625 Fulton Street Rezoning

CEQR No. 19DCP107K

Lead Agency:
New York City Planning Commission

Prepared For:
625 FULTON LLC

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December 10, 2018

625 Fulton Street Rezoning

Draft Scope of Work for an Environmental Impact Statement

CEQR No. 19DCP107K

Table of Contents

625 FULTON STREET REZONING

DRAFT
SCOPE OF WORK FOR A DRAFT ENVIRONMENTAL IMPACT STATEMENT

CEQR NO. 19DCP107K

December 10, 2018

A. INTRODUCTION

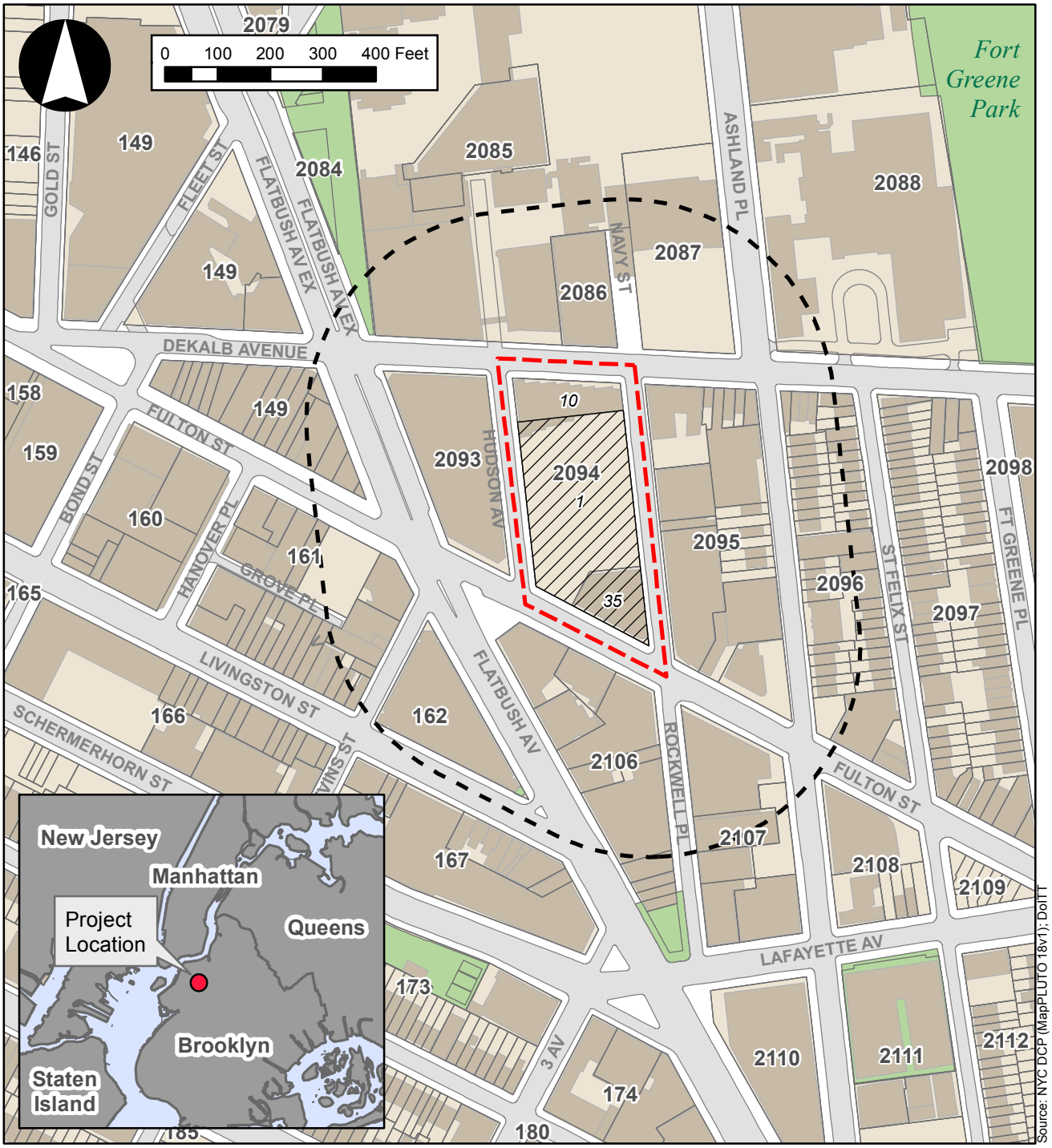
This Draft Scope of Work (Draft Scope) outlines the technical areas to be analyzed in the preparation of the Draft Environmental Impact Statement (DEIS) for the 625 Fulton Street Rezoning project in the Downtown Brooklyn neighborhood of Brooklyn Community District (CD) 2. The Project Area, as defined below, is generally bounded by Fulton Street to the south, Hudson Avenue to the west, DeKalb Avenue to the north, and Rockwell Place to the east, (see **Figure 1**), and contains 88,898 square feet (sf) (2.04 acres) of lot area. The Project Area consists of a single zoning lot and includes Lots 1 and 35 (the Applicant-owned "Development Site"), as well as Lot 10, and is within a C6-4 zoning district in the Special Downtown Brooklyn (DB) District. The Development Site has a combined lot area of approximately 75,270 sf (1.73 acres).

The Applicant, 625 Fulton LLC, seeks the following discretionary actions in connection with the Proposed Project: (1) a zoning map amendment to rezone the Project Area from a C6-4 district to a C6-9 district within the Special Downtown Brooklyn (DB) District; (2) a zoning text amendment to add provisions to the Special Downtown Brooklyn District to allow by Special Permit: (a) a maximum FAR in certain C6-9 (DB) districts of up to 20.0 and, if the zoning lot includes public school uses up to 21.0; and (b) modifications of the underlying bulk and loading regulations in such C6-9 (DB) districts, provided that the site and proposed development meets certain conditions; and (3) a Special Permit pursuant to the special permit created by the zoning text amendment to allow the Applicant to construct the Proposed Project at 21.0 FAR with a public school use and with modifications of underlying bulk and loading regulations in accordance with that provision (collectively, the "Proposed Actions").

The Proposed Actions would facilitate the construction of a 1,833,706 gross square foot ("gsf") mixed-use development (the "Proposed Project"). The Proposed Project would include 739,000 gsf of commercial office space (a portion of which may include office space and similar support space for non-profit cultural organizations), 50,547 gsf of commercial retail space, a 640-seat (up to 82,500 gsf) public elementary school, and 902 dwelling units (DUs) (up to 843,346 gsf) (the Proposed Project will satisfy the requirements of the R10 Inclusionary Housing program, and the EIS will analyze up to 25 percent of residential units as affordable). The Proposed Project would also include up to approximately 350 below-grade accessory parking spaces on two sub-cellar levels (up to 115,903 gsf) and a total of 0.25 acres (10,913 sf) of outdoor publicly accessible open space, and a 2,410-sf enclosed publicly accessible area. Construction of the Proposed Project is expected to begin in 2020 with all components complete and fully operational by 2023.

This document provides a description of the Proposed Actions and associated reasonable worst case development scenario (RWCDS), and includes a description of the analyses and methodologies to be used for all technical areas to be analyzed in the DEIS.

Project Location



Legend

- Development Site
- Project Area
- 400-ft Study Area
- Existing Buildings
- Open Space
- 2094 Tax Block
- 1 Tax Lot

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

Required Approvals

The Proposed Actions include discretionary actions that are subject to review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, and City Environmental Quality Review (CEQR) process. The anticipated discretionary actions include:

- a zoning map amendment (Zoning Sectional Map 16c) to rezone the Project Area from a C6-4 (DB) district to a C6-9 (DB) district;
- a zoning text amendment to add provisions to the Special Downtown Brooklyn (DB) District to allow by Special Permit: (1) a maximum FAR in certain C6-9 (DB) districts of up to 20.0 and, if the zoning lot includes public school uses, up to 21.0; and (2) modifications of the underlying bulk and loading regulations in certain C6-9 (DB) districts; and,
- a Special Permit pursuant to the special permit created by the zoning text amendment (which will be created as part of the Proposed Actions) to facilitate the construction of the Proposed Project (the "Special Permit").

The Proposed Project will also be subject to New York City School Construction Authority (SCA) requirements and approval in order to construct a public elementary school on the Development Site; including SCA site selection for the school and site plan review by the Mayor and City Council pursuant to the requirements of the New York City School Construction Authority Act. Other potential land use approvals may be applicable in order to accommodate the school, if determined necessary. As SCA site selection approval is considered a discretionary action, it will be subject to CEQR. As such, the EIS will serve as an environmental review document for the SCA discretionary action.

City Environmental Quality Review (CEQR) and Scoping

The Proposed Actions are classified as a Type I Action, as defined under NYC Executive Order 91 of 1977, as amended, §6-15(a)(2), and is subject to environmental review in accordance with CEQR guidelines. An Environmental Assessment Statement (EAS) and Positive Declaration were issued on December 14, 2018 by the New York City Department of City Planning (DCP), as lead agency on behalf of the City Planning Commission (CPC). DCP has determined that the Proposed Actions may result in significant adverse environmental impacts requiring that a DEIS be prepared.

This Draft Scope for the preparation of a DEIS contains a description of the Proposed Actions and the tasks that would be undertaken to analyze the potential environmental impacts of the Proposed Actions. The issuance of the Draft Scope marks the beginning of the public comment period. The scoping process allows the public a voice in framing the scope of the DEIS. The scoping document sets forth the analyses and methodologies that will be utilized to prepare the DEIS. During the public comment period, those interested in reviewing the Draft Scope may do so and give their comments to the lead agency. The public, interested agencies, and elected officials, are invited to comment on the Draft Scope, either in writing or orally, at the public scoping meeting.

A public scoping meeting is scheduled to be held on Thursday, January 17, 2018 starting at 3:00 PM at: New York City Department of Planning, City Planning Commission Hearing Room, 120 Broadway, Concourse Level, New York, NY, 10271.

Comments received during the Scoping Meeting and written comments received up to ten days after the meeting - until 5:00 PM on January 31, 2019, will be considered and incorporated, as appropriate, into the Final Scope of Work (Final Scope). The Final Scope will incorporate all relevant comments made on the

Draft Scope and revise the extent or methodologies of the studies, as appropriate, in response to comments made during the CEQR scoping process. The DEIS will be prepared in accordance with the resulting Final Scope.

Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for 10 days after the public hearing to allow for receipt of additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared. Comments made on the DEIS will be responded to and incorporated into the FEIS, as appropriate. The FEIS will then be used by the lead agency and involved agencies to evaluate CEQR findings, which address project impacts and proposed mitigation measures, and to decide whether to approve the requested discretionary actions, with or without modifications.

C. PROJECT DESCRIPTION

Project Area

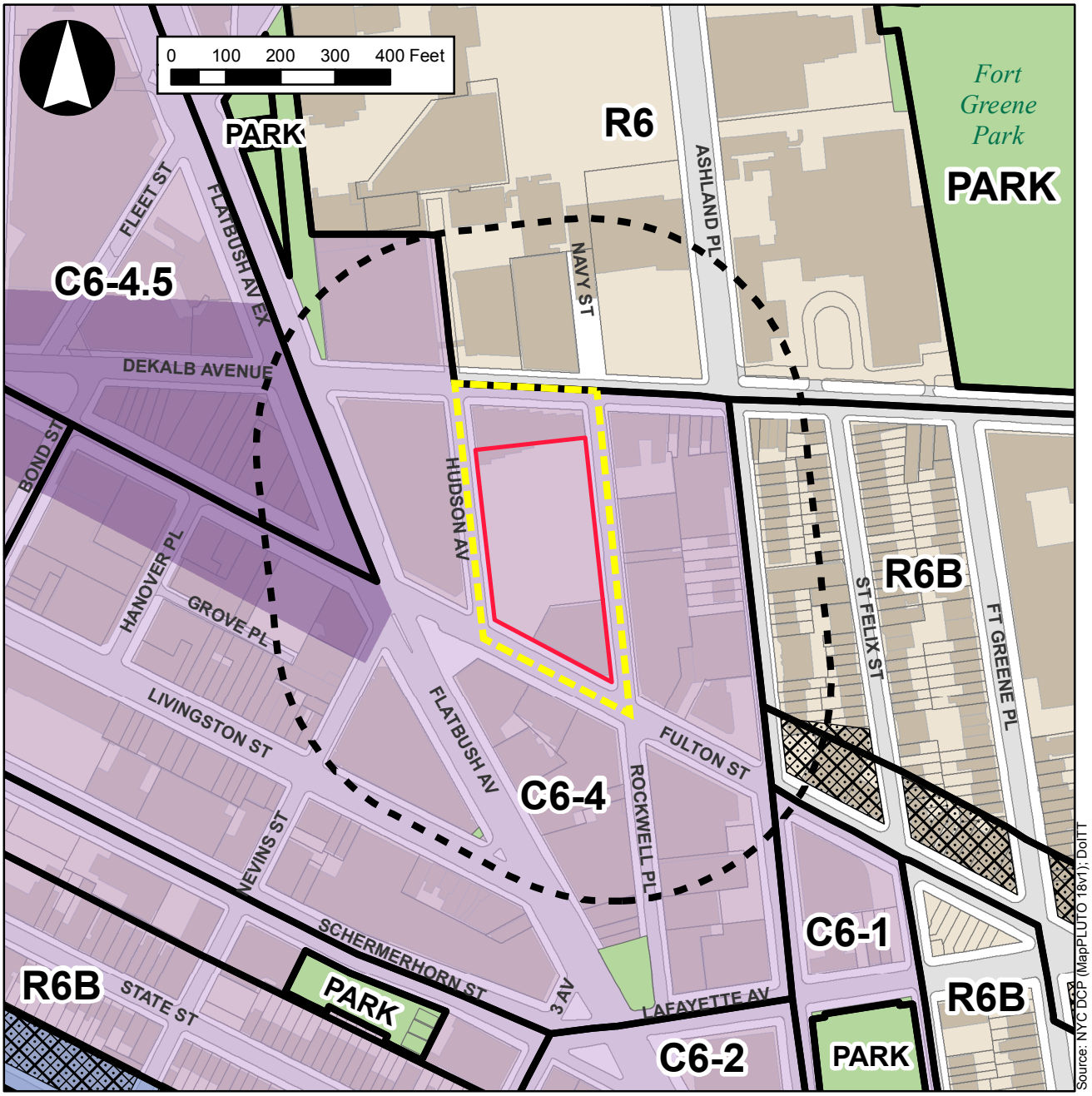
The Project Area includes all of Lots 1, 10, and 35 on Brooklyn Block 2094 in the Downtown Brooklyn neighborhood of Brooklyn Community District (CD) 2. The Project Area is bounded by Fulton Street to the south, DeKalb Avenue to the north, Hudson Avenue to the west, and Rockwell Place to the east (refer to **Figure 1, "Project Location"**). The Project Area contains 88,898 sf of lot area, consisting of Lots 1 and 35 (the Applicant-owned "Development Site") as well as Lot 10 (80 DeKalb Avenue).

Lots 1 and 35 (the Development Site)

The trapezoid-shaped Development Site includes all of Brooklyn Block 2094, Lots 1 and 35 (refer to **Figure 1**). The Development Site contains 75,270 sf (1.73 acres) of lot area and is entirely located within the Project Area. Lot 1 is currently vacant, and has a lot area of 63,053 sf. Lot 35 is currently occupied by a 3-story (42-feet in height) building containing ground floor retail uses and a commercial trade school for adults and day care center. Lot 35 has a lot area of 12,217 sf and contains approximately 36,651 gsf of floor area. The Development Site is in a C6-4 (DB) district (refer to **Figure 2**).

The existing building on Lot 35 is occupied by Northside Center for Child Development, a child care and pre-K program nonprofit; HJ Fulton Trading, Inc./Dollar Deals, a convenience store; and Healthfirst, a provider-sponsored health insurance company. The existing building on Lot 35 was constructed in 1998 and modified in 2009.

Lot 1 was subdivided in 2007 to create Lot 10; prior to 2007, Block 2094 consisted of only Lots 1 and 35. Prior to the subdivision, Lot 1 was a 76,681 sf tax lot containing the 10 Metro Tech Building (built in 1963 and modified in 1991 and 2008). The 10 Metro Tech Building consisted of a series of 3-to 7-story commercial office buildings. Following the subdivision, Lot 1 was reduced to approximately 63,053 sf and the new Lot 10 contained approximately 13,628 sf in lot area. As stated in a Zoning Lot Development and Easement Agreement recorded on May 16, 2008 (CRFN # 2008000206672) (the "Original Declaration"), a cantilever easement (the "Overhang Easement") was established within certain airspace over Lot 1 (the "Overhang Easement Area") which prohibited development on Lot 1 within 60 feet of the Overhang Easement Area (the "Restricted Area") located along the interior lot line between Lots 1 and 10. A correction to the easement, recorded on October 29, 2010 (CRFN # 2010000363572) (the "Corrected Declaration"), revised the boundaries of the Restricted Area to allow for development below a height of elevation of 54 feet. Additionally, as a part of the subdivision in 2007, and according to a Zoning Lot Development and Easement Agreement (the "ZLDEA") recorded on January 26, 2016 (CRFN # 2016000025134), approximately 141,464 zoning square feet (zsf) of unused development rights were



Legend

- Development Site
- Project Area
- 400-ft Study Area
- Zoning District Boundary
- C2-4 (Commercial Overlay)
- Special Downtown Brooklyn District (SDBD)
- SDBD - Fulton Mall Subdistrict
- SDBD - Atlantic Avenue Subdistrict

distributed from Lot 1 to Lot 10 in order to facilitate the development of a 36-story mixed-use residential and commercial retail building at 80 DeKalb Avenue, discussed further below. 10 Metro Tech was demolished in 2013, and Lot 1 has remained vacant since then.

Lot 10

Lot 10, which is not a part of the Applicant-owned Development Site but is in the Project Area, has a lot area of 13,628 sf, and is currently occupied by a 36-story (405-feet in height), 335,187 gsf mixed-use building containing an above- and below street level parking garage with 126 parking spaces, 5,392 gsf of ground floor local retail uses, and 369 residential DUs on the remaining upper floors (80 DeKalb Avenue). Lot 10 is in a C6-4 (DB) district (refer to **Figure 2**).

As discussed above, prior to the 2007 subdivision, Lot 10 (at the time the northern portion of Lot 1) was formerly occupied by a portion of the 10 Metro Tech Building. This portion of the 10 Metro Tech building consisted of three, 3-story interconnected office structures containing approximately 51,862 gsf of commercial office space. These structures were demolished in the spring of 2007. In the same year, according to the ZLDEA, approximately 141,464 zsf of unused development air rights from adjacent Lot 1 were distributed to Lot 10 to facilitate the development of the 36-story, mixed-use 80 DeKalb building. An amendment to the ZLDEA in 2016 states that any additional development rights created by an amendment to the Zoning Resolution (or any other change in existing law) would be solely allocated to Lot 1. Thus, in the event of an upzoning, Lot 10 would not have any right to any portion of the additional development rights resulting from such upzoning.

Land Use

As discussed above, Lot 1 is currently vacant and unimproved; Lot 35 is currently occupied by a 3-story building containing ground floor retail uses, as well as a commercial trade school for adults and day care center; and Lot 10 is currently occupied by a 36-story mixed-use building containing 369 DUs, 5,392 gsf of ground floor retail uses, and a below- and above street level parking garage totaling 126 spaces.

