4506 PARK AVENUE
ZONING MAP & TEXT AMENDMENT
Borough of the Bronx, Community District 6

City Environmental Quality Review
Draft Environmental Assessment Statement



(For illustrative purposes only)

Rendering by:
DAMORE STUDIO

Applicant:
Rocky & Brothers Realty LLC

Lead Agency:
NYC Department of City Planning

Prepared by:
IMEG

January 21, 2026

CITY ENVIRONMENTAL QUALITY REVIEW

ENVIRONMENTAL ASSESSMENT STATEMENT

4506 PARK AVENUE

ZONING MAP AMENDMENT & TEXT AMENDMENT

4506 PARK AVENUE

Block 3086, Lots 1, 3, 5, 7, 8, 9, 11, 12, 13, 14, 16, 20, 29, 38, 45, 87, and 187

Borough of the Bronx, Community District 6

CEQR No.

77DCP965X

ULURP No.

240216ZMX, N240217ZRX

Draft EAS

January 21, 2026

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New York City Department of City Planning
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EAS FULL FORM AND FIGURES

City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

Please fill out and submit to the appropriate agency (see instructions)

Part I: GENERAL INFORMATION

PROJECT NAME 4506 Park Avenue Rezoning

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
77DCP965X	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
240216ZMX, N240217ZRX	

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			Rocky & Brothers Realty, LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, AICP			Nora Martin, Akerman		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 1251 Avenue of the Americas, 37th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10020
TELEPHONE (212) 720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE (212) 259-6456	EMAIL nora.martins@akerman.com	

3. *Action Classification and Type*

SEQRA Classification

☒ UNLISTED ☐ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended):

Action Type (refer to CEQR Technical Manual Chapter 2, "Establishing the Analysis Framework" for guidance)

☐ LOCALIZED ACTION, SITE SPECIFIC ☒ LOCALIZED ACTION, SMALL AREA ☐ GENERIC ACTION

4. *Project Description*

Rocky & Brothers Realty LLC (the "Applicant") requests approval of a zoning map amendment from an M1-1 and R6A zoning district to an R7X/C2-4 and R7A/C2-4 zoning district, and a zoning text amendment to Appendix F of the Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area (the "Proposed Actions"). The Proposed Actions would affect Block 3038, Lots 1, 3, p/o 5, 7, 8, 9, 11, 12, 13, 14, 16, p/o 20, p/o 29, 38, 45, 87, and 187 (the "Directly Affected Area") in the Fordham/Belmont neighborhood of the Bronx, Community District 6.

The Proposed Actions would facilitate two new developments proposed by the applicant (the "Proposed Project"): a new 14-story, 192,379 gross square foot ("gsf") mixed-use building, on Block 3038, Lots 5, 7, 8, 9, and 11 ("Projected Development Site 1"), containing 187,879 gsf of residential use, 179 dwelling units, 36-54 of which would be incomerestricted
pursuant to MIH, 4,500 gsf of ground-floor commercial use, and 67 accessory parking spaces provided on the ground and cellar levels; and a new 9-story, 137,689 gsf mixed-use building on Block 3038, Lots 38 and 45 ("Projected Development Site 2"), containing 132,276 gsf of residential use, 129 dwelling units, 32-39 of which would be incomerestricted
pursuant to MIH, 4,500 gsf of ground-floor commercial use, and 49 accessory parking spaces provided on the ground and cellar levels.

In addition to the applicant-controlled sites, four other projected development sites were identified on properties not owned by the applicant and analyzed within the EAS.

Project Location

BOROUGH Bronx	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 4506-4512 Park Avenue
TAX BLOCK(S) AND LOT(S) Block 3038, Lots 1, 3, 5, 7, 8, 9, 11, 12, 13, 14, 16, 20, 38, 45, 87, and 187.		ZIP CODE 10457
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Bounded by East 183rd Street to the north, East 182nd Street to the south, Park Avenue to the west, and Washington Avenue to the east.		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1, R6A		ZONING SECTIONAL MAP NUMBER 3c

5. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT ☐ ZONING CERTIFICATION ☐ CONCESSION
☒ ZONING MAP AMENDMENT ☐ ZONING AUTHORIZATION ☐ UDAAP
☒ ZONING TEXT AMENDMENT ☐ ACQUISITION—REAL PROPERTY ☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY ☐ DISPOSITION—REAL PROPERTY ☐ FRANCHISE
☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO ☐ Cogeneration Facility ☐ Title V Permit

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION ☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING ☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES ☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL ☐ PERMITS, specify:
☐ OTHER, explain:

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

6. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☒ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 82,073
Waterbody area (sq. ft.) and type: N/A
Roads, buildings, and other paved surfaces (sq. ft.): 82,073
Other, describe (sq. ft.): N/A

7. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 510,353

NUMBER OF BUILDINGS: 6

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.):
Projected Development Site 1: 192,379
Projected Development Site 2: 137,689
Projected Development Site 3: 38,120
Projected Development Site 4: 50,894
Projected Development Site 5: 32,800
Projected Development Site 6: 58,471

HEIGHT OF EACH BUILDING (ft.):
Projected Development Site 1: 145
Projected Development Site 2: 95
Projected Development Site 3: 95
Projected Development Site 4: 145
Projected Development Site 5: 75
Projected Development Site 6: 115

NUMBER OF STORIES OF EACH BUILDING:
Projected Development Site 1: 14
Projected Development Site 2: 9
Projected Development Site 3: 9
Projected Development Site 4: 14
Projected Development Site 5: 7
Projected Development Site 6: 11

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO

If "yes," specify: The total square feet owned or controlled by the applicant: 44,421
The total square feet not owned or controlled by the applicant: 37,651

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO

If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: 44,421 sq. ft. (width x length) VOLUME OF DISTURBANCE: 444,210 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 44,421 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2029

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 23

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: See Attachment N: Construction

9. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Public Facilities & Institutions

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☐ YES ☒ NO	☒ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
Describe type of residential structures	N/A	Multifamily	Multifamily	-
No. of dwelling units	0	44	432	388
No. of low- to moderate-income units	0	0	109 (25%)	109
Gross floor area (sq. ft.)	0	32,845	488,940	456,095
Commercial	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)	N/A	N/A	Retail	-
Gross floor area (sq. ft.)	0	0	21,413	21,413
Manufacturing/Industrial	☒ YES ☐ NO	☒ YES ☐ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type of use	Warehouses/Autobody	Warehouses/Autobody	N/A	-
Gross floor area (sq. ft.)	30,590	21,790	0	-21,790
Open storage area (sq. ft.)	0	0	0	0
If any unenclosed activities, specify:	N/A	N/A	N/A	-
Community Facility	☒ YES ☐ NO	☒ YES ☐ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type	House of Worship	House of Worship	N/A	-
Gross floor area (sq. ft.)	4,595	4,595	0	-4,595
Vacant Land	☒ YES ☐ NO	☒ YES ☐ NO	☐ YES ☒ NO	
If "yes," describe:	4,998 sf	4,998 sf	0	-4,998 sf
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):	N/A	N/A	N/A	-
Other Land Uses	☒ YES ☐ NO	☒ YES ☐ NO	☐ YES ☒ NO	
If "yes," describe:	Misc. - Surface Parking: 16,235 sf	Misc. - Surface Parking: 16,235 sf	N/A	-16,235
PARKING				
Garages	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces	0	0	0	0
No. of accessory spaces	0	0	121	121
Operating hours	N/A	N/A	24 hrs	-
Attended or non-attended	N/A	N/A	TBD	-
Lots	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	N/A	-
No. of accessory spaces	N/A	N/A	N/A	-
Operating hours	N/A	N/A	N/A	-
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	N/A	N/A	N/A	-
POPULATION				
Residents	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify number:	N/A	104	1,024	920
Briefly explain how the number of residents	Population multiplier is the average household size in Bronx Community District 6 (2.37 x 432 dwelling			

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
was calculated:	units = 1,024 residents). Source: U.S. Census Bureau, 2020 Decennial Census.			
Businesses	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type	Autio Repair (2); Shipping (1); Car Dealerships (2); Towing (1); Mattress Factory / Warehouse (1)	Autio Repair (2); Shipping (1); Car Dealerships (2); Towing (1); Mattress Factory / Warehouse (1)	Retail	-
No. and type of workers by business	35	35	81	44
No. and type of non-residents who are not workers	0	0	0	0
Briefly explain how the number of businesses was calculated:	Employee estimates based on the following: 3 employees per 1,000 sf of retail; 1 employee per 25 residential units.			
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:	N/A	N/A	N/A	-
Briefly explain how the number was calculated:	N/A			
ZONING				
Zoning classification	M1-1; R6A; C1-4	M1-1; R6A; C1-4	R7X/C2-4; R6A; C1-4	-
Maximum amount of floor area that can be developed	Manufacturing: 66,457 Community Facility: 159,497	Manufacturing: 66,457 Community Facility: 159,497	365,467	-
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Residential (1 and 2 family; multifamily); Mixed Residential & Commercial; Industrial & Manufacturing; Transit & Utility; Parking; Vacant Land; Open Space	Residential (1 and 2 family; multifamily); Mixed Residential & Commercial; Industrial & Manufacturing; Transit & Utility; Parking; Vacant Land; Open Space	Residential (1 and 2 family; multifamily); Mixed Residential & Commercial; Industrial & Manufacturing; Transit & Utility; Parking; Vacant Land; Open Space	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Full EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use and/or zoning different from the surrounding area?	☒	☐
(b) Is there the potential to affect an applicable public policy?	☒	☐
(c) If "yes," to (a) and/or, (b), complete a preliminary assessment and attach.		
(d) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a OneNYC assessment and attach.		
(e) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of more than 250 residential units?	☒	☐
▪ If "yes," answer *both* questions 2(b)(ii) below.		
○ Generate a net increase of more than 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer question 2(b)(iv) below.		
○ Directly displace 500 or more existing residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
○ Directly displace more than 100 existing employees or an unusually important business as defined in the chapter?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
○ Create a retail concentration?	☐	☒
▪ If "yes," answer question 2(b)(v) below.		
○ Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(vi) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answered.		
i. Direct Residential Displacement		
○ If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☒
○ If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?	☐	☐
ii. Indirect Residential Displacement		
○ Would the population of the primary study area increase by more than 10 percent or is there the potential to increase or accelerate trends toward increasing rents?	☐	☐
iii. Direct Business Displacement		
○ Do any of the displaced businesses provide goods or services essential to the local economy that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☒
○ If "yes," is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it?	☐	☒
iv. Indirect Business Displacement		

	YES	NO
○ Would the project potentially introduce trends that make it difficult for businesses that provide products or services essential to the local economy to remain in the area?	☐	☒
○ Would the project displace a use that either directly supports businesses in the area or brings a customer base to the area for local businesses?	☐	☒
v. Indirect Business Displacement due to Retail Market Saturation		
○ Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☒
vi. Adverse Effects on Specific Industries		
○ Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☒
○ Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 100 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Healthcare Facilities and Fire/Police Protection**: Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate a net increase of more than 175 residential units in an existing R1-R4 district or 250 units in an existing R5 or above, C, or M district?	☒	☐
(c) Would the project generate more 500 additional employees?	☐	☒
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in with-action structures of 250 feet or more?	☐	☒
(b) Would the proposed project result in with-action structures between 50-250 feet and be located adjacent to, within, or across the street from a sunlight-sensitive resource?	☒	☐
(c) Would the proposed project result in greater than 50 feet of incremental height change or substantial changes in bulk?	☒	☐
(d) If "yes" to any of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year.		
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☐	☒
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project result in a building over 250 feet tall, have a project area greater than 1.5 acres, or be classified as a general large-scale development?	☒	☐
(b) Does the project require a special permit to allow the modification of bulk and yard requirements or special uses?	☐	☒
(c) Does the proposed project introduce new, or change the location of, streets or public open spaces?	☐	☒
(d) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
(e) If "yes" to either of the above, please provide the information requested in Chapter 10.		

	YES	NO
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(d) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(f) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(g) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(h) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☒	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed?	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 19,384		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
○ If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs):		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒

	YES	NO
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, bus stop, or Citywide Ferry Service landing?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☒	☐
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☒	☐
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☒
○ If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☒	☐
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood		

	YES	NO
Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☒	☐
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.		

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	SIGNATURE	DATE
Michael R. Keane, AICP		1/21/2026

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☐	☐
Socioeconomic Conditions	☐	☐
Community Facilities and Services	☐	☐
Open Space	☐	☐
Shadows	☐	☐
Historic and Cultural Resources	☐	☐
Urban Design/Visual Resources	☐	☐
Natural Resources	☐	☐
Hazardous Materials	☐	☐
Water and Sewer Infrastructure	☐	☐
Solid Waste and Sanitation Services	☐	☐
Energy	☐	☐
Transportation	☐	☐
Air Quality	☐	☐
Greenhouse Gas Emissions	☐	☐
Noise	☐	☐
Public Health	☐	☐
Neighborhood Character	☐	☐
Construction	☐	☐

2. Does the project have the potential to disproportionately affect disadvantaged communities, or cause or increase a disproportionate pollution burden on a disadvantaged community. ☐ YES ☐ NO

3. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ YES ☐ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

4. Check determination to be issued by the lead agency:

☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☐ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

5. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
NAME	DATE
SIGNATURE	

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6 NYCRR, Part 617, State Environmental Quality Review, assumed the role of lead agency for the environmental review of the proposed project. Based on a review of information about the project contained in this environmental assessment statement and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed project would not have a significant adverse impact on the environment.

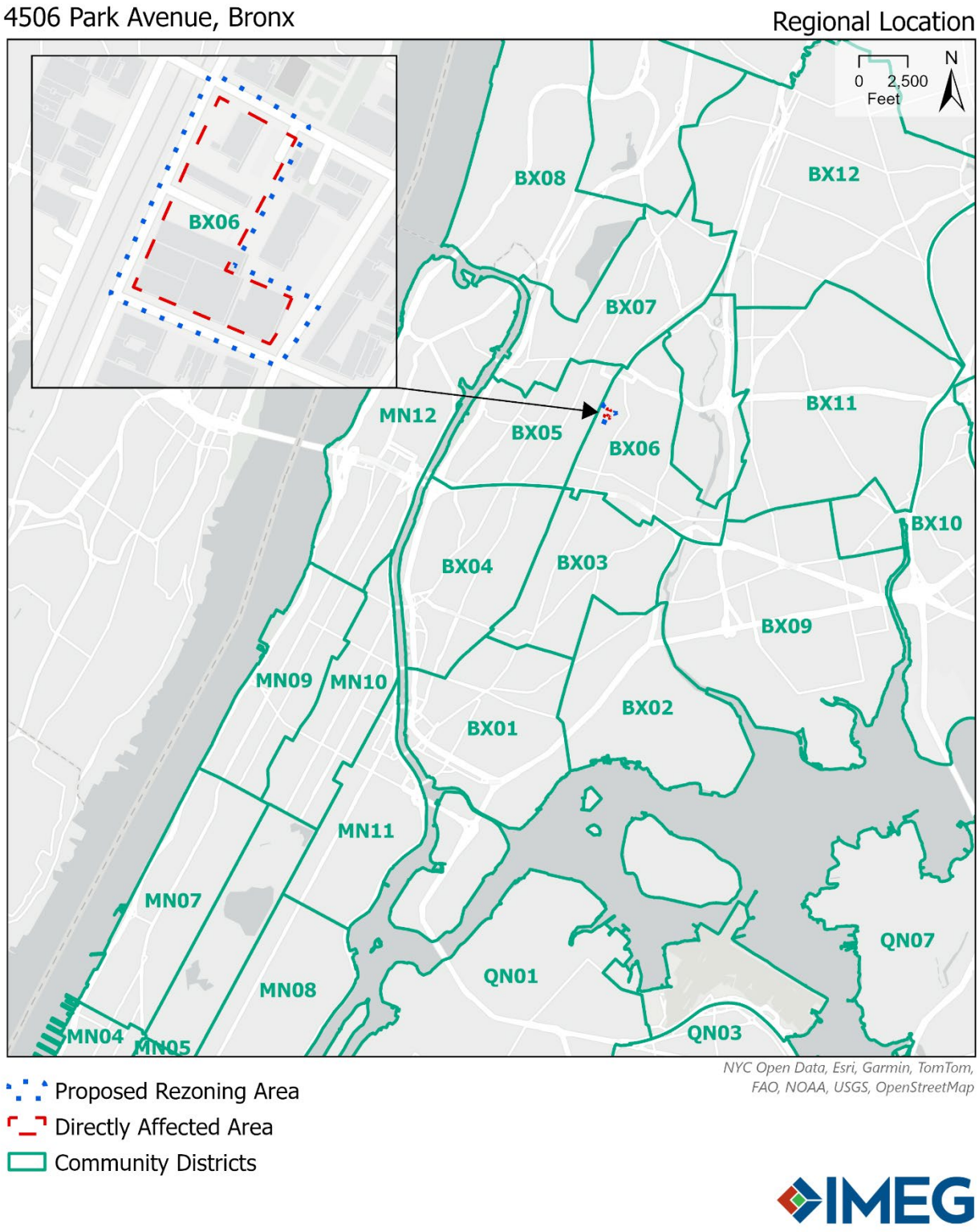
Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which that finds the proposed project:

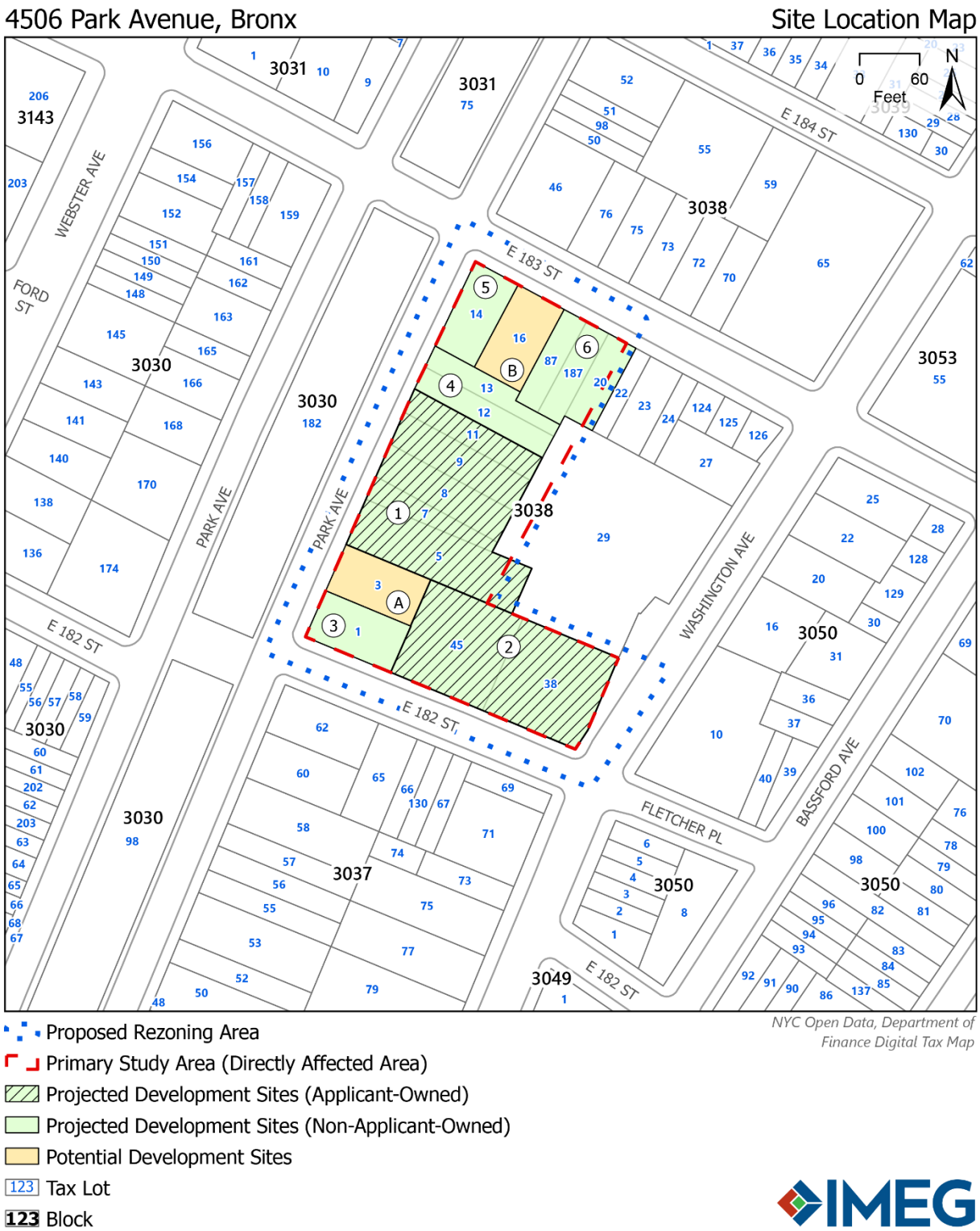
No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA).

TITLE	LEAD AGENCY
NAME	DATE
SIGNATURE	

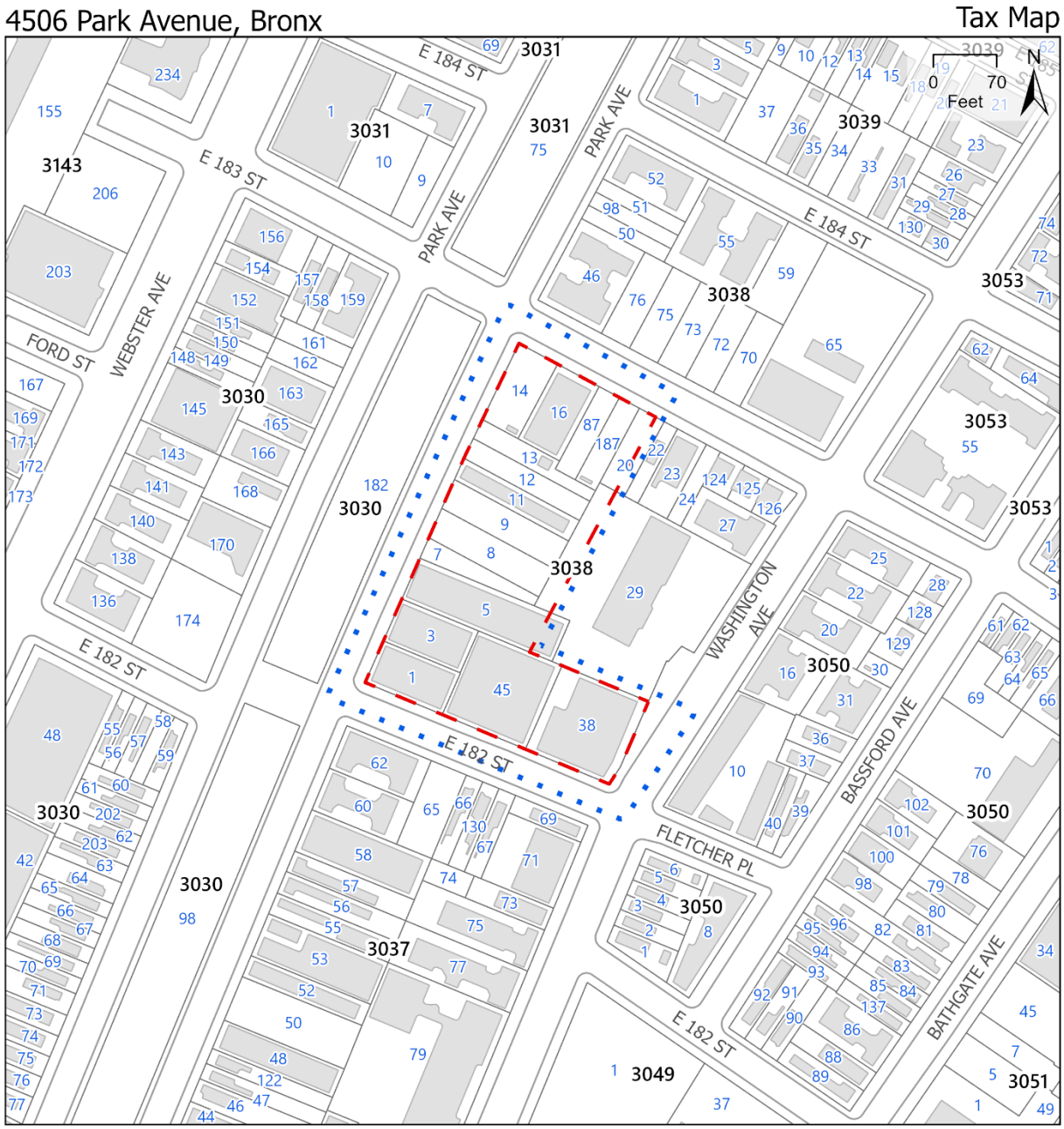
EAS Figure 1: Regional Location Map



EAS Figure 2: Site Location Map



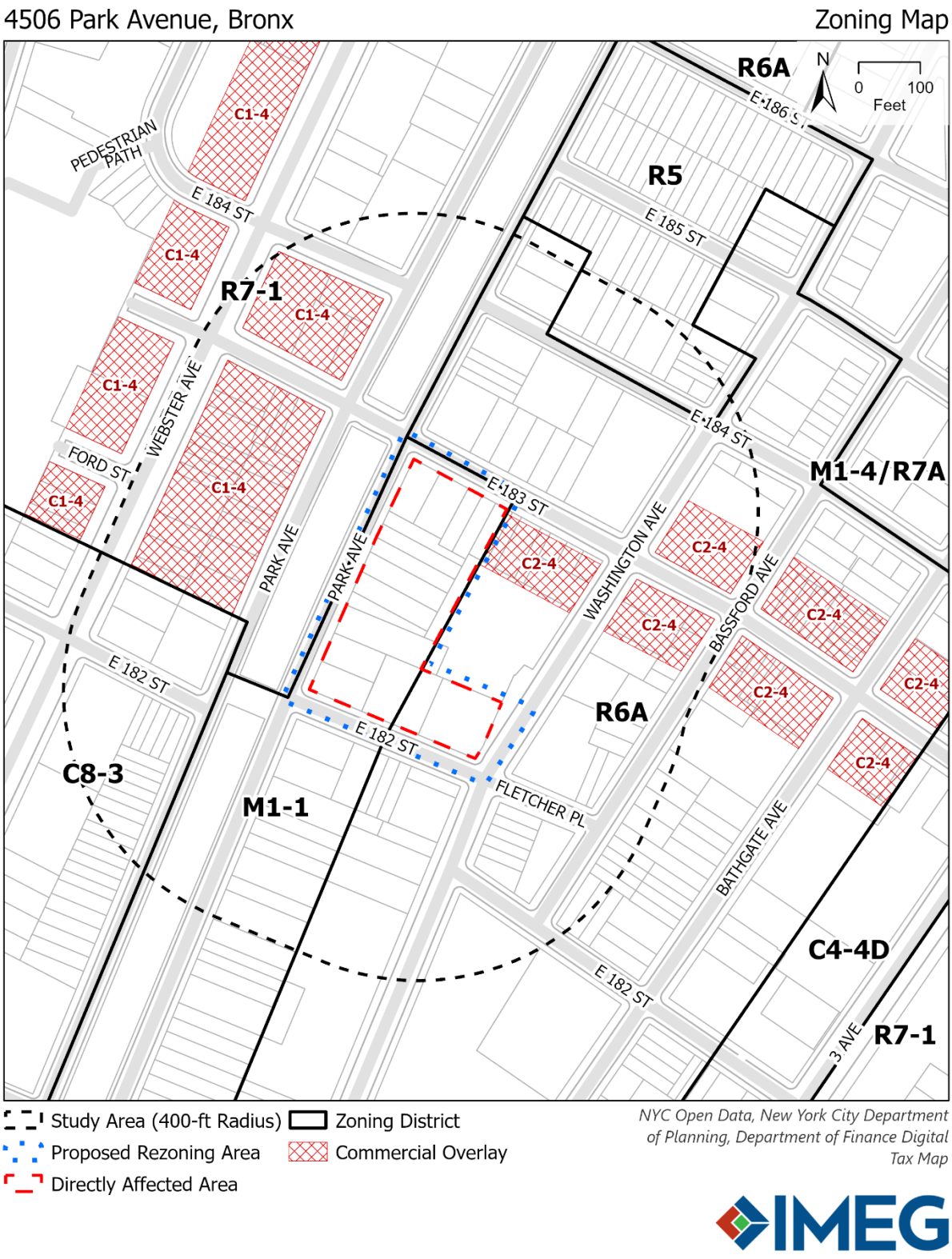
EAS Figure 3: Tax Map



EAS Figure 4: Land Use Map



EAS Figure 5: Zoning Map



EAS Figure 6: Aerial Imagery Map



ATTACHMENT A: PROJECT DESCRIPTION

INTRODUCTION

Rocky & Brothers Realty LLC (the "Applicant") requests approval of the Proposed Actions:

i. A zoning map amendment to change the Proposed Rezoning Area from the current M1-1 and R6A zoning districts to R7X and R7A zoning districts with C2-4 commercial overlays, and

ii. A zoning text amendment to Appendix F of the Zoning Resolution to establish a Mandatory Inclusionary Housing ("MIH") Area mapping Options 1, 2, and 3.

Approval of the Proposed Actions would facilitate two new developments proposed by the Applicant (the "Proposed Project").

1. The Applicant-controlled Projected Development Site 1 is known as and by the street address 4506-4522 Park Avenue and is comprised of five (5) tax lots (Lots 5, 7, 8, 9, and 11) on Block 3038 in the Fordham/Belmont neighborhood of the Bronx, Community District 6. Projected Development Site 1 ("Building A") would be developed with a 14-story (maximum height of 145 ft) plus cellar approximately 192,379 gross square foot ("GSF") (146,990 zoning square feet ("ZSF")) mixed-use building fronting Park Avenue, containing 4,500 gsf (4,500 zsf) of ground-floor commercial use and approximately 187,879 gsf (142,490 zsf) of residential use on floors 1 through 14, containing 179 dwelling units ("DUs") and built to a Floor Area Ratio ("FAR") of 6.00. 20-30% of the 179 dwelling units (36-54 units) would be affordable pursuant to MIH at an average of 40-80% AMI depending on the Option selected. Approximately 67 accessory off-street parking spaces would be provided in the cellar or on the ground floor (rear of building). One (1) curb cut would be installed on Park Avenue in connection with the parking entrance.

2. The Applicant-controlled Projected Development Site 2 is known as and by the street address 449 East 182nd Street and 2249 Washington Avenue and is comprised of two (2) tax lots (Lots 38 and 45) on Block 3038 in the Fordham/Belmont neighborhood of the Bronx, Community District 6. Projected Development Site 2 ("Building B") would be developed with a 9-story (maximum height of 95 ft) plus cellar approximately 137,689 gsf (105,256 zsf) mixed-use building fronting East 182nd Street, containing 5,413 gsf (5,413 zsf) of ground-floor commercial use and approximately 132,276 gsf (99,843 zsf) of residential use on floors 1 through 9, containing 129 DUs and built to an FAR of 5.28. 20-30% of the 129 dwelling units (26-39 units) would be affordable pursuant to MIH at an average of 40-80 AMI depending on the Option selected. Approximately 49 off-street parking spaces would be provided in the cellar or on the ground floor (side of building). One (1) curb cut would be installed on East 182nd Street in connection with the parking entrance.

Architectural plans for the Proposed Project were prepared by D'Amore Design Studio & Architects, AIA, and are included in Appendix A (for illustrative purposes only).

PROPOSED ACTIONS

The Proposed Actions are classified as Type I pursuant to Part 617 of the New York Codes, Rules, and Regulations. Type I actions require an environmental review in accordance with City Environmental Quality Review ("CEQR"), New York City's process for implementing the New York State Environmental Review Act ("SEQRA"). Under CEQR, agencies of the City review proposed discretionary actions to identify and disclose the potential effects those actions may have on the environment. This Environmental Assessment Statement ("EAS") has been prepared pursuant to Mayoral Executive Order No. 91 of 1977, as amended; Title 62 RCNY Chapter 5 (City Environmental Quality Review); and the implementing regulations for SEQRA found at 6 NYCRR Part 617. This EAS informs the New York City Department of City Planning, as CEQR Lead Agency, in making the determination whether the Proposed Actions would potentially result in any significant adverse environmental impact and require further environmental quality review.

The Applicant believes that the proposed R7X and R7A zoning districts, along with C2-4 commercial overlays, are appropriate given the proximity to Park Avenue and the open Metro North Railroad tracks, as well as the adjacent 14-story building located at 2271 Washington Avenue, immediately abutting the rear of Projected Development Site 1. The R7X and R7A zoning will allow for residential development and a higher FAR than the existing M1-1 and R6A zoning districts, which will provide more flexibility in providing larger units at a height and bulk that is consistent with surrounding development. Mapping the commercial overlay will activate this block with local retail amenities.

Prior Land Use Actions

On October 13, 2010, the City Council approved the Third Avenue/Tremont Avenue rezoning, which rezoned all or portions of 75 blocks, including part of the Directly Affected Area through the middle of Block 3038, to provide new opportunities for residential and commercial development (CEQR No. 22DCP123X). One of the goals of the Third Avenue/Tremont Avenue Rezoning was to provide new opportunities for mixed residential and commercial development. This also facilitated the creation of Inclusionary Housing Designated Areas. The Proposed Project intends to further this goal by maximizing the potential of an underutilized site by allowing residential development that would complement and strengthen the residential and commercial character of this area of the Bronx, in addition to creating affordable housing.

It is the opinion of the Applicant that the Proposed Actions would activate an underutilized block in Bronx Community District 6 by creating new mixed-use development with affordable housing. The Applicant believes the Proposed Actions would further the goals of the Third Avenue/Tremont Avenue Rezoning by providing new opportunities for mixed residential and commercial development.

DIRECTLY AFFECTED AREA

As depicted in **Figure A-1**, the Directly Affected Area consists of Lots 1, 3, p/o 5, 7, 8, 9, 11, 12, 13, 14, 16, p/o 20, p/o 29, 38, 45, 87, and 187 on Block 3038 in the Fordham/Belmont neighborhood of the Bronx. The Directly Affected Area is bounded by East 183rd Street to the north, Park Avenue to the

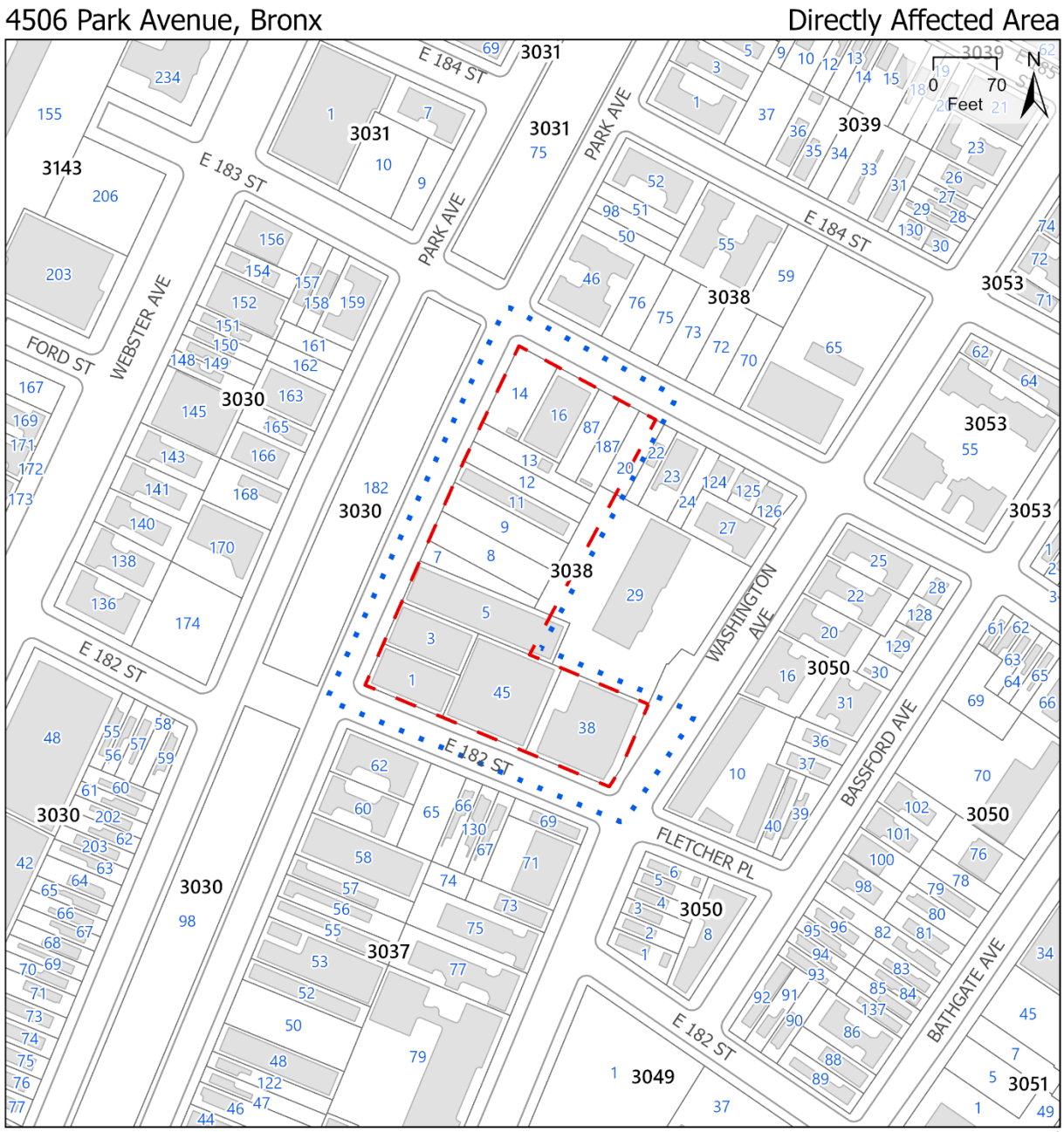
west, East 182nd Street to the south, and Washington Avenue to the east. The western portion of Block 3038 is zoned M1-1; the eastern portion is mapped with an R6A zoning district. Parts of ("p/o") Lots 5, 20, 29, and 45 are split zoning lots (M1-1/R6A); p/o Lot 20 is mapped with a C2-4 commercial overlay.

- Lot 1 (4500 Park Ave), having a lot area of 4,595 sf and 50 feet of frontage on Park Avenue, contains a two-story, 4,595 sf house of worship.
- Lot 3 (4504 Park Avenue), having a lot area of 4,475 sf and 50 ft of frontage on Park Avenue, contains a one-story, 4,450 sf autobody/repair facility.
- Lots 5, 7, 8, 9, and 11 (4506-4522 Park Avenue), having a total combined lot area of 24,499 sf and 145.10 ft of frontage on Park Avenue. Lot 5 is currently improved with a one-story, 8,590 gsf warehouse. Lots 7, 8, and 9 contain unlicensed surface parking. Lot 11 contains a one-story, 3,400 gsf autobody/repair facility.
- Lots 12 and 13 (4524 Park Avenue), having a total combined lot area of 6,347 sf and 28 ft of frontage on Park Avenue. Both lots contain unlicensed surface parking.
- Lot 14 (438 E. 183 St), having a lot area of 4,110 sf and 47 ft of frontage on E. 183 St, contains surface parking.
- Lot 16 (442 E. 183 St) having a lot area of 4,500 sf and 50 ft of frontage on E. 183 St, contains a one-story, 9,000 gsf house of worship.
- Lots 20, 87, 187, and (452-456 E. 183 St), having a total combined lot area of 8,000 sf and 75 ft of frontage on E. 183 St. Lots 87 and 187 are vacant; Lot 20 contains unlicensed surface parking.
- p/o Lot 29 (2271 Washington Ave), having an area of approx. 5,625 sf, contains surface parking.
- Lots 38 and 45 (2249 Washington Ave; 449 E. 182 St), having a total combined lot area of 19,922 sf with 195.35 ft of frontage on E. 182 St and 100.37 ft of frontage on Washington Ave. Lot 38 is currently improved with a one-story, 8,800 gsf warehouse and restaurant and Lot 45 is currently improved with a one-story warehouse.

Land uses within 400 feet of the Directly Affected Area are varied and include a mix of one-and two-family residential buildings, multi-family walk-up and elevator buildings, mixed commercial-residential uses, commercial uses, industrial/manufacturing uses, transportation and utility uses, community facilities, parking facilities, open space/outdoor recreation, and vacant land. Zoning within 400 feet of the Directly Affected Area includes R5, R7-1, R6A, M1-1, and C8-3 districts. The built character of the area includes a diverse mix of residential buildings, ranging from one to fourteen stories in height. Other notable features within 400 feet of the Directly Affected Area include the "Farm in the Bronx" community garden within Bathgate Playground, located one block south of the Directly Affected Area on East 182nd Street and Washington Avenue; the Thorpe Family Playground, located one block northwest of the Directly Affected Area at East 183rd Street and Park Avenue; and Washington Park, located directly across from the Directly Affected Area at 457 East 183rd Street. The Directly Affected Area is proximate to several local and regional roadways, including Park Avenue, the Cross Bronx Expressway, the Bronx River Parkway, East Fordham Road, and Webster Avenue. Public transportation within 400 feet of the Directly Affected Area includes the Bx41 bus, which runs along

Webster Avenue; and the Bx15 bus, which runs along Third Avenue. The Directly Affected Area is approximately 0.6 miles south of the Fordham Metro North Railroad station, and 0.6 miles east of the 182nd-183rd Street subway station, serving the B and D subway lines. The Directly Affected Area is within the Transit Zone and FRESH Zone.

Figure A-1: Directly Affected Area



PROJECTED DEVELOPMENT SITES

Projected Development Sites are sites that are more likely to be developed within the analysis period (Build Year 2029) as a result of the Proposed Actions, and were identified based on the following criteria:

1. Sites currently owned by the Applicant.

2. Sites that are underutilized, defined as vacant, or constructed to less than or equal to 50 percent of the maximum allowable FAR under the Proposed Actions ("soft site").

3. Two or more adjacent lots under common ownership and totaling more than 5,000 sf, if assembled.

The Applicant-controlled Projected Development Site 1, an irregularly shaped parcel comprised of a series of interior lots, is mapped with an M1-1 zoning district (a small, interior portion of Lot 5 is located in the R6A zoning district). Projected Development Site 1 consists of 4506-4522 Park Avenue (Block 3038, Lots 5, 7, 8, 9, and 11) and has a total lot area of 24,499 sf and approximately 173 feet of frontage along Park Avenue. 4506 Park Avenue (Lot 5) is currently improved with a one-story industrial building. 4510 Park Avenue (Lots 7, 8, and 9) contains unlicensed surface parking. 4522 Park Avenue (Lot 11) contains a one-story industrial building which houses an autobody/repair facility.

The Applicant-controlled Projected Development Site 2 consists of 449 East 182nd Street (Block 3038, Lot 45) and 2249 Washington Avenue (Block 3038, Lot 38). Lot 38 is zoned R6A, while Lot 45 is a split zoning lot and is mapped within the M1-1 district as well as the R6A zoning district. Projected Development Site 2 has a total combined lot area of 19,922 sf and approximately 100 feet of frontage along East 182nd Street. Lot 45 is currently improved with a one-story industrial/manufacturing facility housing a furniture accessories supplier. Lot 38 is currently improved with a one-story building housing a shipping service, event hall, and restaurant.

For the purposes of this CEQR Environmental Assessment Statement, future development is contemplated on four (4) additional non-Applicant-controlled Projected Development Sites within the Directly Affected Area, as depicted in **Figure A-3**.

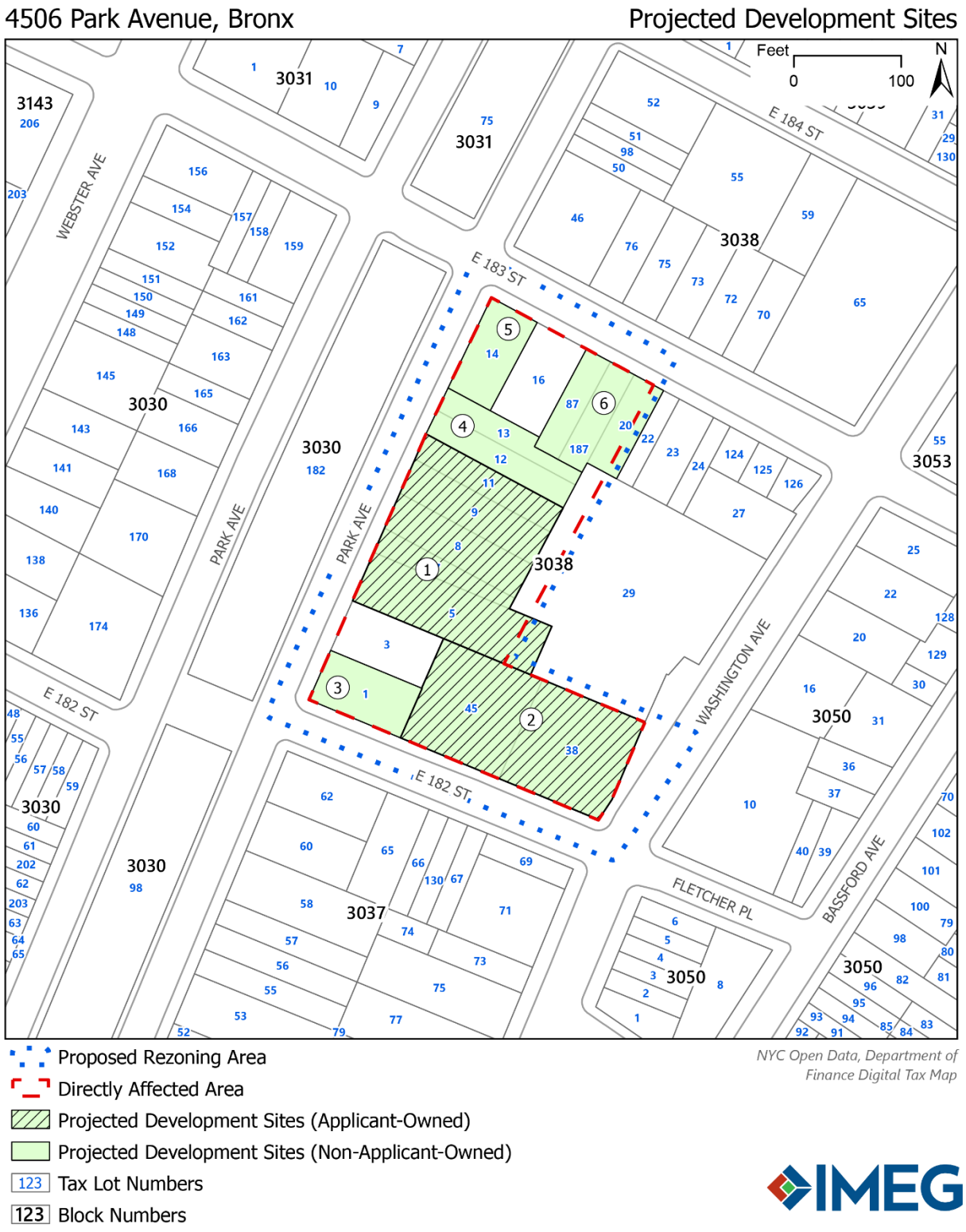
- Projected Development Site 3, located at 4500 Park Avenue (Block 3038, Lot 1), is mapped entirely within an M1-1 zoning district. It has a total lot area of 4,594 sf and approximately 50 feet of frontage along Park Avenue. Projected Development Site 3 is currently improved with a two-story house of worship. The Applicant does not own this parcel.

- Projected Development Site 4 is an irregularly shaped parcel comprised of 4524 Park Avenue (Block 3038, Lot 12) and 4526 Park Avenue (Block 3038, Lot 13), and is mapped entirely within an M1-1 zoning district. Projected Development Site 4 has a total combined lot area of 6,347 sf and a total of 48 feet of frontage along Park Avenue. Projected Development Site 4 is currently improved with a used car dealership and automobile storage. The Applicant does not own these parcels; both tax lots are under common ownership.

- Projected Development Site 5, located at 438 East 183rd Street (Block 3038, Lot 14), is mapped entirely within the M1-1 zoning district. Projected Development Site 5 has a lot area of 4,110 sf and 47 feet of frontage along East 183rd Street. Projected Development Site 5 is currently improved with a used car dealership and automobile storage. The Applicant does not own this parcel.

- Projected Development Site 6 is an irregularly shaped parcel comprised of 456 East 183rd Street (Block 3038, Lot 20), 452 East 183rd Street (Block 3038, Lot 87), and 454 East 183rd Street (Block 3038, Lot 187). Lots 87 and 187 are located in the M1-1 zoning district; Lot 20 is a split zoning lot and is located in the M1-1 zoning district as well as the R6A district, and is also mapped with a C2-4 commercial overlay. Projected Development Site 6 has a total combined lot area of 8,000 sf and a total of 83.33 feet of frontage along East 183rd Street. Lots 87 and 187 are vacant, while Lot 20 is currently improved with unlicensed surface parking. The Applicant does not own these parcels; all three parcels are under common ownership.

Figure A-3: Projected Development Sites



POTENTIAL DEVELOPMENT SITES

Potential Development Sites are those considered less likely to be developed within the analysis period (Build Year 2029), and were identified based on the following criteria:

1. Sites occupied by long-standing institutional uses with no known development plans.

2. Sites with a total lot area of less than 5,000 sf.

Based on these criteria, two (2) Potential Development Sites have been identified in the Directly Affected Area:

- Potential Development Site A (Lot 3), totaling 4,475 sf, is currently occupied by a one-story autobody/repair facility.
    - Potential Development Site A may be developed as an approximately 31,325 gsf mixed-use development, including 26,850 gsf of residential use and 4,475 gsf of commercial use, and would rise to a height of 145 feet.
- Potential Development Site B (Lot 16), totaling 4,500 sf, is currently occupied by a house of worship.
    - Potential Development Site B may be developed as an approximately 31,500 gsf mixed-use development, including 27,000 gsf of residential use and 4,500 gsf of commercial use, and would rise to a height of 145 feet.

PURPOSE AND NEED

The Third Avenue/Tremont Avenue rezoning was approved by the City Council on October 13, 2010. The goal of the Third Avenue/Tremont Avenue rezoning was to provide new opportunities for mixed residential and commercial development, resulting in all or portions of 75 blocks, including the eastern portion of Block 3038 (through the mid-block), adjacent to the Proposed Rezoning Area, to be rezoned.

The Proposed Actions intend to further the goals of the Third Avenue/Tremont Avenue rezoning and maximize the potential of the western portion of Block 3038, several parcels of which are owned by the Applicant and/or are underutilized. New mixed-use development facilitated by the Proposed Actions would complement and strengthen the residential and commercial character of this area of the Bronx, in addition to creating new affordable housing opportunities pursuant to the provisions of the City's Mandatory Inclusionary Housing ("MIH") zoning amendment (approximately 89 – 116 units depending on the MIH Option selected).

ATTACHMENT B: CEQR ANALYSIS FRAMEWORK

INTRODUCTION

The framework for the CEQR EAS assessment follows the guidelines established in the *2021 Edition of the CEQR Technical Manual* ("*CEQR Technical Manual*"). For each technical area, the *CEQR Technical Manual* defines thresholds that, if met or exceeded, typically require further assessment. Accordingly, preliminary screening assessments were conducted for all applicable CEQR technical areas to determine if detailed analyses would be necessary. The following sections of this EAS provide additional assessment and information for technical categories listed in Part II of the EAS for which CEQR thresholds were determined to have been met or exceeded, or if supplemental information is needed to complete the assessment. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

Table B-1: Summary of CEQR Technical Areas Screening

CEQR Technical Area	Screened out per EAS Form	Screened out per Supplemental Assessment
Land Use, Zoning, and Public Policy		X
Socioeconomic Conditions		X
Community Facilities and Services	X	
Open Space		X
Shadows		X
Historic and Cultural Resources		X
Urban Design and Visual Resources		X
Natural Resources	X	
Hazardous Materials		X
Water and Sewer Infrastructure	X	
Solid Waste and Sanitation Services	X	
Energy	X	
Transportation		X
Air Quality		X
Greenhouse Gas Emissions and Climate Change	X	
Noise		X
Public Health	X	
Neighborhood Character		X
Construction		X

Summary of Screening Analysis

The following CEQR Technical Areas do not meet or exceed thresholds requiring further assessment: Community Facilities and Services, Natural Resources, Water and Sewer Infrastructure, Solid Waste

and Sanitation Services, Energy, Greenhouse Gas Emissions and Climate Change, and Public Health. A brief description of the criteria for each technical area follows.

Community Facilities and Services

The Proposed Project would not directly eliminate, displace, or alter public or publicly funded community facilities. Based on the thresholds outlined in Table 6-1 of the *CEQR Technical Manual*, the Proposed Actions would generate 89 elementary and middle school students, 25 high school students, and 18 children eligible for early childhood education. This does not exceed the thresholds for students generated for public elementary/middle schools, public high schools, or early childhood programs. The Proposed Project would not result in a 5 percent or more increase in the ratio of residential units to library branches, and would not result in the introduction of a sizable new neighborhood. Therefore, an assessment of Community Facilities and Services is not warranted.

Natural Resources

Neither the Project Area nor any adjacent sites contain any natural resources as defined in Section 100 of Chapter 11 of the *CEQR Technical Manual*, and no part of the Project Area is within the Jamaica Bay Watershed. Therefore, an assessment of Natural Resources is not warranted.

Water and Sewer Infrastructure

The Proposed Project would not result in water demand of over one million gallons per day, nor would it result in at least 400 incremental residential units or 150,000 square feet of commercial space. Therefore, an analysis of Water and Sewer Infrastructure is not warranted.

Solid Waste and Sanitation Services

The Proposed Project does not have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week and does not involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City. Therefore, an assessment of Solid Waste and Sanitation Services is not warranted.

Energy

The Proposed Project would not affect the transmission or generation of energy. Therefore, an Energy assessment is not warranted.

Greenhouse Gas Emissions and Climate Change

The Proposed Project would result in the development of over 350,000 square feet, but is not a City capital project, and does not propose power generation or changes to the City's solid waste management system. Therefore, an assessment of Greenhouse Gas Emissions and Climate Change is not warranted.

Public Health

The Proposed Project would not result in environmental changes that would cause significant public health effects. Therefore, a Public Health assessment is not warranted.

REASONABLE WORST CASE DEVELOPMENT SCENARIO

In order to assess the potential effects of the Proposed Action, a Reasonable Worst Case Development Scenario ("RWCDS") for both the Future Without the Proposed Actions (No-Action Condition) and the Future With the Proposed Actions (With-Action Condition) was analyzed for Build Year 2029. The With-Action Condition identifies the extent, type, and location of development that would be expected to occur by the end of the Build Year. The No-Action Condition identifies development projections for the Build Year absent the Proposed Actions. The potential environmental impacts of the Proposed Actions are based on the incremental differences between the With-Action Condition and the No-Action Condition.

No-Action Condition

The No-Action Condition projects development that is expected to occur in the Directly Affected Area absent the Proposed Actions.

The Directly Affected Area is mapped with M1-1 and R6A zoning districts and is currently defined by vacant land; unlicensed surface parking; three warehouse buildings; two autobody/repair facilities; a restaurant; and two houses of worship.

M1-1

In the No-Action Condition, it is assumed that all parcels within the M1-1 district (Lots 1, 3, 7, 8, 9, 11, 12, 13, 14, 16, 87, 187, and p/o 5, p/o 20, p/o 29, and p/o 45) would remain the same as under existing conditions. Development trends in the area do not suggest that new manufacturing or industrial uses, or other uses permitted as-of-right in an M1-1 district, would be developed.

R6A

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building. Along with p/o Lot 5, p/o Lot 20, and Lots 22, 23, 24, 124, 125, 126, 27, p/o Lot 29, and p/o Lot 45 on Block 3038, Lot 38 was included in the 2010 Third Avenue/Tremont Avenue Rezoning. As described above, the goal of the Third Avenue/Tremont Avenue Rezoning was to provide new opportunities for mixed residential and commercial development. Therefore, contemplating a future as-of-right residential use on Lot 38 (pursuant to the R6A regulations) is reasonable. This assumption is further substantiated by the predominantly residential character defining Washington Avenue, including the residential uses fronting Washington Avenue (Lots 27 and 29) and East 183rd Street (Lots 22, 124, 125, and 126) on the same block.

With-Action Condition

The With-Action Condition contemplates future development on six (6) Projected Development Sites in the Directly Affected Area. The Proposed Actions would facilitate new residential and commercial development currently not permitted in the M1-1 district. As described in the Reasonable Worst Case Development Scenario ("RWCDS"), and pursuant to CEQR methodologies, development assumptions on the Projected Development Sites maximize the allowable height and bulk requirements under the Proposed Actions.

In the With-Action Condition:

- Projected Development Site 1 would be developed with a 14-story (145 feet), approximately 192,379 gsf (146,990 zsf) mixed-use building fronting Park Avenue (Lots 5, 7, 8, 9, and 11). Projected Development Site 1 would contain approximately 4,500 gsf (4,500 zsf) of ground-floor commercial use and approximately 187,879 gsf (142,490 zsf) of residential use on floors 1 through 14 with 179 dwelling units, of which 20-30% (36-54 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 67 accessory off-street parking spaces would be provided.

- Projected Development Site 2 would be developed with a 9-story (95 feet), approximately 137,689 gsf (105,256 zsf) mixed-use building fronting East 182nd Street (Lots 38 and 45). Projected Development Site 2 would contain approximately 5,413 gsf (5,413 zsf) of ground-floor commercial use and approximately 132,276 gsf (99,843 zsf) of residential use on floors 1 through 9 with 129 dwelling units, of which 20-30% (26-39 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 49 accessory off-street parking spaces would be provided.

- Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft) 38,120 gsf (27,564 zsf) mixed-use building containing 3,000 gsf (3,000 zsf) of ground-floor commercial space and 35,120 gsf (27,564 zsf) of residential space on floors 2 through 9 with 25 dwelling units, of which 20-30% (5-8 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf (38,082 zsf) mixed-use building containing 2,000 gsf (2,000 zsf) of ground-floor commercial space and 48,894 gsf (36,082 zsf) of residential space on floors 2 through 14 with 36 dwelling units, of which 20-30% (8-11 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf (24,660 zsf) mixed-use building containing 2,500 gsf (2,500 zsf) of ground-floor commercial space and 30,300 gsf (22,160 zsf) of residential space on floors 2 through 7 with 22 dwelling units, of which 20-30% (5-7 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 6 (Lots 87, 187, and 20) would be developed with an 11-story (115 ft), approximately 58,471 gsf (45,312 zsf) mixed-use building containing 4,000 gsf (4,000 zsf) of ground-floor commercial space and 54,471 gsf (41,312 zsf) of residential space on floors 2 through 11 with 41 dwelling units, of which 20-30% (9-12 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Two (2) Potential Development Sites have been identified in the Directly Affected Area:

- Potential Development Site A (Lot 3) may be developed as an approximately 31,325 gsf mixed-use development, including 26,850 gsf of residential use and 4,475 gsf of commercial use, and would rise to a height of 145 feet.

- Potential Development Site B (Lot 16) may be developed as an approximately 31,500 gsf mixed-use development, including 27,000 gsf of residential use and 4,500 gsf of commercial use, and would rise to a height of 145 feet.

Increment

The incremental difference between the No-Action Condition and With-Action Condition provides the basis by which the potential environmental effects of the Proposed Actions are evaluated under CEQR. As described in **Table B-2** below, the With-Action Condition would result in a net increase of 456,095 gsf of residential use (388 additional dwelling units) and 21,413 gsf of commercial use, and a decrease of 4,595 gsf of community facility use and 20,790 gsf of manufacturing use.

Table B-2: Incremental Difference between No-Action Condition and With-Action Condition

Land Use	**Existing Conditions (gsf)**	**No-Action Condition (gsf)**	**With-Action Condition (gsf)**	**Increment (gsf)**
Residential	0	32,845 (44 DUs)	488,940 (432 DUs)	456,095 (388 DUs)
Retail	0	0	21,413	21,413
Community Facility	4,595	4,595	0	-4,595
Manufacturing	30,590	21,790	0	-20,790
Parking	9,346	6,348	20,385	14,037
Population	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residents	0	104	1,024	920
Note: - Population multiplier is the average household size in Bronx CD 6 (2.37 x 432 dwelling units = 1,024 residents). Source: U.S. Census Bureau, 2020 Decennial Census.				

Analysis (Build) Year

The Proposed Actions would facilitate the construction of six (6) Projected Development Sites within the Directly Affected Area, as described above.

Construction on the Applicant-owned Projected Development Sites 1 and 2 is anticipated to begin following approval of the Proposed Actions and would occur in a single phase totaling approximately 18 months.

Approval of the Proposed Actions is anticipated for 2026; therefore, a Build Year of 2029 is appropriate.

ATTACHMENT C: LAND USE, ZONING, AND PUBLIC POLICY

INTRODUCTION

According to the *CEQR Technical Manual*, a land use analysis assesses the uses and development trends in the area that may be affected by a proposed project and determines whether the proposed project is compatible with those conditions or if it may affect those conditions. Similarly, the analysis considers the project's compliance with, and effect on, the area's zoning and other applicable public policies. A detailed assessment of land use, zoning, and public policy is appropriate if an action would result in a significant change in land use or would substantially affect regulations or policies governing land use.

As discussed in Attachment A: "Project Description," the Applicant is requesting approval of a zoning map and text amendment over a portion of Block 3038 to facilitate the Proposed Project on the two (2) Applicant-owned development sites. Under the Reasonable Worst Case Development Scenario, four (4) other Projected Development Sites and two (2) Potential Development Sites were identified on properties not owned by the Applicant and analyzed within the EAS:

- Projected Development Site 1 would be developed with a 14-story (145 feet), approximately 192,379 gsf (146,990 zsf) mixed-use building fronting Park Avenue (Lots 5, 7, 8, 9, and 11). Projected Development Site 1 would contain approximately 4,500 gsf (4,500 zsf) of ground-floor commercial use and approximately 187,879 gsf (142,490 zsf) of residential use on floors 1 through 14 with 179 dwelling units, of which 20-30% (36-54 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 67 accessory off-street parking spaces would be provided.

- Projected Development Site 2 would be developed with a 9-story (95 feet), approximately 137,689 gsf (105,256 zsf) mixed-use building fronting East 182nd Street (Lots 38 and 45). Projected Development Site 2 would contain approximately 5,413 gsf (5,413 zsf) of ground-floor commercial use and approximately 132,276 gsf (99,843 zsf) of residential use on floors 1 through 9 with 129 dwelling units, of which 20-30% (26-39 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 49 accessory off-street parking spaces would be provided.

- Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft) 38,120 gsf (27,564 zsf) mixed-use building containing 3,000 gsf (3,000 zsf) of ground-floor commercial space and 35,120 gsf (27,564 zsf) of residential space on floors 2 through 9 with 25 dwelling units, of which 20-30% (5-8 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf (38,082 zsf) mixed-use building containing 2,000 gsf (2,000 zsf) of

ground-floor commercial space and 48,894 gsf (36,082 zsf) of residential space on floors 2 through 14 with 36 dwelling units, of which 20-30% (8-11 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf (24,660 zsf) mixed-use building containing 2,500 gsf (2,500 zsf) of ground-floor commercial space and 30,300 gsf (22,160 zsf) of residential space on floors 2 through 7 with 22 dwelling units, of which 20-30% (5-7 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 6 (Lots 87, 187, and 20) would be developed with an 11-story (115 ft), approximately 58,471 gsf (45,312 zsf) mixed-use building containing 4,000 gsf (4,000 zsf) of ground-floor commercial space and 54,471 gsf (41,312 zsf) of residential space on floors 2 through 11 with 41 dwelling units, of which 20-30% (9-12 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Potential Development Site A (Lot 3) may be developed as an approximately 31,325 gsf mixed-use development, including 26,850 gsf of residential use and 4,475 gsf of commercial use, and would rise to a height of 145 feet.

- Potential Development Site B (Lot 16) may be developed as an approximately 31,500 gsf mixed-use development, including 27,000 gsf of residential use and 4,500 gsf of commercial use, and would rise to a height of 145 feet.

The Proposed Actions would result in a change in land use facilitated through a rezoning. Therefore, a land use, zoning, and public policy assessment pursuant to CEQR is warranted.

METHODOLOGY

Pursuant to *CEQR Technical Manual* guidelines, the land use, zoning, and public policy analysis considers a 400-foot radius from the Development Site (the "Study Area"). Geographic Information System ("GIS") land use and zoning data provided by the New York City Department of City Planning ("DCP"), along with a site visit conducted by IMEG on April 21, 2023, were used to ascertain existing land use patterns and neighborhood characteristics.

LAND USE

Existing conditions

Directly Affected Area & Development Sites

The Directly Affected Area consists of Lots 1, 3, p/o 5, 7, 8, 9, 11, 12, 13, 14, 16, p/o 20, p/o 29, 38, 45, 87, and 187 on Block 3038. The Directly Affected Area is bounded by East 183rd Street to the north, Park Avenue to the west, East 182nd Street to the south, and Washington Avenue to the east. Existing land uses in the Directly Affected Area include vacant land, unlicensed surface parking, miscellaneous

industrial/manufacturing uses, and public facilities/institutions. There are no residential or commercial uses in the Directly Affected Area.

Lot 1 (4500 Park Avenue) has a total lot area of 4,595 sf and 50 ft of frontage on Park Avenue and contains a two-story, 4,595 sf house of worship. Lot 3 (4504 Park Avenue) has a total lot area of 4,475 sf and 50 ft of frontage on Park Avenue and contains a one-story, 4,450 sf autobody/repair facility. Lots 5, 7, 8, 9, and 11 (4506-4522 Park Avenue) have a total combined lot area of 24,499 sf and 145.10 ft of frontage on Park Avenue. Lot 5 is currently improved with a one-story, 8,590 gsf warehouse. Lots 7, 8, and 9 contain unlicensed surface parking. Lot 11 contains a one-story, 3,400 gsf autobody/repair facility. Lots 12 and 13 (4524 Park Avenue) have a total combined lot area of 6,347 sf and 28 ft of frontage on Park Avenue. Both lots contain unlicensed surface parking. Lot 14 (438 East 183 St) has a total lot area of 4,110 sf and 47 ft of frontage on East 183rd Street and contains unlicensed surface parking. Lot 16 (442 East 183rd Street) has a total lot area of 4,500 sf and 50 ft of frontage on East 183rd Street and contains a one-story, 9,000 sf house of worship. Lots 87, 187, and 20 (452-456 East 183rd Street) have a total combined lot area of 8,000 sf and 75 ft of frontage on East 183rd Street. Lots 87 and 187 are vacant; Lot 20 contains unlicensed surface parking. Lots 38 and 45 (2249 Washington Avenue and 449 East 182nd Street) have a total combined lot area of 19,922 sf with 195.35 ft of frontage on East 182nd Street and 100.37 ft of frontage on Washington Avenue. Lot 38 is currently improved with a one-story, 8,800 gsf warehouse and restaurant and Lot 45 is currently improved with a one-story warehouse.

Study Area

For purposes of the Land Use and Zoning assessment, the Study Area is defined as the area within a 400-foot radius from the boundary of the Directly Affected Area (**Figure C-1, Figure C-2**).

Land uses within 400 feet of the Directly Affected Area are varied and include a mix of one-and two-family residential buildings, multi-family walk-up and elevator buildings, mixed commercial-residential uses, commercial uses, industrial/manufacturing uses, transportation and utility uses, community facilities, parking facilities, open space/outdoor recreation, and vacant land.

Several lots in the western portion of the Study Area contain multi-family elevator buildings of a similar scale to the Proposed Project, specifically the 14-story building immediately adjacent to the Directly Affected area at 2271 Washington Avenue (Lot 29, Block 3038).

Multi-family elevator buildings are located in the western portion of the Study Area, while one- and two-family buildings and multi-family walk-ups are present on nearly all blocks throughout the Study Area.

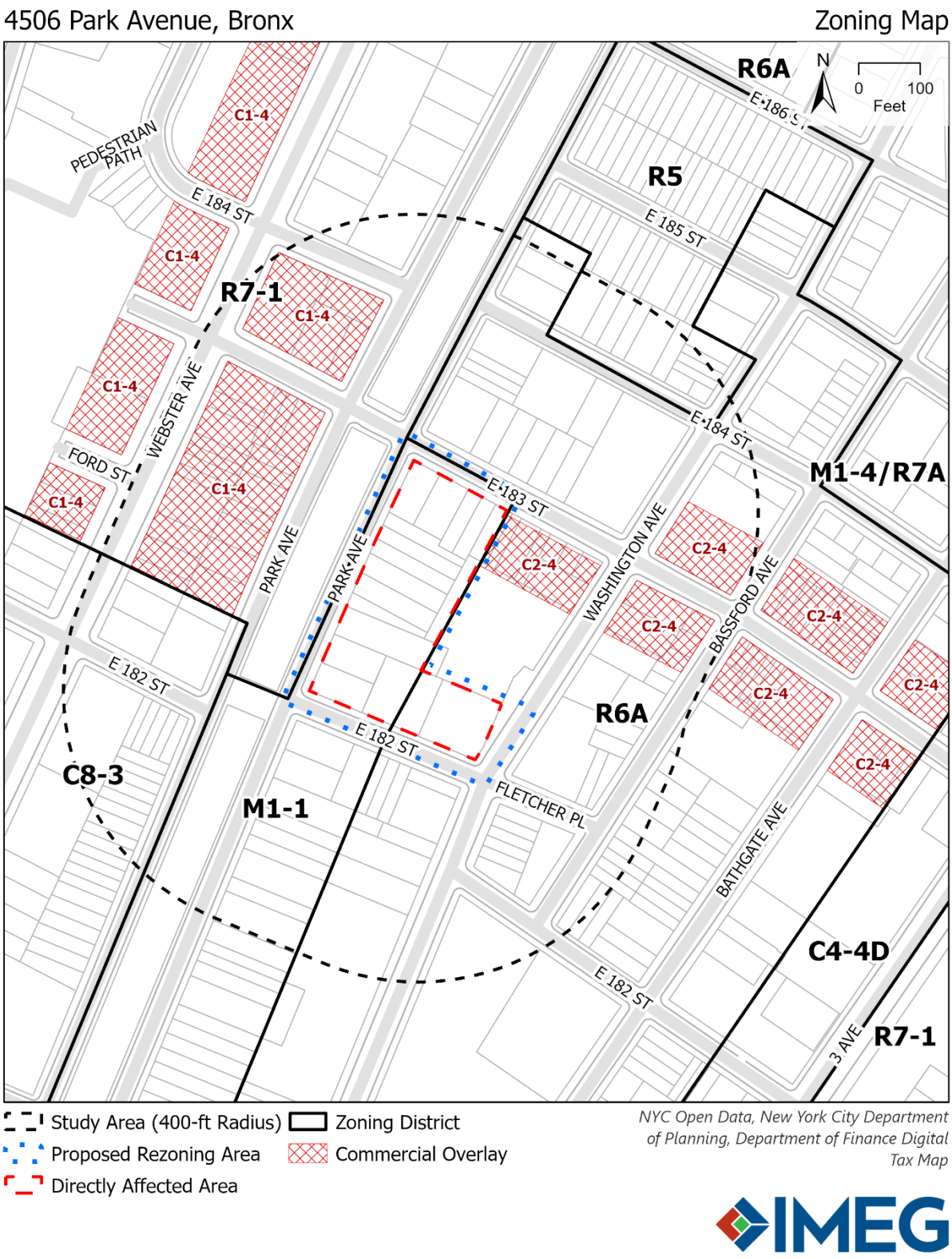
Open space resources in the Study Area include the "Farm in the Bronx" community garden within Bathgate Playground, located one block south of the Directly Affected Area on East 182nd Street and Washington Avenue; the Thorpe Family Playground, a 0.2-acre playground located one block northwest of the Directly Affected Area at East 183rd Street and Park Avenue; and Washington Park, a 0.52-acre playground located directly across from the Directly Affected Area at 457 East 183rd Street

Public facilities and institutions in the Study Area include Our Savior Catholic Church located at 2317 Washington Avenue, Zion Baptist Church Bronx located at 464 East 183rd Street, Sardis Baptist Church located at 4511 Park Avenue, Iglesia Pentecostal Puerta De Refugio Inc., located at 2185 Washington Avenue, and P.S. 23 – The New Children's School, located at 2151 Washington Avenue.

Figure C-1: Existing Land Use Map



Figure C-2: Existing Zoning



No-Action Condition

The Directly Affected Area is currently defined by vacant land; unlicensed surface parking; three warehouse buildings; two autobody/repair facilities; a restaurant; and two houses of worship.

M1-1

In the No-Action Condition, it is assumed that all parcels within the M1-1 district (Lots 1, 3, 7, 8, 9, 11, 12, 13, 14, 16, 87, 187, and p/o 5, p/o 20, p/o 29, and p/o 45) would remain the same as under existing conditions. Residential uses are not permitted in an M1-1 zoning district. Development trends in the area do not suggest that new manufacturing or industrial uses, or other uses permitted as-of-right in an M1-1 district, would be developed.

R6A

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building. Along with p/o Lot 5, p/o Lot 20, and Lots 22, 23, 24, 124, 125, 126, 27, 29, and p/o Lot 45 on Block 3038, Lot 38 was included in the 2010 Third Avenue/Tremont Avenue Rezoning. As described above, the goal of the Third Avenue/Tremont Avenue Rezoning was to provide new opportunities for mixed residential and commercial development. Therefore, contemplating a future as-of-right residential use on Lot 38 (pursuant to the R6A regulations) is reasonable. This assumption is further substantiated by the predominantly residential character defining Washington Avenue, including the residential uses fronting Washington Avenue (Lots 27 and 29) and East 183rd Street (Lots 22, 124, 125, and 126) on the same block.

With-Action Condition

The With-Action Condition contemplates future development on six Projected Development Sites and two Potential Development Sites. In the With-Action Condition, the Directly Affected Area would be developed pursuant to the proposed R7X/R7A zoning district and C2-4 commercial overlay.

Projected Development Site 1 would be developed with a 14-story (145 feet), approximately 192,379 gsf (146,990 zsf) mixed-use building fronting Park Avenue (Lots 5, 7, 8, 9, and 11). Projected Development Site 1 would contain approximately 4,500 gsf (4,500 zsf) of ground-floor commercial use and approximately 187,879 gsf (142,490 zsf) of residential use on floors 1 through 14 with 179 dwelling units, of which 20-30% (36-54 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 67 accessory off-street parking spaces would be provided.

Projected Development Site 2 would be developed with a 9-story (95 feet), approximately 137,689 gsf (105,256 zsf) mixed-use building fronting East 182nd Street (Lots 38 and 45). Projected Development Site 2 would contain approximately 5,413 gsf (5,413 zsf) of ground-floor commercial use and approximately 132,276 gsf (99,843 zsf) of residential use on floors 1 through 9 with 129 dwelling units, of which 20-30% (26-39 units) would be made affordable pursuant to MIH at an

average of 40-80% AMI, depending on the Option selected. Approximately 49 accessory off-street parking spaces would be provided.

Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft) 38,120 gsf (27,564 zsf) mixed-use building containing 3,000 gsf (3,000 zsf) of ground-floor commercial space and 35,120 gsf (27,564 zsf) of residential space on floors 2 through 9 with 25 dwelling units, of which 20-30% (5-8 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf (38,082 zsf) mixed-use building containing 2,000 gsf (2,000 zsf) of ground-floor commercial space and 48,894 gsf (36,082 zsf) of residential space on floors 2 through 14 with 36 dwelling units, of which 20-30% (8-11 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf (24,660 zsf) mixed-use building containing 2,500 gsf (2,500 zsf) of ground-floor commercial space and 30,300 gsf (22,160 zsf) of residential space on floors 2 through 7 with 22 dwelling units, of which 20-30% (5-7 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Projected Development Site 6 (Lots 87, 187, and 20) would be developed with an 11-story (115 ft), approximately 58,471 gsf (45,312 zsf) mixed-use building containing 4,000 gsf (4,000 zsf) of ground-floor commercial space and 54,471 gsf (41,312 zsf) of residential space on floors 2 through 11 with 41 dwelling units, of which 20-30% (9-12 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Assessment

As described above, approval of the Proposed Actions would facilitate the construction of six Projected Development Sites within the Directly Affected Area that would consist of ground floor retail and upper floor residential uses.

The Proposed Actions would not generate new land uses that would be incompatible with current land uses in the Study Area. The With-Action Condition would introduce six new mixed residential and commercial buildings that would complement and strengthen the residential and commercial character of this area of the Bronx, in addition to creating new affordable housing opportunities pursuant to MIH provisions. The Proposed Project would maximize the potential of several underutilized sites on Block 3038 by providing new housing in a residential neighborhood.

Based on this information, the Proposed Actions would not result in any significant adverse land use effects; therefore, no further analysis is warranted.

ZONING

Existing conditions

Directly Affected Area & Development Sites

The Directly Affected Area and Development Sites are currently zoned M1-1, R6A, and C2-4. A description of the zoning regulations for each of these districts is provided below.

M1-1

The majority of the Directly Affected Area, including the development sites, are within an M1-1 zoning district. M1 zoning districts permit certain community facility uses, most commercial uses, and nearly all semi-industrial and light manufacturing uses subject to M1 performance standards. New residential use is not permitted within M1-1 districts. The maximum FAR for permitted commercial and manufacturing uses within the M1-1 district is 1.0 and 2.4 for permitted community facility uses. The maximum base height before setback is 30 feet or two stories, whichever is lower, with building height controlled by a sky exposure plane. Accessory off-street parking is required for manufacturing and commercial uses, and for most uses is calculated based on the amount of floor area. In M1-1 districts, the off-street parking requirement may be varied if fewer than 15 spaces are required.

R6A

Lot 38 and p/o lots 5, 20, and 45 are in an R6A zoning district. R6A is a medium-density contextual residential district. This district generally allows residential (Use Group 1 and 2), and community facility (Use Group 3 and 4) uses. No commercial or industrial/manufacturing uses are permitted. In R6A districts within Inclusionary Housing Designated Areas, the maximum permitted FAR is 3.6 for residential uses and 3.0 for community facility uses. Any new buildings must be constructed pursuant to Quality Housing regulations. In R6A districts, Quality Housing buildings typically range in height from seven to eight stories. Within Inclusionary Housing Designated Areas in R6A districts, Quality Housing regulations mandate a maximum base height of 65 feet and a maximum building height of 85 feet. Accessory parking is required for 50% of dwelling units and for 25% of income-restricted housing units. These requirements may be waived if the district is located within the Transit Zone.

C2-4

P/o lot 20 is mapped with a C2-4 commercial overlay. C2 districts permit a wider range of retail and service establishments than C1 districts. When commercial overlays are mapped in R1 through R5 districts, the maximum commercial FAR is 1.0; when mapped in R6 through R10 districts, the maximum commercial FAR is 2.0. However, in mixed residential and commercial buildings, commercial uses are limited to one floor and must always be located below residential use. Off-street parking requirements vary by use, but are generally calculated based on the amount of floor area with C2-4 districts requiring one parking space per 1,000 square feet of floor area for general retail or service uses. A waiver is available for required commercial parking fewer than 40 spaces.

Study Area

Zoning within the 400 feet of the Directly Affected Area (the "Study Area") includes a mix of residential, commercial, light manufacturing, and special mixed use zoning districts of varying density. A description of the zoning regulations within each of these districts is provided below.

M1-1

See above for a description of the M1-1 zoning district.

R5

A small portion of the Study Area to the northeast lies within an R5 district. R5 zoning districts permit a variety of housing types with a FAR of 1.25. The maximum street wall height of a new building is 30 feet, and the maximum building height is 40 feet. Above a height of 30 feet, a setback of 15 feet is required from the street wall of the building. In addition, any portion of the building that exceeds a height of 33 feet must be set back from a rear or side yard line. Off-street parking is required for 85 percent of the dwelling units in a building. For blocks entirely within R5 districts, the regulations for predominately built-up areas may be applied to permit a maximum residential FAR of 1.65.

R6A

See above for a description of the R6A zoning district.

R7-1

The northwest portion of the Study Area falls within an R7-1 district. R7 districts are medium-density residential districts mapped in much of the Bronx, Brighton Beach in Brooklyn, and the Upper West Side in Manhattan. R7-1 districts specifically are located in many parts of the South Bronx, including Highbridge, Morris Heights, Morrisania, and Longwood. They can also be found in Prospect Lefferts Gardens, Brooklyn, as well as Jackson Heights and Rego Park, Queens. In R7 districts, buildings may be constructed according to either the optional Quality Housing Regulations or height factor regulations. Buildings constructed in accordance with Quality Housing regulations are generally lower in height, with greater lot coverage. Alternatively, the height factor regulations for R7 districts result in lower apartment buildings on smaller zoning lots, and taller buildings on larger lots with less lot coverage. The FAR for height factor buildings in R7 districts ranges from 0.87 to 3.44. Off-street parking is generally required for 60 percent of a building's dwelling units in an R7-1 district, but requirements are lower for income-restricted housing units and are further modified in certain areas, such as within the Transit Zone. As R7 districts generally encompass many blocks, they have wide and narrow street rules for each set of regulations. For Quality Housing Buildings, the maximum FAR varies based on whether the building is to be constructed on a wide street or a narrow street. Additionally, off-street parking is generally required for 50 percent of a building's dwelling units, but requirements are also lower for income-restricted housing units and further modified in certain areas. Off-street parking requirements may be waived if 5 or fewer parking spaces are required in R7-1 districts.

C1-4

Several lots in the western portion of the Study Area are mapped with a C1-4 commercial overlay. Because these overlays are mapped within the R7-1 district, the maximum commercial FAR is 2.0. In mixed residential and commercial buildings, commercial uses are limited to one floor and must always be located below residential uses. Off-street parking requirements vary by use, but are generally calculated based on the amount of floor area, with C1-4 districts requiring one parking space per 1,000 square feet of floor area for general retail or service uses. A waiver is available for required commercial parking fewer than 40 spaces.

C2-4

See above for a description of the C2-4 commercial overlay.

C8-3

The southwest portion of the Study Area falls within a C8-3 district. C8 zoning districts are mapped mainly along major traffic arteries where concentrations of automotive uses have developed. C8-3 districts permit most commercial and semi-industrial uses and certain community facility uses. New residential use is not permitted within C8-3 districts. The FAR for permitted commercial and community facility uses within the C8-3 district is 2.0 and 6.5, respectively. The maximum base height before setback is 60 ft., with building height controlled by a sky exposure plane. Off-street parking is required, and for most uses is calculated based on the amount of floor area. In C8-3 districts, the off-street parking requirement may be waived if fewer than 40 spaces are required.

The Study Area is not located in an Industrial Business Zone, Business Development District, historic district, or flood zone.

No-Action Condition

As described above, the Directly Affected Area is mapped with M1-1 and R6A zoning districts.

<u>M1-1</u>

In the No-Action Condition, it is assumed that all parcels within the M1-1 district (Lots 1, 3, 7, 8, 9, 11, 12, 13, 14, 16, 87, 187, and p/o 5, p/o 20, p/o 29, and p/0 45) would remain the same as under existing conditions. Residential uses are not permitted in an M1-1 zoning district. Development trends in the area do not suggest that new manufacturing or industrial uses, or other uses permitted as-of-right in an M1-1 district, would be developed.

<u>R6A</u>

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building. Along with p/o Lot 5, p/o Lot 20, and Lots 22, 23, 24, 124, 125, 126, 27, 29, and p/o Lot 45 on Block 3038, Lot 38 was included in the 2010 Third Avenue/Tremont Avenue Rezoning. As described above, the goal of the Third Avenue/Tremont Avenue Rezoning was to provide new

opportunities for mixed residential and commercial development. Therefore, contemplating a future as-of-right residential use on Lot 38 (pursuant to the R6A regulations) is reasonable. This assumption is further substantiated by the predominantly residential character defining Washington Avenue, including the residential uses fronting Washington Avenue (Lots 27 and 29) and East 183rd Street (Lots 22, 124, 125, and 126) on the same block.

With-Action Condition

The With-Action Condition contemplates future development on six Projected Development Sites. In the With-Action Condition, the Directly Affected Area would be developed pursuant to the proposed R7X/R7A zoning district and C2-4 commercial overlay.

The With-Action Condition contemplates future development on two Projected Development Sites. In the With-Action Condition, the Directly Affected Area would be developed pursuant to the proposed R7X/R7A zoning district and C2-4 commercial overlay.

Projected Development Site 1 would be developed with a 14-story (145 feet), approximately 192,379 gsf (146,990 zsf) mixed-use building fronting Park Avenue (Lots 5, 7, 8, 9, and 11). Projected Development Site 1 would contain approximately 4,500 gsf (4,500 zsf) of ground-floor commercial use and approximately 187,879 gsf (142,490 zsf) of residential use on floors 1 through 14 with 179 dwelling units, of which 20-30% (36-54 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 67 accessory off-street parking spaces would be provided.

Projected Development Site 2 would be developed with a 9-story (95 feet), approximately 137,689 gsf (105,256 zsf) mixed-use building fronting East 182nd Street (Lots 38 and 45). Projected Development Site 2 would contain approximately 5,413 gsf (5,413 zsf) of ground-floor commercial use and approximately 132,276 gsf (99,843 zsf) of residential use on floors 1 through 9 with 129 dwelling units, of which 20-30% (26-39 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 49 accessory off-street parking spaces would be provided.

Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft) 38,120 gsf (27,564 zsf) mixed-use building containing 3,000 gsf (3,000 zsf) of ground-floor commercial space and 35,120 gsf (27,564 zsf) of residential space on floors 2 through 9 with 25 dwelling units, of which 20-30% (5-8 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf (38,082 zsf) mixed-use building containing 2,000 gsf (2,000 zsf) of ground-floor commercial space and 48,894 gsf (36,082 zsf) of residential space on floors 2 through 14 with 36 dwelling units, of which 20-30% (8-11 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf (24,660 zsf) mixed-use building containing 2,500 gsf (2,500 zsf) of ground-floor commercial space and 30,300 gsf (22,160 zsf) of residential space on floors 2 through 7 with 22 dwelling units, of which 20-30% (5-7 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Projected Development Site 6 (Lots 87, 187, and 20) would be developed with an 11-story (115 ft), approximately 58,471 gsf (45,312 zsf) mixed-use building containing 4,000 gsf (4,000 zsf) of ground-floor commercial space and 54,471 gsf (41,312 zsf) of residential space on floors 2 through 11 with 41 dwelling units, of which 20-30% (9-12 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

Assessment

The Proposed Actions include (i) a zoning map amendment to change the Proposed Rezoning Area from the current M1-1 and R6A zoning districts to an R7X and R7A zoning districts with C2-4 commercial overlays, and (ii) a zoning text amendment to establish an MIH area, mapping Option 1, Option 2, and Option 3. The Applicant believes the proposed R7X and R7A zoning districts with C2-4 commercial overlays are appropriate given the frontage on Park Avenue and the 14-story residential building fronting Washington Avenue on the same block. The R7X and R7A districts allow for residential development at a scale that is consistent with the surrounding neighborhood, while the commercial overlay will activate Park Avenue and East 182nd Street with local retail amenities.

Based on this information, the Proposed Actions would not result in any adverse impacts related to zoning; therefore, no further assessment is required.

PUBLIC POLICY

According to the *CEQR Technical Manual*, a proposed project that would be within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports that pertain to the Study Area. If the proposed action could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

Housing Our Neighbors

In June 2022, New York City Mayor Eric Adams released "Housing Our Neighbors: A Blueprint for Housing and Homelessness." Crafted with input from New Yorkers who have experienced homelessness, the plan represents the first city housing plan to build on the creation and preservation of affordable housing with transformative reforms to NYCHA.

Chapter 3: Create and Preserve Affordable Housing

Housing Our Neighbors intends to increase access to equitable and inclusive development, especially for low-income new Yorkers. Affordable housing investments in neighborhoods with access to transit will create thriving, diverse neighborhoods that benefit from access to economic opportunity and an increased quality of life.

The new Mandatory Inclusionary Housing Area under the Proposed Actions will create housing options that are accessible to low- and middle-income New Yorkers. Additionally, the new residential and commercial zoning under the Proposed Actions is designed to add new retail uses to activate the Directly Affected Area at the street level that will support the new residential population.

As previously described, the Proposed Actions would complement and strengthen the residential and commercial character of this area of the Bronx, thereby furthering the goals of the Third Avenue/Tremont rezoning by providing the Belmont neighborhood of the Bronx with new mixed-income housing.

CONCLUSION

As discussed above, the proposed mixed residential and commercial development would be consistent with the existing zoning and land use in the Study Area and would not alter or conflict with any applicable public policy.

Based on this information, approval of the Proposed Actions would not result in any potentially significant land use or zoning effects and would be consistent with or advance applicable public policies. Therefore, no further assessment is required.

ATTACHMENT D: SOCIOECONOMIC CONDITIONS

INTRODUCTION

According to the *CEQR Technical Manual*, the socioeconomic character of an area includes its population, housing, and economic activity. Even when socioeconomic change may not result in environmental effects 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. According to the *CEQR Technical Manual*, a socioeconomic character assessment considers whether development resulting from a proposed project could result in significant effects on the socioeconomic character of the area as a result of (i) direct displacement of the residential population on the project site; (ii) indirect displacement of the residential population within the study area; (iii) direct displacement of existing businesses on the project site; (iv) indirect displacement of existing businesses within the study area; and/or (v) effects on specific industries.

METHODOLOGY

According to the *CEQR Technical Manual*, an assessment of socioeconomic conditions typically separates the socioeconomic conditions of area residents from those of area businesses, although a proposed project may affect both in similar ways. A proposed project may directly displace residents or businesses or change the area's socioeconomic conditions such that residents or businesses may be indirectly displaced.

The *CEQR Technical Manual* defines direct displacement as the involuntary displacement of residents or businesses from a project site(s) directly affected by a proposed project. Indirect displacement is the involuntary displacement of residents, businesses, or employees that results from a change in socioeconomic conditions in a particular study area as a result of the proposed project.

Direct Residential Displacement

Because there are no residential uses currently occupying the Directly Affected Area, the Proposed Actions would not result in the direct displacement of any residential population. Therefore, an assessment of direct residential displacement is not warranted.

Indirect Residential Displacement

The development in the With-Action Condition would result in a net increase of approximately 388 dwelling units over the No-Action Condition. According to the *CEQR Technical Manual*, projects that would result in more than 250 new residential units may lead to indirect residential displacement. Therefore, a preliminary assessment of potential indirect residential displacement is warranted.

Direct Business Displacement

The With-Action Condition would result in the direct displacement of existing businesses from the Directly Affected Area. The businesses that currently operate in the Directly Affected Area consist of two (2) automotive service and repair facilities, two (2) automotive retail facilities, one (1) towing facility, one (1) mattress factory/warehouse, and one (1) shipping facility. This would result in the direct displacement of approximately 35 employees. The displacement of approximately 35 employees would not exceed the 100-employee threshold warranting an assessment as indicated by the *CEQR Technical Manual*. Moreover, the products and services offered by these businesses are not uniquely dependent upon this location; are not the subject of other regulations or publicly adopted plans aimed at their preservation; and do not serve a population uniquely dependent on their services in their present location. Based on these criteria, an assessment of direct displacement of existing businesses is not warranted.

Indirect Business Displacement

The With-Action Condition would result in the development of approximately 21,413 gsf of commercial floor area in the Directly Affected Area. According to the *CEQR Technical Manual*, projects resulting in less than 200,000 square feet of retail on a single development site would not typically result in indirect socioeconomic impacts due to market saturation. There are currently no commercial or retail uses in the Directly Affected Area, therefore the development in the With-Action Condition would result in a net increase of 21,413 gsf over the No-Action Condition. Based on these criteria, an assessment of indirect business displacement is not warranted.

Effects on Specific Industries

The Directly Affected Area is currently occupied by two (2) automotive service and repair facilities, two (2) automotive retail facilities, one (1) towing facility, one (1) mattress factory/warehouse, and one (1) shipping facility. The replacement of these facilities with mixed residential-commercial developments would not affect the economic and operational conditions of the automotive service or sales industries or the shipping industry at large. These categories of businesses are not unique to the Directly Affected Area and can be found elsewhere either in the vicinity of the Directly Affected Area, in the Borough of the Bronx, or across New York City. Moreover, their replacement would not result in the loss or substantial diminishment of a particularly important product or service in the area. Based on these criteria, an assessment of the Proposed Actions' potential effects on specific industries is not warranted.

STUDY AREA

According to the *CEQR Technical Manual*, the Socioeconomic Conditions Study Area is typically the same as the Land Use Study Area and should reflect the scale of the project relative to the area's population. The *CEQR Technical Manual* states that for projects that would increase the population by more than 5 percent within a 0.25-mile Study Area compared to the projected population in the future without the Proposed Actions, a 0.5-mile Study Area would be appropriate for analysis purposes.

The Directly Affected Area is located within Bronx Community District 6. Twenty (20) new residential development projects are anticipated in the 0.25-mile Study Area under the future No-Action Condition, resulting in the construction of approximately 388 new residential units (**Table D-1**). Based on the average household size of the Bronx Community District 6, as per the 2020 Decennial Census, these new residential units would yield approximately 907 residents. The 0.25-mile Study Area would also contain Bronx Census Tracts 383.01, 383.03, 383.04, and 385.[1] Combined, with the population of these census tracts and the anticipated population added by the No-Build projects would result in a total No-Action Condition population of 16,880 within a 0.25-mile Study Area (**Table D-2**).

Table D-1: No-Build Developments[2]

Address	# DUs	Community District	Avg HH Size[3]	# Residents
2319 Bassford Avenue	2	Bronx CD 6	2.37	4
2233 Bathgate Ave	8			18
2368 Washington Avenue	1			2
2365 Hoffman Street	8			18
491 Fletcher Place	80			189
2336 Valentine Avenue	0			0
2375 Lorillard Place	7			16
2324 Webster Avenue	40			94
2386 Lorillard Place	2			4
2176 Bathgate Avenue	45			106
2336 Valentine Avenue	17			40
2248 Webster Avenue	10			23
2270 Bassford Avenue	21			49
4533 3rd Avenue	22			52
4509 Park Avenue	18			42
2350 Washington Avenue	2			4
2246 Bathgate Avenue	13			30
4432 3rd Avenue	7			16
2351 Lorillard Place	83			196
2321 Bassford Avenue	2			4
Total	**388**			**907**

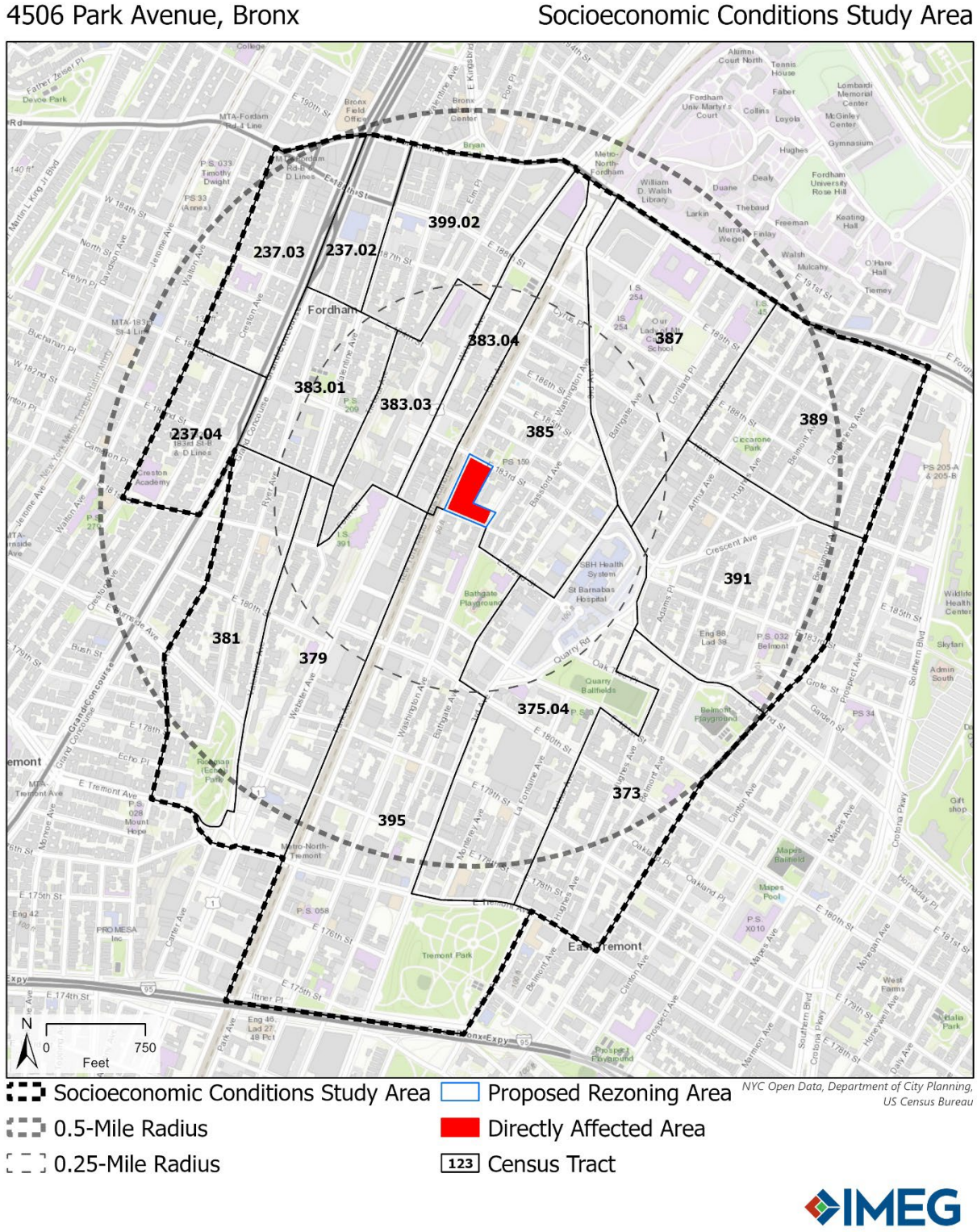
[1] Census tracts that contain at least 50% of their area within the 0.25-mile radius were included in the Study Area.
[2] Source: "HousingDB Post-2010" shapefile, DCP Housing Database. https://www.nyc.gov/content/planning/pages/resources/datasets/housing-project-level (Accessed June 4, 2025)
[3] Source: 2020 Decennial Census average household size for Bronx Community District 6

Table D-2: No-Action Condition Population

Census Tract	Population
383.01	4,635
383.03	3,468
383.04	2,508
385	5,362
No-Build Developments	907
Total	**16,880**

Based on the net increase of 388 dwelling units in the With-Action Condition and the average household size of 2.37 for Bronx Community District 6, the Proposed Actions would generate approximately 919 residents, resulting in a total population of 17,799 within the 0.25-mile Study Area in the With-Action Condition. This is estimated to result in a residential population increase of 5.44%. Because this increase exceeds the 5 percent threshold set forth in the *CEQR Technical Manual*, the Study Area was expanded to 0.5-miles. For this analysis, the 0.5-mile Study Area includes Bronx Census Tracts 237.02, 237.03, 237.04, 373, 375.04, 379, 381, 383.01, 383.03, 383.04, 385, 387, 389, 391, 395, and 399.02 (**Figure D-1**).

Figure D-1: Socioeconomic Conditions Study Area



PRELIMINARY ASSESSMENT

Indirect Residential Displacement

As the *CEQR Technical Manual* states, the objective of the indirect residential displacement analysis is to determine whether the proposed project may either introduce or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. Generally, an indirect residential displacement analysis is conducted only in cases in which the potential impact may be experienced by renters living in privately held units unprotected by rent control, rent stabilization, or other government regulations restricting rents, and whose income or poverty status indicates that they may not support substantial rent increases. In all cases, the potential for indirect displacement depends not only on the characteristics of the proposed project, but on the characteristics of the study area.

Methodology

This preliminary assessment follows the step-by-step preliminary assessment guidelines described in Section 332.1 of the *CEQR Technical Manual*. The first step of the preliminary analysis is to determine if the increase in population resulting from the proposed project would be large enough to affect real estate market conditions in the study area, relative to the size of the population expected to reside in the study area without the project. If the population increase is greater than 5 percent, then the next step of the analysis is conducted.

Existing Conditions

The existing population of the 0.5-mile Study Area is 75,311 as per the 2020 Census, and has increased by 5.59 percent from 2010. The population of the Bronx as a whole has decreased by 5.94 percent since 2010, while the population of New York City as a whole has increased by 7.69 percent (**Table D-3**).

Table D-3: Population Change, 2010 – 2020

Geographic Area	2010 Census	2020 Census	Percent Change
Study Area	71,326	75,311	5.59%
Bronx	1,472,654	1,385,108	-5.94%
New York City	8,175,133	8,804,190	7.69%
Source: U.S. Census Bureau			

No-Action Condition

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building. Along with p/o Lot 5, p/o Lot 20, and Lots 22, 23, 24, 124, 125, 126, 27, 29, and p/o Lot 45 on Block 3038, Lot 38 was included in the 2010 Third Avenue/Tremont Avenue Rezoning. As described above, the goal of the Third Avenue/Tremont Avenue Rezoning was to provide new opportunities for mixed residential and commercial development. Therefore, contemplating a future

as-of-right residential use on Lot 38 (pursuant to the R6A regulations) is reasonable. This assumption is further substantiated by the predominantly residential character defining Washington Avenue, including the residential uses fronting Washington Avenue (Lots 27 and 29) and East 183rd Street (Lots 22, 124, 125, and 126) on the same block. The development in the No-Action Condition would include approximately 44 residential units, and approximately 104 residents to the Study Area.[4]

No-Build Developments

As described above, three (3) new residential development projects are anticipated in the 0.25-mile Study Area under the future No-Action Condition, resulting in the addition of approximately 274 residents to the Study Area.

Based on this information, the development in the No-Action Condition would result in a total No-Action Condition population of 75,689 (**Table D-4**).

Table D-4: No-Action Condition Population

No-Action Condition Population	
0.5-mile Study Area Population	75,311
No-Build Projects Population	274
No-Action Condition Population	104
Total	**75,689**

With-Action Condition

As described in Attachment B: "CEQR Analysis Framework," the development in the With-Action Condition would introduce approximately 1,024 residents to the study area, thereby increasing the study area's population by 1.36 percent (**Table D-5**).[5]

Table D-5: With-Action Condition Population Change in 0-5.-mile Study Area

Existing Conditions Population	**New Residents Introduced**	**With-Action Condition Population**	**Percent Change**
75,311	1,024	76,335	1.36%

CONCLUSION

The 1.36 percent increase in the total population in the 0.5-mile Study Area that would result from the Proposed Actions is not anticipated to be large enough to cause indirect displacement of residents or broadly affect real estate market conditions as compared to the No-Action Condition.

[4] Population multiplier is the average household size in Bronx CD 6 (2.37 x 44 dwelling units = 104 residents). Source: U.S. Census Bureau, 2020 Decennial Census
[5] Population multiplier is the average household size in Bronx CD 6 (2.37 x 432 dwelling units = 1,024 residents). Source: U.S. Census Bureau, 2020 Decennial Census

Based on the preliminary analysis above, the Proposed Actions are not anticipated to result in the indirect displacement of existing residents in the Study Area. Therefore, the development in the With-Action Condition is not anticipated to result in a potentially significant adverse impact on the socioeconomic conditions of the neighborhood, and, therefore, no further analysis is necessary.

ATTACHMENT E: OPEN SPACE

INTRODUCTION

This chapter assesses the potential impacts of the Proposed Actions on open space resources. According to the *CEQR Technical Manual*, an open space assessment is conducted to determine whether a proposed project would have a direct impact resulting from the elimination or alteration of open space and/or an indirect impact resulting from burdening available open space by the introduction of a new residential or worker population. The *CEQR Technical Manual* defines open space as publicly- or privately-owned land that is publicly accessible and available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment. An open space analysis focuses on all existing or planned publicly accessible open space.

In addition to the analysis provided in this section, Attachment F: "Shadows," provides an assessment of the Proposed Actions' potential shadow effects on open space resources.

METHODOLOGY

According to guidelines in the *CEQR Technical Manual*, an open space analysis is generally conducted if a proposed project would generate more than 250 new residents in an existing R5 or above, C, or M district, or 500 new employees; however, the need for an open space assessment may vary in certain areas of the city that are considered either underserved or well-served by open space. Across analysis categories, projected development sites are analyzed for both density-related and site-specific effects, whereas potential sites are analyzed for potential site-specific effects only.

Direct Effects

According to the *CEQR Technical Manual*, a proposed project would directly affect open space resources if it would encroach upon, limit public access to, or cause a loss of public open space. Direct effects may also occur if the facilities within an open space would be so changed that the open space no longer serves the same user population. Other direct effects may result from sources of noise, air pollutants, or shadows on public open space, affecting its function, usability, or enjoyment, though it should be noted that direct effects may not always result in adverse effects to public open space.

Indirect Effects

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add sufficient population, either residential or non-residential, to noticeably diminish the capacity of open space in the area to serve the future population.

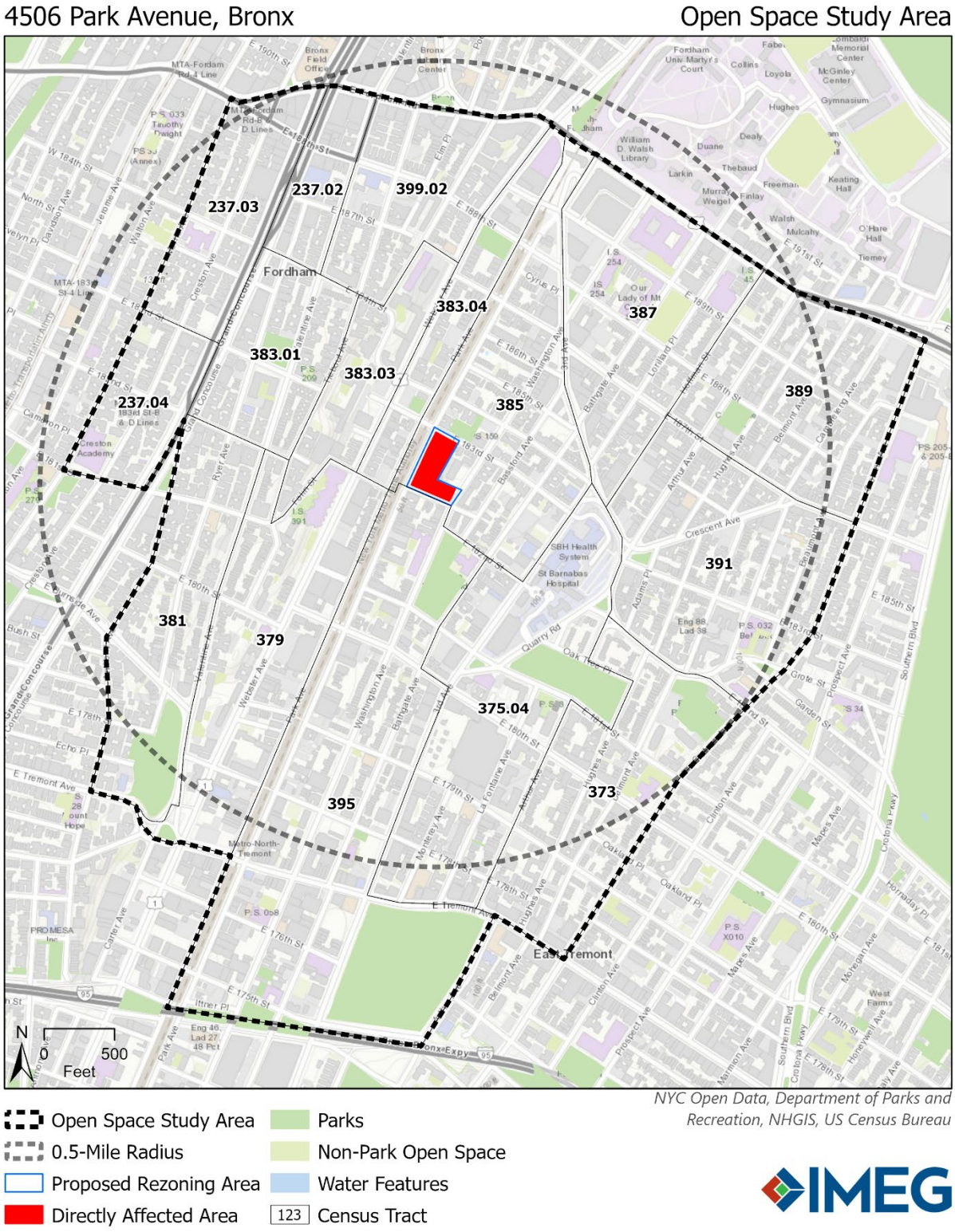
Study Area

According to the *CEQR Technical Manual*, an open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreation areas – typically a 0.5-mile radius for residential projects and a 0.25-mile radius for commercial projects with

a worker population. Because the Proposed Actions would facilitate a primarily residential development, a 0.5-mile radius is used as an appropriate study area boundary (the "Open Space Study Area"). Based on *CEQR Technical Manual* guidelines, the Open Space Study Area includes all census tracts with at least 50 percent of their area within the 0.5-mile radius around the Directly Affected Area and all publicly accessible open spaces resources within that census tract.

As shown in **Figure E-1**, the Open Space Study Area includes Bronx Census Tracts 237.02, 237.03, 237.04, 373, 375.04, 379, 381, 383.01, 383.03, 383.04, 385, 387, 389, 391, 395, and 399.02, and eighteen publicly accessible open space resources: Stop & Go Playground (0.32 acres), Richman (Echo) Park (4.39 acres), Ciccarone Park (0.55 acres), Murphy Triangle (0.1 acres), Whalen Grove (0.13 acres), Flood Triangle (0.07 acres), Slattery Playground (0.91 acres), El Batey de Doña Provi Garden (0.13 acres), D'Auria-Murphy Triangle (0.31 acres), Washington Park (0.52 acres), Thorpe Family Playground (0.20 acres), Belmont Playground (2.21 acres), Quarry Ballfields (4.42 acres), Webster Playground (0.74 acres), Tremont Park (15 acres), Bathgate Playground (2.5 acres), O'Brien Oval (0.23 acres), and Columbus Square, M.S. 45 (1.45 acres).

Figure E-1: Open Space Study Area



Open Space Ratio (OSR)

The *CEQR Technical Manual* defines OSR as the amount of open space acreage per 1,000 residents. Based on the *CEQR Technical Manual*, because local OSRs vary widely in New York City, as a planning goal, an OSR of 2.5 acres per 1,000 residents represents an area well-served by open space. If the OSR would increase or remain substantially the same in the With-Action Condition as compared to the No-Action condition, no further analysis of open space is necessary. If there is a decrease in the OSR that approaches or exceeds five (5) percent, it is generally considered to be a substantial change warranting a more detailed analysis.

ANALYSIS FRAMEWORK

Based on the *CEQR Technical Manual* guidelines, if a project exceeds thresholds outlined in Section 200 of Chapter 7: "Open Space," a preliminary assessment is required to determine whether a more detailed analysis is warranted. However, in areas that are particularly scarce in open space, even a small reduction in the OSR may be considered potentially significant; therefore, a detailed analysis to evaluate any indirect effects of the Proposed Action on open space resources should be conducted.

The adequacy of open space can be assessed both qualitatively and quantitatively. According to the *CEQR Technical Manual*, the quantitative approach requires an assessment of the OSR (ratio of open space acreage to the population in the study area). The qualitative assessment may examine other factors that may affect utilization, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic age characteristics of the study area population.

To estimate the population that will be introduced to the area in the With-Action Condition, the average household size of renter-occupied units in Bronx Census Tract 385 is applied to the number of new housing units proposed for the development. Open Space Ratios are calculated for the future With-Action Condition and compared to the No-Action condition ratios to determine changes in future levels of adequacy.

Open space effects are based in part on how the Proposed Action would change open space ratios in the Open Space Study Area. In addition to quantitative analyses, the *CEQR Technical Manual* also recommends conducting a qualitative assessment in order to identify the potential for open space effects. Per *CEQR Technical Manual* guidelines, the ratios do not constitute an absolute effect threshold, but rather benchmarks that represent how well an area is served by its open space.

EXISTING CONDITIONS

The Open Space Study Area contains approximately 34.18 acres of publicly accessible open space. Public open space resources within 0.5 miles of the Directly Affected Area include Stop & Go Playground (0.32 acres), Richman (Echo) Park (4.39 acres), Ciccarone Park (0.55 acres), Murphy Triangle (0.1 acres), Whalen Grove (0.13 acres), Flood Triangle (0.07 acres), Slattery Playground (0.91 acres), El Batey de Doña Provi Garden (0.13 acres), D'Auria-Murphy Triangle (0.31 acres), Washington Park (0.52 acres), Thorpe Family Playground (0.20 acres), Belmont Playground (2.21

acres), Quarry Ballfields (4.42 acres), Webster Playground (0.74 acres), Tremont Park (15 acres), Bathgate Playground (2.5 acres), O'Brien Oval (0.23 acres), and Columbus Square, M.S. 45 (1.45 acres) (**Figure E-2**).

The Open Space Study Area has an existing population of approximately 75,311 residents, creating an OSR for the Study Area of approximately 0.454 acres of open space per 1,000 residents.[6]

Stop & Go Playground

Stop & Go Playground is a 0.32-acre playground located on W 175th Street, between Washington Avenue and Bathgate Avenue. The park is used by nearby schools during school days (8AM-4PM) and contains playground equipment, spray showers, and benches.

Richman (Echo) Park

Richman (Echo) Park is a 4.39-acre neighborhood park located on Valentine Avenue between East Tremont Avenue and Burnside Avenue. The park features basketball courts, handball courts, spray showers, playgrounds, fitness equipment, benches, game tables, and public restrooms.

Ciccarone Park

Ciccarone Park is a 0.55-acre triangular plaza located on East 188th Street between Arthur Avenue and Hughes Avenue. The park contains bocce courts, a mobile food truck, fitness equipment, playgrounds, public restrooms, and spray showers.

Murphy Triangle

Murphy Triangle is a 0.1-acre triangular plaza located on East 181st Street at Third Avenue and Quarry Road. The plaza features wide sidewalks and several benches.

Whalen Grove

Whalen Grove is a 0.13-acre triangular plaza located on Crotona Avenue at Grote Street and Garden Street. The plaza features trees, shrubbery, and several benches.

Flood Triangle

Flood Triangle is a 0.07-acre triangular plaza located on East 188th Street at Third Avenue and Washington Avenue. The plaza features trees, shrubbery, and several benches.

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[6] *US Census Bureau, 2020 Census, Bronx Census Tract(s): 237.02, 237.03, 237.04, 373, 375.04, 379, 381, 383.01, 383.03, 383.04, 385, 387, 389, 391, 395, and 399.02.*

Slattery Playground

Slattery Playground is a 0.91-acre playground located on East 183rd Street between Valentine Avenue and Ryer Avenue. The playground features basketball courts, fitness equipment, handball courts, playgrounds, public restrooms, spray showers, benches, games tables, and a mobile food truck.

El Batey de Doña Provi Garden

El Batey De Doña Provi Garden is a 0.13-acre community garden located at 504 East 178th Street at Bathgate Avenue. The garden is open from April 1 to October 31. The garden is part of the NYC Parks GreenThumb community gardening program.

D'Auria-Murphy Triangle

D'Auria-Murphy Triangle is a 0.31-acre triangular plaza located at Adams Place between Crescent Avenue and East 183rd Street. The plaza features trees, shrubbery, benches, a gazebo, and a monument to Christopher Columbus.

Washington Park

Washington Park is a 0.52-acre playground located at East 183rd Street between Washington Avenue and Park Avenue. The park features a basketball court, spray showers, benches, a small lawn, and playground equipment.

Thorpe Family Playground

Thorpe Family Playground is a 0.2-acre playground located at East 183rd Street between Park Avenue and Webster Avenue. The playground features spray showers, playground equipment, and a drinking fountain.

