacts on historic and cultural resources in consultation with LPC and OPRHP, as appropriate.

**TASK 8: URBAN DESIGN/VISUAL RESOURCES**

This section of the GEIS will assess changes in urban design patterns and visual resources of the study area as a result of the proposed actions. Subtasks within this section are as follows:

- Prepare a concise narrative of the project site and a surrounding 400-foot study area, as well as, consider potential longer view corridors beyond the 400-foot study area, as appropriate. The narrative will address the components of urban design as defined in the 2010 *CEQR Technical Manual*: streets, buildings, visual resources, open space, natural resources, wind, and sunlight. The narrative will be supported with the following items from the detailed analysis checklist in Section 330 of Chapter 10 in the *CEQR Technical Manual*: photographs; birdseye views; area maps including those showing existing view corridors and access to visual resources; and information on building massing, floor area, lot and tower coverage, building heights, open area, building setbacks, and average floor plate sizes, etc.
- Based on planned and proposed development projects and using the information gathered above for existing conditions, assess whether and how urban design conditions are expected to change in the future without the project. This will include other planned projects in the area.
- Present program information for the proposed project, including site plans, zoning calculations, floor area calculations, lot and tower coverage, building heights and setbacks, and street wall heights, as such information is developed and becomes available. Program information may also include, as appropriate, sketches or renderings of the future with the project condition for existing views, elevations along street fronts, detailed landscape plans, and sections through street and other pedestrian areas, and proposed program and use distribution.
- Assess how the proposed project would affect urban design relative to the future without the project condition, describing the project in terms of how it would affect the area's defining elements of urban design, and determine the significance of those changes.

**TASK 9: HAZARDOUS MATERIALS**

This chapter will summarize updated results of the project site's Phase I Environmental Site Assessment, any Phase II report, if available, and any other relevant studies.

Based on the findings of the Phase I Environmental Site Assessment, a protocol or protocols for a program of subsurface testing (soil and groundwater) in the areas to be disturbed by the project would be prepared by the developer(s) to be selected pursuant to the RFP and submitted for

review and approval by the New York City Department of Environmental Protection (DEP) prior to start of any work. The findings of this testing program or programs would be used to determine the scope of any Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) that would be implemented during construction of the development sites. The RAP(s) would include measures to both remediate any conditions identified by the subsurface testing and to properly address any unexpectedly encountered hazardous materials. The CHASP(s) would include necessary measures to protect construction workers and the community including, for example, procedures for dust control and management of surplus excavated soil. A mechanism to ensure that further investigative and/or remedial activities, as well as health and safety measures, prior to and/or during construction will be required under the City's contract of sale with the private entity or entities selected to develop the project site.

The hazardous materials assessment will be conducted according to the following tasks:

- The land use history of the project site will be described based on an examination of historic maps, atlases, and other historical records.
- The New York State Department of Environmental Conservation and New York City's Fire and Building Department records will be examined for records of underground storage tanks.
- Records of other areas of environmental concern—including hazardous waste disposal sites, hazardous waste generators or treatment facilities, and hazardous substance releases—will be obtained through a computer database for all locations within a ½ mile of the site.
- Available information on subsurface conditions (geology and hydrogeology), including any borings performed on or near the site, will be obtained and reviewed.
- All available prior reports of soil or groundwater testing on or adjacent to the property will be reviewed.
- The project site and the surrounding study area will be inspected for any evidence of contamination, including the presence of drums or tanks, stained soils, stressed vegetation, and illegally dumped or stored material.
- The potential for contamination of soil and groundwater in the rezoning area, and the need for any site testing, will be assessed based on land use history, examination of tank records, and current site conditions.
- The results of the assessment will be summarized for inclusion in the GEIS.
- If there is the potential for significant adverse impacts under the proposed project, the need to perform soil and/or groundwater sampling, and remediation, as necessary, will be described in the GEIS.
- Remedial measures for sites under HPD jurisdiction will be required through a Land Disposition Agreement (LDA) or other legally binding loan documents.

**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.

A water supply and demand analysis would not be warranted for the proposed project, because the estimated water demand under the project would be 386,328 gallons per day, below the *CEQR Technical Manual* threshold of one million gallons per day. Additionally, the proposed project would not be located in an area that experiences low water pressure.