Zoning

As shown in **Figure 2, "Existing Zoning,"** the Project Area is within a C6-4 (DB) district. C6 districts are high-density areas intended for commercial uses that require central locations or serve the entire metropolitan region. The C6-4 zoning district (R10 equivalent) has a maximum floor area ratio (FAR) of 10.0 for commercial, residential, and community facility uses, with up to 12.0 FAR permitted with a public plaza or the provision of affordable housing through the Inclusionary Housing program. In R10 equivalent districts, the residential floor area can be increased by 3.5 sf for every 1 sf of affordable housing provided pursuant to the Inclusionary Housing program, up to a maximum bonus of 2.0 FAR. C6-4 zoning districts generally require accessory off-street parking for at least 40 percent of the total number of new market-rate dwelling units; however, the requirements for accessory off-street parking for residential uses in the Special Downtown Brooklyn District are reduced from 40 percent to 20 percent pursuant to ZR Section 101-50.

The Special Downtown Brooklyn (DB) District was established in 2004 as part of the Downtown Brooklyn Redevelopment Project approved in June 2004 (ULURP No. 04071ZMK and CEQR No. 03DME016K), which rezoned the Project Area from an M1-6 zoning district to a C6-4 district. The Special Downtown Brooklyn District modifies height and setback regulations for a range of moderate- to high-density residential and commercial zoning districts that facilitate development on the small and irregularly shaped lots commonly found in Downtown Brooklyn. The higher density zoning districts within this special district allow either Quality Housing Program buildings with maximum height limits or, pursuant to ZR Section 101-223, "tower" buildings without maximum height limits. For buildings that utilize the special district's tower regulations, residential, commercial, and/or community facility buildings must provide a 10-foot

setback along a wide street and a 15-foot setback along a narrow street for any portion of the building above a height of 85 feet. Towers are permitted a maximum lot coverage of 65 percent for building heights between 150 and 300 feet; for building heights above 300 feet, a maximum lot coverage of 50 percent is permitted. However, under the tower regulations, any portion of a building containing residential floor area above a height of 150 feet is permitted a maximum lot coverage of 40 percent. In addition, urban design guidelines within the special district promote, and in some cases require, ground floor retail and street wall continuity, storefront glazing, sidewalk widening, curb cut restrictions and off-street relocation of subway stairs.

Easements Affecting the Project Area

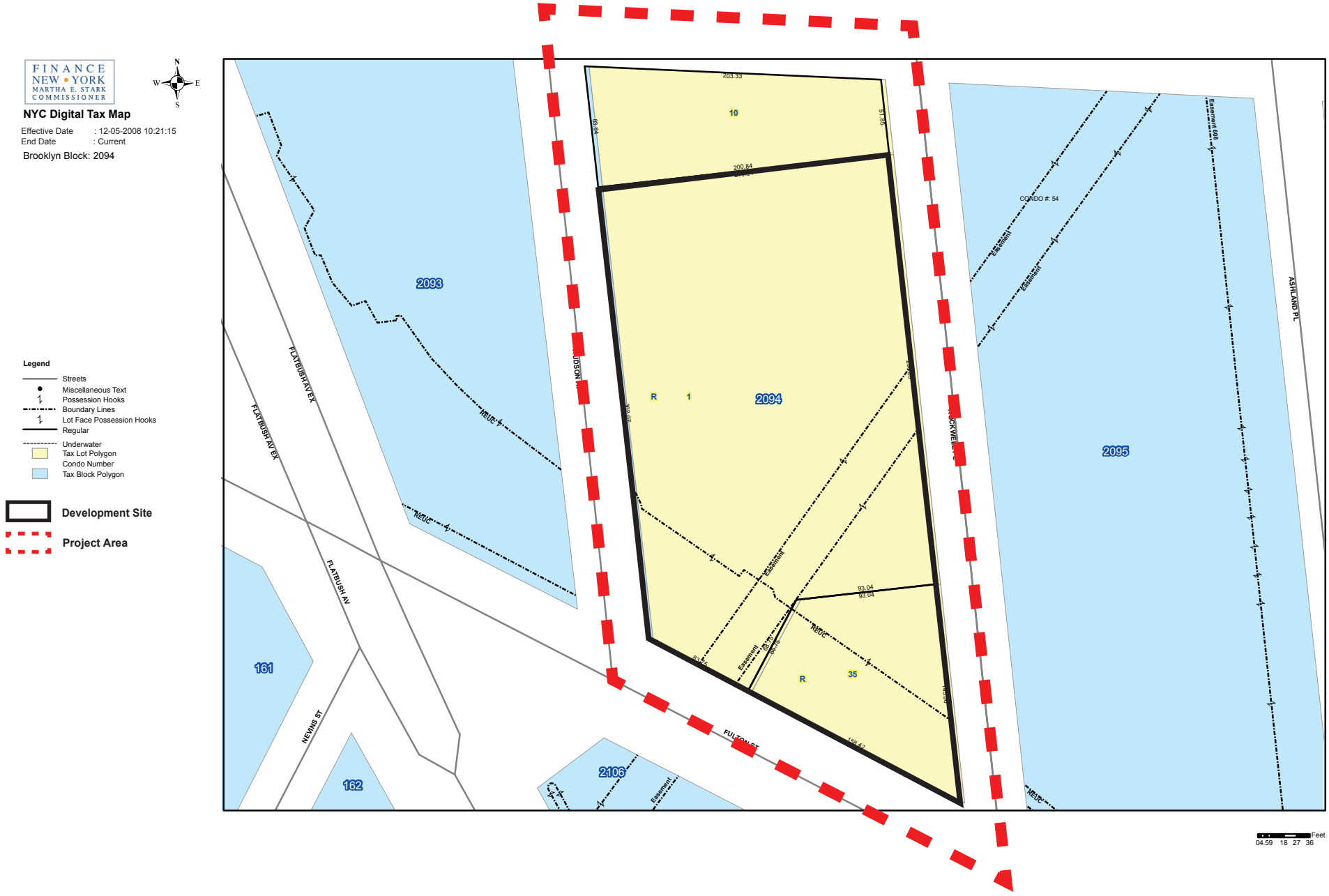
There are three existing easements over the Project Area: (i) the easement contained in the ZLDEA (CRFN # 2008000206672 and 2010000363572), which is detailed above; (ii) a Real Estate of Utility Companies (REUC) easement; and (iii) an easement for New York City (NYC) Water Tunnel No. 2 (refer to **Figure 3, "Tax Map"**). The REUC and the NYC Water Tunnel No. 2 easements are both subsurface easements. The REUC easement, listed under the New York City Department of Finance's (DOF) identification number B119, prohibits development that exceeds a depth of approximately six feet below grade where the Metropolitan Transit Authority (MTA) subway lines are located. The REUC easement runs along Fulton Street at a depth of approximately 50 to 100 feet from the lot line, including the southern portions of Lots 1 and 35 of the Project Area. The NYC Water Tunnel No. 2 was constructed in 1935 and runs northeast-to-southwest below the Project Area at a width of approximately 30 feet. Though limited information regarding the NYC Water Tunnel No. 2 easement is publicly available, it is estimated that the easement runs at a depth of approximately 380 to 780 feet below the surface.

Neighborhood Context

The Project Area is located in the Downtown Brooklyn neighborhood of Brooklyn. Land uses in the vicinity of the Project Area include a mix of commercial, residential, mixed-use, and institutional and public facility (refer to **Figure 4**). Residential uses are generally east of the Project Area. Mixed-use buildings containing ground-floor retail and residential uses above are generally along DeKalb Avenue, Flatbush Avenue, and Fulton Street. Institutional and public facility uses, including the Long Island University Brooklyn Campus and Brooklyn Hospital Center, are generally to the north of the Project Area along DeKalb Avenue. Commercial uses are generally found to the east, west, and south of the Project Area. Commercial uses in the surrounding area are predominantly made up of office and retail uses. In addition, portions of the Brooklyn Cultural District are generally located to the southeast of the Project Area. The BRIC House (an artist incubation space containing public galleries, performance space, and artist studios) and the BAM Harvey Theater, which are both part of the Brooklyn Cultural District, are located directly across from the Project Area on the north side of Fulton Street between Rockland and Ashland Places.

Most of the surrounding area was rezoned in 2004 as part of the Downtown Brooklyn Redevelopment Project, as a part of the City's long-range strategy to create a vibrant, multi-use urban environment, build upon the already established commercial core, and strengthen linkages between the area's commercial core and surrounding residential neighborhoods. The area affected by the Downtown Brooklyn Redevelopment Project extends from Tillary Street to the north, Schermerhorn Street to the south, Adams Street to the west, and Ashland Place to the east. As noted above, the Project Area was rezoned C6-4 (DB) under this initiative.

Since 2004, a significant amount of new development has been completed in the vicinity of the Project Area. To the southeast of the Project Area, a 586-unit (282 affordable units) residential building with ground floor retail was completed in 2017 (250 Ashland Place). Directly south of the Project Area, a 183 residential unit (37 affordable) building with ground floor retail is expected to be completed in 2018 (One Flatbush Avenue). To the east of the Project Area a 184 DU residential building with ground floor retail is expected to be completed by 2018 (10 Nevins Street). Adjacent to 10 Nevins Street, a 221,039 gsf commercial



625 Fulton Street Rezoning

Figure 3
Tax Map

Land Use Map

Legend

- Development Site
- Project Area
- 400-ft Study Area

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

building is expected to be completed by 2020 (540 Fulton Street). In addition, Long Island University, directly north of the Project Area, has filed plans for a 476 residential unit (140 affordable) building with 183,530 gsf of community facility space and a 564-space above-grade parking garage at 61 DeKalb Avenue. To the south of the Project Area, plans have been filed to redevelop the 10-story former self-storage Pioneer Building at 41 Flatbush Avenue with 236,693 gsf of commercial office space.

The Project Area is close to Fort Greene Park, a 30.17-acre open space located three blocks to the northeast. The park was designated as Brooklyn's first park in 1847, and received its name in 1897. Fort Greene Park is owned and operated by the New York City Department of Parks and Recreation (DPR), and includes tennis courts, basketball courts, playgrounds, spray showers, a dog park, the Prison Ship Martyrs Monument, a nature center, barbecue and picnic areas, walking paths, benches, and a variety of landscaped and forested areas.

The Project Area is close to public transit access. As shown in **Figure 5**, The Dekalb Avenue (B/Q/R) Subway Station and the Nevins Street (2/3/4/5) Station are located within 250 feet of the Project Area. The DeKalb Avenue Station is northwest of the Project Area, while the Nevins Street Station is to the southwest, with entrances at the intersection of DeKalb Avenue and Flatbush Avenue Extension, and Nevins Street and Flatbush Avenue Extension, respectively. Other nearby subway stations include the Hoyt Street (2/3) Station, the Atlantic Avenue (2/3/4/5/B/Q) Station, and the Fulton Street (G) Station, all of which are an approximately seven-minute (0.3-mile) walk from the Project Area. In addition, the B25, B26, B38, and B52 local bus routes run along Fulton Street (to the south of the Project Area), providing connections between Downtown Brooklyn, East New York, and Ridgewood, Queens.

Description of the Proposed Actions

The Proposed Actions include a zoning map amendment, zoning text amendments, and a Special Permit. These actions are detailed below.

Zoning Map Amendment

The proposed zoning map amendment, which would rezone the Project Area from a C6-4 (DB) district to a C6-9 (DB) district, would result in an increase of the maximum permitted FAR (18.0) in the Project Area, allowing for the additional development of commercial uses than could be provided under existing zoning. **Table 1**, below, compares the use and bulk regulations under the existing and proposed zoning districts.

The proposed zoning district would allow for the development of a wide range of uses at higher densities and would create opportunities for a more vibrant, mixed-use community, while maximizing space for additional commercial office uses in Downtown Brooklyn, the principal commercial district in Brooklyn.

Study Area Transit Services

Legend

- G — NYCT Subway Station
- B38 — MTA/NYCT Bus Routes
- Development Site
- Quarter-Mile Radius

Table 1
Comparison of Existing and Proposed Zoning

	Existing	Proposed
	C6-4 (DB)	**C6-9 (DB)**
Use Groups	1-12	1-12
Maximum Permitted FAR		
Residential	10.0[1]	10.0[1]
Community Facility	10.0[2]	18.0
Commercial	10.0[2]	18.0
Manufacturing	Not Permitted	Not Permitted
Overall Maximum Permitted	10.0[1,2]	18.0
Overall Maximum Permitted with Special Permit	-	20.0
Overall Maximum Permitted with Special Permit and School	-	21.0

Source: *Zoning Resolution of the City of New York.*
Notes:
[1] Up to 2.0 FAR bonus with the Inclusionary Housing program.
[2] Up to 20 percent increase for a public plaza bonus.

Zoning Text Amendment

The Applicant proposes a zoning text amendment to add provisions to the Special Downtown Brooklyn District to allow by Special Permit: (1) a maximum FAR in certain C6-9 (DB) of up to 20.0 and, if the zoning lot includes public school uses, up to 21.0; and (2) modifications of the underlying bulk and loading regulations in C6-9 (DB) districts.

Special Permit

With the proposed zoning text amendment, the Applicant seeks a Special Permit from CPC pursuant to the special permit created by the zoning text amendment to facilitate the construction of the Proposed Project (the "Special Permit"). As discussed above, the Special Permit would allow: (1) a maximum FAR in certain C6-9 (DB) of up to 20.0 and, if the zoning lot includes public school uses, a maximum FAR of up to 21.0; and (2) modifications of the underlying bulk and loading regulations in certain C6-9 (DB) districts. Modifications to the underlying bulk regulations would include modifications to street wall location regulations pursuant to ZR Section 101-41(d) and height and setback regulations pursuant to ZR Section 101-22. The proposed bulk modifications would allow greater design flexibility to facilitatelarge-floorplate commercial office space, providing light and air to the publicly accessible open space, and enhancing the articulation of tower elements through the use of terraces and other building features.

Pursuant to ZR Section 36-62, the Proposed Project would be required to provide a minimum of four loading berths, including three loading berths for the proposed office space and one for the commercial retail space. The modification under the Special Permit would allow for a reduction in the number of loading berths from four to three, resulting in better streetscape activation along the Proposed Project's Hudson Avenue frontage, and accordingly improving the pedestrian experience at the street level without any negative effect on loading/unloading, traffic congestion, or street queuing.

The proposed zoning map change and Special Permit are discretionary actions that are subject to the Uniform Land Use Review Procedure (ULURP), while the zoning text amendments are subject to review under Section 200 of the City Charter; all actions are subject to CEQR review. Additionally, as a portion of the Proposed Project would contain space for a public elementary school, the Proposed Project will also be subject to New York City School Construction Authority (SCA) requirements and approval to construct a public elementary school on the Development Site; including SCA site selection for the school and site plan review by the Mayor and City Council pursuant to the requirements of the New York City School

Construction Authority Act. Other potential land use approvals may be applicable in order to accommodate the school, if determined necessary. As SCA site selection approval is considered a discretionary action, it will be subject to CEQR. As such, the EIS will serve as an environmental review document for the SCA discretionary action.

Purpose and Need for the Proposed Actions

The Proposed Actions would facilitate large-floorplate commercial office space in Downtown Brooklyn, a transit accessible area and the principal commercial district in Brooklyn, within a mixed-use building that provides of public amenities. The 2004 Downtown Brooklyn rezoning was intended to "reinforce Downtown Brooklyn's role as a regional central business district" and "capture regional employment growth and strengthen New York City's economic base by attracting new businesses and retaining businesses considering relocation outside Manhattan." However, the majority of new development in Downtown Brooklyn under the 2004 Downtown Brooklyn rezoning has been for residential uses. The Final Environmental Impact Statement (FEIS) for the Downtown Brooklyn Redevelopment Project (2004) projected that approximately 4.6 million square feet of commercial office and 979,000 square feet of residential space (979 DUs) would be built in the rezoning area within the ten-year analysis period; however, during that period, only approximately 1.3 million square feet of commercial space (not all of which is commercial office space) was developed, while 9.9 million square feet of residential uses and 10,889 DUs were built as of 2016.[1] At the same time, the market for office space in Downtown Brooklyn is extremely tight, with a vacancy rate under three percent.[2] Approval of the Proposed Actions would result in the creation of approximately 738,185 gsf of commercial office space, with floorplate format which is not achievable on many sites in Downtown Brooklyn, many of which have irregular configurations due to the street grid. The Proposed Project would align with the goals of the Downtown Brooklyn Development Plan, as well as with those of the New York Works policy, a series of 25 initiatives to spur 100,000 jobs over the coming decade. Specifically, the plan calls for the need to bring jobs closer to where New Yorkers live to reduce commuting times and minimize the strain on the transit network. Downtown Brooklyn, accordingly, is a key area where the City supports the construction of new buildings with substantial commercial office space.

In addition, the Proposed Actions would also create additional school capacity in Downtown Brooklyn, a neighborhood which has experienced significant residential development and population growth in the past 10 years. This new public elementary school would add 640 school seats which would directly address the existing overcapacity conditions of Community School District (CSD) 13, Sub-district 2, in which the Development Site is located. CSD 13 has the highest concentration of new residential development in Downtown Brooklyn and an overall utilization rate of approximately 117 percent, with waitlists for attendance at the beginning of each school year. Construction of a new public school would help to relieve this overcrowding.

The Proposed Actions would also add to the neighborhood's public amenities by providing approximately 10,913 sf of outdoor publicly accessible open space located along the Proposed Project's Fulton Street frontage, and 2,410 sf enclosed publicly accessible area adjacent to the proposed outdoor open space. In total, the Proposed Project would include approximately 13,323 sf of publically accessible areas.

The Development Site is currently located in a C6-4 (DB) district with a maximum of 12 FAR of residential use allowed under the R10 Inclusionary Housing Program or through the provision of a public plaza. Because the Proposed Actions do not increase the residential zoning capacity of the Development Site

[1] *A Decade Later in Downtown Brooklyn: A Review of the 2004 Rezoning* (2016). Office of the Brooklyn Borough President Eric L. Adams. Brooklyn-usa.org.

[2] *Downtown Brooklyn Market Report* (2016). This vacancy rate is lower than other areas of the City, such as Lower Manhattan (8.9 percent), Midtown South (4.6 percent) and Midtown Manhattan (7.1 percent).

above 12 FAR, the City's Mandatory Inclusionary Housing Program could not be imposed through the Proposed Actions. Under the City's R10 Inclusionary Housing Program, a portion of the residential dwelling units would be required to be affordable in order to generate a two (2) FAR bonus. However, the Applicant will analyze as part of the DEIS providing up to 25% of the residential units as affordable. By creating new affordable housing in the Project Area, the Proposed Project would help to address the affordable housing goals set forth by the City in *Housing New York: A Five-Borough, Ten-Year Plan*.

In addition, the Proposed Project would be constructed on underbuilt land in close proximity to public transportation and other public amenities.