Belmont Playground

Belmont Playground is a 2.21-acre jointly operated playground located at East 182nd Street between Belmont Avenue and Croton Avenue. The playground features basketball courts, fitness equipment, handball courts, playground equipment, public restrooms, and spray showers.

Quarry Ballfields

The Quarry Ballfields is a 4.42-acre recreation field bounded by Quarry Road to the west, Oak Tree Place to the north, East 181st Street to the south, and Hughes Avenue to the east. The park features a baseball field, soccer field, public restrooms, bleachers, and a wooded area towards the west of the park.

Webster Playground

Webster Playground is a 0.74-acre playground located at East 188th Street between Webster Avenue and Park Avenue. The playground includes basketball courts, fitness equipment, handball courts, playground equipment, public restrooms, benches, and picnic tables.

Walter Gladwin Park

Walter Gladwin Park, formerly known as Tremont Park, is a 15-acre neighborhood park that is bounded by the Cross Bronx Expressway and East 175th Street to the south, East Tremont Avenue to the north, Third Avenue to the west, and Arthur Avenue to the east. The park features a baseball field, handball courts, playground equipment, public restrooms, spray showers, a designated dog-friendly area, benches, and a mobile food truck.

Bathgate Playground

Bathgate Playground is a 2.5-acre neighborhood park bounded by Washington Avenue to the west, Bathgate Avenue to the east, East 182nd Street to the north, and East 181st Street to the south. The park features a playground and running track and is home to the Charles W. Cooke Community Farm and the Farm in the Bronx community gardens, both of which are part of the NYC Parks GreenThumb program. During school days, the playground serves children attending the neighboring P.S. 23, The New Children's School and P.S. 59, The Community School of Technology.

O'Brien Oval

O'Brien Oval is a 0.23-acre triangular plaza located at the intersection of East Tremont Avenue and Valentine Avenue. The petite plaza features wide sidewalks, trees and shrubbery, and several benches

Columbus Square, M.S. 45

Columbus Square is an approximately 1.45-acre community playground that is bounded by East 189th Street to the north, Bathgate Avenue to the west, Lorillard Place to the east, and East 188th Street to the south. The playground features a baseball field, handball courts, a soccer field, exercise equipment, a running track, and benches. The playground is open to the public every day from 8AM to dusk when school is not in session. When school is in session, the playground serves the nearby Thomas C. Giordano Middle School 45.

According to the *CEQR Technical Manual*, open space can be public or private and used for active or passive recreational purposes. Pursuant to CEQR guidelines, publicly accessible open space is defined as recreational facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and qualitative analysis, whereas private open space not accessible to the general public on a regular basis is considered qualitatively. **Table F-1** below provides a descriptive summary of the eighteen open space resources within the Open Space Study Area, including location, acreage, category (active or passive), amenities, condition, and hours of access.

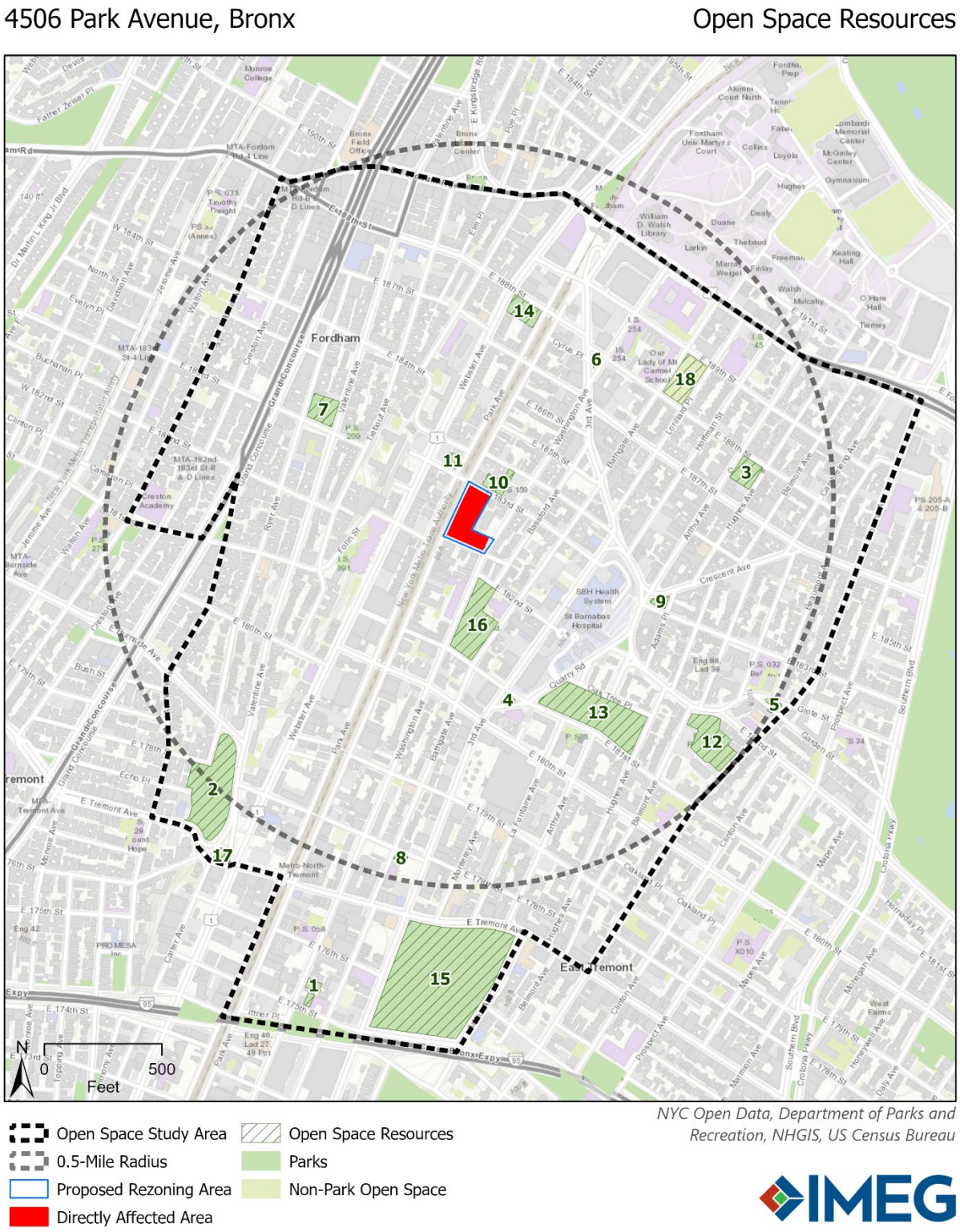
Table E-1: Open Space Resources within the Open Space Study Area

Map ID	Open Space Resource	Location	Owner	Amenities	Acreage	Passive		Active		Quality	Hours of Access
						Acres	%	Acres	%		
1	Stop & Go Playground	W 175 St, between Washington Ave and Bathgate Ave	DPR	Playground, spray showers, benches	0.32	.16	50%	.16	50%	Acceptable	School use during school days (AM-4PM)
2	Richman (Echo) Park	Valentine Ave, between E Tremont Ave and Burnside Ave	DPR	Basketball courts, handball courts, spray showers, playgrounds, fitness equipment, benches, game tables, public restrooms	4.39	3.2925	75%	1.0975	25%	Acceptable	6 AM – 10 PM
3	Ciccarone Park	E 188 St between Arthur Ave and Hughes Ave	DPR	Bocce courts, food truck, fitness equipment, playground, public restroom, spray showers	0.55	0.55	100%	-	-	Acceptable	7 AM – 6 PM
4	Murphy Triangle	E 181 St at Third Avenue and Quarry Rd	DPR	Benches	0.1	0.1	95%	0.01	5%	Acceptable	24/7
5	Whalen Grove	Crotona Ave at Grote St and Garden St	DPR	Benches	0.13	0.08	65%	0.05	35%	Acceptable	24/7
6	Flood Triangle	E 188 St at Third Ave and Washington Ave	DPR	Benches	0.07	0.07	100%	-	-	Acceptable	24/7
7	Slattery Playground	E 183 St between Valentine Ave and Ryer Ave	DPR	Basketball courts, fitness equipment, handball courts, playgrounds, public restrooms, spray showers, benches, games tables, food truck	0.91	0.23	25%	0.68	75%	Acceptable	7 AM – 6 PM
8	El Batey de Doña Provi Garden	504 E 178 St at Bathgate Ave	DPR	Community garden	0.13	-	-	0.13	100%	-	Open from 10AM-PM from April 1 to October 1
9	D'Auria-Murphy Triangle	Adams Pl between Crescent Ave and E 183 St	DPR	Benches, gazebo, Columbus monument	0.31	0.31	100%	-	-	Acceptable	6 AM – 10 PM
10	Washington Park	E 183 St between Washington Ave and Park Ave	DPR	Basketball court, spray showers, playground	0.52	0.08	15%	0.44	85%	Acceptable	6 AM – 10 PM
11	Thorpe Family Playground	E 183 St between Park Ave and Webster Ave	DPR	Spray showers, playground, drinking fountain	0.2	0.08	40%	0.12	60%	Acceptable	7 AM – 6 PM
12	Belmont Playground	E 182 St between Belmont Ave and Croton Ave	DPR	Basketball courts, fitness equipment, handball courts, playgrounds, public restrooms, spray showers	2.21	0.44	20%	1.77	80%	Acceptable	7 AM – 6 PM
13	Quarry Ballfields	Bounded by Quarry Rd, Oak Tree Pl, E 181 St, Hughes Ave	DPR	Baseball field, soccer field, public restroom, bleachers	4.42	0.88	20%	3.54	80%	Unacceptable	6 AM – 10 PM
14	Webster Playground	E 188 St between Webster Ave and Park Ave	DPR	Basketball courts, fitness equipment, handball courts, playground equipment, public restrooms, picnic tables	0.74	0.22	30%	0.52	70%	Acceptable	7 AM – 6 PM

15	Walter Gladwin Park	Bounded by Cross Bronx Expwy, E 175 St, E Tremont Ave, Third Ave, and Arthur Ave	DPR	Baseball field, handball courts, playground equipment, public restrooms, spray showers, dog-friendly area, benches, food truck	15.0	9.75	65%	5.25	35%	Unacceptable	6 AM – 10 PM
16	Bathgate Playground	Bounded by Washington Ave, Bathgate Ave, E 182 St, and E 181 St	DPR	Community gardens, playground, running track	2.5	2.5	100%	-	-	Unacceptable	School use during school days (8AM-4PM), Community Gardens open from 1PM-6PM from April 1 to October 31
17	O'Brien Oval	Intersection of E Tremont Ave and Valentine Ave	DPR	Benches	0.23	0.23	100%	-	-	Acceptable	24/7
18	Columbus Square	Bounded by E 189 St, Bathgate Ave, Lorillard Pl, and E 188 St	DOE	Baseball Field, handball courts, soccer field, exercise equipment, running track, benches	1.45	-	-	1.45	100%	-	School use during school hours; open to the public every day from 8AM to dusk when school is not in session
				Total:	34.18	18.9725		15.2175			

Note:
Condition of Park derived from inspection summary performed by New York City Department of Parks and Recreation (https://www.nycgovparks.org/parks).
Active and passive open space values derived from NYC Open Data (https://data.cityofnewyork.us/Recreation/NYC-Parks-Active-and-Passive-Recreation/kcqe-vnci/about_data).

Figure E-2: Open Space Resources within the Open Space Study Area



Residential Population

According to the 2020 U.S. Census, the Open Space Study Area (Bronx Census Tracts 237.02, 237.03, 237.04, 373, 375.04, 379, 381, 383.01, 383.03, 383.04, 385, 387, 389, 391, 395, and 399.02) has a residential population of approximately 75,311. However, it is the age distribution of the population that can affect the way open space is utilized and the associated need for different types of recreational facilities.

According to the *CEQR Technical Manual*, children four (4) years old or younger typically use traditional playgrounds and "tot lots" that have play equipment for toddlers and preschool children. Children ages five (5) through nine (9) typically use traditional playgrounds with play equipment suitable for school-age children, as well as grassy and hard-surfaced open spaces that are used for ball playing, running, and skipping rope. Children ages ten (10) through fourteen (14) typically use playground equipment, court spaces, and ball fields. Teenagers and young adults tend to use court facilities such as basketball courts and sports fields, such as football or soccer fields. Adults ages twenty (20) through sixty-four (64) continue to use court facilities and fields for sports, as well as space for more individualized recreation, such as rollerblading, biking, and jogging, which require bike paths, esplanades, and vehicle-free roadways. Adults also gather for picnicking and other recreational activities in which all ages can participate. Finally, adults sixty-five (65) years and older engage in active recreation such as handball, tennis, gardening, and swimming, as well as passive recreational activities.

As shown in **Table E-2** below, more than half of the Study Area population is comprised of residents between the ages of 25 and 64, indicating the need for recreational facilities geared towards an adult preference. Children and teenagers (up to 19 years of age) account for 30 percent of the Study Area population, suggesting the need for recreational facilities geared towards a younger age group's preference as well.

Table E-2: Study Area Population Age Breakdown[7]

Age Category	Persons	Percent of Population
Under 5 years	5,097	7%
5-9	5,738	8%
10-14	6,045	8%
15-19	6,029	8%
20-64	45,619	61%
Over 65 years	6,783	9%
Total	**75,311**	**100%**

NYC Parks Walk to a Park Initiative

New York City, as part of the *OneNYC 2050 Building a Strong and Fair City* plan, has put forth a goal for 85 percent of New York City residents to be living within walking distance of a park by 2030. The Walk to a Park Service Area, or areas of the city that are within walking distance of a park are shown below in **Figure E-3**. Areas of the map that are not covered by the Walk to a Park Service Area are considered "walk gaps" as they are not within walking distance of a park.

As part of the preliminary assessment for open space, a project should be reviewed to determine if it is located in an area of the City within a Walk to a Park Service Area. Project sites that are located outside of a Walk to a Park Service Area (located in a known walk gap area) suggests a need for a detailed analysis to be performed to determine if the project may further exacerbate a condition of residents living in areas of the city with inadequate park access, potentially leading to a significant effect.

Because the project site is located within the Walk to a Park Service area, no further assessment is warranted.

[7]*US Census Bureau, 2020 Census, Bronx Census Tract(s): 237.02, 237.03, 237.04, 373, 375.04, 379, 381, 383.01, 383.03, 383.04, 385, 387, 389, 391, 395, and 399.02.*

Figure E-3: NYC Parks Walk to a Park Service Area map



ASSESSMENT

Quantitative Assessment

There is a total of 34.18 acres of open space within the Study Area, of which approximately 18.9725 acres are for passive use and approximately 15.2175 acres are for active use. The residential population is approximately 75,311 persons, which results in a total open space ratio of 0.454 acres per 1,000 residents. The Study Area's passive and active open space ratios are 0.252 and 0.202 per 1,000 residents, respectively. These values do not meet the standards for passive or active open space as defined in the *CEQR Technical Manual*. Based on this information, there is an existing shortfall of passive and active open space resources within the Study Area (**Table E-3**).

Table E-3: Adequacy of Open Space Resources

	Population	Open Space Acreage			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residential	75,311	34.18	15.2175	18.9725	0.454	0.202	0.252	2.50	0.50	2.00

No-Action Condition

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building. Along with p/o Lot 5, p/o Lot 20, and Lots 22, 23, 24, 124, 125, 126, 27, 29, and p/o Lot 45 on Block 3038, Lot 38 was included in the 2010 Third Avenue/Tremont Avenue Rezoning. As described above, the goal of the Third Avenue/Tremont Avenue Rezoning was to provide new opportunities for mixed residential and commercial development. Therefore, contemplating a future as-of-right residential use on Lot 38 (pursuant to the R6A regulations) is reasonable. This assumption is further substantiated by the predominantly residential character defining Washington Avenue, including the residential uses fronting Washington Avenue (Lots 27 and 29) and East 183rd Street (Lots 22, 124, 125, and 126) on the same block. The development in the No-Action Condition would include approximately 44 residential units, and approximately 104 residents to the Study Area.

Seventy-six (76) new residential development projects are anticipated in the 0.5-mile Study Area under the future No-Action Condition, resulting in the construction of approximately 2,026 new residential units. Based on the average household size of Bronx Community District 6 (2.37) and Bronx Community District 5 (2.91) (as per the 2020 Decennial Census), these no-build developments are expected to add approximately 5,386 residents to the 0.5-mile Study Area under the No-Action Condition.

Direct Effects

As described in Attachment F: "Shadows," the Proposed Actions would not have the potential for adverse shadow impacts related to project-generated incremental shadows. As described in Attachment J: "Air Quality," there Proposed Actions would not have the potential to result in significant adverse air quality impacts on the Projected Development Sites from existing sources. As described in Attachment K: "Noise," the Proposed Actions would not have the potential to result in a significant

adverse noise impact. The No-Action conditions would not result in the physical alteration or loss of any public open space; therefore, an analysis of direct open space effects is not warranted.

Indirect Effects

Open Space Study Area Population

The development in the No-Action Condition would result in an increase of approximately 44 new dwelling units. Based on the average household size in Bronx Community District 6, development in the No-Action Condition is expected to add approximately 104 residents to the Study Area. This, combined with the 5,386 residents introduced by expected residential development projects in the Study Area, would result in a total No-Action population of 80,801 persons. (**Table E-4**).

Assessment of Open Space Adequacy

With approximately 34.18 acres of publicly accessible open space within a 0.5-mile radius of the Directly Affected Area, and a No-Action residential population of approximately 80,801, the OSR in the No-Action Condition would be approximately 0.423 acres per 1,000 residents, which remains below the planning goal of 2.5 acres of open space per 1,000 residents as stated in the *CEQR Technical Manual*.

With-Action Condition

Direct Effects

As described in Attachment F: "Shadows," the Proposed Actions would not have the potential for adverse shadow impacts related to project-generated incremental shadows. As described in Attachment J: "Air Quality," there Proposed Actions would not have the potential to result in significant adverse air quality impacts on the Projected Development Sites from existing sources. As described in Attachment K: "Noise," the Proposed Actions would not have the potential to result in a significant adverse noise impact. The With-Action conditions would not result in the physical alteration or loss of any public open space; therefore, an analysis of direct open space effects is not warranted.

Indirect Effects

Open Space Study Area Population

The With-Action Condition would result in an incremental increase of approximately 388 new dwelling units compared to the No-Action Condition. Based on the average household size of renter-occupied units in Bronx Census Tract 385, the additional 388 dwelling units would generate approximately 1,024 additional residents in the With-Action Condition.[8] This, combined with the

[8] *Population multiplier is the average household size in Bronx CD 6 (2.37 x 432 dwelling units = 1,024 residents). Source: U.S. Census Bureau, 2020 Decennial Census.*

5,386 residents introduced by expected residential development projects in the Study Area, would result in a total With-Action population of 81,721 persons.

Assessment of Open Space Adequacy

With approximately 34.18 acres of publicly accessible open space within the Open Space Study Area, and a With-Action residential population of approximately 81,721, the OSR in the No-Action Condition would be approximately 0.418 acres per 1,000 residents, which remains below the planning goal of 2.5 acres of open space per 1,000 residents as stated in the *CEQR Technical Manual*.

In the With-Action Condition, the active and passive use open space ratios for the Study Area would remain below the planning goal of 2.5 acres of open space per 1,000 residents as stated in the *CEQR Technical Manual*. The population generated in the With-Action Condition as compared to the No-Action Condition is not expected to have any special characteristics, such as a disproportionately younger or older population that would place particular demands on the Study Area's open space resources.

Table E-4: Change in Open Space Ratio

	Existing Conditions	No-Action Condition	With-Action Condition	Incremental Change
Population within 0.5-mile radius	75,311	80,801	81,721	920
Total open space within 0.5 miles (acres)	34.18	34.18	34.18	0
Total OSR (acres per 1,000 residents)	0.454	0.423	0.418	-1.13%
Active OSR	0.202	0.188	0.186	-1.13%
Passive OSR	0.252	0.235	0.232	-1.13%

Under CEQR, because local OSRs vary widely in New York City, as a planning goal, an OSR of 2.5 acres per 1,000 residents represents an area well-served by open space. If the OSR would increase or remain substantially the same in the With-Action Condition as compared to the No-Action Condition, no further analysis of open space is warranted.

As shown in **Table E-4** above, In the With-Action Condition, the total OSR would decrease by 1.13 percent, the active OSR would decrease by 1.13 percent, and the passive OSR would decrease by 1.13 percent. For a 0.418 total OSR, guidance provided by Table 7-5 of the *CEQR Technical Manual* indicates that a 1% change in OSR has the potential for a possible significant adverse impact. For a 0.186 active OSR, guidance indicates that a 1% change in OSR has the potential for a possible significant adverse impact. For a 0.232 passive OSR, guidance indicates that a 3% change in OSR has the potential for a possible significant adverse impact. Therefore, the changes in total and active OSR signify the potential for a possible adverse open space impact.

Qualitative Assessment

While this proposed action would result in exceeding the optimal total and active open space ratios as defined by the *CEQR Technical Manual*, the presence of additional active open space resources at two flagship parks – Bronx Park and Crotona Park – just outside of the Open Space Study Area, would offset these conditions. Bronx Park contains 718.37 acres (35.92 acres containing active uses, comprising 5% of the park's total acreage) that include many active open space resources, including baseball fields, basketball courts, cycling paths and greenways, bocce courts, football fields, handball courts, kayak and canoe launch sites, fitness equipment, hiking trails, skate parks, playgrounds, and soccer fields. [9] Crotona Park, a 127.50-acre park (25.5 acres containing active uses, comprising 20% of the parks total acreage), is home to active open space resources including baseball fields, basketball courts, fitness equipment, handball courts, outdoor pools, pickleball courts, playgrounds, soccer fields, and tennis courts.[10] These open space resources are considered qualitatively due to their close proximity to the Study Area and the high likelihood that local residents use these spaces for both active and passive recreation.

CONCLUSION

As described above, the Proposed Actions would not result in the physical loss or alteration of any public open space. The increase in residential population would result in a total OSR of 0.418, an active OSR of 0.186, and a passive OSR of 0.232. Although the total and active OSR would meet the threshold for a possible significant adverse impact, the presence of additional major open space resources (Bronx Park and Crotona Park) in close proximity to the Open Space Study Area would offset these conditions. Based on this qualitative assessment, significant adverse indirect impacts on open space are not anticipated to occur as a result of the Proposed Actions; therefore, no further analysis is warranted.

[9] https://www.nycgovparks.org/parks/bronx-park *(Accessed: July 24, 2023).*

[10] https://www.nycgovparks.org/parks/crotona-park *(Accessed: July 24, 2023).*

ATTACHMENT F: SHADOWS

INTRODUCTION

According to the *CEQR Technical Manual*, a shadow assessment is necessary when a proposed action would result in a new structure(s) or additions to an existing structure(s) that are between 50 and 250 feet in height and are adjacent to an existing sunlight-sensitive resource. The *CEQR Technical Manual* defines a shadow as a condition that results when a building or other built structure blocks sunlight that would otherwise directly reach a certain area, space, or feature. An adverse shadow impact would occur when a shadow from a proposed project falls on a publicly accessible open space, historic landscape, or other historic resource that requires sunlight for its enjoyment by the public, or its architectural and historic integrity (e.g., stained glass windows), or if the shadow falls on an important natural feature and adversely affects its use or landscaping and vegetation. Shadows occurring on non-significant features (city streets, sidewalks, buildings, and privately-owned open space), or within 1.5 hours of sunrise or sunset, generally are not considered significant under CEQR.

METHODOLOGY

Shadow analysis methodology is based on the guidelines of the *CEQR Technical Manual*, which includes conducting a preliminary assessment to determine whether shadows resulting from a proposed project could reach any sunlight-sensitive resource at any time of year. The Tier 1 screening assessment identifies the Shadow Study Area based on the height of the structure(s) in the future with the proposed action and the longest shadow a proposed structure(s) could cast, which in New York City is 4.3 times the height of the structure. If there are sunlight-sensitive resources within the Shadow Study Area, a Tier 2 screening assessment is warranted. As stated in the *CEQR Technical Manual*, because of the path the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. If the area outside this triangular area contains a sunlight-sensitive resource(s), further analysis is required. The Tier 3 screening assessment is a detailed assessment that further refines the analysis once sunlight-sensitive resources have been identified by analyzing specific representative days of the year and determining the maximum extent of shadows over the course of each representative day on these sunlight-sensitive resources.

Based on the guidelines of the *CEQR Technical Manual*, if the three-tiered screening analysis described above does not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources, a detailed shadow analysis is warranted.

PRELIMINARY SCREENING ASSESSMENT

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City is 4.3 times its height. This radius surrounding the structure is defined as the Shadow Study Area and is used to determine if a sunlight-sensitive resource would be shaded by the incremental shadows cast as a result of the development in the With-Action Condition.

The Proposed Actions would result in the development of six buildings, ranging in heights from 75 feet to 145 feet (7 stories to 14 stories). Projected Development Site 1 would have a maximum height of approximately 145 feet (14 stories); Projected Development Site 2 would have a maximum height of approximately 95 feet (9 stories); Projected Development Site 3 would have a maximum height of approximately 95 feet (9 stories); Projected Development Site 4 would have a maximum height of approximately 145 feet (14 stories); Projected Development Site 5 would have a maximum height of approximately 75 feet (7 stories); and Projected Development Site 6 would have a maximum height of approximately 115 feet (11 stories). Development on two Potential Development Sites is also contemplated – Potential Development Sites A and B would have a maximum height of approximately 145 feet (14 stories).

Tier 1 Screening Assessment

As shown in **Figure F-2**, the Proposed Actions would result in the development of eight buildings, the tallest of which would have a maximum bulkhead height of 170 feet (145 feet to rooftop plus 25-foot-tall mechanical bulkhead); therefore, a Shadow Study Area of 731 feet (4.3 times the 170-foot maximum building height) was established around the Development Sites.

The Shadow Study Area includes three sunlight-sensitive open space resources: Washinton Park, located at East 183rd Street between Washington Avenue and Park Avenue; Thorpe Family Playground, located at East 183rd Street between Park Avenue and Webster Avenue; and the Farm in the Bronx Community Garden, located within Bathgate Playground at the corner of East 182nd Street and Washington Ave.

Based on this information, a Tier 2 screening assessment is necessary to determine whether these sunlight-sensitive open space resources would be adversely affected by any incremental project-generated shadows in the With-Action Condition.

Tier 2 Screening Assessment

The purpose of the Tier 2 screening is to determine if incremental project-generated shadows would adversely affect the use of Thorpe Family Playground and Washington Park, the two sunlight-sensitive open space resources within the Shadow Study Area. According to the *CEQR Technical Manual*, shadows cast by a proposed building fall generally to the north, east, and west depending on the day and time. In New York City, the shadow area is between -108 degrees and +108 degrees from true north. Conversely, any area lying to the south of a site in the triangular area beyond these angles cannot be shaded by a proposed project. As shown in **Figure F-3**, Thorpe Family Playground and Washington Park fall within the Shadow Study Area in which a shadow could occur.

Based on the results of the Tier 2 screening, a Tier 3 screening assessment was required to determine if the incremental shadows resulting from the development in the With-Action Condition could reach Thorpe Family Playground or Washington Park during the representative analysis days and result in an adverse effect.

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Figure F-1: Shadow Analysis Base Map

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- # Sunlight-Sensitive Open Space Resource

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

4506 Park Avenue Rezoning, Bronx

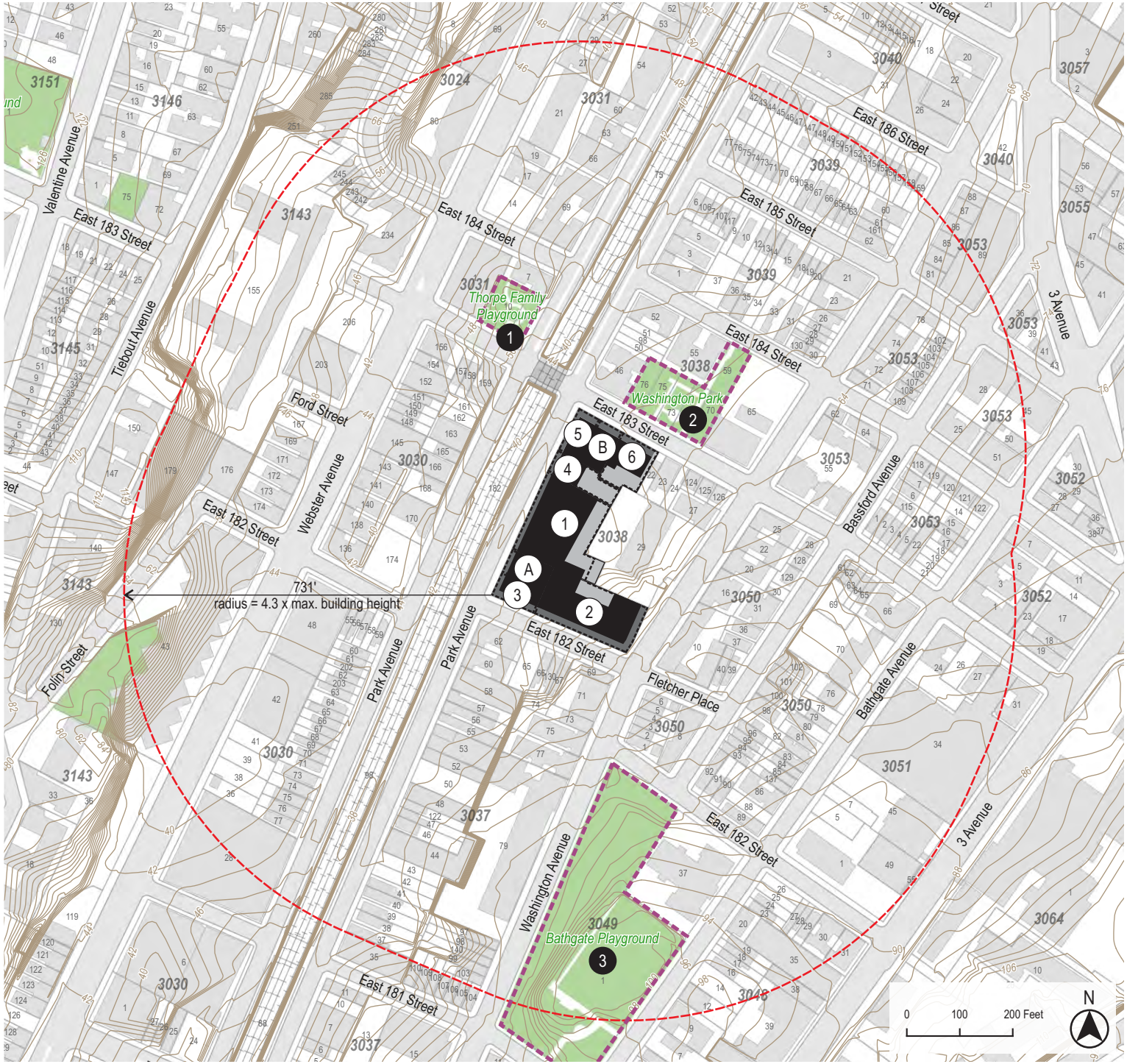
Figure F-2: Tier 1 Screening Assessment

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- Longest Shadow Study Area Boundary
- (#) Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

4506 Park Avenue Rezoning, Bronx

Figure F-3: Tier 2 Screening Assessment

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- Longest Shadow Study Area Boundary
- (#) Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource
- Area That Cannot Be Shaded by the Proposed Building

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

Tier 3 Screening Assessment

For the Tier 3 screening assessment, 3D computer modeling software was used to depict the shadow patterns of the Proposed Project in the With-Action Condition within the Shadow Study Area. The shadow model utilized 3D representations of the elements of the base maps used in the Tier 1 and Tier 2 assessments to determine the incremental shadow in the With-Action Condition as compared to the No-Action Condition, and the duration of the incremental shadows on Thorpe Family Playground and Washington Park.

DETAILED ANALYSIS OF SHADOW IMPACTS

Incremental Shadow Assessment

A shadow analysis of Thorpe Family Playground and Washington Park was performed in accordance with the guidelines in the *CEQR Technical Manual* for four representative days of the year: March 21, the vernal equinox (equivalent to September 21, the autumnal equinox); May 6, the midpoint between the summer solstice and the equinox (equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and the shortest day of the year. The shadow analysis shows the incremental difference in the shadow patterns between the No-Action and With-Action conditions.

In accordance with *CEQR Technical Manual* guidelines, all times reported herein are in Eastern Standard Time and do not reflect adjustments for daylight savings time, which is in effect from mid-March to early November. The three-dimensional shadow analysis considers the times when the six buildings in the With-Action Condition would increase shadows falling on the open space resources identified as sunlight-sensitive (Thorpe Family Playground and Washington Park). As the earth rotates around the sun, shadows fall in a curve on the ground opposite the sun. When the sun rises, shadows fall to the west. As the sun travels across the southern part of the sky throughout the day, shadows move in a clockwise direction until they stretch east as the sun sets in the west. The sun is highest in the sky during midday hours, resulting in shorter shadows than at other times throughout the day. Because of the tilt of the Earth's axis, the angle at which the sun's rays strike the Earth varies throughout the year, such that during the summer, the sun is higher in the sky and shadows are shorter than during the winter. Because the sun is low in the sky, winter shadows, although longest, move the most quickly along their paths (because of the Earth's tilt) and do not affect the growing season of outdoor trees and plants. The With-Action Condition represents the worst-case development scenario for environmental analysis and was used for all three-dimensional computer modeling of shadows.

The shadow analysis used the maximum building heights of the projected and potential developments in the With-Action condition (170 feet) to determine the shadows on the four representative days of the year. Shadows in the With-Action condition were then compared to the No-Action condition to determine the incremental shadow. The shadows resulting from the development in the With-Action condition are shown in gray. The results of the shadow analysis are discussed below.

Table F-1 shows the duration of incremental shadows created by the eight projected and potential developments in the With-Action Condition as compared to the existing buildings in the No-Action Condition.

Table F-1: Incremental Shadow Durations

	March 21	**May 6**	**June 21**	**December 21**
Time Start	7:36 AM	6:27 AM	5:57 AM	8:51 AM
Time End	4:29 PM	5:18 PM	6:01 PM	2:53 PM
Thorpe Family Playground				
With-Action Condition				
Shadow Enter Time	-	-	-	8:51 AM
Shadow Exit Time	-	-	-	11:47 AM
Total Shadow Duration	-	-	-	2 hr. 56 min
No-Action Condition				
Shadow Enter Time	-	-	-	-
Shadow Exit Time	-	-	-	-
Total Shadow Duration	-	-	-	-
Incremental Shadow Duration	**-**	**-**	**-**	**2 hr. 56 min**
Washington Park				
With-Action Condition				
Shadow Enter Time	10:45 AM	11:58 AM	1:06 PM	9:32 AM
Shadow Exit Time	4:29 PM	5:18 PM	5:51 PM	2:53 PM
Total Shadow Duration	5 hrs. 44 min	5 hrs. 20 min	4 hrs. 45 min	5 hrs. 21 min
No-Action Condition				
Shadow Enter Time	-	-	-	-
Shadow Exit Time	-	-	-	-
Total Shadow Duration	-	-	-	-
Incremental Shadow Duration	**5 hrs. 44 min**	**5 hrs. 20 min**	**4 hrs. 45 min**	**5 hrs. 21 min**

NO-ACTION CONDITION

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building with approximately 44 residential units, rising to a maximum height of 75 feet.

Thorpe Family Playground

Thorpe Family Playground is a 0.2-acre playground located at the corner of East 183rd Street and Park Avenue. The park is bordered by an 8-story mixed residential and commercial building to the west, and a 6-story residential building to the north. In the No-Action Condition (existing conditions), there are shadows cast on Thorpe Family Playground from these existing buildings, as well as from the 5-story mixed residential and commercial building across East 183rd Street at 4535 Park Avenue.

Washington Park

Washington Park is a 0.52-acre L-shaped playground located on East 183rd Street. A portion of the park is a throughway onto East 184th Street. The park is bordered by three 5-story residential buildings along Park Avenue and East 184th Stret, and a church fronting Washington Avenue. In the No-Action Condition (existing conditions), there are shadows cast on Washington Park from these existing buildings directly adjacent to the park, as well as from the 14-story residential building across the street at 2271 Washington Avenue.

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Figure F-4: Tier 3 Screening Assessment for the March 21 Analysis Day

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

4506 Park Avenue Rezoning, Bronx

Figure F-5: Tier 3 Screening Assessment for the May 6 Analysis Day

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

4506 Park Avenue Rezoning, Bronx

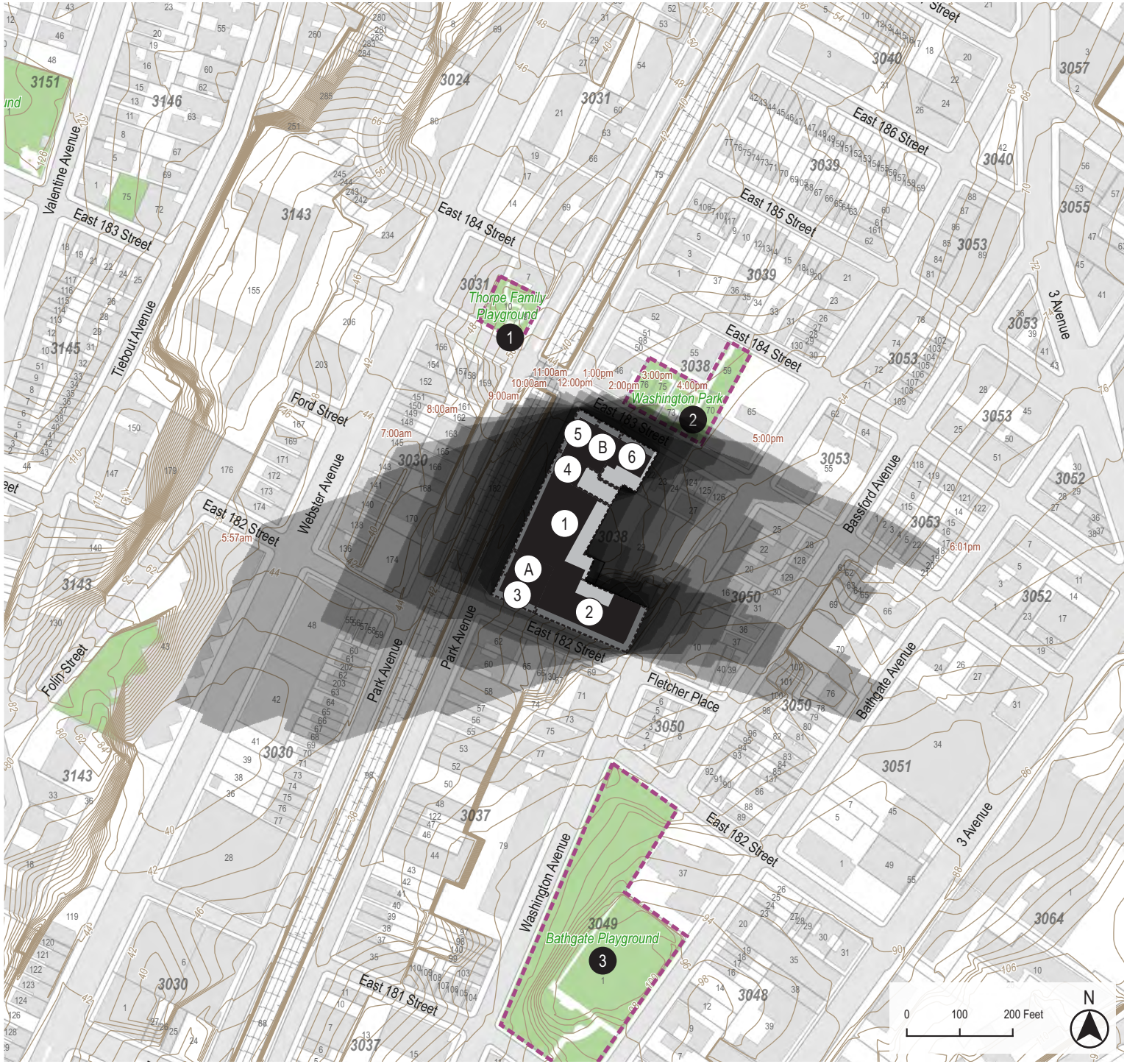
Figure F-6: Tier 3 Screening Assessment for the June 21 Analysis Day

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- 8:51am — Shadow Cast/Analysis Time
- # — Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

4506 Park Avenue Rezoning, Bronx

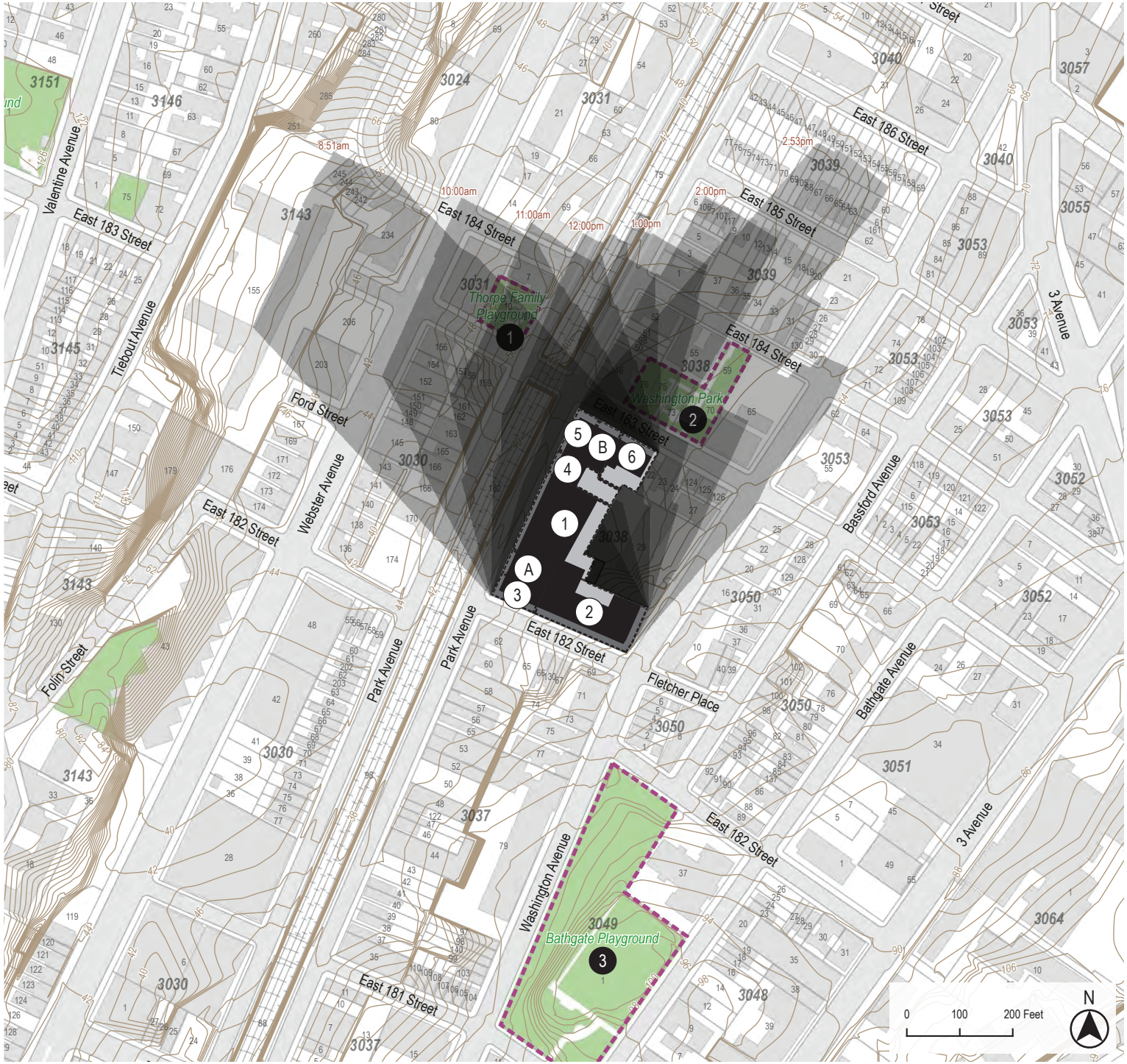
Figure F-7: Tier 3 Screening Assessment for the December 21 Analysis Day

- Project Site
- Projected Building Footprint
- Roof Above Base Height
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	105'	105'	—
Roof Height	145'	145'	95'
Bulkhead	170'	170'	120'

	4	5	6
Base Height	105'	—	105'
Roof Height	145'	75'	115'
Bulkhead	170'	100'	140'



Urban Cartographics

4506 Park Avenue Rezoning, Bronx

Figure F-8: Detailed Analysis for the March 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 n/a

2 10:45am – 4:29pm









Urban Cartographics

(#) Development Site

(#) Open Space Resource

Existing Shadow

New Shadow

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Figure F-8b: Detailed Analysis for the March 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 n/a

2 10:45am – 4:29pm





Urban Cartographics

(#) Development Site

Open Space Resource

Existing Shadow

New Shadow

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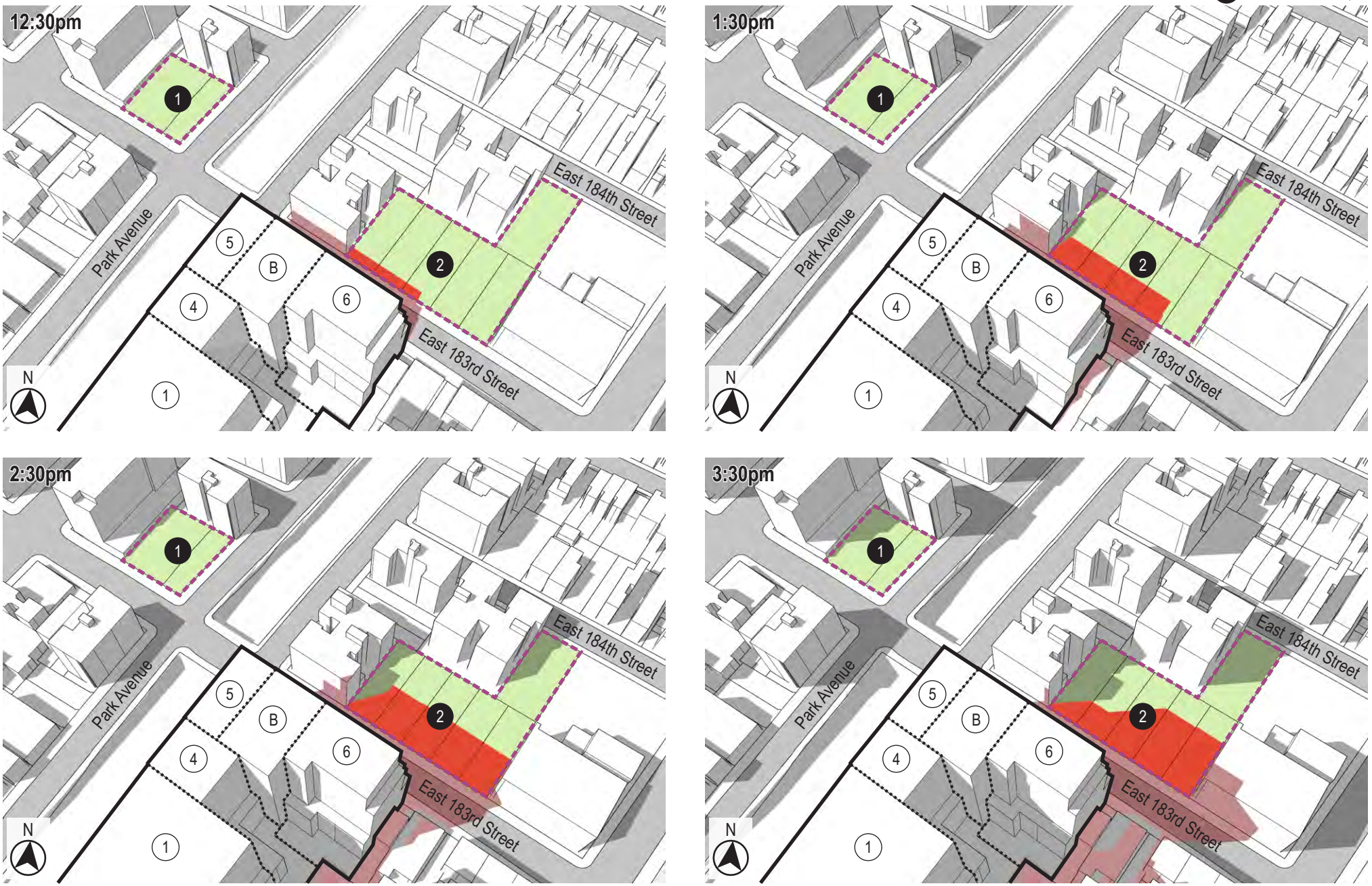
Figure F-9: Detailed Analysis for the May 6 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 n/a

2 11:58am – 5:18pm



4506 Park Avenue Rezoning, Bronx

Figure F-9b: Detailed Analysis for the May 6 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 n/a

2 11:58am – 5:18pm





Urban Cartographics

(#) Development Site

Open Space Resource

Existing Shadow

New Shadow

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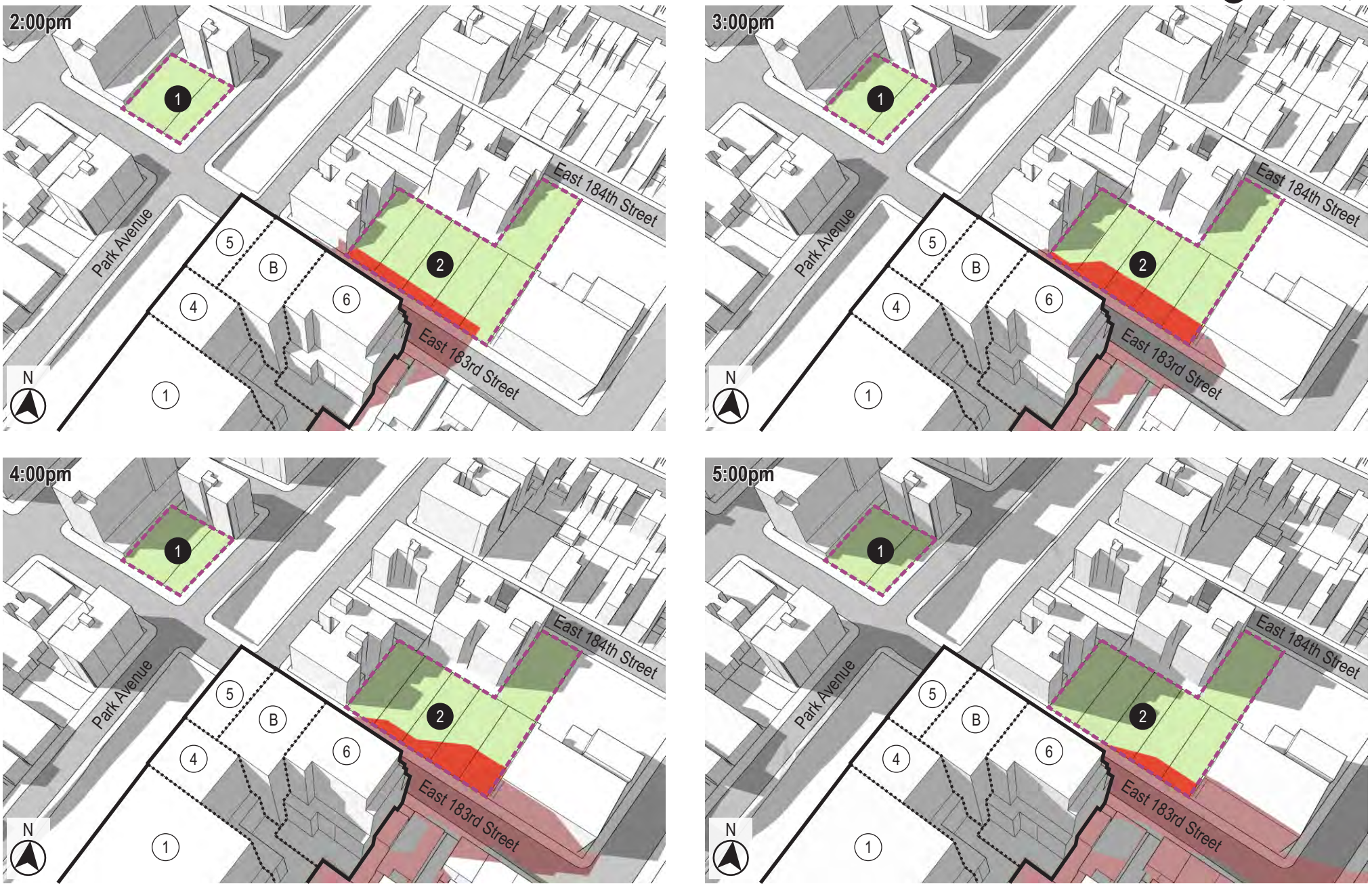
Figure F-10: Detailed Analysis for the June 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 n/a

2 1:06pm – 5:51pm



Urban Cartographics

(#) Development Site

Open Space Resource

Existing Shadow

New Shadow

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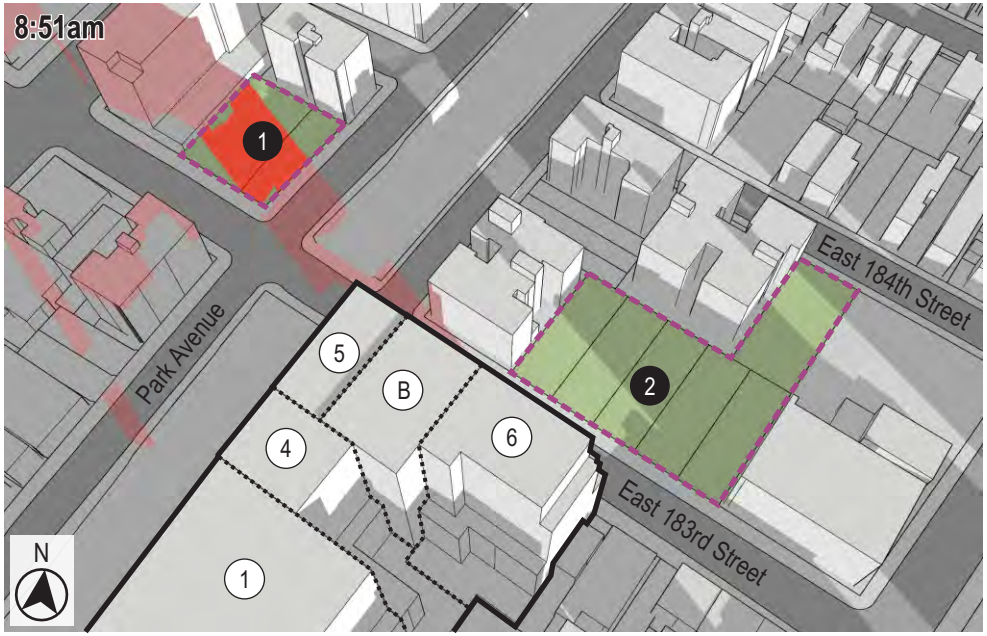
Figure F-11: Detailed Analysis for the December 21 Analysis Day

Shadows Cast on Sunlight-Sensitive Resources

1 8:51am – 11:47am

2 9:32am – 2:53pm









Urban Cartographics

(#) Development Site

(#) Open Space Resource

Existing Shadow

New Shadow

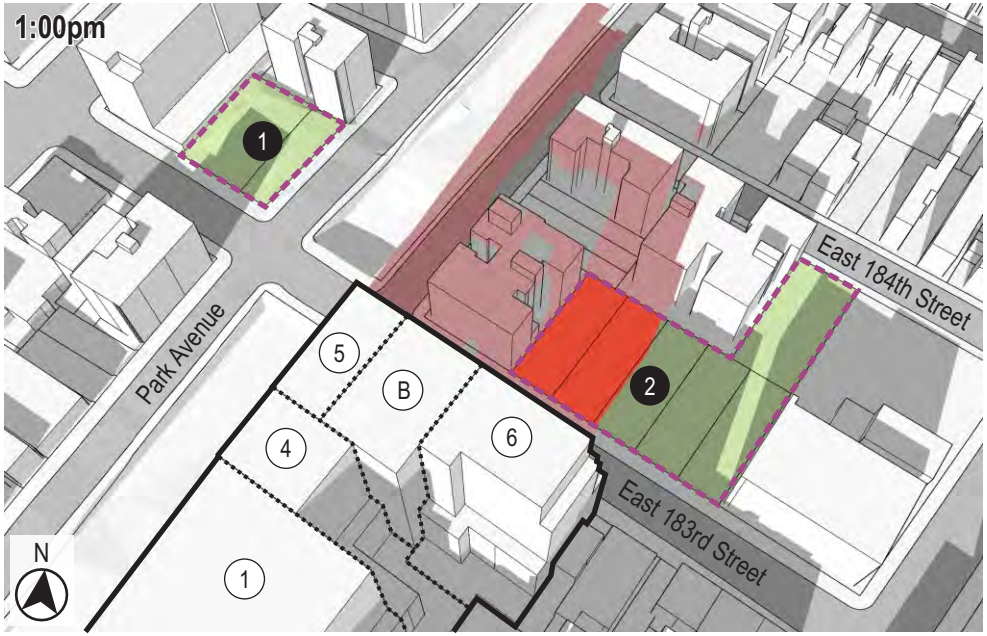
4506 Park Avenue Rezoning, Bronx

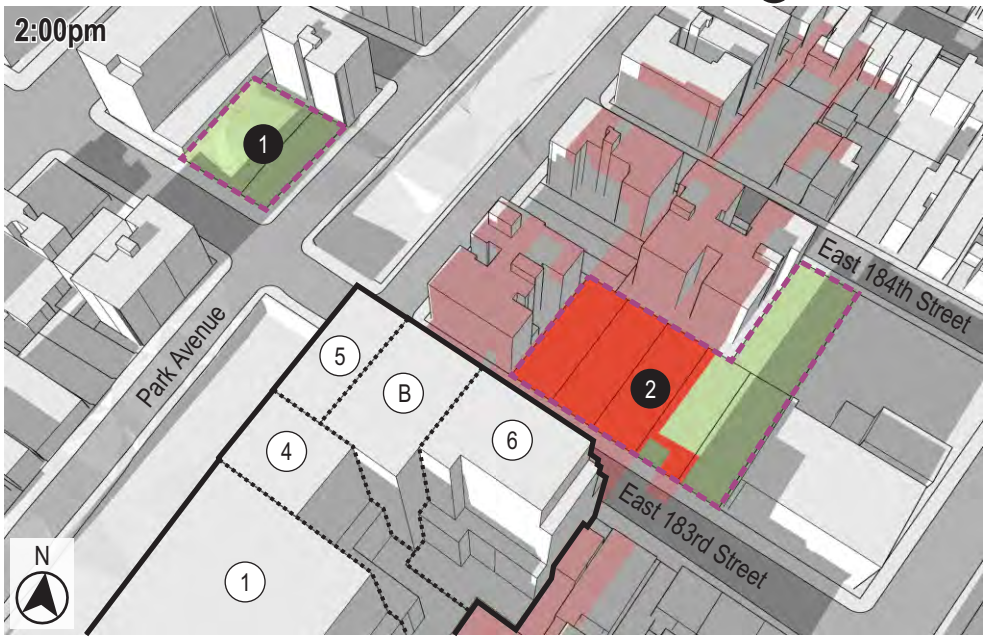
Figure F-11b: Detailed Analysis for the December 21 Analysis Day

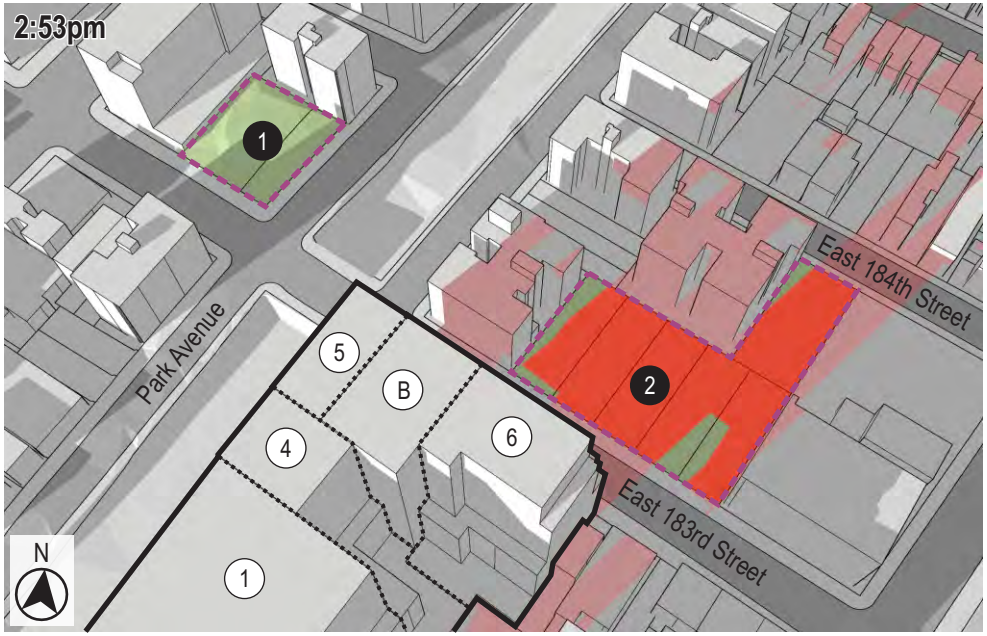
Shadows Cast on Sunlight-Sensitive Resources

1 8:51am – 11:47am

2 9:32am – 2:53pm







Urban Cartographics

(#) Development Site

Open Space Resource

Existing Shadow

New Shadow

WITH-ACTION CONDITION

According to the *CEQR Technical Manual*, the uses associated with open space that rely on sunlight include passive uses, such as sitting on or sunning, and active uses, such as using playfields or paved courts, gardening, or playing in children's wading pools and sprinklers. Vegetation requiring direct sunlight includes tree canopies, flowering plants, and plots in community gardens. Four to six hours a day of sunlight, particularly in the growing season (defined in the *CEQR Technical Manual* as March to October), is a general minimum requirement. Shade created by trees and other natural features is not considered to be of concern for the impact analysis; however, incremental shadow on a tree-shaded environment may create an adverse effect as the incremental shadow is not redundant with tree shade, and the tree canopy may be considered a sunlight-sensitive resource.

