109 Marcus Garvey Boulevard

Environmental Assessment Statement

CEQR No.: 24DCP100K

Prepared for:
CB Emmanuel Realty LLC

Prepared by:
Philip Habib & Associates

Lead Agency:
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

November 20**, 2024**

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Table of Contents

EAS Full Form

Attachment A……Project Description

Attachment B……Supplemental Screening

Attachment C.....Land Use, Zoning and Public Policy

Attachment D .....Socioeconomic Conditions

Attachment E ..... Open Space

Attachment F .....Shadows

Attachment G…….. Historic and Cultural Resources

Attachment H .....Urban Design and Visual Resources

Attachment I ..... Noise

Appendices:

Appendix 1 .....Hazardous Materials Supporting Documents

Appendix 2 .....Transportation Planning Factors and Travel Demand Factors Memorandum

Appendix 3 ..... NYC Landmarks Preservation Commission Correspondence

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 109 Marcus Garvey Boulevard

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
24DCP100K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
240398ZRK; 240399ZMK; 240400ZSK; 240401LDK	

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning			NAME OF APPLICANT CB Emmanuel Realty		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director, EARD			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Jessica Kooris, Eric Palatnik P.C.		
ADDRESS 120 Broadway			ADDRESS 32 Broadway, Suite 114		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10004
TELEPHONE 212-720-3328	EMAIL Sshellooe@planning.nyc.gov		TELEPHONE 212-425-4343	EMAIL jessicakooris@ericpalatnikpc.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):

6 NYCRR § 617.4 (b)(10)

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*

CB Emmanuel Realty, (the "Applicant") is seeking approval for three discretionary actions (the "Proposed Actions") that would facilitate infill development at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area"), in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. These actions are: (1) a zoning map amendment to rezone the Project Area from R6 to R7A, (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area, and (3) a City Planning Commission ("CPC") special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot.

The Proposed Actions would enable the Applicant to construct a new infill development in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area, and is currently occupied by a surface parking lot. The remainder of the Project Area is occupied by four buildings totaling approximately 313,540 gross square feet (gsf), containing a mix of 267 income restricted dwelling units (DUs), approximately 6,642 gsf of ground floor commercial retail, and approximately 5,339 gsf of community facility space for social services offices.

Approval of the Proposed Actions would allow the Applicant to develop a new 14-story 212,919-gsf mixed use building with approximately 192,519 gsf of residential space (containing 292 Affordable Independent Residences for Seniors [AIRS] units, the "Proposed Project") in place of the existing 95-space surface parking lot on the Proposed Development Site. Approximately 63 accessory parking spaces would be located in a 20,400 gsf garage in the cellar level of the proposed building, replacing the existing 95-space surface lot. The four existing buildings in the Project Area would remain unchanged.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 3	STREET ADDRESS 109 Marcus Garvey Boulevard
TAX BLOCK(S) AND LOT(S) Block 1588, Lot 1		ZIP CODE 11206

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Project Area is bounded by Marcus Garvey Boulevard to the west, Vernon Avenue to the north, and Willoughby Avenue to the south.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6, C2-4 Overlay | ZONING SECTIONAL MAP NUMBER 13b

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 74-74

***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: The Applicant is seeking government financing from various sources including a construction loan from the New York State HFA and tax credit programs from HFA and HPD.

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.): 130,000 sf (Project Area Total); 30,000 sf (Proposed Development Site)

Waterbody area (sq. ft.) and type: N/A

Roads, buildings, and other paved surfaces (sq. ft.): 130,000 sf (Project Area Total); 30,000 sf (Proposed Development Site)

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): 212,919 gsf (Proposed Project)

NUMBER OF BUILDINGS: One new building; four existing buildings to remain in Project Area.

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): Four existing buildings totaling 313,308 gsf; proposed building to contain 212,919 gsf.

HEIGHT OF EACH BUILDING (ft.): Existing buildings range from 28' to 102' tall; proposed building would reach 143' (roof), 153' (bulkhead).

NUMBER OF STORIES OF EACH BUILDING: Existing buildings range from three to eight stories; proposed building would have 14 stories.

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: 130,000 sf

The total square feet not owned or controlled by the applicant: N/A

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: 30,000 sq. ft. (width x length) VOLUME OF DISTURBANCE: 300,000 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 30,000 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2027

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 23

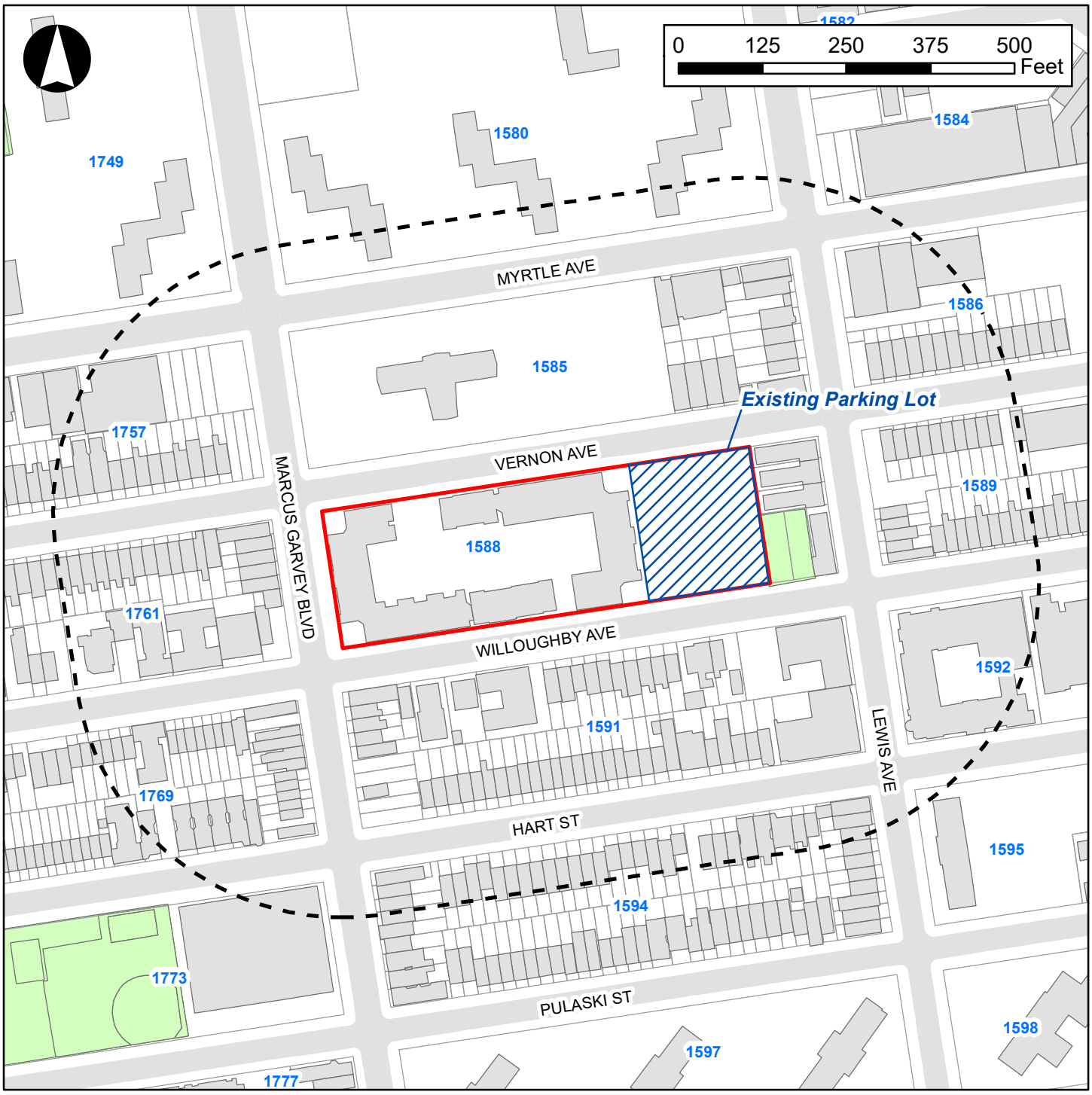
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY? N/A; single phase

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: As the Proposed Development Site is owned by the Applicant, construction of the Proposed Project would commence upon approval of the Proposed Actions, which is expected in late 2024. The 2027 analysis year assumes construction would take approximately 23 months, in which all work would be completed in a single phase.

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

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:

Figure 1
Project Location



Legend

- Project Area
- Tax Lot
- Existing Building
- 400-foot Radius
- 1588 Tax Block
- Proposed Development Site



Figure 2
Land Use



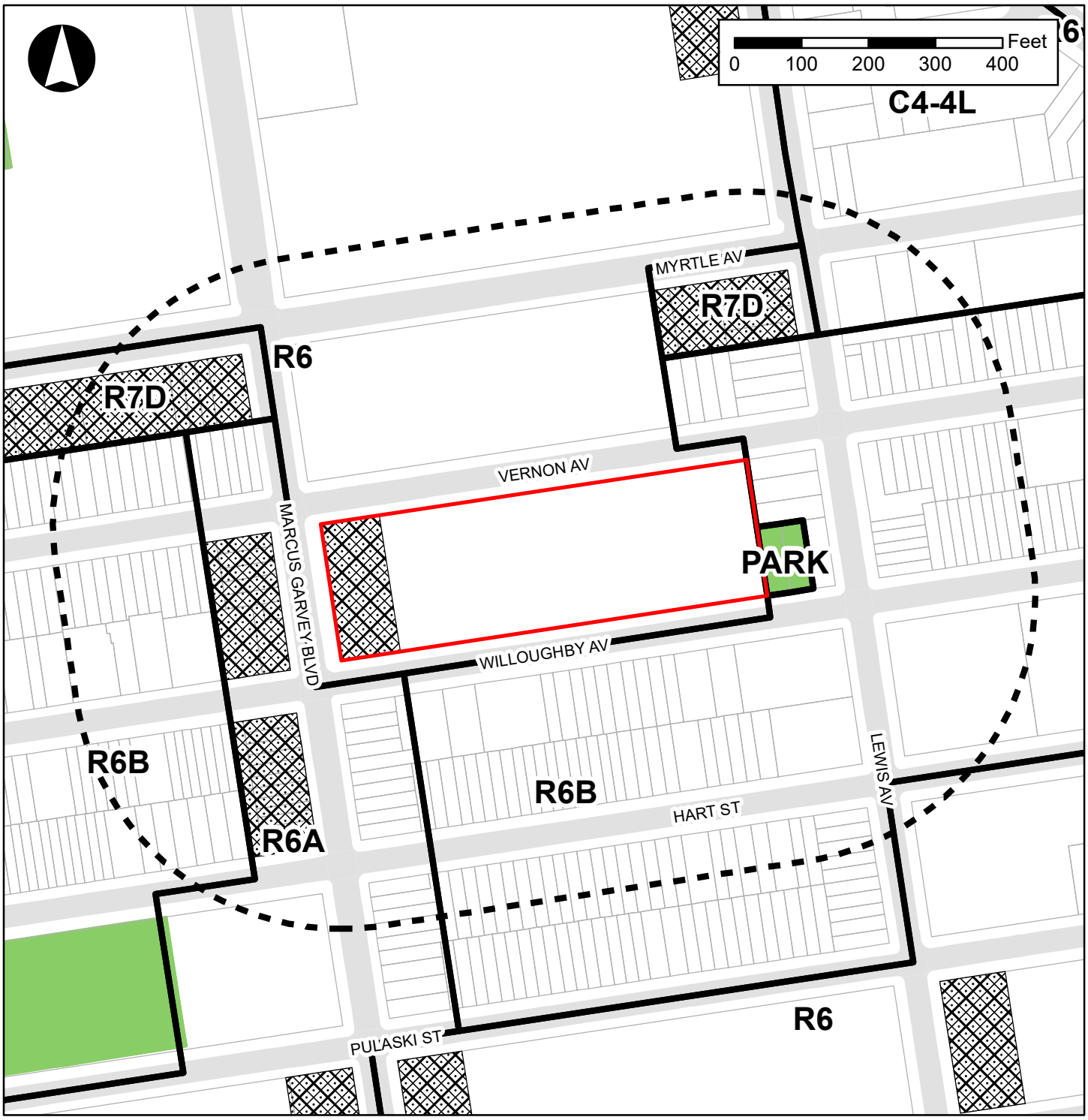
Legend

- Project Area
- 400-foot Radius
- Proposed Development Site
- 1588 Tax Block

LandUse

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

Figure 3
Zoning Map



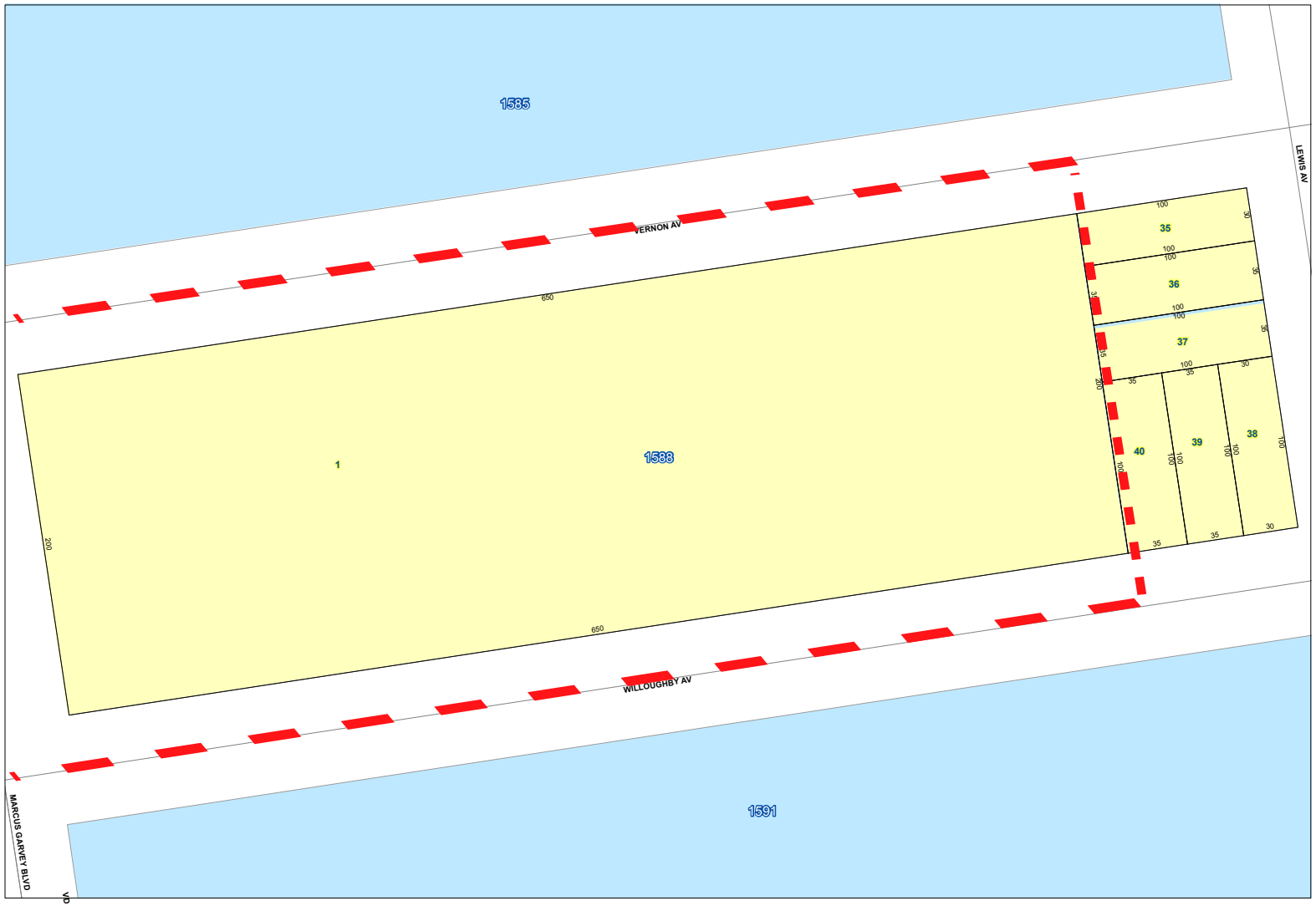
Legend

- Project Area
- 400-foot Radius
- Open Space
- R6A Zoning District
- **Commercial Overlay**
- C2-4

FINANCE NEW • YORK
MARTHA E. STARK
COMMISSIONER

NYC Digital Tax Map

Effective Date : 12-04-2008 17:37:10
End Date : Current
Brooklyn Block: 1588



Legend

- Streets
- Miscellaneous Text
- Possession Hooks
- Boundary Lines
- Lot Face Possession Hooks
- Regular
- Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon
- Project Area

Feet
0 4 8

Feet
0 4 8

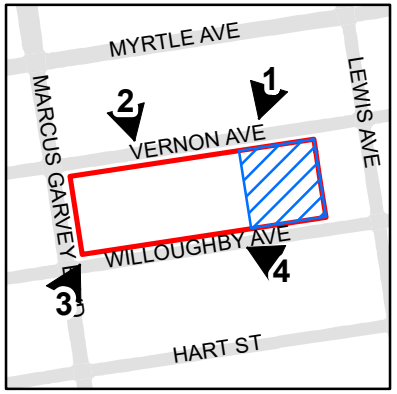
012 4 6 8

109 Marcus Garvey Boulevard EAS

Figure 4
Tax Map



1. View of the Proposed Development Site looking southwest from Vernon Avenue





2. View of the Project Area looking south across Vernon Avenue



3. View of the Project Area looking northeast from the intersection of Marcus Garvey Boulevard and Willoughby Avenue



4. View of the Proposed Development site looking northwest along Willoughby Avenue

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	4 residential apartment buildings of between 3 and 8 stories	4 residential apartment buildings of between 3 and 8 stories	5 residential apartment buildings of between 3 and 14 stories	Addition of a single 14-story AIRS apartment building
No. of dwelling units	267	267	559	+292 DUs
No. of low- to moderate-income units	267	267	559	+292 DUs
Gross floor area (sq. ft.)	301,558	301,558	494,077	+192,519 gsf
Commercial	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)	Local retail	Local retail	Local retail	No change
Gross floor area (sq. ft.)	6,642	6,642	6,642	No change
Manufacturing/Industrial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type of use	N/A	N/A	N/A	N/A
Gross floor area (sq. ft.)	N/A	N/A	N/A	N/A
Open storage area (sq. ft.)	N/A	N/A	N/A	N/A
If any unenclosed activities, specify:	N/A	N/A	N/A	N/A
Community Facility	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Type	Social services offices	Social services offices	Social services offices	No change
Gross floor area (sq. ft.)	5,339	5,339	5,339	No change
Vacant Land	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	N/A	N/A	N/A	N/A
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	N/A
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	N/A	N/A	N/A	N/A
PARKING				
Garages	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	0	N/A
No. of accessory spaces	N/A	N/A	63	+63 accessory spaces
Operating hours	N/A	N/A	24/7	Change in operation from surface lot to garage
Attended or non-attended	N/A	N/A	Attended	Addition of parking attendant
Lots	☒ YES ☐ NO	☒ YES ☐ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces	0	0	N/A	N/A
No. of accessory spaces	95	95	N/A	Loss of 95-space surface lot
Operating hours	24/7	24/7	N/A	Change in operation from surface lot to garage

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	N/A	N/A	N/A	N/A
POPULATION				
Residents	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify number:	684	684	1,122	+438 residents
Briefly explain how the number of residents was calculated:	Number of existing/No-Action residents calculated based on the average household size for Brooklyn Community District 3 (2.56 persons per household) per the 2020 US Census. Number of incremental residents calculated based on a rate of 1.5 residents per AIRS unit			
Businesses	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type	4 local retail businesses; 1 social services office	4 local retail businesses; 1 social services office	4 local retail businesses; 1 social services office	No change
No. and type of workers by business	30 total workers	30 total workers	30 total workers	No change
No. and type of non-residents who are not workers	N/A	N/A	N/A	N/A
Briefly explain how the number of businesses was calculated:	There are 4 existing retail storefronts at the site along Marcus Garvey Blvd., which are expected to remain in the No-Action and With-Action conditions.			
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:	N/A	N/A	N/A	N/A
Briefly explain how the number was calculated:	Workers calculated based on local retail rate of 3 workers per 1,000 gsf of retail space and community facility rate of 1 worker per 450 gsf			
ZONING				
Zoning classification	R6; C2-4 Overlay	R6; C2-4 Overlay	R7A (MIH); C2-4 Overlay	Change from R6 to R7A; mapping of MIH
Maximum amount of floor area that can be developed	R: 2.43 FAR CF: 4.80 FAR C: 2.00 FAR M: N/A	R: 2.43 FAR CF: 4.80 FAR C: 2.00 FAR M: N/A	R: 3.44 FAR (5.01 for AIRS) CF: 4.80 FAR C: 2.00 FAR M: N/A	R: +1.01 FAR (+2.58 w/AIRS) CF: No change C: No change M: N/A
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Residential, Public Facility/ Institution, Commercial/ Office, Mixed Residential and Commercial	Residential, Public Facility/ Institution, Commercial/ Office, Mixed Residential and Commercial	Residential, Public Facility/ Institution, Commercial/ Office, Mixed Residential and Commercial	No change
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 different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. Refer to **Attachment C, "Land Use, Zoning, and Public Policy"**		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) 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 200 residential units *or* 200,000 square feet of commercial space?	☒	☐
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
○ Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
○ Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
○ Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(v) 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. Refer to **Attachment D, "Socioeconomic Conditions"**		
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 expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
○ If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
○ If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		
○ Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐

	YES	NO
○ 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		
○ Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
○ 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?	☐	☐
v. Effects on Industry		
○ 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		
i. 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)	☐	☒
○ If "yes," would the project result in a collective utilization rate of the Early Childhood Programs in the study area that is greater than 100 percent?	☐	☐
○ If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
ii. Public Schools		
○ Would the project result in 50 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)	☐	☒
○ If "yes," would the project result in a utilization rate of the elementary or middle schools that is equal to or greater than 100 percent?	☐	☐
○ If "yes," would the project generate 100 or more elementary or middle school students past the 100% utilization rate?	☐	☐
○ If "yes," would the project result in a utilization rate of the high schools that is equal to or greater than 100 percent?	☐	☐
○ If "yes," would the project increase the high school utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iii. 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)	☐	☒
○ If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
○ If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iv. Health Care Facilities		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
OPEN SPACE: CEQR Technical Manual Chapter 7 Refer to **Attachment E, "Open Space"**		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
4. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
(c) If "yes" to either 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. Refer to **Attachment F, "Shadows"**		

	YES	NO
5. *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. Refer to **Attachment G, "Historic and Cultural Resources"**		
6. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
(c) If "yes" to either of the above, please provide the information requested in Chapter 10. Refer to **Attachment H, "Urban Design and Visual Resources"**		
7. *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.		
8. *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? Refer to **Attachment B, Supplemental Screening**	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☒
(j) Based on the Phase I Assessment, is a Phase II Investigation needed?	☐	☒
9. *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?	☐	☐

	YES	NO
(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.		
10. *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): 11,972 lb/w		
○ 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?	☐	☐
11. *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): 24,392,197 MBtu		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
12. *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?	☐	☐
13. *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) Refer to **Attachment B, Supplemental Screening**	☐	☒
(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.		
14. *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.	☐	☐
15. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐

	YES	NO
(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. Refer to **Attachment I, "Noise"**		
16. *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. Refer to **Attachment B, "Supplemental Screening"**		
17. *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 Character." Attach a preliminary analysis, if necessary. Refer to **Attachment B, "Supplemental Screening"**		
18. *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. Refer to **Attachment B, "Supplemental Screening"**		

19. *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
Abir Sabet, AICP Philip Habib & Associates		11/20/2024

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. 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.

3. 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).

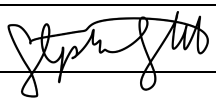
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. 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.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	City Planning Commission
NAME	DATE
Stephanie Shellooe	November 27, 2024

SIGNATURE



NEGATIVE DECLARATION

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, the Department of City Planning acting on behalf of the City Planning Commission assumed the role of lead agency for the environmental review of the proposed actions. Based on a review of information about the project contained in this environmental assessment statement (EAS) and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed actions 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 finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The Applicant, CB Emmanuel Realty is seeking approval for three discretionary actions that would facilitate infill development at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area"), generally bounded by Vernon Avenue to the north, Marcus Garvey Boulevard to the west, Willoughby Avenue to the south and Lewis Avenue to the east in the Bedford-Stuyvesant neighborhood of Brooklyn Community District 3. These actions are: (1) a zoning map amendment to rezone the Project Area from R6 and R6/C2-4 to R7A and R7A/C2-4, (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish a Mandatory Inclusionary Housing ("MIH") area coterminous with the Project Area, and (3) a City Planning Commission ("CPC") special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot (the "Proposed Actions"). The Proposed Actions would enable the construction of a new infill development in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area and is currently occupied by surface parking. The remainder of the Project Area, occupied by four buildings totaling approximately 313,540 gross square feet (gsf), containing a mix of 267 income restricted dwelling units (DUs), approximately 6,642 gsf of ground floor commercial retail, and approximately 5,339 gsf of community facility space for social services offices. Approval of the Proposed Actions would allow the Applicant to develop a new 14-story 212,919-gsf mixed use building with approximately 192,519 gsf of residential space (containing 292 Affordable Independent Residences for Seniors [AIRS] units, the "Proposed Project") in place of the existing 95-space surface parking lot on the Proposed Development Site. Approximately 63 accessory parking spaces would be provided in a 20,400 gsf garage in the cellar level of the proposed building and the four existing buildings in the Project Area would remain unchanged. The Proposed Actions would not introduce any new land uses or zoning that would be incompatible with their surroundings and would not constitute a significant adverse impact.

Open Space

A detailed analysis related to indirect residential effects on open space is included in this EAS. Under the With-Action conditions, the total open space ratio would decrease by 0.69% to 0.427 acres per 1,000 residents when compared to the No-Action condition, which is less than the 1% threshold that would constitute a significant adverse impact pursuant to the guidance of the *CEQR Technical Manual*. Additionally, the EAS notes that while the open space ratio in the study area would remain below planning goals, there is a significant amount of open space that was excluded from the quantitative analysis that would offset some demand from nearby residents. The Proposed Actions would not result in a significant adverse impact to open space.

Shadows

A detailed analysis related to shadows is included in this EAS. The Proposed Project is expected to cast shadows on two sunlight-sensitive resources, Lewis Playground, a 0.16-acre public playground, located directly east of the Proposed Project, and St. John the Baptist Roman Catholic Church, located a block east along Willoughby Avenue. Lewis Playground would receive new incremental shadows from the Proposed Project on all four analysis days: for three hours 46 minutes on the March 21/September 21 analysis day, four hours 18 minutes on the May 6/August 6 analysis day, six hours two minutes on the June 21 analysis day, and three hours 32 minutes on the December 21 analysis day. Though Lewis Playground would receive incremental shadows from the Proposed Project throughout the year, the Proposed Project is not expected to cause a significant adverse impact to the playground through project-generated incremental shadows since Lewis Playground would still receive direct sunlight on all four analysis days. All sunlight-sensitive features (the landscaped areas and active play equipment) would receive sunlight during the day, and all sunlight-sensitive vegetation would receive adequate sunlight during the growing season. Additionally, according to correspondence with the Parks Department, plantings in the reconstructed playground are shade-tolerant species and their health would not be impacted by a reduction of sunlight. As such, the Proposed Actions would not result in a significant adverse impact to Lewis Playground due to incremental shadows.