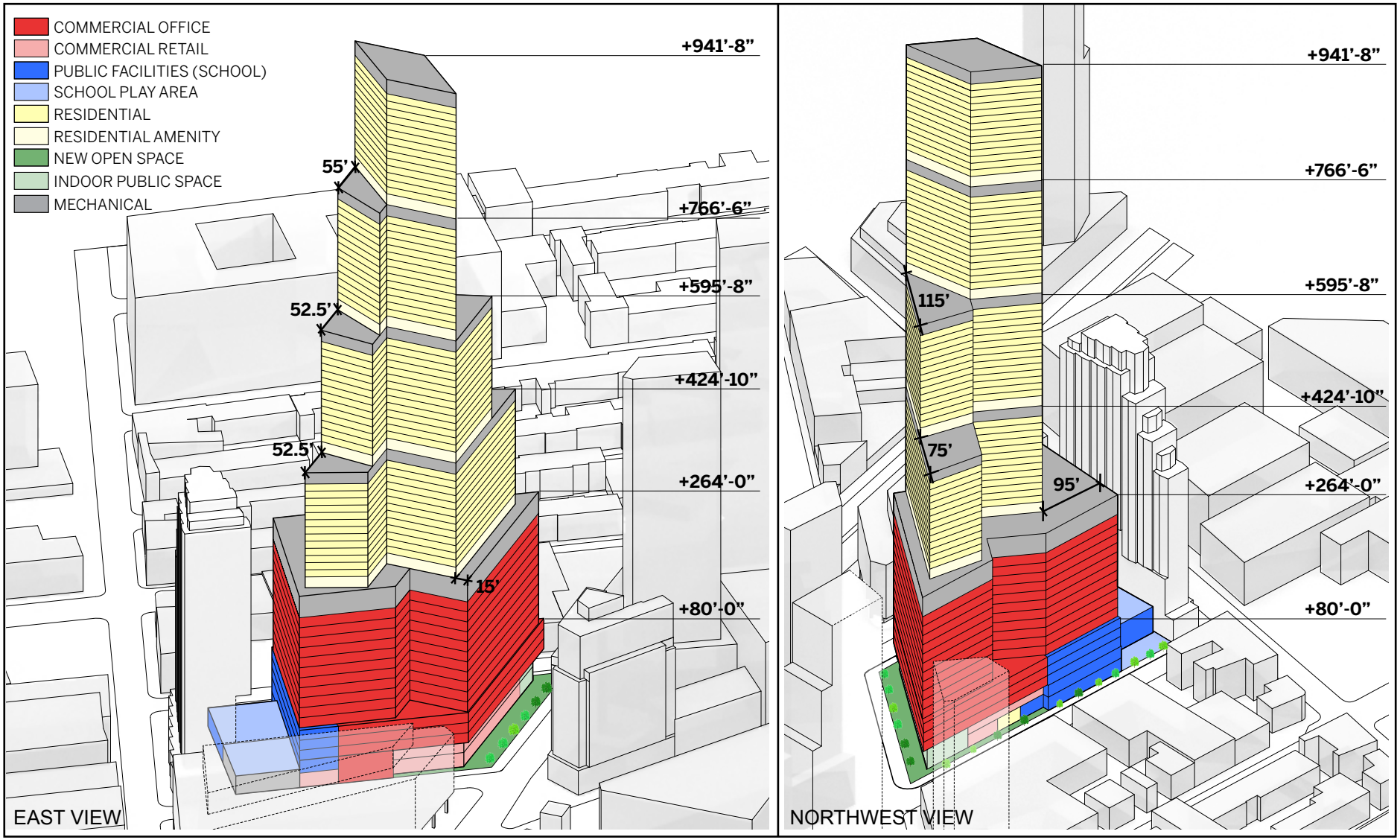
Description of the Proposed Project

The Applicant proposes to demolish the existing building on Lot 35 and redevelop the Development Site with a new 79-story (942-foot-tall), 1,833,706 gsf (1,561,858 zsf) mixed-use building containing 739,000 gsf (669,288 zsf) of commercial office space, 50,547 gsf (48,482 zsf) of commercial retail space, 902 DUs (up to 843,346 gsf [766,678 zsf]) (the Proposed Project will satisfy the requirements of the R10 Inclusionary Housing program, and the EIS will analyze up to 25 percent of residential units as affordable), 2,410 gsf/zsf of enclosed publicly accessible area, and a 640-seat (up to 82,500 gsf [75,000 zsf]) public elementary school. The Proposed Project would also include up to approximately 350 below-grade accessory parking spaces and a total of 0.25 acres (10,913 sf) of outdoor publicly accessible open space.[3] As presented in **Figure 6**, the commercial office and retail uses would be located on floors one through 16, the public elementary school would be located on floors one through five, and the residential uses would be located on floors 18 through 79, with mechanical uses located on floors 17, 32, 48, 64, and the rooftop. The Proposed Project's approximately 350 accessory off-street parking spaces will be located below street level on two sub-cellar levels (up to 115,903 gsf). Pursuant to ZR Section 101-50, the Proposed Project is required to provide a minimum of 145 accessory off-street parking spaces (or 20 percent of the total number of new, market-rate DUs); pursuant to ZR Section 101-531, the Proposed Project would be permitted up to 225 additional spaces, provided that such parking spaces are located entirely below-grade, for a total of up to 370 permitted accessory off-street parking spaces.[4] The Proposed Project would incorporate certain public realm improvements, including the widening of Hudson Avenue's eastern sidewalk and Rockwell Place's western sidewalk, the creation of a new, approximately 10,913 sf publicly accessible open space along Fulton Street, and an approximately 2,410 sf enclosed publicly accessible area accessible to the public during designated hours.

The Proposed Project would generally be built set back from the lot line along Fulton Street (approximately 25-foot setback to accommodate the proposed 10,913 sf publicly accessible open space), Hudson Avenue (approximately 10-foot setback), and Rockwell Place (approximately 15-foot and 35-foot setbacks), and, due to an existing easement encumbering the Development Site, would generally be built approximately 82-feet south of 80 DeKalb Avenue's southern-most facade along the Development Site's northern frontage adjacent Lot 10. The Proposed Project would contain a series of setbacks before rising to a maximum building height of approximately 942 feet (refer to **Figure 6**). The footprint of the two below-grade cellar levels would be limited by the constraints of the existing REUC easement, which affects the southern portions of the Development Site. As such, the Proposed Project's cellars would be setback approximately 60-to-100-feet from Fulton Street.

[3] It should be noted that the proposed publicly accessible open space areas would not require a zoning certification, and thus, would not be used to achieve any additional floor area for the Proposed Project.

[4] Although a maximum of 370 accessory off-street parking spaces would be permitted on the Development Site in the With-Action condition, based on the Development Site's cellar floorplate and easement constraints, the Applicant does not plan to provide below-grade accessory parking that exceeds 350 spaces.



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The commercial office, retail, community facility, and residential components of the Proposed Project would be accessed from separate entrances along Fulton Street, Hudson Avenue, and Rockwell Place. The entrance to the lobby of the commercial office uses would be located along Hudson Avenue, while the entrances to the lobbies for the public school and residential uses would be located along Rockwell Place; entrances to the retail uses would be located at various penetrations along Fulton Street, Hudson Avenue, and Rockwell Place (refer to **Figure 7 "Illustrative Site Plan"**). The entrance to the public school, located at the northeast corner of the Development Site, would be recessed from the property line along Rockwell Place to allow additional space for students to enter and exit the school lobby. In addition, a total of three curb cuts would be located on Hudson Avenue to provide access to the below street level garage and at-grade loading areas. The at-grade loading areas would include three loading berths and two curb cuts located approximately 225 feet north of Fulton Street, and the entrance to the below street level garage would include one curb cut located approximately 85 feet south of DeKalb Avenue.

D. ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW

The Proposed Actions would change the regulatory controls governing land use and development within the Project Area. The 2014 *CEQR Technical Manual* will serve as the general guide on the methodologies and impact criteria for evaluating the Proposed Actions' potential effects on the various environmental areas of analysis.

Analysis Year

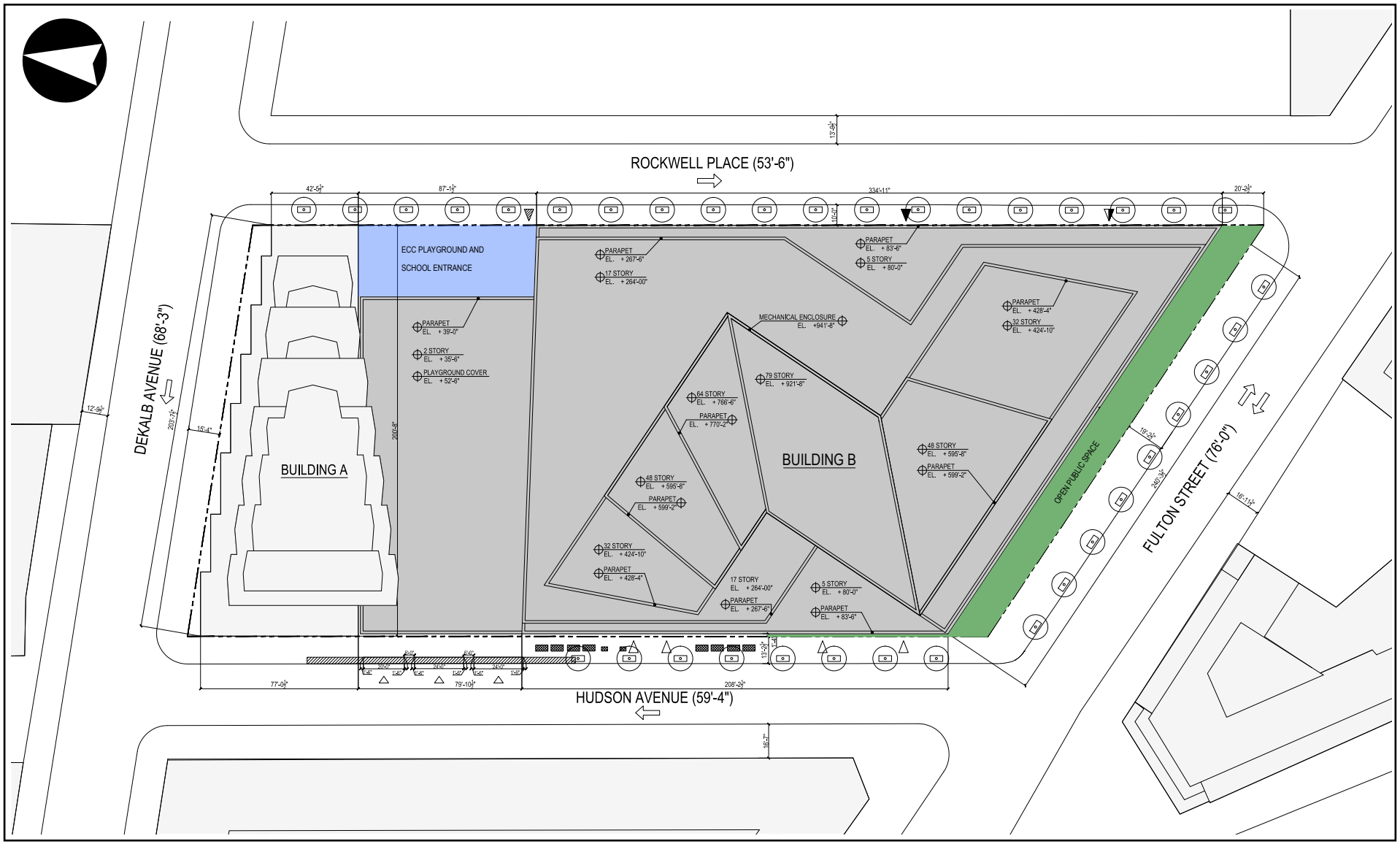
Following the required approvals from the CPC to facilitate the development of the Proposed Project, construction activity would begin in 2020. Construction of the Proposed Project would occur over an approximately 3-year (36-month) period, with all components complete and fully operational by the end of 2023. As Lot 1 is currently vacant and unimproved, demolition would only be needed for the existing 3-story building on Lot 35. The Proposed Project is anticipated to be constructed in a single phase. As such, the environmental review will use a 2023 Analysis Year for analysis purposes.

As the Proposed Project would be operational in 2023, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses and consideration of alternatives assess the current conditions and forecast these conditions to the expected 2023 Analysis Year for the purposes of determining potential impacts. Each chapter of the Environmental Assessment Statement (EAS) and Environmental Impact Statement (EIS) will provide a description of the "Existing Condition" and assessment of future conditions without the Proposed Actions ("Future No-Action") and with the Proposed Actions ("Future With-Action").

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Actions, a reasonable worst-case development scenario (RWCDS) for the Project Area was established for both Future No-Action and Future With-Action conditions. The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis of the impact analyses in the EAS and EIS. The requested Special Permit would require the submission of drawings to the City Planning Commission and would require that the Proposed Project's development program be within the scope of the RWCDS analyzed in the EIS. Therefore, the Proposed Project would represent the upper bounds of potential development and the impact of the Proposed Actions would be no worse than those considered in the EIS.

The Proposed Project may be constructed without the 640-seat public elementary school in the event that the SCA determines at a future date to forego the construction of a new school at the Development Site. Without the school, the Project Area will achieve a maximum FAR of up to 20.0. Additionally, in the event that the zoning map amendment is approved without the zoning text amendment, the Proposed Project may



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be constructed at 18.0 FAR (12.0 FAR of residential uses and 6.0 FAR of commercial uses). Where appropriate, and as discussed in further detail below, the Applicant intends to separately identify all potential environmental impacts that could occur as a result of the Proposed Actions absent the school and/or Special Permit. This analysis would be largely qualitative in nature, except with respect to any technical areas where the potential impacts from the 20.0 FAR or 18.0 FAR project could exceed those in the Proposed Project.

Identification of Development Sites

As no other sites located within C6-9 (DB) districts would be anticipated to make use of the Special Permit to be established by the Proposed Actions, the Project Area is the only development site to be analyzed.

The Development Site

The Development Site (Block 2094, Lots 1 and 35) currently has a built FAR of approximately 0.37.[5] As detailed in Section C, "Project Description" above, the Applicant intends to redevelop Lots 1 and 35.

Lot 10 (80 DeKalb Avenue)

In addition to the Development Site, the Project Area includes the adjacent Lot 10. Lot 10 is currently occupied by a 36-story, 335,187 gsf mixed-use building containing an above- and below street level parking garage with 126 parking spaces, approximately 5,392 gsf of ground floor retail uses, and 369 residential units constructed in 2011. Under the Proposed Actions, Lot 10 would be rezoned from C6-4 to C6-9 (DB) but is not expected to be enlarged, as a 2016 amendment to the ZLDA states that any additional development rights created by an amendment to the Zoning Resolution (or any other change in existing law) would be solely allocated to Lot 1. Thus, in the event of an upzoning, Lot 10 would not have any right to any portion of the additional development rights resulting from such upzoning. Therefore, Lot 10 is not expected to be redeveloped as a result of the Proposed Actions, and is not considered a "soft site" for CEQR analysis purposes.

The Future Without the Proposed Actions (No-Action)

In the 2023 future without the Proposed Actions, the Applicant intends to demolish the existing 3-story building on Lot 35 and construct a new 78-story (821-foot-tall) mixed-use residential building with ground floor retail as-of-right with up to approximately 837,624 gsf (8.57 FAR[6]) of floor area on the Development Site. The No-Action development would include approximately 6,270 gsf (6,000 zsf) of commercial ground-floor retail space and 831,354 gsf (775,776 zsf) of residential space, including 889 DUs. In order to achieve the maximum permitted residential floor area for the zoning lot, the No-Action building would include an approximately 29,632 sf, south-facing public plaza fronting Fulton Street, Hudson Avenue, and Rockwell Place. The No-Action public plaza would be developed at a depth of approximately 95 feet from Fulton Street and 51 feet from Hudson Avenue.[7] Pursuant to ZR Section 35-34, for each square foot of

[5] The existing built FAR at the Development Site (0.37) is based on the zoning lot (88,898 sf).
[6] In the existing C6-4 (DB) zoning district, the maximum permitted FAR for the Project Area is 12.0; however, as approximately 141,464 zsf of development rights were distributed from Lot 1 to Lot 10 in 2007 under the ZLDEA, the maximum permitted buildable FAR for the Development Site under the future without the Proposed Actions would be 8.57.
[7] Pursuant to ZR Section 101-41(d), the Special Downtown Brooklyn District requires at least 70 percent of the aggregate width of street walls to be located within eight feet of the street line along the north side Fulton Street fronting the Development Site. However, as defined in ZR Section 12-10, the aggregate width of street walls is the sum of the maximum widths of all street walls of a building within 50 feet of a street line. As the street wall of the No-Action development would be beyond 50 feet from the Fulton Street street line, the development would not be encumbered by the street wall requirements described in ZR Section 101-41.

public plaza provided on a zoning lot, the total floor area permitted on that zoning lot may be increased by six square feet. As such, approximately 177,792 sf (2.0 FAR) of floor area would be generated by the 29,632 sf public plaza in the No-Action condition, thus increasing the zoning lot's, or Project Area's, maximum permitted FAR from 10.0 to 12.0. The No-Action public plaza would be subject to the provisions of ZR Section 37-70 and would require a certification from the New York City Planning Commission (CPC), which is considered a ministerial action. The No-Action building would have a base height of up to 85 feet and would require a minimum setback of 10 feet from a wide street line and 15 feet from a narrow street line. As the Development Site is located in a C6-4 (DB) zoning district, the No-Action development would not have a maximum building height limit, provided that any residential floor area above a height of 150 feet has a maximum lot coverage of 40 percent of the lot area. As such, it is expected that the No-Action building would include 78 stories, rising to a maximum building height of 821 feet (refer to **Figure 8**). As the No-Action development would also require a minimum of 178 accessory off-street parking spaces and would permit a maximum of 368 spaces, a surface parking lot would be located on the eastern and northern portions of the Development Site, which could include up to 368 parking spaces. Any portion of the site not occupied by the No-Action building, public plaza, or surface parking lot is expected to be utilized as residential amenity space.

In the future without the Proposed Actions, the No-Action building would use all floor area generated by the Project Area that is not used by Lot 10.[8] As such, the maximum amount of floor area that could be built on the Development Site would be approximately 837,804 gsf (761,776 zsf). The Project Area's existing C6-4 (DB) zoning district would remain in place. The No-Action development is assumed to be a residential building with ground-floor retail, consistent with development trends in the area.

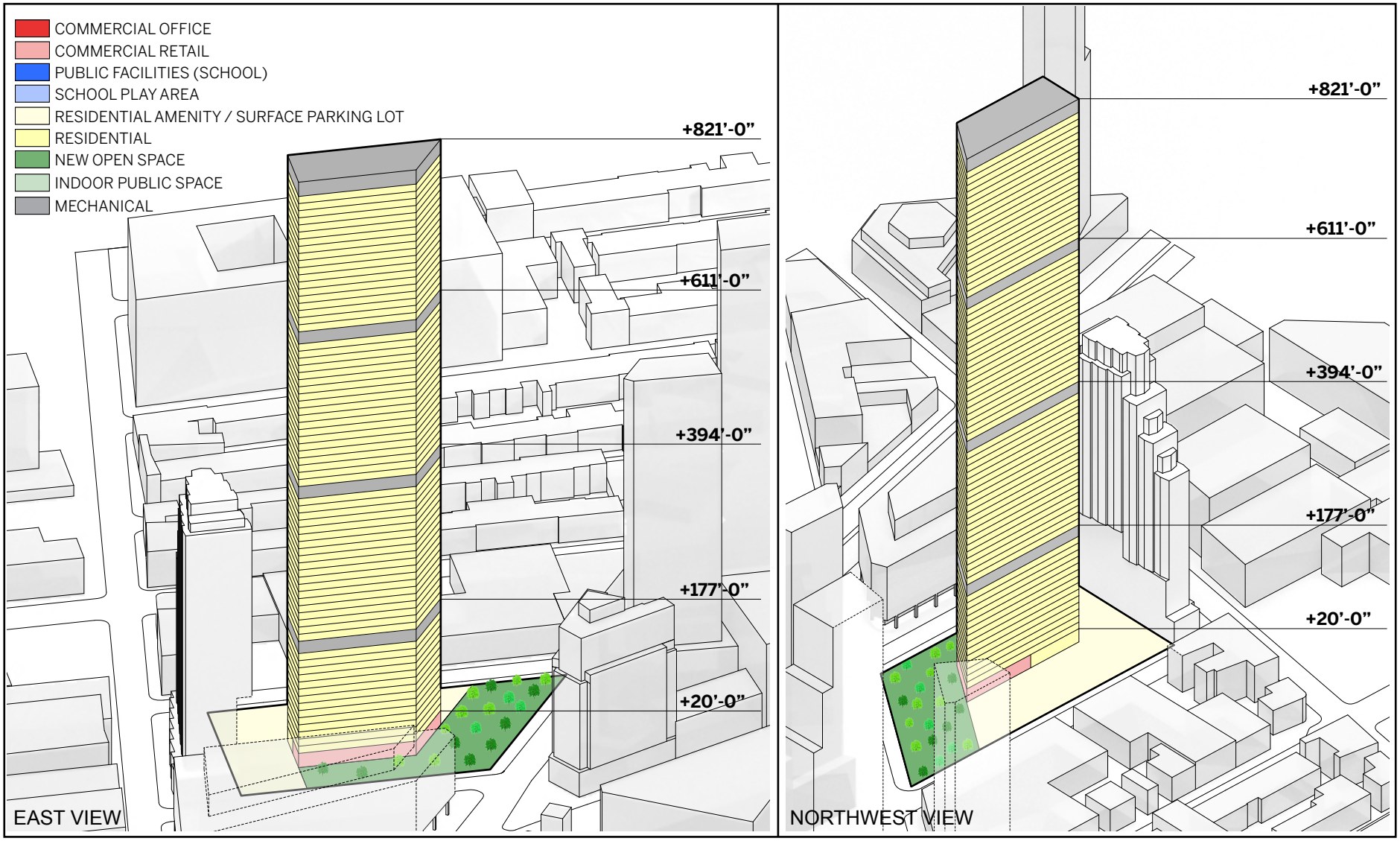
The Future With the Proposed Actions (With-Action)

In the 2023 future with the Proposed Actions, the Proposed Project would be constructed and operational as described in Section C, "Project Description," above.