A preliminary wastewater and stormwater infrastructure analysis, however, would be warranted because the proposed development would exceed the *CEQR Technical Manual* threshold of 250,000 square feet of commercial development in Manhattan. This preliminary analysis would include, among other elements, the following: description of the existing wastewater and stormwater conveyance systems and the affected wastewater treatment plant (WWTP) in the study area; determination of the existing sanitary flows, Future No Action sanitary flows, and With-Action sanitary flows; consideration and analysis of incremental flows from the project on the capacity of the affected WWTP; description of existing surface types, Future No Action surface types and With-Action surface types; determination of volume and peak discharge rates of stormwater expected from the site under existing, Future No Action and With Action conditions; and completion of the DEP flow calculations matrix. Based on the results of the preliminary analysis, a detailed assessment may be warranted and/or mitigation may be required if significant impacts are identified. A description and assessment of potential mitigation strategies would be included in this section of the GEIS.

**TASK 11: SOLID WASTE AND SANITATION SERVICES**

According to the 2010 *CEQR Technical Manual*, actions involving construction of housing or other development generally do not require evaluation for solid waste impacts unless they are unusually large. Based on Citywide solid waste generation rates identified in Table 14-1 of the *CEQR Technical Manual*, the proposed development would generate slightly more than 50 tons per week of solid waste. Therefore, the GEIS will include an analysis of potential effects on solid waste and sanitation services. In addition, the GEIS will include a discussion on the proposed project's waste management features such as any plans for the set out of refuse and recyclables for collection.

**TASK 12: ENERGY**

According to the 2010 *CEQR Technical Manual*, because all new structures that require heating and cooling are subject to the New York State Energy Conservation Code, which reflects State and City energy policies to conserve energy, actions resulting in new construction would not create adverse energy impacts, and as such would not require a detailed energy assessment. The GEIS will include a qualitative assessment of the project's energy needs, as appropriate. Please also see Task 15, "Greenhouse Gas Emissions."

**TASK 13: TRANSPORTATION**

The primary objective of transportation (traffic, transit and pedestrian) analyses is to assess whether a project is expected to have significant impacts on the street network, parking, transit and pedestrian facilities, and to provide appropriate mitigation measures to address such impacts. Traffic and transportation studies will be a critical part of the GEIS, and the analysis

will be conducted in close consultation with NYCDOT. As per the criteria established in the 2010 *CEQR Technical Manual*, the GEIS transportation studies will include the following tasks:

*TRAVEL DEMAND AND SCREENING ASSESSMENTS*

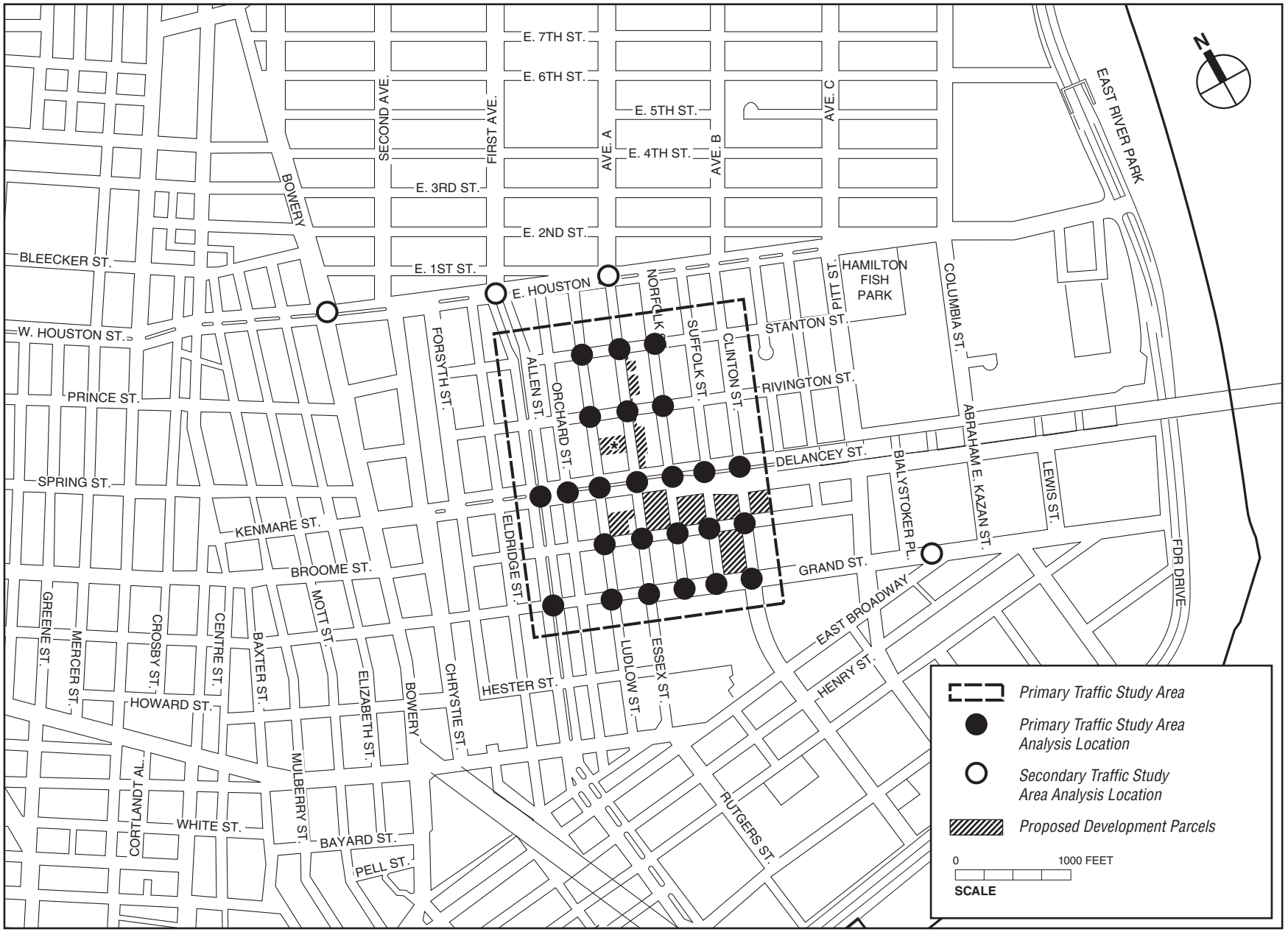
- Level 1 and Level 2 screenings will be prepared based on methodologies described in the 2010 *CEQR Technical Manual*. Travel demand estimates for the proposed project will be prepared based on trip generation, modal split, vehicle occupancy assumptions, etc. from the *CEQR Technical Manual*, previously completed EISs and EASs, and other relevant standard industry-accepted sources.
- Prepare vehicle trip assignments for the proposed project. This will involve identifying appropriate intersections to be analyzed for potential traffic impacts, allocation of transit trips to identify the subway station elements/bus routes to be analyzed, and assignment of pedestrian trips by mode, use, and location, taking into consideration routings to and from transit and parking facilities.
- Prepare a Travel Demand Factors (TDF) Memorandum summarizing the travel demand factors, trip generation results and trip assignments. Submit the TDF Memorandum to NYCDOT for review and approval. The information contained in the TDF Memorandum will be used as the basis for establishing various transportation analyses parameters including the selection of analysis locations in the traffic, transit and pedestrian study areas and the volume of trips expected to be generated by the proposed project.

*TRAFFIC, TRANSIT AND PEDESTRIAN STUDY AREAS*

- Define a traffic study area consisting of intersections to be analyzed within the proposed action area (i.e., the primary traffic study area) and along major routes leading to and from the area, i.e., the secondary traffic study area (see **Figure 4** for the traffic study area and the 28 intersections proposed for detailed analysis). Based on the review of TDF Memorandum by NYCDOT, additional analysis locations may be required in the study area.
- Select subway station elements and bus routes for transit analyses. The subway analysis will focus on the BMT Delancey-Essex Street station, and the bus analysis will evaluate MTA bus service within both the primary and potential secondary study areas.
- Define a pedestrian study area consisting of critical crosswalk, sidewalk and corner elements to be analyzed in the vicinity of the project site. Based on the review of TDF Memorandum by NYCDOT, additional pedestrian elements may be required for analysis in the study area.