The St. John the Baptist Roman Catholic Church building has stained-glass windows along the northern, western, and southern facades that are considered sunlight-sensitive features, per *CEQR Technical Manual* guidance. The stained-glass windows would receive direct sunlight throughout most of the day on all four analysis days, only receiving incremental shadows briefly in the late afternoon on two analysis days (May 6/August 6 and June 21). Due to the minimal duration and area of incremental shadows that could reach the stained-glass windows, the increase in shadow coverage would not noticeably affect the use or enjoyment of these sunlight-sensitive features by the public. Given that the incremental shadows from the Proposed Project would not affect the use or enjoyment of sunlight-sensitive features of the St. John the Baptist Roman Catholic Church, the Proposed Project would not cause an adverse shadows impact on this historic resource.

Historic and Cultural Resources

A detailed analysis related to indirect (contextual) effects is included in this EAS. There are two historic architectural resources located within the 400-foot study area: 345 Vernon Avenue and St. John the Baptist Roman Catholic Church Complex. The Proposed Actions would not result in development that would diminish the qualities that make the S/NR-eligible 345 Vernon Avenue or St. John the Baptist Roman Catholic Church Complex historically and architecturally significant. As such, the Proposed Actions would not result in any significant adverse indirect or contextual impacts on historic architectural resources.

Urban Design and Visual Resources

A detailed analysis related to urban design and visual resources is included in this EAS. The Proposed Actions would introduce strong street walls along Willoughby Avenue and Vernon Avenue that would be consistent with surrounding development. While the With-Action development, at a maximum height of 155 feet including

Project Name: 109 Marcus Garvey Boulevard LSGD
CEQR # 24DCP100K
SEQRA Classification: Type I

rooftop bulkhead, would be taller than most of the existing small residential structures in the study area, the building would be comparable to the larger NYCHA developments that help define the neighborhood. The setback of the Proposed Project above seven stories would fit into the existing context and provide adequate light and air circulation to the surrounding buildings and streetscape and would be in line with NYCHA buildings in the vicinity of the Project Area, many of which are six stories or greater in height and built close to the lot line. As such, the Proposed Actions are not expected to result in any significant adverse impacts to urban design in the study area surrounding the Project Area, nor would they result in significant adverse impacts to the experience of the pedestrian.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-779) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

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). Should you have any questions pertaining to this Negative Declaration, you may contact Andrew Martini at Amartini@planning.nyc.gov.

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE 11/27/2024
SIGNATURE	

TITLE	
Chair, City Planning Commission	
NAME Daniel R. Garodnick	DATE 12/2/2024
SIGNATURE	

Project Name: 109 Marcus Garvey Boulevard LSGD
CEQR # 24DCP100K
SEQRA Classification: Type I

Determination of Significance Appendix

The Proposed Action(s) were determined to have the potential to result in changes to development on the following site(s):

Development Site	Borough	Block and Lot
Proposed Development Site	Brooklyn	Block 1588, Lot 1

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-779**) would be established as part of approval of the proposed actions on **Proposed Development Site** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Proposed Development Site	X	X	X

Hazardous Materials

The (E) designation requirements applicable to **Proposed Development Site** for hazardous materials would apply as follows:

> *Task 1-Remediation Determination and Protocol*
>
> *A written report with Phase II findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated for the test results, a proposed remedial action plan (RAP) must be submitted by OER for review and approval. The Applicant must complete such remediation as determined necessary by OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed. An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.*

Air Quality

The (E) designation requirements for air quality would apply as follows:

> ***Proposed Development Site:*** *Any new residential, community facility and/or commercial development on the above-referenced property must ensure the heating, ventilation, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 156 feet above grade to avoid any potential significant adverse air quality impacts.*

Project Name: 109 Marcus Garvey Boulevard LSGD
CEQR # 24DCP100K
SEQRA Classification: Type I

Noise

The (E) designation requirements for noise would apply as follows:

> ***Proposed Development Site:*** *To ensure an acceptable interior noise environment, future residential, community facility, and commercial office uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on the eastern facade facing Lewis Avenue and on the southern façade facing Willoughby Avenue within 50 feet of the eastern lot line, and a minimum of 28 dBA window/wall attenuation on any facades facing Vernon Avenue to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use, as illustrated in the EAS. To maintain a closed window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

ATTACHMENT A

PROJECT DESCRIPTION

I. INTRODUCTION

The Applicant, CB Emmanuel Realty, is seeking approval for three discretionary actions (the "Proposed Actions") that would facilitate infill development at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area"), in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. These actions are: (1) a zoning map amendment to rezone the Project Area from R6 and R6/C2-4 to R7A and R7A/C2-4, (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area, and (3) a City Planning Commission ("CPC") special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot. The Applicant is also seeking government financing from various sources including a construction loan from the New York State HFA and tax credit programs from HFA and HPD, though the specific financing mechanisms and approvals sought from state and federal sources may be subject to change.

The Proposed Actions would enable the Applicant to construct a new infill development in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area, and is currently occupied by a surface parking lot (refer to **Figure A-1**). The remainder of the Project Area is occupied by four buildings totaling approximately 313,540 gross square feet (gsf), containing a mix of 267 income restricted dwelling units (DUs), approximately 6,642 gsf of ground floor commercial retail, and approximately 5,339 gsf of community facility space for social services offices. Approval of the Proposed Actions would allow the Applicant to develop a new 14-story (143-foot roof height; 153-foot bulkhead height) building with approximately 292 Affordable Independent Residences for Seniors (AIRS) units (the "Proposed Project") in place of the existing 95-space surface parking lot on the Proposed Development Site. The new building would consist of approximately 212,919 gsf, with approximately 192,519 gsf of residential space and approximately 63 accessory parking spaces in a 20,400-gsf garage in the cellar level of the proposed building, replacing the existing 95-space surface lot. The four existing buildings in the Project Area would remain unchanged. The Applicant would also undertake multiple site improvements within the Project Area, including upgraded landscaping throughout. Construction of the Proposed Project under the Proposed Actions is expected to be completed by 2027 ("Analysis Year").

This attachment provides a summary and description of the Proposed Actions, including the Project Area and Proposed Development Site, existing conditions, project's purpose and need, RWCDS under future No-Action and future With-Action conditions, and the governmental approvals required. The attached supplemental studies examine the potential for the Proposed Actions to result in impacts in any City Environmental Quality Review (CEQR) technical areas, including separate attachments with detailed analyses of Land Use, Zoning, and Public Policy, Socioeconomic Conditions, Open Space, Shadows, Historic Resources, Urban Design and Visual Resources, Transportation, Noise, and Air Quality, in **Attachments C through I**, respectively. All other warranted preliminary screening assessments are summarized in **Attachment B, "Supplemental Screening."**

The New York City Department of City Planning (DCP) is proposing a citywide zoning text amendment, the City of Yes for Housing Opportunity ("CHO") (CEQR No. 24DCP033Y) to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every

neighborhood, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. The proposed zoning text amendment was referred into public review in Spring 2024. Given that this project would not be affected by the proposals in the text amendment, the conclusion of the environmental review would not be altered by CHO.

II. BACKGROUND AND EXISTING CONDITIONS

Project Area

The area proposed for rezoning is Brooklyn Block 1588, Lot 1 (see **Figure A-1**). The area being rezoned (a.k.a. "Project Area") is a rectangular lot with a total area of approximately 130,000 sf, as noted above, and has approximately 650 feet of frontage along both Vernon and Willoughby Avenues and approximately 200 feet of frontage along Marcus Garvey Boulevard. The eastern boundary of the Project Area is a line parallel to and approximately 100 feet west of Lewis Avenue.

As discussed above, the Project Area is currently occupied by four predominantly residential buildings containing a mix of residential, commercial (local retail) and community facility uses. The existing buildings range from three to eight stories (28-foot to 102-foot roof height), and are arranged in the western portion of the tax lot around a central private courtyard, playground, and staff parking lot. The existing buildings contain a total of approximately 313,540 gsf, which includes 267 income-restricted DUs, approximately 6,642 gsf of ground floor commercial uses fronting on Marcus Garvey Boulevard, and approximately 5,339 gsf of community facility space for social services offices. The total built Floor Area Ratio (FAR) on the site is approximately 2.19. The eastern portion of the Project Area is occupied by a surface parking lot with approximately 95 accessory residential parking spaces, accessed via a curb cut along Vernon Avenue.

Vernon Avenue is a one-way, west-bound local street with a mapped width of 70 feet (a narrow street for the purposes of zoning) with on-street parking on both sides and no lane markings. Marcus Garvey Boulevard is a one-way, south-bound minor arterial street with a mapped width of 70 feet (a narrow street) with two moving lanes and on-street parking on both sides. Willoughby Avenue is a one-way, east-bound local street with a mapped width of 70 feet (a narrow street) with a single moving vehicle lane, a marked bike lane along the north side, and on-street parking on both sides.

The Project Area is zoned R6 with a C2-4 commercial overlay mapped along Marcus Garvey Boulevard. The maximum allowable FAR in R6 districts is 2.43. The four existing residential buildings at the Proposed Development Site were constructed in 1976 under a development agreement between the New York State Urban Development Corporation and Vernon Avenue Houses, Inc. (a corporation formed under the Limited-Profit Housing Companies Law, a. k. a. Mitchell-Lama). The existing zoning lot is subject to a regulatory agreement in place between New York City Housing Preservation and Development (HPD) and the New York State Division of Housing and Community Renewal (DHCR), in addition to some restrictions placed on the property under the US Department of Housing and Urban Development (HUD). Since November 7, 2012, the zoning lot has been governed by a lenders agreement between Federal National Mortgage Association (Fannie Mae), New York State Housing Finance Agency (HFA), Empire State Development Corporation (ESDC) and HPD. In addition, regulatory agreements are executed between HFA and Fannie Mae that govern the property. Consent is required from each party to make changes to the zoning lot, including changes in use, transfer, sale, exchange, or disposal of the property. This includes changes to the "rehabilitation/construction design, layout, [or] . . . parking spaces . . . of or for the Project." Specifically for changes to the regulatory agreement, consent is required from HFA and Fannie Mae.

Figure A-1
Aerial Imagery



Legend

- Project Area
- 400-foot Radius
- 1588 Tax Block
- Proposed Development Site

Surrounding Area and Context

Land uses within a 400-foot radius (the "surrounding area") of the Project Area include a mix of residential, commercial, and institutional/public facility uses (refer to **Figure 2 in the EAS Form**). The majority of the surrounding area is occupied by single and multi-family attached residential walk-up buildings of three to four stories. These uses are commonly found along Vernon Avenue, Willoughby Avenue, and Hart Street in the vicinity of the Project Area. There are several larger, multi-family residential developments with elevators in the surrounding area, which are concentrated to the north of the Project Area and include the 24-story tower-in-the-park style New York City Housing Authority (NYCHA) development at 303 Vernon Avenue, directly north of the Project Area. There are several mixed-use residential buildings with commercial ground floors along Marcus Garvey Boulevard and Lewis Avenue. Institutional uses in the surrounding area include the St. John the Baptist Roman Catholic Church at 333 Hart Street south of the Project Area, and the Bedford Stuyvesant New Beginnings Charter School at 82 Lewis Avenue.

The Project Area is located within a Transit Zone. The Metropolitan Transit Authority (MTA) New York City Transit (NYCT) M, J, and Z lines are accessible at Myrtle Avenue station, approximately 800 feet northeast of the Project Area. The B15 bus runs northbound along Lewis Avenue and southbound along Marcus Garvey Boulevard, providing access from Bedford-Stuyvesant to John F. Kennedy International Airport. The B54 bus runs east-west along Myrtle Avenue, providing access to Ridgewood and Downtown Brooklyn.

Zoning

As noted above and as shown in **Figure 3 in the EAS Form**, the Project Area is located in an R6 residence district, with a C2-4 commercial overlay mapped to a depth of 100 feet along Marcus Garvey Boulevard. R6 districts are medium-density, non-contextual districts widely mapped in built-up, medium-density areas. Developers can choose between Height Factor and Quality Housing bulk regulations. R6 districts permit a maximum residential FAR of 0.78-2.43 under height factor regulations, or 2.2 (along a Narrow Street) under Quality Housing regulations. Community facility uses are permitted with a maximum FAR of 4.8, and manufacturing uses are not allowed. C2 commercial overlays are mapped within residential districts along streets that serve local retail needs. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential uses. C2 commercial overlay districts permit a slightly wider range of uses than C1 districts. When mapped in R6-R10 districts, C2-4 overlays allow a maximum commercial FAR of 2.0.

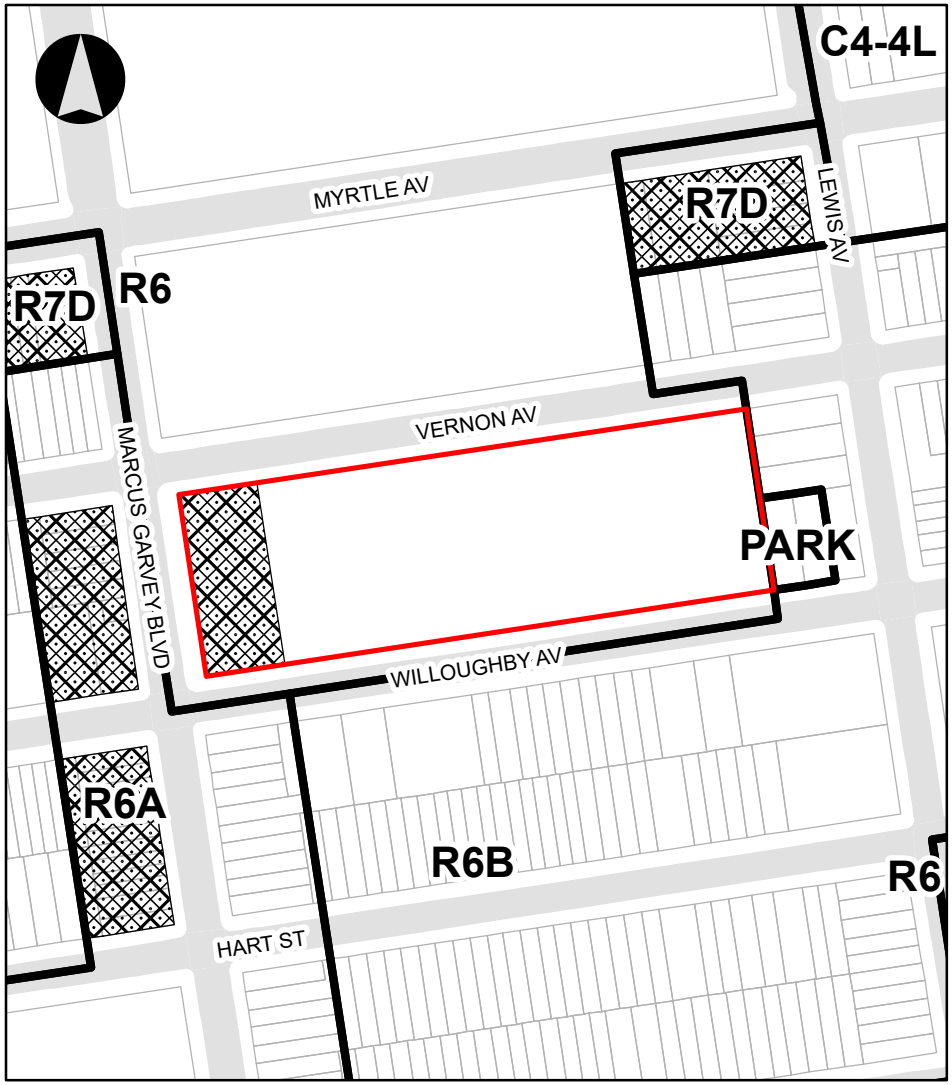
The surrounding area is primarily zoned with contextual R6A, R6B, and R7D residential districts to the west, south, and east of the Project Area. The R6 district that is mapped on the Project Area extends north into the surrounding area. The 2012 Bedford-Stuyvesant North Rezoning affected the areas to the west, south, and east of the Proposed Development Site, generally replacing existing non-contextual R5 and R6 districts with contextual R6A, R6B, R7A, R7D districts that exist today. Under this 2012 rezoning, the C2-4 commercial overlay was mapped within the Project Area along Marcus Garvey Boulevard, but the underlying R6 district was unaffected.

III. THE PROPOSED ACTIONS

The Applicant seeks the following discretionary land use actions:

Zoning Map Amendment to rezone Brooklyn Block 1588, Lot 1, from R6 and R6/C2-4 to R7A and R7A/C2-4, as shown in **Figure A-2**. R7A districts are medium-density, contextual residential districts where development must conform to Quality Housing regulations. R7A districts generally produce buildings of

EXISTING ZONING



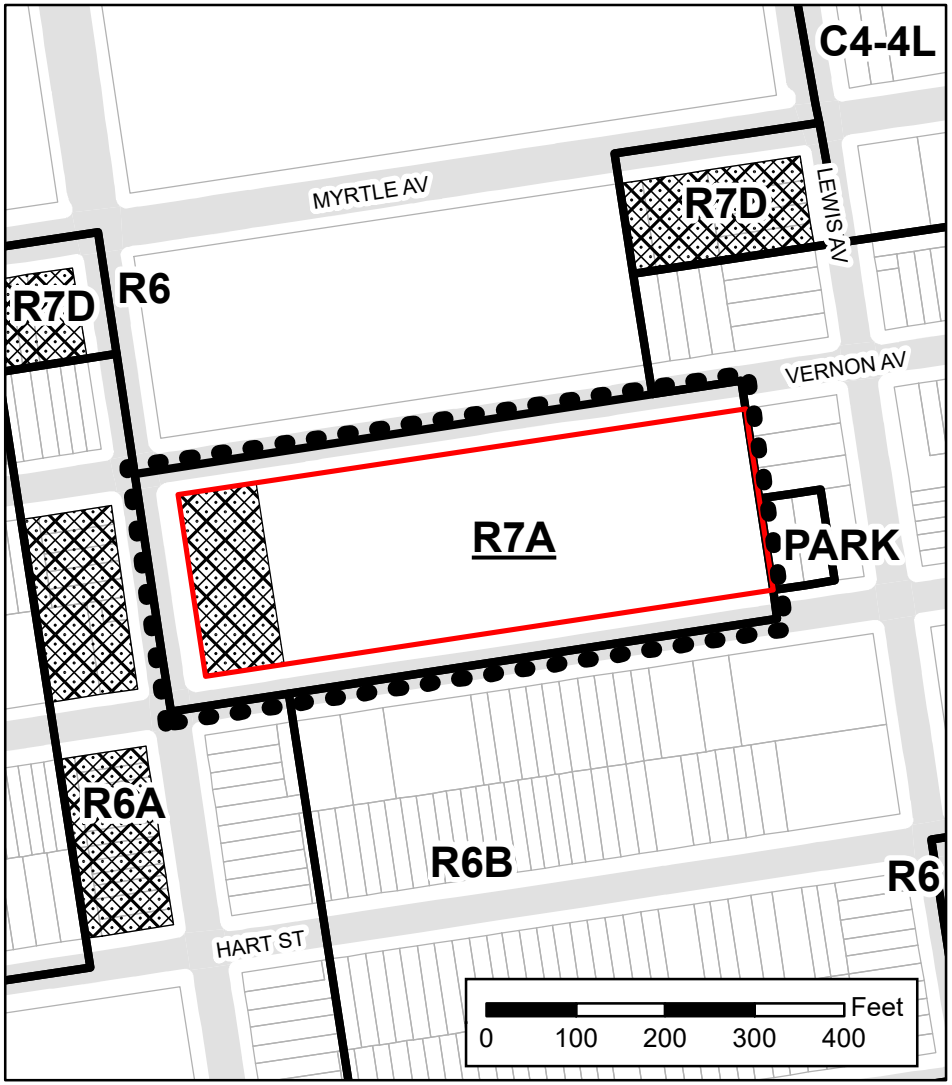
Legend

Project Area | R6 Existing Zoning District

Commercial Overlay

C2-4

PROPOSED ZONING



Legend

Project Area | R6 Existing Zoning District | R7A Proposed Zoning District

Commercial Overlay

C2-4 | Area to be Rezoned

up to eight or nine stories with relatively high lot coverage. Residential developments in an R7A district mapped in an MIH area can achieve a maximum FAR of 4.6, a maximum base height of 75 feet, and a maximum building height of 95 feet (with a qualifying ground floor). Pursuant to ZR Section 23-155, the maximum FAR for AIRS buildings in R7A districts is 5.01. Parking is required for 50 percent of DUs, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone, or for lots with 10,000 square feet of area or less. Parking requirements can be waived if 15 or fewer parking spaces are required. Community facility uses are permitted at a maximum FAR of 4.0. **Table A-1** compares the use and bulk requirements under the existing and proposed zoning districts.

TABLE A-1
Comparison of Existing and Proposed Zoning

	Existing Zoning	**Proposed Zoning**
Zoning District	**R6, R6/C2-4**	**R7A, R7A/C2-4**
Maximum FAR		
Residential	2.43 (Height Factor)	4.6 (with MIH) 5.01 (with AIRS)
Community Facility	4.8	4.0
Commercial	2.0 (within C2-4 overlay)	2.0 (within C2-4 overlay)
Manufacturing	N/A	N/A
Height and Setback		
Maximum Base Height	N/A	75 feet (with MIH)
Maximum Building Height	Governed by the Sky Exposure Plane beginning at 60 feet	9 Stories (with MIH); 95 feet (with MIH and Qualifying Ground Floor)

Source: *Zoning Resolution of the City of New York.*

Zoning Text Amendment to Appendix F of the *Zoning Resolution (ZR) of the City of New York* to establish the Project Area as a Mandatory Inclusionary Housing (MIH) area. The establishment of the MIH area would require a share of new housing to be permanently affordable where significant new housing capacity would be created. The MIH program includes two primary options for set-aside percentages with different affordability levels. Option 1 requires that 25 percent of residential floor area be affordable for residents with incomes averaging 60 percent of the area median income (AMI) (with ten percent of the floor area affordable at 40 percent AMI), and Option 2 requires that 30 percent of residential floor area be affordable for residents with incomes averaging 80 percent of the income index. In combination with these options, two other options may be made available. A "Deep Affordability Option" may be utilized under which 20 percent of residential floor area must be affordable housing units affordable to households with incomes at a weighted average of 40 percent of the income index. Also, a "Workforce Option" may be utilized provided that 30 percent of residential floor area contains housing units affordable to households with incomes at a weighted average of 115 percent, with five percent of residential floor area comprising units affordable to households at incomes of 70 percent of the income index and another five percent of residential floor area affordable to households at an income band of 90 percent of the income index. Depending on the MIH option selected during the public review process, either 25 or 30 percent of the residential floor area would be required to be affordable housing.

CPC Special Permit pursuant to ZR Section 74-74, "Large-scale General Development" to facilitate development that would not otherwise be allowed under the proposed R7A(MIH)/C2-4 zoning. The special permit would waive height requirements under the proposed zoning, enabling the proposed 14-story building to rise to a base height of approximately 103 feet and a roof height of approximately 143 feet. The permit would also waive regulations governing street wall location and minimum distance

between buildings on the same zoning lot, which would facilitate infill development on the underutilized portion of a lot that is occupied by multiple buildings (refer to **Table A-2**).

TABLE A-2
Waivers Requested under Proposed Special Permit for Large-Scale General Development

ZR Section		Required/Permitted	Proposed	Compliance
Yard Requirements				
23-711	Distance Between Buildings on a Single Zoning Lot	35 feet (window-to-wall)	28 feet four inches (window-to-wall)	Non-Compliant (waiver requested under Special Permit)
Height and Setback				
23-664 Table 1	Building Height	95 feet	143 feet	Non-Compliant (waiver requested under Special Permit)
	Number of Stories	9 stories	14 stories	
35-651(a)(1)(3)(4)	Commercial Overlay – Street Wall Location	70%	N/A	

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The proposed zoning map amendment, zoning text amendment, and CPC special permit are needed to facilitate the development of approximately 292 new AIRS units at a large site that has capacity to support additional development. The proposed rezoning from R6 to R7A would increase the allowable residential FAR from 2.43 to 4.60 (with a maximum of 5.01 FAR for AIRS). The site is only slightly underbuilt pursuant to the existing R6/C2-4 zoning, at approximately 2.19 built FAR (approximately 0.24 unused FAR), and the existing zoning would not permit residential infill development at the density sought by the Applicant. The increase in allowable residential floor area would allow the Applicant to develop an underutilized portion of the Project Area, an interior portion of the zoning lot that is currently occupied by a surface parking lot. The proposed zoning text amendment would establish a MIH area, which would require residential development in the future with the Proposed Actions to include permanently affordable housing units. The proposed zoning text amendment to map MIH would ensure affordability on the Proposed Development Site in perpetuity. Finally, the proposed Large Scale General Development special permit would allow the Applicant to develop a building at the desired height, which would exceed the maximum height pursuant to the proposed zoning. The proposed special permit would also waive regulations relating to distance between buildings on a single zoning lot and street wall location, allowing the Applicant to construct an infill development within a site context that features multiple existing buildings on the same lot.

The Project Area is located in an area that can support additional residential density. Development trends in the area indicate increasing residential development, especially surrounding the intersection of commercial and transit corridors along Broadway and Myrtle Avenue to the north and east of the Proposed Development Site. The allowable residential density of the Project Area was not affected by the 2012 Bedford-Stuyvesant North Rezoning (though a C2-4 overlay was mapped along Marcus Garvey Boulevard on the site's western portion), which as discussed above rezoned residential districts in much of the surrounding area including the blocks directly west and south, and the remaining lots sharing the same block directly east of the Proposed Development Site. The 2012 rezoning sought to preserve the existing character and building patterns in the residential core of the neighborhood, to direct new residential and mixed-use growth to commercial/transit corridors, and to incentivize affordable housing creation in major corridors. The Proposed Actions would build upon the 2012 rezoning by creating the opportunity for new development of affordable senior housing in a transit-accessible area near commercial corridors.

The Proposed Actions would create new affordable housing units that would be consistent with the goals set forth by the Adams administration in *Housing Our Neighbors: A Blueprint for Housing and Homelessness*, a comprehensive plan intended to cover the entire spectrum of New Yorkers' housing needs and options. The Proposed Actions would facilitate the development of 292 additional AIRS units, providing much needed affordable residences for seniors. Consistent with the *Housing Our Neighbors* blueprint plan, the Proposed Actions would create and preserve affordable housing, and would facilitate the development of housing that would meet the needs of seniors.

V. APPLICANT'S PROPOSED PROJECT

The Applicant seeks to develop the Proposed Development Site (the eastern portion of the Project Area currently occupied by a surface parking lot as described above) with a new 14-story residential building with approximately 292 Affordable Independent Residences for Seniors (AIRS) units. Approximately 63 accessory parking spaces would be located in the cellar level of the proposed building, replacing the existing 95-space surface lot. The four existing buildings on the site would remain unchanged. The new building would contain approximately 192,519 gsf of residential space and approximately 20,400 gsf of parking space, for a total of approximately 212,919 gsf. Including the existing uses to remain in the Project Area (consisting of 267 residential DUs [301,558 gsf], 6,642 gsf of commercial retail space, and 5,339 gsf of community facility space), the Proposed Project would result in a total of 526,459 gsf of building area in the Project Area, consisting of five buildings.

As shown in the illustrative site plan in **Figure A-3,** the building would be accessible from Willoughby Avenue, the existing curb cut along Vernon Avenue would be filled, and a new curb cut would be installed along Vernon Avenue at the eastern property line, providing access to the proposed parking garage. As shown in the illustrative massing in **Figure A-4** and illustrative building sections in **Figure A-5,** the proposed 14-story building would rise to a base height of approximately 103 feet and a roof height of approximately 143 feet (153-foot bulkhead height), with 15-foot setbacks above the seventh floor along Vernon and Willoughby Avenues. In addition to construction of a new building, the Proposed Project would also involve multiple improvements throughout the Project Area, including upgraded landscaping, new courtyard furniture, and external upgrades to existing building entrances, stairways, and railings.