March 21

Thorpe Family Playground

No incremental shadows would be cast on Thorpe Family Playground during the March 21 analysis day. Therefore, no further analysis is necessary.

Washington Park

As described in **Table F-1**, on March 21, the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. As shown in **Figure F-8** and **Figure F-8b**, the building in the With-Action Condition would cast an incremental shadow on Washington Park beginning at 10:45 AM and ending at 4:29 PM, for a duration of approximately 5 hours and 44 minutes. During this analysis day, the incremental shadows would first shade the basketball court between 11:30 AM and 12:30 PM, then would move over to the small lawn and passive open space seating area by 1:30 PM. By 2:30 PM, the incremental shadow would extend to cover the passive open space seating area, the southernmost portion of the basketball court, and the westernmost portion of the swings and one of the playgrounds. By 3:30 PM, the incremental shadows would continue to extend, and by 4:29 PM both playgrounds would be shaded. Incremental shadows would not be cast on other areas of the park during this analysis period.

May 6

Thorpe Family Playground

No incremental shadows would be cast on Thorpe Family Playground during the May 6 analysis day. Therefore, no further analysis is necessary.

Washington Park

As described in **Table F-1**, on the May 6 analysis day, the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. As shown in **Figure F-9** and **Figure F-9b**, the building in the With-Action Condition would cast an incremental shadow on Washington Park beginning at 11:58

AM and ending at 5:18 PM, for a duration of 5 hours and 20 minutes. During this analysis day, the incremental shadows would shade portions of the park closest to East 183rd Street. The incremental shadows would first shade a small portion of the basketball court starting at 12:30 PM and increasing in coverage around 1:30 PM, and would then extend to shade a portion of the passive seating area and the swings/playground area by around 2:30 PM. By 3:30 PM, the incremental shadows would cover a portion of the basketball court and a portion of the passive seating area, as well as the swings/playground area. By 4:30 PM the shadows would start to leave the basketball court, and by 5:18 PM the incremental shadows would cover a small portion of the swings/playground area.

June 21

Thorpe Family Playground

No incremental shadows would be cast on Thorpe Family Playground during the June 21 analysis day. Therefore, no further analysis is necessary.

Washington Park

As described in **Table F-1**, on the June 21 analysis day, the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. As shown in **Figure F-10**, the buildings in the With-Action Condition would cast an incremental shadow on Washington Park beginning at 1:06 PM and ending at 5:51 PM, for a duration of approximately 4 hours and 45 minutes. During this analysis day, the incremental shadows would be cast along the segment of the park fronting East 183rd Street and would reach small portions of the park closest to the street, including the basketball court, passive seating area, and swings around 2:00 PM. Around 3:00 PM, the shadows would slightly increase in coverage, reaching their peak coverage at around 4:00 PM, where they would move away from the basketball court and extend to cover a portion of the swings/playground area. By 5:00 PM, the shadows would have moved away from the basketball court and passive seating area, and will cover a small portion of the swings area.

December 21

Thorpe Family Playground

As described in **Table F-1**, on December 21, the time period for shadows analysis begins at 8:51 AM and continues until 2:53 PM. As shown in **Figure F-11** and **Figure F-11b**, the building in the With-Action Condition would cast an incremental shadow on Thorpe Family Playground beginning at 8:51 AM and ending by 11:47 AM, for a duration of approximately 2 hours and 56 minutes. During this analysis day, an incremental shadow would be cast across the middle of the park and would shade the passive seating area and the swings. By 10:00 AM, incremental shadows would be cast across the entire park, covering the swings, playground, and passive seating area. Finally, starting around 11:00 AM, the incremental shadows would move away from the park, starting with the swings, and would stop shading the park by 11:47 AM.

Washington Park

As described in **Table F-1**, on December 21, the time period for shadows analysis begins at 8:51 AM and continues until 2:53 PM. As shown in **Figure F-11** and **Figure F-11b**, the building in the With-Action Condition would cast incremental shadows on Washington Park from 9:32 AM until 2:53 PM, for a duration of approximately 5 hours and 21 minutes. Around 10:00 AM, a small corner of the basketball court bordering East 183rd Street would be shaded by an incremental shadow, and would move off of the park around 11:00 AM. At around 12:00 PM, incremental shadows would cover small portions of the basketball court, bordering the buildings to the west and northwest of the park. At around 1:00 PM, the shadows would cover the entire basketball court, and would extend across the park at around 2:00 PM to cover the passive seating area. By 2:53 PM, the incremental shadows would extend to cover the rest of the park.

CONCLUSION

As shown on the May 6 and June 21 analysis days, during the warm weather months, when usage of public parks is typically highest, the incremental project-generated shadows on Washington Park are limited to the afternoon hours and would reach a very limited portion of the park. Although the park would receive several hours of shadow coverage on these analysis days, the shadows would be limited to small southern areas of the park, while the majority of the open space would continue to receive direct sunlight throughout the day.

As shown on the March 21 and December 21 analysis days, it is also not expected that the project-generated incremental shadows would adversely affect public enjoyment of the basketball courts or other areas of the park used for active public enjoyment, given that it would occur in the morning hours during the winter, when usage of public parks is typically at its lowest.

It is further noted that Washington Park receives shadows from existing adjacent buildings, specifically the 4-story building directly to the east at E. 183 Street and Washington Avenue (2317 Washington Avenue); the 5-story building directly to the west at E. 183 Street and Park Avenue (4554 Park Avenue); and the two 5-story buildings directly to the north on E. 184 Street (442 and 150 East 184th Street). Further, Washington Park does not contain significant plantings or vegetation that would be affected by the incremental project-generated shadow; in fact, the park contains only mature trees with established canopies and a small grass lawn.

Therefore, it is not expected that the incremental shadows cast on Washington Park would adversely affect public enjoyment of the park. Based on this analysis, the With-Action Condition is not expected to result in any significant adverse shadow impacts on sunlight-sensitive resources of concern within the Shadow Study Area.

ATTACHMENT G: URBAN DESIGN & VISUAL RESOURCES

INTRODUCTION

This attachment assesses the potential impact of the Proposed Actions on urban design and visual resources. The *CEQR Technical Manual* defines urban design as the totality of elements that shape and affect a pedestrian's experience of public space. These elements include streets, buildings, open space, natural features, and wind. According to the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from street level, a physical alteration beyond that allowed by the existing zoning, including projects that permit the modification of yard, height, and setback requirements or projects that result in an increase in built floor area beyond what would be allowed as-of-right or in the No-Action Condition. A detailed analysis may be warranted for projects that would result in substantial alterations to the neighborhood's streetscape by noticeably changing the scale of buildings.

As described in Attachment A: "Project Description," the Proposed Actions include:

- A zoning map amendment that would change the existing zoning districts from M1-1 and R6A to R7X and R7A districts with C2-4 commercial overlays; and

- A zoning text amendment to establish a Mandatory Inclusionary Housing ("MIH") Area mapping Option 1, Option 2, and Option 3.

Approval of these Proposed Actions would facilitate the development of eight (8) Projected and Potential Development Sites. The Proposed Actions would facilitate new residential and commercial development currently not permitted by the existing M1-1 zoning district. Pursuant to CEQR methodologies, development assumptions on the Projected Development Sites maximize the allowable height and bulk requirements permitted under the Proposed Actions.

Projected Development Site 1 (Block 3038, Lots 5, 7, 8, 9, and 11) would be improved with a new 14-story (145 feet) plus cellar, approximately 192,379 gsf mixed-use building, containing approximately 4,500 gsf of ground-floor commercial space and approximately 187,879 gsf of residential space with 179 dwelling units. Approximately 67 accessory off-street parking spaces would be provided in the cellar or on the ground floor (rear of building). One (1) curb cut would be installed on Park Avenue in connection with the below-grade parking entrance.

Projected Development Site 2 (Block 3038, Lot 45) would be improved with a new 9-story (95 feet), approximately 137,689 gsf residential building, containing approximately 5,413 gsf of commercial space and 132,276 gsf of residential space with 129 dwelling units. Approximately 49 accessory off-street parking spaces would be provided on the ground floor. One (1) curb cut would be installed on East 182nd Street in connection with the below-grade parking entrance.

Projected Development Site 3 (Block 3038, Lot 1) would be developed with a new 9-story (95 feet), approximately 38,120 gsf mixed use building, comprising 3,000 gsf of commercial space and 35,120 zsf of residential space with 25 dwelling units.

Projected Development Site 4 (Block 3038, Lots 12 and 13) would be developed with a new 14-story (145 feet), approximately 50,894 gsf mixed-use building comprising 2,000 gsf of commercial space and 48,894 zsf of residential space with 36 dwelling units.

Projected Development Site 5 (Block 3038, Lot 14) would be developed with a new 7-story (75 feet), approximately 32,800 gsf mixed-use building comprising 2,500 gsf of commercial space and 30,300 zsf of residential space with 22 dwelling units.

Projected Development Site 6 (Block 3038, Lots 20, 87, and 187) would be developed with a new 11-story (115 feet), approximately 58,471 gsf mixed-use building comprising 4,000 gsf of commercial space and 54,471 gsf of residential space with 41 dwelling units.

Potential Development Site A (Block 3038, Lot 3) may be developed as an approximately 31,325 gsf mixed-use development, including 26,850 gsf of residential use and 4,475 gsf of commercial use, and would rise to a height of 145 feet.

Potential Development Site B (Block 3038, Lot 16) may be developed as an approximately 31,500 gsf mixed-use development, including 27,000 gsf of residential use and 4,500 gsf of commercial use, and would rise to a height of 145 feet.

METHODOLOGY

Based on the guidelines and definitions in the *CEQR Technical Manual*, this assessment of urban design and visual resources considers the Proposed Actions' potential effects on the following elements:

Streetscape: This urban design component refers to the arrangement and orientation of streets (the "street grid") that defines the location and flow of activity in an area, sets street views, and creates the blocks on which buildings and open spaces are organized. Streetscape elements are physical features that make up a streetscape, such as building street walls, building entrances, building fenestrations, sidewalks, street trees, street furniture and other permanent fixtures, including plantings, streetlights, fire hydrants, curb cuts, or newsstands that are critical to making a successful streetscape.

Buildings: Buildings support the street grid and the streetscape by conveying a sense of the overall form and design of a block or a larger area. A building's street wall forms the most common backdrop for public space and includes a building's size, shape, setbacks, lot coverage, and placement on the zoning lot and block. Active uses and pedestrian and vehicular entrances all play major roles in the vitality of the streetscape.

Visual Resources: A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

Open Space: For the purpose of urban design, open space includes public and private areas such as parks, yards, cemeteries, parking lots, playgrounds, community gardens, plazas, and privately-owned public spaces.

Study Area

According to the *CEQR Technical Manual*, the study area for an urban design analysis is defined as the area where the project may influence land use patterns, the built environment, and a pedestrian's experience in the public realm surrounding the project area. The urban design study area consists of both a Primary Study Area (where urban design effects of the Proposed Action are direct) and a Secondary Study Area, defined as the area within 400 feet of the Directly Affected Area (**Figure G-1**). For visual resources, view corridors within the Study Area for which such resources are publicly viewable should be identified, and in cases where significant visual resources exist, it might be appropriate to look beyond the 400-foot 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 Proposed Project is not located on or near a waterfront. Further, there are no significant visual resources, such as waterfront views, landmark structures or districts, or distinct buildings or groups of buildings; open space or natural resources; or tall buildings that may cause channelized wind pressure or down-washed wind that could affect pedestrian comfort or safety – within, adjacent to, or visible from the Study Area. Therefore, for the purposes of this preliminary assessment, the Primary Study Area consists of the Directly Affected Area, and the Secondary Study Area is defined as the area within a 400-foot radius around the Directly Affected Area – consistent with the study area used for the land use analysis (**Figure G-1**). The assessment is based on aerial views, photographs, current land uses and the urban fabric defining the Study Area, a review of the New York City Landmarks Preservation Commission ("LPC") online map "Discover New York City Landmarks,"[11] and a site visit conducted by IMEG on April 21, 2023.

There are no open space resources in the Primary Study Area. Open space resources in the Secondary Study Area consist of three public parks: Washinton Park, located at East 183rd Street between Washington Avenue and Park Avenue; Thorpe Family Playground, located at East 183rd Street between Park Avenue and Webster Avenue; and the Farm in the Bronx Community Garden, located at the corner of East 182nd Street and Washington Avenue within Bathgate Playground.

Based on these conditions, this preliminary assessment focuses on the Proposed Project's potential effects on (i) the pedestrian experience near the Projected Development Sites, and (ii) the general

[11] *https://www.landmarks.nyc:3344/webappbuilder/apps/2/ Accessed August 16, 2023.*

land use, bulk, and height characteristics of the Study Area. Four primary viewpoints have been identified for assessment (as shown in **Figure G-2**):

- Washington Avenue at East 182nd Street facing west towards the Directly Affected Area.
- Park Avenue on the west side of the Metro-North tracks facing northeast towards the Directly Affected Area.
- Park Avenue at East 183rd Street facing south towards the Directly Affected Area.
- East 183rd Street at Washington Avenue facing west towards the Directly Affected Area.

Figure G-1: Urban Design Study Areas

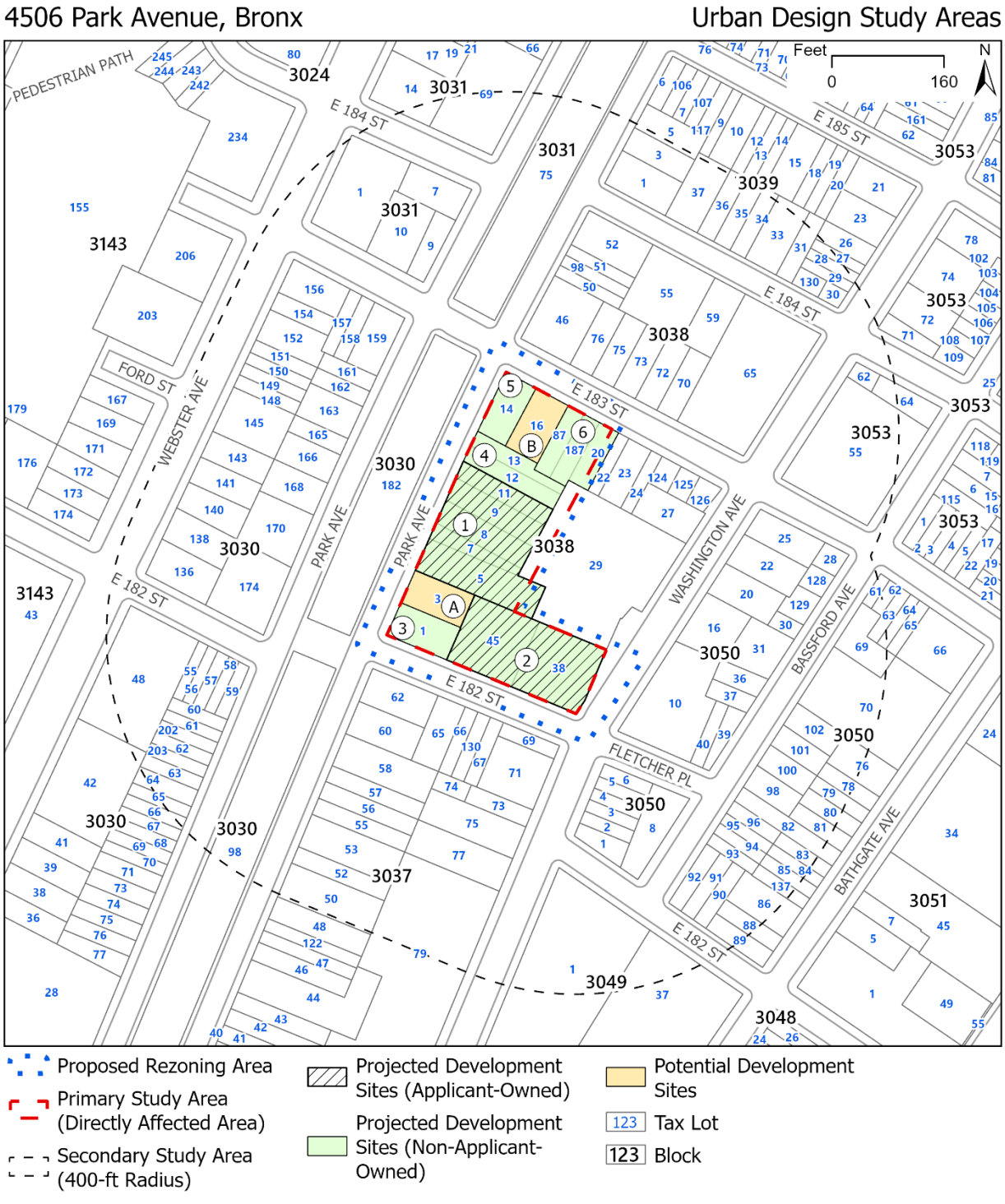


Figure G-2: Viewshed Locations



PRELIMINARY ASSESSMENT

According to the *CEQR Technical Manual*, the purpose of an Urban Design and Visual Resources preliminary assessment is to determine whether any physical changes facilitated by the Proposed Actions may have the potential to affect elements of urban design significantly and adversely. As described above, the Proposed Project is not located on or near a waterfront. Further, with the exception of three public parks located within the Secondary Study Area (Washinton Park, located at East 183rd Street between Washington Avenue and Park Avenue; Thorpe Family Playground, located at East 183rd Street between Park Avenue and Webster Avenue; and the Farm in the Bronx Community Garden, located at the corner of East 182nd Street and Washington Ave within Bathgate Playground), there are no significant visual resources, such as waterfront views; landmark structures or districts; distinct buildings or groups of buildings; open space or natural resources; or tall buildings that may cause channelized wind pressure or down-washed wind that could affect pedestrian comfort or safety – within, adjacent to, or visible from the Study Areas.

Existing Conditions

Primary Study Area

As shown in **Figure G-1**, The Primary Study Area (the Directly Affected Area) is comprised of the western half of Block 3038, Lots 1, 3, 5, 7, 8, 9, 11, 12, 13, 14, 16, 20, 38, 45, 87, and 187. The Directly Affected Area is located along Park Avenue, between East 183rd Street and East 182nd Street, and is currently occupied by several one-story buildings, unlicensed surface parking lots, and vacant land. Based on a site visit conducted by IMEG on April 21, 2023, there were not a notable number of vehicles blocking the street or sidewalk outside of repair shops.

Projected Development Site 1 (Block 3038, Lots 5, 7, 8, 9, and 11) has a total combined lot area of 24,392 sf and 173 ft of frontage on Park Avenue. Lot 5 is currently improved with a one-story, 8,590 sf warehouse. Lots 7, 8, and 9 contain unlicensed surface parking. Lot 11 contains a one-story, 3,400 sf autobody/repair facility.

Projected Development Site 2 (Block 3038, Lot 45) has a total lot area of 9,942 sf with 99.5 feet of frontage on East 182nd Street, and contains a one-story, 9,800 sf warehouse.

Projected Development Site 3 (Block 3038, Lot 1) has a total lot area of 4,595 sf and 50 ft of frontage on Park Avenue and contains a two-story 4,595 sf house of worship.

Projected Development Site 4 (Block 3038, Lots 12 and 13) has a total combined lot area of 6,347 sf and 28 ft of frontage on Park Avenue. Both lots contain unlicensed surface parking.

Projected Development Site 5 (Block 3038, Lot 14) has a total lot area of 4,110 sf and 47 ft of frontage on East 183rd Street and is occupied by a used car dealership.

Projected Development Site 6 (Block 3038, Lots 20, 87, and 187) has a total combined lot area of 7,997 sf and 75 ft of frontage on East 183rd Street. Lots 87 and 187 are vacant, while Lot 20 contains unlicensed surface parking.

Potential Development Site A (Block 3038, Lot 3) has a total lot area of 4,475 sf and 50 ft of frontage on Park Avenue, and contains a one-story, 4,450 sf autobody/repair facility.

Potential Development Site B (Block 3038, Lot 16) has a total lot area of 4,500 sf and 50 ft of frontage on East 183rd Street, and contains a one-story, 9,000 sf house of worship.

Secondary Study Area

Land uses within the 400-ft study area are largely residential, including a mix of one- & two-family homes, multi-family walk-ups, mixed residential & commercial buildings, and multi-family elevator buildings. Building heights in the Secondary Study Area range from one story to fourteen stories. Buildings over five stories in height lie primarily on the periphery of the Secondary Study Area.

Bulk in the Secondary Study Area varies. Bulk regulations are the combination of controls (lot size, floor area ratio (FAR), lot coverage, open space, yards, height, and setback) that determine the maximum size and placement of a building on a zoning lot. Floor area ratios are the main regulation by which the size of buildings is controlled. FAR is measured by calculating the ratio of total building floor area to the area of its zoning lot. Each zoning district has a floor area ratio, which, when multiplied by the lot area of the zoning lot, produces the maximum amount of floor area allowable on that zoning lot.[12] The Secondary Study Area varies in bulk, with Floor Area Ratios (FAR) ranging from <1.0 to >6.0. A greater variety in bulk is observed towards the southern and the eastern portion of the Secondary Study Area.

No-Action Condition

The No-Action Condition projects development that is expected to occur in the Directly Affected Area absent the Proposed Actions.

The Directly Affected Area is mapped with M1-1 and R6A zoning districts and is currently defined by vacant land; unlicensed surface parking; three warehouse buildings; two autobody/repair facilities; a restaurant; and two houses of worship.

M1-1

In the No-Action Condition, it is assumed that all parcels within the M1-1 district (Lots 1, 3, 7, 8, 9, 11, 12, 13, 14, 16, 87, 187, and p/o 5, p/o 20, p/o 29, and p/o 45) would remain the same as under existing conditions. Development trends in the area do not suggest that new manufacturing or industrial uses, or other uses permitted as-of-right in an M1-1 district, would be developed.

[12] *https://www.nyc.gov/site/planning/zoning/glossary.page Accessed August 16, 2023.*

R6A

In the No-Action Condition, it is assumed that Lot 38 would be developed with an as-of-right residential building. Along with p/o Lot 5, p/o Lot 20, and Lots 22, 23, 24, 124, 125, 126, 27, p/o Lot 29, and p/o Lot 45 on Block 3038, Lot 38 was included in the 2010 Third Avenue/Tremont Avenue Rezoning. As described above, the goal of the Third Avenue/Tremont Avenue Rezoning was to provide new opportunities for mixed residential and commercial development. Therefore, contemplating a future as-of-right residential use on Lot 38 (pursuant to the R6A regulations) is reasonable. This assumption is further substantiated by the predominantly residential character defining Washington Avenue, including the residential uses fronting Washington Avenue (Lots 27 and 29) and East 183rd Street (Lots 22, 124, 125, and 126) on the same block.

With-Action Condition

Primary Study Area

As demonstrated in Viewshed 1 (**Figure G-3**), the Proposed Project on Projected Development Site 2 would have a proposed base height of 75 feet and a proposed building height of 95 feet. The adjacent Projected Development Site 3 would have a proposed building height of 95 feet.

As demonstrated in Viewshed 2 (**Figure G-4**), the Proposed Project on Projected Development Site 1 would have a proposed base height varying from 105 feet to 125 feet, and a proposed building height of 145 feet. Projected Development Site 4 would also have a proposed base height of 105 feet and a proposed building height of 145 feet, while Projected Development Site 5 would have a proposed building height of 75 feet.

As demonstrated in Viewshed 3 (**Figure G-5**), Projected Development Sites 5, 4, 1, and 3 would create a continuous street wall fronting Park Avenue, while maintaining a transition between the lower height residential buildings located on the blocks to the north and south of the site. The continuous street wall is appropriate for the context, as Park Avenue is a wide street, where taller, bulkier buildings may be accommodated.

As demonstrated in Viewshed 4 (**Figure G-6**), Projected Development Site 6 would vary in height. The portion of the building that would lie in the proposed R7X district would be improved with a base height of 105 feet and a proposed building height of 115 feet. The portion of the building that would lie in the proposed R7A district would be improved with a proposed base height of 65 feet and a proposed building height of 85 feet. By "stepping down" in height from the two zoning districts, Projected Development Site 6 would respond to the lower height buildings that define the urban fabric in the northern portion of the Secondary Study Area.

Streetscape

The Projected Development Sites western and southern street wall would be built to the lot line along Park Avenue and East 182nd Street, respectively. This configuration would create continuous street walls along the perimeter of the Directly Affected Area. The With-Action Condition may include

streetscape improvements, including the planting of new street trees upon construction completion. It is the Applicant's intention that these proposed building configurations and streetscape improvements would enhance the overall pedestrian experience and public realm within the Study Area. Moreover, the With-Action Condition would introduce new ground-floor commercial uses along Park Avenue, thereby activating a currently underutilized segment of the street. The development in the With-Action Condition would not alter the existing streets, street grid, streetscape, or sidewalks in the Study Area.

In its current state, the corridor along Park Avenue from East 182nd Street to East 183rd Street does not provide an activated pedestrian experience. In the No-Action condition, the block would continue to be underutilized. The development in the With-Action Condition would enhance the streetscape along all three streets surrounding the Directly Affected Area by providing street trees and other pedestrian-friendly features. The development in the With-Action Condition would create a continuous street wall and extend the mixed-use character of the neighborhood from East 183rd Street to Park Avenue and would activate Park Avenue with ground-floor retail.

Buildings

The development in the With-Action Condition would introduce multiple buildings whose form and scale would be contextually similar to the surrounding built environment. The building in the With-Action Condition at Projected Development Site 1 is very similar in height to an existing residential building located directly to the east of Projected Development Site 1 at 2275 Washington Avenue, which sits at 135 feet.

Open Space

There are no existing or proposed open space resources in the Primary Study Area.

Secondary Study Area

Streetscape

As stated previously, there is currently no activated pedestrian experience surrounding the Proposed Project. This development would facilitate new mixed-use buildings of varying height, continuous street walls, required street trees, proposed actions would help stitch together the urban fabric and create consistency with surrounding residential uses.

The proposed project would not partially or totally block any view corridors in the Secondary Study Area.

Buildings

The development in the With-Action Condition would result in multiple buildings whose form and scale would be contextually similar to the surrounding built environment. The 135-foot, 111,767 sf building located at 2271 Washington Avenue, represents a similar height and bulk to Projected

Development Site 1. The multi-family elevator building is 14 stories in height and has 118 dwelling units. Additionally, the Proposed Project is similar to several other existing buildings in the Secondary Study Area in terms of height and bulk, including the 13-story residential building located at 2277 Bathgate Avenue.

Park Avenue is a two-way 50' street, separated by the Metro-North right-of-way, giving it the appearance of a wide street where taller, bulkier buildings are typically appropriate. By maximizing lot coverage, the development would create a continuous street wall along Park Avenue.

Open Space Resources

There are three parks located within the Secondary Study Area: Washinton Park, located at East 183rd Street between Washington Avenue and Park Avenue; Thorpe Family Playground, located at East 183rd Street between Park Avenue and Webster Avenue; and the Farm in the Bronx Community Garden, located at the corner of East 182nd Street and Washington Ave within Bathgate Playground. As detailed in Attachment F: "Shadows," these open space resources would not be adversely affected by the development of the Proposed Project.

4506 Park Avenue Rezoning, Bronx

Figure G-3: Urban Design Viewshed 1

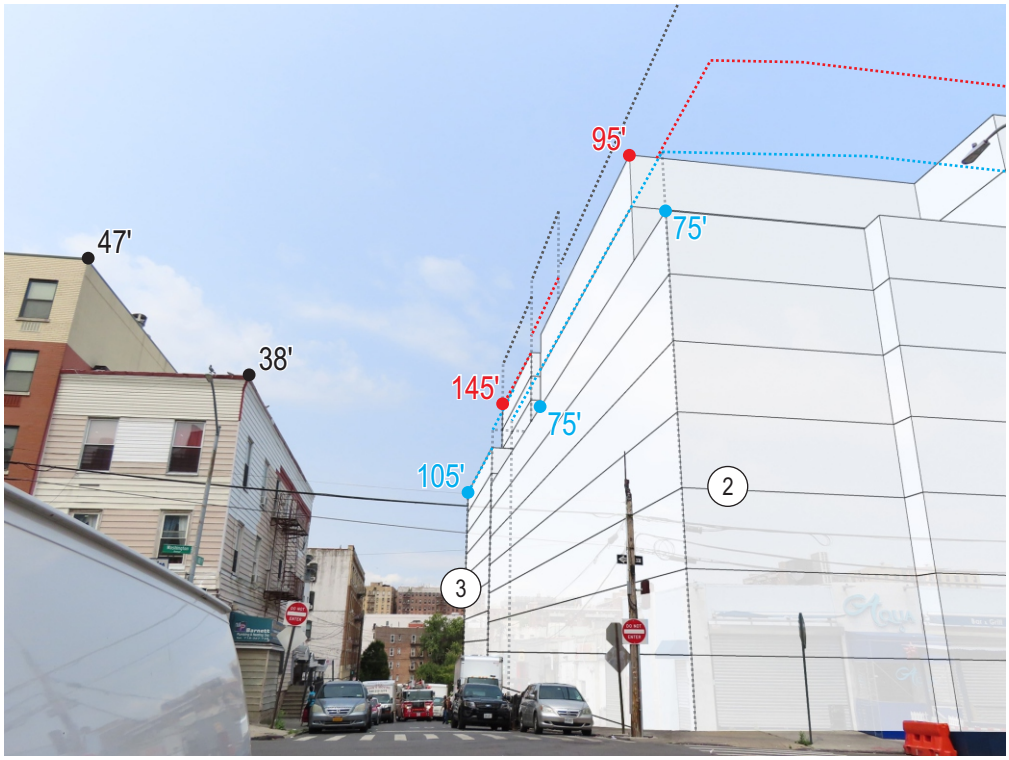
No-Action Scenario

East 182nd Street facing west (Site at right)



With-Action Scenario

East 182nd Street facing west (Site at right)



Maximum Permitted Base Height (85' R7A, 105' R7X)

Maximum Permitted Building Height (105' R7A, 145' R7X)

Maximum Permitted Bulkhead Height (130' R7A, 170' R7X)

Proposed Base Height

Proposed Building Height

Proposed Building Height

Urban Cartographics

4506 Park Avenue Rezoning, Bronx

Figure G-4: Urban Design Viewshed 2

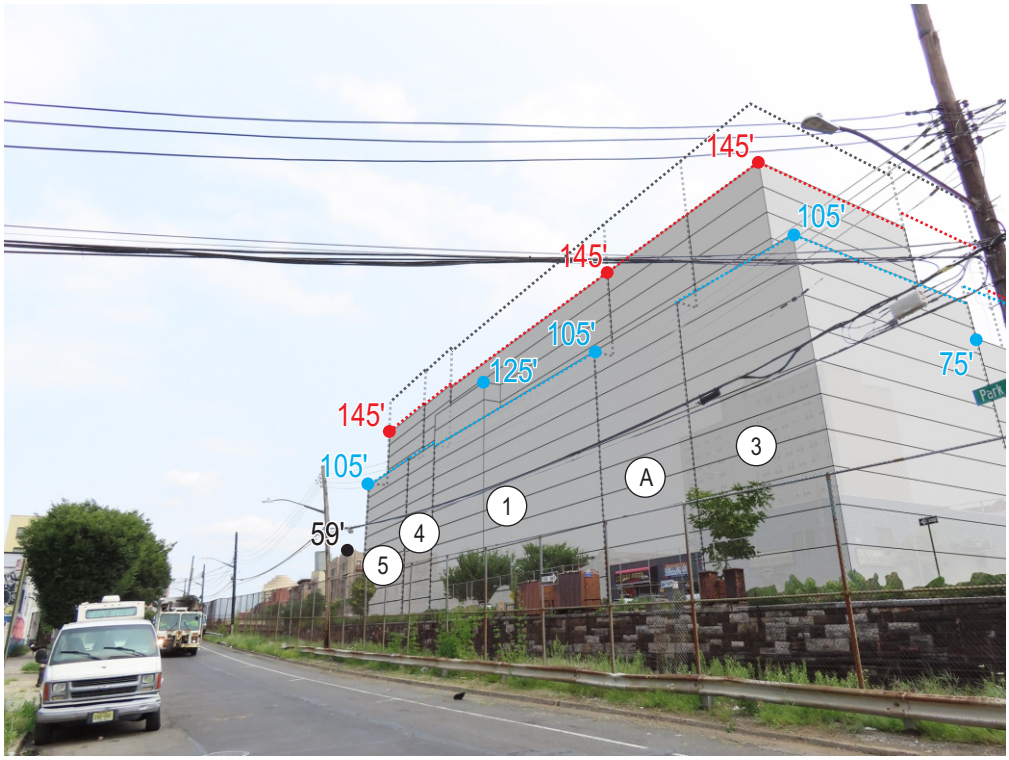
No-Action Scenario

Park Avenue facing northeast (Site at right)



With-Action Scenario

Park Avenue facing northeast (Site at right)



Maximum Permitted Base Height (85' R7A, 105' R7X)

Proposed Base Height

Maximum Permitted Building Height (105' R7A, 145' R7X)

Proposed Building Height

Maximum Permitted Bulkhead Height (130' R7A, 170' R7X)

Proposed Building Height

Urban Cartographics

4506 Park Avenue Rezoning, Bronx

Figure G-5: Urban Design Viewshed 3

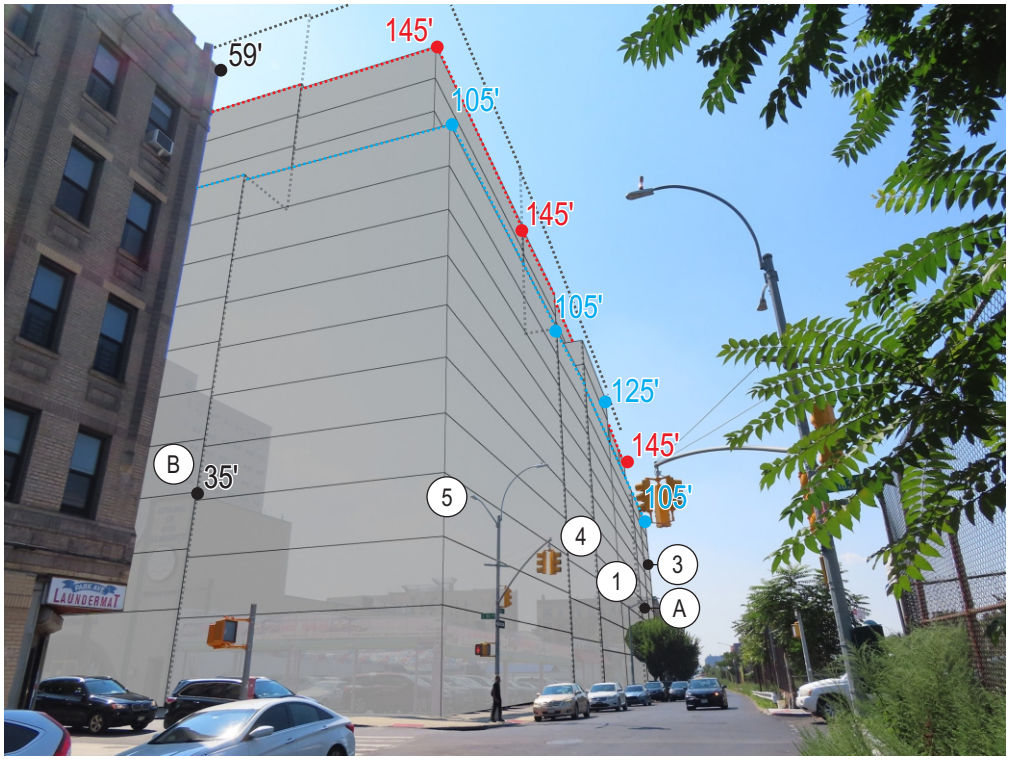
No-Action Scenario

Park Avenue facing south (Site at left)



With-Action Scenario

Park Avenue facing south (Site at left)



Maximum Permitted Base Height (85' R7A, 105' R7X)

Proposed Base Height

Maximum Permitted Building Height (105' R7A, 145' R7X)

Proposed Building Height

Maximum Permitted Bulkhead Height (130' R7A, 170' R7X)

Proposed Building Height

Urban Cartographics

4506 Park Avenue Rezoning, Bronx

Figure G-6: Urban Design Viewshed 4

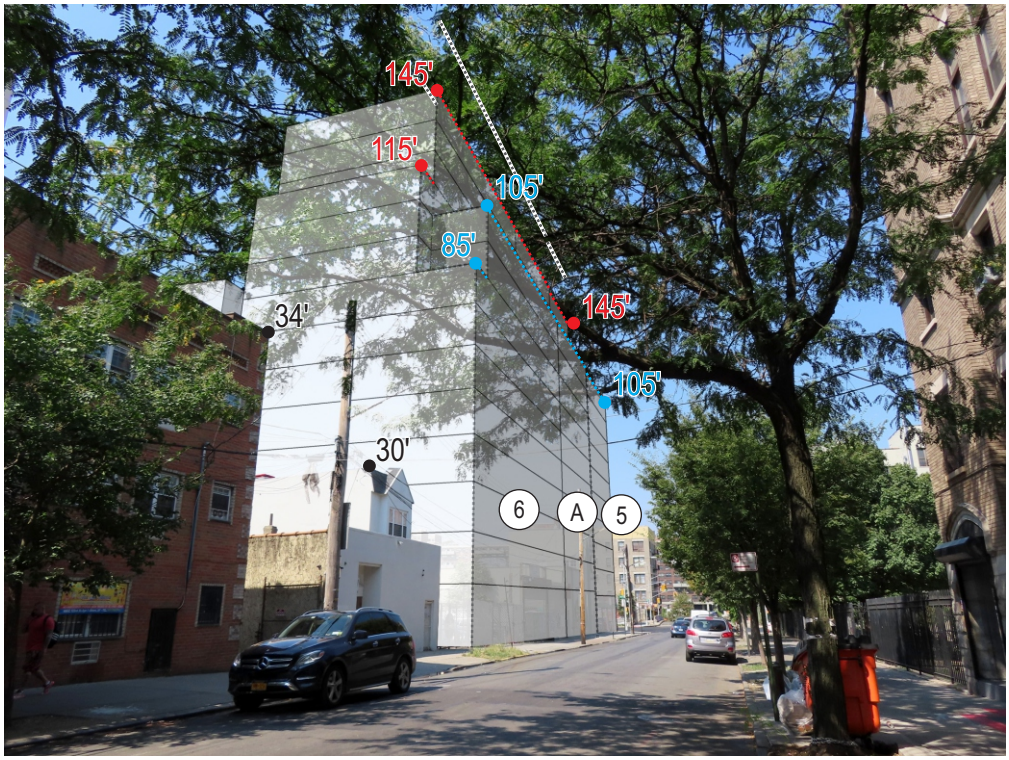
No-Action Scenario

East 183rd Street facing west (Site at left)



With-Action Scenario

East 183rd Street facing west (Site at left)



Maximum Permitted Base Height (85' R7A, 105' R7X)

Proposed Base Height

Maximum Permitted Building Height (105' R7A, 145' R7X)

Proposed Building Height

Maximum Permitted Bulkhead Height (130' R7A, 170' R7X)

Proposed Building Height

Urban Cartographics

CONCLUSION

The Proposed Actions would not negatively affect the experience of a pedestrian in the project area and would not alter the arrangement, appearance, and functionality of the built and natural environment in the context of the project. Further, the Proposed Actions would not change urban design elements such that the context of a natural or built visual resource is altered.

The proposed buildings' form and scale are contextually similar to the surrounding built environment, specifically along the intersection of Washington Avenue and East 182nd street and would be well-buffered from the lower density character of the surrounding area to the west of the Metro-North railroad tracks. Moreover, because the Directly Affected Area does not contain any natural resources, and because the Proposed Actions would facilitate new street tree plantings, the pedestrian experience along the perimeter of the Development Sites would be improved. Further, there are no significant visual resources – such as waterfront views, public parks, landmark structures or districts, or distinct buildings or groups of buildings; open space or natural resources; or tall buildings that may cause channelized wind pressure or down-washed wind that could affect pedestrian comfort or safety – that would be affected by the Proposed Actions.

Based on this information, the Proposed Actions would not result in any potentially significant impacts to urban design and visual resources; therefore, no further assessment is warranted.

ATTACHMENT H: HAZARDOUS MATERIALS

INTRODUCTION

The *CEQR Technical Manual* defines hazardous materials as any substance that poses a threat to human health or the environment. Substances of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds ("VOCs", including petroleum constituents and chlorinated solvents, and "SVOCs"), methane, pesticides, polychlorinated biphenyls ("PCBs"), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic).

The potential for significant effects from hazardous materials can occur when hazardous materials exist on site and an action would increase pathways to their exposure to humans and the environment, or an action would introduce new activities or processes using hazardous materials. Potential routes of exposure to hazardous materials can include direct contact, such as contact between contaminated soil and skin (dermal contact), beathing of VOCs or chemicals associated with suspended soil particles (inhalation), or swallowing soil or water (ingestion). According to the *CEQR Technical Manual*, public health may also be threatened when soil vapors migrate through the subsurface or along preferential pathways (such as building foundation, utility conduit, or duct) and accumulate beneath a concrete slab or inside a basement, resulting in an explosive, oxygen-deficient, or hazardous atmosphere.

As Indicated in the *CEQR Technical Manual*, the hazardous materials (E) designation is an institutional control that may be placed on a site to establish a hazardous materials review and approval framework. It provides a mechanism to ensure that testing for and remediation of hazardous materials, if necessary, are completed prior to future development of an affected site, thereby eliminating the potential for a hazardous materials effect (E) to designated parcels as administered under the authority of the New York City Mayor's Office of Environmental Remediation ("OER").

METHODOLOGY

According to the guidelines of the *CEQR Technical Manual*, the first step to evaluate the potential presence of hazardous materials on the Development Site is to conduct a Phase I Environmental Site Assessment ("ESA"). The objective of a Phase I ESA is to identify the presence or likely presence, use, or release of hazardous substances or petroleum products, as defined in the American Society for Testing and Materials ("ASTM") E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) as a Recognized Environmental Condition ("REC"). A Phase I ESA also identifies historical recognized environmental concerns ("HREC"). An HREC is defined by ASTM E1527-13 as a past release of hazardous substance or petroleum product that has occurred in connection with the property. An HREC has been addressed to the satisfaction of the applicable regulatory authority or meets unrestricted use criteria established by a regulatory authority without subjecting the property to any regulatory controls. Typically, a Phase I ESA qualitatively evaluates environmental conditions within a particular area.

According to the *CEQR Technical Manual*, if, after conducting the Phase I ESA, it is determined that contamination may exist or is known to exist, a Phase II ESA should be performed to determine the nature and extent of any contamination, so that the potential for significant effects can be fully disclosed and mitigation developed, as appropriate. If remediation is warranted, the applicant may elect to explore performing all required testing and remediation plan development through the New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program. Should the project sponsor withdraw from the BCP, jurisdiction on the oversight and implementation of any required testing and remediation would revert to OER.

FINDINGS

1. Phase I ESA (September 5, 2019)

The Phase I ESA was prepared by Partner Assessment Corporation in accordance with the American Society for Testing and Materials (ASTM) International Standard Practices for Environmental Site Assessments (ASTM Designation: E1527-13) for most of Projected Development Site 1 (Block 3086, Lots 5, 7, 8, and 9), with the exception of Lot 11. The purpose of the Phase I ESA was to characterize the environmental quality of the Projected Development Site through the identification of Recognized Environmental Conditions (RECs).

The Phase I ESA scope of work included the following:

1. A property and adjacent site reconnaissance.
2. Interviews with key personnel.
3. A review of historical sources.
4. A review of regulatory agency records.
5. A review of a regulatory data base report provided by a third-party vendor.

The results of the Phase I ESA revealed the following REC at Projected Development Site 1 (Lots 5, 7, 8, and 9):

1. Projected Development Site 1 was developed with the current structure in 1910 and was first utilized as a garage. According to available Sanborn fire insurance maps, the partial basement in the northwest of the current building contained a boiler between 1915 and 1950; an "Oil Room" was depicted in the southwest corner of the building between 1915 and 2007; and a notation for two 250-galon buried gasoline storage tanks located beneath the sidewalk is shown in the southeast corner of the building between 1915 and 1978. There are no regulatory records for the subject property related to oil/gas tank usage; the nature of use of the "oil room" is unknown, as is the location/disposition of the buried gas tanks. Partner notes that access was not provided to the partial basement during the reconnaissance, and no evidence of current or former tanks was observed. The historic use of Projected Development

Site 1 as a garage with buried gas tanks and an oil room is considered a recognized environmental condition, and further investigation is recommended.

An ”environmental issue” refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of the assessment:

1. Due to the age of the building, there is a potential that asbestos-containing materials (ACMs) are present. Readily visible suspect ACMs were observed in good condition. Should the identified suspect ACMs be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

2. Limited Phase II ESA (October 2019)

The Limited Phase II ESA was performed by ESPL Environmental Consultants Corporation on behalf of the Applicant due to the findings of the September 2019 Phase I ESA report. The assessment was performed to obtain representative hydrogeologic and environmental quality data capable of defining conditions at Projected Development Site 1 (Block 3038, Lots 5, 7, 8, and 9), with the exception of Lot 11. This data was used to evaluate the nature and extent of potential contamination.

The Limited Phase II ESA scope of work included the following:

1. Perform Ground Penetrating Radar (GPR) survey of the car park area.

2. Identify the presence of any significant underground anomalies.

3. Advance up to four (4) soil borings to a depth of maximum 15 feet below grade or Geoprobe refusal.

4. Collect up to four (4) soil samples from the advanced soil borings.

5. Field screen all collected samples for evidence of contamination (i.e., odor, sheen, color, and PID reading).

6. Submit up to four (4) soil samples for laboratory analysis.

7. Submit all collected soil samples with chain of custody to an accredited laboratory to be analyzed for CP-51 Volatile Organic Compounds (VOCs) EPA Method 8260, and CP-51 Semi Volatile Organic Compounds (SVOCs) EPA Method 8270.

The results of this subsurface investigation did not reveal the presence of contamination in onsite soils and soil vapors at Projected Development Site 1 (Block 3038, Lots 5, 7, 8, and 9). The laboratory results of the collected samples indicated that there were no elevated levels of VOCs or SVOCs above applicable soil quality guidelines of the New York State Department of Environmental Conservation CP-51 standards.

3. Phase I ESA (October 2023)

The Phase I ESA was prepared by ESPL Environmental Consultants Corporation in accordance with the American Society for Testing and Materials (ASTM) International Standard Practices for Environmental Site Assessments (ASTM Designation: E1527-21) for a portion of Projected Development Site 2 (Block 3086, Lot 45). The purpose of the Phase I ESA was to characterize the environmental quality of the Projected Development Site through the identification of Recognized Environmental Conditions (RECs).

The Phase I ESA scope of work included the following:

1. An evaluation of information contained within Federal and State environmental databases, and other local environmental records, within specific search distances.

2. An evaluation of past property uses through a review of reasonably obtainable standard historical sources such as historical maps, aerial photographs, prior environmental reports and interviews with knowledgeable persons.

3. A qualitative evaluation of the physical characteristics of Projected Development Site 2 through a review of published topographic, geologic, and hydrogeologic maps; published groundwater data; and area observations to characterize surface water flow in the property area.

4. Am evaluation of current property conditions including, but not limited to, a search (database and onsite) for the following items: underground storage tanks and aboveground storage tanks; potential PCB-containing electrical equipment; hazardous materials and petroleum projects generation; treatment, storage, or disposal of hazardous, regulated, or medical wastes.

5. The preparation of a Phase I ESA report, which represents the findings from the studies of the items described above and provides conclusions and recommendations based on the information gathered above and provided by the Client.

The results of the Phase I ESA revealed the following RECs in connection with Projected Development Site 2:

1. A REC in connection with Projected Development Site 1, the adjacent property directly behind Projected Development Site 2, has revealed evidence of historically recognized environmental conditions in connection with the adjacent property's two buried 250-gallon gasoline tanks as shown on the 1915, 1950, and 1978 Sanborn Maps. Since no records were located as to the registration or removal/abandonment of these tanks, a concern exists as to a potential impact to Projected Development Site 2, since the gasoline tanks are located directly behind the site.

4. Phase I ESA (November 8, 2023)

The Phase I ESA was prepared by ESPL Environmental Consultants Corporation in accordance with the American Society for Testing and Materials (ASTM) International Standard Practices for Environmental Site Assessments (ASTM Designation: E1527-21) for Projected Development Site 1 (Block 3086, Lot 11), which was not included in the Phase I ESA (September 5,2019) or the Limited Phase II ESA (October 2019). The purpose of the Phase I ESA was to characterize the environmental quality of the Projected Development Site through the identification of Recognized Environmental Conditions (RECs).

The Phase I ESA scope of work included the following:

1. An evaluation of information contained within Federal and State databases, and other local environmental records, within specific search distances.

2. An evaluation of past property uses through a review of reasonably obtainable standard historical sources such as historical maps, aerial photographs, prior environmental reports, and interviews with knowledgeable persons.

3. A qualitative evaluation of the physical characteristics of the property through a review of published topographic, geologic, and hydrogeologic maps; published groundwater data; and area observations to characterize surface water flow in the property area.

4. An evaluation of current property conditions including, but not limited to, a search (database and onsite) for the following items: underground storage tanks and aboveground storage tanks; potential PCB-containing electrical equipment; hazardous materials and petroleum products generation; treatment, storage, or disposal of hazardous, regulated, or medical wastes.

5. The preparation of a Phase I ESA report, which represents the findings from the studies of the items described above and provides conclusions and recommendations based on the information gathered above and provided by the Client.

The results of the Phase I ESA revealed an REC in connection with Projected Development Site 1 (Lot 11) as follows:

1. The two tanks that are located in the basement require further investigation as to their previous use. Since no records were located as to the registration of these tanks, a concern exists as to a potential impact to Projected Development Site 1.

2. The discharge point end point for the floor drain located in the building requires further investigation.

3. The discharge point of the sump pump located in the basement of Projected Development Site 1 requires further investigation.

5. Phase I ESA (October 15, 2025)

The Phase I ESA was prepared by ESPL Environmental Consultants Corporation in accordance with the American Society for Testing and Materials (ASTM) International Standard Practices for Environmental Site Assessments (ASTM Designation: E1527-21) for the portion of Projected Development Site 2 (Block 3086, Lot 38) that was not included in the Phase I ESA conducted in October 2023. The purpose of the Phase I ESA was to characterize the environmental quality of the Projected Development Site through the identification of Recognized Environmental Conditions (RECs).

The Phase I ESA scope of work included the following:

1. An evaluation of information contained within Federal and State databases, and other local environmental records, within specific search distances.

2. An evaluation of past property uses through a review of reasonably obtainable standard historical sources such as historical maps, aerial photographs, prior environmental reports, and interviews with knowledgeable persons.

3. A qualitative evaluation of the physical characteristics of the property through a review of published topographic, geologic, and hydrogeologic maps; published groundwater data; and area observations to characterize surface water flow in the property area.

4. An evaluation of current property conditions including, but not limited to, a search (database and onsite) for the following items: underground storage tanks and aboveground storage tanks; potential PCB-containing electrical equipment; hazardous materials and petroleum products generation; treatment, storage, or disposal of hazardous, regulated, or medical wastes.

5. The preparation of a Phase I ESA report, which represents the findings from the studies of the items described above and provides conclusions and recommendations based on the information gathered above and provided by the Client.

The results of the Phase I ESA revealed an REC in connection with Projected Development Site 2 (Lot 38) as follows:

1. Staining was observed on the pavement beneath and surrounding the exterior paved storage area for motor oil. In addition, several containers of motor oil, including an Aboveground Storage Tank (AST) tote of unknown quantity, were noted in the exterior, paved portion of the subject property. The observed staining suggests the potential for past or ongoing releases of motor oil, which may pose an environmental concern. Given the presence of the AST, motor oil containers, and the staining, this condition is considered a REC, warranting further

investigation to assess the extent of any contamination and determine if any remedial actions are necessary.

CONCLUSION

As per a letter from the New York City Department of Environmental Protection (DEP) included in Appendix C, the following next steps are recommended.

For Projected Development Sites 1 and 2:

- It is recommended that a supplemental Phase II be conducted to adequately identify and characterize the surface and subsurface soils, groundwater, and soil vapor of the entire subject property and to inform and disclose the measures necessary to avoid impacts from hazardous materials, including a Phase II Investigation Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities, as well as an Investigation Health and Safety Plan (HASP). The Phase II Work Plan and HASP should be submitted for DEP review and approval prior to the start of any fieldwork.

- A minimum of nine soil borings, five groundwater wells, and eight soil vapor probes should be installed on Projected Development Site 1. A minimum of two soil samples should be collected from each test boring/probe.

- A minimum of eight soil borings, four groundwater wells, and seven soil vapor probes should be installed on Projected Development Site 2. A minimum of two soil samples should be collected from each test boring/probe.

- Groundwater samples should be collected where the water table is less than 30 feet beneath the deepest level of the proposed on-site basement or slab-on-grade foundation.

- If underground storage tank (UST) areas are identified at the site, additional test borings should be advanced to adequately characterize the UST areas.

For Projected Development Sites 3 through 6, as well as Potential Development Sites A and B:

- An (E) Designation for hazardous materials should be placed, pursuant to Section 11-15 of the New York City Zoning Resolution. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance occurs, as well as to ensure the maintenance and oversight of any required engineering controls through oversight by the Mayor's Office of Environmental Remediation (OER).

With these measures included as part of the Proposed Actions, no significant adverse impacts related to hazardous materials would occur during or following construction activities on Projected or Potential Development Sites.