The With-Action scenario was determined in consideration of the maximum build-out of the proposed commercial (office and retail), community facility, and residential uses on the Development Site under the proposed C6-9 zoning and the Special Permit. As the Proposed Project would maximize the potential FAR of 17.6 for the Development Site (21.0 for the Project Area), it represents the maximum potential floor area that could be constructed on the Development Site. Additionally, as discussed above, the requested Special Permit would require the submission of drawings to the CPC and would require that the Proposed Project's development program be within the scope of the RWCDS analyzed in the EIS. Therefore, the Proposed Project would represent the upper bounds of potential development and the impact of the Proposed Actions would be no worse than those considered in the EIS.

As discussed above, the Applicant may also construct the Proposed Project without the 640-seat elementary school in the event that the SCA determines at a future date to forego the construction of a new school at the Development Site. Under the With-Action condition absent the school, the Project Area will achieve a maximum FAR of up to 20.0 (and the Proposed Project would have a total FAR of approximately 16.6). Under this scenario, the Applicant could construct a 78-story (928-foot-tall) mixed-use building containing approximately 688,450 gsf (621,758 zsf) of commercial office space, approximately 85,809 gsf (82,114 zsf) of commercial retail space, and approximately 843,346 gsf (766,678 zsf) of residential space, including 902 DUs (the Proposed Project without the public school would satisfy the requirements of the R10 Inclusionary Housing program, and the EIS will analyze up to 25 percent of residential units as affordable),

[8] See Footnote 6 above.



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and approximately 350 accessory off-street parking spaces (refer to **Figure 9**). The 20.0 FAR building absent the school would also include an approximately 10,913 sf outdoor public open space along Fulton Street and an approximately 2,410 sf enclosed publicly accessible area. In the 20.0 FAR building, retail uses would maximize the available street frontage in the absence of the school, generally shifting the Proposed Project's school floor area and portions of the office floor area to retail. Compared to the Proposed Project with the school, the 20.0 FAR building absent the school would have a net reduction in commercial office space (approximately 50,550 gsf) and community facility space (approximately 82,500 gsf) and a net increase in commercial retail space (approximately 35,262 gsf), while the residential, parking, loading, and open space programs would not change.

In addition to constructing the Proposed Project without the 640-seat school, if the Zoning Text Amendment and/or the Special Permit are not approved, the Project Area will achieve a maximum FAR of up to 18.0 (and the Proposed Project would have a total FAR of approximately 14.6). Under this scenario, the Applicant could construct a 69-story (864-foot-tall) mixed-use building containing approximately 492,874 gsf (443,962 zsf) of commercial office space, approximately 85,809 gsf (82,114 zsf) of commercial retail space, and approximately 843,346 gsf (766,678 zsf) of residential space, including 902 DUs (the Proposed Project without the public school or Special Permit would satisfy the requirements of the R10 Inclusionary Housing program, and the EIS will analyze up to 25 percent of residential units as affordable) and approximately 350 accessory off-street parking spaces (refer to **Figure 10**). In the 18.0 FAR building, similar to the 20.0 FAR building, retail uses would maximize the available street frontage in the absence of the school, generally shifting the Proposed Project's school floor area and portions of the office floor area to retail. The 18.0 FAR building absent the school and Special Permit, compared to the Proposed Project, would have a net reduction in commercial office space (approximately 246,126 gsf), community facility space (approximately 84,910 gsf), and public open space (approximately 10,913), and a net increase in commercial retail space (approximately 31,567 gsf), while the residential, loading, and parking programs would not change.[9] The Proposed Project's height, setback, and lot coverage requirements absent the school and/or Special Permit would be governed by the bulk, height, and setback regulations of the Special Downtown Brooklyn District.

Where appropriate, the Applicant will separately identify all potential environmental impacts that could occur as a result of the Proposed Actions absent the school and/or Special Permit. This analysis will be largely qualitative in nature, except with respect to those technical areas where the environmental effects of the 20.0 FAR and 18.0 FAR project could exceed those of the Proposed Project.

Possible Effects of the Proposed Actions

Table 2 below provides a comparison of the No-Action and With-Action scenarios identified for analysis purposes of the Proposed Project within the Development Site.

As shown, the incremental (net) change that would result from the Proposed Project is the addition of 13 DUs (11,992 gsf), 739,000 gsf of commercial office uses, 44,277 gsf of local retail uses, an estimated 640 public elementary school seats (82,500 gsf), 2,410 gsf of other community facility uses (enclosed publicly accessible area), and 172 below-grade parking spaces, as well as a net reduction of 0.43 acres (18,719 sf) of publicly accessible open space.[10] Based on 2010 census data, Brooklyn Community District 2 has an

[9] Due to the changes in commercial office and retail space, the loading berth requirements would change from four in the 21.0 FAR building to three in the 18.0 FAR building pursuant to ZR Section 36-62. However, as detailed above, the Proposed Actions include a Special Permit that waives one of the required loading berths, thus reducing the number of loading berths to three in the With-Action condition with the school and Special Permit. Therefore, compared to the Proposed Project, the 18.0 FAR building absent the school and Special Permit would not experience a change in the loading berth program.

[10] It should be noted that there is no amount of public open space currently located in the Project Area under existing conditions. However, it is expected that in the future without the Proposed Actions, the No-Action development on the Development Site

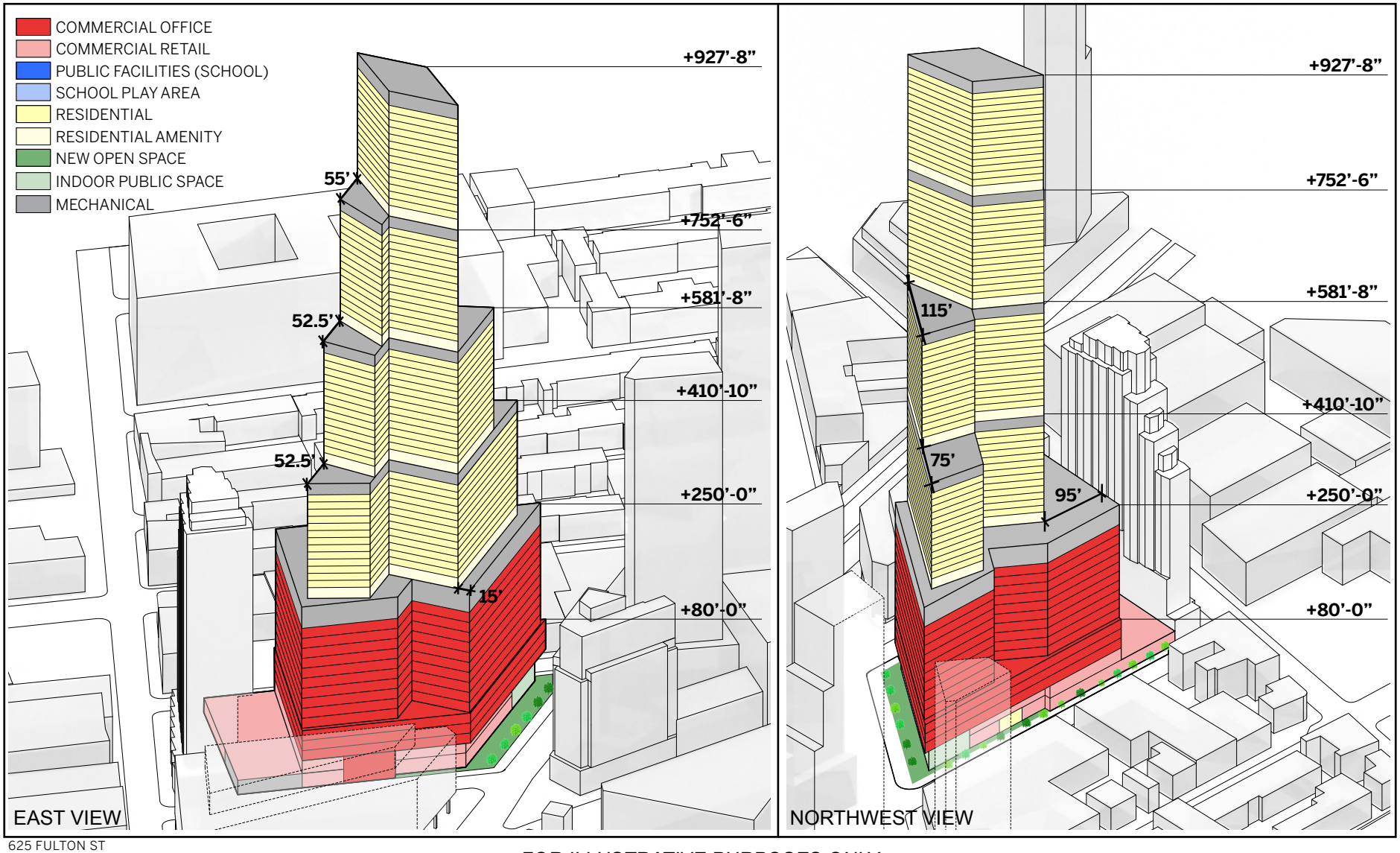

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Figure 9
Future 2023 With-Action Massing Diagram
Proposed Project Absent the School - 20.0 FAR Building

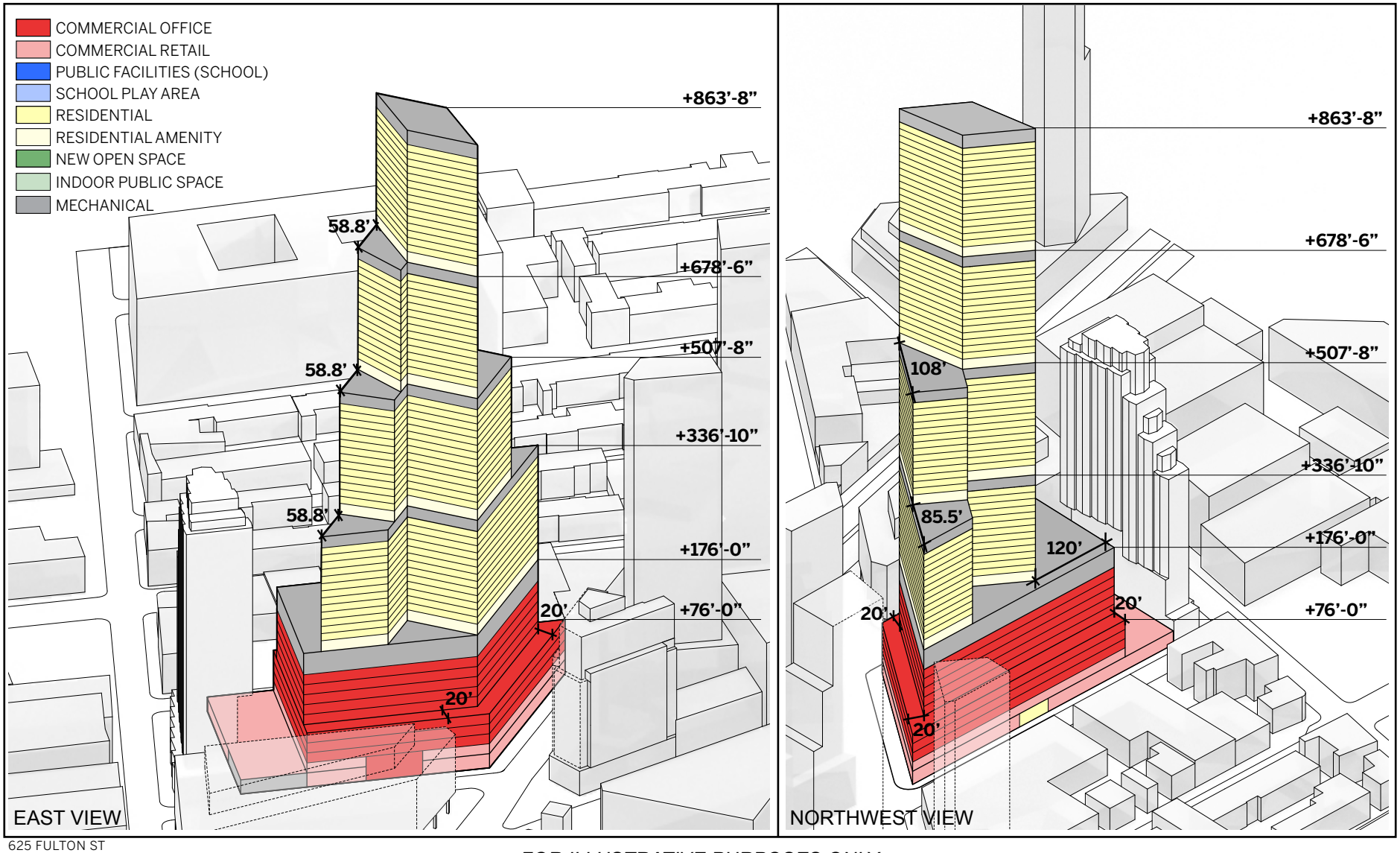

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Figure 10
Future 2023 With-Action Massing Diagram
Proposed Project Absent the School and Special Permit - 18.0 FAR Building

average of 2.01 persons per household. Using this ratio, and other standard ratios for estimating employment, **Table 2** also provides an estimate of the number of residents and workers generated by the Proposed Project. As shown in **Table 2**, based on these ratios, the incremental change in residents and workers that would result from the Proposed Project is the addition of 26 residents and 3,150 workers. Additionally, the Proposed Project with the school is expected to generate up to approximately 640 students. **Table 3** provides a comparison of the No-Action and With-Action scenarios identified for analysis purposes of the Proposed Project absent the school within the Development Site.

TABLE 2
Comparison of No-Action and With-Action Conditions within the Development Site – Proposed Project (21.0 FAR)

Use		**No-Action Scenario**	**With-Action Scenario**	**Increment**
Residential		889 DUs[1] (831,354 gsf)	902 DUs[1] (843,346 gsf)	**13 DUs** **(11,992 gsf)**
Market Rate		889 DUs	676 DUs	***-213 DUs***
Affordable[2]		0 DUs	226 DUs	**226 DUs**
Commercial		6,270 gsf	789,547 gsf	**783,277 gsf**
Office		--	739,000 gsf	**739,000 gsf**
Retail		6,270 gsf	50,547 gsf	**44,277 gsf**
Community Facility	Public Elementary School	-- --	640 seats (82,500 gsf)	**640 seats** **(82,500 gsf)**
	Enclosed Publicly Accessible Area	--	2,410 gsf	**2,410 gsf**
Vacant/Unoccupied		63,053 sf	*-63,053 sf*	***-63,053 sf***
Parking and Loading				
Parking		178 (35,170 sf)	350 spaces (115,903 sf)	**172 spaces** **(80,733 sf)**
Loading		--	3 berths	**3 berths**
Publicly Accessible Open Space (Outdoor)		0.68 acres (29,632 sf)	0.25 acres (10,913 sf)	***-0.43 acres*** ***(-18,719 sf)***
Population/Employment[3]		**No-Action Scenario**	**With-Action Scenario**	**Increment**
Residents		1,787 residents	1,813 residents	**26 residents**
Workers		58 workers	3,208 workers	**3,150 workers**

Notes:
[1] Assumes 850 zsf per DU; includes one superintendent's unit in each residential building.
[2] For CEQR purposes, affordable units are identified as any dwelling unit affordable at or below 80 percent AMI.
[3] Assumes 2.01 persons per DU (based on 2010 U.S. Census data for Brooklyn Community District 2). Estimate of workers is based on standard rates and are as follows: 1 worker per 25 DUs; 3 workers per 1,000 sf retail space; 4 workers per 1,000 sf of office space; 1 worker per 11.4 public elementary school seats; and 1 worker per 50 parking spaces.

As shown in **Table 3**, the incremental (net) change that would result from the Proposed Project absent the school is the addition of 13 DUs (11,992 gsf), 688,450 gsf of commercial office uses, 79,539 gsf of local retail uses, 2,410 gsf of community facility uses (enclosed publicly accessible area), and 172 below-grade parking spaces, as well as a net reduction of 0.43 acres (18,719 sf) of publicly accessible open space.[11] **Table 3** also provides an estimate of the number of residents and workers generated by the Proposed Project absent the school. As shown in **Table 3**, based on these ratios, the incremental change in residents and workers that would result from the Proposed Project absent the school is the addition of 26 residents and 2,997 workers.

A comparison of the No-Action and With-Action scenarios identified for analysis purposes of the Proposed Project absent the school and Special Permit within the Development Site are detailed in **Table 4**.

As shown in **Table 4**, the incremental (net) change that would result from the Proposed Project absent the school and Special Permit is the addition of 13 DUs (11,992 gsf), 492,874 gsf of commercial office uses,

would include an approximately 0.68 acre (29,632 sf) public plaza primarily located on the site's Fulton Street frontage, which would allow the Project Area to reach a maximum permitted FAR of 12.0 in the No-Action condition.

[11] See Footnote 10 above.

79,539 gsf of local retail uses, and 172 below-grade parking spaces, as well as a net reduction of 0.68 acres (29,632 sf) of publicly accessible open space.[12] **Table 4** also provides an estimate of the number of residents and workers generated by the Proposed Project absent the school. As shown in **Table 4**, based on these ratios, the incremental change in residents and workers that would result from the Proposed Project absent the school and Special Permit is the addition of 26 residents and 2,214 workers.

TABLE 3
Comparison of No-Action and With-Action Conditions within the Development Site – Proposed Project Absent the School (20.0 FAR)

Use		**No-Action Scenario**	**With-Action Scenario**	**Increment**
Residential		889 DUs[1] (831,354 gsf)	902 DUs[1] (843,346 gsf)	**13 DUs** **(11,992 gsf)**
Market Rate		889 DUs	676 DUs	***-213 DUs***
Affordable[2]		0 DUs	226 DUs	**226 DUs**
Commercial		6,270 gsf	774,259 gsf	**767,989 gsf**
Office		--	688,450 gsf	**688,450 gsf**
Retail		6,270 gsf	85,809 gsf	**79,539 gsf**
Community Facility	Public Elementary School	-- --	-- --	-- --
	Enclosed Publicly Accessible Area	--	2,410 gsf	**2,410 gsf**
Vacant/Unoccupied		63,053 sf	*-63,053 sf*	***-63,053 sf***
Parking and Loading				
Parking		178 (35,170 sf)	350 spaces (115,903 sf)	**172 spaces** **(80,733 sf)**
Loading		--	3 berths	**3 berths**
Publicly Accessible Open Space (Outdoor)		0.68 acres (29,632 sf)	0.25 acres (10,913 sf)	***-0.43 acres*** ***(-18,719 sf)***
Population/Employment[3]		**No-Action Scenario**	**With-Action Scenario**	**Increment**
Residents		1,787 residents	1,813 residents	**26 residents**
Workers		58 workers	3,055 workers	**2,997 workers**

Notes:
[1] Assumes 850 zsf per DU; includes one superintendent's unit in each residential building.
[2] For CEQR purposes, affordable units are identified as any dwelling unit affordable at or below 80 percent AMI.
[3] Assumes 2.01 persons per DU (based on 2010 U.S. Census data for Brooklyn Community District 2). Estimate of workers is based on standard rates and are as follows: 1 worker per 25 DUs; 3 workers per 1,000 sf retail space; 4 workers per 1,000 sf of office space; 1 worker per 11.4 public elementary school seats; and 1 worker per 50 parking spaces.