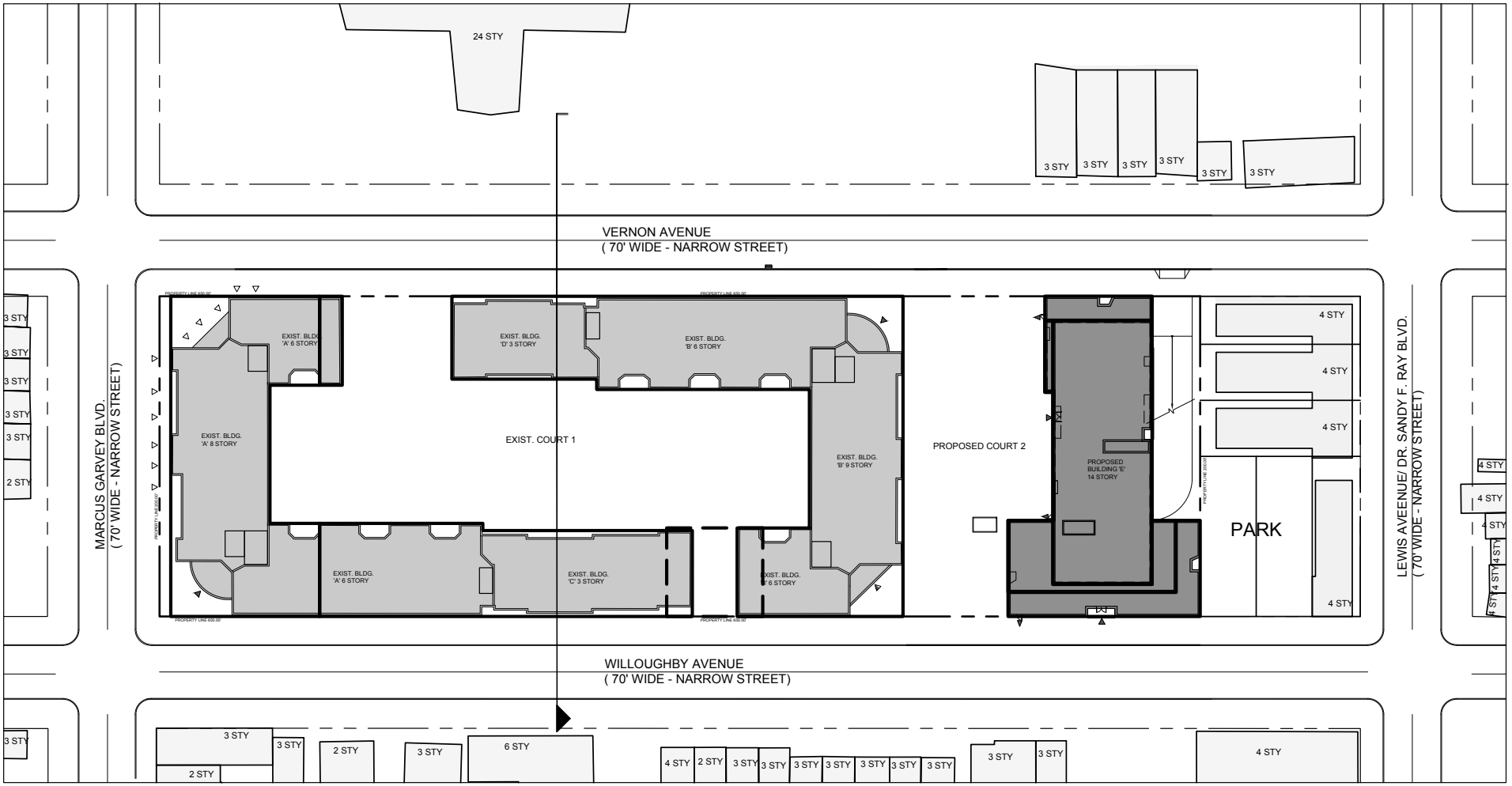
VI. ANALYSIS FRAMEWORK

Identification of Development Sites

As discussed above, the proposed zoning map amendment would only affect the Applicant-owned Block 1588, Lot 1. Thus, the Proposed Actions are site-specific, and there are no additional properties that could be considered "soft sites" under CEQR criteria. As discussed further below under "Future with the Proposed Actions (With-Action Condition)", development in the future with the Proposed Actions could only occur at the Proposed Development Site, the area which is currently occupied by a surface parking lot. As such, for CEQR analysis purposes, the Applicant's Proposed Development Site (refer to **Figure A-1**) is the only development site analyzed in this EAS.

Analysis Year

As the Proposed Development Site is owned by the Applicant, construction of the Proposed Project would commence upon approval of the Proposed Actions, which is expected in late 2024. Construction would


24 STY
3 STY
3 STY
3 STY
3 STY
3 STY
3 STY
VERNON AVENUE
(70' WIDE - NARROW STREET)
MARCUS GARVEY BLVD.
(70' WIDE - NARROW STREET)
EXIST. BLDG.
'A' 6 STORY
EXIST. BLDG.
'D' 3 STORY
EXIST. BLDG.
'B' 6 STORY
EXIST. BLDG.
'A' 8 STORY
EXIST. COURT 1
EXIST. BLDG.
'B' 9 STORY
PROPOSED COURT 2
PROPOSED
BUILDING 'E'
14 STORY
4 STY
4 STY
4 STY
4 STY
PARK
EXIST. BLDG.
'A' 6 STORY
EXIST. BLDG.
'C' 3 STORY
EXIST. BLDG.
'F' 6 STORY
LEWIS AVEENUE/ DR. SANDY F. RAY BLVD.
(70' WIDE - NARROW STREET)
WILLOUGHBY AVENUE
(70' WIDE - NARROW STREET)
3 STY
2 STY
3 STY
2 STY
3 STY
6 STY
4 STY
2 STY
3 STY
3 STY
3 STY
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3 STY
4 STY

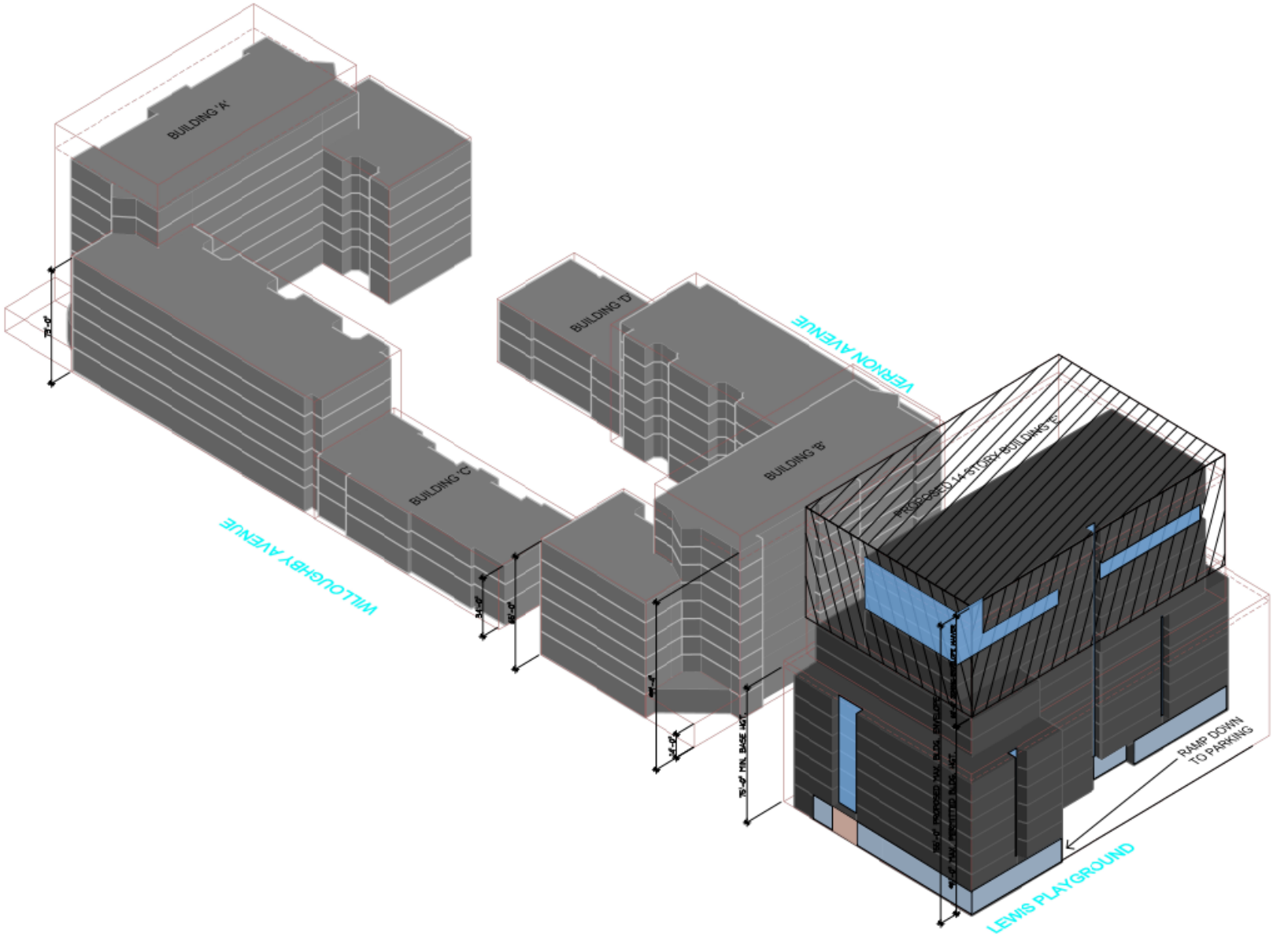
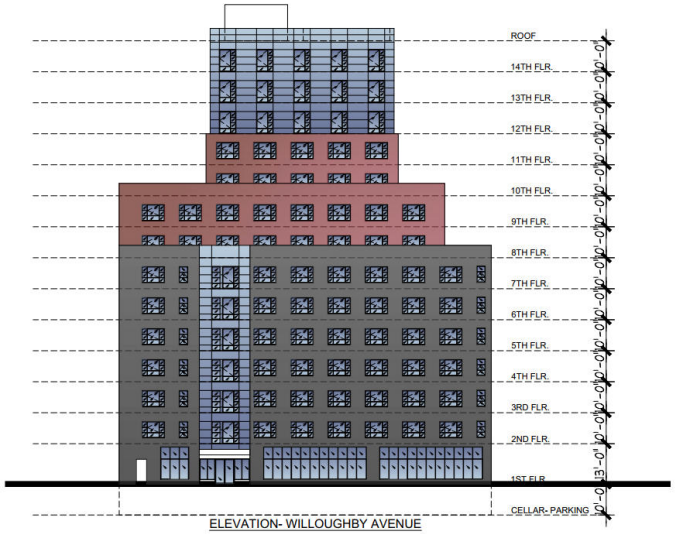


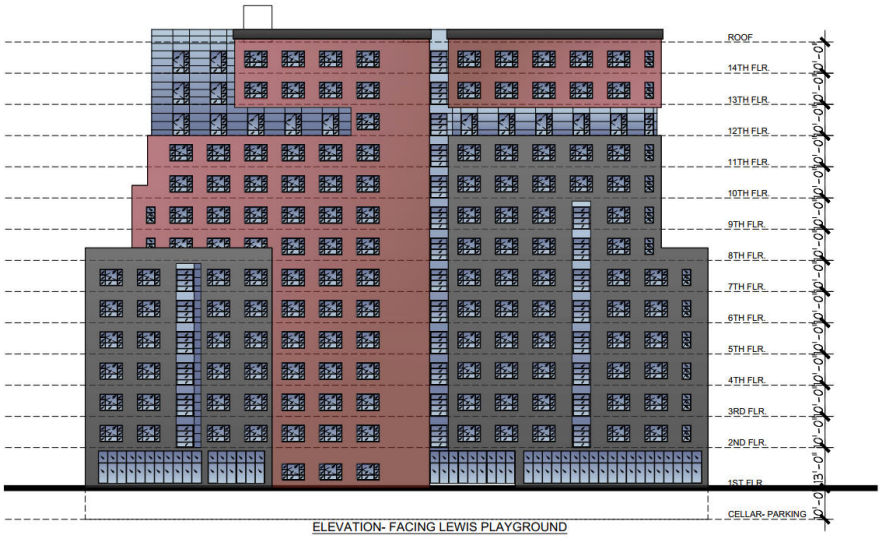
Figure A-4
Illustrative Building Massing



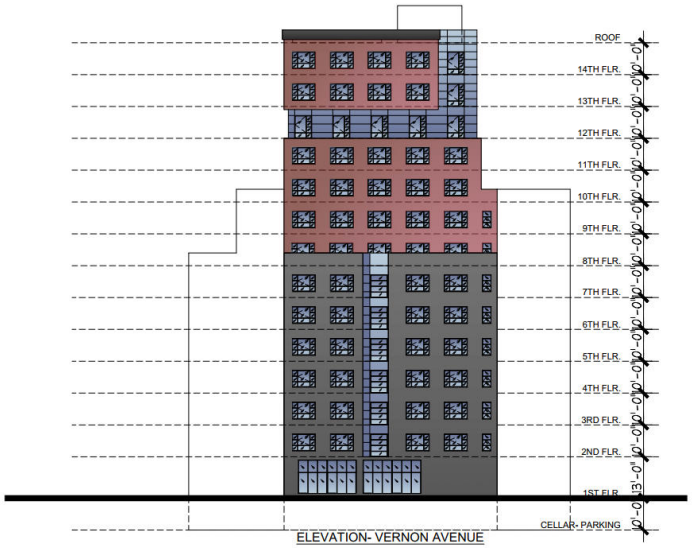
ELEVATION- COURT 2



ELEVATION- WILLOUGHBY AVENUE



ELEVATION- FACING LEWIS PLAYGROUND



ELEVATION- VERNON AVENUE

Figure A-5
Illustrative Building Elevation

take approximately 23 months, in which all work would be completed in a single phase. Therefore, it is assumed that the Proposed Project would be completed in 2027, and 2027 is the analysis year for the Proposed Project under CEQR.

Future without the Proposed Actions (No-Action Condition)

Absent approval of the Proposed Actions (the "No-Action Condition"), the existing residential and mixed-use buildings and surface parking lot would remain at the Project Area, and no new development or changes to the existing uses are expected to occur. Though there is approximately 0.24 remaining FAR available on the single zoning lot that makes up the Project Area (existing developments in the Project Area total 2.19 FAR; 2.43 FAR is allowed under the existing R6/C2-4 zoning), the amount of unused FAR remaining is too small for any additional development to feasibly occur within the Project Area absent the Proposed Actions. Thus, Project Area conditions in the 2027 future without the Proposed Actions are assumed to be the same as the existing conditions for the purpose of CEQR technical analysis.

Future with the Proposed Actions (With-Action Condition)

In the future with the Proposed Actions (With-Action condition), the proposed zoning map and zoning text amendments and CPC special permit for Large-scale General Development would be approved. As such, the Project Area would be rezoned from R6 and R6/C2-4 to R7A and R7A/C2-4, and would be designated as an MIH area. The Applicant would construct a new building at the Proposed Development Site in the eastern portion of the Project Area as outlined in **Section V, "Applicant's Proposed Project"**, above. The existing 95-space surface parking lot would be replaced with a new 14-story, 212,919-gsf building consisting of approximately 192,519 gsf of residential space, which would contain approximately 292 AIRS units, and a 20,400-gsf accessory parking garage containing approximately 63 spaces. As part of the Proposed Project, the Applicant would also carry out site improvements throughout the Project Area as described above. No additional changes to any of the existing residential, commercial, or community facility uses are expected to occur in the future with the Proposed Actions.

The Reasonable Worst-Case Development Scenario (RWCDS) under the Proposed Actions would be the same as the Applicant's Proposed Project described above. Stipulations under the proposed Large Scale General Development special permit and existing regulatory agreement and deed restrictions would limit the feasibility of any development that differs from the Applicant's proposal. Although the Proposed Development Site would not maximize its allowable FAR under the proposed R7A zoning, the Applicant's Proposed Project would be limited in height, density, and bulk by the LSGD special permit granted by CPC. Furthermore, the existing zoning lot is subject to regulatory controls at the city, state, and federal level, which are described in detail above under **Section II, "Background and Existing Conditions"**. If the LSGD site-plan approval were not exercised following ULURP approval in the future with the Proposed Actions, no new development would be feasible within the Project Area due to the applicable regulatory requirements. As such, there is no feasible With-Action scenario other than the Proposed Project, which would be considered the most reasonable and conservative With-Action scenario.

Although allowable FAR would increase in the With-Action Condition, none of the existing buildings at the Proposed Development Site would be expanded or enlarged, as the bulk and massing of all buildings on the site would be governed by the proposed Large Scale General Development special permit pursuant to ZR Section 74-74. In the hypothetical scenario where the approved site plan under the special permit were not exercised following ULURP approval of the Proposed Actions, with the R7A district in place, the same level of discretionary approval would be required from City, State and Federal housing agencies to permit any new development on the zoning lot. As such, no development other than the Proposed Project could feasibly occur in the With-Action Condition.

Possible Effects of the Proposed Actions

Table A-2 below provides a comparison of the No-Action and With-Action conditions identified for CEQR analysis purposes. As shown, the incremental (net) change that would result from the Proposed Actions is the addition of 192,519 gsf of residential space, with approximately 292 AIRS DUs, as well as a net reduction of 32 accessory residential parking spaces, compared to the No-Action condition. In terms of population, the Proposed Actions are expected to generate an estimated 438 incremental residents and 18 incremental employees, as compared to the 2027 No-Action condition.

TABLE A-2
Comparison of No-Action and With-Action Development Scenarios

	No-Action	With-Action	Increment
Land Use			
Residential (gsf)	301,558	494,077	+192,519
Residential (DUs)	267	559	+292
AIRS DUs	0	292	+292
Local Retail (gsf)	6,642	6,642	
Community Facility (gsf)	5,339	5,339	
Accessory Parking Spaces	95 (Surface Lot)	63 (Garage)	-32
Parking (gsf)[1]	N/A	20,400	+20,400
Number of Buildings	4	5	+1
Total Building Area (gsf)	313,540	526,459	+212,919
Population			
Residents[2]	684	1,122	+438
Employees[3]	41	52	+11

Notes:
[1] Existing surface parking lot to be replaced by new building with garage in the cellar
[2] Residents for existing DUs calculated based on the average household size for Brooklyn Community District 3 (2.56 persons per household) per the 2020 US Census. Number of incremental residents calculated using a rate of 1.5 residents per AIRS DU.
[3] Employees calculated using rates of 3 workers per 1,000 gsf of retail space, 1 worker per 450 gsf of community facility space, and 1 worker per 25 residential DUs.

VII. REQUIRED APPROVALS

The proposed zoning map and text amendments and CPC special permit are discretionary public actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR).

The City's ULURP process, mandated by Sections 197-c and 197-d of the New York City Charter, is designed to allow public review of ULURP applications at four levels: the Community Board; the Borough President; the CPC and the City Council. The procedure has mandated time limits for review at each stage to ensure a maximum review period of approximately seven months. The process begins with certification by CPC that the ULURP application is complete. The application is then referred to the relevant Community Board (in this case Brooklyn Community Board 1). The Community Board has up to 60 days to review and discuss the proposal, hold a public hearing, and adopt an advisory resolution on the ULURP application. The Brooklyn Borough President then has up to 30 days to review the application. The CPC then has up to 60 days, during which time a public hearing is held on the ULURP application. If CPC approved, the application is then forwarded to the City Council, which has 50 days to review the ULURP application.

CEQR is a process by which agencies review discretionary actions to identify the effects those actions may have on the environment. The City of New York established CEQR regulations in accordance with the New

York State Environmental Quality Review Act (SEQRA). In addition, the City has published a guidance manual for environmental review, the *CEQR Technical Manual*.

ATTACHMENT B

SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the guidance and methodologies presented in the 2021 *City Environmental Quality Review ("CEQR") Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Project to determine whether detailed analysis of any technical area may be appropriate.

As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of the Proposed Project, a new 14-story residential building at 109 Marcus Garvey Boulevard to be constructed as infill development on Brooklyn Block 1588, Lot 1 (the "Project Area") in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. The Proposed Project would be constructed in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area, and is currently occupied by a surface parking lot. The Proposed Project would consist of a 192,519-gross-square-foot (gsf) building with 292 Affordable Independent Residences for Seniors (AIRS) dwelling units (DUs) and approximately 68 accessory parking spaces included in a below-grade garage. The building would rise to a roof height of 143 feet (155-foot bulkhead height). The Project Area includes four existing buildings totaling approximately 313,540 gross square feet (gsf), containing a mix of 267 income restricted dwelling units (DUs), approximately 6,642 gsf of ground floor commercial retail, and approximately 5,339 gsf of community facility space for social services offices. These buildings would remain in the future with the Proposed Actions. In the 2027 analysis year in absence of the Proposed Actions, the existing conditions are expected to remain.

Part II of the **EAS Form** identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the **EAS Form**, supplemental screening assessments are provided in this attachment. The supplemental screenings contained herein identified that additional analyses are required in the areas of Land Use, Zoning, and Public Policy, Socioeconomic Conditions, Open Space, Shadows, Historic & Cultural Resources, Urban Design and Visual Resources and Noise. These analyses are provided in **Attachments C to I**, respectively, and are summarized in this attachment. The remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because the project increment did not trigger initial CEQR thresholds and/or is unlikely to result in significant adverse impacts. **Table B-1** presents a summary of analysis screening information for the Proposed Project.

TABLE B-1
Summary of CEQR Technical Areas Screening

CEQR TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SUPPLEMENTAL SCREENING	ANALYSIS REQUIRED
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions			X
Community Facilities and Services	X		
Open Space			X
Shadows			X
Historic & Cultural Resources			X
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water and Sewer Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation - Traffic & Parking - Transit - Pedestrians		 X X X	
Air Quality - Mobile Sources - Stationary Sources		 X X	
Greenhouse Gas Emissions	X		
Noise			X
Public Health		X	
Neighborhood Character		X	
Construction		X	

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

Refer to **Attachment C, "Land Use, Zoning, and Public Policy"** for a detailed assessment.

Socioeconomic Conditions

Refer to **Attachment D, "Socioeconomic Conditions"** for a detailed assessment.

Open Space

Refer to **Attachment E, "Open Space"** for a detailed assessment.

Shadows

Refer to **Attachment F, "Shadows"** for a detailed assessment.

Historic and Cultural Resources

Refer to **Attachment G, "Historic and Cultural Resources"** for a detailed assessment.

Urban Design and Visual Resources

Refer to **Attachment G, "Urban Design and Visual Resources"** for a detailed assessment.

Hazardous Materials

As defined in the 2021 *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semivolatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs) and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: (a) hazardous materials exist on a site, and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

Partner Assessment Corporation (Partner) prepared a Phase I Environmental Site Assessment (ESA) for the Proposed Development Site (refer to **Appendix 1** for the Phase I ESA). The site assessments for the Phase I ESA were completed during June 2023, and the report is dated June 28, 2023. The findings of the report are summarized below.

Phase I ESA

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any RECs during the course of this assessment.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any CRECs during the course of this assessment.

Historical Recognized Environmental Condition

A historical recognized environmental condition (HREC) refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any HRECs during the course of this assessment.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and/or lead-based paint (LBP) are present. Readily visible suspect ACMs and painted surfaces were observed in good condition. Should these materials be replaced, the identified suspect ACMs and LBPs would need to be sampled to confirm the presence or absence of asbestos or lead prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

Significant Data Gaps

No significant data gaps affecting the ability of the Environmental Professional to identify a REC were encountered during this assessment.

Conclusions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of 300 Vernon Avenue in Brooklyn, Kings County, New York (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report. This assessment has revealed no evidence of RECs, CRECs, or HRECs were identified in connection with the subject property; however, a BER was identified. Based on the conclusions of this assessment, Partner recommends the following:

- An Operations and Maintenance (O&M) Program should be implemented in order to safely manage the suspect ACMs and LBP located at the subject property.

No RECs, CRECs, or HRECs were identified by the Phase I ESA. Based on consultation with New York City Department of Environmental Protection (DEP), to address any concerns related to hazardous materials on the Proposed Development Site from historical on-site and/or surrounding area land uses, a Phase II Environmental Site Assessment (Phase II) is necessary to adequately inform and disclose the measures necessary to avoid impacts from hazardous materials. A Phase II would characterize the Proposed Development Site for contaminants relating to soil, groundwater and soil vapor conditions as outlined in the *CEQR Technical Manual*. Accordingly, a Phase II Environmental Site Assessment Work Plan and a Health and Safety Plan (HASP) were prepared and submitted to DEP for review, which were approved in a letter dated August 30, 2024 (see **Appendix 1**). The Applicant is currently proceeding with testing in accordance with the approved Work Plan.

At the request of DEP, an E-designation is being mapped on the Applicant's Proposed Development Site to ensure proper testing and remedial actions are completed prior to construction. The (E) designation would require an approved remediation plan where appropriate, to the satisfaction of the New York City Office of Environmental Remediation (OER). The New York City Department of Buildings (DOB) will

typically issue the foundation permits when OER approves the remedial action work plan – the actual remediation is usually done concurrently with the construction. The remediation plan provided to OER to satisfy the (E) designation must also include a mandatory construction-related health and safety plan (CHASP), which must also be submitted to OER. The (E) designation text related to hazardous materials (E-779) for Block 1588, Lot 1, is as follows:

> **Task 1: Remediation Determination and Protocol**
>
> **A written report with Phase II findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated for the test results, a proposed remedial action plan (RAP) must be submitted by OER for review and approval. The Applicant must complete such remediation as determined necessary by OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed. An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.**

With the (E) Designation in place and implementation of the preventative and institutional and engineering control measures described above, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the Proposed Actions and resultant development on the Proposed Development Site.

Transportation

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to transportation and therefore require transportation analysis. As shown in Table 16-1 of the *CEQR Technical Manual*, based on the location of the Project Area, the Proposed Project would exceed the threshold of 200 incremental residential DUs that would warrant analysis of transportation.

The Proposed Project would result in the net increase of 292 AIRS DUs compared to the No-Action. Therefore, per *CEQR Technical Manual* guidance, a preliminary trip generation assessment is warranted and has been provided in the *Transportation Planning Factors & Travel Demand Forecast Memorandum* which is provided in **Appendix 2.** Per CEQR guidance, a screening assessment was completed to determine if the Proposed Project warrants detailed analyses of traffic, parking, transit, or pedestrians. The screening assessment consisted of a Level 1 Project Trip Generation, presented in **Appendix 2**.

The Proposed Project does not warrant detailed analyses of traffic, pedestrian, transit, parking, or ferry service. The Proposed Project would not generate 50 or more vehicle trips in any peak period, which is the CEQR threshold for a detailed traffic analysis.[1]

[1] Specifically, as detailed in the *Transportation Planning Factors & Travel Demand Forecast Memorandum* for this project (see **Appendix 2**), the Proposed Project would result in an incremental net decrease in vehicle trips of 27, 18, 23, and 25 in the weekday AM, midday, PM, and Saturday peak hours, respectively.

In addition, the Level 1 Screening determined that the Proposed Project is not expected to generate an increase of more than 200 peak hour rail or 50 peak hour bus transit riders, the CEQR thresholds for a detailed transit analysis. According to *2021 CEQR Technical Manual* guidance, on- and off-street parking analyses may be warranted if a quantified traffic analysis is necessary based on the Levels 1 and 2 screening assessments. Based on the screening assessments detailed above, a quantified traffic analysis would not be warranted for the Proposed Actions. Furthermore, the Proposed Project is not expected to generate 200 or more pedestrian trips, the CEQR threshold for analysis of pedestrians.