ATTACHMENT I: TRANSPORTATION

INTRODUCTION

This attachment examines the potential effects of the Proposed Actions on study area transportation systems. As described in Attachment A: "Project Description," Rocky & Brothers Realty LLC (the "Applicant") requests a zoning map amendment and zoning text amendment which would facilitate the construction of 14-story mixed-use residential and commercial buildings at 4506-4522 Park Avenue (Block 3038, Lots 5, 7, 8, 9, 11, 38, 45, "Projected Development Sites 1 and 2") in Community District 6 in the Belmont/Fordham neighborhood of the Bronx. The "Proposed Project" is depicted in **Figure I-1**.

The Proposed Actions would result in additional development at four additional non-Applicant-controlled Projected Development Sites:

- Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft) 38,120 gsf (27,564 zsf) mixed-use building containing 3,000 gsf (3,000 zsf) of ground-floor commercial space and 35,120 gsf (27,564 zsf) of residential space on floors 2 through 9 with 25 dwelling units, of which 20-30% (5-8 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

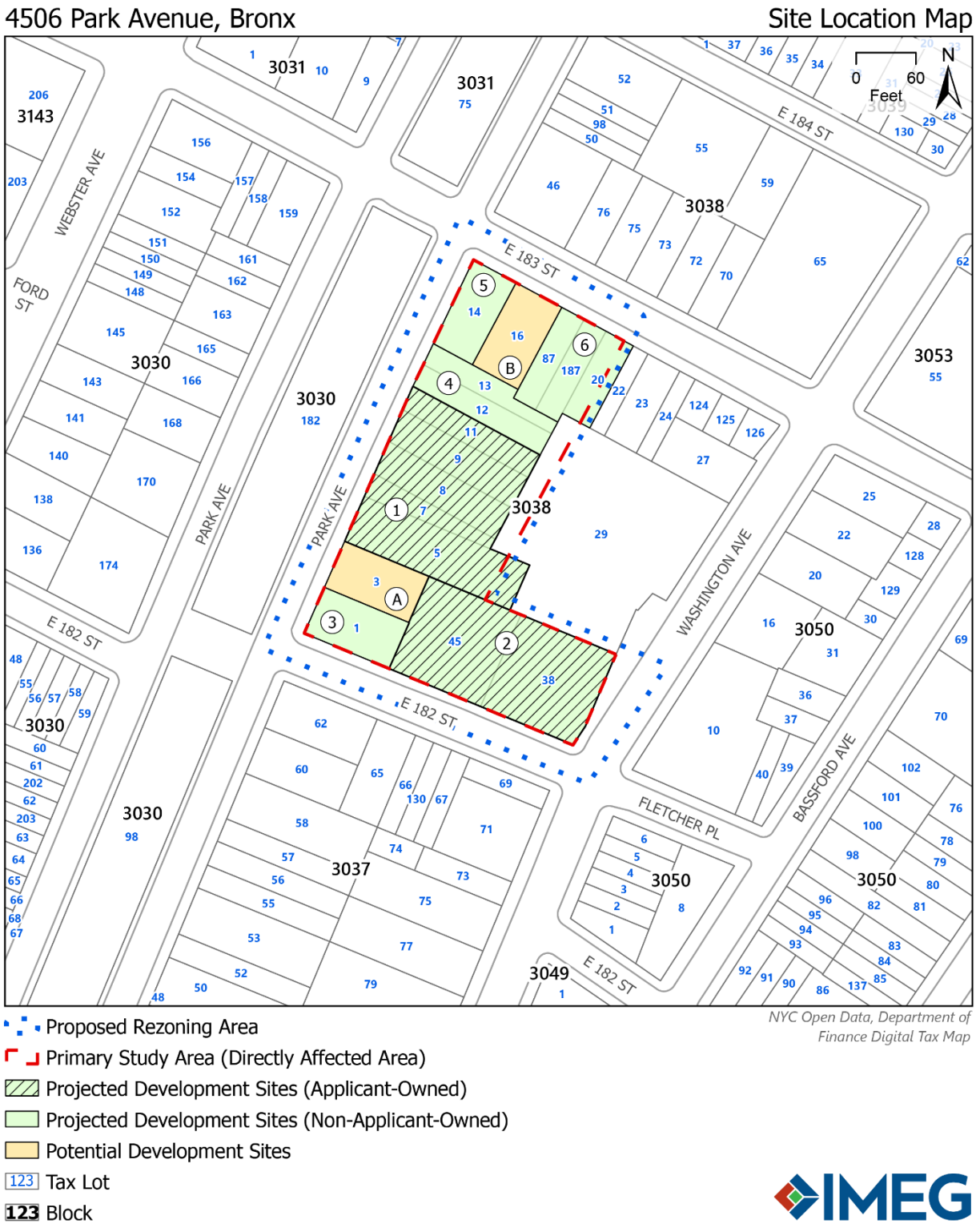
- Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf (38,082 zsf) mixed-use building containing 2,000 gsf (2,000 zsf) of ground-floor commercial space and 48,894 gsf (36,082 zsf) of residential space on floors 2 through 14 with 36 dwelling units, of which 20-30% (8-11 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf (24,660 zsf) mixed-use building containing 2,500 gsf (2,500 zsf) of ground-floor commercial space and 30,300 gsf (22,160 zsf) of residential space on floors 2 through 7 with 22 dwelling units, of which 20-30% (5-7 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 6 (Lots 87, 187, and 20) would be developed with an 11-story (115 ft), approximately 58,471 gsf (45,312 zsf) mixed-use building containing 4,000 gsf (4,000 zsf) of ground-floor commercial space and 54,471 gsf (41,312 zsf) of residential space on floors 2 through 11 with 41 dwelling units, of which 20-30% (9-12 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

The Reasonable Worst Case Development Scenario ("RWCDS") for both the Future Without the Proposed Actions (No-Action Condition) and the Future With the Proposed Actions (With-Action Condition) was analyzed for Build Year 2029.

Figure I-1: Proposed Rezoning Area & Projected Development Sites



Under the No-Action condition, the Projected Development Sites are assumed to be developed as shown in **Table I-1**.

Table I-1: Incremental Difference between No-Action Condition and With-Action Condition

Land Use	Existing Conditions (gsf)	No-Action Condition (gsf)	With-Action Condition (gsf)	Increment (gsf)
Residential	0	29,859 (44 DUs)	366,451 (432 DUs)	336,592 (388 DUs)
Retail	0	0	21,413	21,413
Community Facility (Church)	4,595	4,595	0	-4,595
Manufacturing (Light Industrial)	30,590	21,790	0	-20,790
Parking	9,346	6,348	20,385	14,037
Population	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residents	0	104	1,024	920
Note: Population multiplier is the average household size in Bronx CD 6 (2.37 x 432 dwelling units = 1,024 residents). Source: U.S. Census Bureau, 2020 Decennial Census				

The analyses consider the 2029 analysis year to identify potential impacts, and if warranted, determine project improvement measures that would be appropriate to address those impacts. The travel demand projections, trip assignments, and capacity analysis presented in this attachment were conducted pursuant to the methodologies outlined in the 2021 *CEQR Technical Manual*.

TRANSPORTATION SCREENING ASSESSMENTS

The *CEQR Technical Manual* identifies procedures for evaluating a proposed project's potential impacts on traffic, transit, ferry, pedestrian, and parking conditions. This consists of a two-tiered screening process to determine whether a detailed, quantified analysis is needed. The first step of this methodology begins with the preparation of a trip generation analysis to determine the volume of person and vehicle trips that would be generated by the Proposed Project. The results are then compared with the *CEQR Technical Manual*-specified thresholds (Level 1 screening analysis) to determine whether a Level 2 screening analysis is warranted. If the proposed project would result in 50 or more peak hour vehicle trips, 200 or more peak hour transit trips (subway/rail or bus riders), 50 or more peak hour Citywide Ferry Service ("CWFS") ferry trips, and/or 200 or more peak hour pedestrian trips, a Level 2 screening analysis is undertaken.

For the Level 2 screening analysis, project generated trips would be assigned to specific intersections, transit routes, ferry routes, and pedestrian elements. If the results of this analysis show that the proposed project would generate 50 or more peak hour vehicle trips through an intersection, 50 or more peak hour bus riders on a bus route in a single direction, 200 or more peak hour subway passengers at any given station or on a subway line, 25 or more passenger ferry trips in a single direction on a single route, 50 or more passengers at a ferry landing, or 200 or more peak hour pedestrian trips per pedestrian element, further quantified analyses may be warranted to evaluate

the potential for significant adverse traffic, transit, ferry, and pedestrian impacts and parking shortfalls.

LEVEL 1 SCREENING ASSESSMENT

Travel demand factors for the Proposed Project, as well as the projected No-Action activity were developed based on information from the *CEQR Technical Manual*, U.S. Census Data, data provided by the New York City Department of Transportation ("NYCDOT"), and other previously approved EISs. **Tables I-2** and **I-3** summarize the travel demand factors for the No-Action and With-Action Conditions for the weekday AM, midday, PM, and Saturday peak hours.

Community Facility

The daily person trip generation rate, temporal distributions, modal splits, auto and taxi occupancy, daily delivery trip generation rate, and delivery temporal distributions are from the approved EAS for East New York Rezoning (No. 15DCP102K; ULURP Nos. C160035ZMK, C160037HUK, C160042HDK, N160036ZRK, N160050ZRK). The directional splits were provided by NYCDOT.

Light Industrial

The daily person trip generation rate, temporal distributions, midday modal splits, daily delivery trip generation rate, and delivery temporal distributions are from the approved FEIS for Jerome Avenue Rezoning (No. 17DCP019X). Auto and taxi vehicle occupancy and AM, PM, and Saturday modal splits are from the American Community Survey ("ACS") 2012-2016 Reverse Journey To Work ("JTW") for Bronx census tracts 375.04, 379, 383.02, 385, 387, 395 (Table A302103 - Means of Transportation). The directional splits were provided by NYCDOT.

Residential

The daily person trip generation rate, temporal distributions, daily delivery trip rate, and delivery temporal distributions are from the *CEQR Technical Manual*. The modal splits and auto and taxi occupancy are from the 2015-2019 ACS JTW Estimates for Bronx Census Tracts 375.04, 379, 383.03, 383.04, 385, 387, 395. The directional splits were provided by NYCDOT.

Commercial / Local Retail

The daily person trip rate, temporal distributions, daily delivery trip rate, and delivery temporal distributions are from the *CEQR Technical Manual*. The trip linkage, modal splits, vehicle occupancy, and directional splits were provided by NYCDOT.

Table I-2: Travel Demand Factors for No-Action Conditions

	Community Facility (Church)				Light Industrial			
Daily Person Trip Generation Rate	Weekday 29.18/ksf [1]		Saturday 21.83/ksf [1]		Weekday 14.7/ksf [2]		Saturday 2.2/ksf [2]	
Temporal Distribution – Person Trips	AM	MID	PM	SAT	AM	MID	PM	SAT
	7.9% [1]	4% [1]	7.2% [1]	15.8% [1]	13.2% [2]	11% [2]	14.2% [2]	10.7% [2]
Modal Split					[3]	[2]	[3]	[3]
Auto	5%	5%	5%	5%	48.3%	2%	48.3%	48.3%
Taxi	1%	1%	1%	1%	0.9%	3%	0.9%	0.9%
Subway/Rail	3%	3%	3%	3%	15.4%	6%	15.4%	15.4%
Bus	6%	6%	6%	6%	22.6%	6%	22.6%	22.6%
Walk/Bicycle	85%	85%	85%	85%	12.8%	83%	12.8%	12.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	Weekday		Saturday		Weekday [3]		Saturday [3]	
Auto	1.65[1]		1.65[1]		1.12		1.12	
Taxi	1.4[5]		1.4[5]		1.12		1.12	
Daily Delivery Trip Generation Rate	Weekday 0.29/ksf [1]		Saturday 0.29/ksf [1]		Weekday 0.67/ksf [2]		Saturday 0.67/ksf [2]	
Temporal Distribution - Delivery	AM	MID	PM	SAT	AM	MID	PM	SAT
	9.6% [1]	11% [1]	1% [1]	0% [1]	14% [2]	9% [2]	1% [2]	0% [2]
Directional Splits					[4]		[4]	
In	57%	48%	52%	48%	86%	52%	16%	48%
Out	43%	52%	48%	52%	14%	48%	84%	52%

Sources:

(1) East New York Rezoning FEIS (15DCP102K; ULURP Nos. C160035ZMK, C160037HUK, C160042HDK, N160036ZRK, N160050ZRK)

(2) Jerome Avenue Rezoning EAS (17DCP019X)

(3) 2012-2016 Reverse JTW for Bronx census tracts 375.04, 379, 383.02, 385, 387, 395. (Table A302103 - Means of Transportation)

(4) Directional splits provided by NYCDOT

(5) Taxi occupancy provided by NYCDOT

Table I-3: Travel Demand Factors for With-Action Conditions

	Residential (> 3 floors)				Local Retail			
Daily Person Trip Generation Rate	(1) Weekday 8.18/DU		Saturday 9.08/DU		(1) Weekday 329 /ksf		Saturday 358 /ksf	
Trip Linkage	0%				(2) 20%			
Temporal Distribution – Person Trips	(1) AM 9.3%	MID 5.6%	PM 8.5%	SAT 8.4%	(1) AM 4.8%	MID 8%	PM 10.9%	SAT 11.7%
Modal Split	(3)				(4)			
Auto	20.8%				11%			
Taxi	1.4%				0%			
Subway/Rail	45.7%				3%			
Bus	21.1%				2%			
Walk/Bicycle	6.9%				84%			
Other/Work from home	4.2%				0%			
Total	100%				100%			
Vehicle Occupancy	(3) Weekday		Saturday		(5) Weekday		Saturday	
Auto	1.07		1.07		2.10		2.10	
Taxi	1.4		1.4		2.10		2.10	
Daily Delivery Trip Generation Rate	(1) Weekday 0.06/DU		Saturday 0.02/DU		(1) Weekday 0.35 /ksf		Saturday 0.04 /ksf	
Temporal Distribution – Delivery	(1) AM 12%	MID 9%	PM 2%	SAT 9%	(1) AM 8%	MID 11%	PM 2%	SAT 11%
Directional Splits	(6)				(6)			
In	22%	50%	62%	55%	52%	50%	50%	50%
Out	78%	50%	38%	45%	48%	50%	50%	50%

Sources:
(1) *CEQR Technical Manual* (December 2021 Edition), Table 16-2.
(2) Per NYCDOT instruction provided February 12, 2024.
(3) ACS Journey to Work 5-Year estimates for census tracts 375.04, 379, 383.02, 385, 387, 395 for the AM-PM-SAT peak hours (2015-2019)
(4) Modal splits provided by NYCDOT
(5) Vehicle occupancy provided by NYCDOT
(6) Directional splits provided by NYCDOT

TRIP GENERATION SUMMARY

The number of person trips generated by the No-Action Condition and With-Action Condition are presented in **Table I-3** and **Table I-4**, respectively. Under the No-Action Condition, the Projected Development Sites would generate 85, 60, 63, and 53 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Under the With-Action Condition, the Projected Development Sites would generate 586, 641, 902, and 1,034 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. **Table I-5** presents the net increments (With-Action minus No-Action) for the Proposed Project. The net increase in person trips for the weekday AM, midday, PM, and Saturday peak hour is 501, 581, 839, and 980, respectively.

Table I-3: No-Action Condition Trip Generation Summary – Person Trips

No-Action Use	Peak Hour	Person Trips					
		Auto	Taxi	Subway/Rail	Bus	Walk	Total
Light Industrial	Weekday AM	20	0	7	10	5	42
(1,000 s.f.)	Weekday Midday	1	1	2	2	29	35
21.790	Weekday PM	1	0	7	10	6	24
k.s.f.	Saturday	2	0	1	1	1	5
Church	Weekday AM	1	0	0	1	9	11
(1,000 s.f.)	Weekday Midday	0	0	0	0	5	5
4.595	Weekday PM	0	0	0	1	8	10
k.s.f.	Saturday	1	0	0	1	13	16
Residential	Weekday AM	7	0	15	7	2	32
(DU)	Weekday Midday	4	0	9	4	1	19
44	Weekday PM	6	0	14	6	2	29
Dwelling units	Saturday	7	0	15	7	2	32
	Weekday AM	28	1	22	17	17	85
Total	Weekday Midday	5	1	11	7	35	60
No-Action	Weekday PM	8	1	21	17	16	63
	Saturday	10	1	17	9	16	53

Note:
Values may not add directly due to rounding

Table I-4: With-Action Condition Trip Generation Summary – Person Trips

With-Action Use	Peak Hour	Person Trips					
		Auto	Taxi	Subway/Rail	Bus	Walk	Total
Retail	Weekday AM	30	0	8	5	227	271
21.413	Weekday Midday	50	0	14	9	379	451
k.s.f.	Weekday PM	68	0	18	12	516	614
	Saturday	79	0	22	14	603	718
Residential (DU)	Weekday AM	68	5	150	69	23	315
432	Weekday Midday	41	3	90	42	14	190
Dwelling units	Weekday PM	62	4	137	63	21	288
	Saturday	69	5	151	70	23	316
	Weekday AM	98	5	158	75	250	586
Total	Weekday Midday	91	3	104	51	392	641
With-Action	Weekday PM	130	4	156	76	537	902
	Saturday	147	5	172	84	625	1,034

Note:
Values may not add directly due to rounding

Table I-5: With-Action Condition Trip Generation Summary – Net Increase in Person Trips

Incremental Person Trips	Peak Hour	Person Trips					
		Auto	Taxi	Subway/Rail	Bus	Walk	Total
Net Increase	Weekday AM	53	3	136	57	233	501
	Weekday Midday	57	1	92	44	357	581
	Weekday PM	84	2	134	58	521	839
	Saturday	92	3	156	75	609	980
Note: Values may not add directly due to rounding							

Traffic

Table I-6 and **Table I-7** present the vehicle trips that would be generated under the No-Action and With-Action Conditions. The net increase in vehicle trips due to the Proposed Project would be 68, 75, 89, and 98 during the weekday AM, midday, PM, and Saturday peak hours, respectively and are shown in **Table I-8**. Since the incremental vehicle trips would be greater than 50 vehicles during each peak hour, a Level 2 screening assessment was conducted to determine if a quantified traffic analysis is warranted.

Table I-6: No-Action Condition Trip Generation Summary – Vehicle Trips

No-Action Use	Peak Hour	Vehicle Trips			
		Auto	Taxi	Delivery	Total
Light Industrial	Weekday AM	18	0	2	21
(1,000 s.f.)	Weekday Midday	1	1	1	3
21.790	Weekday PM	1	0	0	1
k.s.f.	Saturday	2	0	0	2
Church	Weekday AM	0	0	0	1
(1,000 s.f.)	Weekday Midday	0	0	0	0
4.595	Weekday PM	0	0	0	0
k.s.f.	Saturday	0	0	0	1
Residential	Weekday AM	7	0	0	7
(DU)	Weekday Midday	4	0	0	4
44	Weekday PM	6	0	0	6
Dwelling units	Saturday	7	0	0	7
	Weekday AM	25	1	2	28
Total	Weekday Midday	5	1	2	8
No-Action	Weekday PM	7	1	0	8
	Saturday	9	0	0	10
Note: Values may not add directly due to rounding					

Table I-7: With-Action Condition Trip Generation Summary – Vehicle Trips

With-Action Use	Peak Hour	Vehicle Trips			
		Auto	Taxi	Delivery	Total
Retail	Weekday AM	14	0	12	26
21.413	Weekday Midday	24	0	17	40
k.s.f.	Weekday PM	32	0	3	35
	Saturday	38	0	2	39
Residential (DU)	Weekday AM	64	3	3	70
432	Weekday Midday	38	2	2	43
Dwelling units	Weekday PM	58	3	0	62
	Saturday	64	3	1	68
	Weekday AM	78	3	15	97
Total	Weekday Midday	62	2	19	83
With-Action	Weekday PM	91	3	4	97
	Saturday	102	3	3	108
Note: Values may not add directly due to rounding					

Table I-8: With-Action Condition Trip Generation Summary – Net Increase in Vehicle Trips

Incremental Vehicle Trips	Peak Hour	Person Trips			
		Auto	Taxi	Delivery	Total
Net Increase	Weekday AM	53	3	13	68
	Weekday Midday	57	1	17	75
	Weekday PM	84	2	3	89
	Saturday	92	3	3	98
Note: Values may not add directly due to rounding					

Transit

As shown in **Table I-5**, the incremental subway/rail trips generated by the Projected Development Sites would be 136, 92, 134, and 156 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. The incremental bus trips generated by the Projected Development Sites would be 57, 44, 58, and 75 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Since these increments do not exceed the *CEQR Technical Manual* Level 1 analysis threshold of 200 transit trips per hour, a detailed analysis of subway/rail and bus facilities is not warranted, and the Proposed Actions are not expected to result in any significant adverse subway/rail or bus impacts.

Pedestrians

Pedestrian trips include a combination of walk-only trips, plus walk trips to and from the transit elements, all of which would traverse the pedestrian elements (i.e., sidewalks, corners, and crosswalks) surrounding the project area. The net incremental pedestrian trips, which include walk-only and transit (subway/rail and bus) trips presented in **Table I-5** would be 427, 494, 713, and 839

during the weekday AM, midday, PM and Saturday peak hours, respectively. These increments are greater than the *CEQR Technical Manual* Level 1 screening threshold of 200 pedestrian trips per hour during every peak hour. Therefore, a Level 2 screening assessment was conducted to determine if there is a need for additional quantified pedestrian analyses.

LEVEL 2 SCREENING ASSESSMENT

As part of the Level 2 screening assessment, project-generated trips were assigned to specific intersections and pedestrian elements near the Project Area. As previously stated, further quantified analyses to assess the potential impacts of the Proposed Actions on the transportation system would be warranted if the trip assignments were to identify key intersections incurring 50 or more peak hour vehicle trips or pedestrian elements incurring 200 or more peak hour pedestrian trips.

Site Access

To date, architectural drawings are underway only for the first two Projected Development Sites:

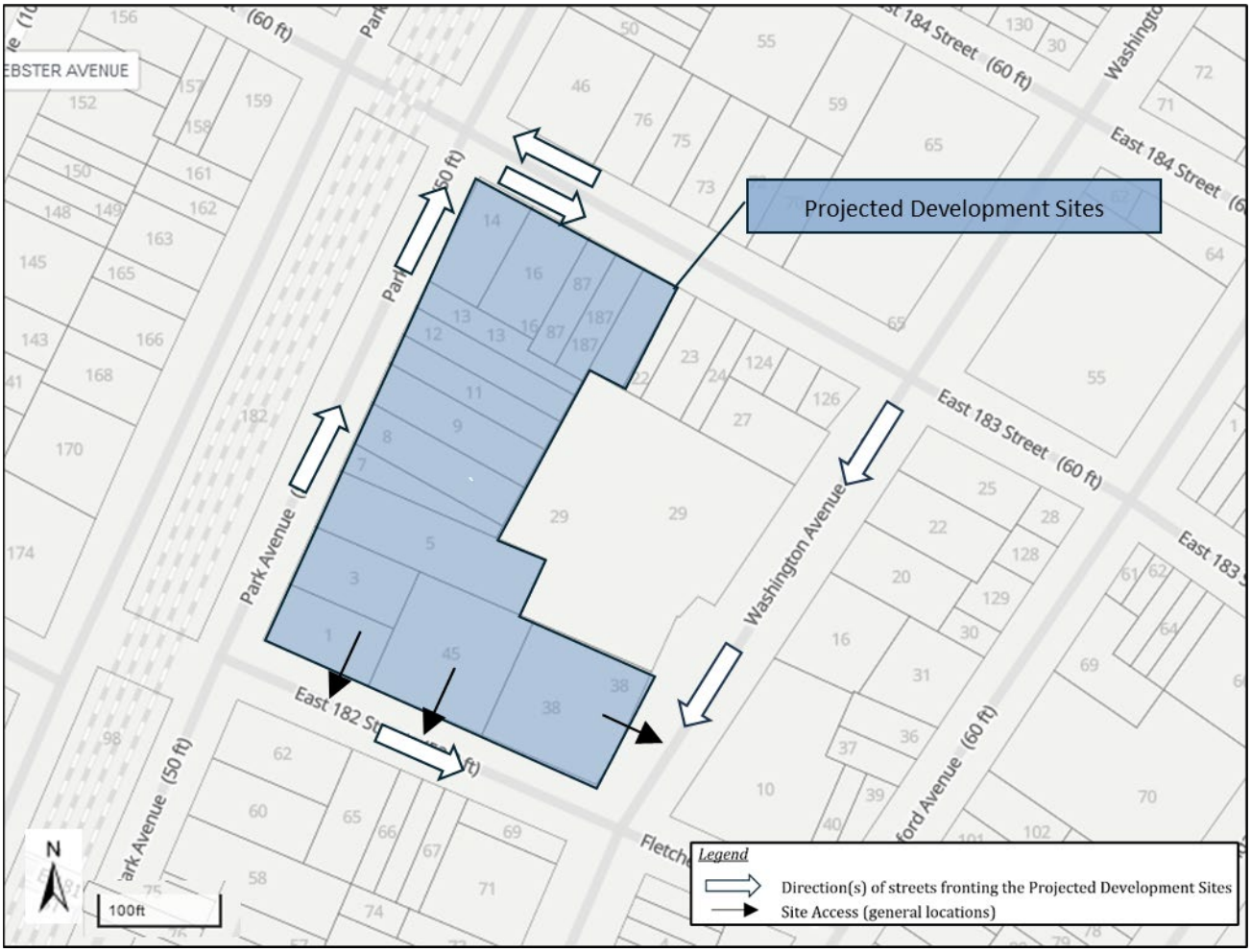
- Site 1 with 78 parking spaces; driveway on Park Avenue
- Site 2 with 22 parking spaces; driveway on E. 182nd Street

The remaining four Projected Development Sites are not currently under design. Based on the lot areas, these four sites could accommodate on-site parking, with driveway locations based on the location of each Site.

- Site 3: 6 parking spaces; a driveway on E. 182nd Street
- Site 4: 11 parking spaces; driveway on Park Avenue
- Site 5: 5 spaces; driveway on Park Avenue
- Site 6: 20 spaces; driveway on E. 183rd Street

A site access schematic is provided in **Figure I-2**.

Figure I-1: Site Access Schematic and Street Directions



Anticipated vehicle access and pedestrian doors will be situated along all three streets: E. 182nd Street between Park Avenue and Washington Avenue, E. 183rd Street between Park Avenue and Washington Avenue, and Park Avenue between E. 182nd Street and E. 183rd Street. E. 182nd Street is eastbound one-way; Park Avenue is one-way northbound, and E. 183rd Street is two-way. The anticipated vehicle trip assignments follow the one-way or two-way designations.

Traffic

As discussed in the Level 1 screening, the net incremental increases in vehicle trips are above the 50-per-hour threshold during each peak hour, with 68, 75, 89, and 98 trips during the weekday AM, Midday, PM, and Saturday midday peak hours, respectively. **Table I-9** presents the entry and exit splits, 53 vehicles per hour "in" and 45 "out", for the Saturday peak hour, which would have the highest number of net new vehicle trips (98 vehicles per hour).

Table I-9: Saturday Peak Hour Level 2 Screening Vehicle Trip Assignments, Entry/Exit Directional Splits

No-Action, Saturday	**Enter**	**Exit**	**Total**
Light Industrial	1	1	2
Residential	3	4	7
Church	0	0	1
Total No-Action	5*	5	10
With-Action, Saturday	**Enter**	**Exit**	**Total**
Retail	20	20	39
Residential	37	31	68
Total With-Action	57	50	108
Total Net Incremental	**Enter**	**Exit**	**Total**
Vehicles, Saturday	53*	45	98
Note: Values may not add directly due to rounding (denoted by *)			

The project-generated vehicle trips were then assigned through the local street network based on direct and logical routes to and from the project site driveways and regional destinations. **Figure I-3** depicts the net incremental trip generation at individual intersections for the Saturday peak hour, which would have the highest number of net new vehicle trips, 98 vehicles per hour. **Table I-10** provides the total increase in vehicle trips at each of the four closest intersections to the Projected Development Sites:

- Location 1: Park Avenue at E. 183rd Street
- Location 2: Park Avenue at E. 182nd Street
- Location 3: Washington Avenue at E. 183rd Street
- Location 4: Washington Avenue at E. 182nd Street

Based on this assessment, no intersection exceeds the *CEQR Technical Manual* 50 vehicle-trips-per-hour incremental threshold, and a detailed vehicular analysis is not needed.

Figure I-2: Vehicle Trip Assignments (Saturday Peak Hour)

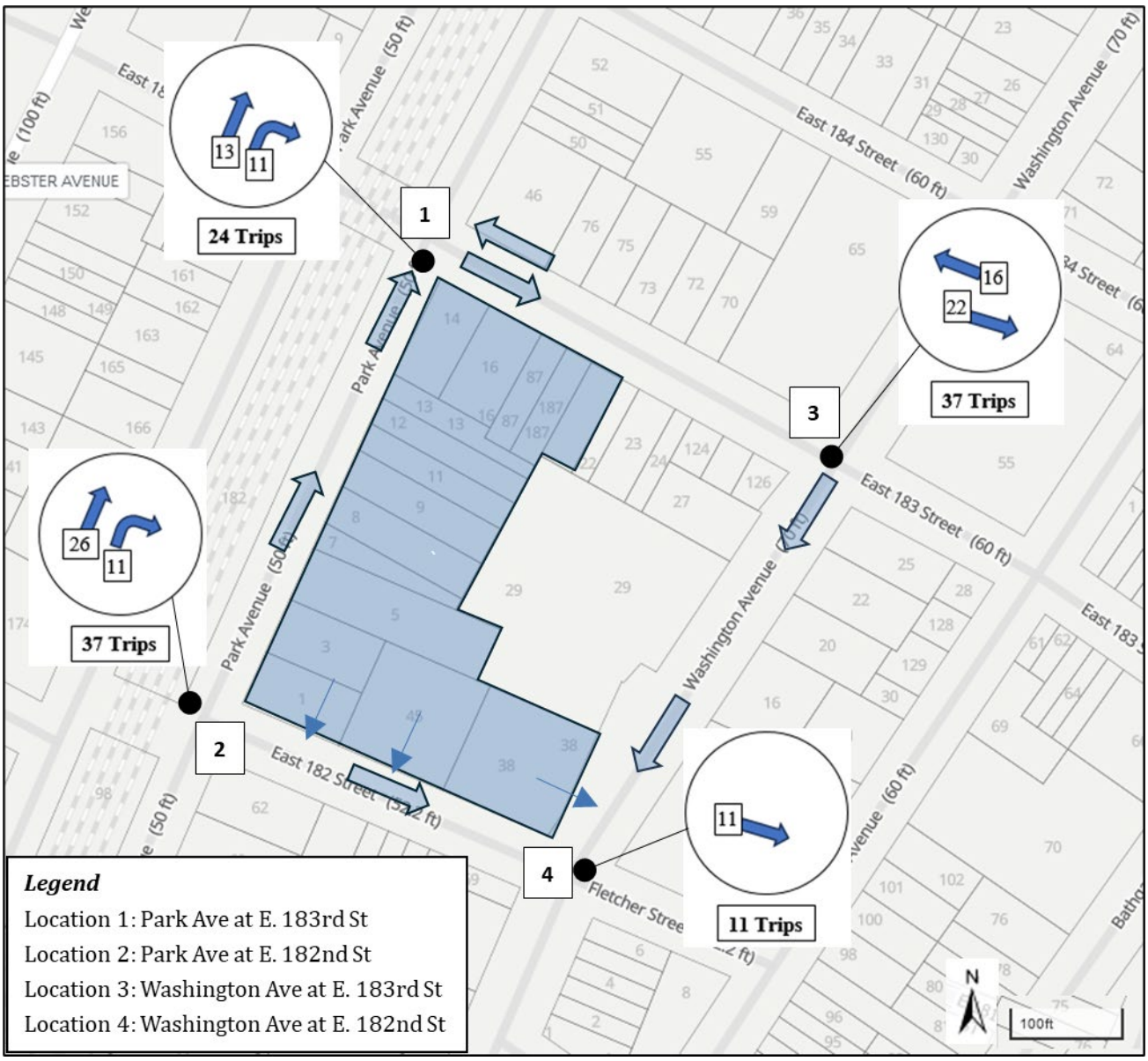


Table I-10: Vehicle Entry/Exit Assignments per Intersection (Saturday Peak Hour)

Location 1: Park Avenue at E. 183rd Street			Net New Vehicles per Intersection		
	Enter	Exit	Enter	Exit	Total
Northbound Through	0%	29%	0	13	24
Northbound Right	0%	24%	0	11	
Location 2: Park Avenue at E. 182nd Street			Net New Vehicles per Intersection		
	Enter	Exit	Enter	Exit	Total
Northbound Through	50%	0%	26	0	37
Northbound Right	20%	0%	11	0	
Location 3: Washington Avenue at E. 183rd Street			Net New Vehicles per Intersection		
	Enter	Exit	Enter	Exit	Total
Eastbound Through	0%	48%	0	22	37*
Westbound Through	30%	0%	16	0	
Location 4: Washington Avenue at E. 182nd Street			Net New Vehicles per Intersection		
	Enter	Exit	Enter	Exit	Total
Eastbound Through	0%	24%	0	11	11

Note:
*Totals may not add directly due to rounding (denoted by an asterisk *)*

Pedestrians

As discussed in the Level 1 screening, the net incremental increases in pedestrian trips, which include walk-only, subway/rail, and bus trips, are above the 50-per-hour threshold during each peak hour, with 427, 494, 713, and 839 trips during the respective weekday AM, Midday, PM, and Saturday midday peak hours. **Table I-11** presents the entry and exit splits, 415 pedestrians per hour "in" and 424 "out", for the Saturday peak hour, which would have the highest number of net new pedestrian trips 839 pedestrians per hour).

Table I-11: Saturday Peak Hour Level 2 Screening Pedestrian Trip Assignments, Entry/Exit Directional Splits

No-Action, Saturday	**Enter**	**Exit**	**Total**
Light Industrial	1	1	3
Residential	14	11	25
Church	7	8	15
Total No-Action	22	20	42*
With-Action, Saturday	**Enter**	**Exit**	**Total**
Retail	319	320	639
Residential	118	125	243
Total With-Action	437	445	881*
Total Net Incremental Vehicles, Saturday	**Enter**	**Exit**	**Total**
	415	424	839

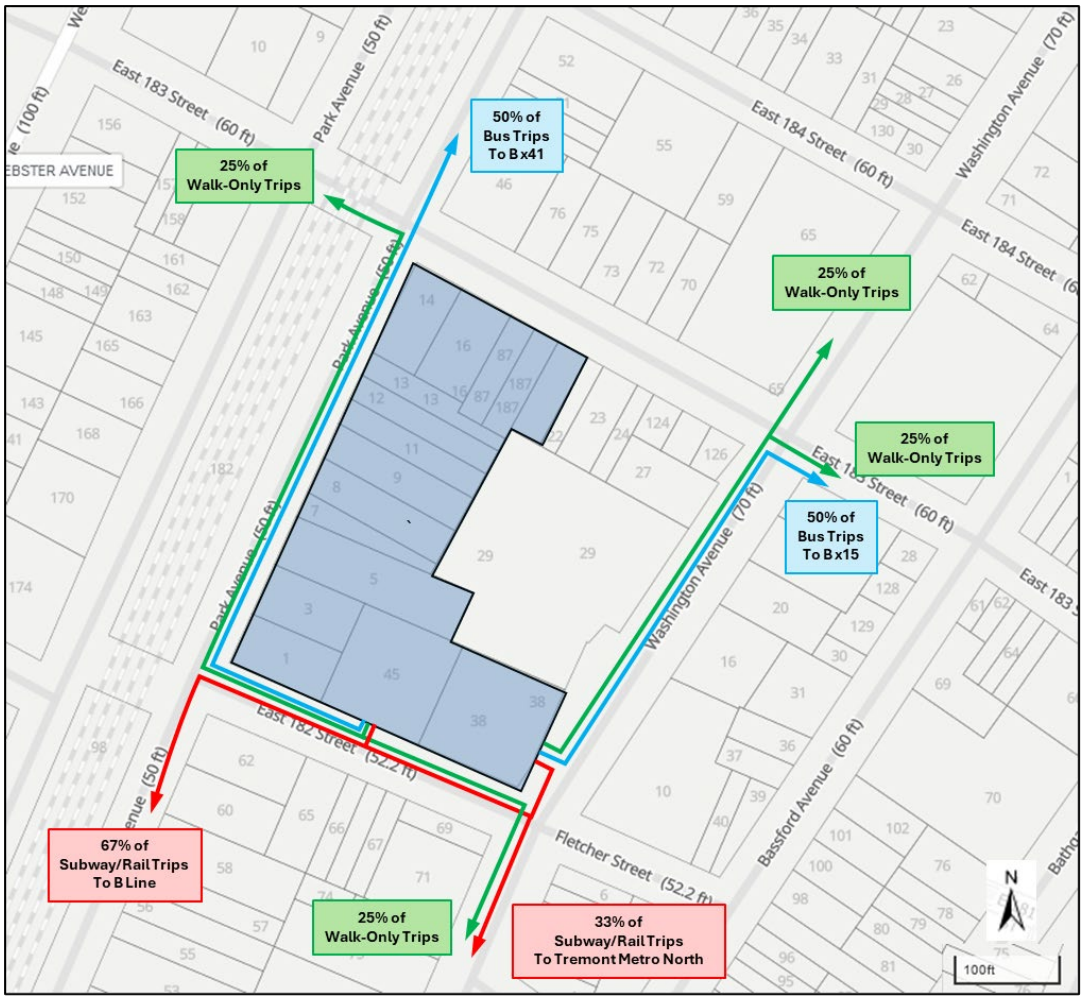
Notes:
Includes walk-only, subway/rail, and bus trips
Values may not add directly due to rounding (denoted by *)

The project-generated pedestrian trips were assigned through the local street network based on direct and logical routes. Whereas vehicles must obey a one-way street designation, pedestrians can walk in any direction and are generally expected to follow the same routes to exit or return to the Projected Development Sites. Walk-only trips were distributed fairly evenly in each direction to and from the Projected Development Sites and various regional destinations. Notable destinations in the surrounding area, along with multiple commercial establishments, include but are not limited to:

- St. Barnabas Hospital on 3rd Avenue to the east
- Community School and P.S. 59 on Bathgate Avenue to the east
- I.S. 391 on Park Avenue to the northwest
- M.S. 321 and P.S. 163 on Webster Avenue to the southwest

Bus and subway/rail trips were assigned along specific routes to the nearest transit stations. The nearest B train subway station is at Grand Concourse and 182-183 Street. The nearest rail stations are the Fordham and Tremont stops on the Metro North line; since Fordham is the end of the rail branch, most riders from this site would likely choose to get on at the Tremont station located at the intersection of Park Avenue and E. 177 Street. The two closest bus stops are the Bx41 stop, one block west of the site at Webster Avenue and E. 183 Street, and the Bx15 stop, three blocks east of the site at Third Avenue and E. 182 Street. **Figure I-4** presents the pedestrian trip distribution percentages used in the assessment.

Figure I-4: Pedestrian Trip Distribution Percentages



Saturday and weekday PM peak hours, the two peak hours that generated the highest number of pedestrian trips (839 and 713 pedestrians per hour), were considered for Level 2 screening.

Saturday Peak Hour Pedestrian Assignments

Table I-12 and **Figure I-5** present the net Saturday peak hour pedestrian increment trips for walk-only, subway/rail, and bus trips, as well as the assignment percentage and increment breakdowns in each direction surrounding the Projected Development Sites.

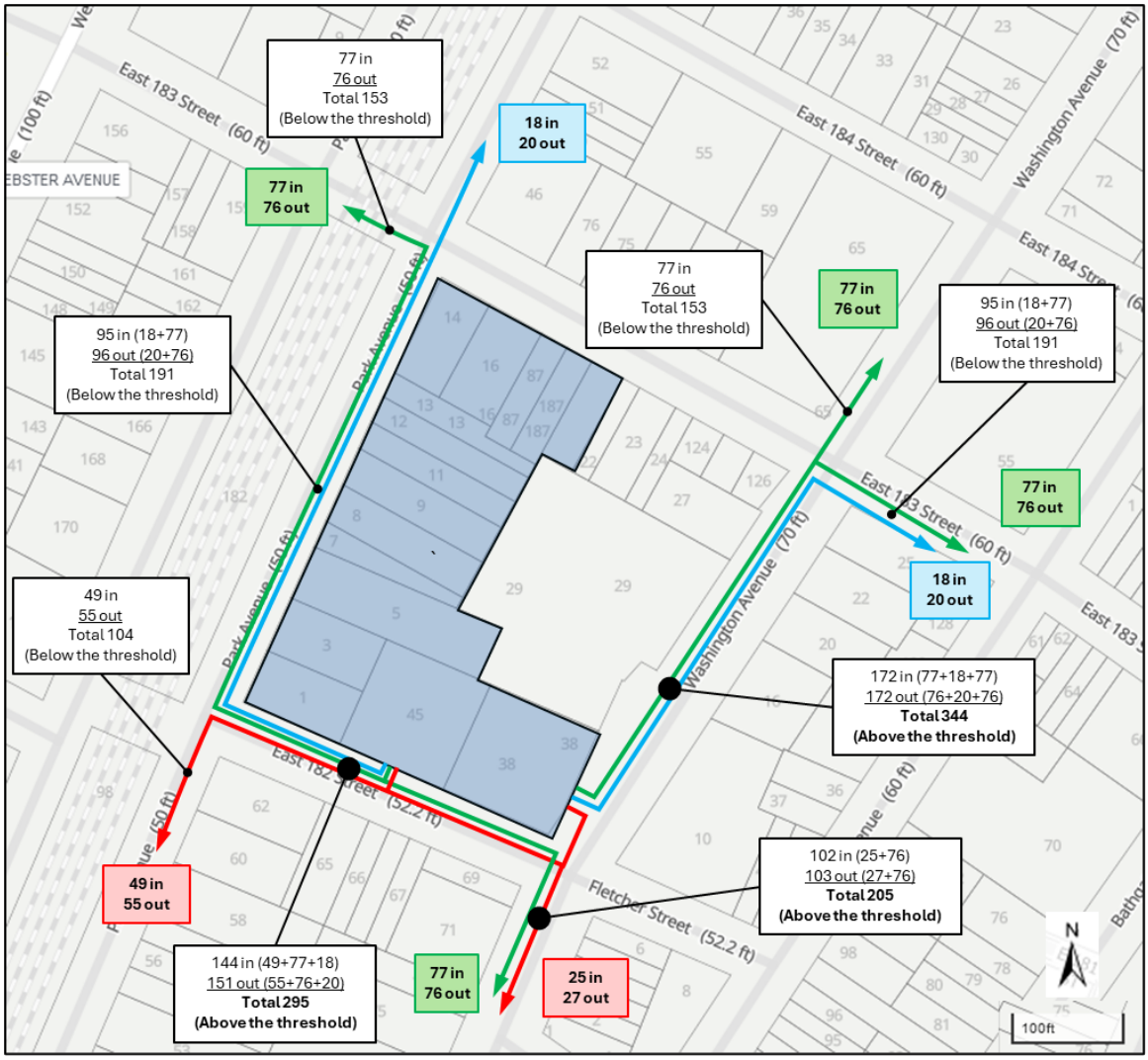
Table I-12: Saturday Peak Hour Pedestrian Net Increments by Mode

Pedestrians		
Enter	Exit	Total
306	303	609

Subway/Rail		
Enter	Exit	Total
74	82	156

Bus		
Enter	Exit	Total
35	39	74

Figure I-5: Saturday Peak Hour Pedestrian Trip Assignments



Based on this assessment, three pedestrian elements result in pedestrian increments higher than the 200 pedestrian-per-hour threshold during the Saturday peak hour:

1. The sidewalk on the west side of Washington Avenue, along the building frontage, between E. 182 Street and E. 183 Street (344 pedestrians)
2. The sidewalk on the west side Washington Avenue, south of E. 182 Street/Fletcher Street (205 pedestrians)
3. The sidewalk on the north side of E. 182 Street in front of the building (295 pedestrians)

These three pedestrian elements exceed the CEQR Level 2 screening thresholds and were therefore advanced for detailed level of service ("LOS") analyses for the Saturday peak hour.

Weekday PM Peak Hour Pedestrian Assignments

Table I-13 and **Figure I-6** present the net weekday PM peak hour pedestrian increment trips for walk-only, subway/rail, and bus trips, as well as the assignment percentage and increment breakdowns in each direction surrounding the Projected Development Sites.

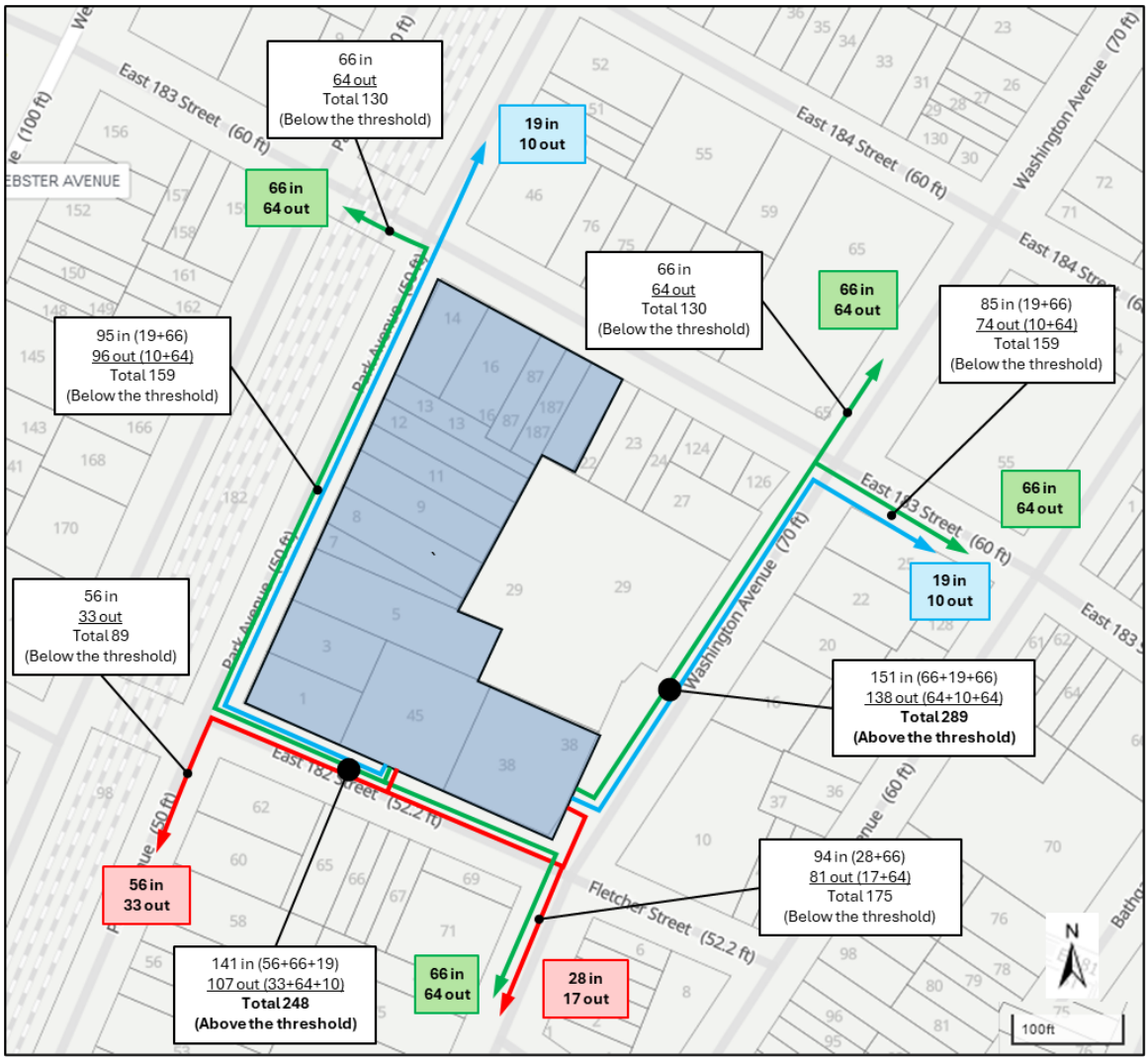
Table I-13: Weekday PM Peak Hour Pedestrian Net Increments by Mode

Pedestrians		
Enter	Exit	Total
264	256	521

Subway/Rail		
Enter	Exit	Total
84	50	134

Bus		
Enter	Exit	Total
39	19	58

Figure I-6: Weekday PM Peak Hour Pedestrian Trip Assignments



Based on this assessment, two pedestrian elements result in pedestrian increments higher than the 200 pedestrian-per-hour threshold during the weekday PM peak hour:

1. The sidewalk on the west side of Washington Avenue, along the building frontage, between E. 182 Street and E. 183 Street (289 pedestrians)
2. The sidewalk on the north side of E. 182 Street in front of the building (248 pedestrians)

These two pedestrian elements exceed the CEQR level 2 screening thresholds and were therefore advanced for detailed LOS analyses for the weekday PM peak hour.

DETAILED PEDESTRIAN ANALYSIS

Methodology

The Level 1 and Level 2 screening assessments showed that detailed pedestrian analyses are needed for sidewalk locations near the Projected Development Sites. Pedestrian LOS was evaluated based on the methodologies outlined in the *CEQR Technical Manual* and 2010 Highway Capacity Manual. Pedestrian LOS thresholds for platoon flow, as defined by the *CEQR Technical Manual*, are presented below in **Table I-14**.

LOS is determined based on walking speed, pedestrian spacing, and probabilities of pedestrian contact with a vehicle and is based on the space needs of people along walking paths, such as along sidewalks, crosswalks and street corners to and from the Projected Development Sites.

To evaluate sidewalks that were determined to be key locations during the Level 2 screening assessment, pedestrian LOS, in the form of pedestrian [space square feet per person (ft^2/p)], is determined based on pedestrian volumes, peak hour factors, the effective sidewalk width, and average free-flow walking speed.

The effective sidewalk width includes the total sidewalk width, minus obstructions and their shy distance (distance away from an obstruction that cannot be used effectively by pedestrians). Typical shy distances were obtained from the *CEQR Technical Manual* Transportation Appendix.

Average free-flow pedestrian walking speeds typically depend on the population; the proportion of seniors and children who access the area impacts walking speeds. Average walking speeds can range from 4.4 feet per second (ft/s) with a senior population of less than 20%, to 3.3 ft/s or less if the walkway carries many children (i.e. near a school, park etc.) or is in a Senior Pedestrian Focus Area (SPFA). The intersections within the study area are not within an SPFA and do not carry a disproportionate number of children, and therefore the average walking speed was conservatively assumed to be 3.5 ft/s.

Table I-14: Pedestrian Sidewalk/Walkway LOS (Platoon Flow)

LOS	Pedestrian Space Threshold (ft^2/p)
A	> 530.1
B	90.1 – 530.0
C	40.1 – 90.0
D	23.1 – 40.0
E	11.1 – 23.0
F	≤ 11.0

Significant Impact Criteria

Pedestrian LOS grades, as shown in **Table I-15**, are assigned from A to F, with LOS A representing free flow conditions without pedestrian conflicts, LOS D representing restricted slow conditions where pedestrians are unable to choose their free flow walking speed, and LOS F which typically results in movement that is difficult or impossible. Mid-LOS D or better in Central Business District ("CBD") areas is generally considered acceptable because pedestrians are typically acclimated to more congested conditions. Outside of CBD areas, such as the areas surrounding the Projected Development Sites, LOS C or better is typically considered acceptable. If pedestrian space under the With-Action conditions deteriorate to LOS D or worse, the *CEQR Technical Manual* provides a sliding scale of impact criteria bared on the reduction in available pedestrian space from No-Action to With-Action conditions:

- If the average pedestrian space under the No-Action condition is greater than or equal to 44.3 ft^2/p
    - Then a reduction in average pedestrian space under the With-Action condition to 40.0 ft^2/p or less (LOS D or worse) should be considered a significant impact.
    - If the average pedestrian space under the With-Action condition is greater than or equal to 40.1 ft^2/p (LOS C or better), the impact should not be considered significant.
- If the average pedestrian space under the No-Action condition is between 6.4 and 44.2 ft^2/p inclusive, then a reduction in pedestrian space under the With-Action condition should be considered significant using a sliding scale formula [presented in **Table I-15** for non-CBD locations].
- If the reduction in average pedestrian space is less than the value [in **Table I-15**], the impact should not be considered significant.
- If the average pedestrian space under the No-Action condition is less than or equal to 6.3 ft^2/p, then a reduction in pedestrian space greater than or equal to 0.3 ft^2/p should be considered significant.

Table I-15: Significant Impact Guidance for Sidewalks Non-CBD Location

No-Action Condition Pedestrian Space (ft^2/p)	**With-Action Condition Pedestrian Space Reduction to be Considered a Significant Impact (ft^2/p)**
≥ 44.3	With-Action Condition ≤ 40.0
43.5 to 44.2	Reduction ≥ 4.3
42.5 to 43.4	Reduction ≥ 4.2
41.6 to 42.4	Reduction ≥ 4.1
40.6 to 41.5	Reduction ≥ 4.0
39.7 to 40.5	Reduction ≥ 3.9
38.7 to 39.6	Reduction ≥ 3.8
37.8 to 38.6	Reduction ≥ 3.7
36.8 to 37.7	Reduction ≥ 3.6
35.9 to 36.7	Reduction ≥ 3.5
34.9 to 35.8	Reduction ≥ 3.4
34.0 to 34.8	Reduction ≥ 3.3
33.0 to 33.9	Reduction ≥ 3.2
32.1 to 32.9	Reduction ≥ 3.1
31.1 to 32.0	Reduction ≥ 3.0
30.2 to 31.0	Reduction ≥ 2.9
29.2 to 30.1	Reduction ≥ 2.8
28.3 to 29.1	Reduction ≥ 2.7
27.3 to 28.2	Reduction ≥ 2.6
26.4 to 27.2	Reduction ≥ 2.5
25.4 to 26.3	Reduction ≥ 2.4
24.5 to 25.3	Reduction ≥ 2.3
23.5 to 24.4	Reduction ≥ 2.2
22.6 to 23.4	Reduction ≥ 2.1
21.6 to 22.5	Reduction ≥ 2.0
20.7 to 21.5	Reduction ≥ 1.9
19.7 to 20.6	Reduction ≥ 1.8
18.8 to 19.6	Reduction ≥ 1.7
17.8 to 18.7	Reduction ≥ 1.6
16.9 to 17.7	Reduction ≥ 1.5
15.9 to 16.8	Reduction ≥ 1.4
15.0 to 15.8	Reduction ≥ 1.3
14.0 to 14.9	Reduction ≥ 1.2
13.1 to 13.9	Reduction ≥ 1.1
12.1 to 13.0	Reduction ≥ 1.0
11.2 to 12.0	Reduction ≥ 0.9
10.2 to 11.1	Reduction ≥ 0.8
9.3 to 10.1	Reduction ≥ 0.7
8.3 to 9.2	Reduction ≥ 0.6
7.4 to 8.2	Reduction ≥ 0.5
6.4 to 7.3	Reduction ≥ 0.4
≤ 6.3	Reduction ≥ 0.3

Existing Conditions

Pedestrian counts were conducted at the following analysis locations identified during the Level 1 and Level 2 screening in April 2025:

1. The sidewalk on the west side of Washington Avenue, along the building frontage, between E. 182 Street and E. 183 Street (Saturday and weekday PM peak periods)
2. The sidewalk on the west side Washington Avenue, south of E. 182 Street/Fletcher Street (Saturday peak period)
3. The sidewalk on the north side of E. 182 Street in front of the building (Saturday and weekday PM peak periods)

Peak hours were selected for analysis based on the peak collected volumes and were determined to be Saturday from 1:45-2:45 PM and weekday from 4:30-5:30 PM.

Existing peak hour pedestrian volumes are presented in **Figure I-7**. All pedestrian elements analyzed would operate at acceptable LOS A during the Saturday and weekday PM peak hours, as shown in **Table I-16**.