*DATA COLLECTION AND REDUCTION*

- Conduct traffic data collection and reduction. The traffic count program will include current manual intersection turning movement counts at the study area intersections. Vehicle classification counts, automatic traffic recorder (ATR) counts, and an inventory of existing roadway geometry and traffic control will be performed. Travel time and delay runs will be conducted along key routes in conjunction with the traffic volume counts to support air quality mobile source analyses. Official traffic signal timing and phasing will be obtained from NYCDOT for incorporation into the capacity and level of service analyses.
- Conduct transit-related pedestrian counts at critical elements of the subway stations and bus routes. Obtain peak bus load data from NYCT for bus transit analysis.




***** *NOTE: This Site (#7) Would not be Redeveloped Under the Proposed Actions*

Traffic Study Area
**Figure 4**

- Conduct pedestrian counts at critical crosswalk, sidewalk and corner elements along key routes in conjunction with the traffic volume counts to establish the baseline for pedestrian analysis.
- Inventory physical data at each of the analysis intersections needed for traffic and pedestrian analyses, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, typical parking regulations, signal phasing and timing data, location of street furniture and sidewalk/crosswalk widths.

*CAPACITY ANALYSES*

- Determine existing traffic and pedestrian operating characteristics at each analysis location including capacities, volume-to-capacity (v/c) ratios, average delays, and levels of service (LOS) using the 2000 Highway Capacity Manual procedures. Allowances for any on-going construction or temporary road/sidewalk closures will be made. Existing capacities and LOS along or through critical elements of the subway stations will be determined in accordance with 2010 *CEQR Technical Manual* and/or NYCT design criteria.
- Based on available sources, U.S. Census data, and standard references, estimate the travel demand characteristics of the existing uses on the project site. This will include daily and hourly person trips, and a modal distribution to estimate trips by auto, taxi, and other modes (refer to discussion of transit and pedestrians for more discussion of other modes).
- Compute future No Action traffic, transit and pedestrian volumes (year 2022) based on the *CEQR Technical Manual* recommended background growth (0.25 percent per year for the first five years and half of that for subsequent years) plus trips expected to be generated by major developments proposed elsewhere in or just outside the traffic study area. Intersection volume-to-capacity (v/c) ratios, delays, and LOS will also be determined. Consult with NYCDOT to determine whether any changes in traffic plans are envisioned by the project's planned Build year.
- Using the same transportation planning assumptions as for No Action conditions, estimate the travel demand characteristics of the proposed project (the net change in uses).
- Determine the volume of vehicle, transit and pedestrian trips expected to be generated by the proposed project and assign those trips in each analysis period to the approach and departure routes likely to be used. Prepare traffic and pedestrian volume networks for the future condition under the proposed project for each analysis period.
- Determine the resulting v/c ratios, delays, and LOS for the future with the proposed project (year 2022) and identify any significant traffic, transit and pedestrian impacts based on the guidelines of 2010 *CEQR Technical Manual*.
- If significant impacts are identified, develop and evaluate proposed mitigation measures, as necessary.

*VEHICLE/PEDESTRIAN SAFETY ASSESSMENT*

- Assess vehicle/pedestrian safety conditions. Obtain the most recent three year accident data from the New York State Department of Transportation (NYSDOT) for the intersections in the vicinity of the project site. Summarize the accident data and determine if any of the intersections are classified as a high-accident location based on the 2010 CEQR criteria. If high accident locations are identified, recommend mitigation/improvement measures to alleviate the safety impacts.

- Determine whether the proposed project has the potential to adversely affect vehicular, bicycle, or pedestrian safety at the analysis locations. If such locations are identified, mitigation or improvement measures will be identified in coordination with NYCDOT and NYCT.