Therefore, no significant adverse impacts to traffic, transit, parking, or pedestrians would be expected in the future with the Proposed Project.

Air Quality

According to *CEQR Technical Manual* guidance, air quality analyses are conducted to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts.

Mobile Sources

Peak hour trip generation would be far below the 170-vehicle threshold identified in *CEQR Technical Manual* Section 210 as potentially warranting further assessment (refer to the Project Trip Generation included in **Appendix 2**). The project would also not generate peak hour vehicle volumes in exceedance of the CEQR thresholds for heavy-duty diesel vehicle (HDDV) traffic or the vehicular emissions equivalent on adjacent roadways. Moreover, the project would not create a new sensitive receptor adjacent to large parking facilities. Therefore, no further assessment of potential for mobile source air quality impacts is warranted.

Stationary Sources

Stationary source impacts could occur with actions that create new stationary sources or pollutants, such as emission stacks for industrial plants, hospitals, or other large institutional uses, or a building's boiler stacks used for heating/hot water, ventilation, and air conditioning ("HVAC") systems, that can affect surrounding uses. Impacts from boiler emissions associated with a development are a function of fuel type, stack height, minimum distance of the stack on the source building to the closest building of similar or greater height, building use, and the square footage of the source building. In addition, stationary source impacts can occur when new uses are added near existing or planned emissions stacks, or when new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

Emissions from the HVAC system of the Proposed Project have the potential to affect air quality at other nearby existing land uses. To determine whether a detailed project-on-existing HVAC analysis is warranted, an air quality nomograph screening was performed using Figure 17-3 of the *CEQR Technical Manual*. Though it is expected that the Proposed Project would use fossil fuels (natural gas) for HVAC purposes, the standard spoiler screening was used for conservative analysis purposes.

The Proposed Project would rise to 14 stories tall (approximately 143 feet, with a mechanical bulkhead height of approximately 153 feet) and include approximately 192,519 gsf. As noted above, the building is expected to use natural gas for its HVAC system. A review of existing land uses within approximately 400 feet of the Proposed Development Site via the New York City Open Accessible Space Information System (OASIS) Land Use interactive mapping application and Google Maps shows that there is one existing building of similar or greater height than the Proposed Project within an approximate 400-foot radius of the site (the 24-story, approximately 213-foot tall building at 303 Vernon Avenue, which is approximately 275 feet from the Proposed Development Site).

The air quality analysis of boiler HVAC emissions is based on the screening procedures and methodologies provided in Sub-Section 322.1 of the *CEQR Technical Manual*. This analysis uses a nomograph procedure based on the size of the development (i.e., floor area square footage), fuel type, and distance to the nearest receptor or buildings of a height similar or greater than the stack height of the Proposed Project. The nomograph figure was specifically developed through detailed mathematical modeling to predict the threshold of development size below which a project would not be likely to have a significant impact. This procedure is only appropriate for single buildings at least thirty feet or more from the nearest building of similar or greater height. If a project passes the screening analysis, then there is no potential for a significant adverse air quality impact from the project's boiler, and a detailed analysis may not need to be conducted.

Based on the chart provided in Figure 17-3 of the *CEQR Technical Manual* Air Quality Appendix, associated emissions from the Proposed Project's HVAC system are not expected to adversely affect any existing sensitive receptors (see **Figure B-1**). As shown in the graph, based on the size of the Proposed Project (192,519 gsf), emissions could affect buildings of similar or greater heights within approximately 195 feet. Since the closest such building is approximately 275 feet away, the Proposed Project would therefore not result in any significant adverse air quality impacts to surrounding buildings. As such, no further analysis of HVAC emissions from the Proposed Project on surrounding uses is warranted.

To ensure that the Proposed Project's HVAC and hot water equipment stacks do not adversely impact surrounding buildings, an air quality (E) designation (E-779) would be placed on the Project Area, as specified below:

Brooklyn Block 1588, Lot 1

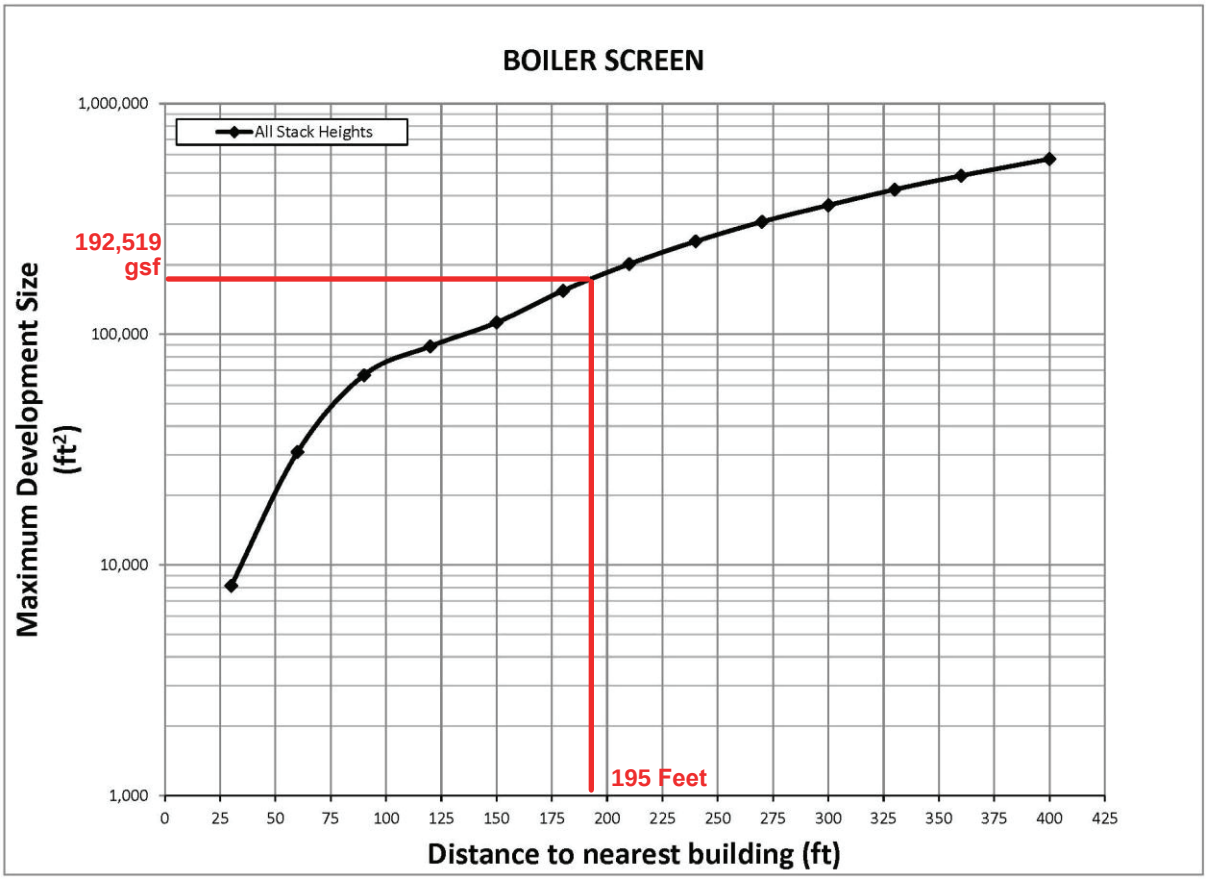
The (E) designation text related to air quality is as follows:

> **Any new residential, community facility and/or commercial development on the above-referenced property must ensure the heating, ventilation, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 156 feet above grade to avoid any potential significant adverse air quality impacts.**

With the (E) designation in place, the Proposed Actions would not have the potential to result in a significant adverse air quality impact from project-generated HVAC or hot water systems.

Based on a review of DEP's Clean Air Tracking System (CATS) Light Industrial Permit records as of September 28, 2022, there are two permits (DEP Permit CA 130098 and DEP Permit CA026796) for facilities located within 400 feet of the Proposed Project. DEP Permit CA 130098 is for a natural gas burner at 303 Vernon Avenue (Block 1585, Lot 1) that serves a residential building, which is not an industrial

Figure 17-3
Stationary Source Screen- Heat and Hot Water System



source. In addition, DEP Permit CA026796 is for a No. 2 fuel oil burner serving the church building at 17 Lewis Avenue (Block 1592, Lot 1), which is also not an industrial source. Based on this information, no industrial source analysis is warranted for the Proposed Project. Moreover, based on surrounding area land uses, there are no industrial or manufacturing facilities within 400 feet of the Proposed Development Site (see **Figure 2 in the EAS Form**). There are also no major or large combustion sources located within a 1,000-foot radius of the Proposed Development Site. Therefore, no significant adverse industrial source or large emission source air quality impacts are anticipated, and no significant adverse stationary source air quality impacts are expected in the future with the Proposed Project.

Noise

Refer to **Attachment H**, **"Noise"** for a detailed assessment.

Public Health

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, water quality, hazardous materials, and noise.

According to the 2021 *CEQR Technical Manual*, a public health assessment may be warranted if a project results in (a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; (b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect groundwater to be used as a source of drinking water; (c) solid waste management practices that could attract vermin and result in an increase in pest populations; (d) potential significant adverse impacts to sensitive receptors from noise and odors; (e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts; (f) exceedances of accepted federal, state, or local standards; or (g) other actions that might not exceed the preceding thresholds but might, nonetheless, result in significant health concerns.

As detailed in the analyses provided in this EAS, the Proposed Project would not result in significant adverse impacts in the areas of air quality, water quality, hazardous materials, or noise. Therefore, the Proposed Project does not have the potential to result in significant adverse public health impacts, and further assessment is not warranted.

Neighborhood Character

According to the 2021 *CEQR Technical Manual*, an assessment of neighborhood character may be appropriate if a proposed action(s) has the potential to result in significant adverse impacts on land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise, or when an action may have moderate effects on several of the elements that define a neighborhood's character. As the EAS provides detailed assessments of land use, zoning, and public policy (**Attachment C**)**,** open space (**Attachment E**), shadows (**Attachment F**), historic and cultural resources (**Attachment G**), urban design and visual resources (**Attachment H**), and noise (**Attachment I**), a preliminary screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted.

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." According to the *CEQR Technical Manual*, a preliminary assessment may be appropriate if a project has the potential to result in any significant adverse impacts on any of the technical areas mentioned. Per the analyses provided in this EAS, although the Proposed Project required supplemental screening or assessment of some of these technical areas, there would be no project-generated significant adverse impacts.

The *CEQR Technical Manual* also states that for projects not resulting in significant adverse impacts to any technical areas related to neighborhood character, additional analyses may be required to determine if the Proposed Project would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. However, the *CEQR Technical Manual* indicates that neighborhood character impacts are rare and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects in the neighborhood would result in any significant adverse impact to neighborhood character.

The Proposed Project would not adversely affect any component of the surrounding area's neighborhood character, conflict with the surrounding activities, or significantly affect land use patterns. The Proposed Project would bring residential infill development to an underutilized portion of a large lot containing residential, commercial, and community facility land uses. The Proposed Project would bring affordable housing to the Project Area by facilitating the development of a new residential building in place of an existing surface parking lot. Compared to the future without the Proposed Actions, in which the existing parking lot would remain, the Proposed Project would create development that is more compatible with the dense residential character of the surrounding neighborhood.

As the Proposed Project would not be considered to have any significant adverse effects on any of the technical areas relating to neighborhood character, a neighborhood character assessment can be screened out, and no significant adverse neighborhood character impacts would occur. Therefore, no additional analysis is warranted for neighborhood character.

Construction

Although temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. Determination of the significance of construction impacts and the need for mitigation is generally based on the duration and magnitude of the impacts. Construction impacts are usually important when construction activity could affect traffic conditions, the integrity of historic and/or archaeological resources, community noise patterns, and air quality conditions. The construction activities associated with the development of the Proposed Project would be expected to result in conditions typical of construction sites in New York City.

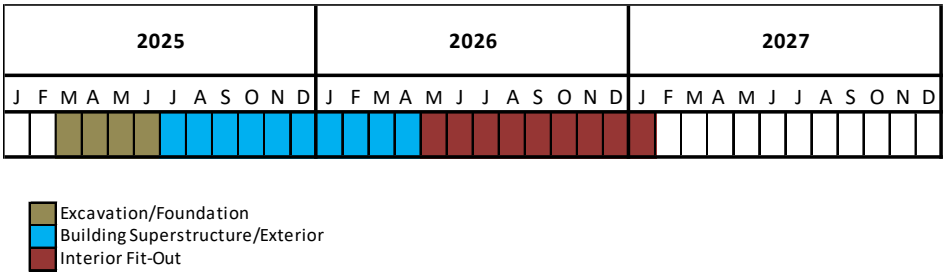
The Proposed Project involves the construction of a single residential building at the Proposed Development Site in place of the existing surface parking lot. The Proposed Project would be constructed in a single phase, and in less than two years. Thus, potential construction effects would be minimal and as discussed below, are not expected to have any significant adverse impacts.

Construction at the Proposed Development Site is expected to begin in 2025, allowing time for design and permits to be finalized following approval of the Proposed Actions, and would be completed in up to 23 months, by 2027. The site is occupied by a paved surface parking lot, which would be site excavated to construct a single cellar level. It is expected that construction of the Proposed Project at the Proposed

Development Site would take up to approximately 23 months (approximately 89 weeks) to complete. The Proposed Development Site would undergo an initial approximately 14 weeks of excavation and foundation work, approximately ten months of building superstructure erection, and approximately nine months of exterior and interior building fit-out. A conceptual construction schedule for the Proposed Project is presented in **Table B-2.** Construction of the Proposed Project would follow applicable federal, state, and local laws for building and safety, as well as local noise ordinances, as appropriate. Construction specifications would require that construction contractors comply with all applicable legal requirements including environmental regulations and obtain necessary permits for the duration of construction.

Construction activities are not expected to adversely affect surrounding land uses. During construction, access to all adjacent buildings, residences, and other uses would be maintained according to the regulations established by the DOB. As required by City regulations, sidewalk protection bridges and full height plywood barriers would be installed at the site to protect the public right of way. During construction projects in New York City, it is often necessary for some sidewalks immediately adjacent to the construction site to be narrowed or closed temporarily to accommodate heavy loading areas, and for portions of adjacent roadways (e.g., curbside parking lanes) to be temporarily closed during certain limited periods of construction. In these cases, pedestrians are typically provided with a temporary protected walkway or are diverted to a sidewalk on the opposite side of the street. The construction manager is required to demonstrate how they intend to reduce disruptions due to vehicle deliveries and staging and the closures of adjacent sidewalks and parking lanes. Detailed Maintenance and Protection of Traffic (MPT) plans for any temporary sidewalk and lane closures need to be submitted for approval to the DOT's Office of Construction Mitigation and Coordination (OCMC), the entity that ensures critical arteries are not interrupted, especially in peak travel periods. MPT plans are developed to ensure the safety of the construction workers and the public passing through the area. Measures specified in the plans typically include a pedestrian access plan identifying the extent to which any sidewalk would be closed or narrowed, ADA compliant pedestrian detour routes, the projected pedestrian trips along the proposed detours, and appropriate protective measures for ensuring pedestrian safety surrounding the site. Also included are measures to maintain traffic flow and vehicular safety, and requirements for street crossing and entrance barriers, protective scaffolding, and compliance with applicable construction safety measures.

TABLE B-2
Conceptual Construction Schedule



Construction activity on the Proposed Development Site may also involve the operation of several pieces of diesel equipment or machinery during peak construction. However, through adherence to relevant guidelines and regulations including the *New York City Noise Control Code* and *New York City Air Pollution Control Code*, the Proposed Project would not result in significant adverse construction-related noise or air quality impacts. While the Proposed Project would result in temporary disruptions, these effects are not considered as significant or adverse. Therefore, no further analysis is warranted.

Construction activities would be completed within approximately 23 months from the start date, and since the Proposed Actions are site-specific and no development other than the Proposed Project would occur as a result, there is no potential for overlapping construction timelines. Additionally, by following historic and cultural resources protective measures outlined in **Attachment D, "Historic and Cultural Resources,"** there would be no impacts to historic and cultural resources resulting from the construction of the Proposed Project. DOB's TPPN #10/88, which supplements the standard building protection afforded by the Building Code C26-112.4 by requiring, among other measures, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or SNR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so construction procedures could change, would be followed at the Proposed Development Site. LPC determined that the Proposed Development Site has no archaeological significance (See **Appendix 3**). Construction would also be performed subject to relevant DOT and DOB regulations to ensure minimal construction impacts. Therefore, no significant adverse impacts associated with construction activities would occur.

ATTACHMENT C

LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

Under 2021 *CEQR Technical Manual* guidance, a land use analysis evaluates the uses and development trends in the area that may be affected by a proposed action(s) and determines whether the action(s) would be compatible with those conditions or potentially adversely affect them. Similarly, the analysis considers the proposed action's compliance with, and effect on, the area's zoning and other applicable public policies.

As discussed in **Attachment A, "Project Description,"** the Proposed Actions involve zoning changes that would affect a single tax lot (Brooklyn Block 1588, Lot 1 a.k.a. the "Project Area") in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. The Applicant-owned Project Area is bounded by Vernon Avenue to the north, Marcus Garvey Boulevard to the west, and Willoughby Avenue to the south. The Proposed Actions would enable the Applicant to construct a new infill development in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area, currently occupied by a surface parking lot.

The Proposed Actions consist of a zoning map amendment to rezone the Project Area from R6 and R6/C2-4 to R7A and R7A/C2-4, a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area, and a City Planning Commission ("CPC") special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot. Approval of the Proposed Actions would allow the Applicant to develop a new 14-story (143-foot roof height; 153-foot bulkhead height) building (the "Proposed Project") in place of the existing 95-space surface parking lot on the Proposed Development Site. The approximately 212,919-gross-square-foot (gsf) building will include 292 Affordable Independent Residences for Seniors (AIRS) units and approximately 63 accessory parking spaces in a 20,400-gsf garage in the cellar level. The existing uses in the Project Area, (four buildings totaling approximately 313,540 gsf containing a mix of 267 income restricted dwelling units [DUs], approximately 6,642 gsf of retail, and approximately 5,339 gsf of community facility space, would remain.

According to the *CEQR Technical Manual*, a land use and zoning analysis is warranted for actions facilitating a change in land use or zoning. As the Proposed Actions involve zoning changes that would increase the allowable density, an analysis of land use and zoning is warranted. Furthermore, the *CEQR Technical Manual* recommends that if a preliminary assessment cannot succinctly describe land use conditions in the study area, or if a detailed assessment is required in the technical analyses of socioeconomic conditions, neighborhood character, transportation, air quality, noise, infrastructure, or hazardous materials, a detailed land use assessment is appropriate. As such, a detailed land use and zoning assessment is warranted for the Proposed Actions.

II. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions and determine whether they would result in any significant adverse impacts on land use, zoning, or public policy. The analysis methodology is based on the guidance of the *CEQR Technical Manual* and examines the Proposed Actions'

consistency with land use patterns and development trends, zoning regulations, and other applicable public policies. As described in **Attachment A, "Project Description,"** in order to assess the possible effects of the Proposed Actions, a RWCDS was established for the future without the Proposed Actions (the No-Action condition) and future with the Proposed Actions (the With-Action condition) for the 2027 analysis year.

This attachment includes a description of existing land uses and zoning within the directly affected area and the broader study area. Following the guidance of the *CEQR Technical Manual*, the analysis describes existing and anticipated future conditions to a level necessary to understand the relationship of the Proposed Actions to such conditions, assesses the nature of any changes on these conditions that would be created by the Proposed Actions, and identifies those changes, if any, that could be significant or adverse.

Existing land uses were identified through review of a combination of sources including field surveys and secondary sources, as well as the City's Primary Land Use Tax Lot Output (PLUTO™) data files for 2022 and websites, such as New York City's Zoning and Land Use Map (ZoLa, https://zola.planning.nyc.gov) and NYCityMap (http://gis.nyc.gov/doitt/nycitymap/). New York City Zoning Maps and the Zoning Resolution (ZR) of the City of New York were consulted to describe existing zoning districts and provided the basis for the zoning evaluation of the future No-Action and future With-Action conditions. Relevant public documents including documents recognized by the New York City Department of City Planning (DCP) and other City agencies were utilized to describe existing public policies pertaining to the study areas.

Analysis Year

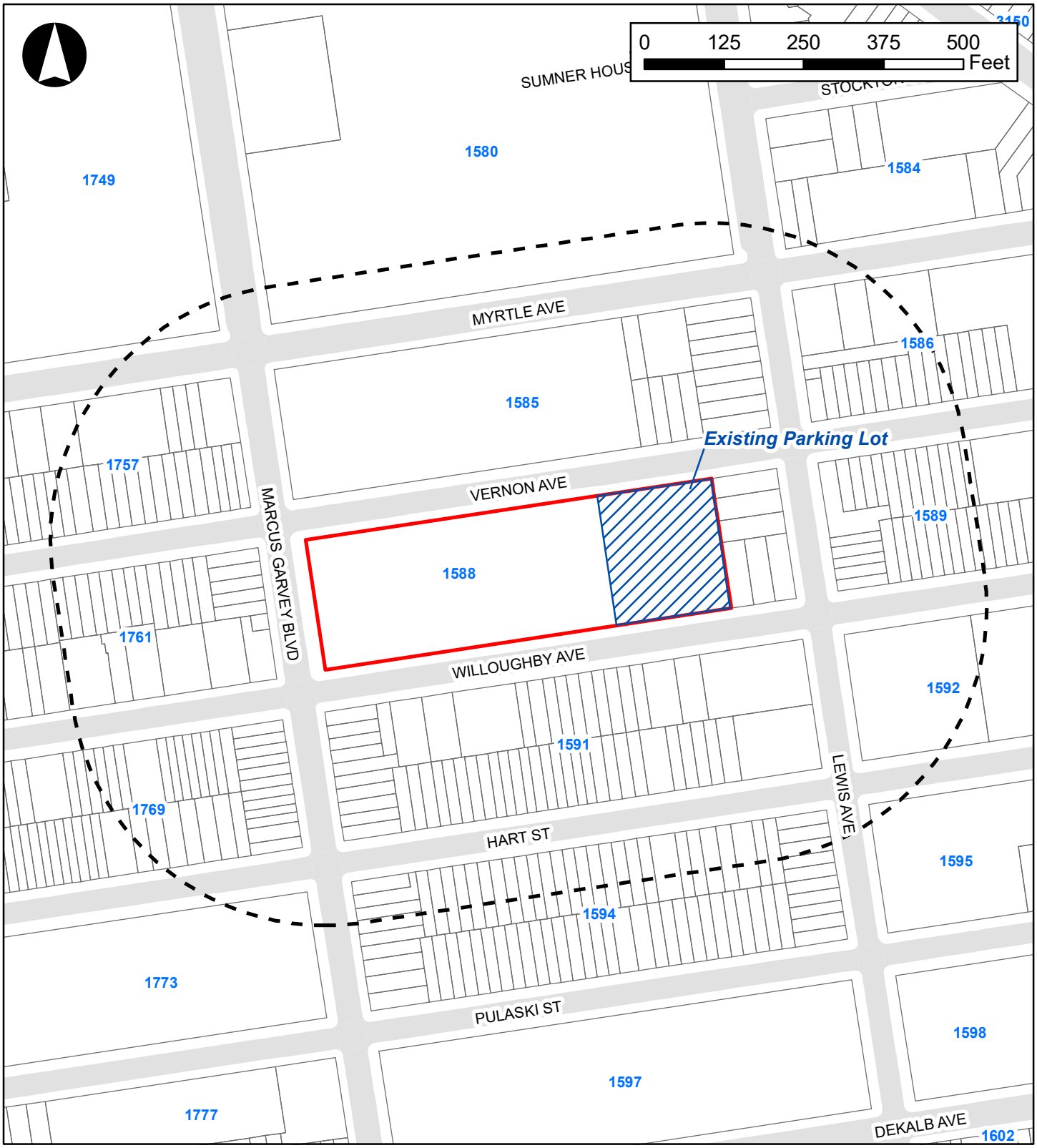
As discussed in **Attachment A, "Project Description,"** construction of the Proposed Project under the Proposed Actions is expected to be completed by 2027. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2027. Future No-Action conditions account for planned development projects, initiatives, and proposals that are anticipated to be completed by 2027.

Study Area Definition

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning, and public policy is related to the type and size of an action, as well as the location and context of the area that could be affected. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. The study areas for the Proposed Actions have been established in accordance with *CEQR Technical Manual* guidance and are shown in **Figure C-1**.

As shown in **Figure C-1**, land use, zoning, and public policy are addressed and analyzed for two geographical areas for the Proposed Actions. The study areas include: (1) the directly affected area (or Project Area), which comprises the Proposed Rezoning Area (Block 1588, Lot 1); and (2) a secondary study area that encompasses an area that has the potential to experience indirect impacts as a result of the Proposed Actions. The secondary study area extends an approximate 400-foot radius from the boundary of the primary study area. The secondary study area is bounded to the north by the midblock between Myrtle Avenue and Park Avenue, to the east by the midblock between Lewis Avenue and Stuyvesant Avenue, to the south by the midblock between Hart Street and Pulaski Street, and to the west by the midblock between Marcus Garvey Blvd and Throop Avenue.

Figure C-1
Land Use Study Areas



Legend

- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Proposed Development Site
- 1588 Tax Block
- Tax Lot

III. EXISTING CONDITIONS

Land Use

Primary Study Area (Project Area)

The primary study is the area that would be directly affected by the Proposed Actions. The area includes a single tax lot (Block 1588, Lot 1), and is bounded by Vernon Avenue to the north, Marcus Garvey Boulevard to the west, and Willoughby Avenue to the south. It has a total area of approximately 130,000 sf and has approximately 650 feet of frontage along both Vernon and Willoughby Avenues and approximately 200 feet of frontage along Marcus Garvey Boulevard. The eastern boundary of the Project Area is the eastern lot line, which is a line parallel to and approximately 100 feet west of Lewis Avenue.

The Project Area is currently occupied by four predominantly residential buildings containing a mix of residential, commercial (local retail) and community facility uses. The existing buildings range from three to eight stories (28-foot to 102-foot roof height) and are arranged in the western portion of the tax lot around a central private courtyard, playground, and staff parking lot. The existing buildings contain a total of approximately 313,540 gsf, which includes 267 income-restricted DUs, approximately 6,642 gsf of ground floor commercial uses fronting on Marcus Garvey Boulevard, and approximately 5,339 gsf of community facility space for social services offices. The total built Floor Area Ratio (FAR) on the site is approximately 2.19. The eastern portion of the Project Area is occupied by a surface parking lot with approximately 95 accessory residential parking spaces, accessed via a curb cut along Vernon Avenue.

Vernon Avenue is a one-way, west-bound local street with a mapped width of 70 feet (a narrow street for the purposes of zoning) with on-street parking on both sides and no lane markings. Marcus Garvey Boulevard is a one-way, south-bound minor arterial street with a mapped width of 70 feet (a narrow street) with two moving lanes and on-street parking on both sides. Willoughby Avenue is a one-way, east-bound local street with a mapped width of 70 feet (a narrow street) with a single moving vehicle lane, a marked bike lane along the north side, and on-street parking on both sides.

Secondary Study Area (400-foot Radius)

As shown in **Figure C-2**, land uses within the secondary study area are varied, most prominently featuring a mix of residential, commercial, and institutional/public facility uses. Directly adjacent to the primary study area, the eastern portion of Block 1588 (excluding Lot 1), is occupied by several four-story residential buildings and a public playground. Lewis Playground owned and operated by New York City Parks and has an area of approximately 0.16 acres. The playground borders the primary study area to the east.