Figure I-7 Existing Pedestrian Volumes – Saturday (Weekday PM) Peak Hours

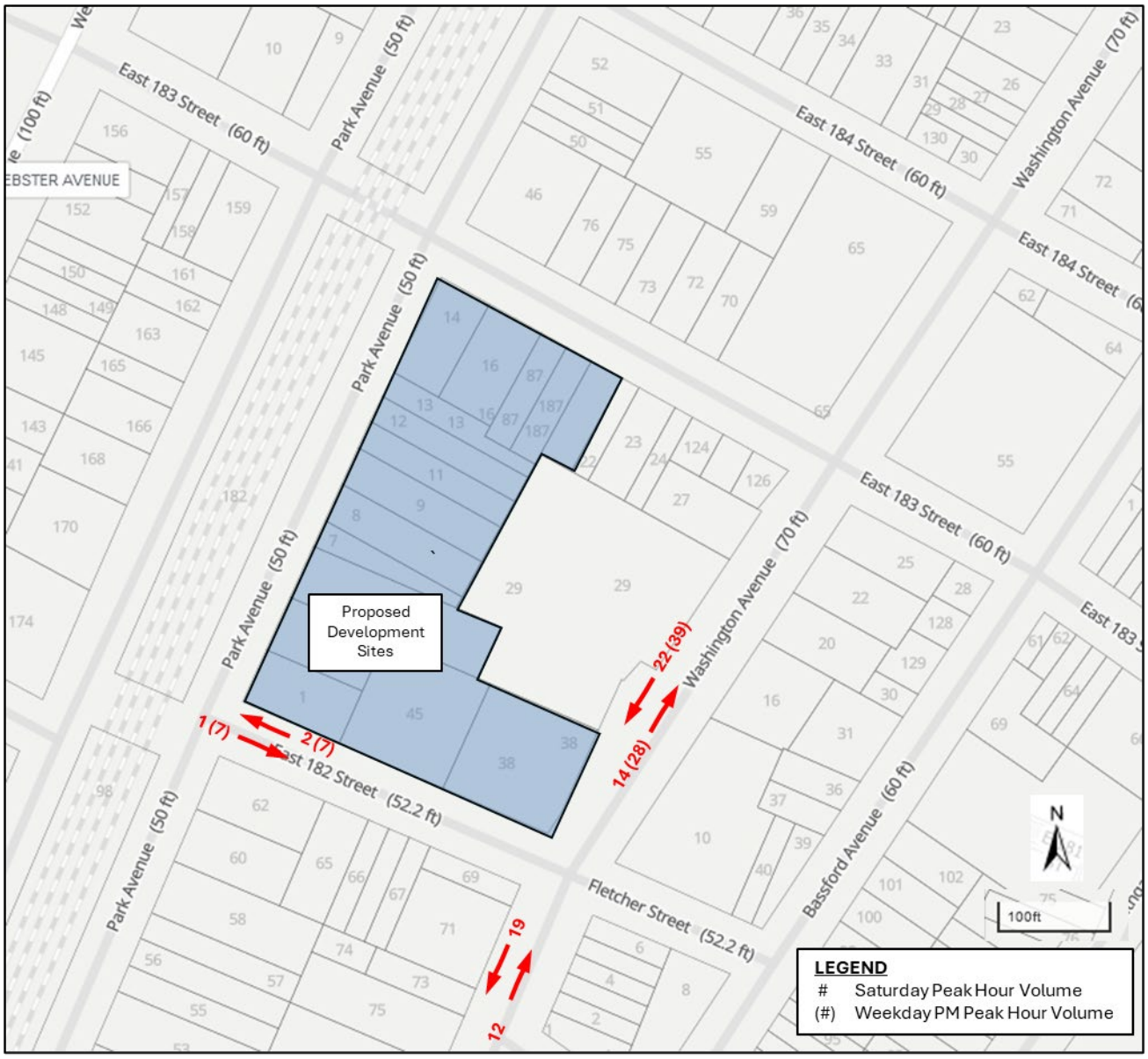


Table I-16: Existing Pedestrian Levels of Service

Sidewalk	Effective Width (ft)	Saturday Peak Hour			Weekday PM Peak Hour		
		Volume (ped/hr)	Avg Ped Space (ft^2/p)	LOS (Platoon)	Volume (ped/hr)	Avg Ped Space (ft^2/p)	LOS (Platoon)
W side of Washington Ave btwn E. 182 St & E. 183 St	4.2	36	1094.6	A	67	627.3	A
W side Washington Ave, S of E. 182 St/Fletcher St	6.6	31	2300.0	A	-	-	-
N side of E. 182 St	2.6	3	4117.7	A	14	2043.3	A

No-Action Condition

The No-Action conditions are established to provide a baseline to compare the With-Action conditions against to identify potential impacts that may be caused by the Proposed Project. No-Action conditions are typically developed through a combination of background growth and potential increases in volumes due to nearby No-Action projects and as-of-right developments. To estimate background growth, existing volumes were grown by 0.25 percent, compounded annually for four years (2025 to 2029) following the *CEQR Technical Manual* recommendations for projects in the Bronx. Under No-Action conditions, it is anticipated that there would be an increase in dwelling units (44) at the project site and a reduction in manufacturing (light industrial) use. Increments were developed for these sites and assigned to the pedestrian network. The background growth and No-Action increments were combined to generate No-Action total volumes as shown in **Figure I-8**. All pedestrian elements analyzed would operate at acceptable LOS A during the Saturday and weekday PM peak hours, as shown in **Table I-17**.

Figure I-8: No-Action Pedestrian Volumes – Saturday (Weekday PM) Peak Hours

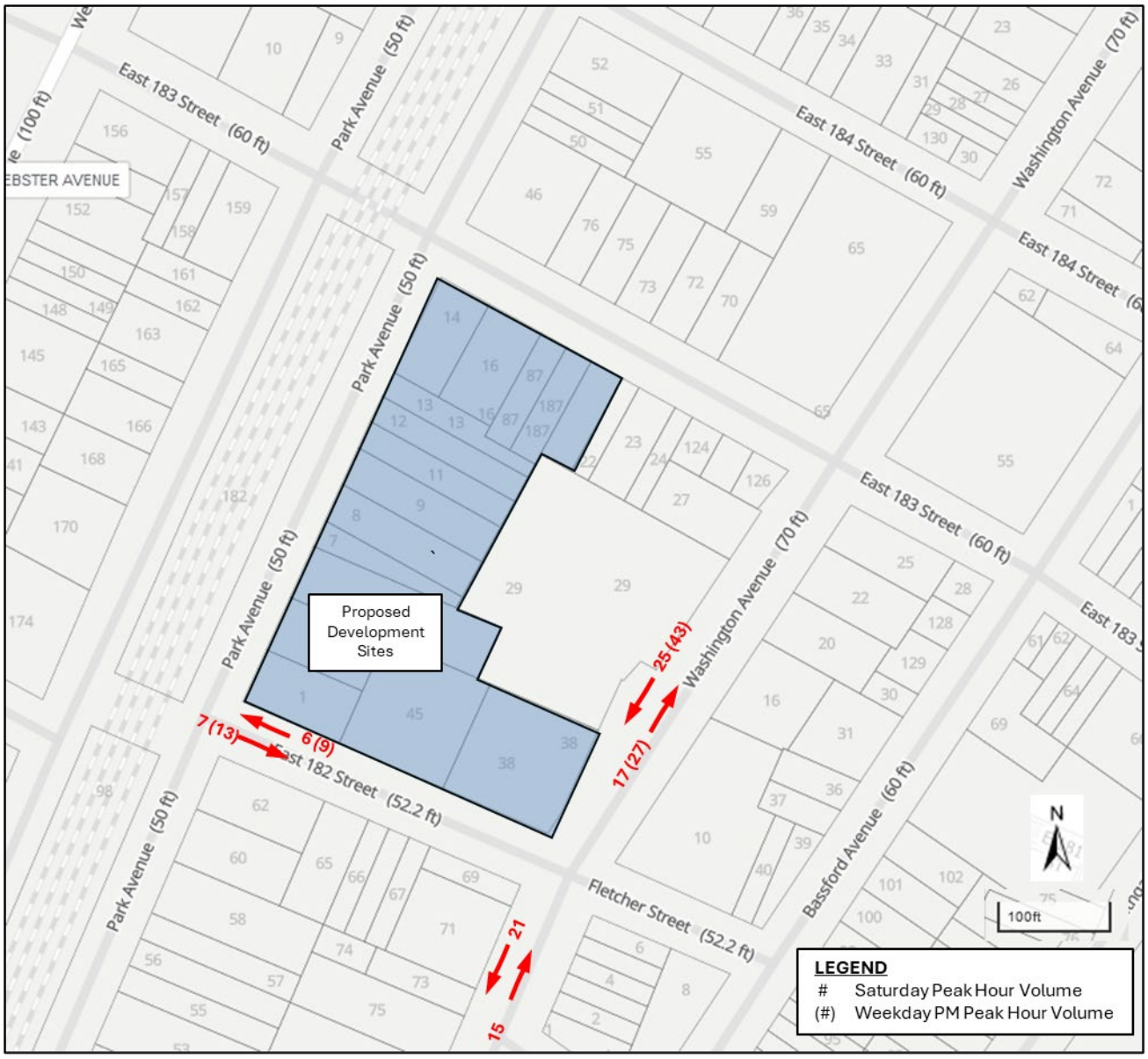


Table I-17: No-Action Pedestrian Levels of Service

Sidewalk	Effective Width (ft)	Saturday Peak Hour			Weekday PM Peak Hour		
		Volume (ped/hr)	Avg Ped Space (ft^2/p)	LOS (Platoon)	Volume (ped/hr)	Avg Ped Space (ft^2/p)	LOS (Platoon)
W side of Washington Ave btwn E. 182 St & E. 183 St	4.2	42	938.2	A	70	600.4	A
W side Washington Ave, S of E. 182 St/Fletcher St	6.6	36	1980.6	A	-	-	-
N side of E. 182 St	2.6	13	950.2	A	22	1300.3	A

With-Action Condition

The net increase in Proposed Project increments established during the Level 2 screening were added to the No-Action volumes at the analyzed intersections. Total With-Action pedestrian volumes for the Saturday and weekday PM peak hours are presented in **Figure I-9**. Pedestrian analyses were performed for the With-Action condition and results are provided in **Table I-18**. Under With-Action conditions, all analyzed intersections in the Saturday and weekday PM peak hours would operate at acceptable LOS C or better.

Based on these With-Action results, no significant impacts to pedestrian elements are expected to occur as a result of the Proposed Project.

Figure I-9: With-Action Pedestrian Volumes – Saturday (Weekday PM) Peak Hours

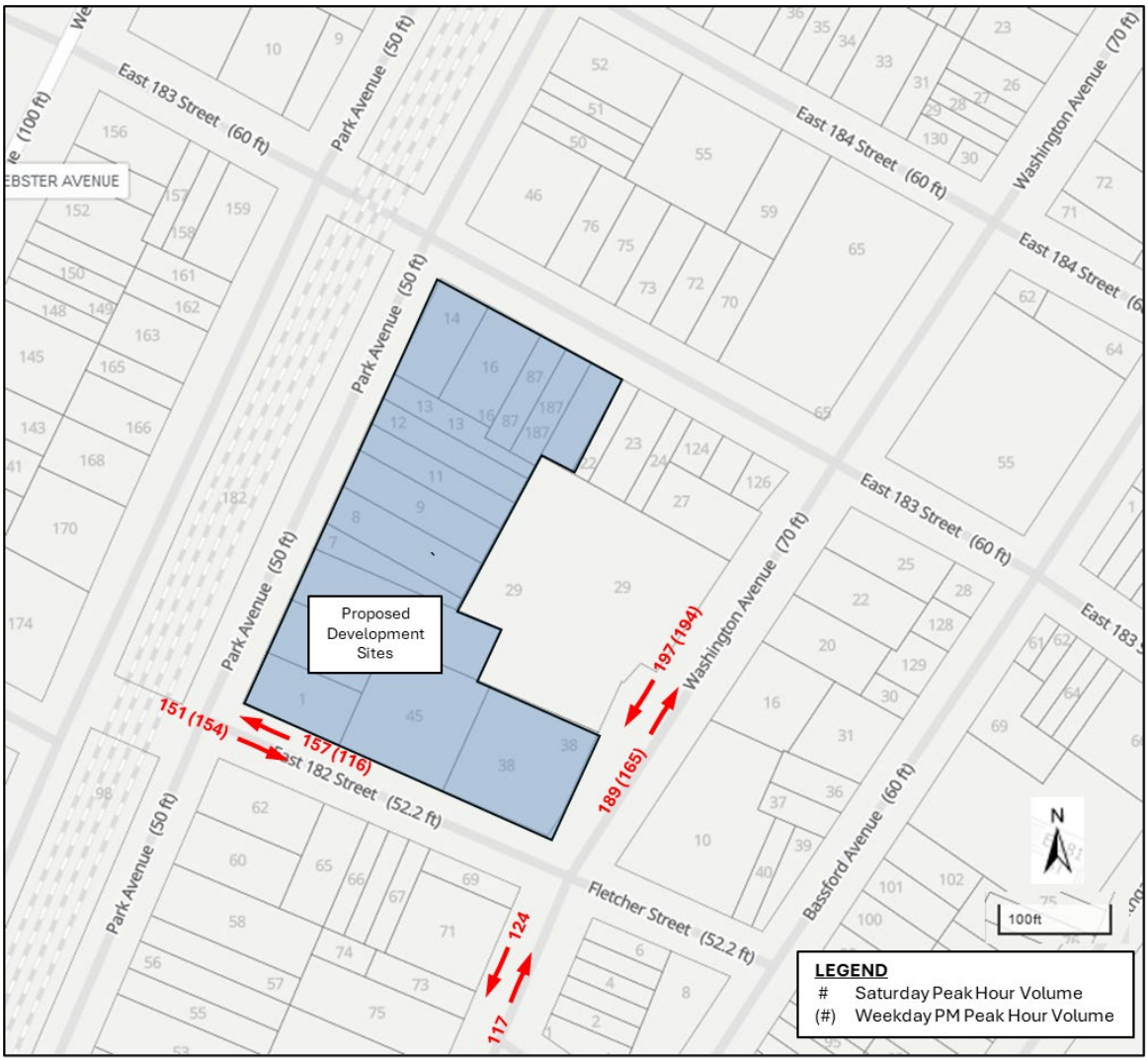


Table I-18: With-Action Pedestrian Levels of Service

Sidewalk	Effective Width (ft)	Saturday Peak Hour			Weekday PM Peak Hour		
		Volume (ped/hr)	Avg Ped Space (ft^2/p)	LOS (Platoon)	Volume (ped/hr)	Avg Ped Space (ft^2/p)	LOS (Platoon)
W side of Washington Ave btwn E. 182 St & E. 183 St	4.2	386	101.8	B	359	116.8	B
W side Washington Ave, S of E. 182 St/Fletcher St	6.6	241	295.7	B	-	-	-
N side of E. 182 St	2.6	308	78.7	C	270	105.6	B

CONCLUSION

Vehicular and transit volumes were assessed through Level 1 and 2 screenings, as needed to determine whether they exceeded *CEQR Technical Manual* screening thresholds. Under the proposed project, the screening thresholds were not met, and no detailed analysis was required for further evaluation. There are no significant adverse impacts expected for vehicular and transit elements due to the Proposed Project.

The Proposed Project would generate pedestrian volumes which exceed the *CEQR Technical Manual* thresholds of 200 pedestrians per hour at three pedestrian sidewalk elements. A detailed pedestrian analysis was performed at those three sidewalk locations during the Saturday peak hour and at two of the locations during the weekday PM peak hour. Analysis results indicate that the sidewalk elements would operate at acceptable LOS under the Proposed Project, and therefore no significant adverse impacts related to pedestrians are anticipated as a result of the project.

Overall, the Proposed Actions would have no significant adverse impacts on the transportation system, and no further assessment is necessary.

ATTACHMENT J: AIR QUALITY

INTRODUCTION

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources;" by fixed facilities, usually referenced as "stationary sources;" or by a combination of both. Under CEQR, an air quality assessment determines both a proposed project's effects on ambient air quality and the effects of ambient air quality on the project.

As described in Attachment A: "Project Description," the Applicant seeks approval for a zoning map amendment to change the Proposed Rezoning Area from M1-1 and R6A zoning districts to R7X and R7A districts with C2-4 commercial overlays, and a zoning text amendment to establish a mandatory inclusionary housing area to facilitate new mixed-use development, including affordable housing. The Proposed Rezoning Area comprises Lots 1, 3, 7, 8, 9, 11, 12, 13, 14, 16, 87, 187, and p/o 5, p/o 20, p/o 29, and p/o 45 on Block 3038, and is bounded by East 183rd Street to the north, Park Avenue to the west, East 182nd St to the south, and Washington Avenue to the east. Approval of the Proposed Actions would facilitate new residential and commercial development currently not permitted in the M1-1. The With-Action Condition contemplates future development on six (6) Projected Development Sites.

- Projected Development Site 1 (Lots 5, 7, 8, 9, & 11) would be developed with a 14-story (145 ft), approximately 192,379 gsf mixed-use building, comprising 4,500 gsf of commercial space and 187,879 gsf of residential space with 179 dwelling units. Approximately 67 accessory off-street parking spaces would be provided.

- Projected Development Site 2 (Lots 38 and 45) would be developed with 9-story (95 ft), approximately 137,689 gsf residential building, comprising 5,413 gsf of commercial space and 132,276 gsf of residential space with 129 dwelling units. Approximately 49 accessory off-street parking spaces would be provided.

- Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft), approximately 38,120 gsf mixed use building, comprising 3,000 gsf of commercial space and 35,120 gsf of residential space 25 dwelling units.

- Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf mixed-use building comprising 2,000 gsf of commercial space and 48,894 gsf of residential space with 36 dwelling units.

- Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf mixed-use building comprising 2,500 gsf of commercial space and 30,300 gsf of residential space with 22 dwelling units.

- Projected Development Site 6 (Lots 20, 87, and 187) would be developed with an 11-story (115 ft), approximately 58,471 gsf mixed-used building comprising 4,000 gsf of commercial space and 54,471 gsf of residential space with 41 dwelling units.

The Projected Development Sites are anticipated to use fossil fuel(s) for heating/hot water, ventilation, and air conditioning ("HVAC") systems and would be located within 1,000 feet of major air emission sources. As such, stationary source analyses were conducted to evaluate the development HVAC stack(s) emissions effects on ambient air quality, and the effects of ambient air quality associated with existing major sources within 1,000 feet of the Directly Affected Area.

This chapter discusses potential impacts to air quality as a result of the Proposed Actions. The air quality analyses are concerned with both mobile source and stationary source impacts, as follows:

- The potential for traffic volumes and a redistribution of traffic associated with the Proposed Actions (along with the inclusion of new parking garages) to result in significant mobile source air quality impacts;

- The potential for emissions from the HVAC systems of the projected Development Site buildings to result in stationary source pollutants that would significantly impact existing land uses;

- The potential for emissions from the HVAC systems of individual projected Development Site buildings to result in stationary source pollutants that would significantly impact other proposed buildings; and

- The potential for emissions from existing stationary sources of pollution from large-scale air emission sources to result in significant impacts on the Proposed Actions.

These air quality analyses are conducted per the guidance of the *CEQR Technical Manual*, as well as other relevant guidance and protocols provided by New York State Department of Environmental Conservation ("NYSDEC"), New York City Department of Environmental Protection ("NYCDEP"), and United States Environmental Protection Agency ("USEPA"). As appropriate, applicable environmental reports for other nearby projects have been reviewed. In addition, the air quality characteristics of the Proposed Actions are identified and discussed within the context of the Clean Air Act ("CAA") requirements and other applicable state and local air quality standards.

The air quality analysis determined that both the Proposed Actions effects on ambient air quality and the effects of ambient air quality on the Proposed Actions would not result in significant adverse air quality impacts. A summary of the analysis is presented below.

PRINCIPAL CONCLUSIONS

Air quality analyses addressed mobile sources, parking facilities, stationary HVAC systems, and industrial and large emission sources in the surrounding community. Based on the information and analyses provided in this chapter, no significant adverse impacts are projected for air quality due to the Proposed Actions. The analyses conclude that the Proposed Actions would not result in any significant adverse air quality impacts on sensitive uses in the surrounding community, and would not be adversely affected by existing sources of air emissions in the project area and surrounding vicinity.

The stationary source analyses determined that there would be no potential significant adverse air quality impacts from fossil fuel-fired HVAC systems at the Projected Development Sites. An (E) designation would be mapped on the project area tax lots as part of the zoning proposal to ensure the developments would not result in any significant air quality impacts from fossil fuel-fired HVAC emissions due to individual or groups of development sites. These would include fuel type restrictions and stack location restrictions for some buildings.

An industrial source analysis determined that the Proposed Actions would not result in any significant adverse air quality impacts related to the introduction of the sensitive uses (i.e., residences) to the project area.

As the Proposed Actions would not exceed the analysis screening thresholds for mobile sources, detailed analysis is not required, and the Proposed Actions would not result in significant adverse impacts related to those concerns. The parking facilities assumed to be developed as a result of the Proposed Actions would not result in any significant adverse air quality impacts.

POLLUTANTS OF CONCERN

USEPA has identified several criteria pollutants as being of concern nationwide. Currently, the USEPA and the NYSDEC enforce ambient air quality standards for the following seven pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than 2.5 microns ($PM_{2.5}$), ozone (O_3) (which is controlled through limiting of nitrogen oxides (NO_x) and volatile organic carbon (VOC) emissions), and lead (Pb). USEPA has established the National Ambient Air Quality Standards (NAAQS) for all of these criteria pollutants and has categorized these standards as "primary" and "secondary." Primary standards are designed to establish limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. In addition to criteria pollutants, emissions of air toxics are also of concern and are briefly discussed below.

Carbon Monoxide

CO is a colorless, odorless gas, which is primarily formed by incomplete combustion of carbon-containing fuels and by photochemical reactions in the atmosphere. Nationally, particularly in urban areas, the majority of CO emissions to ambient air come from mobile sources. Because CO disperses quickly, its concentrations may vary greatly over relatively short distances. Impacts from mobile sources are localized and can cause elevated concentrations within a relatively short distance from heavily traveled traffic light signals and intersections. Elevated concentrations are usually limited to locations near congested intersections and along heavily traveled and congested roadways. Consequently, it is appropriate to focus on CO emissions from motor vehicles on a localized or microscale basis. Emissions of CO could increase as a result of a project related increase in vehicle volumes and the potential parking facilities in the study area. As a result, concentrations of CO are evaluated on a local, or microscale, basis.

Nitrogen Dioxide, VOC, and Ozone

Nitrogen oxides (NO_x) are emitted from both mobile and stationary sources. Nitric Oxide (NO) accounts for approximately 90% of the total oxidized nitrogen emitted. In the atmosphere, and in the presence of sunlight, NO reacts with ozone (O_3), mainly forming nitrogen dioxide (NO_2). Ground-level ozone is formed when VOCs, also known as hydrocarbons, and NO_x interact in the presence of sunlight. Because the reactions are slow and occur as the pollutants are transported downwind, elevated ozone levels are often found many miles from the sources of the precursor pollutants. Because the chemical reactions that form O_3 occur slowly, the effects of the pollutants involved are usually analyzed on a regional level.

The location of elevated NO_2 concentration from vehicular emission extends away from the roadway. Therefore, the effects of NO_x (NO and NO_2) emissions from mobile sources are generally examined on a regional basis. The Proposed Actions would not substantially increase the vehicle mile traveled or stationary source emissions at a regional scale. Therefore, mesoscale (regional) analysis for ozone precursor is not required. The Proposed Actions would include stationary fuel combustion sources (i.e., HVAC systems). With the USEPA promulgation of the 1-hour average NAAQS standard for NO_2, local sources became of greater concern for this pollutant. Therefore, the proposed Project's effects on local NO_2 concentration were evaluated.

Lead

Up until the 1970s, lead emissions were associated with vehicular fuel combustion. At that time Federal clean air legislation prompted the conversion of lead-based gasoline to lead-free fuels, which began a systematic phase-out of the sale of leaded gasoline. Emissions of lead from motor vehicles have decreased significantly as a result of lead being phased out as an additive in motor vehicle fuels. The Federal Highway Administration (FHWA) has advised that microscale lead analyses for highway projects are not needed or warranted. Lead emissions from highways have been virtually eliminated as a result of the regulation and legislation prohibiting the manufacture, sale, or introduction into commerce of any engine requiring leaded gasoline since model year 1992, sale of only unleaded gasoline, and the requirement for reformulated gasoline to contain no heavy metals (such as lead). Therefore, lead is not a pollutant of concern for the project.

Particulate Matter

PM sources are both primary and secondary in nature. Primary sources are specific sources, such as particles produced by mechanical abrasion. Secondary PM sources originate from gas-phase chemical compounds that condense with certain gases or when different gases react with each other. These small particles might then coagulate with other particles to form larger particles. Sulfur oxides, nitrogen oxides, and VOCs are examples of PM precursors. The burning of fossil fuel can produce both primary and secondary PM.

Inhalable PM is a respiratory irritant and is of most concern when classified as being less than 2.5 microns in diameter ($PM_{2.5}$) and less than 10 microns in diameter (PM_{10}). PM is primarily generated by stationary sources, such as industrial facilities and power plants; however, PM can also

be produced by the combustion of diesel fuel used in some buses and trucks, as well as residential and commercial HVAC systems. PM also develops from the mechanical breakdown of coarse particulate matter (e.g., from building demolition or roadway surface wear as well as other construction-related activities). $PM_{2.5}$ is extremely persistent in the atmosphere and has the ability to reach the lower regions of the respiratory tract, delivering with it other compounds that absorb the surfaces of the particles.

NYCDEP, in conjunction with NYSDEC, has promulgated guidance for the screening and assessment of these fine particulates that is outlined in the *CEQR Technical Manual*. The mobile source screening portion of the guidelines requires that if a proposed action would generate fewer heavy-duty diesel vehicles ("HDDV") per hour (or its equivalent in vehicular emissions) than listed below, the need for a detailed $PM_{2.5}$ analysis is unlikely:

- 12 HDDV: for paved roads with < 5000 vehicles/day
- 19 HDDV: for collector type roads
- 23 HDDV: for principal and minor arterials
- 23 HDDV: for expressways and limited access roads

The project-generated HDDVs would be less than the *CEQR* threshold, therefore, a detailed PM mobile analysis is not warranted. However, the HVAC systems of the Proposed Actions may contribute to emissions of PM. As a result, both PM_{10} and $PM_{2.5}$ are evaluated as a pollutant of concern.

Sulfur Dioxide

Fossil fuel combustion is the main anthropogenic source of primary SO_2. The amount of SO_2 emitted is directly related to the amount of sulfur in the fuel. SO_2 emissions are associated primarily with the combustion of No. 6 oil and coal, both high sulfur–containing fuels. Due to the USEPA rules on the sulfur content in fuel for on–road vehicles, including diesel vehicles, no significant SO_2 quantities are emitted from vehicular sources. Specifically, beginning in 2006, USEPA began to phase-in more stringent regulations to lower the amount of sulfur in diesel fuel to 15 parts per million (ppm), which is known as ultra-low sulfur diesel (ULSD) and combustion of it results in negligible SO_2 emissions. Therefore, an analysis of SO_2 from mobile sources was not warranted.

Natural gas and/or ULSD may be burned in the projected Site Development building HVAC systems. The sulfur content of natural gas is negligible. As it is assumed that the Proposed Actions could potentially use oil for the HVAC systems, SO_2 is a pollutant of concern per guidance from the *CEQR Technical Manual*.

Air Toxics

In addition to criteria pollutants, a wide range of the non-criteria air pollutants (known as air toxic pollutants), which could be emitted from industrial and commercial facilities, are also of potential

concern. The CAA identifies 187 hazardous air pollutants (HAPs) to be regulated by the USEPA. These are substances that cause or may cause cancer or other serious health effects.

These pollutants can be grouped into two categories: carcinogenic air pollutants and non-carcinogenic air pollutants. These two groups include hundreds of pollutants, ranging from high to low toxicity. No federal air quality standards have been promulgated for toxic air pollutants. However, USEPA and NYSDEC have issued guidelines that establish acceptable ambient levels for these pollutants based on human exposure criteria.

As the Proposed Actions include sensitive uses (i.e., residences), an analysis to examine the potential for impacts from existing industrial emissions was performed.

EXISTING AIR QUALITY

The USEPA has promulgated NAAQS to protect human health and welfare. The NAAQS include primary standards, which are designed to protect human health, including the health of sensitive subpopulations such as children and those with chronic respiratory problems. The NAAQS also include secondary standards designed to protect public welfare, including economic interests, visibility, vegetation, animal species, and other concerns not related to human health. Each NAAQS is expressed in terms of a concentration level and an associated time averaging period. The current NAAQS are summarized in **Table J-1**. Footnotes to **Table J-1** explain how compliance with each NAAQS is assessed.

Table J-1: National Ambient Air Quality Standards

Pollutant	Averaging Period	Standards	
		Primary	Secondary
Sulfur dioxide (SO_2)	1-hour [8]	75 ppb	
		197 µg/m^3	
	3-hour [2]	--	0.5 ppm
			1300 µg/m^3
PM_{10}	24-hour [4]	150 µg/m^3	150 µg/m^3
$PM_{2.5}$ (2024 Standard)	Annual [5]	9.0 µg/m^3	15.0 µg/m^3
$PM_{2.5}$ (2006 Standard)	24-hour [6]	35 µg/m^3	35 µg/m^3

Pollutant	Averaging Period	Standards	
		Primary	**Secondary**
Nitrogen Dioxide (NO_2)	Annual [1]	0.053 ppm (53 ppb)	0.053 ppm (53 ppb)
		100 µg/m^3	100 µg/m^3
	1-hour [3]	100 ppb	--
		188 ug/m^3	
Carbon Monoxide (CO)	8-hour [2]	9 ppm	--
		10,000 µg/m^3	
	1-hour [2]	35 ppm	--
		40,000 µg/m^3	
Ozone (2015 Standard)	8-Hour[7]	0.070 ppm	0.070 ppm
Lead (Pb)	Rolling 3-month [1]	0.15 µg/m^3	0.15 µg/m^3

Notes:

[1] Not to be exceeded.

[2] Not to be exceeded more than once per year.

[3] Compliance based on 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area.

[4] Not to be exceeded more than once per year on average over 3 years.

[5] Compliance based on 3-year average of weighted annual mean $PM_{2.5}$ concentrations at community-oriented monitors.

[6] Compliance based on 3-year average of 98th percentile of 24-hour concentrations at each population-oriented monitor within an area.

[7] Compliance based on annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years.

[8] Compliance based on 3-year average of 99th percentile of the daily maximum 1-hour average at each monitor within an area.

ppm = parts per million by volume.

ppb = parts per billion by volume.

µg/m^3 = micrograms per cubic meter.

In addition to the NAAQS, states and municipalities are free to adopt standards that are more stringent than the NAAQS. The NYSDEC has adopted the NAAQS as the New York Ambient Air Quality Standards (NYAAQS). In addition, NYSDEC has NYAAQS for total suspended particulate ("TSP"), gaseous fluoride, beryllium, and hydrogen sulfide. The NYAAQS for beryllium, fluorides, and hydrogen sulfide will not be applicable as no emissions of these pollutants are expected from the Proposed Actions.

Existing Ambient Air Quality

The Proposed Actions are located in Bronx County, NYSDEC Region 2, New York-New Jersey-Connecticut Air Quality Control Region ("AQCR"). The NYSDEC Bureau of Air Surveillance operates various air quality monitors for SO_2, PM_{10}, $PM_{2.5}$, NO_2, CO, O_3, and Pb. Locations of monitoring stations for NYSDEC's Region 2 (New York City) were reviewed and sites were selected as representative of the Project area. Ambient air quality monitoring data from the 3-year period 2021-2023 are summarized in **Table J-2** for those monitoring stations nearest to the Proposed Actions. **Table J-2** lists the maximum annual mean concentration and/or a near-maximum short-term concentration in each year. Second-high short-term concentrations are listed for most pollutants, but **Table J-2** includes the fourth-highest 8-hour average concentration for ozone, the 98th percentile 1-hour average concentration for NO_2, the 98th percentile 24-hour average concentration for $PM_{2.5}$, and the 99th percentile 1-hour average concentration for SO_2, consistent with the structure of the NAAQS for those pollutants and averaging periods.

Table J-2: Existing Background Concentrations of Criteria Pollutants

Pollutant	Averaging Period	NAAQS	Units	Monitored Background Concentration[a,b] (μg/m³)			Monitor Location
				2021	2022	2023	
SO_2	1-Hour[c]	197	ug/m³	7.6	11.3	8.9	Pfizer Lab, Bronx Co., New York (Monitor ID 36-005-0133)
PM_{10}	24-Hour	150	ug/m³	38	23	33	IS 52 – Bronx Co., New York (Monitor ID 36-005-0110)
$PM_{2.5}$	24-Hour[c]	35	ug/m³	21.5	14.6	28.2	Pfizer Lab, Bronx Co., New York (Monitor ID 36-005-0133)
	Annual	9	ug/m³	7.1	6.9	8.6	
NO_2	1-Hour[c]	100	ppb	48.3	50.8	55.8	Pfizer Lab, Bronx Co., New York (Monitor ID 36-005-0133)
	Annual	53	ppb	12.6	13.1	13.9	
CO	1-Hour	35	ppm	1.6	2.0	1.8	Pfizer Lab, Bronx Co., New York (Monitor ID 36-005-0133)
	8-Hour	9	ppm	1.1	1.6	1.3	
O_3	8-Hour	0.07	ppm	0.069	0.074	0.065	Pfizer Lab, Bronx Co., New York (Monitor ID 36-005-0133)

[a] Highest-second highest short-term (1-, 3-, 8-, and 24-hour) and maximum annual average concentrations presented.

[b] Monitored background concentrations obtained from the NYSDEC 2023 Ambient Air Quality Monitoring Report (https://dec.ny.gov/sites/default/files/2024-10/2023airqualreport.pdf).

[c] The 98th percentile 24-hour and annual $PM_{2.5}$ and 1-hour NO_2 values presented consistent with structure of those standards. The 3-year average 98th percentile 24-hour $PM_{2.5}$ value is **21.4** ug/m³, the 3-year average of the 98th percentile annual PM2.5 value is **7.6** ug/m³, and the three year average 1-hour NO_2 value is **51.6 ppb**. The 3-year average 99th percentile SO_2 value is **9.2** ug/m³.

Attainment Status

The most meaningful way to characterize existing air quality in a given area is to identify the attainment status of the AQCR in which it is located. An AQCR, as defined in Section 107 of the Clean Air Act, is a federally-designated area in which NAAQS must be met. An implementation plan is developed for each AQCR describing how ambient air quality standards will be achieved and maintained.

USEPA designates the attainment status of an area on a pollutant-specific basis based on whether an area meets the NAAQS. Areas that meet the NAAQS are termed "attainment areas." Areas that do not meet the NAAQS are termed "nonattainment areas." Areas for which insufficient data are available to determine attainment status are termed "unclassified areas." Areas formerly designated as nonattainment areas that have subsequently reached attainment are termed "maintenance areas."

The attainment status designations appear in the Code of Federal Regulations ("CFR") at 40 CFR Part 81. The attainment status of a region, in conjunction with projected emission rates or emissions increases, determines the regulatory review process for a new project. **Table J-3** summarizes the attainment status of the AQCR in which the Project will be located. Bronx County is within the New York-New Jersey-Connecticut Air Quality Control Region AQCR (40 CFR §81.333).

Table J-3: Attainment Status of Proposed Actions AQCR

Attainment/ Unclassifiable	Nonattainment	Maintenance
SO_2, CO, PM_{10}, NO_2, Pb	O_3	$PM_{2.5}$

Beginning in 2004, the USEPA included New York City's five counties (New York, Kings, Queens, Bronx, and Richmond counties) and five other New York counties located in the New York City metropolitan area (Nassau, Suffolk, Rockland, Westchester, and Orange counties) within a designated $PM_{2.5}$ nonattainment are due to exceedances of the 1997 annual average standard. The area was designated as nonattainment with the 2006 24-hour $PM_{2.5}$ NAAQS since November 2009. The USEPA redesignated the area as being in attainment for the 24-hour $PM_{2.5}$ standard effective April 18, 2014, and the area now is under a maintenance plan. USEPA designated the area as in attainment for the 12 $\mu g/m^3$ annual average $PM_{2.5}$ NAAQS effective April 15, 2015.

The USEPA classified the area as a moderate nonattainment for the 2015 ozone standard.

Significant Impact Criteria

The modeled concentrations of pollutants associated with a proposed action are compared with either the NAAQS for criteria air pollutants or ambient guideline concentrations for toxic non-criteria pollutants (i.e., NYSDEC short term guideline concentrations (SGCs) and annual guideline concentrations (AGCs)). If a proposed action would cause the standards for any pollutant to be

exceeded, it may result in a significant adverse air quality impact. In addition, for CO from mobile sources and for $PM_{2.5}$, the *de minimis* criteria described below are also used to determine significant impacts.

With respect to CO impacts from mobile sources, in addition to the federal and state standards, New York City has developed *de minimis* criteria in CEQR to assess the significance of project-related impacts on local air quality. These criteria set the minimum change in an 8-hour average CO concentration that would constitute a significant adverse environmental impact. The criteria are defined as follows:

An increase of 0.5 ppm or greater in the maximum eight-hour concentration if the projected future ambient No Action concentration is equal to 8.0 ppm or between 8 ppm and 9 ppm.

An increase of more than half the difference between the baseline concentrations and the 8-hour standards when No Action concentrations are below 8 ppm.

Project-related impacts less than these values are not considered to be significant. With respect to $PM_{2.5}$, NYSDEC and NYCDEP have developed criteria guidance for the study and assessment of project-related significant adverse impacts. These threshold criteria are related to analyses which determine potential microscale and neighborhood scale incremental (the difference between the future with and without the Proposed Actions) impacts at sensitive receptor locations. The criteria are as follows:

- Predicted increase of more than half the difference between the background concentration and the 24-hour standard (i.e., 6.80 ug/m^3);
- The maximum annual impact criteria of 0.3 µg/m^3 is applicable to stationary sources and construction only: or,
- The criteria threshold concentration for the neighborhood scale increment on a yearly basis is 0.1 µg/m^3 (for stationary sources, receptor locations are based on a 1km x 1km grid centered at the maximum predicted microscale annual concentration - averaged over all receptors; for mobile sources, receptors are located at a distance of 15 meters from the edge of roadway).

The USEPA regulates toxic air pollutants, which include those pollutants that are known or suspected to cause cancer or other serious health effects. The list of toxic air pollutants currently includes 187 HAPs. In addition, the NYSDEC Division of Air Resources established short-term (one-hour) SGC and annual AGC standards for contaminants that range in toxicity from high to low, which include HAPs. The standards are acceptable ambient concentrations, which are based on human exposure. The New York State standards for noncriteria pollutants are published in the Division of Air Resources (DAR-1) guidance document[13].

[13] https://www.dec.ny.gov/docs/air_pdf/dar1.pdf

METHODOLOGY FOR PREDICTING POLLUTANT CONCENTRATIONS

The air quality assessment examines potential significant adverse air quality impacts resulting from the implementation of the Proposed Actions. Specific methodology and background information are discussed below.

Stationary Sources

A stationary source analysis was conducted to evaluate potential impacts from the Projected Development sites' HVAC systems. In addition, an assessment was conducted to determine the potential for impacts due to industrial activities within the affected area, and from any nearby major or large emission sources.

Individual HVAC Systems

The potential for emissions from the HVAC systems of individual proposed buildings located on the six (6) Projected Development Sites to result in stationary source pollutants that would significantly impact existing land uses (Project on Existing impacts) and other proposed buildings (Project on Project impacts) are conducted utilizing a stepped analysis procedure following the sequence described below:

- Impacts would be initially analyzed using the HVAC screening procedures described in the *CEQR Technical Manual* assuming the use of fuel oil.

- If the nomographic screening result fails with the use of fuel oil, a more detailed analysis would be conducted utilizing USEPA's AERMOD dispersion model.

- If the detailed AERMOD analysis result fails with the use of fuel oil, HVAC screening procedures will be utilized assuming a cleaner burning fuel (natural gas), and an air quality (E) designation would be proposed for the site, providing the fuel type restriction that would be required to avoid a significant adverse air quality impact.

- If the detailed AERMOD analysis result fails with the use of natural gas, additional <u>refined</u> analysis and further stack restrictions (i.e., stack setback, stack height and/or low NOx burner emission controls) would be required to avoid a significant adverse air quality impact. An air quality (E) designation would be proposed for the site in the <u>Final</u> Environmental Assessment Statement (EAS), providing the fuel type and stack restrictions.

<u>Screening Analysis</u>

A screening analysis was performed to assess air quality impacts associated with emissions from HVAC systems associated with each Projected Development Site. The methodology described in the *CEQR Technical Manual* was used for the analysis and considered impacts on sensitive uses (i.e., existing and proposed residences).

The methodology determines the threshold of development size below which the action would not have a significant adverse impact. The screening procedures utilize information regarding the type of fuel to be used, the maximum development size, and the HVAC systems exhaust stack height to evaluate whether a significant adverse impact may occur. Based on the distance from the development site to the nearest building of similar or greater height, if the maximum development size is greater than the threshold size in the *CEQR Technical Manual*, there is the potential for significant air quality impacts, and a refined dispersion modeling analysis would be required. Additionally, if minimum distance between the buildings resulting from or facilitated by the Proposed Actions and the nearest existing or proposed building of similar or greater height is less than 33 feet, a refined dispersion modeling analysis is required. Otherwise, the source passes the screening analysis, and no further analysis is required.

The information on the HVAC systems' design and stack location is not currently available. Thus, the distance from lot line to lot line was used for the screening analysis for conservative purposes to determine the minimum distance between both proposed and existing buildings. The maximum floor area of each Projected Development Site from the RWCDS was used as input for the screening analysis. It was assumed that ULSD oil or natural gas would be used in the Projected Development Sites' HVAC systems, and that exhaust stacks would be located three feet above roof height per the *CEQR Technical Manual*. For sources that did not pass the screening analyses using the *CEQR Technical Manual* procedures, a refined modeling analysis was performed.

Refined Dispersion Analysis

A detailed dispersion modeling analysis using the USEPA AERMOD model is conducted for Projected Development Sites that do not pass the screening analysis. AERMOD is applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD incorporates current concepts about flow and dispersion in complex terrain, including updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and handling of terrain interactions. AERMOD also accounts for building-induced turbulence, or "wake" effects, caused by nearby structures on the dispersion of pollutants from nearby stacks.

The *CEQR Technical Manual* provides the following guidance for AERMOD analyses:

- When modeling potential pollutant concentrations emitted from stacks with AERMOD, the following information is needed: the appropriate pollutant emission rates, stack exhaust parameters (i.e., stack exhaust velocity, inner stack diameter, stack exhaust temperature, stack height), and representative meteorological data.

- Computations with AERMOD are usually made assuming stack tip downwash, urban dispersion parameters, and use of routines for elimination of calm winds and handling of missing meteorological data.

- AERMOD should be run both with and without building downwash (i.e., wake effects option) if the exhaust from the stack(s) could be affected by either the building on which the stack is

located or a nearby structure. The USEPA's Building Profile Input Program with PRIME (BPIPPRM) should be used to determine the projected building dimensions for the AERMOD modeling with the building downwash algorithm enabled.

- The meteorological data set used with AERMOD should consist of the latest available five consecutive years of meteorological data in order to ensure that an adequate number of hours are simulated to determine compliance with applicable standards and guideline concentrations. The latest recommended meteorological data set provided by NYSDEC should be used for modeling.

The latest USEPA AERMOD model version 24142 was used for the refined dispersion modeling analysis. The model was run with the regulatory default option and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using the last five consecutive years of meteorological data (2017-2021), obtained from the NYSDEC, Division of Air Resources, Impact Assessment and Meteorology Section. Surface data used in the analysis is from LaGuardia Airport and upper air data is from Brookhaven, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperatures over the 5-year period. Population in New York City, obtained from the U.S. Census Bureau's estimated population as of July 1, 2022, was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion.

HVAC System Emission Rates and Exhaust Parameters

Because information on the HVAC systems' design is not available, appropriately conservative dispersion modeling stack options and assumptions are applied per the guidance of the *CEQR Technical Manual.* It is assumed that exhaust stacks are located three feet above roof height, and are assumed to be located 10 feet from the wall of any adjacent taller building. Where exceedances of significance thresholds are predicted to occur with this scenario, additional iterations of the analysis are conducted utilizing subsequent setback distances from the wall of the adjacent building. If the maximum distance is reached (i.e., the edge of the subject rooftop directly opposite the adjacent building property line), then the analysis is run assuming interval increases in stack height.

The refined dispersion modeling analysis was performed for 1-hour SO_2, 24-hour PM_{10}, 24-hour and annual $PM_{2.5}$, and 1-hour and annual NO_2 based on either natural gas or fuel oil combusted in the HVAC systems. The boiler's energy intensity was calculated based on energy consumption rate (i.e., the amount of fuel consumed per year per building square foot), obtained from the *CEQR Technical Manual* Appendices, corresponding to residential use in the buildings. Emissions were calculated based on emission factors obtained from the USEPA's AP-42 manual for external combustion sources[14]. All fuel was assumed to be consumed during the 100-day (or 2,400 hour) heating season. The potential Development Site energy requirements in units of million British thermal Units per

[14] https://www.epa.gov/sites/default/files/2020-09/documents/1.3_fuel_oil_combustion.pdf and https://www.epa.gov/sites/default/files/2020-09/documents/1.4_natural_gas_combustion.pdf

hour (mmBtu/hr) were multiplied by the emission factors in pounds per mmBtu (lb/mmBtu) to estimate the potential pound per hour (lb/hr) emission rate for each pollutant. **Table J-4** shows the estimated boiler size and pollutants emission rates.

Table J-4: Projected Development Sites HVAC Systems Short-term and Annual Emission Rates

Projected Development Site	Estimated Boiler Size (MMBtu/Hr)	NO_x		SO_2	$PM_{10}/PM_{2.5}$	
		Short-Term (grams/sec)	Annual (grams/sec)	Short-Term (grams/sec)	Short-Term (grams/sec)	Annual (grams/sec)
Natural Gas						
1	4.26	5.27E-02	1.44E-02	3.76E-03	4.00E-03	1.10E-03
2	3.05	3.77E-02	1.03E-02	2.69E-03	2.87E-03	7.85E-04
3	0.84	1.04E-02	2.86E-03	7.46E-04	7.93E-04	2.17E-04
4	1.13	1.39E-02	3.82E-03	9.95E-04	1.06E-03	2.90E-04
5	0.73	8.98E-03	2.46E-03	6.42E-04	6.83E-04	1.87E-04
6	1.30	1.60E-02	4.39E-03	1.14E-03	1.22E-03	3.33E-04
Fuel Oil						
1	4.26	7.68E-02	2.10E-02	8.17E-04	1.27E-02	3.47E-03
2	3.05	5.49E-02	1.51E-02	5.85E-04	9.06E-03	2.48E-03
3	0.84	1.52E-02	4.17E-03	1.62E-04	2.51E-03	6.88E-04
4	1.13	2.03E-02	5.56E-03	2.16E-04	3.35E-03	9.18E-04
5	0.73	1.31E-02	3.59E-03	1.39E-04	2.16E-03	5.92E-04
6	1.30	2.33E-02	6.39E-03	2.48E-04	3.85E-03	1.05E-03

The projected Development Site boiler stack diameters of either 0.5 feet or 1.0 feet were estimated based on values obtained from the NYCDEP "CA Permit" database for the corresponding boiler sizes. The stack's exit velocity was calculated based on the fuel volume of combustion components per unit of heat content (i.e., standard cubic feet per minute of air flow per mmBtu of fuel consumed). The stack's exit temperature was assumed to be 300 ^{O}F, which is appropriate for boilers. **Table J-5** shows the estimated boiler size and stack parameters.

Table J-5: Projected Development Sites HVAC Systems Stack Parameters

Projected Development Site	Estimated Boiler Size (mmBtu/hr)	Stack Height (m)	Stack Diameter (m)	Stack Exit Temperature (K)	Stack Exit Velocity (m/sec)
1	4.26	45.11	0.30	422.0	13.30
2	3.05	29.87	0.30	422.0	9.52
3	0.84	29.87	0.15	422.0	10.54
4	1.13	45.11	0.15	422.0	14.07
5	0.73	23.77	0.15	422.0	9.07
6	1.30	35.97	0.15	422.0	16.16

Receptor Locations

Discrete receptors (i.e., locations at which concentrations are calculated) were modeled along the existing and projected Development Site building façades to represent potentially sensitive locations such as operable windows and intake vents. The Projected Development Sites were modeled as buildings that cover their entire lot(s) area(s) (the wall façade located on the outer lot lines) and rise to their RWCDS heights. Buildings in the surrounding area were accounted for in the downwash analysis using BPIP. Receptors on the Projected Development Site buildings and buildings within the surrounding area were placed on all wall façade from the ground floor to the roof-top height in 10 foot spaced intervals.

The USGS National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset), the terrain data set recommended by the USEPA for use in the United States for regulatory purposes, was used to process buildings base elevations. The base elevations of receptors and stacks were set to their buildings base elevations. Roof heights of buildings in the area were obtained from the NYC Building Footprint database[15] and Google Earth and were conservatively modeled with the maximum height of any building located throughout the City block the building is located within. The modeling analysis also included a ground-level receptor grid with 10 meter spacing out to a distance of 400 meters from the Projected Development Sites. This methodology resulted in over 11,500 receptors to characterize the potential sensitive receptor locations.

NO_2 Modeling Methodology

The AERMOD model is capable of producing detailed output data that can be analyzed at the hourly level required for the form of the 1-hour NO_2 standard. USEPA has also developed guidance to estimate the transformation ratio of NO_x to NO_2, applicable to HVAC systems.

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile (8th Highest) of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the USEPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NO_2/NO_x ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's ozone limiting method (OLM) module. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations.

Per the *CEQR Technical Manual*, a Tier 1 approach is initially applied, followed by a Tier 2 application of NO_2/NO_x ratio of 80% to the NO_x modeled concentration to determine whether violation of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

[15] https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh

The annual NO_2 standard is 0.053 ppm (100 ug/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NO_x ratio of 0.75, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

The 1-hour NO_2 modeling analysis utilized the USEPA Tier 3 modeling approach for 1-hour NO_2 modeling assessment results using the AERMOD Ozone Limiting Method (OLM) that adjusts NO_x emissions to estimate more realistic ambient NO_2 concentrations by modeling the conversion of NO_x to NO_2. OLM incorporates three sets of data into the calculation of 1-hour NO_2 concentrations. Those are source-specific in-stack NO_2/NO_x emission rate ratios, an ambient NO_2/NO_x concentration ratio, and hourly average background ozone concentrations. The OLM option for modeling conversion of NO to NO_2 incorporated a default NO_2/NO_x ambient equilibrium concentration ratio of 0.90.

The USEPA NO_2/NO_x In-Stack Ratio (ISR) Database[16] was reviewed to determine representative NO_2/NO_x ratios for small natural gas or fuel oil boilers. Based upon the maximum NO_2/NO_x ratio provided in the USEPA data, a conservative in-stack NO_2/NO_x ratio of 0.10 for the boilers was used in the 1-hour NO_2 modeling analysis.

Based on review of the locations of NYSDEC ambient air quality monitoring sites, the closest NYSDEC monitoring sites were used to represent the current background ozone air quality in the site area. Background data for ozone from 2017-2021 was obtained from a monitoring station located at Pfizer Lab, Bronx Co., New York (Monitor ID 36-005-0133). When hourly ozone data was missing from the Pfizer Lab monitor, missing hours were substituted using the ozone monitoring data from next closest monitor, the IS52, Bronx Co., New York (Monitor ID: 36-005-0110) monitor. Lastly, for any hours that had missing data from both the Pfizer Lab and IS52 monitors, missing hours were substituted using ozone monitoring data from the Queens College, Queens Co., New York (Monitor ID: 36-081-0124) monitor.

Cumulative Impacts from HVAC Systems

A cumulative HVAC impact analysis is performed for Projected Development Site buildings as they would have similar stack heights and are located in close proximity to one another. The results of the cumulative analysis are added to background concentrations to determine whether impacts are below ambient air quality standards. In the event that an exceedance of a standard for a specific Projected Development Site is predicted, an air quality E-designation is proposed for the site, describing the fuel and/or HVAC exhaust stack restrictions that would be required to avoid a significant adverse air quality impact.

Industrial Sources

The Proposed Actions would introduce a sensitive land use into the area. The emissions of toxic pollutants from the operation of any existing facilities or proposed facilities may result in pollutant concentrations that could adversely affect these residential uses. Accordingly, a preliminary screening

[16] https://www.epa.gov/scram/nitrogen-dioxidenitrogen-oxide-stack-ratio-isr-database

was conducted to determine if there are any potential sources of industrial process emissions that could affect occupants of the Projected Development Sites. Industrial sources were identified through a search of the NYCDEP Clean Air Tracking System (CATS) database for industrial permits for sites within a 400-foot study area. A comprehensive search was also performed to identify NYSDEC air permits listed in the USEPA Envirofacts database[17].

Based reviews of NYCDCP land use maps, Google Earth Street Views, USEPA Envirofacts database, and the NYCDEP CATS Database, no industrial sources within a 400-foot study area were identified as having an active air permit. Therefore, there is no potential for impact to the Projected Development Sites from industrial sources in the surrounding area.

Additional Major or Large Emission Sources

The *CEQR Technical Manual* requires an analysis of projects that may result in a significant adverse impact due to certain types of new uses (i.e., residences) located near a "large" or "major" emissions source. Major sources are defined as facilities that have a USEPA Title V or Prevention of Significant Deterioration air permit, while large sources are defined as those that require a major NYSDEC Air State Facility Permit. To assess the potential effects of these existing sources on the Projected Development Sites, a review of existing permitted facilities was conducted. Sources of information reviewed included the USEPA's Envirofacts database, and the NYSDEC Title V and Air State Facility Permit databases. The only major/large source located within 1,000 feet from the Projected Development Sites is the St. Barnabas Hospital that is permitted by a NYSDEC Air State Facility permit. Pollutant concentrations are modeled from this facility to evaluate potential impact on the Projected Development Sites.

The St. Barnabas Hospital has three (3) dual fired (No. 2 oil and natural gas) 25.9 mmBtu/hr boilers. Each boiler vents through a common exhaust stack. The facility emissions are estimated using the information developed from the Air State Facility Permit and applying the USEPA's AP-42 manual for external combustion sources[18] emission factors for boilers.

Table J-6: Emission Rates and Stack Parameters Used in Major Source AERMOD Analyses

Parameter	**Value**
Stack height (m)	38.40
Stack Diameter (m)	0.30
Exhaust Velocity (m/s)	80.75
Exhaust Temperature (˚K)	422
Pollutant and Averaging Period	**Maximum Emission Rate of either No. 2 Oil or Natural Gas Combustion**

[17] https://enviro.epa.gov/

[18] https://www.epa.gov/sites/default/files/2020-09/documents/1.3_fuel_oil_combustion.pdf and https://www.epa.gov/sites/default/files/2020-09/documents/1.4_natural_gas_combustion.pdf

1-hr NO_2	7.83E-01
Annual NO_2	7.83E-01
24-hr $PM_{2.5}$	2.31E-01
Annual $PM_{2.5}$	2.31E-01
24-hr PM_{10}	2.31E-01
1-hr SO_2	6.86E-02

THE FUTURE WITHOUT THE PROPOSED ACTIONS

New development within the study area may occur in the future without the Proposed Actions. As a result, traffic volumes would increase at locations near these developments. However, it is not anticipated that the anticipated increase in traffic volumes would result in significant increases in localized pollutant emissions. Additionally, while the resulting increase in stationary source stack emissions from heat and hot water systems could affect sensitive building receptors, these affects would disperse throughout the project area at locations nearby the Projected Development Sites.

THE FUTURE WITH THE PROPOSED ACTIONS

Stationary Sources

Individual HVAC Systems

Screening Analysis

The screening analysis was performed to evaluate whether potential air quality impacts from the HVAC systems associated with the Projected Development Sites could potentially impact other Projected Development Sites, or existing buildings. All of the Potential Development Sites are located within 30 feet of another Projected Development Site and/or an adjacent existing building. Thus, the Projected Development Sites failed the screening analysis, therefore, each of these Projected Development Sites required a refined dispersion modeling analysis.

Refined Dispersion Analysis

A detailed dispersion analysis using the AERMOD model was performed to assess the potential air quality impacts from emissions associated with the HVAC systems located at the Projected Development Sites. The maximum predicted concentrations for NO_2, SO_2, PM_{10} and $PM_{2.5}$ are presented in **Table J-7** for the Project-on-Project impacts and in **Table J-8** for the Project on Existing impacts. This analysis accounts for the range of potential heights and the maximum potential floor area for each building for the Proposed Actions for both downwash and non-downwash scenarios. The concentrations shown in **Table J-7** and **Table J-8** were modeled with certain restrictions to ensure that no significant adverse air quality impact(s) would occur. The restrictions for the Proposed Actions are specified in the Air Quality (E) Designations that would be placed on the Development Sites, which are detailed further below. As such, the maximum modeled impacts reflect

the provisions of the (E) Designations with respect to fuel type and exhaust stack location (see **Figure J-1**). Depending on how the Projected Development Sites are ultimately built out, it may yield lesser impacts than predicted and some or all of these restrictions may not be required or could be adjusted based on a more refined analysis.