[12] See Footnote 10 above.

TABLE 4
Comparison of No-Action and With-Action Conditions within the Development Site – Proposed Project Absent the School and Special Permit (18.0 FAR)

Use		No-Action Scenario	With-Action Scenario	Increment
Residential		889 DUs[1] (831,354 gsf)	902 DUs[1] (843,346 gsf)	**13 DUs** **(11,992 gsf)**
Market Rate		889 DUs	676 DUs	***-213 DUs***
Affordable[2]		0 DUs	226 DUs	**226 DUs**
Commercial		6,270 gsf	578,684 gsf	**572,414 gsf**
Office		--	492,874 gsf	**492,874gsf**
Retail		6,270 gsf	85,809 gsf	**79,539 gsf**
Community Facility	Public Elementary School	-- --	-- --	-- --
	Enclosed Publicly Accessible Area	--	--	--
Vacant/Unoccupied		63,053 sf	*-63,053 sf*	***-63,053 sf***
Parking and Loading				
Parking		178 (35,170 sf)	350 spaces (115,903 sf)	**172 spaces** **(80,733 sf)**
Loading		--	3 berths	**3 berths**
Publicly Accessible Open Space (Outdoor)		0.68 acres (29,632 sf)	0.0 acres (0 sf)	***-0.68 acres*** ***(-29,632 sf)***
Population/Employment[3]		**No-Action Scenario**	**With-Action Scenario**	**Increment**
Residents		1,787 residents	1,813 residents	**26 residents**
Workers		58 workers	2,272 workers	**2,214 workers**

Notes:
[1] Assumes 850 zsf per DU; includes one superintendent's unit in each residential building.
[2] For CEQR purposes, affordable units are identified as any dwelling unit affordable at or below 80 percent AMI.
[4] Assumes 2.01 persons per DU (based on 2010 U.S. Census data for Brooklyn Community District 2). Estimate of workers is based on standard rates and are as follows: 1 worker per 25 DUs; 3 workers per 1,000 sf retail space; 4 workers per 1,000 sf of office space; 1 worker per 11.4 public elementary school seats; and 1 worker per 50 parking spaces.

E. PROPOSED SCOPE OF WORK FOR THE EIS

As the Proposed Actions would affect various areas of environmental concern and was found to have the potential for significant adverse impacts in a number of impact categories, pursuant to the EAS and Positive Declaration, an EIS will be prepared for the Proposed Actions that will analyze all technical areas of concern.

The EIS will be prepared in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act ("SEQRA") (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules and Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York.

The EIS, following the guidance of the 2014 *CEQR Technical Manual*, will include:

- A description of the Proposed Actions and their environmental setting;
- A description of the project which would be facilitated by the Proposed Actions, including the Proposed Project and any different With-Action scenarios (i.e., the Proposed Project absent the school and/or Special Permit) which may require assessment;
- A statement of the environmental impacts of the Proposed Actions, including short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Actions are implemented;
- A discussion of reasonable alternatives to the Proposed Actions;

- An identification of irreversible and irretrievable commitments of resources that would be involved in the Proposed Actions, should it be implemented; and
- A description of feasible mitigation proposed to eliminate or minimize any significant adverse environmental impacts resulting from the Proposed Actions.

Based on the preliminary screening assessments as outlined in the *CEQR Technical Manual* and detailed in the EAS for the Proposed Actions, with the exception of natural resources and solid waste and sanitation services, all other CEQR technical areas warrant detailed assessment and would therefore be included in the EIS. The specific technical areas to be included in the EIS, as well as their respective tasks and methodologies for evaluating the effects of the Proposed Actions, are described below. The analyses in the EIS will examine the RWCDS with the greater potential environmental impact for each impact area.

TASK 1. PROJECT DESCRIPTION

The first chapter of the EIS introduces the reader to the discretionary actions (i.e., the Proposed Actions) required to facilitate the Proposed Project, and sets the context in which to assess impacts associated with the Proposed Actions. This chapter contains a description of the Proposed Actions, the directly affected area, and the background and history of the project; a statement of the purpose and need for the Proposed Actions; key planning considerations that have shaped the current proposal; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. In addition, the Project Description chapter will present the planning background and rationale for the actions being proposed and summarize the RWCDS for analysis in the EIS.

This chapter provides a baseline for understanding the Proposed Actions and their potential for impacts, and gives the public and decision-makers a base from which to evaluate the Proposed Actions against the future condition absent the project. The section on approval procedures will explain the ULURP process, its timing, and hearings before the Community Board, the Brooklyn Borough President's office, the New York City Planning Commission (CPC), and the New York City Council. The role of the EIS as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

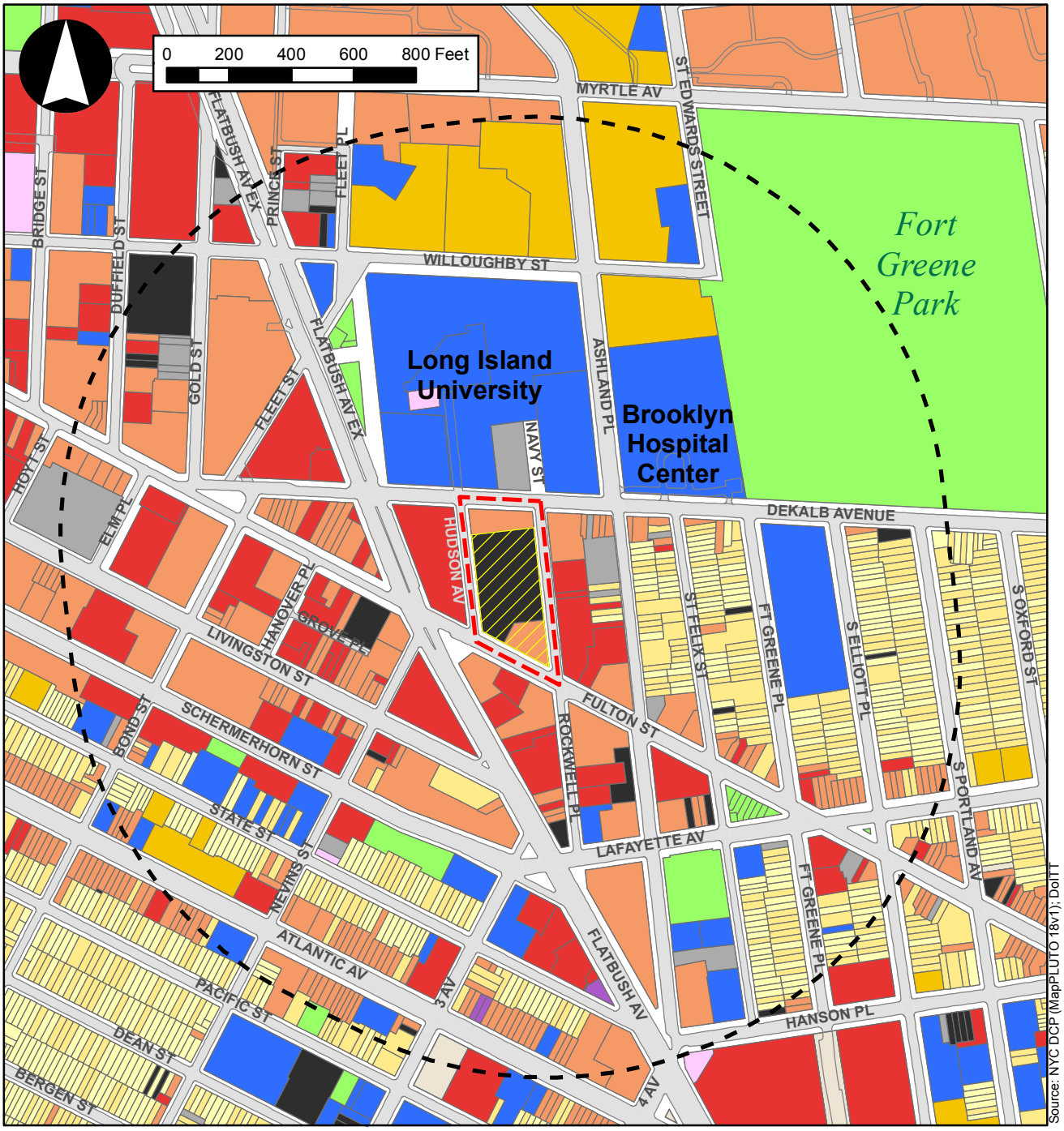
TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

Under CEQR, a land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project, describes the public policies that guide development in the area, and determines whether a proposed project is compatible with or would affect those conditions and is consistent with these policies. In addition to considering the Proposed Actions' effects in terms of land use compatibility and trends in zoning and public policy, this chapter will also provide a baseline for other analyses. This assessment will analyze the potential impact of the Proposed Actions on land use, zoning, and public policy, pursuant to the methodologies presented in the *CEQR Technical Manual.*

The primary land use study area will consist of the Project Area, where the potential effects of the Proposed Actions would be directly experienced (reflecting the proposed rezoning and the resultant RWCDS). The secondary land use study area would include the neighboring areas within a 0.25-mile radius of the Project Area, as shown in **Figure 11**, which could experience indirect impacts. The analysis will include the following subtasks:

- Provide a brief development history of the directly affected area (the Project Area) and surrounding (secondary) study area.
- Provide a description of land use, zoning, and public policy in the study areas discussed above, which may also be used for the assessment of other technical areas in the EIS. Recent development activity in the Project Area and secondary study area will be noted. Other public policies that apply to the study

Land Use Study Areas



Legend

- Project Area
- Development Site
- 1/4-Mile Study Area

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

areas will also be described, including the Brooklyn Cultural District project, the 2004 Downtown Brooklyn Development Plan (2004), Housing New York, New York Works, and the City's sustainability/PlaNYC/OneNYC policies.

- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the study areas. Describe recent land use trends in the study areas and identify major factors influencing land use trends.
- Describe and map existing zoning and recent zoning actions in the study areas.
- Prepare a list of future development projects in the study areas that are expected to be constructed by the 2023 analysis year and may 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 areas. Based on these planned projects and initiatives, assess future land use and zoning conditions without the Proposed Actions (No-Action condition).
- Describe the Proposed Actions and provide an assessment of the impacts of the Proposed Actions and resultant RWCDS on land use and land use trends, zoning, and public policy. Consider the effects of the Proposed Actions and resultant RWCDS related to issues of compatibility with surrounding land use, consistency with public policy initiatives, and the effect on development trends and conditions in the study area.
- If necessary, mitigation measures to avoid or reduce potential significant adverse land use, zoning, and/or public policy impacts will be identified.

TASK 3. SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. This chapter will assess the Proposed Actions' potential effects on the socioeconomic character of the study area, which is expected to conform to the 0.25-mile land use study area described in Task 2. The socioeconomic conditions analysis will follow the guidance contained within the *CEQR Technical Manual*; specific methodologies are described herein.

The socioeconomic study area boundaries are dependent on the size and characteristics of the Proposed Project, pursuant to Section 310 of Chapter 5 of the *CEQR Technical Manual*. A socioeconomic assessment seeks to assess the potential to change socioeconomic character relative to the study area population. The Proposed Actions are expected to generate a net increase of up to 13 residential units and 783,277 gsf of commercial office and retail space compared to No-Action conditions. For projects or actions that result in an increase in population (both residential and worker), the scale of the relative change is typically represented as a percent increase in population (i.e., a project that would result in a relatively large increase in population may be expected to affect a larger study area). Therefore, if the Proposed Actions would increase the population by five percent compared to the expected No-Action population in a quarter-mile (0.25-mile) study area, the socioeconomic study area would be expanded to a half-mile (0.5-mile) radius, consistent with the *CEQR Technical Manual*.

The five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement due to increased rent; and (5) adverse effects on specific industries. As detailed below, the Proposed Actions warrant an assessment of socioeconomic conditions with respect to indirect business

displacement. Direct displacement of fewer than 500 residents or of fewer than 100 employees would not typically be expected to alter the socioeconomic characteristics of a neighborhood, according to the *CEQR Technical Manual*. The Proposed Actions would not exceed the *CEQR Technical Manual* analysis threshold of 500 displaced residents or 100 displaced employees, and therefore, are not expected to result in significant adverse impacts due to direct residential or business/institutional displacement. Per *CEQR Technical Manual* guidance, projects resulting in less than 200 residential units would not typically be expected to alter the socioeconomic characteristics of a neighborhood. The Proposed Actions would result in fewer than 200 residential units compared to future No-Action conditions, and therefore, are not expected to result in significant adverse impacts due to indirect residential displacement.

The assessment of indirect business displacement will begin with a preliminary assessment to determine whether a detailed analysis is necessary. 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 No-Action and With-Action conditions in 2023, including any population and employment changes anticipated to take place by the analysis year of the Proposed Actions.

Indirect Business Displacement

The indirect business displacement analysis assesses whether the Proposed Actions and the resultant RWCDS may introduce trends that markedly increase property values or rents throughout the study area making it difficult for those businesses that provide products or services essential to the local economy, or those subject to regulations or publicly adopted plans to preserve, enhance, or otherwise protect them, to remain in the area. The purpose of the preliminary assessment is to determine whether a proposed action has potential to introduce such a trend. The Proposed Actions and resultant RWCDS would introduce more than 200,000 sf of new commercial uses to the area, which is the analysis threshold for "substantial" new development warranting a preliminary assessment. The preliminary assessment will entail the following subtasks:

- Identify and characterize conditions and trends in employment and businesses within the study area. This analysis will be based on field surveys, employment data from the New York State Department of Labor and/or U.S. Census Bureau, and discussions with real estate brokers.
- Determine whether the Proposed Actions would introduce enough of a new economic activity to alter existing economic patterns.
- Determine whether the Proposed Actions would add to the concentration of a particular sector of the local economy enough to alter or accelerate the alternation of existing economic patterns.
- Determine whether the Proposed Actions would directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses.
- Determine whether the Proposed Actions would directly or indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the area.

If the preliminary assessment determines that the Proposed Actions could introduce trends that make it difficult for businesses that provide products or services essential to the local economy to remain in the area, a detailed analysis will be conducted. The detailed analysis would determine whether the Proposed Actions would increase property values and thus increase rents for a potentially vulnerable category of business and whether relocation opportunities exist for those businesses, following the *CEQR Technical Manual* guidance.

Indirect Business Displacement Due to Market Saturation

An assessment of the indirect business displacement due to market saturation is not warranted. The Proposed Actions and associated Proposed Project are not expected to add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the study area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets. The Proposed Actions are expected to introduce a maximum increment of approximately 79,539 gsf of retail uses compared to the No-Action condition.[13] Projects resulting in less than 200,000 sf of regional-serving retail in the study area, or less than 200,000 sf of locally-serving or regional-serving retail on a single development site would not typically result in socioeconomic impacts, according to the guidance established in the *CEQR Technical Manual*. As the Proposed Actions and associated Proposed Project would not exceed the CEQR threshold, the Proposed Actions are not expected to result in significant adverse impacts due to indirect business displacement due to saturation, and no further analysis is warranted in the EIS.

Adverse Effects on Specific Industries

The analyses of indirect business displacement will provide sufficient information to determine whether the Proposed Actions could have any adverse effects on a specific industry, compared with the Future without the Proposed Actions. The analysis will determine:

- Whether the Proposed Actions would significantly affect business conditions in any industry or category of businesses within or outside the study area.
- Whether the Proposed Actions would substantially reduce employment or impair viability in a specific industry or category of businesses.

The industries or categories of businesses that will be considered in this assessment are those specified in the North American Industry Classification System (NAICS) as promulgated by the U.S. Census Bureau.

TASK 4. COMMUNITY FACILITIES AND SERVICES

Community facilities are public or publicly funded schools, libraries, child care centers, health care facilities and fire and police protection. An analysis examines a project's potential effect on the services provided by these facilities. 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.

The Proposed Actions would not result in the direct displacement of any existing community facilities or services.[14] Nor would the Proposed Project affect the physical operations of, or access to and from, any police or fire stations. Therefore, the Proposed Actions would not have any significant adverse direct impacts on existing community facilities or services.

New population added to an area as a result of a project would use existing services, which may result in potential indirect effects on service delivery. The demand for community facilities and services is directly related to the type and size of the new population generated by the development resulting from a proposed

[13] Under the RWCDS, the Proposed Project absent the school and/or Special Permit is expected to introduce an increment of 79,539 gsf of commercial retail uses, while the Proposed Project with the school and Special Permit is expected to introduce an increment of 44,277 gsf of commercial retail uses.

[14] Lot 35 is currently occupied by Northside Center for Child Development, a child care and Pre-K facility. However, the Proposed Actions would not result in the direct displacement of this facility as it is expected that the existing building on Lot 35 would be demolished in the No-Action condition, and that the child care/Pre-K facility would not be included in the No-Action building.

project. The Proposed Actions would result in an increment of approximately 13 residential units to the area, compared to the No-Action condition. According to Table 6-1 of the *CEQR Technical Manual*, this level of development in Brooklyn would not exceed the CEQR analysis thresholds for public schools, libraries, or police/fire services and health care facilities. Therefore, a detailed analysis of public schools, libraries, or police/fire services and health care facilities is not warranted, and no significant adverse impacts are anticipated in regards to these technical areas. However, as the Proposed Actions would result in an increment of approximately 181 new affordable dwelling units, as compared to the No-Action condition, and thus would exceed the CEQR analysis threshold for child care, an assessment of child care centers is warranted and will be included in the EIS. As such, the community facilities and services analysis will follow the guidance contained within the *CEQR Technical Manual*; specific methodologies are described herein.

Public Schools

If a proposed project introduces less than 50 elementary and middle school age children, or 150 high school students, an assessment of school facilities is not required. In Brooklyn, the 50-student threshold for analysis of elementary/middle school capacity is achieved if a proposed project introduces at least 121 residential units; the threshold for analysis of high school capacity is 1,068 residential units. The Proposed Actions would result in an increment of up to 13 residential units compared to No-Action conditions. Based on the multipliers for estimating project-generated public school students (Table 6-1a of the *CEQR Technical Manua*l), the Proposed Actions would generate an increment of up to approximately four elementary school students, two intermediate school students, and two high school students compared to No-Action conditions. As the Proposed Actions would result in an increment of up to 13 residential units, it would not exceed the CEQR threshold for elementary/middle and high schools, and therefore, a detailed analysis of public elementary/intermediate and high schools is not warranted, and no significant adverse impacts are anticipated.

It should be noted that the Proposed Actions would also create additional school capacity in Downtown Brooklyn, a neighborhood which has experienced significant residential development and population growth in the past 10 years. This new public elementary school would add 640 school seats which would directly address the existing overcapacity conditions of Community School District (CSD) 13, Sub-district 2, in which the Development Site is located. CSD 13 has the highest concentration of new residential development in Downtown Brooklyn and an overall utilization rate of approximately 117 percent, with waitlists for attendance at the beginning of each school year. This new 640-seat public school would help to relieve this overcrowding.

Libraries

If a proposed project increases the number of residential units served by the local library branch by more than five percent, then an analysis of library services is necessary. In Brooklyn, the introduction of 734 residential units would represent a five percent increase in dwelling units per branch. As the Proposed Actions would result in the addition of up to 13 dwelling units to the study area, compared to the No-Action condition, it would not exceed the CEQR threshold for libraries, and therefore, a detailed analysis of libraries is not warranted, and no significant impacts are anticipated.