The majority of the surrounding area is occupied by single and multi-family attached residential walk-up buildings of three to four stories. These uses are commonly found along Vernon Avenue, Willoughby Avenue, and Hart Street in the vicinity of the Project Area. There are several larger, multi-family residential developments with elevators in the surrounding area, which are concentrated to the north of the Project Area and include the 24-story tower-in-the-park style New York City Housing Authority (NYCHA) development at 303 Vernon Avenue, directly north of the Project Area. The Summer Houses, which are located to the north of the Study Area, is home to over 2,400 public housing residents. This development includes 13 buildings ranging from seven to nine stores, with green areas, a basketball court, and parking lots. There are several mixed-use residential buildings with commercial ground floors along Marcus Garvey Boulevard and Lewis Avenue.

Figure C-2
Land Use



Legend

- Project Area
- 400-foot Radius
- Proposed Development Site
- 1588 Tax Block

LandUse

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

Lewis Avenue is a one-way avenue that runs northbound through the eastern portion of the secondary study area while Marcus Garvey Boulevard is also one way that runs southbound through the western portion of the secondary study area. These streets are the main commercial corridors within the secondary study area, and both streets are occupied by a variety of uses including multiple churches, schools, restaurants, and stores that serve residents from the neighborhood as well as visitors. Institutional uses in the secondary study area include the St. John the Baptist Roman Catholic Church at 333 Hart Street south of the Project Area, the Bedford Stuyvesant New Beginnings Charter School at 82 Lewis Avenue and the Beth Shalom Hebrew Congregation at 730 Willoughby Avenue.

Table C-1 provides a description of existing land use within the secondary study area. As shown in **Table C-1**, residential uses are the most prevalent throughout the study area and constitute the highest percentage of tax lots, lot area, and building area (approximately 80.1, 62.7, and 57.9 percent, respectively). Of the residential uses, multi-family walkup buildings comprise the highest percentage of total lots (approximately 44.2 percent). Just nine lots are occupied by multi-family elevator buildings which make up 17.4 percent of total building area. Only 17 lots contain mixed commercial/residential buildings, but they account for 31.2 percent of the total building area. Parking facilities make up 2.2 percent of total lots. 6.1 percent of the total lots are vacant. There are four lots dedicated to public facilities or institutions accounting for 3.3 percent of the total lot area and 6.7 percent of building area.

TABLE C-1: Existing Land Uses in the Secondary Study Area

Land Use	Number of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	185	80.1%	517,305	62.7%	965,597	57.9%
One & Two Family Buildings	74	32.0%	127,802	15.5%	165,600	9.9%
Multi-Family Walkup Buildings	102	44.2%	245,606	29.8%	479,461	28.8%
Multi-Family Elevator Buildings	9	3.9%	143,897	17.4%	320,536	19.2%
Mixed Commercial/Residential Buildings	17	7.4%	194,935	23.6%	520,367	31.2%
Commercial/Office Buildings	4	1.7%	35,497	4.3%	68,212	4.1%
Industrial/Manufacturing	0	0.0%	0	0.0%	0	0.0%
Transportation/Utility	0	0.0%	0	0.0%	0	0.0%
Public Facilities & Institutions	4	1.7%	27,381	3.3%	112,429	6.7%
Open Space	2	0.9%	7,000	0.8%	0	0.0%
Parking Facilities	5	2.2%	12,599	1.5%	0	0.0%
Vacant Land	14	6.1%	30,546	3.7%	0	0.0%
All Others/No Data	0	0.0%	0	0.0%	0	0.0%
Total	**231**	**100.0%**	**825,263**	**100.0%**	**1,666,605**	**100.0%**

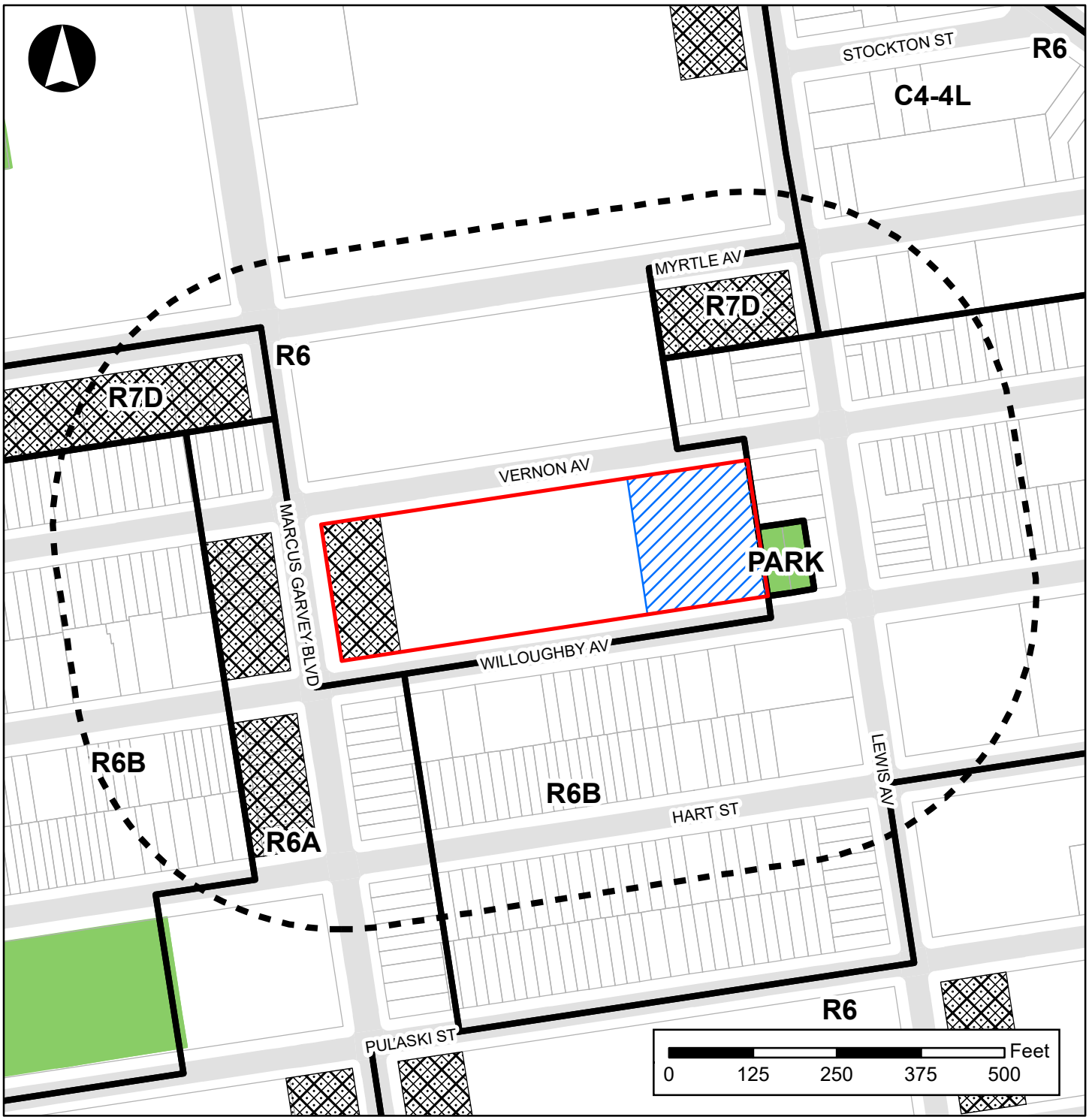
Source: NYC Department of City Planning (PLUTO 2022 v3)

Zoning

Primary Study Area

As shown in **Figure C-3**, The primary study area is zoned R6 with a C2-4 commercial overlay mapped along Marcus Garvey Boulevard. The maximum allowable FAR in R6 districts is 2.43. R6 districts are widely mapped in built-up, medium-density areas. Developers can choose between Height Factor and Quality Housing bulk regulations. C2 commercial overlays are mapped within residential districts along streets that serve local retail needs. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential uses. 2.0 Commercial FAR is permitted within R6 districts.

Figure C-3
Zoning Map



Legend

- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Proposed Development Site
- Open Space
- R6A Zoning District
- **Commercial Overlay**
- C2-4

As discussed in detail in **Attachment A, "Project Description"**, the existing zoning lot is subject to a regulatory agreement in place between New York City Housing Preservation and Development (HPD) and the New York State Division of Housing and Community Renewal (DHCR), in addition to some restrictions placed on the property under the US Department of Housing and Urban Development (HUD), as well as other regulatory and financial agreements.

Secondary Study Area

Zoning classifications within the secondary study area are shown in **Table C-2** and consist of residential, districts and commercial overlays. The majority of lots within the secondary study area are zoned for residential uses. The Project Area is mapped with an R6 district that extends north past Myrtle Avenue. An R6B district is mapped along the eastern and southern sides of the study area including portions of Lewis Avenue, Willoughby Avenue and Hart Street. An R6A district exists to the west of the study area, and an R7D district is mapped at the northwestern corner of the study area. **Figure C-3** shows the existing zoning districts in the secondary study area.

TABLE C-2: Existing Zoning Districts within the Secondary Study Area

Name	Definition/General Use	Maximum FAR
Residential Districts		
R6	R6 districts are widely mapped in built-up, medium-density areas. Developers can choose between Height Factor and Quality Housing bulk regulations.	R: 0.78-2.43[1] CF: 4.8 C: Not permitted M: Not permitted
R6A	R6A is a medium-density contextual district where bulk regulations tend to produce high lot coverage, six- to eight-story apartment buildings set at or near the street line.	R: 3.0 CF: 3.0 C: Not permitted M: Not permitted
R6B	R6B districts are contextual residential districts and are often traditional rowhouse districts. The base height must be between 30 and 40 feet, and a maximum building height after setback is 50 feet.	R: 2.0/2.2 (IH) CF: 2.0 C: Not permitted M: Not permitted
R7D	R7D is a medium-density contextual district designed to produce 10- to 11-story Quality Housing buildings that are slightly larger than what an R7A district allows.	R: 4.2 CF: 4.2 C: Not permitted M: Not permitted
Commercial Districts		
C2-4 Overlay	C2 commercial overlays are mapped within residential districts along streets that serve local retail needs. In mixed-use buildings, commercial uses are limited to one or two floors and must always be located below the residential uses. C2 commercial overlay districts permit a slightly wider range of uses than C1 districts.	R & CF: Same as underlying R district C: 1.0 within R1-R5 districts & 2.0 within R6-R10 districts M: Not permitted

Source: Zoning Resolution of the City of New York
Notes: R=Residential; C=Commercial; CF=Community Facility; M=Manufacturing; HF: Height Factor; QH: Quality Housing
[1]Maximum residential FAR for "height factor" residential zoning districts such as R6, R7-1, and R7-3 vary depending on the number of stories and the open space ratio, i.e., lot coverage

Public Policy

According to the *CEQR Technical Manual*, a project that would be located 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, which pertain to the

study area. If a proposed project could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

The primary and secondary study areas are located within the Food Retail Expansion to Support Health Program (FRESH) zoning and discretionary tax incentive area. The study areas are not part of, or subject to, an Urban Renewal Plan, adopted community 197-a Plan, or Industrial Business Zone (IBZ). Neither the primary nor the secondary study area are located within New York City's designated Coastal Zone, and therefore the Proposed Actions are not subject to review of consistency with the City's Waterfront Revitalization Program (WRP). The Proposed Actions also do not include a largely publicly sponsored project, and as such, consistency with the City's OneNYC for sustainability is not warranted.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

In 2022, the administration of Mayor Eric Adams released Housing Our Neighbors: A Blueprint for Housing and Homelessness, a comprehensive, citywide blueprint aimed at addressing the city's housing crisis. The Blueprint outlines policies and strategies to address five goals: (1) Transform NYCHA, (2) Address Homelessness and Housing Instability, (3) Create and Preserve Affordable Housing, (4) Improve the Health and Safety of New Yorkers, and (5) Reduce Administrative Burden. The plan details the specific actions that agencies and stakeholders should undertake to address these goals. Similar to the previous administration's Housing New York plan, the Blueprint emphasizes the importance of building new housing in amenity-rich areas and expanding the availability of different housing types including affordable housing and senior housing. The Blueprint additionally emphasizes cooperation between numerous city agencies.

IV. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Land Use and Zoning

Primary Study Area

As presented in **Attachment A, "Project Description,"** in the 2027 future without the Proposed Actions, it is anticipated that no land use or zoning changes would occur within the Project Area, and the existing uses would remain.

Secondary Study Area

Existing land use patterns are generally anticipated to continue in the surrounding area. Within the secondary study area, there are three known projects anticipated to be completed in the future without the Proposed Actions:

At 315 Hart Street (Block 1591, Lot 54) to the south of the Project Area, a four-story residential building is currently under construction. The new building will total approximately 3,992 gsf and contain 5 residential units.

A new residential building is expected to be completed at 75 Lewis Avenue (Block 1591, Lot 54). This eight-story building will have 175,042 gsf of residential space. There will be 205 residential units and 103 parking spaces provided at the site.

A new mixed-use building is expected to be developed at 1100 Myrtle Avenue (Block 1586, Lot 12). The building is expected to contain 170,168 residential gsf and 24,748 commercial gsf. The structure will have 233 residential units, a cellar, a 30-foot-long rear yard and 111 enclosed parking spaces.

In total, new development in the secondary study area in the future without the Proposed Actions is expected to consist of 349,202 gsf of residential uses (444 total DUs), 24,798 gsf of commercial uses, and approximately 214 parking spaces.

In the 2027 future without the Proposed Actions, no changes to zoning are expected to occur in the secondary study area.

Public Policy

In absence of the Proposed Actions, no changes in public policy are anticipated that would affect conditions in the primary or secondary study areas.

V. THE FUTURE WITH THE PROPOSED ACTION (WITH-ACTION CONDITION)

In the future with the Proposed Actions (With-Action condition), the proposed zoning map and zoning text amendments and CPC special permit for Large-Scale General Development would be approved. As such, the Project Area would be rezoned from R6 and R6/C2-4 to R7A and R7A/C2-4 and would be designated as an MIH area. The Applicant would construct a new building at the Proposed Development Site in the eastern portion of the Project Area as outlined above. The existing 95-space surface parking lot would be replaced with a new 14-story building consisting of approximately 192,519 gsf of residential space, which would contain approximately 292 AIRS units and a 20,400-gsf accessory parking garage containing approximately 63 spaces. No additional changes to any of the existing residential, commercial, or community facility uses within the Project Area are expected to occur in the future with the Proposed Actions.

Land Use

Primary Study Area

The Proposed Actions would result in changes to land use within the primary study, increasing allowable density and introducing new residential uses. As described in detail in **Attachment A, "Project Description"**, approval of the Proposed Actions would result in an increase of allowable residential density under zoning in the Project Area from 2.43 FAR to 4.60 FAR (with MIH; 5.01 FAR with AIRS). The allowable community facility FAR would decrease from 4.80 to 4.00 FAR. The proposed CPC special permit would modify certain regulations governing allowable building height and envelope within the Project Area, but would not change the land uses permitted. The Proposed Actions would facilitate the replacement of the

existing surface parking lot at the Proposed Development Site with a new 14 story building. The Proposed Actions under the RWCDS would result in a net increase of 192,519 gsf of residential space (292 AIRS units) over the No-Action condition, and the replacement of the existing 95-space surface parking lot with a below-grade, 63-space parking garage. As discussed above, the existing residential, commercial, and community facility uses within the Project Area would remain in the future with the Proposed Actions. Aside from the increase in residential density, no new land uses would be introduced to the Project Area as a result of the Proposed Actions.

Secondary Study Area

No additional changes to land use are anticipated in the secondary study area as a result of the Proposed Actions. The Proposed Actions are site-specific and are not expected to alter development trends or patterns in the secondary study area.

Assessment

The Proposed Actions would facilitate a change in land use on one lot (the Project Area), allowing the redevelopment of an existing parking lot with new infill development consisting of a single, 14-story residential AIRS building. This change in use would result in an appropriate increase in residential density given the character of the Project Area and its surroundings. The Project Area is in a dense neighborhood that is well-served by public transit and features a mix of residential, commercial, and industrial uses. The surrounding area is characterized by dense residential blocks of multi-family walkup buildings and several large multi-family elevator buildings. The proposed 14-story building would be in context with nearby residential buildings of comparable or greater height, including the 26-story building directly north of the Project Area. Development introduced by the Proposed Actions would be appropriate given the neighborhood context and would result in the activation of a site that is underbuilt relevant to the surrounding density and presence of transit options. The redevelopment of the existing surface parking lot with a new residential building (including an enclosed parking garage) would result in a more efficient use of space within the Project Area while facilitating the creation of 292 units of affordable senior housing.

The Proposed Actions would also facilitate site improvements within the Project Area, which would be carried out as part of the Proposed Development. These site improvements would include upgraded landscaping, new courtyard furniture, and external upgrades to existing building entrances, stairways, and railings. These improvements would facilitate access to the existing and proposed land uses within the Project Area.

The Proposed Actions would not introduce any new land uses that would be incompatible with their surroundings and would not result in any significant adverse impact on land use in the primary or secondary study areas, in accordance with the guidance set forth in the *CEQR Technical Manual.*

Zoning

Primary Study Area

In the future with the Proposed Actions, the Project Area would be rezoned from R6 and R6/C2-4 to R7A and R7A/C2-4. R7A districts are medium-density, contextual residential districts where development must

conform to Quality Housing regulations. R7A districts generally produce buildings of up to eight or nine stories with relatively high lot coverage. Residential developments in an R7A district mapped in an MIH area can achieve a maximum FAR of 4.6, a maximum base height of 75 feet, and a maximum building height of 95 feet (with a qualifying ground floor). Pursuant to ZR Section 23-155, the maximum FAR for AIRS buildings in R7A districts is 5.01. Community facility uses are permitted at a maximum FAR of 4.0.

The proposed zoning text amendment will establish a Mandatory Inclusionary Housing (MIH) zone for the entire Project Area. This means that all future developments within the Project Area will be required to follow MIH regulations. Affordable housing units are required to be provided in MIH zones. The specifics of how many units are dedicated to certain AMI thresholds are dictated by the MIH option chosen. This option will be decided during the public review process.

The Proposed Actions will also create a special permit for a "Large Scale General Development." The special permit would modify height and setback requirements under the proposed zoning, enabling the proposed 14-story building to rise to a base height of approximately 103 feet and a roof height of approximately 143 feet. The special permit would also waive regulations governing street wall location and minimum distance between buildings on the same zoning lot, which would facilitate infill development on the underutilized portion of a lot that is occupied by multiple buildings.

Secondary Study Area

The Proposed Actions would only affect the primary study area, and no changes in zoning would occur in the secondary study area as a result of the Proposed Actions.

Assessment

The Proposed Actions would not result in a significant adverse impact to zoning in the primary or secondary study areas. The proposed zoning map and text amendments would align with the City's policy objective to encourage denser development in areas served by public transit and facilitate the development of affordable housing. The proposed zoning changes would be consistent with the presence of other medium-density residential districts and commercial overlays in the secondary study area. The Project Area is well suited for additional development given its proximity to public transit. The Proposed Actions would increase allowable density at the Project Area in line with its surroundings, allowing for the redevelopment of an underutilized lot with new affordable housing for seniors.

It should also be noted that, as described in **Attachment A, "Project Description,"** though allowable density within the Project Area would be increased in the future with the Proposed Actions, additional development would be limited by the existing HUD restrictions on the property.

Public Policy

Assessment

The Proposed Actions would be consistent with all applicable public policies in both the primary and secondary study areas, and no significant adverse impact to public policy would occur as a result of the Proposed Actions.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

The Proposed Actions would be consistent with *Housing Our Neighbors,* and would result in a net increase of 292 AIRS DUs. Under MIH, approximately 25-30 percent of any future residential units developed in the Project Area would be permanently affordable to residents with incomes averaging 60-80 percent of the AMI, depending on the MIH option selected during the public review process. The AIRS units under the With-Action condition would provide seniors in the area with new affordable housing options that would be located near existing and planned amenities, and would support the City's efforts to increase the overall amount of affordable housing and help foster diverse and livable neighborhoods. The Proposed Actions would also be consistent with the *Blueprint* goal of increasing the diversity of housing options for seniors.

ATTACHMENT D

SOCIOECONOMIC CONDITIONS

I. INTRODUCTION

This attachment assesses whether the Proposed Actions would result in significant adverse impacts to the socioeconomic character of the area surrounding the Project Area in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. As described in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual*, the socioeconomic character of an area includes its population, housing, and economic activities. Socioeconomic changes may occur when a project directly or indirectly changes these elements. Although some socioeconomic changes may not result in environmental impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area.

As described in **Attachment A, "Project Description,"** the Applicant is seeking discretionary actions (the "Proposed Actions") to facilitate infill development at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area"). Under the Reasonable Worst Case Development Scenario (RWCDS), the Proposed Actions would result in the addition of 192,519 gross square feet (gsf) of residential space, with approximately 292 Affordable Independent Residences for Seniors (AIRS) DUs, as well as a net reduction of 32 accessory residential parking spaces, compared to the No-Action condition. As presented in **Attachment B, "Supplemental Screening,"** the Proposed Actions do not exceed the thresholds warranting detailed analyses of direct residential or business displacement, indirect business displacement, or adverse effects on specific industries. As the Proposed Actions would exceed the *CEQR Technical Manual* threshold warranting a preliminary indirect residential displacement analysis (200 DUs), a preliminary assessment is provided herein.

In accordance with *CEQR Technical Manual* guidance, the socioeconomic analysis considers whether the Proposed Actions could result in significant adverse socioeconomic impacts due to: (1) direct displacement of residential population from the Proposed Development Site; (2) direct displacement of existing businesses or institutions from the Proposed Development Site; (3) indirect displacement of residential population; (4) indirect displacement of businesses or institutions; and (5) adverse effects on a specific industry.

II. METHODOLOGY

Under CEQR, the socioeconomic character of an area is defined by its population, housing, and economic activities. The assessment of socioeconomic conditions usually distinguishes between the socioeconomic conditions of an area's residents and businesses. However, proposed action(s) affect either or both of these segments in similar ways: they may directly displace residents or businesses; or they may alter one or more of the underlying forces that shape socioeconomic conditions in an area and thus may cause indirect displacement of residents or businesses. The objective of the CEQR analysis is to disclose whether any changes created by the proposed action would have a significant impact compared with what would happen in the future without the proposed action (i.e., the "No-Action condition").

Direct displacement is defined as the involuntary displacement of residents, businesses, or institutions from the actual site of (or sites directly affected by) a proposed action. Examples include the proposed redevelopment of a currently occupied site for new uses or structures, or a proposed easement or right-of-way that would take a portion of a parcel and thus render it unfit for its current use. Since the occupants of a particular site are usually known, the disclosure of direct displacement focuses on specific businesses and employment and an identifiable number of residents and workers.

Indirect or secondary displacement is defined as the involuntary displacement of residents, businesses, or employees in an area adjacent to, or close to, a project site that results from changes in socioeconomic conditions created by a proposed action. Examples include rising residential rents in an area that result from a new concentration of higher-income housing introduced by a project, which ultimately could make existing housing unaffordable to lower-income residents; a similar turnover of industrial to higher-rent commercial tenancies induced by the introduction of a successful office project in an area; or the flight from a neighborhood that can occur if a proposed project creates conditions that break down the community (such as a highway dividing the area). Unlike direct displacement, the exact occupants to be indirectly displaced are not known. Therefore, an assessment of indirect displacement usually identifies the size and type of groups of residents, businesses, or employees potentially affected.

Even if a proposed action does not directly or indirectly displace businesses, it may affect the operation and viability of a major industry or commercial operation in the City. An example would be new regulations that prohibit or restrict the use of certain processes that are critical to certain industries. In these cases, the CEQR review may involve the assessment of the economic impact of the project on the specific industry in question.

Determining Whether a Socioeconomic Assessment is Appropriate

According to the *CEQR Technical Manual*, a socioeconomic assessment should be conducted if a project may be reasonably expected to create socioeconomic changes in the area affected by the project that would not be expected to occur in the absence of the project. The following screening assessment considers threshold circumstances identified in the *CEQR Technical Manual* and enumerated below that can lead to socioeconomic changes warranting further assessment.

1. ***Direct Residential Displacement: Would the project directly displace residential population to the extent that the socioeconomic character of the neighborhood would be substantially altered? Displacement of fewer than 500 residents would not typically be expected to alter the socioeconomic character of a neighborhood.***

The Project Area at 109 Marcus Garvey Boulevard (Block 1588, Lot 1) currently contains four predominantly residential buildings containing a mix of residential, local retail, and community facility uses that are arranged in the western portion of the tax lot around a central private courtyard, playground, and staff parking lot. The existing buildings include 267 income restricted DUs[1], approximately 6,642 gsf of ground floor local retail fronting on Marcus Garvey Boulevard and approximately 5,339 gsf of community facility space for social services offices. The eastern portion of the Project Area (Proposed

[1] The existing income restricted DUs at the Project Area have a regulatory agreement with New York City Department of Housing Preservation and Development (HPD), New York State Division of Housing and Community Renewal (DHCR), and US Department of Housing and Urban Development (HUD) and are targeted for households at or below 80 percent of AMI.

Development Site) is occupied by a surface parking lot with approximately 95 accessory residential parking spaces, accessed via a curb cut along Vernon Avenue. As a result of the Proposed Actions, the 95-space surface parking lot, comprising the eastern portion of the Project Area, would be replaced with a new 14-story residential building containing approximately 292 AIRS units and an accessory parking garage containing approximately 63 spaces. All 267 existing income restricted DUs would remain and none of the existing buildings would be expanded or enlarged. Therefore, no direct residential displacement would occur because of the Proposed Actions.

2. ***Direct Business Displacement: Would the project directly displace more than 100 employees, or directly displace a business whose products or services are uniquely dependent on its location, are the subject of policies or plans aimed at its preservation, or serve a population uniquely dependent on its services in its present location? If so, assessments of direct business displacement and indirect business displacement are appropriate.***

Like the existing residential uses, the existing 6,642 gsf of local retail fronting on Marcus Garvey Boulevard and approximately 5,339 gsf of community facility space for social services offices would remain in the future with the Proposed Actions. No direct displacement would occur and an assessment of direct business or institutional displacement is not warranted.

3. ***Indirect Displacement due to Increased Rents: Would the project result in substantial new development that is markedly different from existing uses, development, and activities within the neighborhood? Residential development of 200 units or less or commercial development of 200,000 sf or less would typically not result in significant socioeconomic impacts. For projects exceeding these thresholds, assessments of indirect residential displacement and indirect business displacement are appropriate.***

The Proposed Actions would introduce 292 AIRS units to the Project Area, and therefore would exceed the preliminary screening assessment threshold of 200 units warranting a preliminary assessment of indirect residential displacement. As such, the indirect displacement analysis provided below assesses the potential of the Proposed Actions to result in significant adverse impacts in regard to indirect residential displacement.

4. ***Indirect Business Displacement due to Retail Market Saturation: Would the project result in a total of 200,000 sf or more of retail on a single development site or 200,000 sf or more of region-serving retail across multiple sites? This type of development may have the potential to draw a substantial amount of sales from existing businesses within the study area, resulting in indirect business displacement due to market saturation.***

As noted previously, no commercial space would be introduced as a result of the Proposed Actions. As such, an analysis of indirect business displacement is not warranted for the Proposed Actions.

5. ***Adverse Effects on Specific Industries: Is the project expected to affect conditions within a specific industry? This could affect socioeconomic conditions if a substantial number of workers or residents depend on the goods and services provided by the affected businesses, or if the project would result in the loss or substantial diminishment of a particularly important product or service within the City.***

The Proposed Actions would not have a significant adverse impact on specific industries. The Proposed Actions would not displace any business that is critical to the viability of any specific industry within or outside of the study area. Therefore, the Proposed Actions would not directly or indirectly affect business conditions in any industry or category or business within or outside of the study area and would not substantially reduce employment or impair viability in a specific industry or category of business.