*PARKING*

- Conduct parking inventories in accordance with 2010 CEQR criteria to determine parking supply. On-street and off-street parking inventories will be performed within a ¼-mile radius of the project site. This will include: obtaining on-street parking regulations; locating and mapping existing off-street parking lots and garages; and determining occupancies and capacities for both on-street and off-street parking on a typical weekday and Saturday or Sunday (whichever is selected as the weekend analysis day).
- Assess the location and concentration of any proposed parking facility and its utilization rates. Future No Build parking supply and demand estimates will be based on background growth rates and any changes due to nearby development-related projects.
- Estimate future Build parking demand based on modal split and vehicle occupancy data. Impact assessment will focus on adequacy of parking, location of access/egress points, means of controlling/directing traffic to appropriate parking locations, and interface operations between parking driveways and the surrounding street system.

**TASK 14: AIR QUALITY**

The air quality studies for the proposed project will include both mobile and stationary source analyses. The mobile source air quality impact analysis will address two distinct issues:

- The effect traffic-generated emissions will have on pollutant levels (i.e., carbon monoxide concentrations) at locations within the adjacent study area; and
- The project's consistency with the applicable State Implementation Plan for the area.

Using computerized dispersion modeling techniques, the effects of project-generated traffic on CO and PM ($PM_{10}$ and $PM_{2.5}$) levels at critical intersection locations will be determined. In addition, the impact of the proposed parking facilities on air quality will be analyzed, and the results from that analysis will be combined with the intersection analyses, where applicable.

The stationary source air quality impact analysis will determine the effects of emissions from any proposed heating, ventilating, and air conditioning (HVAC) systems on pollutant levels (i.e., sulfur dioxide, particulate and/or nitrogen dioxide concentrations).

The GEIS studies will include the following subtasks:

*Mobile Source Analyses*

- Gather existing air quality data. Collect and summarize 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.
- Determine receptor locations for the microscale analysis. Select critical intersection locations in the study area, and outside the study area, based on data obtained from the proposed project's traffic analysis. At each intersection, multiple receptor sites will be analyzed in accordance with CEQR guidelines.

- Select dispersion model. At each of the receptor sites, identify the appropriate dispersion model to be used in the microscale analyses. It is anticipated that the CAL3QHC screening dispersion model (Version 2) will be used for the CO microscale analysis. The refined CAL3QHCR intersection model will be used to predict the maximum change in $PM_{2.5}$ concentrations.
- Select emission calculation methodology and "worst-case" meteorological conditions. Vehicular cruise and idle emissions for the dispersion modeling will be computed using EPA's MOBILE6.2 model, or the latest approved emission model. Conservative meteorological conditions to be assumed in the CAL3QHC dispersion modeling are a 1 meter per second wind speed, Class D stability and a 0.70 persistence factor. In addition, the *CEQR Technical Manual* recommended winter temperature of 50 degrees Fahrenheit for the Borough of Manhattan will be used as input to the model. For the CALQHCR analysis, five years of meteorological data from LaGuardia Airport and concurrent upper air data from Brookhaven, NY, will be used for the simulation program.
- At each mobile source microscale receptor site, calculate maximum 1- and 8-hour CO concentrations for existing conditions, the future conditions without the proposed project and the future conditions with the proposed project. 24-Hour and annual average $PM_{2.5}$ concentrations will be determined for the future conditions without the proposed project and the future conditions with the proposed project. Concentrations will be determined for up to three peak periods. No field monitoring will be included as part of these analyses.
- Assess the potential CO impacts associated with proposed parking facilities. Information on the conceptual design of the parking facilities will be employed to determine potential off-site impacts from emissions. Cumulative impacts from on-street sources and emissions from the proposed parking facilities will be calculated, where appropriate.
- Compare existing and future levels with standards. Future pollutant levels with and without the proposed project will be compared with the CO National Ambient Air Quality Standards (NAAQS), the City's CO *de minimis* criteria and $PM_{2.5}$ interim guidance criteria to determine the impacts of the proposed project.
- Evaluate potential impacts of 1-hour $NO_2$ concentrations from mobile sources based on applicable CEQR guidance and/or consultation with DEP. If the number of project-generated trips exceeds screening threshold(s), perform a microscale analysis at affected receptor locations following available guidance.
- Determine the consistency of the proposed project with the strategies contained in the SIP for the area. At any receptor sites where violations of standards occur, analyses would be performed to determine what mitigation measures would be required to attain standards.
- Mitigation. Examine mitigation measures, as necessary.