Table J-7: Individual HVAC Analysis Results for Project on Project Impacts

Pollutant	Averaging Period	CEQR De Minimis Threshold (ug/m^3)	Development Site	NAAQS (ug/m^3)	Representative Background (ug/m^3)	Maximum Modeled Concentration (ug/m^3)	Total NAAQS Concentration with Background (ug/m^3)	Exceed CEQR Threshold	Exceed NAAQS
NO_2	1-Hour	NA	1	188	97.0	34.5	131.5	NA	NO
			2			87.6	184.6	NA	NO
			3			86.1	183.1	NA	NO
			4			79.1	176.1	NA	NO
			5			82.1	179.1	NA	NO
			6			86.6	183.6	NA	NO
	Annual	NA	1	100	26.1	0.3	26.4	NA	NO
			2			1.7	27.8	NA	NO
			3			2.1	28.2	NA	NO
			4			0.2	26.3	NA	NO
			5			1.4	27.5	NA	NO
			6			1.2	27.3	NA	NO
$PM_{2.5}$	24-Hour	6.80	1	35	21.4	1.4	22.8	NO	NO
			2			2.8	24.2	NO	NO
			3			3.5	24.9	NO	NO
			4			0.7	22.1	NO	NO
			5			2.4	23.8	NO	NO
			6			2.2	23.6	NO	NO
	Annual	0.3	1	9	7.6	0.1	7.7	NO	NO
			2			0.1	7.7	NO	NO
			3			0.2	7.8	NO	NO
			4			0.2	7.8	NO	NO
			5			0.1	7.7	NO	NO
			6			0.1	7.7	NO	NO
PM_{10}	24-Hour	NA	1	150	38	2.8	13.7	NA	NO
			2			4.2	15.1	NA	NO
			3			6.0	16.9	NA	NO
			4			1.4	12.3	NA	NO
			5			4.6	15.5	NA	NO
			6			3.6	14.5	NA	NO
SO_2	1-Hour	NA	1	196	9.2	2.5	11.7	NA	NO
			2			10.2	19.4	NA	NO
			3			9.6	18.8	NA	NO

Pollutant	Averaging Period	CEQR De Minimis Threshold (ug/m^3)	Development Site	NAAQS (ug/m^3)	Representative Background (ug/m^3)	Maximum Modeled Concentration (ug/m^3)	Total NAAQS Concentration with Background (ug/m^3)	Exceed CEQR Threshold	Exceed NAAQS
			4			1.5	10.7	NA	NO
			5			8.9	18.1	NA	NO
			6			9.6	18.8	NA	NO

Table J-8: Individual HVAC Analysis Results for Project on Existing Impacts

Pollutant	Averaging Period	CEQR De Minimis Threshold (ug/m^3)	Development Site	NAAQS (ug/m^3)	Representative Background (ug/m^3)	Maximum Modeled Concentration (ug/m^3)	Total NAAQS Concentration with Background (ug/m^3)	Exceed CEQR Threshold	Exceed NAAQS
NO_2	1-Hour	NA	1	188	97.0	17.6	114.6	NA	NO
			2			84.6	181.6	NA	NO
			3			13.1	110.1	NA	NO
			4			7.2	104.2	NA	NO
			5			12.2	109.2	NA	NO
			6			51.8	148.8	NA	NO
	Annual	NA	1	100	26.1	0.3	26.4	NA	NO
			2			1.2	27.3	NA	NO
			3			0.1	26.2	NA	NO
			4			0.1	26.2	NA	NO
			5			0.2	26.3	NA	NO
			6			0.5	26.6	NA	NO
$PM_{2.5}$	24-Hour	6.80	1	35	21.4	0.7	22.1	NO	NO
			2			2.0	23.4	NO	NO
			3			0.2	21.6	NO	NO
			4			0.4	21.8	NO	NO
			5			0.3	21.7	NO	NO
			6			0.9	22.3	NO	NO
	Annual	0.3	1	9	7.6	0.07	7.7	NO	NO
			2			0.03	7.6	NO	NO
			3			0.01	7.6	NO	NO
			4			0.06	7.7	NO	NO
			5			0.02	7.6	NO	NO
			6			0.04	7.6	NO	NO
PM_{10}	24-Hour	NA	1	150	38	1.2	12.1	NA	NO
			2			3.5	14.4	NA	NO
			3			0.4	11.3	NA	NO
			4			0.5	11.4	NA	NO
			5			0.4	11.3	NA	NO

Pollutant	Averaging Period	CEQR De Minimis Threshold (ug/m^3)	Development Site	NAAQS (ug/m^3)	Representative Background (ug/m^3)	Maximum Modeled Concentration (ug/m^3)	Total NAAQS Concentration with Background (ug/m^3)	Exceed CEQR Threshold	Exceed NAAQS
			6			1.7	12.6	NA	NO
SO_2	1-Hour	NA	1	196	9.2	1.0	10.2	NA	NO
			2			7.1	16.3	NA	NO
			3			1.2	10.4	NA	NO
			4			0.4	9.6	NA	NO
			5			1.1	10.3	NA	NO
			6			4.5	13.7	NA	NO

As shown in the tables, with the identified restrictions on fuel type and stack placement, the maximum NO_2 , SO_2, and PM_{10} concentrations, when added to ambient background levels, would be below the NAAQS. The maximum 24-hour incremental $PM_{2.5}$ impacts would be less than the applicable *de minimis* criterion of 6.80 µg/m^3. On an annual basis, the modeled $PM_{2.5}$ impacts would be less than the applicable *de minimis* criterion of 0.3 µg/m^3 for local impacts. Thus, the proposed (E) Designations that would be assigned would preclude the potential for any significant adverse air quality impacts related to HVAC systems as a result of the Proposed Actions.

Proposed (E) Designation Requirements

At the Projected Development Sites, the proposed (E) designation would specify the type of fuel to be used, and the distance that the vent stack on the building roof must be from its lot line(s). **Table J-9** provides the proposed (E) designations.

For each of the Projected Development Sites with a proposed (E) designation, the (E) designation process, as set forth in Zoning Resolution Section 11−15 and Chapter 24 of Title 15 of the Rules of the City of New York, allows for the modification of the measures required under an (E) designation in the event of new information or technology, additional facts or updated standards that are relevant at the time the site is ultimately developed. Because the air quality analysis is based on conservative assumptions due to the absence of information on the actual design of buildings that would be constructed, the actual design of buildings may result in modification of the (E) designation measures under these procedures.

Table J-9: Proposed (E) Designations

Projected Development Site	Tax Block	Tax Lot	(E) Designation
1	3038	5, 7, 8, 9, & 11	None
2	3038	38 and 45	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for the heating, ventilating and air conditioning (HVAC) systems, and ensure that the HVAC stack(s) is located at the highest tier or at least 98 feet above grade, and no more than 20 feet away from the lot line facing E. 182nd Street, to avoid any potential significant adverse air quality impacts.
3	3038	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for the heating, ventilating and air conditioning (HVAC) systems, and ensure that the HVAC stack(s) is located at the highest tier or at least 98 feet above grade, and no more than 50 feet away from the lot line facing Park Avenue, to avoid any potential significant adverse air quality impacts.
4	3038	12 and 13	None
5	3038	14	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for the heating, ventilating and air conditioning (HVAC) systems, and ensure that the HVAC stack(s) is located at the highest tier or at least 78 feet above grade, and no more than 44 feet away from the lot line facing E. 183rd Street, to avoid any potential significant adverse air quality impacts.
6	3038	20, 87, and 187	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for the heating, ventilating and air conditioning (HVAC) systems, and ensure that the HVAC stack(s) is located at the highest tier or at least 118 feet above grade, and no more than 32 feet away from the lot line facing E. 183rd Street, to avoid any potential significant adverse air quality impacts.

Cumulative Impacts from HVAC Systems

An analysis was conducted to evaluate potential air quality impacts from groups of HVAC systems in close proximity because there is a potential for overlap of exhaust plumes to contribute to significant adverse air quality impacts. The analysis is performed using the USEPA AERMOD model using the general assumptions and procedures outlined earlier for individual HVAC systems. The same restrictions on fuel type and stack parameters (i.e., stack height and stack location) as determined from the individual HVAC analysis were assumed for cumulative analysis. The maximum pollutant concentrations are provided **Table J-10**.

The cumulative analyses demonstrated that with the same restrictions on fuel type and stack parameters (i.e., stack height and stack locations) determined from the individual HVAC analysis, the maximum pollutant concentration would not exceed the respective NAAQS and *de minimis* criteria. Therefore, no significant adverse air quality impacts are predicted from the cumulative effects of emissions from groups of HVAC systems in close proximity with similar stack heights as a result of the Proposed Actions.

Table J-10: Cumulative HVAC Analysis Results for Project on Project Impacts

Pollutant	Averaging Period	CEQR De Minimis Threshold (ug/m^3)	Development Site	NAAQS (ug/m^3)	Representative Background (ug/m^3)	Maximum Modeled Concentration (ug/m^3)	Total NAAQS Concentration with Background (ug/m^3)	Exceed CEQR Threshold	Exceed NAAQS
NO_2	1-Hour	NA	All	188	97.0	87.6	184.6	NA	NO
	Annual	NA	All	100	26.1	2.2	28.3	NA	NO
$PM_{2.5}$	24-Hour	6.80	All	35	21.4	3.5	24.9	NO	NO
	Annual	0.3	All	9	7.6	0.2	7.8	NO	NO
PM_{10}	24-Hour	NA	All	150	38	6.0	44.0	NA	NO
SO_2	1-Hour	NA	All	196	9.2	10.2	19.4	NA	NO

Additional Major or Large Emission Sources

Potential stationary source impacts on the Projected Development Sites from the existing boilers at the St. Barnabas Hospital were determined using the AERMOD model. The maximum estimated cumulative concentrations from the modeling are added to the background concentrations to estimate total air quality concentrations on the Projected Development Sites. The results of the AERMOD analysis are presented in **Table J-11**. As shown in **Table J-11**, the predicted pollutant concentrations for all of the pollutant time averaging periods shown are below their respective standards. Therefore, no significant adverse air quality impacts on the Projected Development Sites from existing sources are predicted.

Table J-11: Cumulative HVAC Analysis Results with Major Sources for Project on Project Impacts

Pollutant	Averaging Period	NAAQS (ug/m^3)	Representative Background (ug/m^3)	Maximum Modeled Concentration (ug/m^3)	Total NAAQS Concentration with Background (ug/m^3)	Exceed NAAQS
NO_2	1-Hour	188	97.0	87.6	184.6	NO
	Annual	100	26.1	2.3	28.4	NO
$PM_{2.5}$	24-Hour	35	21.4	3.5	24.9	NO
	Annual	9	7.6	0.4	8.0	NO
PM_{10}	24-Hour	150	38	6.7	44.7	NO
SO_2	1-Hour	196	9.2	10.2	19.4	NO

As described above, the predicted pollutant concentrations for all of the pollutant time averaging periods shown are below their respective standards. Therefore, no significant adverse air quality impacts on the Projected Development Sites from existing sources are predicted.

Figure J-1: Designated Area for Stacks at Projected Development Sites with (E) Designations



ATTACHMENT K: NOISE

INTRODUCTION

According to the *CEQR Technical Manual*, the purpose of a noise assessment is to determine both (i) a proposed project's potential effects on sensitive noise receptors, including the effects on the level of noise inside residential, commercial, and institutional facilities (if applicable), and at open spaces; and (ii) the effects of ambient noise levels on new sensitive uses introduced by a proposed project.

According to the *CEQR Technical Manual*, initial impact screening considers whether a proposed project would: (1) generate any mobile or stationary sources of noise; and/or (2) introduce noise sensitive receptors in an area with existing high ambient noise levels. For a mobile source analysis to be triggered, a project must impact vehicular traffic noise, aircraft noise, and/or train noise. Based on the *CEQR Technical Manual*, an initial noise assessment on vehicular traffic noise is necessary if a proposed project would (1) generate or reroute traffic; or (2) introduce a new receptor near a heavily trafficked thoroughfare. In order for a stationary source analysis to be triggered, a proposed project must either (1) cause a substantial stationary source to be operating within 1,500 feet of a receptor, with direct line of sight to that receptor; or (2) introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as enclosed manufacturing activities or other loud uses.

METHODOLOGY

The assessment has been conducted in accordance with the guidelines set forth in the *CEQR Technical Manual*. An initial impact screening assessment considers whether a proposed project would:

1. Generate any mobile or stationary sources of noise; or

2. Be located in an area with existing high ambient noise levels.

Stationary noise sources do not move in relation to a noise-sensitive receptor. Typical stationary noise sources of concern include machinery or mechanical equipment, such as those associated with a building's heating, ventilation, and air-conditioning (HVAC) system. The Proposed Actions would introduce new stationary sources such as mechanical equipment; therefore, a discussion of stationary sources is provided in this chapter.

Mobile noise sources are those that move in relation to receptors. The mobile source screening assessment addresses potential noise impacts associated with vehicular and rail traffic. The basic measure of sound is the sound pressure level (SPL), which is expressed in decibels (dB). The A-weighted network is the most commonly used and sound levels measured using this weighting are noted as dB(A). The letter "A" indicates that the sound has been filtered to reduce the strength of very low and high frequency sounds, much as the human ear does. Accordingly, dB(A) is normally used for CEQR assessments.

Per the CEQR Technical Manual, if existing passenger car equivalent (PCE) values are increased by 100 percent or more over existing conditions, a detailed analysis is generally performed. Because the With-Action scenario would not double the passenger car equivalents (PCEs) on any street over the existing condition, the Proposed Actions would not have the potential to generate a 3 dB(A) or greater increase in noise levels.

Per the *CEQR Technical Manual*, the acceptable interior L10 noise level is 45 dB(A) or lower for residential uses, and 50 dB(A) or lower for commercial office uses. The acceptable interior day-night average sound level (Ldn) noise level is 40 dB(A) or lower for residential uses. Noise survey locations were selected by examining the Development Site's location relative to the dominant sources of ambient noise. Existing noise levels were determined at each location thorough field measurements. The measured noise levels were used to determine minimum window/wall attenuation requirements needed to satisfy CEQR interior noise level criteria.

Survey Locations

The survey locations were selected to account for the worst-case noise conditions of the surrounding area, including the Metro-North railroad tracks, ventilation mechanical equipment and to capture ambient noise generated by existing traffic volumes. The survey locations selected are shown in **Figure K-1**:

- Survey Location 1: Setback from street on Corner of Park Avenue and East 183rd Street.
- Survey Location 2: Elevated Rooftop of 4522 Park Avenue with line-of-sight to Metro-North Railroad Tracks.
- Survey Location 3: Elevated Rooftop above 449 East 182nd Street
- We note that this measurement location was not used due to site safety concerns and feedback from the Department of City Planning that location 3 was not necessary.
- Survey Location 4: Setback from street on East 183rd Street at the middle of the block across from Washington Park.
- Survey Location 5: Setback from street in front of 4522 Park Avenue (directly below location 2).
- Survey Location 6: Setback from street on Washington Avenue

Figure K-1: Survey Locations



NOISE STANDARD CRITERIA

The *CEQR Technical Manual* provides attenuation requirements for buildings based on exterior noise levels (**Table K-1**). Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential uses and 50 dBA or lower for commercial uses and are determined based on exterior L10 and Ldn noise levels.

Table K-1: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Acceptable	**Marginally Unacceptable**				**Clearly Unacceptable**
Vehicular Traffic	65 < L10 ≤ 70	70 < L10 ≤ 73	73 < L10 ≤ 76	76 < L10 ≤ 78	78 < L10 ≤ 80	80 < L10
Aircraft	DNL ≤ 65	65 < DNL ≤ 68	68 < DNL ≤ 71	71 < DNL ≤ 73	73 < DNL ≤ 75	75 < DNL
Train	Ldn ≤ 65	65 < Ldn ≤ 68	68 < Ldn ≤ 71	71 < Ldn ≤ 73	73 < Ldn ≤ 75	75 < Ldn
Attenuation	N/A	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	See Note C

Notes:
A) DNL descriptor based on average values of L_{dn} over a year period.
B) The composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.
C) The required attenuation value is the difference between L_{build} and $L_{interior}$, using the appropriate noise descriptor where:
L_{build} is the projected noise level under the build condition rounded up to the whole number.
$L_{interior}$ is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)
Source: New York City Department of Environmental Protection.

Exterior noise levels that fall in or above the "marginally unacceptable" category warrant window-wall attenuation to achieve the CEQR-recommended interior noise environment.

Existing Noise Levels

The noise survey locations were selected by examining the location of the Development Sites and the location of the dominant sources of noise, including the Metro-North railroad tracks west of the Directly Affected Area. Noise levels were determined by performing field measurements. The measured noise levels were then used to determine minimum window/wall attenuation requirements to satisfy CEQR interior noise level criteria.

Measurements were performed using NTi XL2 sound level meters (SLM). The SLMs are a Type 1 instrument according to ANSI Standard S1.4-1983 (R2006). For each measurement, the microphone was mounted on a tripod at a height of 5 feet above the ground, and was mounted at least approximately 5 feet away from any large reflecting surfaces. The SLM's calibration was field checked before and after readings. Measurements at each location were made on the A-scale (dB(A)). The data were digitally recorded by the SLMs and displayed at the end of the measurement period in units of dB(A). Measured quantities included Leq, L1, L10, L50, L90, and 1/3 octave band levels. A windscreen was used during all sound measurements except for calibration. Noise levels were measured on October 11, 2023, over a 24-hour period as well as 20-minute periods during the weekday AM (7:30am – 9:30am) Midday 3(11:30am – 1:30pm) and PM (4:00pm – 6:00pm) peak periods.

The results of the existing noise level measurements are presented in **Table K-2**, below.

Table K-2: Existing Noise Levels

Measurement Location	Location Description	Time	Leq	L1	L10	L50	L90	Ldn
1	Setback from street on Corner of Park Avenue and East 183rd Street	AM 20-minute Spot	66.8	78.7	68.5	60.8	55.2	N/A
		MD 20-minute Spot	82.5	87.2	67.8	60.1	55.8	N/A
		PM 20-minute Spot	77.0	89.8	71.0	64.0	59.1	N/A
2	Elevated Rooftop of 4522 Park Avenue with line-of-sight to Metro-North Railroad Tracks	24 Hour	68.6	80.5	69.7	58.0	54.5	73
3	Elevated Rooftop above 449 East 182nd Street	24 Hour	N/A[1]	N/A[1]	N/A[1]	N/A[1]	N/A[1]	N/A[1]
4	Setback from street on East 183rd Street at the middle of the block across from the Washington Park	AM 20-minute Spot	62.0	69.9	65.7	59.1	53.4	N/A
		MD 20-minute Spot	66.8	79.9	66.7	58.4	52.7	N/A
		Afternoon Playground	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A[2]
		PM 20-minute Spot	70.2	78.4	69.4	62.8	58.1	N/A
5	Setback from street in front of 4522 Park Avenue	AM 20-minute Spot	64.1	72.9	68.1	56.9	51.6	N/A
		MD 20-minute Spot	64.1	75.0	66.4	58.7	54.0	N/A
		PM 20-minute Spot	67.0	77.0	68.4	58.9	54.8	N/A
6	Setback from street on Washington Avenue	AM 20-minute Spot	59.6	68.9	62.8	56.3	52.9	N/A
		MD 20-minute Spot	58.6	68.5	61.2	53.6	51.1	N/A
		PM 20-minute Spot	62.9	74.7	63.7	56.7	53.5	N/A

[1] Location 3 was not used due to site safety concerns and feedback from the Department of City Planning that location 3 was not necessary.

[2] The afternoon playground measurement was abandoned due to elevated noise infiltration from continuous music being played from the nearby car dealership on the corner of East 183rd Street and Park Avenue. However, based on site observations, noise from the roadways were the dominant noise sources.

ASSESSMENT

Mechanical Systems

The design of and specification for building mechanical systems, such as heating, ventilation, and air conditioning (HVAC), would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and the New York City Department of Buildings Mechanical Code). By adhering to the requirements of these noise regulations, mechanical equipment introduced by the Proposed Project would not result in a significant increase in ambient noise levels.

Attenuation Requirements

As described in **Table K-1**, the *CEQR Technical Manual* has set noise attenuation values for building facades, based on exterior L10 noise levels. For dominant traffic noise, these noise attenuation values are designed to maintain interior noise levels of 45 dB(A) or lower for residential uses and 50 dB(A) for commercial uses.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Normally, a building façade consists of a wall, glazing, and any vents or louvers associated with the building mechanical systems in various ratios of area. The design of the Proposed Project would include acoustically rated windows and an alternate means of ventilation (i.e., air conditioning) that does not degrade the acoustical performance of the façade. Based on the measurement results in **Table K-2**, the Proposed Project would include these elements and would therefore be designed to provide a composite Outdoor-Indoor Transmission Class1 (OITC) rating greater than or equal to the attenuation requirements listed in **Table K-3**. By designing the Proposed Project to provide a composite OITC rating greater than or equal to the attenuation requirements listed in **Table K-3** the development would be expected to provide sufficient attenuation to achieve the interior noise level guideline of 45 dB(A) or lower for residential uses and 50 dB(A) or lower for commercial uses.

Table K-3: Existing Noise Levels

Building Façade	Associated Location(s)	Maximum L10 (in dBA)	Maximum Ldn	Minimum Attenuation Requirement
North	1, 2 & 4	71.0	73.0	33 dBA
East	6	63.7	N/A	None
South	2	69.7	73.0	33 dBA
West	1, 2 & 5	71.0	73.0	33 dBA

To preclude the potential for significant adverse impacts related to noise, these building attenuation requirements will be incorporated into the design of the Proposed Project, as follows:

Based on our measurements, noise levels at the Development Site will require 33 dB(A) of attenuation along the north, south, and west facades to achieve CEQR interior noise guidelines. To preclude the potential for significant adverse noise impacts to the proposed noise-sensitive receptors, an E-Designation is proposed to require façade attenuation and an alternate means of ventilation. The text for the E-Designation would be as follows:

> ***To ensure an acceptable interior noise environment, the building façade(s) of future development must provide minimum composite building façade attenuation as shown on Table L-3 of the 4506 Park Avenue Environmental Assessment Statement in order to maintain an interior L10 noise level not greater than 45 dB(A). To maintain a closed-window condition in these areas, an alternate means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided.***

The proposed building facades would be designed to provide a composite OITC rating greater than or equal to the attenuation requirements listed in **Table K-3**. The E-Designation would provide oversight by the New York City Mayor's Office of Environmental Remediation (OER) to ensure new development on the development sites are designed and constructed to the minimum attenuation standards. By designing the buildings to provide a composite OITC rating greater than or equal to the attenuation requirements listed in **Table K-3**, the Development Site would provide sufficient attenuation to achieve the CEQR interior noise level guideline of 45 dB(A) or lower for residential uses. Therefore, the Proposed Actions would not result in significant adverse noise impacts, and no further analysis is warranted.

CONCLUSION

The Proposed Actions would not result in significant adverse noise impacts. The Proposed Actions would not generate sufficient traffic to create a significant noise impact or result in a substantial change in traffic-generated noise. The mechanical systems (HVAC systems) of new buildings would be designed to meet all applicable noise regulations and would avoid producing noise that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in significant adverse noise impacts from project-generated building mechanical equipment (stationary sources).

To achieve the CEQR-recommended interior noise criteria, the proposed building facades would be designed to provide a composite OITC rating greater than or equal to the attenuation requirements listed in **Table K-3**. An alternate means of ventilation (i.e., air conditioning) would also be provided that does not degrade the acoustical performance of the proposed building's façade along the north, south and west facades.

With an E-Designation in place for the development sites, the Proposed Actions would not have the potential to result in a significant adverse noise impact and no further analysis is required.

ATTACHMENT L: NEIGHBORHOOD CHARACTER

INTRODUCTION

Neighborhood character, as defined in the *CEQR Technical Manual*, is considered to be an amalgam of the various elements that give a neighborhood its distinct "personality." These elements may include a neighborhood's land use patterns, socioeconomic conditions, open space resources, historic and cultural resources, urban design and visual resources, transportation, noise, and open space, as well as any other physical or social characteristics that help to define a community. Not all these elements affect neighborhood character in all cases; a neighborhood usually draws its distinctive character from a few defining features.

According to the *CEQR Technical Manual*, if a project has the potential to result in any significant adverse impacts on any of the above technical areas, a preliminary assessment of neighborhood character may be appropriate. A significant impact identified in one of these technical areas is not automatically equivalent to a significant impact on neighborhood character; rather, it serves as an indication that neighborhood character should be examined.

METHODOLOGY

According to the *CEQR Technical Manual*, an assessment of neighborhood character is generally needed when a proposed action has the potential to result in significant adverse effects on any of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise. The *CEQR Technical Manual* states that even if a proposed action does not have the potential to result in significant adverse effects in any specific technical area(s), that an assessment of neighborhood character may be required if the project would result in a combination of moderate effects to several elements that may cumulatively affect neighborhood character. A "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse effect threshold for a particular technical analysis area.

A preliminary assessment of neighborhood character determines whether anticipated effects in identified technical areas may adversely affect a defining feature of the neighborhood. The preliminary assessment first identifies the defining features that contribute to a neighborhood's character and then evaluates whether the proposed project or action has the potential to adversely affect those defining features, either through the potential for a significant adverse effect in a single relevant technical area or a combination of moderate effects in the relevant technical areas. The key elements that define neighborhood character, and their relationships to one another, form the basis of determining effect significance. In general, the more uniform and consistent the existing neighborhood character, the more sensitive it is to change. A neighborhood that has a varied context typically is able to tolerate greater change without experiencing significant effects. If there is no potential for the proposed action to affect the defining features of neighborhood character, a detailed assessment is not warranted.

Study Area

According to the *CEQR Technical Manual*, the study area for a preliminary assessment of neighborhood character is typically consistent with the study areas in the relevant technical areas assessed pursuant to CEQR that contribute to the defining features of the neighborhood. The study area boundaries of the preliminary assessment of neighborhood character are generally coterminous with those used in the analyses of land use and urban design (400-ft radius from the Development Site). As per the *CEQR Technical Manual*, the extent of the study area may be modified, as appropriate, either to include any additional areas that may be affected by the project or to exclude areas that would clearly not be affected by the project.

PRELIMINARY ASSESSMENT

Existing Conditions (Defining Features of the Neighborhood)

The Directly Affected Area consists of Block 3038, Lots 1, 3, 5, 7, 8, 9, 11, 12, 13, 14, 16, 20, 38, 45, 87, and 187 in the Belmont neighborhood of the Bronx, Community District 6. The Directly Affected Area (including the Development Sites) is bounded by East 183rd Street to the north, Park Avenue to the west, East 182nd Street to the south, and Washington Avenue to the east.

Land uses in the 400-foot radius around the Directly Affected Area (the "Study Area") are characterized by various levels of residential development, including one- and two-family buildings, multi-family walk-ups, multi-family elevator buildings, and mixed residential & commercial buildings. Multi-family walk-ups and mixed residential and commercial uses are present on nearly all blocks throughout the Study Area. One- and two-family buildings are generally located near the periphery of the Study Area, while multi-family elevator buildings are located closer to the Directly Affected Area, concentrated around the intersection of Washington Avenue and East 182nd Street. Residential building heights within the Study Area range from one story to fourteen stories.

There are three open space resources within the Study Area: Washington Park, located at East 183rd Street between Washington Avenue and Park Avenue; Thorpe Family Playground, located at East 183rd Street between Park Avenue and Webster Avenue; and the Farm in the Bronx Community Garden, located at the corner of East 182nd Street and Washington Avenue within Bathgate Playground.

Assessment

The sections below discuss the potential for effects resulting from the Proposed Actions in the following technical areas that are considered in the neighborhood character assessment pursuant to the *CEQR Technical Manual*: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; urban design and visual resources; shadows; transportation; and noise. The neighborhood character assessment uses information and conclusions from the relevant technical analyses chapters to identify whether the Proposed Actions would result in any moderate or significant effects in these technical areas and whether any such changes would have the potential to affect the defining features of the neighborhood.

Land Use, Zoning, and Public Policy

The Proposed Actions would not directly displace any land uses that would adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with existing land uses or zoning districts in the Study Area. The Proposed Actions would not result in land uses that conflict with public policies applicable to the Study Area. Therefore, the neighborhood's character would not be adversely affected due to potential effects of the Proposed Actions on land use, zoning, and public policy, either individually or in combination with potential impacts in the other relevant technical areas discussed in this section.

The Proposed Actions would encourage higher-density mixed uses and would activate the pedestrian corridor along Park Avenue. The new residential and commercial uses would complement existing mixed residential and commercial uses within the Study Area. The Proposed Actions would be consistent with existing neighborhood trends of mixed residential and commercial development and would further the goals of the East Tremont Rezoning by maximizing the potential of an underutilized site and allowing residential development that would complement and strengthen the residential and commercial character of this area of the Bronx, in addition to creating affordable housing (*CEQR No. 22DCP123X*).

Based on this information, the Proposed Actions would not result in any significant adverse impacts on neighborhood character in the area of land use, zoning, and public policy.

Socioeconomic Conditions

The Proposed Actions are anticipated to introduce approximately 388 residential units, 89-116 of which would be allocated as affordable housing for low-, moderate-, and middle-income families through the Mandatory Inclusionary Housing (MIH) program (Options 1, 2, and 3). The Proposed Actions are not anticipated to introduce a new trend that places upward pressure on rents. As discussed in Attachment D: "Socioeconomic Conditions," the development facilitated by the Proposed Actions would result in less than a 5 percent increase in Study Area population. Therefore, it is not anticipated that the development in the With-Action Condition would introduce or substantially accelerate a trend of change in the residential real estate market that would result in the potential displacement of a vulnerable population.

The Proposed Actions are anticipated to displace approximately 35 employees, which would not exceed the 100-employee threshold warranting an assessment as described in the *CEQR Technical Manual*.

The Proposed Actions would result in the development of approximately 16,000 gsf of commercial floor area within the Directly Affected Area, which is an increase of approximately 16,000 gsf as compared to the No-Action Condition. According to the *CEQR Technical Manual*, projects resulting in less than 200,000 square feet of retail on a single development site typically do not result in indirect socioeconomic impacts due to market saturation.

In conclusion, the Proposed Actions are not anticipated to result in significant adverse impacts on direct or indirect residential displacement, direct or indirect business displacement, or affect specific industries in the Directly Affected Area or the Study Area. Therefore, the neighborhood's character would not be adversely affected due to potential effects of the Proposed Actions on socioeconomic conditions either alone or in combination with potential impacts in other relevant technical areas as discussed in this section.

Based on this information, the Proposed Actions would not result in a significant adverse impact on neighborhood character as a result of changes to the area's socioeconomic conditions.

Open Space

The Proposed Actions would not directly displace an existing open space resource or result in a substantial decrease in the area's open space ratio (OSR). In addition, the proposed buildings are not anticipated to cast shadows on any publicly accessible open space within the Study Area. Therefore, the neighborhood's character would not be adversely affected due to potential effects of the Proposed Actions on open space either alone or in combination with potential impacts in other relevant technical areas discussed in this section.

According to CEQR Technical Manual guidelines, the planning goal of 2.5 acres of open space per 1,000 residents represents an area well-served by open space. The Proposed Actions would result in an additional 920 residents. As discussed in Attachment E: "Open Space," there are approximately 34.18 acres of open space within 0.5 miles of the Directly Affected Area. The total, active, and passive OSRs in the With-Action Condition would decrease by 1.13 percent. According to Table 7-5 of the CEQR Technical Manual, the percentage change in open space ration signifying a possible adverse impact for the total, active, and passive OSRs are 1%, 1%, and 2%, respectively. Therefore, only the decrease in total and active OSRs signify the potential for a possible adverse open space impact. Although the increase in residential population would result in a lower OSR than in the No-Action Condition, the presence of additional major open space resources in proximity to the Open Space Study Area would offset these conditions. Based on this information, the Proposed Actions are not anticipated to result in any potentially significant effects on open space; therefore, no further analysis is warranted. Based on this information, the Proposed Actions would not result in significant adverse impact on neighborhood character as a result of the effect of the Proposed Actions on the area's open space resources.

Shadows

As discussed in Attachment F: "Shadows," the Proposed Actions have the potential to cast shadows on two open space resources. However, due to the limited duration and extent of the incremental shadows, the Proposed Actions would not result in significant adverse shadow impacts to any of the identified sunlight-sensitive resources.

Based on this information, the Proposed Actions would not result in a significant adverse impact on neighborhood character as a result of changes to the area's sunlight-sensitive resources.

Urban Design and Visual Resources

As discussed in Attachment G: "Urban Design," the Proposed Actions would facilitate development that is contextually appropriate to the urban design character of the surrounding area, consistent with the surrounding building form and streetscape, and would develop underutilized sites within the Directly Affected Area. Additionally, the Proposed Actions would not result in any significant adverse impacts to the pedestrian experience or view corridors in the Study Area.

Based on this information, the Proposed Actions would not result in any potentially significant adverse impacts on neighborhood character in relation to urban design and visual resources.

Transportation

As discussed in Attachment I: "Transportation," vehicular and transit volumes were assessed through Level 1 and 2 screenings, as needed to determine whether they exceeded CEQR Technical Manual screening thresholds. Under the proposed project, the screening thresholds were not met, and no detailed analysis was required for further evaluation. There are no significant adverse impacts expected for vehicular and transit elements due to the Proposed Project.

The Proposed Project would generate pedestrian volumes which exceed the CEQR Technical Manual thresholds of 200 pedestrians per hour at three pedestrian sidewalk elements. A detailed pedestrian analysis was performed at those three sidewalk locations during the Saturday peak hour and at two of the locations during the weekday PM peak hour. Analysis results indicate that the sidewalk elements would operate at acceptable LOS under the Proposed Project, and therefore no significant adverse impacts related to pedestrians are anticipated as a result of the project.

Overall, the Proposed Project would have no significant adverse impacts on the transportation system, and no further assessment is necessary.

Noise

As discussed in Attachment K: "Noise," the Proposed Actions would not result in significant adverse noise impacts. The Proposed Actions would not generate sufficient traffic to create a significant noise impact or result in a substantial change in traffic-generated noise. The mechanical systems (HVAC systems) of new buildings would be designed to meet all applicable noise regulations and would avoid producing noise that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in significant adverse noise impacts from project-generated building mechanical equipment (stationary sources).

To achieve the CEQR-recommended interior noise criteria, the proposed building facades would be designed to provide a composite OITC rating greater than or equal to the attenuation requirements listed in Table M-3. An alternate means of ventilation (i.e., air conditioning) would also be provided that does not degrade the acoustical performance of the proposed building's façade along the north, south and west facades.

With an E-Designation in place for the development sites, the Proposed Actions would not have the potential to result in a significant adverse noise impact and no further analysis is required.

Therefore, the neighborhood's character would not be adversely affected due to potential effects of the Proposed Actions on noise either separately or in combination with potential impacts in other relevant technical areas as discussed in this section.

CONCLUSION

As stated in the *CEQR Technical Manual*, if a proposed project would have the potential to affect the defining features of the neighborhood, either through the potential for a significant adverse impact or a combination of moderate effects in relevant technical areas, then a detailed assessment is required to determine whether the proposed project may have a significant adverse neighborhood character impact. Of the relevant technical areas specified in the *CEQR Technical Manual*, the Proposed Actions would not cause significant adverse impacts regarding land use, zoning, and public policy, socioeconomic conditions, open space, shadows, urban design and visual resources, transportation, or noise. In addition, the technical areas that contribute to a neighborhood's character would not, either individually or in combination, result in moderate adverse impacts on neighborhood character.

Therefore, based on the results of the preliminary assessment, there is no potential for the Proposed Actions to result in significant adverse impacts to neighborhood character, and further analysis is not warranted.

ATTACHMENT M: CONSTRUCTION

INTRODUCTION

According to the *CEQR Technical Manual*, construction activities, although temporary, may sometimes result in significant adverse effects. Construction duration, which is a crucial measure to determine a project's potential for adverse effects during construction, is categorized as short-term (24 months or less) and long-term (more than 24 months). For construction activities not related to in-ground disturbance, short-term construction generally does not warrant a detailed construction analysis. However, consideration of several factors, including the location and setting of the project in relation to other uses and the intensity of construction activities, may indicate that a project's construction activities, even if short-term, warrant analysis in additional areas such as traffic, hazardous materials, historic and cultural resources, noise, and air quality.

Construction on Projected Development Sites 1 and 2 is anticipated to begin following approval of the Proposed Actions and would occur in a single phase totaling approximately 18 months. The Applicant intends to acquire Projected Development Sites 3 through 6, at which point construction would begin immediately and would be completed in a single phase totaling 18 months, concurrent with construction on Projected Development Sites 1 and 2. Construction on all Projected Development Sites would occur over a total period of 23 months.

Approval of the Proposed Actions is anticipated for 2026; therefore, the Proposed Project would be complete and operational by the beginning of 2029.

METHODOLOGY

The construction period for the Proposed Project is less than 24 months; therefore, pursuant to *CEQR Technical Manual* guidelines, any impacts resulting from such short-term construction generally do not require a detailed assessment. However, consideration of several factors, such as the location and setting of the project in relation to other uses and the intensity of construction activities, may indicate that a project's construction activities, even if short-term, may warrant further analysis. While the Proposed Project is expected to be constructed in less than 24 months, because the Directly Affected Area contains four (4) Projected Development Sites that are non-Applicant controlled, an assessment of the Proposed Project's potential for construction impacts has been completed.

CONSTRUCTION SEQUENCING

Construction would occur on six development sites located on the same block including two Applicant-Controlled sites and four Non-Applicant Controlled sites, as described below.

As discussed in Attachment B: "CEQR Analysis Framework," the Proposed Actions would facilitate development on two Applicant-controlled Projected Development Sites within the Directly Affected Area (the "With-Action Condition").

Projected Development Site 1 (Block 3038, Lots 5, 7, 8, 9, and 11) would be improved with a new 14-story (145 feet) plus cellar, approximately 192,379 gsf mixed-use building, containing approximately 4,500 gsf of ground-floor commercial space and approximately 187,879 sf of residential space with 179 dwelling units. Approximately 67 accessory off-street parking spaces would be provided in the cellar or on the ground floor (rear of building). One (1) curb cut would be installed on Park Avenue in connection with the below-grade parking entrance.

Projected Development Site 2 (Block 3038, Lot 45) would be improved with a new 9-story (95 feet), approximately 137,689 gsf residential building, containing approximately 5,413 gsf of commercial space and 132,276 gsf of residential space with 129 dwelling units. Approximately 49 accessory off-street parking spaces would be provided on the ground floor. One (1) curb cut would be installed on East 182nd Street.

Construction on Projected Development Site 1 and 2 is anticipated to begin following approval of the Proposed Actions and be completed by the beginning of 2029 (the "Build Year") (see **Figure M-1**).

Future development is also contemplated on four additional Projected Development Sites within the Directly Affected Area.

Projected Development Site 3 (Block 3038, Lot 1) would be developed with a new 9-story (95 feet), approximately 38,120 gsf mixed use building, comprising 3,000 gsf of commercial space and 35,120 gsf of residential space with 25 dwelling units.

Projected Development Site 4 (Block 3038, Lots 12 and 13) would be developed with a new 14-story (145 feet), approximately 50,894 gsf mixed-use building comprising 2,000 gsf of commercial space and 48,894 gsf of residential space with 36 dwelling units.

Projected Development Site 5 (Block 3038, Lot 14) would be developed with a new 7-story (75 feet), approximately 32,800 gsf mixed-use building comprising 2,500 gsf of commercial space and 30,300 gsf of residential space with 22 dwelling units.

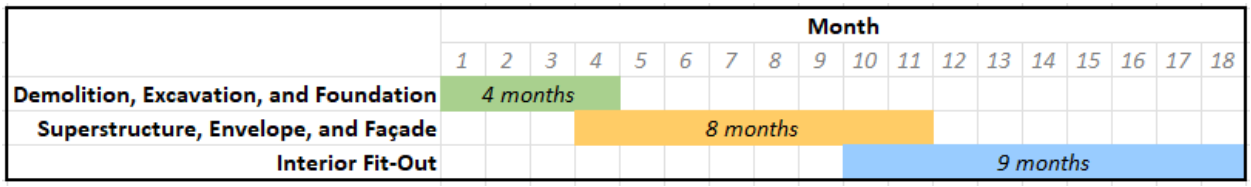
Projected Development Site 6 (Block 3038, Lots 20, 87, and 187) would be developed with a new 11-story (115 feet), approximately 58,471 gsf mixed-use building comprising 4,000 gsf of commercial space and 54,471 gsf of residential space with 41 dwelling units.

The Applicant intends to acquire Projected Development Sites 3 through 6, at which point construction would begin immediately. Construction on Projected Development Sites 3 through 6 would occur concurrently with construction on Projected Development Sites 1 and 2 over the course of 18 months and would be completed in the middle of 2029 (see **Figure M-2**).

For Projected Development Sites 1 and 2, demolition, excavation, and foundation work would occur over an approximately four-month period. Construction of the superstructure, envelope, and façade would occur over a period of approximately eight months, overlapping the foundation phase by approximately one month. The interior fit-out activities would occur over a nine-month period and

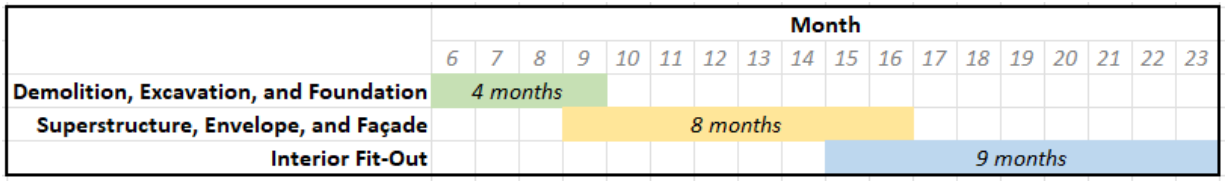
would begin in month ten, during the superstructure, envelope, and façade phase. These phases would overlap for approximately two months.

Figure M-1: Construction Schedule – Projected Development Sites 1 and 2 (Applicant Controlled Sites



For Projected Development Sites 3 through 6, it is anticipated that demolition, excavation, and foundation work would begin in month six and would occur over an approximately four-month period. Construction of the superstructure, envelope, and facade would begin in month nine and would occur over a period of approximately eight months, overlapping the foundation phase by approximately one month. The interior fit-out activities would occur over a nine-month period and would begin in month fifteen, during the superstructure, envelope, and facade phase. These phases would overlap for approximately two months.

Figure M-2: Construction Schedule – Projected Development Sites 3 through 6 (Non-Applicant Controlled Sites)



REGULATORY AGENCIES AND OVERSIGHT

Compliance with New York City construction regulations is required regardless of the length of the construction period. In addition to regulatory requirements, applicants must coordinate with New York City, New York State, and occasionally federal agencies to ensure that construction is facilitated appropriately.

New York City Air Pollution Control Code

All projects, whether or not they are subject to the requirements of CEQR, are required to comply with the New York City Air Pollution Control Code, which regulates fugitive dust under Section 1402.2-9.11. "Preventing Dust from Becoming Air-Borne; Spraying of Insulating Material and Demolition Regulated" (Title 24 of the Administrative Code of the City of New York, Chapter 1, Subchapter 6, Section 24-146).

Required Permits from NYC DOT's Office of Construction Management and Coordination

Before permits can be issued by the New York City Department of Transportation ("DOT") for general construction activity, sidewalk construction, canopy permits, traffic, bicycle detour, and pedestrian access plans must be approved by the NYC DOT Office of Construction Mitigation and Coordination ("OCMC"). Among other matters, the OCMC pedestrian access plans identify the extent to which any sidewalks and/or crosswalks would be detoured or narrowed to allow for construction-related activity and describe how pedestrian access to adjacent land uses and intersections will be maintained.

New York City Noise Control Code

The New York City Noise Control Code, as amended by Local Law 113 of 2005, defines "unreasonable and prohibited noise standards and decibel levels" for the City of New York. The New York City Noise Control Code, Section 24-219, contains rules that prescribe "noise mitigation strategies, methods, procedures, and technology that shall be used at construction sites" when certain construction devices or activities occur. Additionally, the New York City Noise Control Code requires activities to occur between 7 AM and 6 PM, Monday through Friday. Construction activities outside the permitted days/hours would require an After-Hours Variance from the New York City Department of Buildings ("DOB").

GENERAL CONSTRUCTION PRACTICES

Hours of Work

Construction activities would adhere to New York City laws and regulations, which generally permit construction work to begin at 7:00 AM on weekdays, with workers arriving to prepare work areas between 6:00 AM and 7:00 AM. Construction activities would typically cease around 3:30 PM, but on occasion can be extended to finish specific tasks, such as finishing a concrete pour of a floor deck. In the case of an extended workday, construction activities would continue until about 6:00 PM and would only include the workers involved in the task requiring additional work time.

Occasionally, Saturday or overtime hours may be required to complete time-sensitive tasks. A permit from DOB and approval of a noise mitigation plan from the New York City Department of Environmental Protection ("DEP") may be required for weekend work. The New York City Noise Control Code limits construction to weekdays between the hours of 7:00 AM and 6:00 PM and sets noise limits for specific pieces of construction equipment. Construction activities occurring after hours may be permitted only to accommodate: (i) emergency conditions; (ii) public safety; (iii) construction projects by or on behalf of city agencies; (iv) construction activities with minimal noise effects; and (v) undue hardship resulting from unique site characteristics, unforeseen conditions, scheduling conflicts, and/or financial considerations. Similar to an extended workday during the week, only the workers and equipment needed to complete the specific task during weekend work are required. The typical weekend workday would be on Saturday from 7:00 AM to 5:00 PM, and the level of activity for any weekend work would be less than a normal workday.

Sidewalk and Traffic Lanes: Detours and Closures

It is not anticipated that construction will require long-term closures of traffic lanes. Traffic lanes, on-street parking, and/or sidewalks may need to be closed/detoured at some point during the construction period to accommodate truck access and maneuvering. At this planning stage, the assignment and duration of potential closures is not yet known. However, if sidewalk, shoulder, and/or lane closures/detours are required, appropriate detours and the corresponding Work Zone Traffic Control ("WZTC") plans will be prepared and provided to the OCMC for review and approval. WZTC would provide signs, barriers, flashing arrow boards, and other items that would be provided to physically separate the work zone from vehicle and pedestrian traffic on nearby sections of the affected roads. A temporary path within or directly adjacent to the sidewalk may be required to detour pedestrians around the construction site; this will be further coordinated with the OCMC.

For the Proposed Project, and, depending on the stage of construction, truck movements would generally occur between 7:00 AM and 3:00 PM on weekdays. As described above, New York City Noise Control Code requires construction activities to occur between 7:00 AM and 6:00 PM on weekdays.

No rerouting of traffic is anticipated during construction activities. There are no anticipated scheduled travel lane closures to accommodate construction. Due to construction activities, there may be temporary loss of on-street parking and/or obstruction of sidewalks along the property frontage. Pedestrian circulation and access would be maintained through the use of a temporary sidewalk, or with pedestrian diversions to the opposite side of the street. Additionally, the use of sidewalk enclosures or sidewalk bridges may be implemented.

Deliveries and Access

The construction site would be fenced off and access would be limited to construction-related activities. Workers and trucks that are not needed on the construction site would not be granted entry. Access points to the construction site would be locked and closed after hours.

Rodent Control

Construction contracts may include provisions for a rodent control program. Before the start of construction, the contractor would survey and bait the appropriate areas and provide proper site sanitation as necessary. During construction, the contractor would carry out a maintenance program as necessary and signage on all baiting areas would be posted to protect the community along with appropriate public agency coordination. Additionally, only Environmental Protection Agency ("EPA") and New York State Department of Environmental Conservation ("NYSDEC") registered rodenticides would be permitted. A rodent control program would be required to be implemented in a manner that is not hazardous to the general public, domestic animals, and non-target wildlife.

PRIMARY CONSTRUCTION TASKS

Demolition

The Projected Development Sites contain buildings that would be demolished in the With-Action Condition. In the demolition stage, the existing buildings would be torn down following established

demolition regulations. Equipment used during the demolition stage would include high reach excavators, front end loaders, dozers, dump trucks, and compact excavators. Trucks would transport materials from the construction site to onward destinations such as processing facilities or landfills. Demolition would begin on the Projected Development Sites as soon as the necessary discretionary approvals and building permits are granted.

Excavation and Foundation

Excavation and foundation work would begin on each of the Projected Development Sites upon completion of demolition. Sheeting would be installed to hold back soil around the excavation area and excavators would then be used to remove soil to the appropriate depth. Below-grade elements and foundations would then be built for the new buildings.

Equipment that would be used during the excavation and foundation stage includes bar benders, compactors, compressors, front end loaders, dozers, pumps (concrete), impact pile drivers, excavators, gradalls, vibratory concrete mixers, a backhoe, a boring machine, and generators. During this construction stage, construction vehicles would include dump trucks, flatbed trucks, pickup trucks, and concrete mix and pump trucks. These trucks would assist the excavation and foundation process through the removal of excavated soil and demolished materials.

The foundations would not be waterproofed until a slab-on-grade is built after excavation is complete, creating the potential for water to accumulate in the excavated area. Water from rain and snow collected in the excavation area during construction would be removed as necessary using a dewatering pump. If dewatering is required, it would be performed in accordance with DEP sewer use requirements. Testing would be required to protect against contaminated groundwater before it can be discharged into the existing sewer system.

Superstructure, Envelope, and Façade

The superstructure of a building includes the building's framework such as beams, slabs, and columns. Construction of the interior structure, or core, of the building would include elevator shafts, vertical risers for mechanical, electrical, and plumbing systems, electrical and mechanical rooms, core stairs, and restroom areas. A crane would likely be used during the superstructure stage to lift structural components, façade elements, and other large materials. Superstructure construction activities would typically also require the use of a crane, rebar benders, welding equipment, and a variety of trucks to support superstructure construction. In addition, temporary construction elevators (hoists) would be used for the vertical movement of workers and materials during superstructure activities. Load testing equipment and safety anchors will also be utilized during this phase of work.

Interior Fit-Out

This final stage of construction would include the construction of interior partitions, installation of lighting fixtures, interior finishes (such as flooring, painting, cabinetry, etc.), and mechanical and electrical work, such as the installation of elevators and lobby finishes. Final cleanup, building system

testing (e.g., electrical system, fire alarm, plumbing, etc.), and inspections would also be part of this stage of construction. Equipment used during interiors and finishing would generally include hoists, forklifts, scissor lifts, delivery trucks, and a variety of small handheld tools. The interior fit-out stage would generate significantly less heavy-duty diesel vehicle trips to the Directly Affected Area than the excavation and superstructure phases. The use of heavy machinery would also be minimal during this construction stage, thereby limiting the noise and air effects on the surroundings.

PRELIMINARY ASSESSMENT

Effect of Construction on Traffic

The Proposed Project is not located in a Central Business District ("CBD"), would not require closing, narrowing, or otherwise impeding moving lanes, roadways, pedestrian facilities, bicycle routes, bus lanes, or access points to transit and would not involve construction that would last for more than two years. As described previously, Construction on Projected Development Sites 1 and 2 is anticipated to begin following approval of the Proposed Actions and would occur in a single phase totaling approximately 18 months. The Applicant intends to acquire Projected Development Sites 3 through 6, at which point construction would begin immediately and would be completed in a single phase totaling 18 months, concurrent with construction on Projected Development Sites 1 and 2. Construction on all Projected Development Sites would occur over a total period of 23 months.

Vehicular and transit volumes were assessed through Level 1 and 2 screenings, as needed to determine whether they exceeded *CEQR Technical Manual* screening thresholds. Under the proposed project, the screening thresholds were not met, and no detailed analysis was required for further evaluation. There are no significant adverse impacts expected for vehicular and transit elements due to the Proposed Project.

The Proposed Project would generate pedestrian volumes which exceed the *CEQR Technical Manual* thresholds of 200 pedestrians per hour at three pedestrian sidewalk elements. A detailed pedestrian analysis was performed at those three sidewalk locations during the Saturday peak hour and at two of the locations during the weekday PM peak hour. Analysis results indicate that the sidewalk elements would operate at acceptable LOS under the Proposed Project, and therefore no significant adverse impacts related to pedestrians are anticipated as a result of the project.

Overall, the Proposed Project would have no significant adverse impacts on the transportation system.

Effect of Construction on Air Quality

Emissions from construction equipment and construction related vehicular traffic, as well as dust generating construction activities have the potential to affect air quality. Typically, much of the heavy equipment used in construction has diesel-powered engines that generate carbon monoxide (C02), nitrogen oxide (NO2), and particulate matter. Emission producing heavy equipment is primarily utilized during the early stages of construction during demolition, excavation, groundwork, and foundation activities. The emissions produced as a result of the use of heavy diesel equipment,

coupled with the fugitive dust from particularly intensive earth moving activities, elevate the emissions levels during the early stages of construction.

All projects, whether or not subject to the requirements of CEQR, are required to comply with the New York City Air Pollution Control Code, which regulates fugitive dust under Section 1402.2-9.11. "Preventing Particulate Matter from Becoming Air-Borne; Spraying of Asbestos Prohibited; Spraying of Insulating Material and Demolition Regulated" (Title 24 of the Administrative Code of the City of New York, Chapter 1, Subchapter 6, Section 24-146).

Mobile source emissions may occur from the operation of construction equipment, as a result of trucks delivering materials and removing debris; workers' private vehicles traveling to/from the Projected Development Sites; or occasional disruptions in traffic near the construction site. As the number of construction-related vehicle trips generated by the Proposed Actions would be relatively small and the duration of construction activities would occur over a short-term period (less than 24 months), the mobile source emissions generated by the Proposed Actions would not be significant. Overall, the Proposed Actions would not have the potential to result in significant adverse air quality impacts.

Effect of Construction on Noise

Noise and vibration from construction equipment operation and noise from construction workers' vehicles and delivery vehicles traveling to and from the construction sites can affect community noise levels. The level of impact of these noise sources depends on the noise characteristics of the equipment and activities involved in the construction schedule, and the location of potentially sensitive noise receptors. Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, as well as the distance of the location from the construction site and the types of structures, if any, between the location and the noise source. Noise levels caused by construction activities can vary widely, depending on the phase of construction (e.g. demolition, land clearing and excavation, foundation, erection of structure, construction of exterior walls) and the specific task being undertaken. Construction noise associated with the Proposed Actions is expected to be similar to noise generated by other residential construction projects in the city. Increased noise level caused by construction activities can be expected to be more significant during early excavation phases of construction and would be of a relatively short duration. Increases in noise levels caused by delivery trucks and other construction vehicles would not be significant. Construction noise is regulated by the New York City Noise Control Code and by Environmental Protection Agency noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction material be handled and transported in such a manner as not to create unnecessary noise. In addition, whenever possible, appropriate low noise emission level equipment and operational procedures can be utilized to minimize noise and its effect on adjacent uses. Thus, while there may be short periods of time when noise is greater than the Noise Control Code, these

regulations would be followed in such a matter that no significant adverse noise impacts would be expected to result from the Proposed Actions.

Effect of Construction on Hazardous Materials

As described in Attachment H: "Hazardous Materials," Phase I and Phase II environmental investigations were performed on Projected Development Sites 1 and 2. Projected Development Sites 4, 5, and 6 are not under control of the Applicant; therefore, Phase I and Phase II ESAs were not available for these sites. However, an (E) designation for hazardous materials would be placed on each Projected Development Site to ensure that the necessary pre- and post-development procedures to mitigate or eliminate the potential for significant adverse impacts related to hazardous materials are performed.

In addition, demolition of building interiors, portions of buildings or entire buildings are regulated by NYC DOB which, if necessary, requires abatement of asbestos prior to any construction activities that could result in potential exposure.

Therefore, through adherence to the regulations imposed by the applicable New York City and New York State governing agencies, and the implementation of (E) designations, the Proposed Actions are not anticipated to result in significant adverse impacts from hazardous materials as a result of construction activities.

CONCLUSION

The Proposed Actions would facilitate the development of six Projected Development Sites in the Directly Affected Area. Based on the above qualitative construction analysis, and preliminary analyses in the preceding technical areas, construction-related activities are not expected to have any significant adverse impacts on traffic, air quality, noise, or hazardous materials conditions as a result of the Proposed Actions.

As described above, construction activities on the Development Site would be temporary, typical of new development, and considered short-term (less than 24 months); therefore, pursuant to *CEQR Technical Manual* guidelines, any effects resulting from such short-term construction do not require a detailed assessment. Further, as described in this section, construction processes in New York City are highly regulated and would ensure construction period effects are avoided or minimized.

Based on this information, the Proposed Actions would not result in significant adverse effects related to construction, and no further analysis is warranted.

ATTACHMENT N: EFFECTS ON DISADVANTAGED COMMUNITIES

INTRODUCTION

Effective December 30, 2024, Section 8-0109(2)(k) of the New York State Environmental Conservation Law requires that this Environmental Assessment Statement (EAS) include a statement of the effects of the Proposed Actions on disadvantaged communities, including whether the action may cause or increase a disproportionate pollution burden. The 2021 CEQR Technical Manual does not provide guidance regarding the scope of this analysis. On January 29, 2025, the New York State Department of Environmental Conservation (NYSDEC) proposed a rule that provides additional considerations regarding this new statutory provision. This assessment of effects on disadvantaged communities considers the impacts that have been assessed using the CEQR Technical Manual guidance.

METHODOLOGY

Disadvantaged communities (DAC) in New York State were identified based on criteria adopted in 2023 by the Climate Justice Working Group (CJWG), a group composed of representatives from State Agencies and Environmental Justice groups across the State. The CJWG used 45 indicators to identify 35 percent of Census Tracts within New York State as DACs. The criteria include multiple indicators that represent the environmental burdens or climate change risks within a community, or population characteristics and health vulnerabilities that can contribute to more severe adverse effects of climate change. Each Census Tract was scored based on relative burden, risk, vulnerability, or sensitivity. Specifically, the percentile ranks of the indicators for each Census Tract were combined to produce a value measuring a Census Tracts relative level of "Environmental Burdens and Climate Change Risks" as well as "Population Characteristics and Health Vulnerabilities" relative to other Census Tracts. Census Tracts with higher scores relative to other Census Tracts statewide or to their region (i.e., New York City) were identified as DACs, using NYSDECs Disadvantaged Community Assessment Tool (DACAT).

PRELIMINARY ASSESSMENT

Rocky & Brothers Realty LLC (the "Applicant") requests approval of a zoning map amendment from an M1-1 and R6A zoning district to an R7X/C2-4 and R7A/C2-4 zoning district, and a zoning text amendment to Appendix F of the Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area (the "Proposed Actions"). The Proposed Actions would affect Block 3038, Lots 1, 3, p/o 5, 7, 8, 9, 11, 12, 13, 14, 16, p/o 20, p/o 29, 38, 45, 87, and 187 (the "Directly Affected Area") in the Fordham/Belmont neighborhood of the Bronx, Community District 6.

As discussed in Attachment A: "Project Description," approval of the Proposed Actions would facilitate development on six (6) Projected Development Sites in the Directly Affected Area:

- Projected Development Site 1 would be developed with a 14-story (145 feet), approximately 192,379 gsf (146,990 zsf) mixed-use building fronting Park Avenue (Lots 5, 7, 8, 9, and 11). Projected Development Site 1 would contain approximately 4,500 gsf (4,500 zsf) of ground-floor commercial use and approximately 187,879 gsf (142,490 zsf) of residential use on floors 1 through 14 with 179 dwelling units, of which 20-30% (36-54 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 67 accessory off-street parking spaces would be provided.

- Projected Development Site 2 would be developed with a 9-story (95 feet), approximately 137,689 gsf (105,256 zsf) mixed-use building fronting East 182nd Street (Lots 38 and 45). Projected Development Site 2 would contain approximately 5,413 gsf (5,413 zsf) of ground-floor commercial use and approximately 132,276 gsf (99,843 zsf) of residential use on floors 1 through 9 with 129 dwelling units, of which 20-30% (26-39 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected. Approximately 49 accessory off-street parking spaces would be provided.