Based on the screening assessment presented above, the Proposed Actions and RWCDS warrant an analysis of indirect residential displacement.

Analysis Format

Based on *CEQR Technical Manual* guidelines, the analysis of indirect residential displacement begins with a preliminary assessment. The objective of the preliminary assessment is to learn enough about the potential effects of the Proposed Actions and RWCDS to either rule out the possibility of significant adverse impacts or determine that a more detailed analysis is required to fully determine the extent of the impacts. A detailed analysis, when required, is framed in the context of existing conditions and evaluates the changes to those conditions in the With-Action condition as compared with the changes that would be expected in the No-Action condition. In conjunction with the land use task, specific development projects expected to occur by the project's analysis year are identified. These projects are described in terms of the possible changes to socioeconomic conditions that they would cause, including potential population increases, changes in income characteristics of the affected area, changes to the rents or sale prices of residential units, new commercial or industrial uses, or changes to employment or retail sales. Those conditions are then compared with the future with the Proposed Actions to determine the potential for significant adverse impacts. A preliminary assessment was sufficient to conclude that the Proposed Actions and resultant RWCDS would not result in any significant adverse socioeconomic impacts due to indirect residential displacement.

Study Area Definition

To assess these socioeconomic issues, information was gathered regarding the surrounding area's demographic characteristics, housing inventory, and housing market. Typically, the socioeconomic study area boundaries are similar to those of the land use study area. The study area generally encompasses the area affected by the Proposed Actions (i.e., directly affected area or primary study area), and an adjacent area (study area) within a quarter mile or half mile, depending on project size and area characteristics. The socioeconomic assessment seeks to assess a project's potential to change socioeconomic character relative to the study area populations (i.e., a project that would result in a relatively large increase in population may be expected to affect a larger study area).

The *CEQR Technical Manual* explains that for projects that would increase the residential population by more than five percent as compared to the population expected to reside in the quarter mile study area in the No-Action condition, a half-mile study area is appropriate. In the future with the Proposed Actions, the RWCDS would increase the quarter mile population (14,494 as of 2020[2]) by an estimated 438 people[3] (approximately 3.02 percent), warranting a quarter (0.25) mile study area.

[2] 2020 Census via DCP Population Factfinder.

[3] The estimate of the incremental residential population resulting from the Proposed Actions assumes 1.5 persons per AIRS DU.

The boundary of the socioeconomic study area was modified to match the census tracts that most closely define a quarter-mile perimeter surrounding the Project Area (refer to **Figure D-1**). By conforming to census tract boundaries, the socioeconomic analysis more accurately applies Census data to depict the demographic characteristics of the surrounding area. In addition, in accordance with *CEQR Technical Manual* guidance, the indirect residential displacement analysis considers an area "near" the study area (i.e., within a 0.25-mile radius of the study area) to examine real estate market trends and ascertain whether the surrounding area has experienced a readily observable trend toward increasing rents and the likely effect of the Proposed Actions on such trends.

III. PRELIMINARY ASSESSMENT

Indirect Residential Displacement

As described in the *CEQR Technical Manual*, indirect residential displacement usually results from substantial new development that is markedly different from existing uses and activity in an area and that causes increased property values in the area. Increased property values can lead to increased rents in non-regulated rental housing units, which can make it difficult for some existing residents to afford to stay in their homes. Pursuant to *CEQR Technical Manual* guidance, the indirect residential displacement assessment aims to determine whether the Proposed Actions would either introduce a trend or accelerate an existing trend of changing real estate market conditions that may have the potential to displace a vulnerable residential population and substantially change the socioeconomic character of the neighborhood. Residents who are homeowners, or who are renters living in rent regulated[4] or subsidized housing units would not be vulnerable to rent pressures according to *CEQR Technical Manual* guidance.

This preliminary assessment follows the step-by-step preliminary assessment guidance described in Section 332.1 of the 2021 *CEQR Technical Manual*.

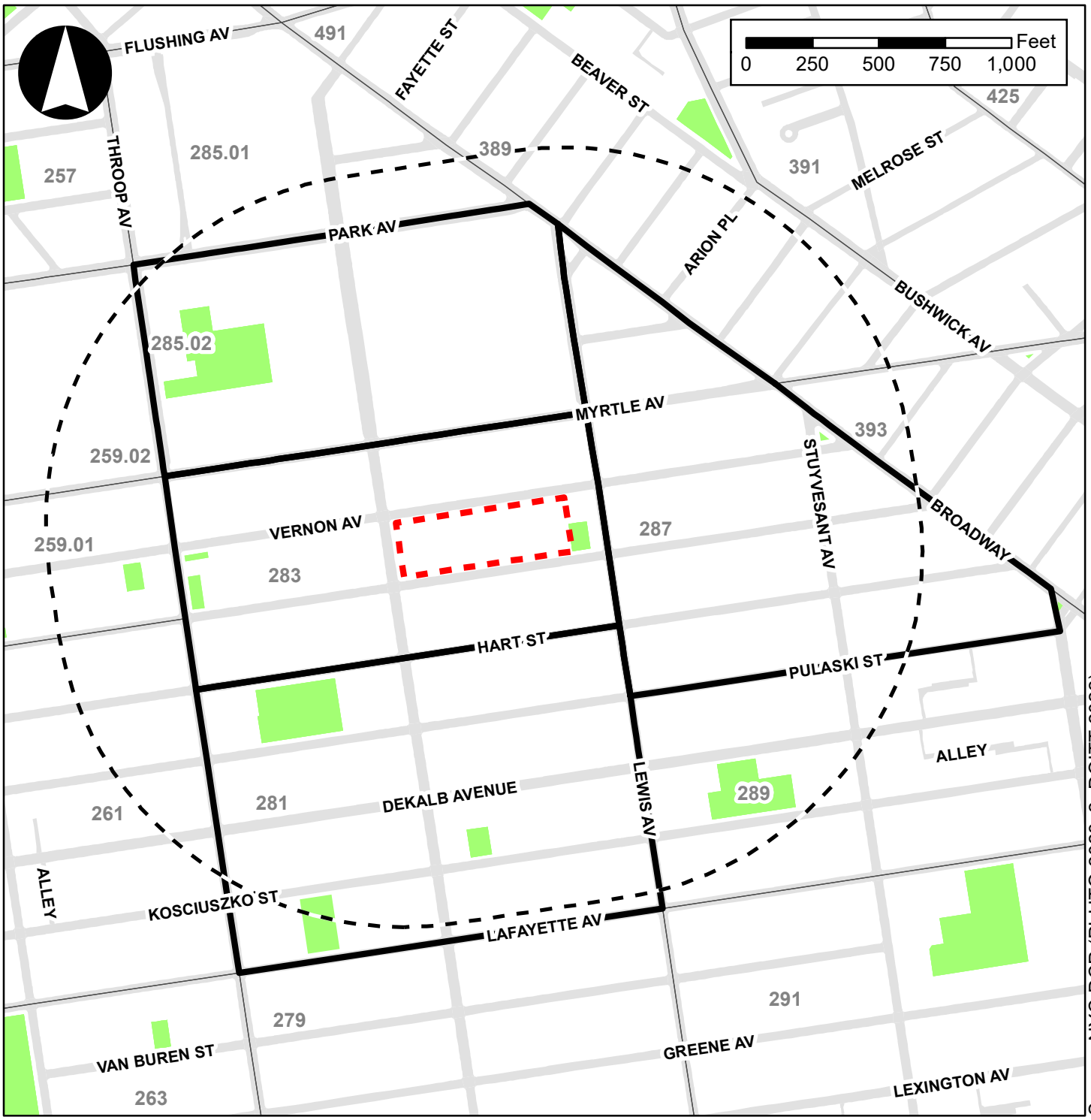
Step 1: Determine if the proposed project would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside within the study area in the future without the proposed project.
Household Incomes

Household income characteristics for the study area population are described using the average (or mean) and median household incomes, as well as a breakdown of income distribution. The median household income represents the mid-point of all household incomes in a study area, and the mean household income is calculated by dividing aggregate income by the total number of households in a study area. The presence of higher- or lower-income households raises or lowers the area's mean income, sometimes substantially higher or lower than the median of household incomes in a study area.

According to 2017-2021 ACS Five-Year Estimates, the mean annual household income of residents living within the 0.25-mile study area is approximately $70,109 as compared to $41,981 in 2006-2010 (refer to

[4] Rent regulated housing includes both rent-controlled and rent stabilized apartments that are protected from steep rent increases and offer tenants greater legal protections than those living in market-rate housing.

Figure D-1
Socioeconomic Study Area



Source: NYC DCP (PLUTO 2023v2; DOITT 2022)

Legend

- Project Area
- 1/4-Mile Radius
- Socioeconomic Study Area
- 283 Census Tract
- Open Space

Table D-1).[5] The existing mean annual household income of study area residents is relatively low and comparable to 62 percent of the area median income ("AMI") of New York City for a family of two.[6] As shown in **Table D-1**, residents within the study area have lower mean household incomes, as compared to Brooklyn ($103,893) and New York City ($113,315) as a whole.

Table D-1:
Household Income Characteristics within the Study Area, Brooklyn, and New York City [1]

	Median Household Income			Mean Household Income		
	2006-2010 ACS	2017-2021 ACS	Percent Change or Directional Change	2006-2010 ACS	2017-2021 ACS	Percent Change or Directional Change
0.25-Mile Study Area	24,948	$42,271	Increase [2]	$41,981	$70,109	Increase [2]
Brooklyn	$54,646	$67,753	24.0%	$78,589	$103,893	32.2%
New York City	$63,072	$70,663	12.0%	$97,706	$113,315	16.0%

Sources: Bureau of the Census, 2017-2021 and 2006-2010 ACS Five-Year Estimates, as reported on DCP's Population Factfinder in October 2023.
Notes: * All dollar values have been adjusted to 2021 dollars.
[1] Statistical reliability of the data included in this table has been vetted using DCP's NYC Population FactFinder.
[2] If the MOE of the difference between 2006-2010 and 2017-2021 ACS Five-Year Estimates is greater than the difference, a change cannot be reported with confidence; if the MOE of the difference is greater than one third of the difference, a chance cannot be estimated with confidence and only the direction of change can be reported (i.e., increase/decrease). For the study area, only the directionality of change could be reported for the study area's median and mean annual household incomes.

Trends in the mean household income within the study area, larger borough, and greater city indicate that the mean household income is increasing across all areas. As shown in **Table D-1**, the mean household income in Brooklyn increased by more than 32 percent since 2006-2010, and in New York City by 16 percent. Only the directionality of change in mean household income could be reported with statistical confidence for the study area between the 2006-2010 and 2017-2021 ACS Five-Year Estimates.

In all areas, the median household income is lower than the mean household income, indicating the presence of higher-income households within the study area, larger borough, and overall city earning more than the typical household (refer to **Table D-1**). As shown in **Table D-1**, consistent with the trends in mean household income, the median household income within the study area is lower than both the larger borough and city. According to 2017-2021 ACS Five-Year Estimates, the median household income for the study area is an estimated $42,271,[7] as compared to $67,753 for Brooklyn households and $70,663 for New York City households, respectively. The study area's existing median annual household income falls in between 30 and 40 percent of the 2023 AMI for the New York City region for a two-person family.[8] Like mean household incomes, the median household incomes within the study area, larger borough, and

[5] Based on the MOE for the mean household income of the study area according to the 2017-2021 ACS Five-Year Estimates (MOE of $11,833, the average household income could range from $58,276 to $81,942. Only the direction in mean household income between the 2006-2010 and 2017-2021 ACS Five-Year Estimates within the study area can be reported with statistical confidence.
[6] The 2023 AMI for the New York City region is $113,000 for a two-person family (100 percent AMI) and therefore, 62 percent of the AMI for a two-person family is $70,060. The AMI for a two-person family is used given that the Proposed Action would introduce AIRS units.
[7] Based on the MOE for the median household income of the study area according to the 2017-2021 ACS Five-Year Estimates (MOE of $4,547), the median household income could range from $37,434 to $46,528.
[8] The median income for all cities across the country is defined each year by the U.S. Department of Housing and Urban Development ("HUD"). In the New York City region, 40 percent of the AMI for a two-person family is $45,200 and 30 percent of the AMI is $33,900.

city have increased indicating a trend of increasing incomes across all areas.

Table D-2 illustrates the distribution of household incomes within the study area as compared to the larger borough and New York City. As shown in **Table D-2**, consistent with lower mean and median household incomes, the distribution of household incomes within the study area is skewed towards lower incomes as compared to Brooklyn and New York City. Relative to Brooklyn and New York City, the study area has fewer percentages of households within higher income brackets. Approximately 56 percent of households within the study area earned less than $50,000, with less than 23 percent earning $100,000 or more, whereas approximately 36 and 37 percent of households earned $100,000 or more in Brooklyn and New York City, respectively.

Table D-2: Household Income Distribution within the Study Area, Brooklyn, and New York City (2017-2021)

	Total Households	Households Earning Less than $25,000		Households Earning $25,000 to $49,999		Households Earning $50,000 to $99,999		Households Earning $100,000 to $199,999		Households Earning $200,000 or more	
		#	%	#	%	#	%	#	%	#	%
0.25-Mile Study Area	5,658	1,980	35.0%	1,189	21.0%	1,208	21.3%	979	17.3%	N/A	N/A
Brooklyn	985,108	217,666	22.1%	172,624	17.5%	243,571	24.7%	228,866	23.2%	122,381	12.4%
New York City	3,250,657	689,576	21.2%	549,830	16.9%	811,566	25.0%	759,843	23.4%	439,842	13.5%

Source: US Census Bureau, 2017-2021 ACS Five-Year Estimates via NYC Population FactFinder in October 2023.
Note: The statistical reliability of the data included in this table has been vetted using DCP's NYC Population FactFinder.

Table D-3 provides information on poverty rates in the study area, Brooklyn and New York City. As shown in **Table D-3**, nearly 32 percent of the population for whom poverty status is determined in the study area had incomes below the poverty level, as compared to approximately 19 percent of the population in Brooklyn and approximately 17 percent in New York City. The percentage of persons living below the poverty level within the study area, Brooklyn, and New York City decreased between 2006-2010 and 2017-2021.

Table D-3: Percent of Persons Living Below the Poverty Level within the Study Area, Brooklyn, and New York City

	Population Below the Poverty Level			
	2006-2010		2017-2021	
	Number	Percent	Number	Percent
0.25-Mile Study Area	5,998	42.9%	5,038	31.9%
Brooklyn	538,435	22.0%	504,813	18.8%
New York City	1,518,636	19.1%	1,457,389	17.0%

Source: Bureau of the Census, 2006-2010 and 2017-2021 Five-Year ACS Estimates via NYC Population FactFinder in October 2023.
Note: The statistical reliability of the data included in this table has been vetted using DCP's NYC Population FactFinder.

Study Area Rental Rates

ACS data paint a general picture about the rate at which housing costs are changing in a neighborhood. Based on five-year ACS estimates, the median gross rent has increased in the study area, Brooklyn and in New York City since 2010. As shown in **Table D-4**, the median gross rent in Brooklyn increased by more than 23 percent since 2006-2010, and in New York City by more than 17 percent. Only the directionality of change in median gross rent could be reported

with statistical confidence for the study area between the 2006-2010 and 2017-2021 ACS Five-Year Estimates. The median gross rent in the study area is lower than Brooklyn and New York City.

Table D-4: Median Gross Rent [1]

	2006-2010 ACS	2017-2021 ACS	Percent Change or Directional Change
0.25-Mile Study Area	$683	$1,134	**Increase [2]**
Brooklyn	$1,281	$1,582	23.5%
New York City	$1,343	$1,579	17.5%

Source: US Census Bureau, 2006-2010 ACE Five-Year Estimates and 2017-2021 ACS Five-Year Estimates via NYC Population FactFinder in October 2023.

Notes: * All dollar values have been adjusted to 2021 dollars.

[1] Statistical reliability of the data included in this table has been vetted using DCP's NYC Population FactFinder.

[2] If the MOE of the difference between 2006-2010 and 2017-2021 ACS Five-Year Estimates is greater than the difference, a change cannot be reported with confidence; if the MOE of the difference is greater than one third of the difference, a chance cannot be estimated with confidence and only the direction of change can be reported (i.e., increase/decrease). For the study area, only the directionality of change could be reported for the study area's median gross rent.

Although U.S. Census ACS data provides information on median housing value and median gross rent, this data fails to distinguish between units subject to market rents and those under some form of rent regulation, nor does it provide information according to unit size. Average neighborhood rents are therefore used to provide a fuller understanding of where the market is today. **Table D-5** summarizes current average rents for apartments for the study area (which falls within Bedford Stuyvesant, Brooklyn), as well as the larger borough as of September 2023. The average asking rents presented in the table are higher than the data presented in the 2017-2021 ACS Five-Year estimates (see **Table D-4**).

As shown in **Table D-5**, average rental rates in Bedford Stuyvesant are more affordable than the overall borough. Average apartment rental rates range from $2,495 for a studio to $3,219 for a two-bedroom unit in Bedford Stuyvesant, as compared to $2,873 for a studio and $4,708 for a two-bedroom in the larger borough. According to M.N.S. Real Estate NYC's *Brooklyn Rental Market Report* (September 2023), average rental rates in Bedford Stuyvesant have remained relatively constant over the last year and increased by roughly 0.2 and 1.0 percent for one-bedrooms and two-bedrooms, respectively, whereas studio rental rates have decreased by 1.1 percent. Rental rates in the larger borough experienced increases of nearly 1.7, 1.4, and 3.4 percent for studios, one-bedrooms, and two-bedrooms, respectively during the same timeframe.

Table D-5: Average Apartment Rental Prices for Bedford Stuyvesant and Brooklyn

	Average Rent		
	Studio	**1 Bedroom**	**2 Bedroom**
Bedford Stuyvesant	$2,495	$2,778	$3,219
Brooklyn	$2,873	$3,507	$4,708

Source: M.N.S. Real Estate NYC, Brooklyn Rental Market Report, September 2023; https://www.mns.com/brooklyn_rental_market_report

Future With Action Condition

Under the RWCDS, the Proposed Actions would introduce 292 AIRS[9] DUs. All 292 AIRS DUs would be income restricted housing units (IRHUs) and would be affordable to senior households at or below 80

[9] An "affordable independent residence for seniors" is a building or portion thereof, containing residences in which at least 90 percent of the dwelling units allocated to affordable independent residences for seniors are each occupied by at least one person who is 62 years of age or older; where, except for a super's unit, all of the dwelling units

percent of AMI ($90,400 for a family of two) for the region. Assuming 100 percent occupancy and an average household size of 1.5 persons per AIRS unit, the Proposed Actions are estimated to add 438 residents.

The income-restricted housing added by the Proposed Actions is expected to help maintain a more diverse demographic composition within the study area and further expand housing opportunities in an area where a strong demand for housing including both market rate and affordable housing exists. The affordability requirements for the AIRS income-restricted housing units would be defined and ensured through regulatory agreements between HPD, HFA, and the Applicant.

As part of the Proposed Actions, the Project Area would be rezoned and would be designated a Mandatory Inclusionary Housing (MIH) Area, which would set mandatory income-restricted housing requirements pursuant to the City's MIH program and require a share of new housing be set aside as permanently income-restricted.[10] The MIH Area would require affordable housing to be provided pursuant to Option 1, 2, 3, and/or 4.

- Option 1 requires 25 percent of residential floor area must be permanently affordable housing for residents with incomes averaging 60 percent of AMI;
- Option 2 requires 30 percent of residential floor area must be affordable housing for residents with incomes averaging 80 percent of AMI; and
- In conjunction with Option 1 and/or 2, Option 3 (Deep Affordability Option), which requires that 20 percent of the residential area be affordable to households earning 40 percent AMI, and/or Option 4 (Workforce Option), which requires that at least 30 percent of the residential area be provided as housing affordable to households at an average of 115 percent AMI, with no unit targeted to a household exceeding 135 percent of AMI, could also be established.

Under MIH, the production of permanently income-restricted housing would be a condition of any future incremental residential development in the Project Area, which is expected to help preserve income-restricted housing in the surrounding area.[11] There would be no expiration to the affordability requirements of housing units created through the MIH program, making them a long-term stable reservoir of income-restricted housing in the surrounding area, a key policy to meet the goals outlined in the city's *Housing Our Neighbors: A Blueprint for Housing and Homelessness*.

Through the ULURP process, the City Planning Commission and City Council will work together to apply a set of income level requirements for the affordable housing units created through MIH in the Project Area, which would mandate that a provision of at least 25 to 30 percent of new residential development in the Project Area as permanently affordable to achieve the maximum permitted floor area under the rezoning. ULURP will determine which MIH option(s) would be established for the Proposed Actions.

allocated to affordable independent residences for seniors are income restricted housing units for households with incomes at or below 80 percent of income index (200 percent of the Very Low-Income Limit established by HUD).

[10] It is City policy to apply MIH Area designation to all rezonings that result in an increase in permitted residential density.

[11] The intent of the MIH program is to provide assurance that new residential development would address the needs of residents at lower income levels even in the event that local housing market conditions change.

Assessment

To estimate the average household income of residents introduced by the Proposed Actions, the incomes of future residents of the AIRS DUs have been projected. For the purposes of CEQR indirect residential displacement analysis, it is assumed that the AIRS units would be set aside for senior households earning up to 80 percent of AMI.

According to HUD, two-person families in the New York City region would be eligible for the AIRS income-restricted housing units targeted if they were earning $90,400 annually, which is 80 percent AMI.[12] Since 1.5 persons are assumed per AIRS unit, it is assumed that the average income of a senior household living in an income-restricted AIRS unit could be up to $84,760. Given that the average household income for the study area is $70,109 (see **Table D-1**), the household income of the AIRS units may be higher than the average household income of the existing study area population.

Although the Proposed Actions would introduce affordable income-restricted senior housing, which is intended to expand housing options available, given the potential difference between the study area's existing average household income and that of the project-generated population, the Proposed Actions could introduce new residents that would have average household incomes that could exceed the average incomes of the 0.25 mile study area population. According to *CEQR Technical Manual* guidance, Step 2 of the preliminary assessment is warranted.

Step 2: Determine if the project's increase in population is large enough relative to the size of the population expected to reside in the study area without the project affecting real estate market conditions in the study area.

Based on *Step 1, Step 2* of the preliminary assessment is warranted for the Proposed Actions. According to *CEQR Technical Manual* analysis thresholds, if the population increase would be greater than five percent in the study area, the incremental population may be large enough to affect real estate market conditions, and *Step 3* of the preliminary assessment is warranted. If the population increase is expected to be more than 10 percent in the study area, a detailed analysis is warranted.

According to 2020 Census data, the 0.25-mile study area had a population of 14,494, as compared to a population of 14,083 in 2010 (refer to **Table D-6**). In comparison, over the same time, the population of Brooklyn increased by more than nine percent and the population of New York City increased by nearly eight percent.

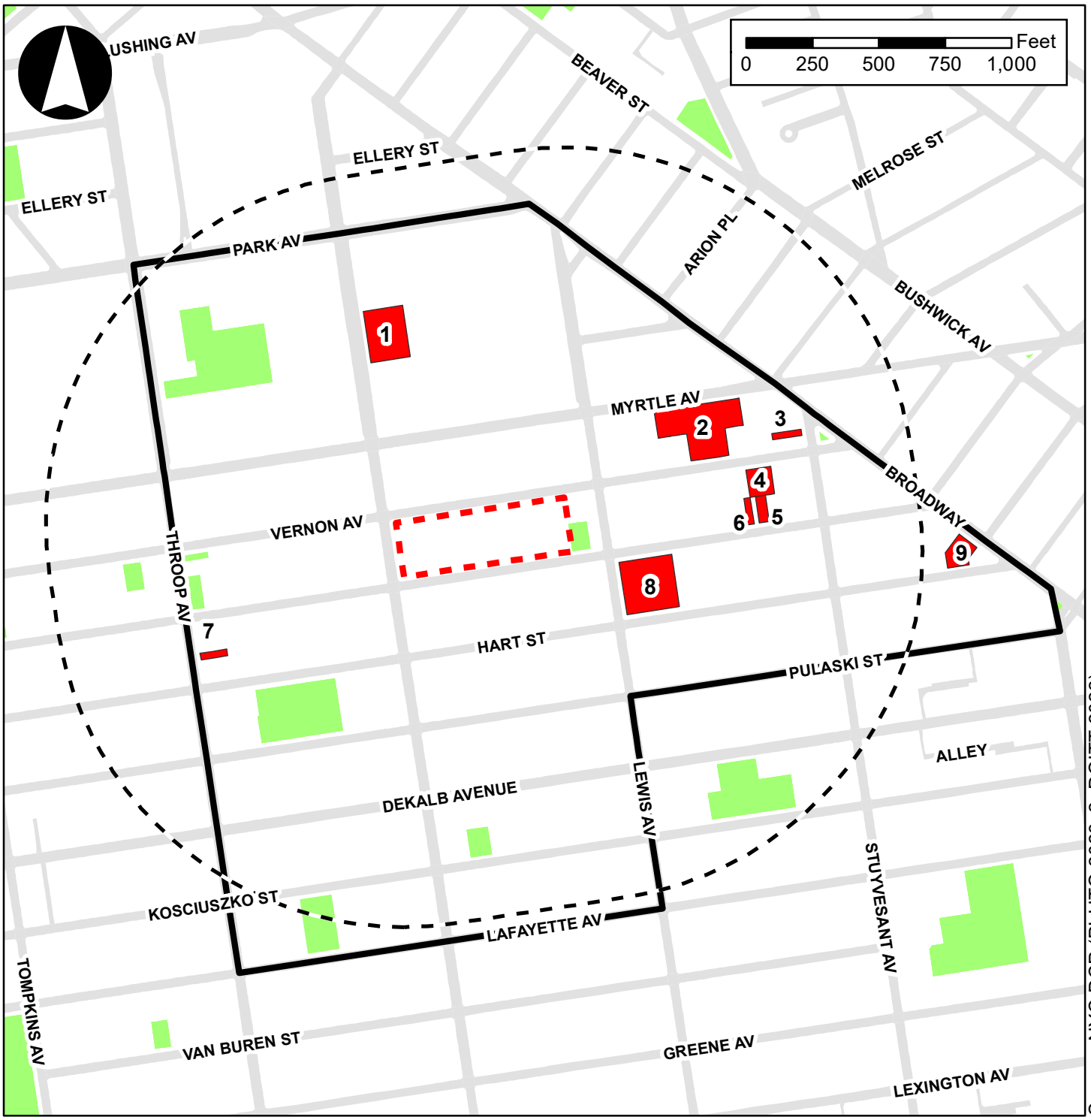
TABLE D-6:
Residential Population [1]

	2010 Census	2020 Census	Percent Change
0.25-Mile Study Area	14,083	14,494	2.9%
Brooklyn	2,504,700	2,736,074	9.2%
New York City	8,175,133	8,804,190	7.7%

Sources: Bureau of the Census, 2010 and 2020 Census, as reported on DCP's Population Factfinder; https://popfactfinder.planning.nyc.gov/explorer/selection/705d2d791ff7bfd31d069fa234c1e3a315090aae?source=decennial-change

[12] https://www1.nyc.gov/site/hpd/services-and-information/area-median-income.page As noted earlier in the attachment, all of the AIRS DUs would be income-restricted to households earning up to 80 percent AMI ($90,400 for a household of two).