*Stationary Source Analysis*

- Perform a stationary source analysis using the AERMOD model to determine the potential impacts from the proposed project. For this analysis, five recent years of meteorological data from LaGuardia Airport and concurrent upper air data will be utilized for the simulation program. Cumulative concentrations of nitrogen dioxide, sulfur dioxide, and particulate matter will be determined at off-site receptor sites, as well on project receptors. Predicted values will be compared with national and State ambient air quality standards and other relevant standards, and the City's interim guidance criteria for $PM_{2.5}$. In the event that

violations of standards are predicted, examine design measures to reduce pollutant levels to within standards.

## TASK 15: GREENHOUSE GAS EMISSIONS

Because the proposed project exceeds the City's threshold of 350,000 square feet of development, a Greenhouse Gas Emissions (GHG) consistency assessment is appropriate. 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 performed. Emissions will be estimated for the analysis years 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 (GWP). Construction-related emission throughout the duration of construction will be quantified if the extent and duration of construction or the expected use of materials is found to be potentially significant. Relevant measures to reduce energy consumption and GHG emissions will be discussed, and will be included in the emissions estimates to the extent practicable.

The GHG analysis will consist of the following subtasks:

*EMISSIONS ESTIMATES*

Direct Operations Emissions—Emissions from on-site boilers used for heat and hot water and on-site electricity generation, if any, would be quantified. Emissions would be based on available project specific information on the expected energy and fuel use or the carbon intensity factors specified in the *CEQR Technical Manual*.

Indirect Operations Emissions—Emissions associated with purchased electricity and/or steam generated off-site and consumed on-site during the project's operation will be estimated.

Indirect Operations Mobile Source Emissions—Emissions from vehicle trips to or from the project site will be quantified using trip distances and vehicular emission factors provided in the *CEQR Technical Manual*.

Construction Emissions—Emissions from construction engines and emissions associated with the extraction and production of construction materials will be qualitatively discussed, and quantified if deemed potentially significant. Opportunities for reducing GHG emissions associated with construction will be considered.

*ASSESSMENT OF CONSISTENCY WITH THE GHG REDUCTION GOAL*

To determine the consistency with the City's overall GHG reduction goal, consistency with the following City's goals will be assessed as relevant to the proposed project, addressing the project's carbon intensity based upon its density, fuel choices, geographic setting, avoided GHG emissions, and building energy efficiency. The City's goals include improved building energy efficiency, use of clean power, transit-oriented development and sustainable transportation, and the reduction of construction-associated emissions.

This section will outline potential measures that could reduce energy use and GHG emissions associated with the proposed project, and will identify the measures that would be implemented as part of the proposed project, and measures still under consideration. To the extent that information is available, the potential of these measures to reduce GHG emissions will be discussed. Overall, the project design, location, and incorporated measures relevant to GHG emissions will be assessed for consistency with the City's GHG reduction goal.

## TASK 16: NOISE

The noise analysis will examine impacts of ambient noise sources (e.g., the Williamsburg Bridge traffic) on the proposed residential uses and the impacts of project-generated traffic on noise-sensitive land uses nearby. This work will include noise monitoring to determine existing ambient noise levels. As described above under "Transportation," based on preliminary trip generation estimates it is not anticipated that the proposed project would generate a substantial amount of new vehicle traffic. Thus it is not anticipated that project-generated traffic would be likely to result in significant noise impacts (i.e., a doubling of Noise Passenger Car Equivalents). For CEQR purposes, it is assumed that a detailed analysis of the proposed project's mechanical equipment will not be required, because any HVAC/R equipment would be designed to meet applicable regulations. Consequently, the noise analysis will examine existing noise levels in the project area and the window/wall attenuation that would be required to provide acceptable interior noise levels at project buildings. The subtasks are as follows:

- Select appropriate noise descriptors. Based upon CEQR criteria for publically accessible open spaces, the noise analysis would examine the 1-hour equivalent ($L_{eq(1)}$) and the $L_{10}$ noise levels.
- Select receptor locations. Receptor sites analyzed will include locations where high existing ambient noise levels could adversely affect new residential and other sensitive uses associated with the project.
- Determine existing noise levels. At each of the receptor sites identified above, 20-minute measurements would be performed during typical weekday AM, midday, and PM peak periods as well as a late-night period. Hourly $L_{eq}$, $L_{1,}$ $L_{10}$, $L_{50}$, and $L_{90}$ values will be recorded. Depending on site access and security, a continuous 24-hour measurement at one site may be performed in lieu of the 20-minute measurements.
- Determine amount of building attenuation required. The level of building attenuation necessary to satisfy CEQR and United States Department of Housing and Urban Development (HUD) requirements is a function of the exterior noise levels, and will be determined. Measured values will be compared to appropriate standards and guideline levels. As necessary, general noise attenuation measures needed for project Buildings to achieve compliance with standards and guideline levels will be recommended.

## TASK 17: PUBLIC HEALTH

If the project results in potential unmitigated environmental impacts with respect to hazardous materials, air quality, or noise, the GEIS will assess and determine if there would be any resulting public health impacts as defined by the 2010 *CEQR Technical Manual*.

## TASK 18: NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise, etc. Most of these elements will already be covered in other GEIS sections but salient points from those analyses will be summarized. Subtasks will include:

- Drawing on other EIS sections, describe the predominant factors that contribute to defining the character of the neighborhood.

- Based on planned development projects, public policy initiatives, and planned public improvements, summarize changes that can be expected in the character of the neighborhood in the future without the project.
- The project's impacts on neighborhood character will be assessed and summarized.

**TASK 19: CONSTRUCTION IMPACTS**

The GEIS will provide a description of the likely construction schedule for development at the project site and an estimate of the related construction activity. A conceptual schedule for each construction task (e.g., demolition, excavation etc.), staging/logistics plans, and estimates of worker/truck trips and types of equipment to be used during each phase of the construction activities will be developed. Because the development parcels are surrounded by narrow streets and sidewalks and are situated proximate to the Williamsburg Bridge, a detailed discussion of the construction sequencing and logistics of the various sites will be necessary to provide a clear depiction of how vehicular and pedestrian traffic circulation could be affected and to determine what emission and noise protection measures can be put in place.

For the purposes of assessing potential impacts from construction activities, a construction scheme will be formulated focusing on construction stages, likely staging areas, placement of equipment, and numbers of workers and trucks. This information, along with hours of work, location and schedule of sidewalk/lane closures, and infrastructure needs, will be used to determine the appropriate level of assessment that would be required to assess the potential for construction impacts. The GEIS analysis will focus on the following technical areas:

- *Historic and Cultural Resources*. In coordination with the historic and cultural resources task, this assessment will consider any potential construction-period impacts on historic and cultural resources.
- *Transportation Systems*. This assessment will consider construction worker parking strategies, losses in lanes, sidewalks, and other transportation services during the various phases of construction, and the increase in vehicle trips from construction workers and trucks. A worst-case peak construction year will be selected for the assessment of potential transportation-related construction impacts and determination of likely required mitigation measures. For this peak construction year, a construction No Build condition will be developed as the baseline against which potential construction impacts can be evaluated. The impact assessment will incorporate construction-generated trips and those from project components that would have been completed and operational during peak construction. Construction of the various project components would incorporate proper maintenance and protection of traffic (MPT) in conformance with NYCDOT requirements. These requirements are expected to limit roadway disruptions to curb-lane closures and maintain pedestrian flow and transit access. A detailed construction traffic analysis will be performed for up to eight study area intersections during weekday construction peak hours to address effects from construction worker vehicles and trucks to determine potential construction-related impacts. The number of intersections selected for quantitative analyses are typical for other New York City EISs but will be finalized (or modified) based on Level 1 and 2 screening for construction traffic once construction details are available. Issues concerning construction worker parking and truck delivery staging will also be addressed. For transit and pedestrians, because trip-making of construction workers would primarily occur outside of area peak hours, a discussion of the trip projections and a qualitative assessment of potential impacts will be prepared.