Child Care Centers

A detailed analysis of child care centers is required when a proposed project would produce substantial numbers of subsidized, low-to moderate-income family housing units that may therefore generate a sufficient number of eligible children to affect the availability of slots at public child care centers. Typically, projects that generate 20 or more eligible children under age six require further analysis. According to Table 6-1 of the *CEQR Technical Manual*, the number of dwelling units to yield 20 or more eligible children

under age six in Brooklyn would be 110 affordable housing units. The Proposed Actions would result in a net increment of up to 226 affordable dwelling units, compared to the No-Action condition, and therefore, would exceed the threshold for an analysis of child care centers. As such, a detailed analysis of child care centers is warranted, and will be included in the EIS.

Police/Fire Services and Health Care Facilities

A detailed analysis of police and fire services and health care facilities is required if a proposed project would (a) introduce a sizeable new neighborhood where one has not previously existed, or (b) would displace or alter a hospital or public health clinic, fire protection services facility, or police station. As the Proposed Actions would not result in any of the above, no significant adverse impacts would be expected to occur, and a detailed analysis of police/fire services and health care facilities is not required.

TASK 5. OPEN SPACE

The *CEQR Technical Manual* recommends performing an open space assessment if an action would have a direct effect on an open space (e.g., displacement of an existing open space resource) or an indirect effect through increased population size. Indirect effects may occur when the population generated by the Proposed Actions would be sufficiently large to noticeably diminish the ability of an area's open space to serve the future population. For the majority of projects, an assessment is warranted if the Proposed Actions would generate more than 200 residents or 500 employees, or a similar number of other uses. However, the need for an open space assessment varies in certain areas of the City that are considered either underserved or well-served by open space. The open space analysis will follow the guidance contained within the *CEQR Technical Manual*; specific methodologies are described herein.

The Proposed Actions would not have any direct effect on open space, as there are no publicly accessible open spaces in the Project Area. Therefore, an analysis of direct impacts on existing open space in the Project Area is not warranted; however, based on other chapters of the EIS, this chapter will summarize the findings of potential direct effects on open space related to shadows, noise, and construction. With respect to potential indirect impacts, the Proposed Area, which is neither located within an underserved area nor a well-served area, would exceed the 500-employee CEQR threshold requiring a preliminary assessment.

The preliminary assessment examines the change in total population relative to total open space in the study area to determine whether the elimination of open space and/or increase in user population would significantly reduce the amount of available open space for the area's population. If the open space ratio (expressed as the amount of open space acreage per 1,000 population) would increase or remain substantially the same in the With-Action condition compared to the No-Action condition, no further analysis of open space is needed. However, decreases in the open space ratio would generally warrant a more detailed analysis under the following conditions:

- If the decrease in the open space ratio approaches or exceeds five percent; or
- If the study area exhibits a low open space ratio (e.g., below the citywide average of 1.5 acres per 1,000 residents or 0.15 acres of passive space per 1,000 nonresidential users), indicating a shortfall of open space.

Based on the preliminary assessment, a detailed nonresidential open space analysis is warranted for the nonresidential population, which would be included in the EIS pursuant to the following sub-tasks.

The open space analysis will consider both passive and active open space resources within the nonresidential (0.25-mile radius) study area. As shown in **Figure 12**, the study area will generally comprise

Open Space Study Area

Legend

- Development Site
- Project Area
- Open Space Resource
- 1/4-Mile Radius
- 1/4-Mile Non-Residential Study Area
- 31 Census Tract

those census tracts that have 50 percent or more of their area located within the 0.25-mile radius of the Development Site, as recommended in the *CEQR Technical Manual*.[15]

The detailed open space analysis in the EIS will include the following subtasks:

- Characteristics of the residential and worker/daytime open space users will be determined. To determine the number of residents in the non-residential study area, 2010 U.S. Census data will be compiled for census tracts comprising the open space study areas. The number of employees and daytime workers in the nonresidential study area will be calculated based on 2010 Census reverse journey-to-work census data and other available information.
- Existing open spaces within the 0.25-mile nonresidential open space study area will be inventoried and mapped. The condition and usage of existing facilities will be described based on the inventory and field visits. In accordance with the *CEQR Technical Manual*, field surveys of the 0.25-mile study area's open space resources will be conducted during peak hours of use and in good weather. Passively programmed open spaces will be visited during peak weekday midday hours and actively programmed open spaces (or actively programmed portions of open spaces that contain both active and passive open space resources) will be visited during both weekday midday and peak weekend hours. Acreages of these facilities will be determined and the total study area acreages will be calculated. The percentage of passive and active open space will also be calculated.
- Based on the inventory of facilities and study area populations, open space ratios will be calculated for the worker, residential, and combined worker and residential populations and compared to City guidelines to assess adequacy. Open space ratios are expressed as the amount of open space acreage (total, passive, and active) per 1,000 user population.
- Expected changes in future levels of open space supply and demand in the 2023 analysis year will be assessed, taking into account the open space created under the Proposed Actions as well as other planned development projects within the open space study area. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. Open space ratios will be calculated for future No-Action conditions and compared with exiting ratios to determine changes in future levels of adequacy.
- Effects on open space supply and demand resulting from increased residential and non-residential population associated with the Proposed Actions will be assessed. The incremental decrease in open space between the No-Action and the With-Action condition (a net reduction of 18,719 sf of open space due to the loss of the No-Action public plaza) would also be taken into account. The assessment of the Proposed Actions' impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, a qualitative analysis will be performed to determine if the changes resulting from the Proposed Actions constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether or not the study areas are sufficiently served by open space, given the type (active vs. passive), capacity, condition, and distribution of open space, and the profile of the study area populations.
- If the results of the impact analysis identify a potential for significant adverse impacts to open space, potential practicable mitigation measures to avoid or reduce those significant adverse impacts will be identified.

[15] 0.25-mile radius adjusted to be coterminous with the boundaries of census tracts with existing populations that have 50 percent of their area within the radius.

TASK 6. SHADOWS

A shadows analysis assesses whether new structures resulting from a proposed project would cast shadows on sunlight sensitive publicly accessible resources or other resources of concern, such as sunlight-sensitive open space, historic resources, and natural resources, and assesses the significance of their impact. This chapter will examine the Proposed Actions and resultant RWCDS's potential for significant and adverse shadow impacts pursuant to *CEQR Technical Manual* criteria. Generally, the potential for shadow impacts exists if an action would result in new structures or additions to buildings resulting in structures over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on sunlight. New construction or building additions resulting in incremental height changes of less than 50 feet can also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource.

The Proposed Actions would facilitate the construction of a new mixed-use building with a height of approximately 942 feet in the vicinity of sunlight-sensitive open space and historic resources, including Fort Greene Park to the northeast. Although the Applicant intends to develop the Proposed Project with a 20-foot-tall mechanical bulkhead for a total building height of approximately 942 feet, for conservative analysis purposes the shadows assessment will analyze a building with the maximum permitted mechanical bulkhead (40 feet), thus resulting in a total building height of approximately 962 feet. Therefore, a shadows assessment is warranted to determine the extent, duration, and effects of any potential incremental new shadows on any sunlight-sensitive resources in the vicinity of the Development Site. The shadows assessment will follow the methodology described in the *CEQR Technical Manual*, and will include the following:

- A preliminary shadows screening assessment will be prepared to ascertain whether shadows from the Proposed Project may potentially reach any sunlight-sensitive resources at any time of year.
    - A Tier 1 Screening Assessment will be conducted to determine the longest shadow study area for the Proposed Project, which is defined as 4.3 times the height of a structure (the longest shadow that would occur on December 21, the winter solstice), pursuant to the *CEQR Technical Manual*. A base map that illustrates the location of the Proposed Project in relation to the sunlight-sensitive resources will be developed.
    - A Tier 2 Screening Assessment will be conducted if any portion of a sunlight-sensitive resource lies within the longest shadow study area. The Tier 2 assessment will determine the triangular area that cannot be shaded by the Proposed Project due to the path of the sun across the sky, which in New York City is the area that lies between -108 and +108 degrees from true north.
    - If any portion of a sunlight-sensitive resource is within the area that could be potentially shaded by the Proposed Project, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment will determine if shadows resulting from the Proposed Project can reach a sunlight-sensitive resource through the use of three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns. The model will include a three-dimensional representation of the sunlight-sensitive resource(s), a three-dimensional representation of the Proposed Project, and a three-dimensional representation of the topographical information within the area to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Project.
- If the screening analysis does not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources, a detailed analysis of potential shadow impacts on publicly-accessible open spaces and/or sunlight-sensitive historic resources resulting from the Proposed Project will be provided in the DEIS. The detailed shadow analysis will establish a baseline condition (No-Action), which will be compared to the future condition resulting from the Proposed Project (With-Action) to

illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the Proposed Project. The detailed analysis will include the following tasks:

- The analysis will be documented with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the Proposed Project, with incremental shadow highlighted in a contrasting color.
- A summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource will be provided.
- The significance of any shadow impacts on sunlight-sensitive resources will be assessed based on CEQR criteria. If any significant adverse shadow impacts are identified, potential practicable mitigation measures to avoid or reduce those significant adverse impacts will be identified.

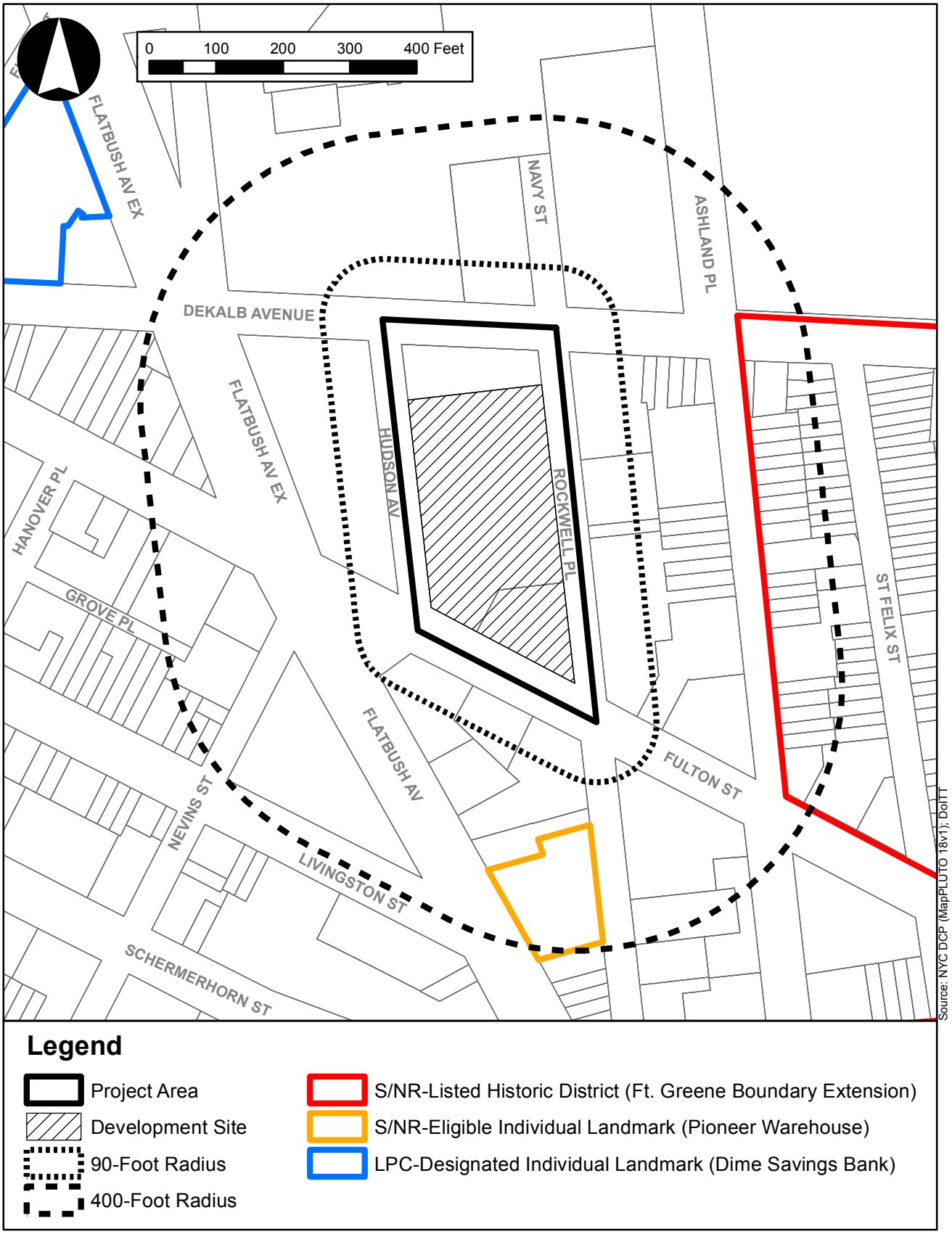
TASK 7. HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources are defined as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Register of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the New York State Board for Listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet the LPC and/or S/NR eligibility requirements. An assessment of architectural and/or archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures, within historic districts, and for developments that require new in-ground disturbance, unless such disturbance occurs in an area that has already been excavated. According to *CEQR Technical Manual* guidance, impacts on historic resources are considered on those sites affected by a proposed action and in the area surrounding identified development sites. The historic and cultural resources analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

A historic resources assessment is required if there is the potential to affect either archaeological or architectural resources. Impacts on historic resources are considered on those sites directly affected by the Proposed Actions and in the area surrounding the Project Area. For architectural resources, the study area is therefore defined as the Project Area, as well as an approximately 400-foot radius around the Project Area. Archeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance, as compared to No-Action conditions. Based on a letter provided by LPC on June 15, 2018, LPC determined that, based on its review of archaeological sensitivity models and historic maps, none of the lots that comprise the Project Area are archaeologically sensitive. As such, an assessment of archaeological resources is not warranted for the Proposed Actions, as no significant adverse impacts related to archaeological resources would result.

However, in a letter dated November 9, 2018, LPC identified several historic architectural resources located within 400 feet of the Project Area, including the Pioneer Building at 41 Flatbush Avenue (S/NR-eligible) and the Fort Green Historic District Boundary Extension (S/NR-listed) (see **Figure 13**). Therefore, an assessment of historic architectural resources is warranted for the Proposed Actions.

In addition, due to the proposed height of the Proposed Project (up to 962 feet tall), the potential for project-generated incremental shadows to affect sunlight-sensitive architectural resources outside the 400-foot study area could not be ruled out. In a letter dated November 5, 2018, LPC identified three sunlight-sensitive architectural resources that could potentially be impacted by incremental shadows as a result of the Proposed Actions, including the Baptist Temple at 360 Schermerhorn Street (LPC- and S/NR-listed), the First Free Congregational Church at 307 Bridge Street (LPC- and S/NR-listed), and the Friends Meeting House at 110 Schermerhorn Street (LPC- and S/NR-listed). As such, the findings of Task 6, "Shadows,"


0 100 200 300 400 Feet
FLATBUSH AV EX
NAVY ST
ASHLAND PL
DEKALB AVENUE
FLATBUSH AV EX
HUDSON AV
ROCKWELL PL
HANOVER PL
GROVE PL
ST FELIX ST
FLATBUSH AV
FULTON ST
NEVINS ST
LIVINGSTON ST
SCHERMERHORN ST
Source: NYC DCP (MapPLUTO 18v1); DoITT
Legend
Project Area
Development Site
90-Foot Radius
400-Foot Radius
S/NR-Listed Historic District (Ft. Greene Boundary Extension)
S/NR-Eligible Individual Landmark (Pioneer Warehouse)
LPC-Designated Individual Landmark (Dime Savings Bank)

and whether or not project-generated incremental shadows would have any impacts on these historic sunlight-sensitive resources will be disclosed within the architectural resources assessment.

Consistent with the *CEQR Technical Manual*, the historic and cultural resources analysis will include the following tasks:

ARCHITECTURAL RESOURCES

- Conduct a field survey of the Project Area and the 400-foot study area to identify any potential architectural resources that could be affected by the Proposed Project;
- Evaluate the potential for the Proposed Actions to result in any visual and contextual impacts on architectural resources, such as the shielding or elimination of publicly accessible views of an architectural resource. Potential effects will be evaluated through a comparison of the future No-Action condition and the future With-Action condition.
- Refer to the detailed shadows analysis to determine the potential for any sunlight-sensitive architectural resources to result in adverse impacts associated with incremental shadows (which will be assessed and disclosed in Task 6, "Shadows").
- 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

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. When an action would potentially obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings, a more detailed analysis of urban design and visual resources would be appropriate. As the Proposed Actions would rezone the Project Area to allow higher density, a preliminary assessment of urban design and visual resources will be provided in the EIS.

The urban design study area will be the same as that used for the land use analysis (delineated by a 0.25-mile radius from the Project Area boundary). For visual resources, the view corridors within the study area from which such resources are publicly viewable will be identified. However, in many cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of this area, as is often the case with waterfront sites or sites within or near historic districts. The preliminary assessment will consist of the following:

- Based on field visits, the urban design and visual resources of the directly affected area and adjacent study area will be described using text, photographs, birdseye views, area maps (including those showing existing view corridors and access to visual resources), and other graphic materials, as necessary, to identify critical features, use, bulk, form, and scale. A detailed narrative will address the components of urban design as defined in the *CEQR Technical Manual*: streets, buildings, visual resources, open space, natural resources, wind, and sunlight.
- In coordination with Task 2, "Land Use, Zoning, and Public Policy," the changes expected in the urban design and visual character of the study area due to known development projects in the future No-Action condition will be described.
- Potential changes that could occur in the urban design character of the study area as a result of the Proposed Actions will be described. For the Development Site, the analysis will focus on the Proposed

Project's massing, as well as elements such as streetwall height, setback, and building envelope.[16] Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including view of/to resources of visual or historic significance and a three-dimensional representation of the future With-Action condition streetscape.

If warranted, a detailed analysis will be prepared based on the preliminary assessment. 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, as described in the *CEQR Technical Manual*. The detailed analysis would describe the Project Area and the urban design and visual resources of 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 Actions (the With-Action condition) in comparison to the future without the Proposed Actions (the No-Action condition), focusing on the incremental changes that could negatively affect a pedestrian's experience of the area. As discussed above, the detailed analysis will present photographs, relevant zoning and floor area information, building heights, project drawings and site plans, and view corridor assessments. The analysis would be prepared in accordance with the *CEQR Technical Manual* and will include project images, such as site plans, elevations, and renderings from the pedestrian's perspective, as well as images that compare the No-Action and With-Action conditions. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 9. HAZARDOUS MATERIALS

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: a) elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposure; b) a project would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or c) the project would introduce a population to potential human or environmental exposure from off-site sources. The hazardous materials analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The hazardous materials chapter will examine the potential for significant hazardous materials impacts from the Proposed Project. The EIS will include a discussion of the site's history and current environmental conditions. A Phase I Environmental Site Assessment (ESA) for the Development Site will be prepared that will include the review of historic Sanborn maps, regulatory databases, and a site reconnaissance. The results of the Phase I ESA, as well as any previous relevant Phase II Subsurface Site Investigations will be summarized in the hazardous materials chapter. If needed, additional hazardous materials studies (e.g., Phase II Subsurface Site Investigation) will also be performed. The chapter will include a discussion of the Proposed Actions' potential to result in significant adverse hazardous materials impacts and, if necessary, will include a description of any additional testing, remediation, or other measures that would be necessary to avoid impacts.

[16] Similar to as stated above in Task 6, "Shadows," it should be noted that although the Applicant intends to develop the Proposed Project with a 20-foot-tall mechanical bulkhead for a total building height of approximately 942 feet, for conservative analysis purposes the urban design and visual resources assessment will analyze a building with the maximum permitted mechanical bulkhead (40 feet), thus resulting in a total building height of approximately 962 feet.