Figure D-2
No-Build Developments



Source: NYC DCP (PLUTO 2023v2; DOITT 2022)

Legend

- Project Area
- 1/4-Mile Radius
- Socioeconomic Study Area
- 1 No-Build Developments
- Open Space

Absent approval of the Proposed Actions, the existing residential, community facility, and local retail uses and surface parking would remain at the Project Area. No new development or changes to the existing uses in the Project Area would occur. The surrounding area is anticipated to continue to experience increased population growth. Based on active construction projects permitted by the New York City Department of Buildings (NYCDOB), several No-Action development projects are anticipated to introduce residential uses in the 0.25-mile study area in absence of the Proposed Actions. Based on information about these planned developments, 544 DUs will be added to the study area by 2027 (refer to **Table D-7** and **Figure D-2**). Assuming an average household size of 2.56 persons per DU[13], as well as 100 percent occupancy rates, these known, planned development projects would add an estimated 1,391 people to the study area.

TABLE D-7
Known Planned No-Action Developments within 0.25-Mile Study Area

Map #[1]	Block	Lot	Address	DUs	Estimated Population [2]
1	1580	10	57 Marcus Garvey Boulevard	190	486
2	1586	12	1100 Myrtle Avenue	233	596
3	1586	40	8 Stuyvesant Avenue	10	26
4	1589	35	388 Vernon Avenue	27	69
5	1589	154	825 Willoughby Avenue	8	20
6	1589	58	821 Willoughby Avenue	3	8
7	1769	4	277 Throop Avenue	8	20
8	1592	1	75 Lewis Avenue	8	20
9	1593	35	1038 Broadway	57	146
			Totals	544	1,391

Notes:
[1] Refer to **Figure D-2**
[2] The estimated number of residents added due to No-Action development assumes average household sizes of 2.56 persons for Brooklyn CD 3, according to the 2020 Census.
Source: NYC DOB, 2023

Table D-8 shows the total projections in the future without the Proposed Actions by adding the population from the No-Action development projects to the 2020 Census population estimates. The Proposed Actions would introduce 292 AIRS DUs into the study area. Assuming an average household size of 1.5 persons, including at least one person 62 years or older, and 100 percent occupancy, these AIRS units would add an estimated 438 residents to the study area over the No-Action condition. As shown in **Table D-8**, when compared to the No-Action condition, the Proposed Actions would result in an estimated 2.8 percent population increase in the study area.

TABLE D-8:
Estimated Study Area Populations in the future without & with the Proposed Actions

Existing Population	2027 No-Action Condition [1]	2027 With-Action Condition	Percent Change (%)
14,494	15,885	16,323	2.8%

Note:
[1] Based on average household size of 2.56 persons/household (2020 Census) which is the average household size for Brooklyn CD 3 according to 2020 Census.

According to *CEQR Technical Manual* methodology, if the project-generated population increase would be less than five percent in the study area, it would not introduce a substantial new population that could substantially affect residential real estate market conditions in the study area. As the Proposed Actions

[13] Average household size for Brooklyn Community District 3 according to the 2020 Census.

would result in an increase in the 0.25-mile study area residential population of less than three percent, this would not represent a substantial new population, and no significant adverse indirect residential displacement impacts would result pursuant to *CEQR Technical Manual* guidance.

ATTACHMENT E

OPEN SPACE

I. INTRODUCTION

An open space assessment may be necessary if a proposed action(s) could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to diminish noticeably the ability of an area's open space to serve the existing or future population. Per the *City Environmental Quality Review (CEQR) Technical Manual*, if a project would generate more than 200 residents or 500 nonresidential users, an open space assessment should be conducted pursuant to CEQR.

The Applicant, CB Emmanuel Realty, is seeking approval for a zoning map amendment, zoning text amendment, and CPC special permit (the "Proposed Actions") that would facilitate infill development at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area"), in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. The Proposed Actions would enable the Applicant to construct a new infill development (the "Proposed Project") in the eastern portion of the Project Area, (the "Proposed Development Site"), consisting of a new 14-story residential building containing 292 Affordable Independent Residences for Seniors (AIRS) dwelling units (DUs).

While the Proposed Actions would not directly displace any existing open space resources, development facilitated by the Proposed Actions is expected to result in an incremental increase of up to 292 dwelling units (DUs) over the 2027 No-Action condition. This would result in an incremental increase of approximately 438 residents[1], as compared to the No-Action condition, which would exceed the *CEQR Technical Manual* preliminary screening threshold for an indirect open space analysis. As the Proposed Project would result in an incremental increase of 11 workers compared to No-Action conditions, it does not exceed the *CEQR Technical Manual* threshold for analysis of nonresidential open space users. Therefore, the analysis of indirect open space impacts focuses exclusively on the open space needs of the area's residential population. Both quantitative and qualitative assessments were conducted to determine whether the Proposed Actions would significantly affect the use and enjoyment of publicly accessible open space in an identified study area.

II. METHODOLOGY

The analysis of open space resources has been conducted in accordance with *CEQR Technical Manual* guidance. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio (OSR). This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both without and with the Proposed Actions. In addition, qualitative factors are considered in assessing the Proposed Actions' potential effects on open space resources.

In accordance with *CEQR Technical Manual* methodology, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a significant worker population.

[1] The estimated number of residents assumes an average of 1.5 residents per AIRS DU.

Open Space Study Area

Pursuant to *CEQR Technical Manual* guidance, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half mile of the Project Area and all open spaces within it that are publicly accessible.[2] As described above, residents typically walk up to a half (1/2) mile for recreational spaces.

The Project Area comprises a single tax lot (Block 1588, Lot 1), and is bounded by Vernon Avenue to the north, Marcus Garvey Boulevard to the west, and Willoughby Avenue to the south. The residential study area for open space consists of 17 census tracts, as shown in **Figure E-1**. The residential study area for open space is generally bounded by Siegel Street and Flushing Avenue to the north, Evergreen Avenue to the east, Lafayette Avenue, Lexington Avenue, and Quincy Street to the south, and Marcy Avenue to the west.

Analysis Framework

Direct Effects Analysis

According to the *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutants, odors, or shadows that would affect its function, usability or enjoyment.

This attachment uses information from other attachments of this EAS to determine whether the Proposed Actions would directly affect any open spaces near the Proposed Project. The direct effects assessment is included in the "The Future with the Proposed Actions (With-Action Condition)" section of this attachment.

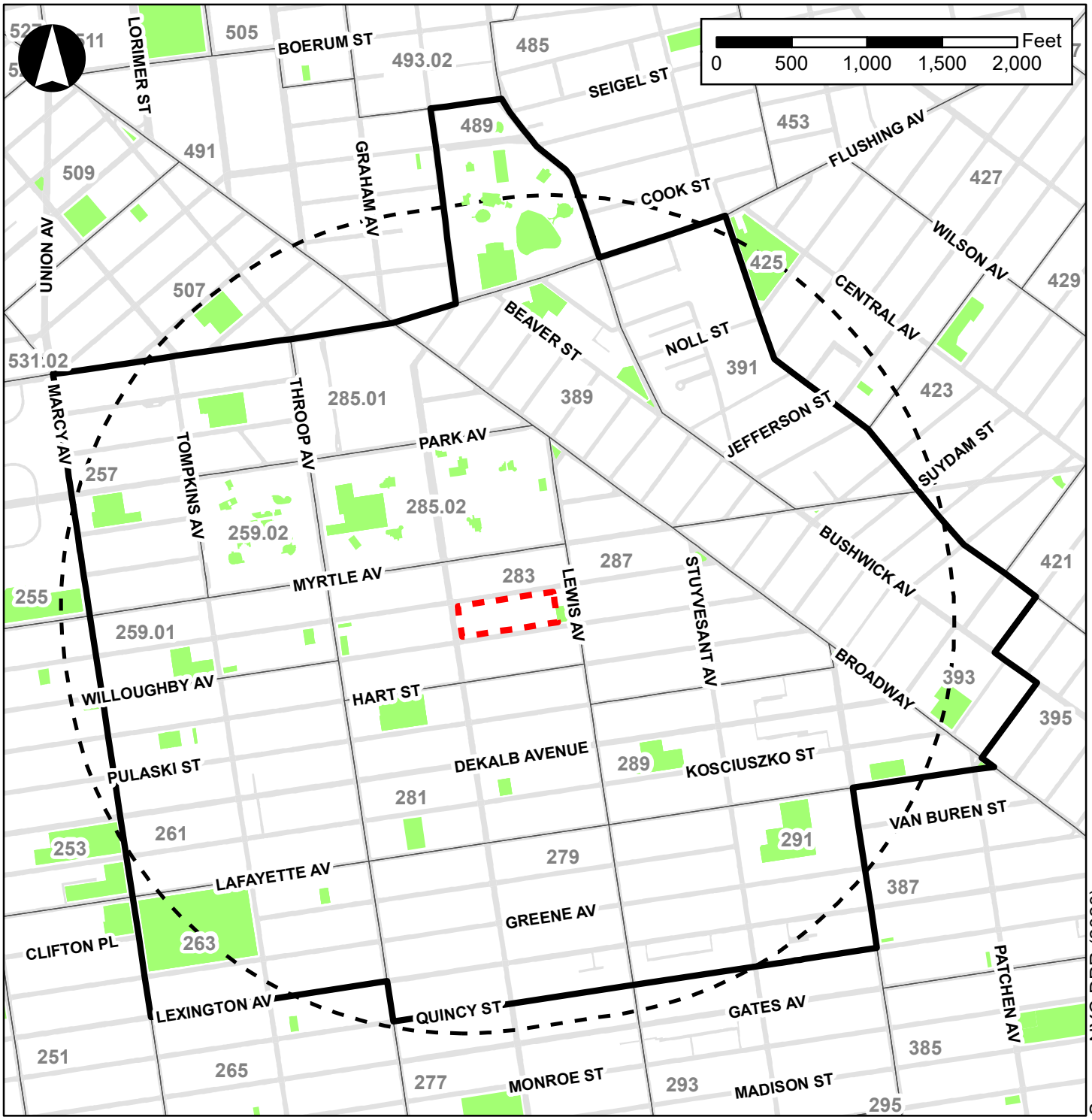
Indirect Effects Analysis

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future populations. Indirect effects may occur when the population generated by a proposed action overtaxes the capacity of existing public open spaces so that the service provided to existing and future populations in the area would be diminished substantially or noticeably.

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. A Walk to a Park Service Area (WtPSA) is a part of the *OneNYC 2050 Building a Strong and Fair City* plan, in which New York City has laid out a goal for 85 percent of New York City residents living within a walking distance of a park by 2030. Existing areas located within a WtPSA are within a walking distance of a park (i.e. 0.5-miles). Areas not located within a WtPSA are considered "walk gaps"; they are areas of New York City that are not within walking distance to a park. As shown in **Figure E-2**, the Project Area and a majority of the ½-mile study area is located within an area that has been identified as a WtPSA as it is within a walking distance of a park (i.e.

[2] Pursuant to the *CEQR Technical Manual,* "public" open space that is analyzed under CEQR is defined as open space that is accessible to the public on a constant and regular basis for active and passive recreation, including for designated daily periods. Public open space may be under government or private jurisdiction.

Figure E-1
Open Space Study Area

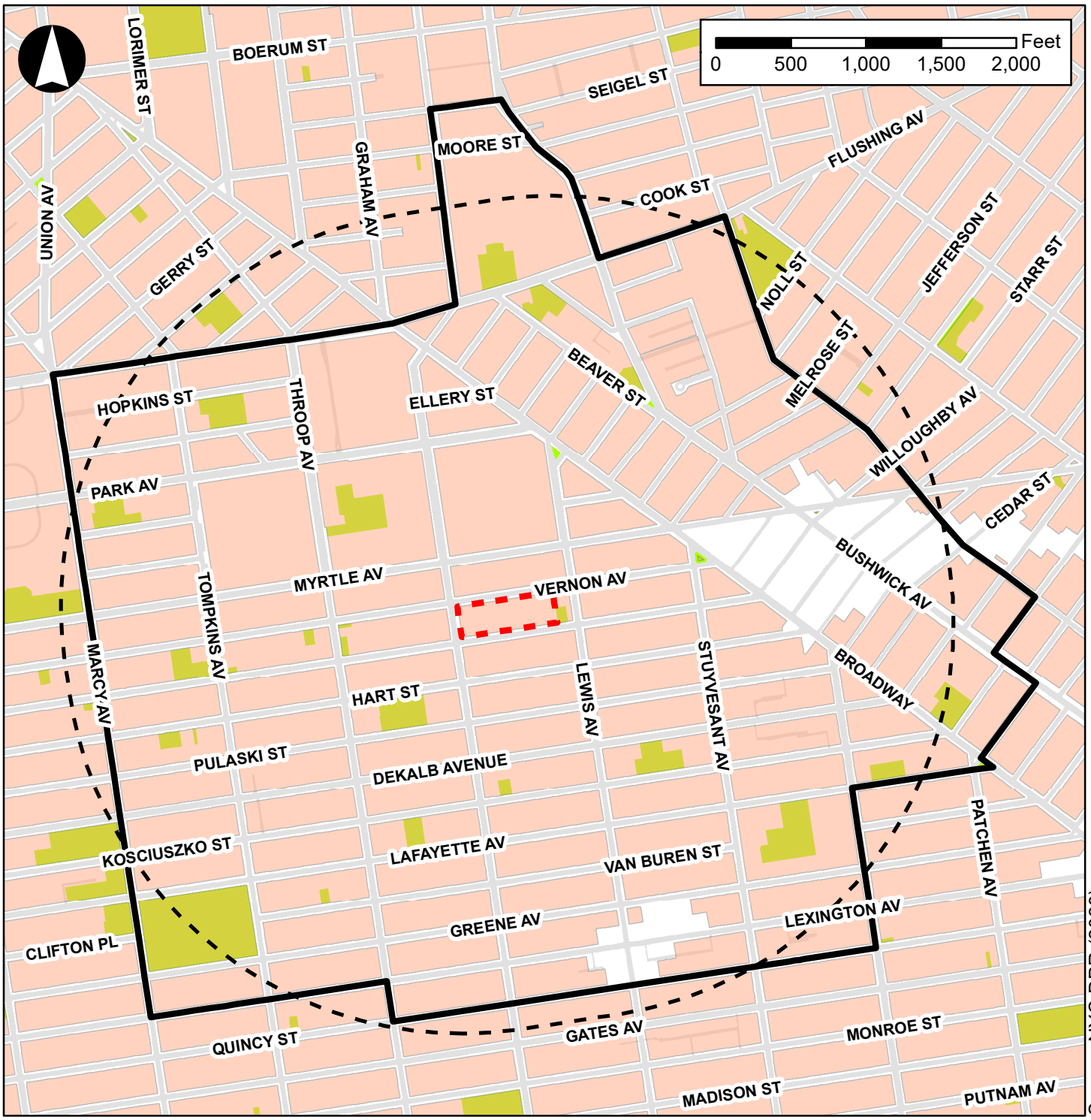


Source: NYC DPR (2023)

Legend

- Project Area
- Open Space
- Open Space Study Area
- Half-Mile Radius
- 283 Census Tract

Figure E-2
Walk to a Park Service Area



Source: NYC DPR (2023)

Legend

- Open Space Study Area
- Open Space
- Half-Mile Radius
- Project Area
- Walk to a Park Service Area

not a walk gap area). Identified walk gap areas are located at the eastern and southern portions of the secondary study area.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the residential users. To determine the number of residents in the study area, 2020 Census data have been compiled for the census tracts comprising the open space study area.
- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with the City's planning goal. In New York City, the optimal open space ratio for residential populations is 2.5 acres of open space per 1,000 residents. Ideally, this would be comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
- An evaluation of qualitative factors affecting open space use.
- A determination of the adequacy of open space in the residential open space study area for existing, No-Action, and With-Action conditions.

Preliminary Assessment

According to the *CEQR Technical Manual*, a preliminary assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential and nonresidential populations to the total open space in the study area. It then compares that ratio with the open space ratio in the future with the Proposed Actions. If there is a decrease in the open space ratio that would approach or exceed one percent in areas exhibiting low open space ratios that are 0.50 or less, a detailed analysis is warranted. The detailed analysis examines passive and active open space resources available to residents within the open space study area delineated in accordance with the *CEQR Technical Manual*, as outlined above. As the Proposed Actions would introduce a residential population in an area with a limited amount of available open space, which exhibits a low open space ratio under existing conditions, a detailed open space analysis is warranted and is provided below.

Impact Assessment

As described in the *CEQR Technical Manual,* the significance of an action's effects on an area's open spaces is determined using both quantitative and qualitative factors, as compared to the No-Action condition. The determination of significance is based upon the context of an action, including its location, the quality and quantity of the open space in the future With-Action condition, and any new open space provided by an action.

An action's potential effects on an area's open space are based, in part, on how a project would change the open space ratios in the study area, as well as other qualitative considerations. According to the *CEQR Technical Manual*, a project that would reduce the open space ratio by more than the general guidance for the open space percentage change shown in **Table E-1** may be considered significant, as these reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. As shown in **Table E-1**, the guidance for tolerated percent change in open space ratio is determined based on the open space ratio ranges outlined in the *CEQR Technical Manual*. In areas that are within a WtPSA, a greater percentage of change (more than five percent) may be tolerated.

TABLE E-1: Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percent Change in Open Space Ratio
2.01 to 2.50 or Greater	5%
1.51 to 2.0	4%
1.01 to 1.5	3%
0.51 to 1.0	2%
0.50 or Less	1%
*2.5 open space ratio is the planning goal in New York City.	

Source: Table 7-1 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

It should be noted that the City's optimal open space ratios and percentage reductions shown in **Table E-1** do not constitute an absolute impact threshold. The *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. Furthermore, as discussed in Section 321 of Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual*, projects located outside of the WtPSA should be further assessed for qualitative impacts. As such, projects that may result in significant quantitative impacts on open space are typically further assessed in a qualitative assessment to determine the overall significance of the impact.

The qualitative assessment supplements the quantitative assessment and considers the distribution of open space, whether a site is within the WtPSA, the distance from the site to regional parks, the connectivity of open space(s), and any additional open space created by the Proposed Actions not available to the general public, if applicable. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment.

III. DETAILED ANALYSIS

Existing Conditions

Study Area Population

To determine the residential population served by existing open space resources, 2020 Census data were compiled for the census tracts comprising the ½-mile study area. As shown in **Table E-2**, the study area has an existing total residential population of approximately 60,300.

TABLE E-2: Existing Residential Population in the ½-Mile Study Area

Census Tract	Residential Population
257	2,822
259.01	2,328
259.02	3,560
261	6,479
263	2,088
279	3,674
281	4,800
283	3,933
285.01	636
285.02	2,658
287	3,103
289	3,933
291	3,042
389	3,570
391	5,776
393	4,141
489	3,757
Total	***60,300***

Source: 2020 Census

Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, *ad hoc* active sports such as Frisbee®, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

The residential population of the study area was also broken down by age group. As shown in **Table E-3**, people between the ages of 20 and 64 make up the majority (70.3 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 20.6 percent of the entire residential population, and persons 65 years and over account for approximately 9.1 percent of the residential study area population. Based on this data, the peak hours of open space demand would be expected to be concentrated during weekends and the early morning and late afternoon to evening hours during the week, as it could be assumed that most residents aged 20 to 64 would work or attend school on weekdays.

TABLE E-3: Residential Population Age Distribution in the ½-Mile Study Area

Age Category	Residential Population	Percent of Population
Under 5 years old	3,008	5.0%
5 to 9 years	3,069	5.1%
10 to 14 years	3,155	5.2%
15 to 19 years	3,175	5.3%
20 to 64 years	42,391	70.3%
65 years and older	5,502	9.1%
Total	***60,300***	***100.0%***

Source: 2020 Census

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidance, whereas private open space is not accessible to the public on a regular basis, and is therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas.

Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this analysis was gathered through field inventories conducted in May 2023, DPR's website, and other secondary sources of information.

The condition of each open space facility was categorized as "Excellent," "Good," "Fair," or "Poor." A facility was considered in excellent condition if the area was clean and attractive and if all equipment was present and in good repair. A good facility had minor problems such as litter or older but operative equipment. A fair or poor facility was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness. Determinations were made based on a visual assessment of the facilities.

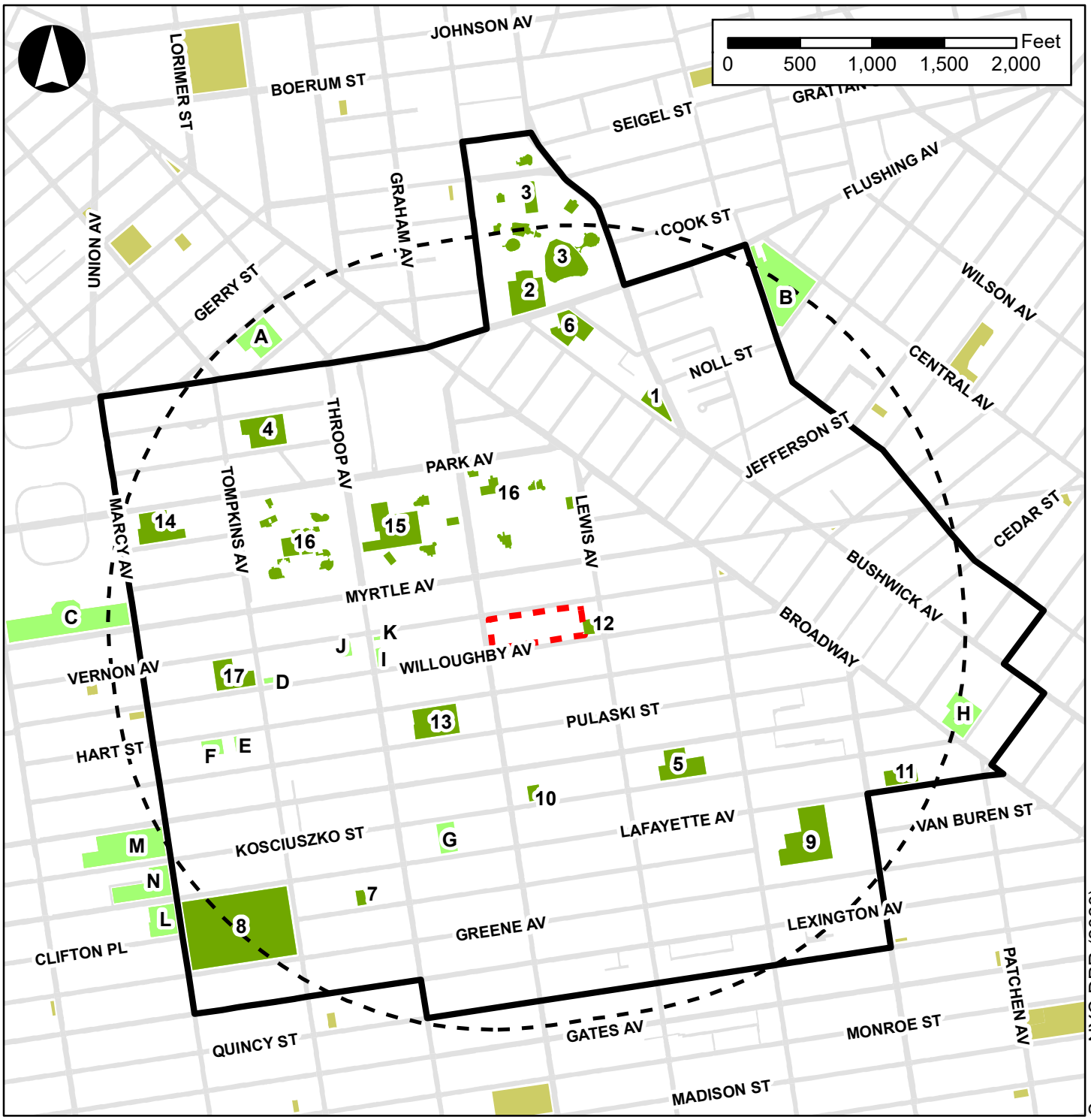
Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon. If a facility seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table E-4** identifies the address, ownership, hours, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure E-3** maps their location in the study area.

Open Space Resources

As shown in **Table E-4**, 17 open space resources comprising approximately 27.09 acres of open space are included in the quantitative analysis, of which approximately 12.21 acres (approximately 45 percent) are considered active open space and 14.88 acres (approximately 55 percent) are passive open space. Most of the open spaces in the study area are neighborhood parks and playgrounds. A typical neighborhood park within the study area includes facilities for passive use (such as benches, landscaping, lawns, picnic tables, and comfort stations) and active recreation (such as sports fields, dog runs, and basketball courts), and is generally used by people of all ages. The typical playground might include play equipment and sports facilities as well as passive seating areas, and would generally be used by children.

Herbert Von King Park is the largest open space resource in the study area. Herbert Von King Park is a 7.82-acre open space featuring a wide array of amenities for both active and passive recreation, including seating areas and landscaping, a baseball field, fitness equipment, handball courts, a recreation center, and a playground with spray showers.

Figure E-3
Open Space Resources



Legend

- Open Space Study Area
- Half-Mile Radius
- Project Area
- Open Space included in Quantitative Analysis (refer to Table E-4)
- Open Space included in Qualitative Analysis (refer to Table E-4)
- Open Space not included in Quantitative or Qualitative Analysis

There are numerous playgrounds within the study area which, as noted above, contain play equipment, sports facilities, and passive seating. Playgrounds with areas greater than 1.5 acres include Jesse Owens Playground (2.33 acres) and Sumner Playground (1.97 acres). Lewis Playground is located directly east of and adjacent to the Project Area (refer to **Figure E**-3), and features playground equipment and seating areas with an area of 0.16 acres..

There are two New York City Housing Authority (NYCHA) campuses within the study area that contain open space resources that are accessible to the public. The Bushwick Houses campus features approximately 2.92 acres of open space (in addition to Bushwick Playground, which is listed as a separate entry in **Table E-4**) and features seating areas, walking paths, and a baseball field. The Sumner Houses campus includes approximately 2.50 acres of open space (in addition to Sumner Playground, listed separately in **Table E-4**) consisting of seating areas, walking paths, and landscaping.

A majority of the publicly accessible open space resources included in the quantitative indirect open space impact assessment are in good to excellent condition. In terms of utilization, all of the study area open space resources exhibit low to moderate utilization.

As shown in **Table E-4,** there are 14 additional open space resources that were conservatively excluded from the quantitative analysis but could still be utilized for recreational purposes by residents of the study area. These open spaces include several community gardens and school playgrounds which were not found to provide consistent access to the public, but would likely still provide recreational value to a subset of the study area population. There are also several open space resources that are adjacent but just outside of the study area boundary (including Banneker Playground, Kosciuzko Pool, and Hattie Carhan Community Garden) and open spaces that are outside the study area boundary but are still within a half-mile distance from the Project Area (including Bartlett Playground, Green Central Knoll, and Marcy Playground) that are likely to serve study-area residents despite their exclusion from the quantitative analysis.