- *Air Quality*. A quantitative (i.e., model predicted concentrations) air quality analysis will be conducted to determine the potential for air quality impacts due to on-site construction activities and project-generated traffic (mobile sources) on local roadways. The mobile source analysis will be performed for nearby roadway intersections using information provided in the traffic analysis. If traffic volumes exceed the screening thresholds defined in the 2010 *CEQR Technical Manual*, a detailed dispersion analysis will be prepared. The pollutants of concern include CO and PM. A dispersion analysis of onsite construction activities will also be performed to determine the potential for air quality impacts on sensitive offsite receptors. Air pollutant sources would include combustion exhaust associated with non-road engines (e.g., cranes, excavators) and on-road engines operating on-site, as well as on-site activities that generate fugitive dust (e.g., excavation, demolition). The pollutants of concern include CO, PM, and nitrogen dioxide ($N0_2$). Since ultra-low-sulfur diesel (ULSD) would be used for all diesel engines in the construction of the proposed project, sulfur oxides (SOx) emitted from those construction activities will be negligible. The ambient concentrations of each pollutant (for both mobile and on-site analyses) will be determined for peak construction periods based on an emissions profile for each phase of work. The potential for significant impacts will be determined by a comparison of model predicted total concentrations to the NAAQS, and by comparison of the predicted increase in concentrations to applicable CEQR thresholds. The air quality analysis will also include a discussion of strategies to reduce project related air pollutant emissions associated with construction activities and potential mitigation measures that can be applied during the construction period.
- *Noise*. A quantified analysis will be prepared that will examine potential noise impacts due to construction-related stationary and mobile sources. Noise-sensitive receptor locations (both at-grade and elevated), including residences, schools, places of worship, open spaces, and other noise-sensitive land uses, near the project sites and created by the proposed project will be selected for analysis. Existing noise levels will be determined by noise measurements performed at at-grade receptor locations, and by use of a combination of measurements and mathematical models for elevated receptor locations. One representative worst-case time period (i.e. day) in each year of construction will be selected for analysis. During each analysis time period, noise levels due to construction activities at each sensitive receptor will be predicted. Noise levels with project-related construction activities will be compared to No Build noise levels to determine project impacts. Based on the criteria contained in the 2010 *CEQR Technical Manual*, a change of 3 dBA or more for two or more consecutive years will be considered a significant noise impact. 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.
- *Vibration*. 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 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. Vibration mitigation measures may include less powerful equipment, alternate equipment, alternative construction methods, a vibration monitoring program, or a combination thereof.

- *Other Technical Areas*. As appropriate, other areas of environmental assessment will be discussed for potential construction-related impacts.

**TASK 20: ALTERNATIVES**

The purpose of an alternatives section in a GEIS is to examine development options that would reduce or eliminate project-related impacts while substantively meeting the goals and objectives of the proposed actions. The specific alternatives to be analyzed will include a No Build alternative, which describes the conditions that would exist if the proposed actions were not implemented and a No Unmitigated Impact alternative, which assesses a change in density or program design in order to avoid the potential for any unmitigated significant adverse impacts that may be associated with the proposed project. In addition, the GEIS will also consider an alternative that considers a mixed-use program that is similar to the proposed project but retains the existing Essex Street Market in its current location on Site 9. Additional alternatives and variations of the project may be identified during the scoping process or be based on any significant adverse impacts identified in the GEIS. The analysis of each alternative will be qualitative, except where impacts of the project have been identified.

**TASK 21: MITIGATION**

Where significant project impacts have been identified in Tasks 2–18, this section will describe the measures to mitigate those impacts, develop these measures, and coordinate with the responsible City/State agency, as appropriate. Where impacts cannot be mitigated, they will be identified as unavoidable adverse impacts.

**TASK 22: SUMMARY CHAPTERS**

Several summary chapters will be prepared, focusing on various aspects of the GEIS, as set forth in the regulations and the *CEQR Technical Manual*. They are as follows:

1. *Executive Summary*. Once the GEIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will utilize relevant material from the body of the GEIS to describe the proposed project, its environmental impacts, measures to mitigate those impacts, and alternatives to the proposed actions.
2. *Unavoidable Adverse Impacts*. Those impacts, if any, that could not be avoided and could not be practicably mitigated, will be listed in this chapter.
3. *Growth-Inducing Aspects of the Proposed Project*. This chapter will focus on whether the proposed project has the potential to induce new development within the surrounding area.
4. *Irreversible and Irretrievable Commitments of Resources*. This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed if the project is built.

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