TASK 10. WATER AND SEWER INFRASTRUCTURE

The water and sewer infrastructure assessment determines whether a proposed action may adversely affect the City's water distribution or sewer system and, if so, assess the effects of such actions to determine whether their impact is significant. The *CEQR Technical Manual* outlines thresholds for analysis of an action's water demand and its generation of wastewater and stormwater. As described in the EAS for the Proposed Actions, an analysis of the City's water supply is not warranted as the Proposed Project would not result in a demand of more than one million gallons per day (gpd) and the Project Area is not located in an area that experiences low water pressure. However, water demand estimates will be provided in the EIS to inform the wastewater and stormwater conveyance and treatment analysis.

The threshold of preliminary wastewater and stormwater analysis for projects in Brooklyn with combined sewers is 400 dwelling units or 150,000 sf of commercial space or more. As the Proposed Actions and Proposed Project would include an increment of up to 783,277 gsf of commercial space, an assessment of wastewater and stormwater conveyance systems is required. The water and sewer infrastructure analysis will consider the potential for significant adverse impacts resulting from the Proposed Project. The New York City Department of Environmental Protection (DEP) will be consulted in preparation of this assessment.

Water Supply

- The existing water distribution system serving the Project Area will be described based on information obtained from DEP's Bureau of Water Supply and Wastewater Collection.
- Water demand generated on the Project Area under existing conditions will be estimated, and No-Action and With-Action conditions will be projected.
- The effects of the incremental demand on the City's water supply system will be assessed to determine if there would be impacts to water supply or pressure. The incremental water demand will be the difference between the water demand in the Project Area in the With-Action condition and the demand in the No-Action condition.

Wastewater and Stormwater Infrastructure

- The appropriate study area for the assessment will be established in accordance with the guidance of the *CEQR Technical Manual* and in consultation with DEP. The Proposed Project's directly affected area is primarily located within the service area of the Red Hook Water Pollution Control Plant (WPCP).
- The existing stormwater drainage system and surfaces (pervious or impervious) on the Project Area will be described, and the amount of stormwater generated on the site will be estimated using DEP's volume calculation worksheet.
- The existing sewer system serving the Project Area will be described based on records obtained from DEP. The existing flows to the Red Hook WPCP, which serves the directly affected area, will be obtained for the latest twelve-month period, and the average dry weather monthly flow will be presented. Information on existing sewer infrastructure in the area, including sanitary, storm, and combined sewer mains, regulators, interceptor sewers, outfalls, and other principal components of the local system will be provided based on available records.
- Any changes to the stormwater drainage plan, sewer system, and surface area expected in the future without the Proposed Actions (i.e., the No-Action condition) will be described, as warranted.
- Future stormwater generation from the Proposed Project compared to the No-Action condition will be assessed to determine the Proposed Project's potential to result in impacts. The stormwater assessment will discuss any planned sustainability elements and best management practices (BMPs) that are

intended to reduce stormwater runoff from the site. Changes to the Project Area's surface area (pervious or impervious) will be described, runoff coefficients and runoff for each surface type/area will be presented. Volume and peak discharge rates of stormwater from the site will be determined based on the DEP volume calculation worksheet.

- Sanitary sewage generation for the Project Area will also be estimated. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the Red Hook WPCP.

A more detailed assessment may be required if increased sanitary or stormwater discharges as a result of the Proposed Actions are predicted to affect the capacity of portions of the existing sewer system, exacerbate combined sewer overflow (CSO) volumes/frequencies, or contribute greater pollutant loadings in stormwater discharged to receiving water bodies. The scope of a more detailed analysis, if necessary, will be developed based on conclusions from the preliminary infrastructure assessment and coordinated with the lead agency and DEP.

TASK 11. ENERGY

An EIS must include a discussion of the effects of a proposed project on the use and conservation of energy, if applicable and significant, in accordance with CEQR. In most cases, a project does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to projects that may significantly affect the transmission or generation of energy. For other projects, in lieu of a detailed assessment, the estimated amount of energy that would be consumed annually as a result of the day-to-day operation of the buildings and uses resulting from a proposed project is disclosed, as recommended in the *CEQR Technical Manual*.

An analysis of the anticipated additional demand from the Proposed Actions and resultant RWCDS will be provided in the EIS. The EIS will disclose the projected amount of energy consumption during long-term operation resulting from the Proposed Actions. The projected amount of energy consumption during long-term operation (for the Development Site) will be estimated based on the average and annual whole-building energy use rates for New York City (per Table 15-1 of the *CEQR Technical Manual*).

TASK 12. TRANSPORTATION

The objective of a transportation analysis is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, the safety of all roadway users (pedestrians, bicyclists and motorists), on-and off-street parking, or goods movement. The Proposed Actions are expected to result in new residential, commercial office, local retail, and community facility (public elementary school and indoor public open space) uses, which would generate additional vehicular travel and demand for parking, as well as additional subway and bus riders and pedestrian traffic. These new trips have the potential to affect the area's transportation systems.

In addition, as discussed in Section D, "Analysis Framework for Environmental Review," the Proposed Project may also be constructed without the 640-seat public elementary school. As the Proposed Project absent the school would contain more retail and less office and community facility space compared to the Proposed Project with the school, and as trip generation rates, temporal and directional distributions, modal split, and vehicle occupancies vary by use, the 20.0 FAR project absent the school may have the potential to generate a greater amount of overall travel demand during certain peak hours. As such, the transportation analysis will also assess the potential impacts from the 20.0 FAR project that exceed those in the Proposed Project with the school.

Travel Demand and Screening Assessment

A detailed travel demand forecast was prepared for both the Proposed Project and the Proposed Project absent the school using standard sources, including the *CEQR Technical Manual*, U.S. census data, previously-approved studies, and other references. The travel demand forecast (a Level 1 screening assessment) is summarized by peak hour, mode of travel, as well as person and vehicle trips. The travel demand forecast also identifies the number of peak hour person trips made by transit and the numbers of pedestrian trips traversing the area's sidewalks, corner areas, and crosswalks. The results of this forecast have been summarized in a Transportation Planning Factors and Travel Demand Forecast (TPF/TDF) memorandum. Detailed vehicle, pedestrian and transit trip assignments (a Level 2 screening assessment) were prepared based on the results of the Proposed Project's travel demand forecast to identify the intersections and pedestrian/transit elements selected for quantified analysis. The detailed trip assignments are included in the TPF/TDF memorandum and will be included in the EIS.

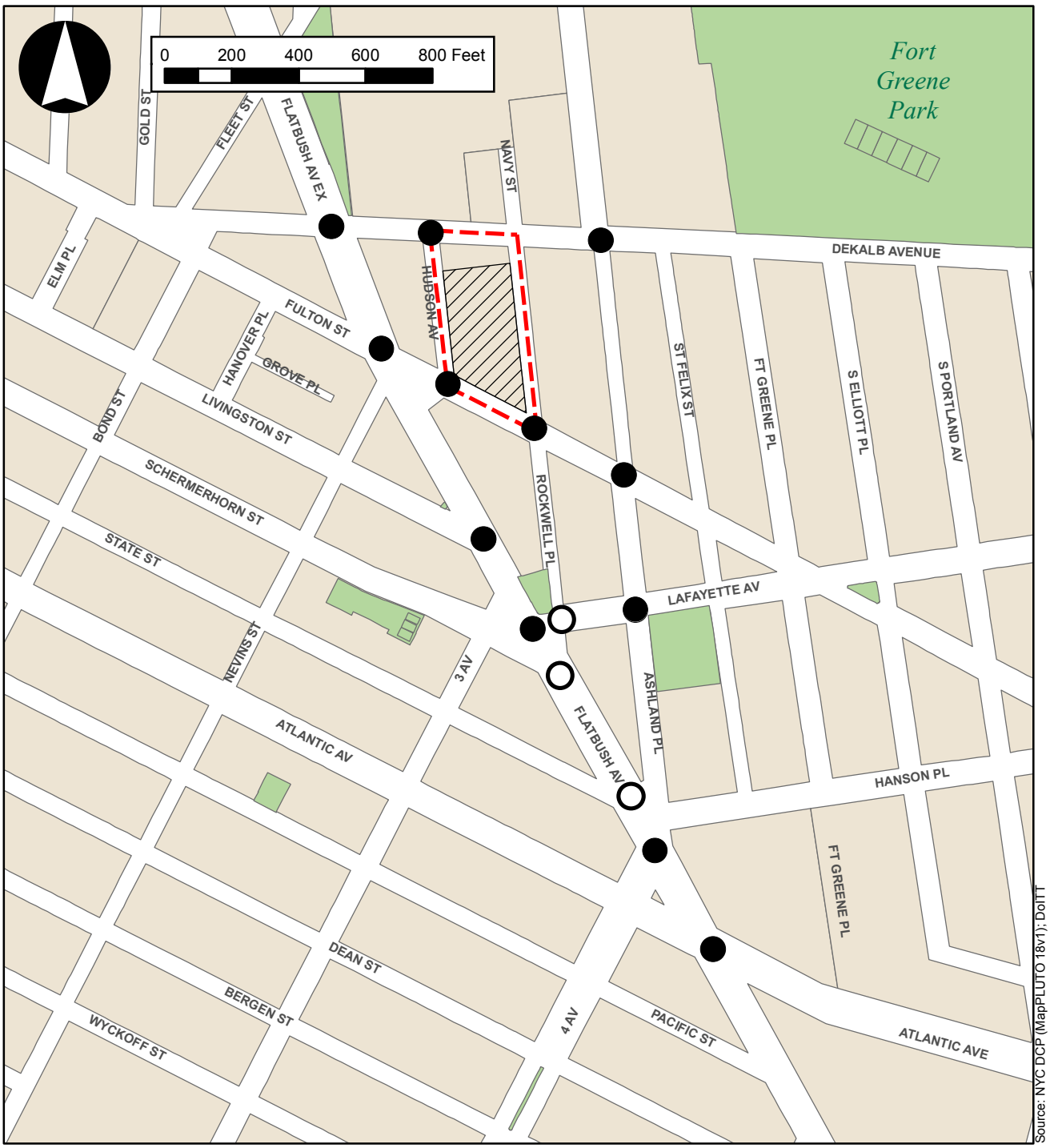
Traffic

The EIS will provide a detailed traffic analysis focusing on those peak hours and street network intersections where the highest concentrations of project-generated demand would occur. The peak hours for analysis are selected, and the specific intersections to be included in the traffic study area are determined based upon the assignment of project-generated traffic and the *CEQR Technical Manual* analysis threshold of 50 additional vehicle trips per hour, or at known congested locations.

The RWCDS would exceed the minimum development density screening thresholds for a transportation analysis specified in Table 16-1 of the *CEQR Technical Manual*. Therefore, a travel demand forecast is required to determine if the RWCDS would generate 50 or more vehicle trips in any peak hour. Based on a preliminary forecast, the RWCDS is expected to generate more than 50 additional vehicular trips in the weekday AM, midday, and PM peak hours. The study intersections and data collection will be determined based on the final TPF/TDF Memo and in consultation with DOT. However, based on a preliminary vehicle trip assignment, it is anticipated that a detailed traffic analysis will be warranted at up to 15 intersections (see **Figure 14**). The analyzed intersections will include the following:

- DeKalb Avenue at Hudson Avenue (signalized)
- DeKalb Avenue at Ashland Place (signalized)
- Flatbush Avenue at DeKalb Avenue (signalized)
- Flatbush Avenue at Fulton Street (signalized)
- Flatbush Avenue at Livingston Street (signalized)
- Flatbush Avenue at Lafayette Avenue (signalized)
- Flatbush Avenue at Schermerhorn Street (unsignalized)
- Flatbush Avenue at State Street (unsignalized)
- Flatbush Avenue at Fourth Avenue (signalized)
- Flatbush Avenue at Atlantic Avenue (signalized)
- Fulton Street at Hudson Avenue (signalized)
- Fulton Street at Rockwell Place (signalized)
- Fulton Street at Ashland Place (signalized)
- Lafayette Avenue at Rockwell Place (unsignalized)

Intersections to be Analyzed



Legend

- Project Area
- Development Site
- Intersections to be Analyzed (Signalized)
- Intersections to be Analyzed (Unsignalized)

- Lafayette Avenue at Ashland Place (signalized)

The following outlines the anticipated scope of work for conducting a traffic impact analysis for the RWCDS:

- Conduct a count program for traffic analysis locations that includes a mix of automatic traffic recorder (ATR) machine counts and intersection turning movement counts. If needed, vehicle classification counts and travel time studies (speed runs) will be conducted to provide supporting data for air quality and noise analyses. Turning movement count data will be collected at each analyzed intersection during the weekday and Saturday peak hours, and will be supplemented by nine days of continuous ATR counts. Vehicle classification count data will be collected during each peak hour at several representative intersections along each of the principal corridors in the study area. The turning movement counts and vehicle classification counts will be conducted concurrently with the ATR counts. The count program will be adequate to address input parameters for the Motor Vehicle Emission Simulator (MOVES). Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from such agencies as the DOT and DCP.
- Inventory physical data at each of the analysis intersections, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, bicycle routes, curbside parking regulations. Signal phasing and timing data for each signalized intersection included in the analysis will be obtained from DOT.
- Determine existing traffic operating characteristics at each analysis intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per lane group, per intersection approach, and per overall intersection. This analysis will be conducted using the 2000 Highway Capacity Manual (HCM) methodology with the latest approved Highway Capacity Software (HCS).
- Based on available sources, U.S. Census data and standard references including the *CEQR Technical Manual*, estimate the demand from other major developments planned in the vicinity of the Project Area by the 2023 analysis year. This will include total daily and peak hour person and vehicular trips, and the distribution of trips by auto, taxi, and other modes. A truck trip generation forecast will also be prepared based on data from the *CEQR Technical Manual* and previous relevant studies. Mitigation measures accepted for all No-Action projects as well as other DOT initiatives will be included in the future No-Action network, as applicable.
- Compute the future 2023 No-Action traffic volumes based on approved background traffic growth rates for the study area (0.25 percent per year for years one through five) and demand from major development projects expected to be completed in the future without the Proposed Actions along with any corresponding approved mitigation measures. Incorporate any planned changes to the roadway system anticipated by 2023, and determine the No-Action v/c ratios, delays, and levels of services at analyzed intersections.
- Using Census data, standard references including the *CEQR Technical Manual*, and data from previous studies, develop a travel demand forecast for the Development Site based on the net change in uses compared to the No-Action condition. For each analyzed peak hour, determine the net change in vehicle trips expected to be generated by the Proposed Actions as described in the finalized TPF/TDF technical memorandum. Assign the net project-generated trips in each analysis period to origin destination patterns, and prepare traffic volume networks for the 2023 future with the Proposed Actions condition for each analyzed peak hour.
- Determine the v/c ratios, delays, and LOS at analyzed intersections for the With-Action condition and identify significant adverse traffic impacts in accordance with *CEQR Technical Manual* criteria.
- Identify and evaluate potential traffic mitigation measures, as appropriate, for all significantly impacted locations in the study area in consultation with the lead agency and DOT. Potential traffic mitigation

could include both operational and physical measures such as changes to lane striping, curbside parking regulations and traffic signal timing and phasing, roadway widening, and the installation of new traffic signals. Where impacts cannot be fully or partially mitigated, they will be described as unavoidable adverse impacts.

Transit

Detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit trips according to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*. If a proposed action would result in 50 or more bus trips being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more trips at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted.

As noted above, based on preliminary travel demand forecasts provided in the TPF/TDF technical memorandum, the Proposed Actions are expected to generate a net increase of more than 200 additional subway trips in one or more peak hours, and would therefore require detailed transit analyses based on *CEQR Technical Manual* criteria. The Proposed Actions are expected to generate a net total of approximately 119 incremental trips by transit bus (with the proposed school) during the weekday AM peak hour, and 101 trips (absent the school) in the PM. However, given that a total of 12 bus routes operate within proximity of the Development Site (i.e., the B25, B26, B37, B38, B41, B41 (LTD), B45, B52, B63, B65, B67, and B103), it is unlikely that one or more bus routes would experience 50 or more bus passenger trips in one direction in at least one peak hour. However, as the potential for the Proposed Actions to generate more than 50 bus passenger trips in one direction in at least one peak hour cannot currently be ruled out, a quantitative analysis of conditions on local bus routes is warranted and would be provided in the EIS.

In addition to subway and bus transit, Downtown Brooklyn is served by commuter rail, with the Long Island Rail Road operating out of Atlantic Terminal at Flatbush and Atlantic avenues. Based on the preliminary travel demand forecasts provided in the TPF/TDF technical memorandum, it is estimated that the Proposed Actions would generate up to 102 trips by commuter rail in each peak hour. Therefore, as the projected net increase in trips by commuter rail is not expected to exceed the CEQR Technical Manual analysis threshold of 200 or more rail trips per line and direction, a detailed analysis of commuter rail conditions is not warranted. However, as it is anticipated that commuter rail trips would start or end their journey via another mode of travel, they are reflected as subway trips for conservative analysis purposes.

Subway

There are five existing subway stations located in proximity to the Development Site that would potentially be utilized by project-generated trips: the DeKalb Avenue station, served by B and Q trains operating on the Brighton Line and R trains operating on the Fourth Avenue Line, is located one block to the west of the Development Site at the intersection of Flatbush and DeKalb avenues. The Nevins Street station, served by Nos. 2, 3, 4 and 5 trains operating on the Eastern Parkway Line, is located one block to the south of the Development Site near the intersection of Nevins Street and Flatbush Avenue. To the southeast are the Fulton Street station, served by G trains operating on the Crosstown Line, located three blocks from the Development Site at the intersection of Fulton Street and Lafayette Avenue, and the Lafayette Avenue station, served by C trains operating on the Fulton Street Line, located five blocks to the southeast at the intersection of Lafayette and South Portland avenues. Lastly, there is the Hoyt-Schermerhorn Streets station, served by A and C trains on the Eighth Avenue Line and G trains on the Crosstown Line. This station is located an approximately 0.35-mile walk to the southwest of the Development Site. The detailed transit analyses will include the following subtasks:

- Identify any subway stations expected to be utilized by 200 or more project-generated trips in one or

more peak hours. At each of these stations, if any, analyze those stairways and entrance control elements expected to be used by significant concentrations of project-generated demand in the weekday AM and PM peak hours. For such stations also:

- Conduct counts of existing weekday AM and PM peak hour demand at analyzed subway station elements and determine existing v/c ratios and levels of service based on *CEQR Technical Manual* criteria.
- Determine volumes and conditions at analyzed subway station elements in the future without the Proposed Actions using approved background growth rates and accounting for any trips expected to be generated by any major projects in the vicinity of the study area.
- Add project-generated demand to the No-Action volumes at analyzed subway station elements and determine AM and PM peak hour volumes and conditions in the future with the Proposed Actions.
- Identify potential significant adverse impacts at subway station stairways and fare control elements based on *CEQR Technical Manual* impact criteria.

- As the Proposed Actions are expected to generate 200 or more new subway trips in one direction on one or more of the of the three existing subway routes serving the area, subway line haul conditions will also be assessed in the EIS.
- Mitigation needs and potential subway station improvements will be identified, as appropriate, in conjunction with the lead agency and New York City Transit (NYCT). Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

Pedestrians

Projected pedestrian volumes of less than 200 persons per hour at any pedestrian element (sidewalks, corner areas, and crosswalks) would not typically be considered a significant adverse impact, since the level of increase would not generally be noticeable and therefore would not require further analysis under *CEQR Technical Manual* criteria. Based on the level of new pedestrian demand generated by the Proposed Actions, it is anticipated that project-generated pedestrian trips would exceed the 200-trip *CEQR Technical Manual* analysis threshold at several locations in one or more peak hours. A detailed pedestrian analysis will therefore be prepared for the EIS focusing on selected sidewalks, corner areas, and crosswalks along key corridors that would experience more than 200 additional peak hour pedestrian trips. Pedestrian counts will be conducted at each analysis location and used to determine existing levels of service. No-Action and With-Action pedestrian volumes and levels of service will be determined based on approved background growth rates, trips expected to be generated by major projects in the vicinity of the study area, and project-generated demand. The specific pedestrian facilities to be analyzed will be determined in consultation with the lead agency once the assignment of project-generated pedestrian trips has been finalized. The analysis will evaluate the potential for incremental demand from the Proposed Actions and resultant RWCDS to result in significant adverse impacts based on current *CEQR Technical Manual* criteria. Potential measures to mitigate any significant adverse pedestrian impacts will be identified and evaluated, as warranted, in consultation with the lead agency and DOT.