- Projected Development Site 3 (Lot 1) would be developed with a 9-story (95 ft) 38,120 gsf (27,564 zsf) mixed-use building containing 3,000 gsf (3,000 zsf) of ground-floor commercial space and 35,120 gsf (27,564 zsf) of residential space on floors 2 through 9 with 25 dwelling units, of which 20-30% (5-8 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 4 (Lots 12 and 13) would be developed with a 14-story (145 ft), approximately 50,894 gsf (38,082 zsf) mixed-use building containing 2,000 gsf (2,000 zsf) of ground-floor commercial space and 48,894 gsf (36,082 zsf) of residential space on floors 2 through 14 with 36 dwelling units, of which 20-30% (8-11 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 5 (Lot 14) would be developed with a 7-story (75 ft), approximately 32,800 gsf (24,660 zsf) mixed-use building containing 2,500 gsf (2,500 zsf) of ground-floor commercial space and 30,300 gsf (22,160 zsf) of residential space on floors 2 through 7 with 22 dwelling units, of which 20-30% (5-7 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

- Projected Development Site 6 (Lots 87, 187, and 20) would be developed with an 11-story (115 ft), approximately 58,471 gsf (45,312 zsf) mixed-use building containing 4,000 gsf (4,000 zsf) of ground-floor commercial space and 54,471 gsf (41,312 zsf) of residential space on floors 2 through 11 with 41 dwelling units, of which 20-30% (9-12 units) would be made affordable pursuant to MIH at an average of 40-80% AMI, depending on the Option selected.

The Proposed Project is located in a disadvantaged community identified as having comparatively higher burdens and vulnerabilities (Census Tract ID 36005036902). The Proposed Project is also surrounded by disadvantaged communities identified as having comparatively higher burdens and vulnerabilities (**Figure N-1**).

As described in Attachment H: "Hazardous Materials," Phase I and Phase II Environmental Site Assessments were conducted where needed, as recommended by NYC DEP. An (E) Designation would be placed on Projected and Potential Development Sites as needed to ensure that appropriate testing and mitigation are conducted. Furthermore, as described in Attachment M: "Construction," demolition and other construction activities are regulated by NYC DOB, which, if necessary, requires abatement of asbestos prior to any construction activities that could result in potential exposure.

As described in Attachment J: "Air Quality," the Proposed Project would not result in any stationary source air quality effects (neither "project on existing conditions" or "existing conditions on project"). Further, no significant adverse air quality impacts are predicted from the cumulative effects of emissions from groups of HVAC systems in close proximity with similar stack heights as a result of the Proposed Actions, and the proposed (E) Designation placed on the Projected Development Sites would specify the type of fuel to be used, as well as the distance that the vent stack on the building roof must be from its lot line(s). Lastly, the AERMOD analysis for existing large emissions sources predicted pollutant concentrations for all of the pollutant time averaging periods were deemed to be below their respective standards.

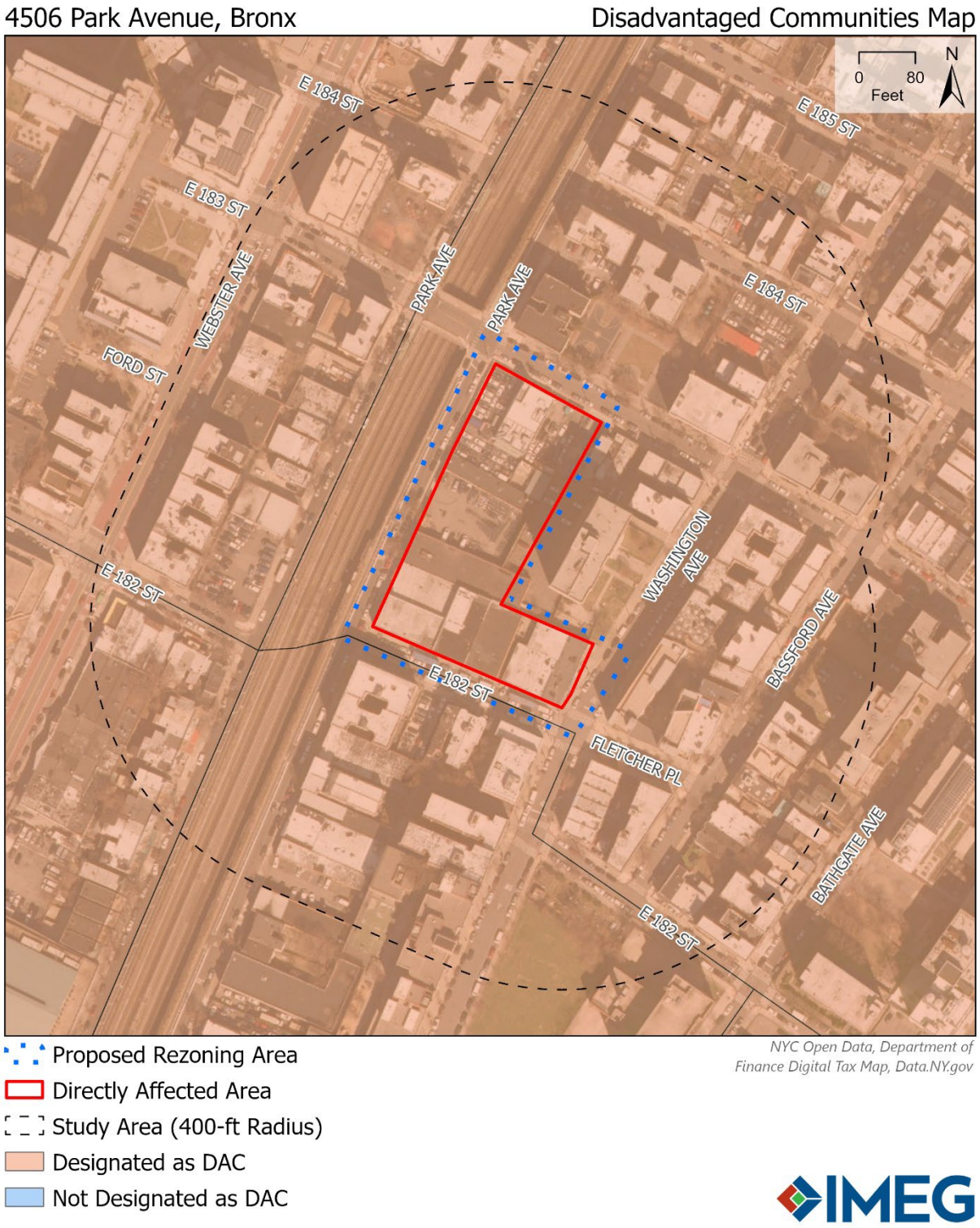
As addressed in Attachment K: “Noise,” the Proposed Project would incorporate the following components as part of the project to protect building residents from high levels of ambient noise:

To achieve the CEQR-recommended interior noise criteria, the proposed building facades would be designed to provide a composite OITC rating greater than or equal to the attenuation requirements listed in ***Table K-3****. An alternate means of ventilation (i.e., air conditioning) would also be provided that does not degrade the acoustical performance of the proposed building’s façade along the north, south and west facades.*

CONCLUSION

The Project Site is located within and proximate to disadvantaged communities. However, as discussed above, the Proposed Project would incorporate several measures in the pre-construction, construction, and operational phases to protect building residents from site-specific concerns. Therefore, the Proposed Actions would not create or introduce a disproportionate burden on DACs. Further, given that the Proposed Project would address a significant need for new housing, including affordable housing, the Proposed Project would not result in impacts related to Environmental Justice and further assessment is not warranted.

Figure N-1: Disadvantaged Communities Map



APPENDICES

Appendix A: Architectural Drawings *(for illustrative purposes only)*

Appendix B: Site Photographs

Appendix C: Agency Correspondence

Appendix D: Transportation Memo

Appendix E: Noise Memo

Appendix A:
Architectural Drawings

PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,, BRONX, NY 10457



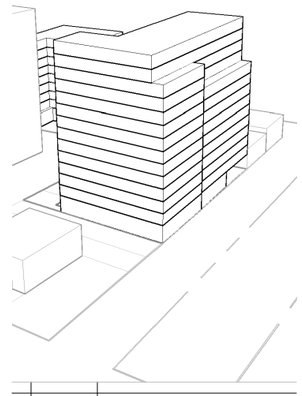
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



No	DATE	SUBMISSIONS / REVISIONS
	09.10.24	REVISED AS PER COMMENTS
	07.26.24	REVISED AS PER COMMENTS
	05.24.22	DCP SUBMISSION
	04.15.24	ISSUED TO CLIENT
	03.15.23	ISSUED TO CLIENT
	01.31.23	INTERDIVISIONAL MEETING
	10.28.22	ISSUED TO CLIENT

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3D ILLUSTRATION

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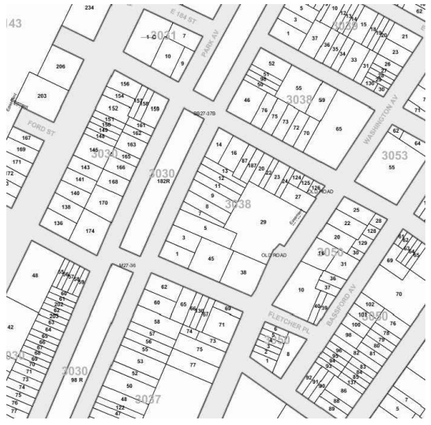
EXISTING ZONING MAP

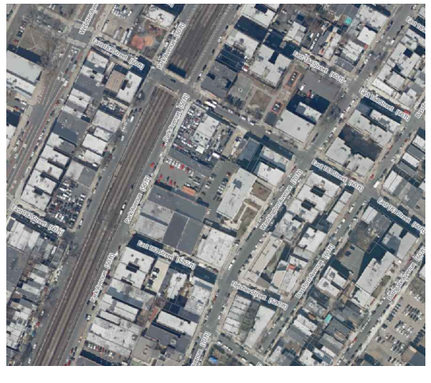


LAND USE MAP





TAX MAP



AERIAL MAP



PLOT PLAN

SCALE: 1/64" = 1'-0"

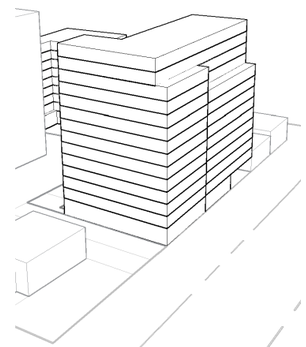
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



No.	DATE	SUBMISSIONS / REVISIONS
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JOB NUMBER: NY100322

SHEET TITLE:

MAPS AND PLOT PLAN

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STREET VIEW LOOKING EAST



AERIAL VIEW LOOKING SOUTH



STREET VIEW LOOKING WEST



AERIAL VIEW LOOKING NORTH

PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
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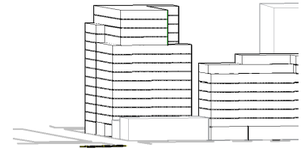

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IMAGES OF EXISTING CONDITIONS

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PROPOSED PLOT PLAN
NOT TO SCALE

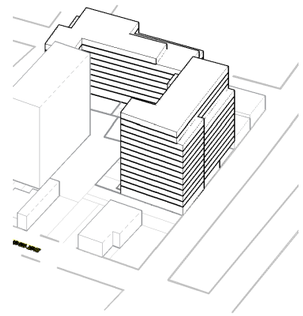
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



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SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

PLOT PLAN AND HEIGHT DIAGRAM

DRAWING NO: Z-102.00

SITE DATA		LIST OF REQUIRED ACTIONS	BUILDING CODE NOTES	QUALITY HOUSING PROGRAM
Block:	3038	1 - SURVEY REQUIRED	CONST. CLASS 1-B 2HR RATED	TRANSIT ZONE
Lots:	5, 7, 8, 9, 11	2 - ZONING MAP AMENDMENT TO R7X/C2-4 OVERLAY & R7A/C2-4	BUILDING CODE OCCUPANCY GROUP R-2	FRESH ZONE
Street Address:	4506 PARK AVE		BUILDING TO BE FULLY SPRINKLERED	SANITATION BOROUGH 2
Existing Zoning:	M1-1 / R6A	3- ZONING TEXT CHANGED TO APPENDIX F: INCLUSIONARY DESIGNATED AREA AND MANDATORY INCLUSIONARY HOUSING AREAS	BUILDING TO BE DESIGNED	COUNCIL DISTRICT 15
Porposex Zone	R7X/C2-4-R7A/C2-4(MIH)		PER 2022 NYC BUILDING CODE	FIRE COMPANY E048
Community District:	6, BRONX		PER NYC ENERGY CODE	SCHOOL DISTRICT 10
Zoning Section Map:	3c			SANITATION DISTRICT 06
Lot Area R7A	14270.9			POLICE PRECINCT 48
Lot Area R7X	30149.5			
Zoning Lot Area	44,420.4			

ZR - SECTION	TITLE	DEFINITION			EX. PERM./REQ.	REZONE PERM.	PROPOSED	TOTAL	Compliance / Notes
					M1-1 / R6A	R7X/C2-4-R7A/C2-4(MIH)	R7X/C2-4-R7A/C2-4(MIH)	R7X/C2-4-R7A/C2-4(MIH)	
22-10, 32-00	USES								
		USE GROUP			4, 5, 6, 7, 8, 9, 10 & 11	2 & 6	2 & 6	2 & 6	OK
23-011	QUALITY HOUSING								
	PROGRAM				N/A	YES	YES	YES	OK
23-32	MIN LOT AREA								
		WIDE STREET		0.00					
		NARROW STREET		44,420.40	1,700	-	-	-	OK
	FAR								
23-154(d)(2)(iii)	R7A (MIH)	RESIDENTIAL			N/A	5	4.7	5.52	OK
	R7X (MIH)	RESIDENTIAL			N/A	6	5.8		OK
		COMM. FAC.			N/A	4	0.0		OK
		COMMERCIAL			N/A	2.00	0.22		OK
	FLOOR AREA								
23-154	R7A (MIH)	RESIDENTIAL							
		14270.9	X	5	-	71354.5	67410.00	242332.50	OK
#REF!	R7X (MIH)	RESIDENTIAL							
		30149.5	X	6	-	180897	174922.50		OK
#REF!		COMM. FAC.							
		44420.4	X	4	-	177681.6		0.00	OK
#REF!		COMMERCIAL							
		44420.4	X	2	-	88840.8	9913.00	9913.00	OK
#REF!		TOTAL			-				
		44420.4	X	5.52	-	252251.5	**252246**	**252246**	OK
23-153	LOT COVERAGE								
		INTERIOR	R6A	65%	9276.09		2831	2831	OK
		INTERIOR	R7A	70%	N/A	21104.65	24245	24245	OK
	YARD REGULATION								
23-45		FRONT YARD			NONE	NONE	NONE	NONE	OK
23-46		SIDE YARD			NONE	NONE	NONE	NONE	OK
23-541		REAR YARD			30'-0"	30'-0"	38'-0"	38'-0"	OK
	HEIGHT & SETBACKS								
23-664	R7A (MIH)	MIN BASE			40'-0"	75'-0"	75'-0"	75'-0"	OK
23-664	R7A (MIH)	MAX BASE			75'-0"	75'-0"	75'-0"	75'-0"	OK
23-664	R7A (MIH)	# OF FLOORS			9	9	9	9	OK
23-664	R7A (MIH)	MAX BUILDING			95'-0"	95'-0"	95'-0"	95'-0"	OK
23-664	R7X (MIH)	MIN BASE			60'-0"	105'-0"	105'-0"	105'-0"	OK
23-664	R7X (MIH)	MAX BASE			105'-0"	105'-0"	105'-0"	105'-0"	OK
23-664	R7X (MIH)	# OF FLOORS			14	14	14	14	OK
23-664	R7X (MIH)	MAX BUILDING			145'-0"	145'-0"	145'-0"	145'-0"	OK
	STREET WALL LOCATION								
23-661		ENTIRE STREET FRONTAGE TO MATCH ADJACENT BUILDING			YES	YES	YES	YES	OK
	SETBACKS								
23-662		SETBACK @ WIDE STREETS			10'-0"	10'-0"	10'-0"	10'-0"	OK
23-662		SETBACK @ NARROW STREETS			15'-0"	15'-0"	15'-0"	15'-0"	OK
	PERMITTED								
23-62	OBSTRUCTION	DORMERS			YES	YES	YES	YES	OK
	DENSITY								
23-22		680			N/A	356	**308**	**308**	OK
	ACCESSORY OFF-STREET PARKING								
25-23		RESIDENTIAL	MR	50%		116	116	116	OK
25-23 / 25-241		RESIDENTIAL	AFF	TRANSIT ZONE	N/A	0	0	0	OK
44-21		COMM. FAC.		1 X 300	0	0	WAIVED	WAIVED	OK
44-21 / 44-23		COMMERCIAL		1 X 300	33	33	WAIVED	WAIVED	OK
	BICYCLE PARKING								
25-80		RESIDENTIAL		50%	N/A	154	154	155	OK
44-60		COMM. FAC.		1 X 10,000	0	0	0		OK
44-60		COMMERCIAL		1 X 10,000	1	1	1		OK

ZONING CALCULATION CHART



AERIAL VIEW

BUILDING A					
FLOOR	APARTMENT TYPE				TOTAL
	0BR	1BR	2BR	3BR	
C					
1					0
2	2	6	4	0	12
3	5	7	4	0	16
4	5	7	4	0	16
5	5	7	4	0	16
6	3	7	4	1	15
7	3	7	4	1	15
8	3	7	4	1	15
9	3	7	4	1	15
10	3	7	4	1	15
11	1	2	6	2	11
12	1	2	6	2	11
13	1	3	6	1	11
14	1	3	6	1	11
TOTAL	36	72	60	11	179
%	20%	40%	34%	6%	

BUILDING B					
FLOOR	APARTMENT TYPE				TOTAL
	0BR	1BR	2BR	3BR	
C					
1					0
2	3	8	5	2	18
3	3	8	5	2	18
4	3	8	5	2	18
5	3	8	5	2	18
6	3	8	5	2	18
7	3	8	5	2	18
8	0	5	6	2	13
9	0	4	3	1	8
TOTAL	18	57	39	15	129
%	14%	44%	30%	12%	

APARTMENT DISTRIBUTION

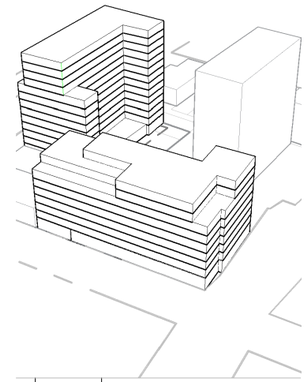
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



No	DATE	SUBMISSIONS / REVISIONS
	09.10.24	REVISED AS PER COMMENTS
	07.26.24	REVISED AS PER COMMENTS
	05.24.22	DCP SUBMISSION
	04.15.24	ISSUED TO CLIENT
	03.15.23	ISSUED TO CLIENT
	01.31.23	INTERDIVISIONAL MEETING
	10.28.22	ISSUED TO CLIENT

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DRAWN BY: ED

SHEET No.: 5 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

ZONING CALCULATIONS

DRAWING NO:

Z-103.00

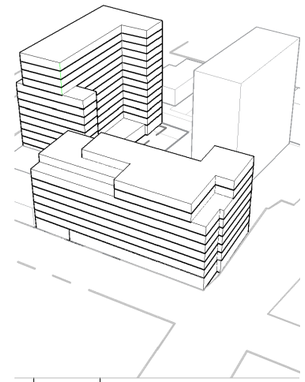
PROPOSED RE-ZONE

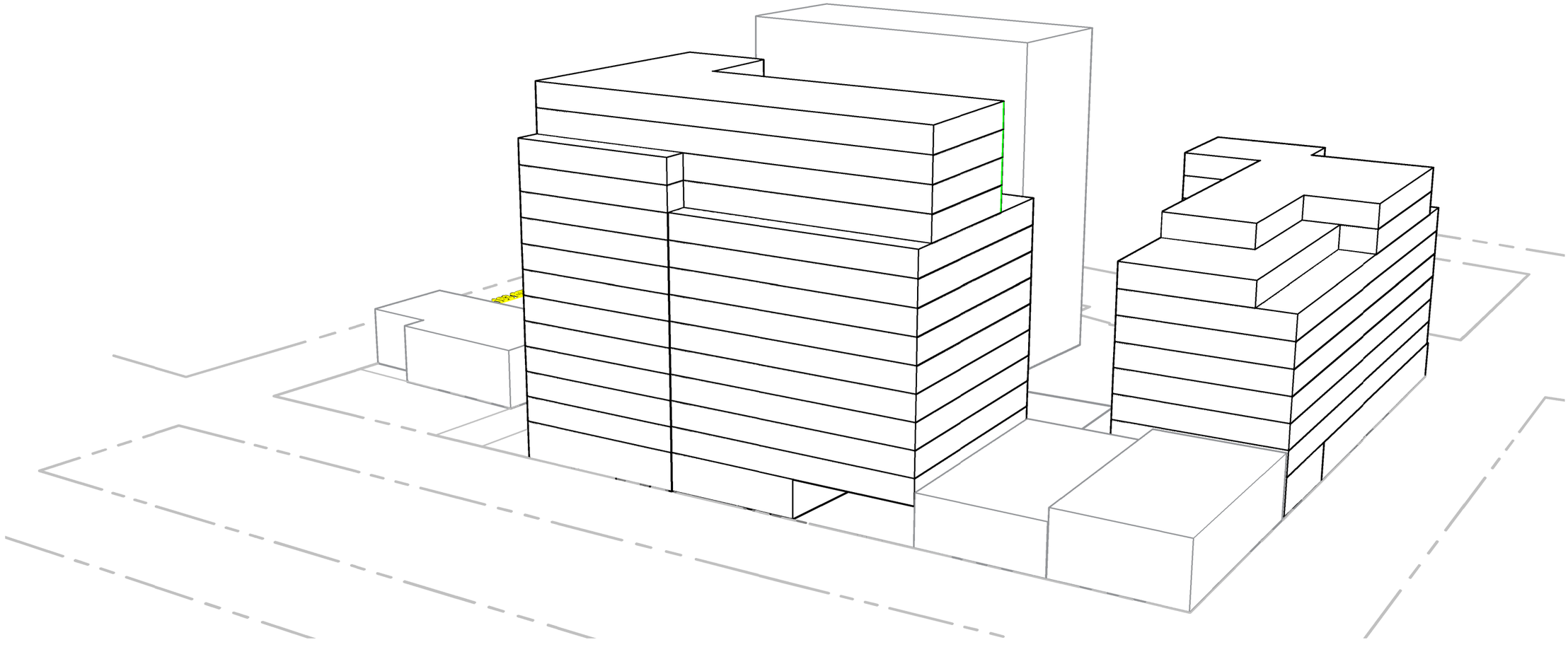
BUILDING A									
FLOOR	GROSS AREA	COMMERCIAL	PARK.	RESIDENTIAL	REC. ROOM	CORRIDOR	MECH. / REF.	ENERGY GREEN	RESIDENTIAL ZONING
	SQ. FT.	GROSS SQ. FT.	SF	GROSSSQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.
C	22171.0		13880	8291			8291		0
1	12530.0	4500.0	5466	2564	834				1730.0
2	12530.0			12530	2250	716.5	96	192	9275.5
3	12530.0			12530		716.5	96	192	11525.5
4	12530.0			12530		716.5	96	192	11525.5
5	12530.0			12530		716.5	96	192	11525.5
6	12530.0			12530		620.5	96	192	11621.5
7	12530.0			12530		620.5	96	192	11621.5
8	12530.0			12530		620.5	96	192	11621.5
9	12530.0			12530		620.5	96	192	11621.5
10	12530.0			12530		620.5	96	192	11621.5
11	11562.0			11562		1241	96	192	10033.0
12	11562.0			11562		1241	96	192	10033.0
13	10892.0			10892		1241	96	188	9367.0
14	10892.0			10892		1241	96	188	9367.0
TOTAL	**192379.0**	4500.0	19346	168533	3084	10932.5	9539	2488	142489.5

BUILDING B									
FLOOR	GROSS AREA	COMMERCIAL	PARK.	RESIDENTIAL	REC. ROOM	CORRIDOR	MECH. / REF.	ENERGY GREEN	RESIDENTIAL ZONING
	SQ. FT.	GROSS SQ. FT.	SF	GROSSSQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.
C	14546.0		7028	7518			7518		0
1	14546.0	5413.0	3155	5978	2378		1250		2350.0
2	14546.0			14546			900	150	13496.0
3	14546.0			14546			900	150	13496.0
4	14546.0			14546			900	150	13496.0
5	14546.0			14546			900	150	13496.0
6	14546.0			14546			900	150	13496.0
7	14546.0			14546			900	150	13496.0
8	12191.0			12191		516	900	150	10625.0
9	9130.0			9130	1312	876	900	150	5892.0
TOTAL	**137689.0**	5413.0	10183	122093	3690	1392	15968	1200	99843.0



SCHEMATIC BUILDING "B" FRONT ELEVATION





ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601

No.	DATE	SUBMISSIONS / REVISIONS
	09.10.24	REVISED AS PER COMMENTS
	07.26.24	REVISED AS PER COMMENTS
	05.24.22	DCP SUBMISSION
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DRAWN BY: ED

SHEET No.: 6 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

3D MASSING

DRAWING NO:

Z-104.00



PROPOSED CELLAR PLAN

SCALE: 1/32" = 1'-0"

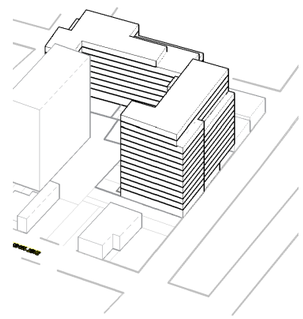
PROPOSED RE-ZONE

ROCKY & BROTHERS
REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



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DRAWN BY: ED

SHEET No.: 7 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC
CELLAR PLAN

DRAWING NO:

A-100.00



PROPOSED 1ST FLOOR PLAN

SCALE: 1/32" = 1'-0"

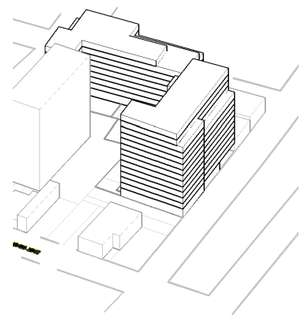
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



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DRAWN BY: ED

SHEET No.: 8 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC
1ST FLOOR PLAN

DRAWING NO:

A-101.00



PROPOSED BUILDING "A" 2ND PLAN

SCALE: 1/32" = 1'-0"

PROPOSED BUILDING "B" 2ND TO 7TH PLAN

SCALE: 1/32" = 1'-0"

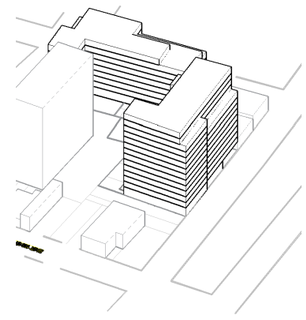
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



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DRAWN BY: ED

SHEET No.: 9 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC FLOOR PLANS

DRAWING NO:

A-102.00



PROPOSED BUILDING "B" 8TH PLAN

SCALE: 1/32" = 1'-0"

PROPOSED BUILDING "A" 3RD TO 5TH PLAN

SCALE: 1/32" = 1'-0"

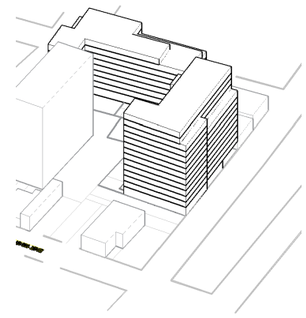
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



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DRAWN BY: ED

SHEET No.: 10 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC FLOOR PLANS

DRAWING NO:

A-103.00



PROPOSED BUILDING "A" 6TH TO 10TH PLAN

SCALE: 1/32" = 1'-0"

PROPOSED BUILDING "B" 8TH PLAN

SCALE: 1/32" = 1'-0"

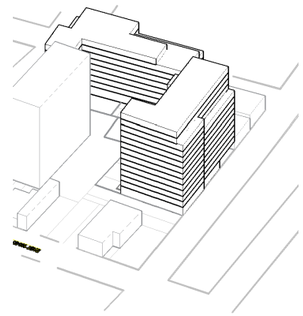
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



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DRAWN BY: ED

SHEET No.: 11 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC
FLOOR PLANS

DRAWING NO:

A-104.00



PROPOSED BUILDING "B" ROOF PLAN

SCALE: 1/32" = 1'-0"

PROPOSED BUILDING "A" 11TH AND 12TH PLAN

SCALE: 1/32" = 1'-0"

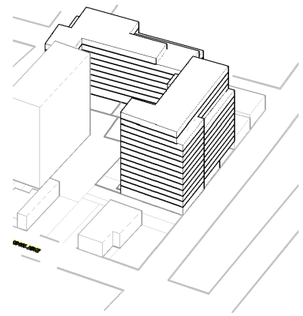
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



No.	DATE	SUBMISSIONS / REVISIONS
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DRAWN BY: ED

SHEET No.: 12 of 13

SCALE: as noted

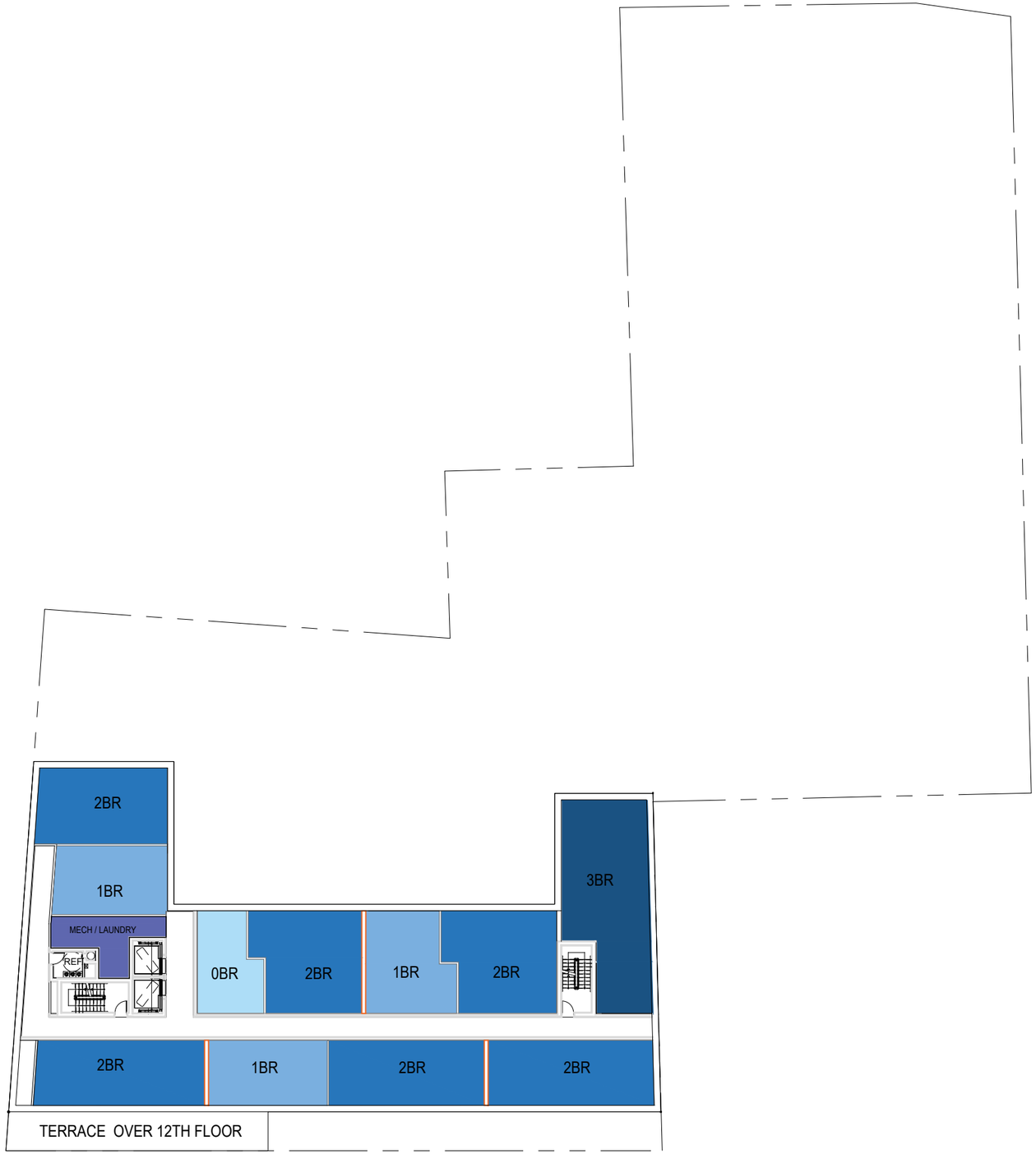
JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC
FLOOR PLANS

DRAWING NO:

A-105.00



PROPOSED BUILDING "A" 13TH AND 14TH PLAN

SCALE: 1/32" = 1'-0"

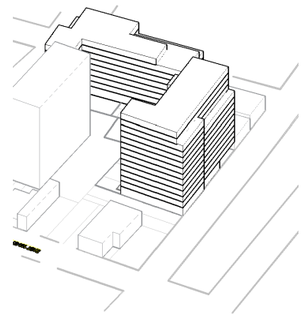
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



No	DATE	SUBMISSIONS / REVISIONS
	09.10.24	REVISED AS PER COMMENTS
	07.26.24	REVISED AS PER COMMENTS
	05.24.22	DCP SUBMISSION

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DRAWN BY: ED

SHEET No.: 13 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC FLOOR PLANS

DRAWING NO:

A-106.00



PROPOSED BUILDING "B" PEDESTRIAN ILLUSTRATION

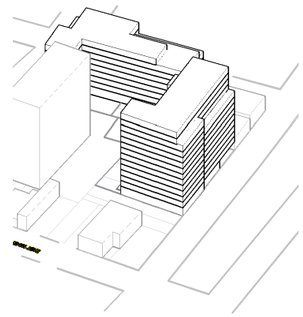
PROPOSED RE-ZONE

ROCKY & BROTHERS REALTY LLC

4506 PARK AVENUE,
BRONX, NY 10457

ARCHITECT:

DAMORE STUDIO
10 N. BROADWAY 1C
WHITE PLAINS, NY 10601



No.	DATE:	SUBMISSIONS / REVISIONS:
	09.10.24	REVISED AS PER COMMENTS
	07.26.24	REVISED AS PER COMMENTS
	05.24.22	DCP SUBMISSION

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DRAWN BY: ED

SHEET No.: 13 of 13

SCALE: as noted

JOB NUMBER: NY100322

SHEET TITLE:

SCHEMATIC ILLUSTRATION

DRAWING NO:

A-107.00

Appendix B:
Site Photographs

4506 Park Avenue, Bronx

Site Photo Locations



Proposed Rezoning Area

Directly Affected Area

Study Area (400-ft Radius)

(#) Viewshed Location

IMEG

Photo #1


CITADEL OF GOD ALMIGHTY
CAR DEALER
SAME DAY PLATES • PRIVATE & COMMERCIAL INSURANCE
ONE WAY
Park Av

Photo #2



Photo #3



Photo #4



Photo #5


Washington
ONE WAY
DO NOT ENTER
Tuesday
Friday
9:30am - 11am
Bar & Grill
Embarque
Cargo Express

Photo #6


Park Av
E 182 St
ONE WAY
ONE WAY
INT'L CENTRAL GOSPEL
DOMINION TEMPLE

Appendix C:
Agency Correspondence



Environmental Protection

Rohit T. Aggarwala
Commissioner

Angela Licata
Deputy Commissioner
Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
alicata@dep.nyc.gov

July 28, 2025

Andrew Martini
Senior Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, New York 10271

Re: 4506 Park Avenue Rezoning
Block 3038, Lots 1, 3, 5, 7, 8, 9, 11, 12, 13, 14, 16, 20, 29, 38, 45, 87 and 187
CEQR # 77DCP965X

Dear Mr. Martini:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the June 2025 Environmental Assessment Statement (EAS) prepared by IMEG Corporation, the October/November 2023 Phase I Environmental Site Assessments (Phase I) prepared by ESPL Environmental Consultants Corporation (ESPL), the September 2019 Phase I Environmental Site Assessment Report (Phase I) prepared by Partner Assessment Corporation and the October 2019 Phase II Environmental Site Assessment Report (Phase II) prepared by ESPL on behalf of Rocky & Brothers Realty LLC., (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to rezone Block 3038, Lots 1, 3, 5, 7, 8, 9, 11 - 14, 16, 20, p/o 29, 38, 45, 87 and 187 from a M1-1 and a R6A zoning districts to a R7X and R7A zoning districts with C2-4 commercial overlays, as well as a zoning text amendment to Appendix F of the Zoning Resolution (ZR) to designate the project area as a Mandatory Inclusionary Housing Area.

The proposed actions would facilitate the redevelopment of Block 3038, Lots 5, 7, 8, 9 and 11 (Projected Development Site 1) with a new 14-story, 192,379 gross square feet (gsf), mixed-use building containing approximately 187,879 gsf of residential space (179 dwelling units), approximately 4,500 gsf of ground floor commercial space and 67 accessory off-street parking spaces, as well as the redevelopment of Block 3038, Lots 38 and 45 (Proposed Development Site 2) with a new 9-story, 137,689 gross square feet (gsf), mixed-use building containing approximately 132,276 gsf of residential space (129 dwelling units), approximately 5,413 gsf of ground floor commercial space and 49 off-street parking spaces.

The applicant-owned Projected Development Sites 1 and 2, located between East 182nd Street and East 183rd Street in the Belmont neighborhood of Bronx Community District 6, are currently developed with five single-story buildings and a paved parking lot, while the remainder of the project area not controlled by the applicant, Block 3038, Lots 1 (Projected Development Site 3), 3 (Potential Development Site A), 12, 13 (Projected Development Site 4), 14 (Projected Development Site 5), 16 (Potential Development Site B), 20, 87 and 187 (Projected Development Site 6) is currently developed with three buildings and paved parking lots. It should also be noted that in the With-Action Scenario, Projected Development Site 3 would be redeveloped with a new 9-story, 38,120 gsf, mixed-use building containing 35,120 gsf of residential space, (23 dwelling units), 3,000 gsf of commercial space, Projected Development Site 4

would be redeveloped with a new 14-story, 50,894 gsf, mixed-use building containing 48,894 gsf of residential space, (36 dwelling units), 2,000 gsf of commercial space, Projected Development Site 5 would be redeveloped with a new 7-story, 32,800 gsf, mixed-use building containing 30,300 gsf of residential space, (22 dwelling units), 2,500 gsf of commercial space and Projected Development Site 6 would be redeveloped with a new 11-story, 58,471 gsf, mixed-use building containing 54,471 gsf of residential space, (41 dwelling units), 4,000 gsf of commercial space,

Projected Development Site 1

The September 2019 and November 2023 Phase I reports revealed that historical on-site and surrounding area land uses consists of manufacturing, commercial and residential uses including Autopart International, Indar Auto Body NYC, Cedano Auto Mall, Affordable Auto Collision & Repair, Farina Shipping Services, Express Cargo Corporation, Speedy Mattress Factory Corporation, Midbronx Towing, Metro-North Railroad tracks, a plastics manufacturer, churches, as well as several residential buildings. Regulatory databases such as the New York State Department of Environmental Conservation (NYSDEC) SPILLS, Leaking Underground Storage Tank, Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act Generators, and Petroleum Bulk Storage (PBS) Underground Storage Tanks (USTs) and PBS Aboveground Storage Tanks (ASTs) identified several sites in close proximity to the project site. The SPILLS database reported 16 SPILLS within a 1/8-mile radius of the project site and the LTANKS database reported 54 LTANKS within a 1/2-mile radius of the project site. The PBS USTs and the PBS ASTs databases reported 15 USTs and 103 ASTs within a 1/4-mile radius of the project site. The Phase I also reported three Historical Cleaners and one Historical Auto Stations within a 1/8-mile radius of the project site. Based on the age of the buildings that currently occupies the project site, asbestos containing materials and lead based paint could be present in the structure.

Projected Development Site 2

The October 2023 Phase I report revealed that historical on-site and surrounding area land uses consists of manufacturing, commercial and residential uses including Speedy Mattress Factory Corporation, Lino Cargo Express, Barnett Plumbing and Heating Corporation, Aqua Bar & Grill, A & K Party Hall Corporation Autopart International, Indar Auto Body NYC, Cedano Auto Mall, Affordable Auto Collision & Repair, Farina Shipping Services, Express Cargo Corporation, Midbronx Towing, Metro-North Railroad tracks, a plastics manufacturer, churches, as well as several residential buildings.

It should be noted that the Phase II Subsurface Investigation was conducted without DEP approval.

During the September 2019 fieldwork, ESPL, installed four soil borings (SB-1 through SB-4) at the project site. One soil sample was collected from each soil boring and analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260C and semi-volatile organic compounds (SVOCs) via EPA Method 8270D.

The soil analytical results revealed VOCs and SVOCs were either non-detect or below New York State Department of Environmental Conservation CP-51 Standards.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

EAS

- DCP should inform the applicant that the EAS should be revised/updated as appropriate as the hazardous materials assessment progresses.

Phase I

Projected Development Site 1: Block 3038, Lots 5, 7, 8, 9 and 11
Projected Development Site 2: Block 3038, Lots 38 and 45
(Sites under the control or ownership of the applicant)

- DCP should instruct the applicant that a complete and up-to-date Phase I report which covers the entirety of Projected Development Sites 1 and 2 should be submitted for review.

Projected Development Site 1: Block 3038, Lots 5, 7, 8, 9 and 11
Projected Development Site 2: Block 3038, Lot 38 and 45
(Sites under the control or ownership of the applicant)

- DCP should inform the applicant that the complete October 2019 Phase II for Projected Development Site 1, including all figures and appendices should be submitted.

- DCP should inform the applicant that based on the historical on-site and/or surrounding area land uses, and the limited September 2019 Phase II, a supplemental Phase II is necessary to adequately identify/characterize the surface and subsurface soils, groundwater and soil vapor of the entire subject property and to inform and disclose the measures necessary to avoid impacts from hazardous materials. A Phase II Investigation Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be developed in accordance with the City Environmental Quality Review (CEQR) Technical Manual and submitted for DEP review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil, groundwater, and soil vapor sampling locations. All soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of VOCs by EPA Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, and Target Analyte List (TAL) metals (filtered and unfiltered for groundwater samples). The soil vapor sampling should be conducted in accordance with the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigation Health and Safety Plan (HASP) should also be submitted to DEP for review and approval.

- DCP should instruct the applicant that a minimum of nine soil borings, five groundwater wells and eight soil vapor probes should be installed on Projected Development Site 1. Sampling locations should be spread to ensure that there is proper coverage of the site.

- DCP should instruct the applicant that a minimum of eight soil borings, four groundwater wells and seven soil vapor probes should be installed on Projected Development Site 2. Sampling locations should be spread to ensure that there is proper coverage of the site.

- DCP should instruct the applicant that a minimum of two soil samples should be collected from each test boring/probe. One shallow soil sample should be collected from the upper two feet of

soil (typically the 0-2 feet below grade surface (bgs) interval). A second soil sample should be collected from the two-foot interval below the proposed maximum excavation depth(s). If groundwater or bedrock is encountered at a shallower depth than the proposed maximum excavation depth during borehole advancement, the subsurface soil sample should be collected from the two-foot interval above the groundwater interface or bedrock. Soil borings must be screened for evidence of gross contamination (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using accepted field instruments). Where screening indicates contamination at an intermediate interval(s) in a soil boring, i.e. between 2 feet bgs and the proposed maximum excavation depth, an additional soil sample(s) should be collected for analysis. If groundwater is encountered in a test boring/probe within five feet of surface grade, only one soil sample per boring may be warranted as long as adequate upgradient and downgradient groundwater samples are collected. Soil samples collected should be discrete (grab) samples.

- DCP should instruct the applicant that where the water table is less than 30 feet beneath the deepest level of the proposed on-site basement or slab-on-grade foundation, groundwater samples should be collected for laboratory analysis.

- DCP should instruct the applicant that the depth of the soil vapor implants should correspond to the proposed development excavation depth or 1-2 feet above the groundwater interface, whichever is encountered first.

- DCP should instruct the applicant that if underground storage tank (UST) areas are identified at the site, additional test borings should be advanced to adequately characterize the UST areas. A minimum of two test borings should be advanced per tank cluster. Test borings should be advanced within two feet of the tanks, if possible, and to a minimum depth of five feet below the tank invert for the collection of representative soil samples. Shallow and subsurface soil samples should be collected from each soil boring as described in the CEQR Technical Manual and analyzed for VOCs via EPA Method 8260, SVOCs via EPA Method 8270, pesticides via EPA Method 8081, PCBs via EPA Method 8082, and TAL metals. In the event that any leaking tanks are identified at the site during the Phase II investigation, New York State Department of Environmental Conservation DER-10 guidance should be followed.

- DCP should also instruct the applicant that the Phase II Work Plan and HASP should be submitted for DEP review and approval prior to the start of any fieldwork.

Projected Development Site 3: Block 3038, Lot 1
Projected Development Site 4: Block 3038, Lots 12 and 13
Projected Development Site 5: Block 3038, Lot 14
Projected Development Site 6: Block 3038, Lots 20, 87 and 187
Potential Development Site A: Block 3038, Lot 3
Potential Development Site B: Block 3038, Lot 16
(Sites not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, an (E) Designation for hazardous materials should be placed pursuant to Section 11-15 of the New York City Zoning Resolution. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance occurs, as well as to ensure the maintenance and oversight of any required engineering controls through oversight by the Mayor's Office of Environmental Remediation (OER). Further hazardous materials assessments should be coordinated through OER.

- DCP should inform the applicant that the EAS should be revised to incorporate the placement of an (E) Designation for hazardous materials.

Future correspondence and submittals related to this project should include the following CEQR # **77DCP965X.** If DCP has any questions, you may contact Ms. Cassandra Scantlebury at CassandraS@dep.nyc.gov.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estesen
C. Scantlebury
M. Wimbish
S. Shellooe – DCP
E. Ulker-Kacar – DCP
M. Bertini – OER

Appendix D:
Transportation Memo



Table 2: Travel Demand Factors for No-Action Condition
Sources listed in footnotes

	Church – community facility[1]				Light Industrial[2]			
Daily Person Trip Generation Rate	Weekday 29.18/ksf		Saturday 21.83/ksf		Weekday 14.7/ksf		Saturday 2.2/ksf	
Temporal Distribution – Person Trips	AM 7.9%	MID 4%	PM 7.2%	SAT 15.8%	AM 13.2%	MID 11%	PM 14.2%	SAT 10.7%
Modal Split					([3])	([2])	([3])	([3])
Auto	5%	5%	5%	5%	48.3%	2%	48.3%	48.3%
Taxi	1%	1%	1%	1%	0.9%	3%	0.9%	0.9%
Subway/Rail	3%	3%	3%	3%	22.6%	6%	22.6%	22.6%
Bus	6%	6%	6%	6%	15.4%	6%	15.4%	15.4%
Walk/Bicycle	85%	85%	85%	85%	12.8%	83%	12.8%	12.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	Weekday		Saturday		Weekday ([3])		Saturday ([3])	
Auto	1.65		1.65		1.12		1.12	
Taxi	1.4		1.4		1.12		1.12	
Daily Delivery Trip Generation Rate	Weekday 0.29/ksf		Saturday 0.29/ksf		Weekday 0.67/ksf		Saturday 0.67/ksf	
Temporal Distribution - Delivery	AM 9.6%	MID 11%	PM 1%	SAT 0%	AM 14%	MID 9%	PM 1%	SAT 0%
Directional Splits[4]								
In	57%	48%	52%	48%	86%	52%	16%	48%
Out	43%	52%	48%	52%	14%	48%	84%	52%

[1] Jerome Avenue Rezoning EAS (17DCP019X)
[2] East New York Rezoning FEIS (15DCP102K; ULURP Nos. C160035ZMK, C160037HUK, C160042HDK, N160036ZRK, N160050ZRK)
[3] 2012-2016 Reverse JTW for Bronx census tracts 375.04, 379, 383.02, 385, 387, 395. A302103 - Means of Transportation
[4] Directional splits provided by NYCDOT

Table 3: Travel Demand Factors for With-Action Condition
Sources listed in footnotes.

	Residential (> 3 floors)				Local Retail			
Daily Person Trip Generation Rate	Weekday 8.18/DU[5]		Saturday 9.06/DU[5]		Weekday 329 /ksf[5]		Saturday 358 /ksf[5]	
Trip Linkage	0%				20%[6]			
Temporal Distribution – Person Trips	AM 9.3%[5]	MID 5.6%[5]	PM 8.5%[5]	SAT 8.4%[5]	AM 4.8%[5]	MID 8%[5]	PM 10.9%[5]	SAT 11.7%[5]
Modal Split	*These are source 7*				*These are source 8*			
Auto	20.8%				11%	11%	11%	11%
Taxi	1.4%				0%	0%	0%	0%
Subway/Rail	45.7%				3%	3%	3%	3%
Bus	21.1%				2%	2%	2%	2%
Walk/Bicycle	6.9%				84%	84%	84%	84%
Other/Work from home	4.2%				0%	0%	0%	0%
Total	100%				100%	100%	100%	100%
	Residential (> 3 floors)				Local Retail			
Vehicle Occupancy	Weekday		Saturday		Weekday		Saturday	
Auto	1.07[7]		1.07[7]		2.10[9]		2.10[9]	
Taxi	1.4[7]		1.4[7]		2.10[9]		2.10[9]	
Daily Delivery Trip Generation Rate	Weekday 0.06/DU[5]		Saturday 0.02/DU[5]		Weekday 0.35 /ksf[5]		Saturday 0.04 /ksf[5]	
Temporal Distribution - Delivery	AM 12%[5]	MID 9%[5]	PM 2%[5]	SAT 9%[5]	AM 8%[5]	MID 11%[5]	PM 2%[5]	SAT 11%[5]
Directional Splits[4]								
In	22%	50%	62%	55%	52%	50%	50%	50%
Out	78%	50%	38%	45%	48%	50%	50%	50%

Level 1 Screening Results

Transit and Pedestrians

The proposed project's person trip increment is detailed in Table 4. The proposed project would result in net increases in total pedestrian trips and transit trips generated by the site between the With-Action and No-Action conditions, as shown below.

The proposed project will exceed the 200-pedestrian increment threshold during every peak hour, so Level 2 analysis is warranted for each time period. The proposed project will not exceed the 200-transit rider increment threshold during any peak hour, and no further transit analysis is warranted.

[5] CEQR Technical Manual (December 2021 Edition), Table 16-2.
[6] Per NYCDOT instruction provided February 12, 2024.
[7] ACS Journey to Work 5-Year estimates for census tracts 375.04, 379, 383.02, 385, 387, 395 for the AM-PM-SAT peak hours (2015-2019)
[8] Modal splits provided by NYCDOT
[9] Vehicle occupancy provided by NYCDOT

Appendix E:
Noise Memo

CERAMI

Memorandum

Date: June 8, 2023

To: Department of City Planning, Environmental Assessment and Review Division

From: Trey Geier / Cerami

CC: Michael Keane / Cameron Engineering an IMEG Company

Project Name: 4506 Park Avenue Rezoning – EAS - Noise Protocol

Comments:

The purpose of this memorandum is to outline the noise monitoring and analysis approach for the 4506 Park Avenue Rezoning EAS project.

Below is a summary of the selected noise monitoring locations and noise monitoring approach to determine existing ambient noise levels at the Project Site. The measured noise levels will be used in the noise analysis to determine what level of building attenuation is necessary to provide acceptable interior noise levels under guidelines set forth by the *2021 CEQR Technical Manual*. Noise levels will be assessed to existing and future conditions. Project-generated noise sources are anticipated to arise from buildings' mechanical equipment, and noise increases due to the Proposed Actions will be analyzed for project-on-existing effects.

Noise Receptor Locations

The below grade Metro North railroad, and motor-vehicle traffic are likely the dominant noise sources in the study area; stationary sources (e.g., building HVAC equipment) also contribute to noise levels.

Proposed noise receptor locations were selected based on the following:

- Location of the Project Site
- Allowing for geographic coverage across the study areas to account for the ambient noise environment
- Existing land use patterns (e.g., near major roadways, existing railways, stationary noise sources)

Six receptor sites are proposed for the noise analysis in the study area around the Project Site.

CERAMI

Noise Monitoring/Prediction

Noise measurements will consist of:

Duration	# of Measurements Locations	Notes
24-hour	3	Elevated at Northern, Western and Southern boundaries of the development sites.
20-minutes	3	At street level along Northern, Western and Southern boundaries of the development sites.
1-hour	3	At street level along Northern, Western and Southern boundaries of the development sites.

All 20-minute and 1-hour measurements will be taken during peak weekday AM (8AM-9AM), midday (12PM-1PM), PM (4:30PM-5:30PM) traffic periods. Figure 1 shows the locations of the six noise receptor sites and Table 1 lists the noise receptor sites, the duration of measurements, and receptor locations. One 1-hour measurement during a peak traffic period will be taken at street level below each 24-hour measurement location in order to provide a correlation between the elevated and street level measurements. All other street level measurements during the remainder of the peak traffic conditions will be 20-minutes.

Measurements will be performed using Sound Level Meter (SLM) Type 1 instruments according to ANSI Standard S1.4-1983 (R2006). The SLMs will be field calibrated with a calibrator that has a laboratory calibration date within one year of the date of the measurements. All measurement procedures will be based on the guidelines outlined in ANSI Standard S1.13-2005.

Noise measurements will include all vehicular traffic, air traffic, railway traffic, and stationary noise sources, and the recommended attenuation levels within the study area will take these sources into account in order to determine acceptable interior noise levels. Vehicle counts will be taken at spot measurements along the roadways and pictures will be taken of all monitoring setups in the field.

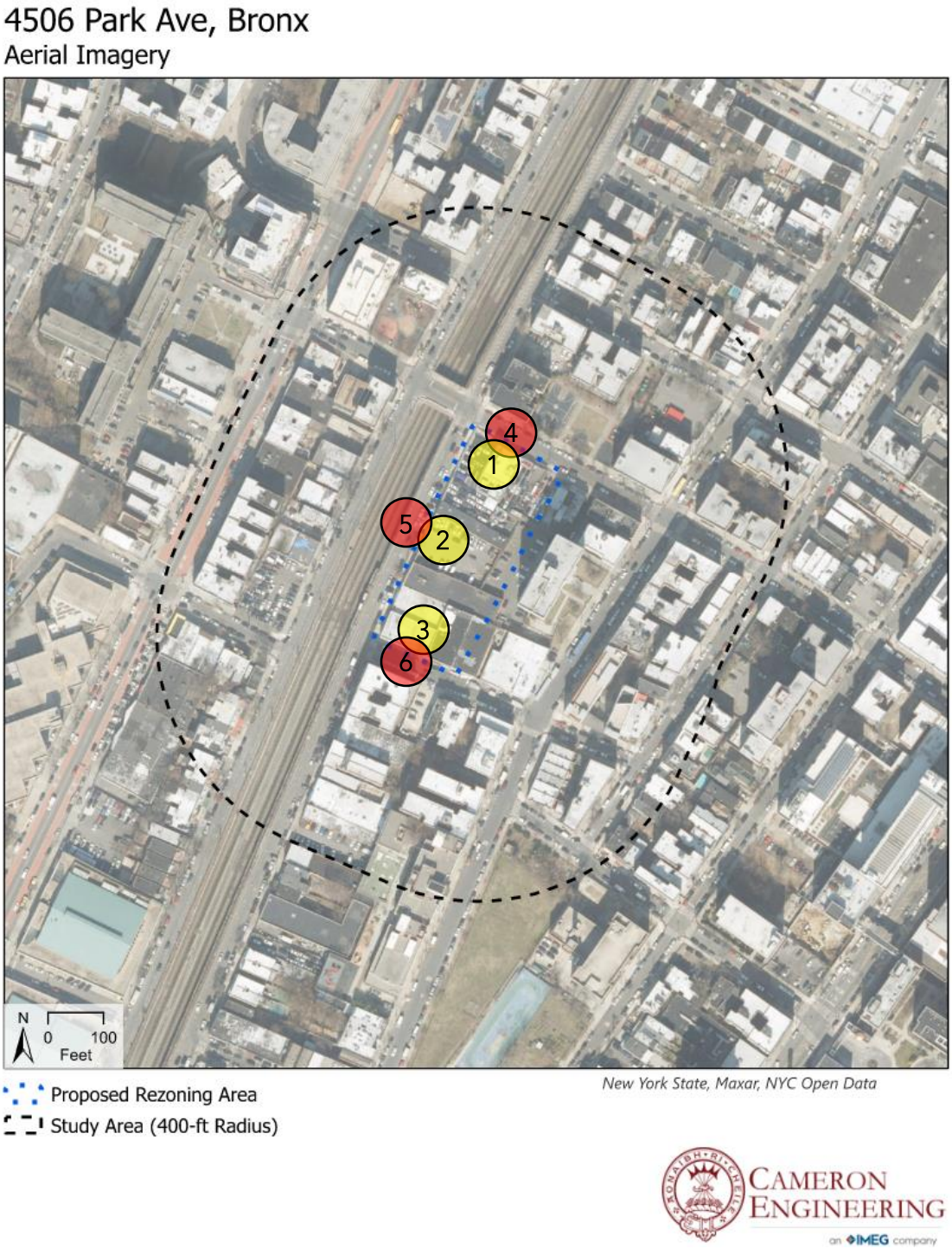
CERAMI

E-Designation

The predicted future noise levels, specifically the maximum L_{10} and L_{dn} values, will be used to place an E-Designation, as necessary to meet the interior noise requirements of the *CEQR Technical Manual*. In addition to window/wall attenuation requirements, the E-Designation, if warranted, will include a requirement for an alternate means of ventilation so that a closed-window condition can be maintained. Building mechanical systems will be assumed to be designed to meet all applicable noise regulations to avoid producing levels that would result in any significant increase in ambient noise levels.

Noise Receptor Site	Duration	Location
1	24-Hour	Elevated at Northern Proposed Rezoning Area Boundary along 183rd Street approximately 50 feet from Park Avenue.
2		Elevated at Western Proposed Rezoning Area Boundary along Park Avenue.
3		Elevated at Southern Proposed Rezoning Area Boundary along 182nd Street approximately 50 feet from Park Avenue.
4	20-Minute & 1-Hour Spots	Set back from street along 183rd Street approximately 50 feet from Park Avenue.
5		Set back from street along Park Avenue.
6		Set back from street along 182nd Street approximately 50 feet from Park Avenue.

Table 1. Noise Receptor Locations



CAMERON ENGINEERING
an IMEG company

Figure 1. Proposed Monitoring Locations