Vehicular and Pedestrian Safety

The City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. In an effort to drive these fatalities down, DOT and New York City Police Department (NYPD) developed a set of five plans, each of which analyzes the unique conditions of one New York City borough and recommends actions to address the borough's specific challenges to pedestrian safety. The Vision Zero Brooklyn Pedestrian Safety Action Plan outlines a series of

recommended actions comprised of engineering, enforcement, and education measures that intend to alter the physical and behavioral conditions on City streets that lead to pedestrian fatality and injury.
Data on traffic crashes involving pedestrians and/or cyclists at study area intersections will be obtained from DOT for the most recent three-year period available. This data will be analyzed to determine if any of the studied locations may be classified as high crash locations and whether vehicle and/or pedestrian trips and any street network changes resulting from the Proposed Actions would adversely affect vehicular and pedestrian safety in the area. If any high crash locations are identified, practicable measures to enhance pedestrian/bicycle safety at these locations will be explored to alleviate potential safety issues. In addition, a discussion of safety measures to minimize pedestrian and vehicle conflicts in the vicinity of the Proposed Project's public elementary school will also be presented.

Parking

If project-generated parking demand cannot be fully accommodated at the Development Site, a detailed analysis of on-street and off-street parking conditions will be provided in the EIS. A detailed inventory of existing on-street and off-street parking would be conducted for the weekday midday period (when commercial parking demand typically peaks) and weekday overnight period (when residential parking demand typically peaks) to document existing supply and demand for each period. Parking utilization within 0.25-mile of the Development Site will be analyzed. If the initial on- and off-street parking assessment shows conditions at or near capacity, then a parking assessment would be conducted up to a 0.5-mile radius to determine if capacity is available to accommodate the projected demand. The parking analyses would document changes in the parking utilization in proximity to the Development Site under the No-Action and With-Action conditions based on accepted background growth rates and projected demand from No-Action and With-Action development on the Development Site and other major projects in the vicinity of the study area.
Parking demand generated by the projected residential component of the Proposed Project will be forecasted based on auto ownership data for the Development Site and the surrounding area. Parking demand from all other uses will be derived from the forecasts of daily auto trips generated by these uses. The forecast of new parking supply under the RWCDS will be based on the net change in parking spaces within the Project Area compared to the No-Action condition. No accessory parking would be required for the affordable units that may be developed under the No-Action and/or With-Action conditions. The forecast of future supply will also account for accessory parking spaces associated with the With-Action commercial uses, which generally have lower commercial demand in the overnight hours.

TASK 13. AIR QUALITY

The number of RWCDS-generated vehicle trips is expected to exceed the *CEQR Technical Manual's* carbon monoxide (CO) screening threshold of 160 vehicles in Downtown Brooklyn in a peak hour at one or more intersections and/or the particulate matter ($PM_{2.5}$) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Therefore, a microscale analysis of CO and PM mobile source emissions at such intersections will be conducted. Using computerized dispersion modeling techniques, the effects of project-generated traffic on CO and $PM_{2.5}$ concentrations at critical intersection locations will be determined. In addition, the effect of the RWCDS parking facility on air quality will be analyzed, and the results from that analysis will be combined with the intersection analyses, where applicable. The mobile source analyses will be performed for the RWCDS scenario that is determined to be the worst-case scenario for the transportation studies.

Potential impacts on surrounding uses from the heating and hot water systems that would serve the Proposed Project and the potential impact of existing stationary sources (major emission and industrial sources) would also be assessed. The effect of heating and hot water systems associated with large or major emission sources in existing buildings in the Project Area will be analyzed, if necessary. Large and major sources of

emissions within 1,000 feet of the Project Area must be examined, as described in the *CEQR Technical Manual*.

Mobile Sources Tasks

- Select appropriate background levels. Summarize existing ambient air quality data for the study area. Specifically, ambient air quality monitoring data published by NYSDEC will be compiled for the analysis of existing and future conditions.
- Determine receptor locations for the microscale analysis. Select critical intersection locations representing locations with the highest potential total and incremental pollution impacts, based on ranking of intersection data obtained from the traffic analysis. At each intersection, multiple receptor locations will be analyzed in accordance with CEQR guidance.
- Select dispersion models. Use EPA's first-level CAL3QHCR intersection model to predict the maximum change in CO concentrations. The refined EPA CAL3QHCR intersection model will be used to predict the maximum change in $PM_{2.5}$ concentrations.
- Emission calculation methodology and meteorological conditions. Five years of recent meteorological data, consisting of surface data from the LaGuardia Airport National Weather Service Station, and concurrent upper data from Brookhaven, New York, will be used for the simulation modeling. Vehicular cruise and idle emissions for the dispersion modeling will be computed using the most current EPA's MOVES model based on traffic volumes, speeds, and vehicle classification information developed for the transportation studies. Compute re-suspended road dust emission factors based on CEQR guidance and the EPA procedure defined in AP-42.
- At each microscale receptor site, calculate for each applicable peak period the maximum 1- and 8-hour average CO concentrations and maximum 24-hour and annual average $PM_{2.5}$ concentrations for No-Action and With-Action conditions. Concentrations will be determined for the weekday AM, midday, and PM peak periods for CO and $PM_{2.5}$.
- Perform an analysis for the RWCDS parking facility. The analysis will apply the procedures outlined in the CEQR Technical Manual for assessing potential impacts of CO and PM from the proposed parking facility. Cumulative impacts from on-street sources and emissions from parking facilities will be calculated, where appropriate.
- Evaluate results. Future pollutant levels with and without the Proposed Actions will be compared with the NAAQS, and the City's CO and $PM_{2.5}$ *de minimis* guidance criteria, to determine the mobile source air quality impacts of the Proposed Actions.
- If the results of the impact analysis identify a potential for significant adverse impacts, potential practicable mitigation measures to avoid or reduce those significant adverse impacts will be identified.

Stationary Sources Tasks

The stationary source analyses will be performed for the RWCDS that is determined to be the worst-case scenario for the potential impacts from stationary sources.

- A screening analysis will be performed and will include the procedures outlined in the *CEQR Technical Manual* that consider the distance of the Proposed Project's heating and hot water system exhaust to the nearest building of similar or greater height, the proposed building size, the height of the exhaust stack and the type(s) of fuel used.
- If warranted, a detailed stationary source analysis will be performed using the EPA AERMOD dispersion model to estimate the potential impacts from the heating and hot water systems for the Proposed Project. Five years of recent meteorological data, consisting of surface data from the LaGuardia Airport National Weather Service Station, and concurrent upper data from Brookhaven, New York, will be used for the simulation modeling. Concentrations of air contaminants of concern will be determined at sensitive receptor locations within the Project Area, as well as at off-site locations from the cumulative effects of the emission sources

associated with the RWCDS. Predicted values will be compared with the corresponding guidance thresholds and national ambient air quality standards.

- An analysis of existing large and major sources of emissions (such as sources having federal and/or state permits) identified within 1,000 feet of the Project Area will be performed to assess their potential effects on the Proposed Project. Industrial sources within 400-feet of the Project Area will also be assessed. Criteria pollutant concentrations will be predicted using the AERMOD model compared with NAAQS and *de minimis* criteria for $PM_{2.5}$.

TASK 14. GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Greenhouse Gas Emissions

Increased greenhouse (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. As the RWDCS exceeds the 350,000 sf development threshold, GHG emissions generated by the Proposed Actions will be quantified and an assessment of consistency with the City's established GHG reduction goal will be performed as part of the EIS in accordance with the *CEQR Technical Manual*. 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. The assessment will examine GHG emissions from the Proposed Project's operations, mobile sources, and construction, as outlined below.

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.

- Direct Emissions – GHG emissions from the Proposed Project's 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 available project-specific information regarding the project's expected fuel use or 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 Proposed Project's operation will be estimated.
- The pollutants for analysis will be discussed, as well as various City, State, and Federal goals, policies, regulations, standards, and benchmarks for GHG emissions.
- Fuel consumption will be estimated for the Proposed Project based on the calculations of energy use estimated as part of Task 11, Energy.
- GHG emissions associated with the action-related traffic will be estimated for the Proposed Project using data from Task 12, Transportation. A calculation of vehicle miles traveled (VMT) will be prepared.
- The types of construction materials and equipment proposed will be discussed along with opportunities for alternative approaches that may serve to reduce GHG emissions associated with construction.
- A qualitative discussion of stationary and mobile sources of GHG emissions will be provided in conjunction with a discussion of goals for reducing GHG emissions to determine if the Proposed Project is consistent with GHG reduction goals, including the construction of efficient buildings, using clean power, transit-oriented development and sustainable transportation, reducing construction operations emissions, and using building materials with low carbon intensity.

- 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.

Climate Change

Per the Preliminary Flood Insurance Rate Maps for New York City dated 1/30/2015, which are issued by the Federal Emergency Management Agency (FEMA) and considered the best available flood hazard data, the Development Site is not located within the 100-year or 500-year floodplain, or any projected future flood zones. Therefore, the Development Site is not likely to experience storm surge and coastal flooding, and an assessment of climate change is not warranted.

TASK 15. NOISE

For the Proposed Actions, there are two major areas of concern regarding noise: (1) the effect the Proposed Actions would have on sensitive noise receptors in the surrounding community; and (2) the potential noise exposure at new sensitive uses introduced by the Proposed Actions.

The Proposed Actions would generate vehicle trips, but given the background conditions and the anticipated project-generated traffic, it is not expected that project-generated traffic would be likely to result in significant adverse mobile-source noise impacts. However, a screening assessment will be performed to determine whether there are any locations where there is the potential for the Proposed Actions and Proposed Project to result in significant noise impacts (i.e., doubling of Noise Passenger Car Equivalents [PCEs]) due to project-generated traffic. As the Proposed Project is expected to include a playground as a part of the proposed public elementary school, an action-generated playground noise assessment will also be warranted. A detailed analysis of potential noise impacts due to outdoor mechanical equipment is not required as the outdoor mechanical equipment for any future development facilitated by the Proposed Project would be required to meet applicable DOB regulations, which ensure that noise levels from equipment are below *CEQR Technical Manual* impact criteria. The noise analysis will also examine the level of building attenuation necessary to meet CEQR interior noise level requirements.

The following tasks will be performed in compliance with *CEQR Technical Manual* guidelines:

- Based on the traffic studies conducted for Task 12, Transportation, a screening analysis will be conducted to determine whether there are any locations where there is the potential for the Proposed Actions to result in significant noise impacts (i.e., doubling Noise PCEs) due to project-generated traffic. If it is determined that Noise PCEs would double at any sensitive receptor, a detailed analysis would be conducted in accordance with *CEQR Technical Manual* guidance.
- Appropriate noise descriptors for building attenuation purposes would be selected. Based on CEQR criteria, the noise analysis will examine the L_{10} and the one-hour equivalent ($L_{eq(1)}$) noise levels.
- Existing noise levels will be measured at receptor locations adjacent to the Development Site. At each receptor site, 20-minute measurements will be performed during typical weekday AM, midday, and PM peak periods (coinciding with the traffic peak periods). Noise measurements will be recorded in conformance with *CEQR Technical Manual* procedures, and measured noise level descriptors will include equivalent noise level (L_{eq}), maximum level (L_{max}), minimum level (L_{min}), and statistical percentile levels such as L_1, L_{10}, L_{50}, and L_{90}. A summary table of existing measured noise levels will be provided as part of the EIS.
- Following procedures outlined in the *CEQR Technical Manual* for assessing mobile source noise impacts, future No-Action and With-Action noise levels will be estimated at the noise receptor locations based on acoustical fundamentals. Noise from the proposed school playground will be determined

based on prior measurements made at multiple SCA school playgrounds.[17] This study of playground noise includes the noise emission levels used by the SCA in analyzing noise from all of their new school construction projects and is the standard reference for school playground noise in New York City. All projections will be made with L_{eq} noise descriptor.

- The level of building attenuation necessary to satisfy CEQR requirements (a function of the exterior noise levels) will be determined based on the highest L_{10} noise level estimated at each monitoring site. The building attenuation requirements will be memorialized by (E) designations placed on the blocks and lots requiring specific levels of attenuation pursuant to Section 11-15 of the New York City Zoning Resolution and the (E) designation rules. The EIS would include the (E) designation language, if necessary.

TASK 16. PUBLIC HEALTH

Public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status, as defined in the *CEQR Technical Manual*. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a proposed project, and, if so, to identify measures to mitigate such effects.

A public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, hazardous materials, or noise, according to the *CEQR Technical Manual*. If unmitigated significant adverse impacts are identified for the Proposed Actions in any of these technical areas and a public health assessment is warranted, an analysis will be provided for the specific technical area or areas.

TASK 17. NEIGHBORHOOD CHARACTER

Neighborhood character 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. The Proposed Actions has the potential to alter certain elements contributing to the affected area's neighborhood character. Therefore, a neighborhood character analysis will be provided in the EIS.

A preliminary assessment of neighborhood character will be provided in the EIS to determine whether changes expected in other technical analysis areas—land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise—may affect a defining feature of neighborhood character. The preliminary assessment will:

- Identify the defining features of the existing neighborhood character.
- Summarize changes in the character of the neighborhood, such as planned development projects, public policy initiatives, and planned public improvements, that can be expected in the future With-Action condition and compare to the future No-Action condition.
- Evaluate whether the Proposed Actions has the potential to affect these defining features, either through the potential for a significant adverse impact or a combination of moderate effects in the relevant technical areas.

[17] SCA Playground Noise Study, AKRF, Inc., October 23, 1992.

If the preliminary assessment determines that the Proposed Actions could affect the defining features of neighborhood character, a detailed analysis will be conducted in accordance with the *CEQR Technical Manual* guidelines.

TASK 18. CONSTRUCTION

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources and the integrity of historic resources, community noise levels, air quality conditions, and mitigation of hazardous materials. Projects with overall construction periods lasting longer than two years and that are near to sensitive receptors should undergo a preliminary impact assessment according to the *CEQR Technical Manual*. Construction of the Proposed Project is expected to take place over a period greater than two years, and is therefore considered long-term and warrants a preliminary assessment. This chapter of the EIS will provide a preliminary impact assessment following the guidelines in the *CEQR Technical Manual*. The preliminary assessment would rely on the conceptual construction schedule developed for the Proposed Project to identify peak periods of construction activity and will evaluate the duration and severity of the disruption or inconvenience to nearby sensitive receptors as a result of construction activity. Technical areas to be assessed include the following:

- **Transportation Systems:** The assessment will consider losses in lanes, off-street parking, sidewalks, and other transportation services on the adjacent streets during the various phases of construction and identify the increase in vehicle trips from construction workers and equipment. A travel demand forecast for the worst-case construction period will be prepared if warranted under CEQR guidelines, including the preparation of a trip generation table identifying the number of construction worker vehicle and construction-related truck in-and-out trips for the construction AM and PM peak hours for each quarter and an assessment of parking conditions during the peak construction traffic periods. Based on the trip projections of activities associated with peak construction, an assessment of potential transportation impacts during construction and how they compare to the trip projections and origin destinations under the operation condition will be provided. If this effort identifies the need for a separate detailed analysis, a detailed construction transportation analysis will be provided for those locations that are determined to be needed in consultation with DOT.
- **Air Quality:** Due to the anticipated duration of construction and proximity to sensitive receptor locations such as residences and nearby open spaces, the Proposed Project would have the potential for construction effects related to air quality. A detailed dispersion analysis of construction sources will be performed to determine the potential for air quality impacts on sensitive receptor locations. Air pollutant sources would include emissions from construction equipment, worker vehicles and trucks, as well as fugitive dust. The analysis will review the projected activity and equipment in the context of intensity, duration, and location of emissions relative to nearby sensitive locations. The pollutants of concern include carbon monoxide (CO), particulate matter (PM), and nitrogen dioxide (NO_2). The potential for significant impacts will be determined by a comparison of model predicted total concentrations to the National Ambient Air Quality Standards (NAAQS), or by comparison of the predicted increase in concentrations to applicable interim guidance thresholds. The air quality analysis will also include a discussion of the strategies and best management practices to reduce project related air pollutant emissions associated with construction activities.
- **Noise and Vibration:** The construction noise impact section will contain an assessment of noise from the Proposed Project's construction activity. This will include estimates of construction noise levels at nearby receptors during the various phases of construction. As discussed above, the construction noise analysis would rely on the conceptual construction schedule developed for the Proposed Project to identify peak periods of construction activity. Assumptions would be developed regarding equipment usage factors and typical equipment noise levels. The magnitude and duration of construction noise

experienced at nearby noise receptors will be determined and evaluated. The noise analysis will take into account strategies to reduce noise associated with construction activities. 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. Appropriate recommendations, if any, will be made to comply with DEP Rules for Citywide Construction Noise Mitigation and the New York City Noise Control Code.

Construction activities have the potential to result in vibration levels that may result in structural or architectural damage, and/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.

- **Other Technical Areas:** As appropriate, the construction assessment will discuss other areas of environmental concern, including Land Use and Neighborhood Character, Socioeconomic Conditions, Community Facilities, Open Space, Historic and Cultural Resources, and Hazardous Materials, for potential construction-related impacts. In accordance with *CEQR Technical Manual* guidelines, the construction analysis will include an assessment of whether construction of the Proposed Project would potentially physically impact, or inhibit access to, adjacent land uses, including community facilities.

TASK 19. MITIGATION

Where significant adverse impacts have been identified in Tasks 2 through 18, potential measures to feasibly mitigate those impacts will be described. These measures will be developed and coordinated with the responsible City/State agencies, as necessary. Where impacts cannot be fully mitigated, they will be disclosed as unavoidable adverse impacts.

TASK 20. ALTERNATIVES

The purpose of an alternative section in an EIS is to examine reasonable alternatives that have the potential to reduce or eliminate action-related impacts. The alternatives will be better defined once the full extent of the Proposed Actions' impacts have been identified. As required by SEQRA, the EIS will include a No-Action alternative. It will also include a No Unmitigated Impact alternative. The alternatives analysis will be qualitative, except in those technical areas where significant adverse impacts for the Proposed Actions have been identified. The level of analysis provided will depend on an assessment of project impacts determined by the analysis connected with the appropriate tasks. A discussion of other possible alternatives may be identified during the scoping and EIS preparation process, such as alternatives that may reduce but not eliminate identified unavoidable adverse impacts, or that may be posed by the public during the scoping of the EIS. The analysis of such an alternative will be qualitative, except where significant adverse impacts of the Propose Actions have been identified.

TASK 21. SUMMARY EIS CHAPTERS

The EIS will include the following three summary chapters, in accordance with CEQR guidelines:

- **Unavoidable Adverse Impacts:** summarizes any significant adverse impacts that are unavoidable if the Proposed Actions are implemented regardless of the mitigation employed (or if mitigation is not feasible).
- **Growth-Inducing Aspects of the Proposed Actions:** which generally refer to "secondary" impacts of the Proposed Actions and Proposed Project that trigger further development.

- **Irreversible and Irretrievable Commitments of Resources:** which summarizes the Proposed Actions and its impact in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 22. EXECUTIVE SUMMARY

The executive summary will utilize relevant material from the body of the EIS to describe the Proposed Actions and Proposed Project, the environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Actions and/or Proposed Project. The executive summary will be written in sufficient detail to facilitate drafting of a notice of completion by DCP, the lead agency.