TABLE E-4: Inventory of Existing Open Space and Recreational Resources in Study Area

Map No.[1]	Name	Location	Owner/ Agency[2]	Amenities	Hours	Park Acreage	Passive		Active		Condition	Utilization
							Acres	%	Acres	%		
Quantitative Analysis Open Space Resources												
1	Beaver Noll Park	Beaver Street & Bushwick Ave	NYC DPR	Playgrounds, benches	6 AM - 1 AM	0.44	0.26	60%	0.18	40%	Excellent	Low
2	Bushwick Playground	Flushing Ave. Bet.. Beaver St. And Garden St.	NYC DPR	Basketball Courts, Handball Courts, Playgrounds,Public Restrooms, Public Pool	6 AM - 9 PM	1.29	0.26	20%	1.03	80%	Good	Low
3	Bushwick Houses Open Space	Siegel St to Flushing Ave between Humboldt St and Bushwick Ave	NYCHA	Playground, seating areas, landscaping, baseball field	-	2.92	2.04	70%	0.88	30%	Good	Low
4	Charlie's Place	Ellery St. at Delmonico Pl., Hopkinds St. bet. Tompkins Ave. and Throop Ave	NYC DPR	Handball Courts, Playgrounds	6 AM - 9 PM	1.26	0.88	70%	0.38	30%	Excellent	Moderate
5	Eleanor Roosevelt Playground	Kosciuszko St. to Dekalb Ave. between Lewis Ave. and Stuyvesant Ave.	NYC DPR	Basketball Courts, Handball Courts, Playgrounds	6 AM - 9 PM	1.21	0.24	20%	0.97	80%	Good	Low
6	Garden Playground	Flushing Ave. between Beaver St. and Garden St.	NYC DPR	Playgrounds, Basketball Courts, Spray Showers	6 AM - 9 PM	0.92	0.09	10%	0.83	90%	Fair	Low
7	Hattie Carthan Herban Farm	49 Van Buren St	NYC DPR	Garden, benches	3 PM - 6 PM	0.14	0.14	100%	0.00	0%	Good	Low
8	Herbert Von King Park	Marcy Ave., Tompkins Ave., bet. Greene Ave. and Lafayette Ave.	NYC DPR	Baseball Field, Fitness Equipment, Handball Courts, Playgrounds, Recreation Centers, Spray Showers	6 AM - 1 PM	7.82	5.47	70%	2.35	30%	Good	Moderate
9	Jesse Owens Playground	Lafayette Ave. bet. Stuyvesant Ave. and Malcom X Blvd.	NYC DPR	Basketball Courts, Handball Courts, Outdoor Pools, Playground, Spray Showers	6 AM - 9 PM	2.33	0.47	20%	1.86	80%	Exellent	Moderate
10	Kosciuszko Street Garden	Kosciuszko Street between Marcus Garvey Boulevard and Throop Avenue	NYC DPR	Garden, benches	7 PM - 9 PM	0.19	0.19	100%	0.00	0%	Good	Low
11	Lafayette Playground	Stillwell Ave., Benson Ave., Bay 43 St.	NYC DPR	Handball Courts, Playground, Spray Showers	6 AM - 9 PM	0.52	0.10	20%	0.42	80%	Good	Low
12	Lewis Playground	Willoughby Ave &, Lewis Ave, BK, NY	NYC DPR	Playground	6 AM - 9 PM	0.16	0.08	50%	0.08	50%	Excellent	Moderate
13	Pulaski Playground	Hart St. to Pulaski St. between Throop Ave. and Marcus Garvey Blvd	NYC DPR	Basketball Courts, Handball Courts, Playgrounds, Spray Showers	6 AM - 9 PM	1.42	0.85	60%	0.57	40%	Good	Low
14	Stockton Playground	Park Ave., Martin Luther King Pl., Marcy Ave.	NYC DPR	Basketball Courts, Fitness Equipment, Handball Courts, Playgorund, Spray Showers	6 AM - 9 PM	1.09	0.33	30%	0.76	70%	Excellent	Low
15	Sumner Playground	Throop Ave. between Myrtle Ave. and Park Ave	NYC DPR	Baseball Fields, Basketball Courts, Handball Courts, Playgrounds, Fitness Equipment, Spray Showers	6 AM - 9 PM	1.97	0.79	40%	1.18	60%	Good	Moderate
16	Sumner Houses Open Space	Myrtle Ave to Park Ave between Tompkins Ave and Lewis Ave	NYCHA	Seating areas, landscaping	-	2.50	2.50	100%	0.00	0%	Good	Moderate
17	Willoughby Playground	130 Vernon Ave	NYC DPR	Basketball Courts, Handball Courts, Playgrounds, Spray Showers	6 AM - 9 PM	0.91	0.18	20%	0.73	80%	Good	Low
					Total:	***27.09***	***14.88***	***55%***	***12.21***	***45%***		

TABLE E-4 (CONTINUED): Inventory of Existing Open Space and Recreational Resources in Study Area

Map No.[1]	Name	Location	Owner/ Agency[2]	Amenities	Hours	Park Acreage	Passive		Active		Condition	Utilization
							Acres	%	Acres	%		
Qualitative Analysis Open Space Resources												
A	Bartlett Playground	Whipple St., Bartlett St., bet. Throop Ave. and Flushing Ave.	NYC DPR	Basketball courts, fitness equipment, handball courts, playgrounds, public restrooms, spray showers	6 AM - 9 PM	1.03	0.10	10%	0.93	90%		
B	Green Central Knoll	Flushing Ave., Central Ave., Noll St., Evergreen Ave.	NYC DPR	Playground,baseball field, public restrooms, spray showers	6 AM - 9 PM	2.74	0.55	20%	2.19	80%		
C	Marcy Playground	Myrtle Ave. bet. Nostrand Ave. and Marcy Ave.	NYC DPR	Handball courts, volleyball courts, playground, spray showers	6 AM - 9 PM	3.20	0.64	20%	2.56	80%		
D	All Peoples Church of the Apostolic Faith Community Garden	147 Tompkins Avenue	NYC DPR	Garden	Mon-Fri 7 AM - 11 AM and 1 PM - 6 PM	0.06	0.06	100%	0.00	0%		
E	American Heart	122 Hart Street	NYC DPR	Garden	-	0.05	0.05	100%	0.00	0%		
F	Hart to Hart	104-108 Hart St	NYC DPR	Garden	Sat-Sun 11 AM - 4 PM	0.33	0.33	100%	0.00	0%		
G	P.S. 25 Eubie Blake School Playground	787 Lafayette Ave	NYC DOE	Playground	-	0.57	0.06	10%	0.51	90%		
H	P.S. 274 Playground	800 Bushwick Ave	NYC DOE	Playground	-	1.07	0.11	10%	0.96	90%		
I	Tranquility Farm	659 Willoughby Ave	NYC DPR	Garden	Mon-Fri 7-9 PM, Sat-Sun 9 AM-1 PM	0.12	0.12	100%	0.00	0%		
J	Vernon Block Association Garden	190 Vernon Avenue	NYC DPR	Garden	Sun 10 AM - 12 PM Weekdays after 6 PM	0.14	0.14	100%	0.00	0%		
K	Vernon Tandt Block Association	200 Vernon Ave	NYC DPR	Garden	-	0.15	0.15	100%	0.00	0%		
L	Hattie Carhan Community Garden	49 Van Buren Street	NYC DPR	Garden	Mon-Tue 10 AM - 12 PM Fri-Sat 10 AM - 6 PM	0.14	0.14	100%	0.00	0%		
M	Kosciuzko Pool	Marcy Ave &, Dekalb Ave	NYC DPR	Outdoor Public Pool	-	2.39	0.00	0%	2.39	100%		
N	Banneker Playground	114 Kosciuszko St	NYC DPR	Playground	6 AM - 9 PM	1.67	0.33	20%	1.34	80%		
					Total:	***13.67***	***2.79***	***20%***	***10.88***	***80%***		

Notes:

[1] Refer to **Figure E-3**

[2] NYC DPR = New York City Department of Parks and Recreation; NYC DOE = New York City Department of Education; NYC DOT = New York City Department of Transportation; NYCHA = New York city Housing Authority

Source: NYC DPR

Assessment of Open Space Adequacy

Quantitative Assessment

The following analysis of the adequacy of existing open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents. As an optimal planning goal, the City tries to achieve an overall residential open space ratio of 2.5 acres per 1,000 residents (80 percent [2 acres] active and 20 percent [0.5 acres] passive) for large-scale plans and proposals. Although a typical population mix may call for such a goal, it is often not feasible for many areas of the City (especially higher density areas). As such, the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold.

In calculating the open space ratio per 1,000-user population for the study area, all of the resources listed in the "Open Space Resources Included in the Quantitative Analysis" section of **Table E-4** were included. **Table E-5** shows that, with an existing study area residential population of approximately 60,300 people, the existing total open space ratio in the study area is approximately 0.449 acres per 1,000 residents; the study area has 0.202 acres of active open space per 1,000 residents and 0.247 acres of passive open space per 1,000 residents. As indicated in **Table E-5**, the existing total, active, and passive residential open space ratios are below the City's open space planning goals of 2.5, 2.0, and 0.5 acres per 1,000 residents, respectively.

TABLE E-5: Adequacy of Open Space Resource in the Study Area – Existing Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	60,300	27.09	12.21	14.88	0.449	0.202	0.247	2.5	2	0.5

Qualitative Assessment

The ratios of total, active, and passive open space per 1,000 residents in the study area all fall below the target ratios established by the City, as discussed above. This quantitative deficiency may be partially ameliorated by several factors. The residential study area contains a large amount of open space that is excluded from the quantitative analysis, per CEQR guidance, but is still likely to serve residents of the study area. There are several community gardens, school playgrounds, and public plazas that were excluded from the quantitative analysis but could still provide some recreational value to residents of the study area. There are also several resources, as noted above, that are just outside of the study area boundary.

Banneker Playground is located directly adjacent to the residential study area, and though it is conservatively excluded from the quantitative analysis, residents of the study area would likely make use of the 1.67-acre open space including a playground and seating areas. Kosciuszko Pool is also adjacent to the study area; it is a 2.39-acre public outdoor pool that provides space for active recreation (swimming) during the summer season. Green Central Knoll is a 2.74-acre neighborhood park with a variety of active and passive facilities, including a baseball field, spray showers, and a playground; it is located just outside of the study area and falls partially within a half-mile distance from the Project Area. Marcy Playground is a 3.20-acre playground with handball and volleyball courts as well as spray showers, located adjacent to the study area and falls partially within a half-mile distance from the Project Area. Finally, Bartlett Playground (which is located outside the study area and is not directly adjacent, but is still within a half-

mile distance from the Project Area) is a 1.03-acre playground including basketball and handball courts, fitness equipment and spray showers.

The presence of a variety of publicly-accessible open space resources just outside the residential study area boundary but within walking distance from the Project Area indicates that the open space ratios presented in **Table E-5** may not fully capture the amount of open space available to residents of the study area.

Overall, the study area has a variety of active and passive open space amenities available, including a wide range of sports and playground equipment. Furthermore, a majority of the open space resources considered in the quantitative analysis are in good or excellent condition, and all of the resources exhibited low or moderate utilization, indicating that they could theoretically have the capacity to support additional users.

The Future Without the Proposed Actions (No-Action Condition)

In the future without the Proposed Actions, no changes would occur in the Project Area. All existing uses are anticipated to remain. The site would not be redeveloped, and the existing residential, community facility, commercial, and accessory parking uses would remain. No open space in the Project Area would be created or removed in absence of the Proposed Actions.

TABLE E-6: Known Planned No-Action Developments within the ½-Mile Study Area

Map No.[1]	Block	Lot	Address	DUs	Population[2]
1	3139	30	15 Montieth Street	94	253
2	3138	13	21 Garden Street	50	135
3	3137	49	826 Flushing Avenue	47	126
4	1722	25	688 Flushing Avenue	3	8
5	1722	23	684 Flushing Avenue	8	20
6	1723	3	171 Throop Avenue	93	238
7	1732	136	763 Park Avenue	8	20
8	1732	1	61 Delmonico Place	8	20
9	1580	10	57 Marcus Garvey Boulevard	190	486
10	1747	30	88 Tompkins Avenue	56	143
11	3150	3	917 Broadway	11	30
12	3150	1	923 Broadway	10	27
13	1586	12	1100 Myrtle Avenue	233	596
14	1586	40	8 Stuyvesant Avenue	10	26
15	1589	35	388 Vernon Avenue	27	69
16	1589	154	825 Willoughby Avenue	8	20
17	1589	58	821 Willoughby Avenue	3	8
18	1759	7	597 Marcy Avenue	20	51
19	1759	71	525 Willoughby Avenue	8	20
20	1767	27	554 Willoughby Avenue	3	8
21	1767	28	556 Willoughby Avenue	3	8
22	1767	32	564 Willoughby Avenue	4	10
23	1767	41	156 Tompkins Avenue	8	20
24	1769	4	277 Throop Avenue	8	20
25	1592	1	75 Lewis Avenue	8	20
26	1593	35	1038 Broadway	57	146
27	1775	10	645 Marcy Avenue	2	5
28	1775	32	124 Pulaski Street	3	8
29	1780	2	679 Marcy Avenue	10	26
30	1786	2	233 Tompkins Avenue	8	20
31	1610	23	924 Lafayette Avenue	6	15
32	1800	33	650 Greene Avenue	10	26
33	1801	1	499 Lexington Avenue	6	15
34	1619	75	577 Lexington Avenue	2	5
			Total:	**1,025**	**2,652**

Notes:
[1] Refer to **Figure E-4**

[2] The estimated number of residents added due to No-Action development assumes average household sizes of 2.56 persons for Brooklyn CD 3 and 2.69 persons for Brooklyn CD 4, according to the 2020 Census.
Source: NYC DOB, 2023

Study Area Population

As presented below in **Table E-6** and shown in **Figure E-4**, a considerable amount of new development is currently planned or anticipated to be completed within the residential open space study area in the future without the Proposed Actions by 2027, which would increase the residential population within the study area. These No-Action developments are anticipated to add 1,025 new residential units to the study area. **Table E-6** shows that these No-Action developments are anticipated to increase the study area population by approximately 2,652 residents, for a total residential population of 62,952 by 2027.

Open Space Resources

In the future without the Proposed Actions, it is anticipated that the NYC Department of Parks and Recreation will have completed one capital improvement project within the study area: the planned reconstruction of Lewis Playground, which is located directly adjacent to the Project Area. The $1 to $3-million project would include a new play area, seating, and outdoor classroom space. The project is currently in the procurement phase; however, procurement is currently delayed as the city re-solicits bids. The project is still on track for completion by the 2027 analysis year, and when completed, it is expected to improve the condition of Lewis Playground, potentially increasing its capacity for recreational users.

No quantitative changes to the amount of open space available in the study area are expected in the future without the Proposed Actions.

Open Space Adequacy

Table E-7, below, presents the No-Action open space ratios for the half-mile study area, based on the anticipated population increases outlined previously. Similar to existing conditions, the total, active, and passive open space ratios in the No-Action condition would be less than the City's open space planning goals of 2.5, 2.0 and 0.5 acres of open space per 1,000 residents, respectively. The total open space ratio is expected to decrease to 0.430 acres per 1,000 residents in the No-Action condition, with No-Action active and passive open space ratios of 0.194 and 0.236 acres per 1,000 residents, respectively.

TABLE E-7: Adequacy of Open Space Resource in the Study Area – No-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	62,952	27.09	12.21	14.88	0.430	0.194	0.236	2.5	2	0.5

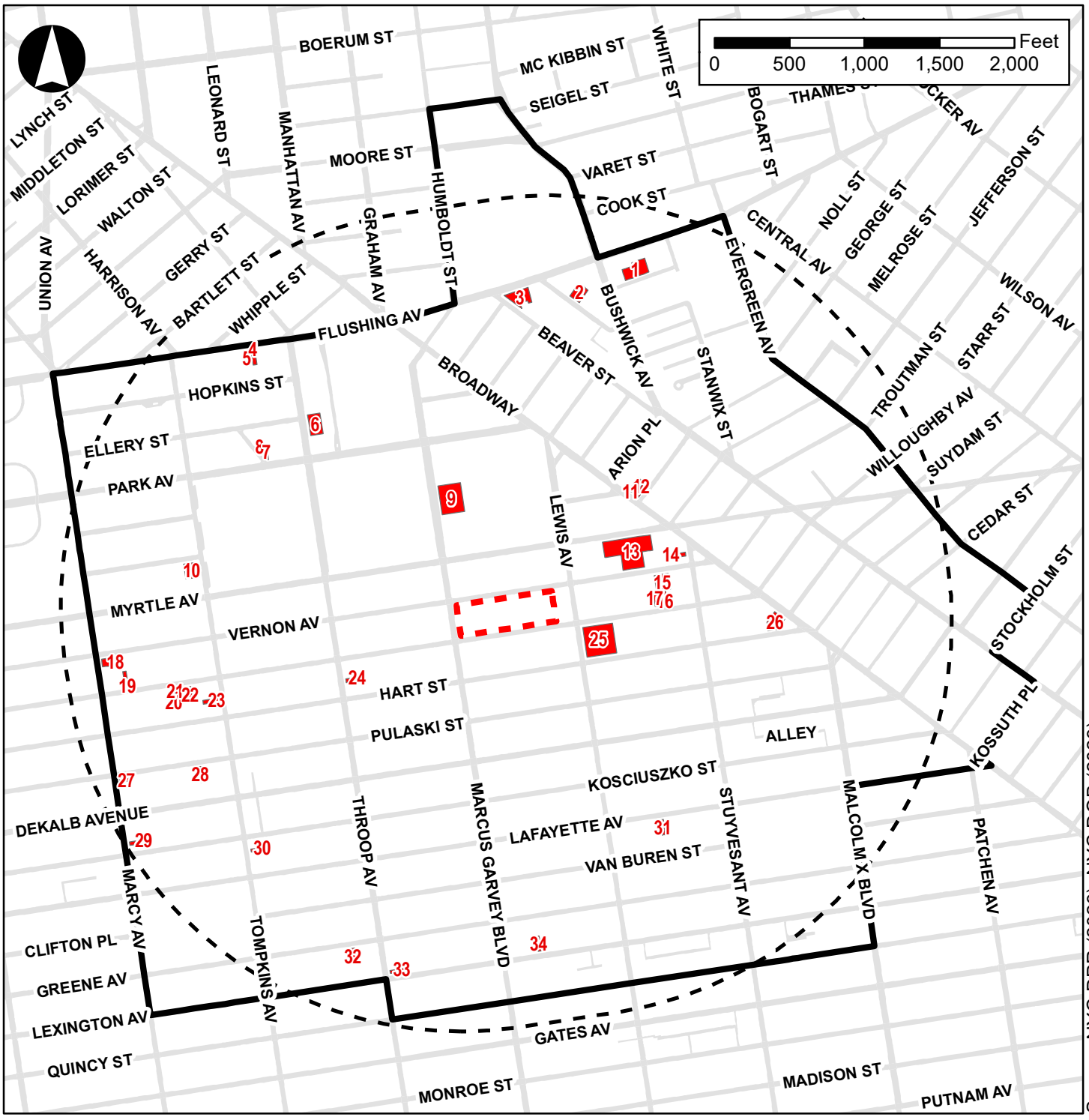
The Future with the Proposed Actions (With-Action Condition)

This section describes the open space conditions that would result from the Proposed Actions by 2027. It evaluates the potential for the Proposed Actions to result in significant adverse indirect impacts to open space resources based on a comparison of the No-Action condition (described above) to the With-Action condition.

Study Area Population

As described in **Attachment A, "Project Description,"** in the future with the Proposed Actions, the Proposed Project would introduce approximately 292 AIRS DUs to the Proposed Development Site.

Figure E-4
Known No-Action Developments



Source: NYC DPR (2023); NYC DOB (2023)

Legend

- Project Area
- Half-Mile Radius
- Open Space Study Area
- No-Action Development (refer to Table E-6)

Assuming an average occupancy of 1.5 residents per AIRS DU, the Proposed Actions are expected to introduce a net increase of approximately 438 residents, and would therefore increase the study area's residential population to 63,390 residents in the 2027 With-Action condition.

Open Space Resources

The Proposed Actions are not expected to introduce any new open space resources to the study area, nor are they expected to result in the elimination of any existing open space. As such, under the With-Action condition, the amount of open space in the residential study area considered in the quantitative analysis would remain at 27.09 total acres, consisting of 12.21 acres of active and 14.88 acres of passive open space.

Direct Effects

The Proposed Project would not have a direct effect on any study area publicly-accessible open spaces. Operation of the Proposed Project would not cause the physical loss of public open space because of encroachment or displacement of the space; would not change the use of an open space so that it no longer serves the same user population; and would not limit public access to an open space. As discussed in other chapters of this EIS, the Proposed Project would not significantly affect the usefulness or utilization of any study area open spaces due to increased noise or air pollutant emissions, odors, or shadows, nor would construction of the Proposed Project result in impacts on area open spaces.

Indirect Effects

Open Space Adequacy

As noted above, the open space impact analysis consists of both quantitative and qualitative assessments. The quantitative assessment considers how a proposed action(s) could change the open space ratios in the study area.

Under the With-Action condition, the total open space ratio in the study area would decrease from 0.430 to 0.427 acres per 1,000 residents, compared to the No-Action condition (see **Table E-8**). The active open space ratio would decrease compared to No-Action conditions from 0.194 to 0.193 acres per 1,000 residents, which would continue to be below the city's guidance of 2.0 acres per 1,000 residents. The passive open space ratio would decrease from 0.236 to 0.235 acres per 1,000 residents, which would remain below the city's guideline ratio of 0.50 acres per 1,000 residents.

TABLE E-8: Adequacy of Open Space Resource in the Study Area – With-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	63,390	27.09	12.21	14.88	0.427	0.193	0.235	2.5	2	0.5

Potential Effects of the Proposed Actions on Publicly Accessible Open Space

Quantitative Assessment

According to the 2021 *CEQR Technical Manual*, a significant adverse open space impact may occur if proposed actions would reduce the open space ratio by more than the general guidelines for the open space percentage change provided in **Table E-9**.

TABLE E-9: Detailed Assessment – Percentage Change Guidance to Determine Possible Open Space Impact

Total Open Space Ratio Range*	Active Open Space Ratio Range*	Passive Open Space Ratio Range*	Percentage Change in Open Space ratio Signifying a Possible Adverse Open Space Impact
2.01 to 2.50 Or greater	1.61 to 2.0 Or greater	0.41 to 0.50 Or greater	5%
1.51 to 2.00	1.21 to 1.60	0.31 to 0.40	4%
1.01 to 1.50	0.81 to 1.20	0.21 to 0.30	3%
0.51 to 1.00	0.41 to 0.80	0.11 to 0.20	2%
0.50 or less	0.01 to 0.40	0.01 to 0.10	1%
* 2.5 open space ratio is the planning goal in NYC, with optimal distribution goal of 2.0 active open space ratio and 0.5 passive open space ratio.			

Source: Table 7-5 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

Table E-10 expresses the percentage change from No-Action to With-Action conditions for the study area. As noted previously, in the future with the Proposed Actions, ratios of total, active and passive open spaces to residents would continue to be lower than the optimal planning goals furnished by DCP. As shown in **Table E-10**, the study area's total open space ratio in the future with the Proposed Actions would be 0.427 acres per 1,000 residents, which represents a reduction of approximately 0.69 percent (0.03 acres per 1,000 residents) from No-Action conditions. The active open space ratio in the study area would decrease from 0.194 acres to 0.193 acres per 1,000 residents in the With-Action condition, a 0.69 percent decrease. The passive open space ratio for residents would decrease from 0.236 to 0.235 acres per 1,000 residents in the With-Action condition, also a 0.69 percent decrease.

TABLE E-10: Comparison of No-Action to With-Action Open Space Ratios in the ½-Mile Study Area

Ratio	*CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios Per 1,000			Percent Change
		Existing	No-Action	With-Action	Future No-Action to Future With-Action
Total – Residents	2.50	0.449	0.430	0.427	-0.69%
Active – Residents	0.50	0.202	0.194	0.193	-0.69%
Passive – Residents	2.00	0.247	0.236	0.235	-0.69%

As shown in **Table E-10**, the Proposed Actions would result in a percentage change in open space ratios below the threshold signifying possible adverse impacts. The expected 0.69% decreases in the total, active, and passive open space ratios would be smaller than the applicable 1%, 1%, and 2% decreases (respectively) referenced in **Table E-9** for considering impact significance. According to *CEQR Technical Manual* guidance, these optimal open space ratios and percentage reductions do not of themselves constitute a significant impact threshold and a project's location, the quality, quantity, and types of nearby open space, and the balance of passive and active open space should be considered in the determination of significance.

Under the With-Action condition, open space in the residential study area would continue to fall short of the City targets for total, active, and passive open space per 1,000 residents. The decreases in open space ratios that would be expected as a result of the Proposed Actions are small enough that they do not suggest a potential adverse impact. As noted above, study area open spaces are in good condition, provide a variety of facilities, and are moderately used. In addition, as shown in **Figure E-2**, the Project Area and the majority of the study area are located within a WtPSA and, therefore, are not located within a walk gap area (i.e., an area of the City that is not within a walking distance to a park). The qualitative assessment below also indicates that the quality and number of the study area open spaces would help to ameliorate the open space shortfall in the future With-Action conditions.

Qualitative Assessment

In the future with the Proposed Actions, the study area would continue to have a shortfall of open space similar to the existing and No-Action conditions. Although these open space ratios in the study area would remain less than the DCP planning goals, the deficiency of open space resources in the study area would be ameliorated by several factors. Most of the open space resources included in the quantitative analysis were found to be in good or excellent condition, and there is a significant amount of open space that was excluded from the quantitative analysis, due to its location or lack of public accessibility, that would still offset some demand from residents of the study area.

The demand for open space generated by the Proposed Actions is not expected to significantly exacerbate the No-Action deficiency, with under a one percent decrease in the study area's open space ratios. The population added because of the Proposed Actions is not expected to noticeably affect utilization of the area's open spaces. Most of the open spaces in the study area could likely handle more demand without affecting the experience of users. As noted above, most of the study area open space resources are in good or excellent condition and offer a variety of amenities which, therefore, could likely handle some increased demand.

IV. CONCLUSIONS

The Proposed Actions would not result in significant adverse open space impacts. The Proposed Actions would not result in the direct displacement of any existing open spaces. the Proposed Project would not significantly affect the usefulness or utilization of any study area open spaces due to increased noise or air pollutant emissions, odors, or shadows, nor would construction of the Proposed Project result in impacts on area open spaces. While the residential open space study area would continue to have a shortfall of open space in the future with the Proposed Actions, the demand for open space generated due to the Proposed Actions is not expected to significantly exacerbate the No-Action deficiency. Moreover, the population added due to the Proposed Actions is not expected to affect utilization adversely of the area's open spaces. The Proposed Actions would result in a 0.69 percent decrease in total, active, and passive open space ratios as compared to No-Action conditions, which is below the applicable threshold indicating the potential for an indirect significant adverse impact on open space.

ATTACHMENT F

SHADOWS

I. INTRODUCTION

According to the 2021 *CEQR Technical Manual*, an adverse shadows impact is considered to occur when an incremental shadow from a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource, or threatens the viability of vegetation or other resources. Pursuant to *CEQR Technical Manual* guidance, sunlight-sensitive resources of concern are those resources that depend on sunlight, or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Sunlight-sensitive resources can include publicly accessible open spaces, architectural resources, natural resources, and Greenstreets. In general, shadows on city streets, sidewalks, buildings, or project-generated open spaces are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

According to the *CEQR Technical Manual*, a shadows assessment is required only if a proposed action would result in structures (or additions to existing structures) of 50 feet or more and/or be located adjacent to, or across the street from, a sunlight-sensitive resource. As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of a new 14-story, 153-foot tall (bulkhead height) building. As the Proposed Action would result in a structure taller than 50 feet and is located adjacent to open space (Lewis Playground), an analysis of shadows is warranted. This attachment assesses the potential for the Proposed Actions and subsequent development to result in a significant adverse shadow impact on any sunlight-sensitive resources.

II. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects or actions resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from a project could reach any sunlight-sensitive resource at any time of year. The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered to be sunlight-sensitive resources.[1]

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in

[1] According to the *CEQR Technical Manual*, city streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered to be sunlight-sensitive resources.

an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots, particularly plots for food production in community gardens. The amount of sunlight typically considered to be the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. However, certain plantings and vegetation can tolerate partial sun, with a reduced minimum requirement of four to six hours of direct sunlight. Examples of areas that can tolerate partial sun are established tree canopies, shrubs or perennials.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features of an architectural resource are considered in a shadows analysis. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.
- *Natural resources where the introduction of shadows could alter the resource's condition or microclimate.* Such resources could include community gardens, surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the proposed buildings representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow (i.e. the additional, or new, shadow) resulting from the project. The detailed shadow analysis establishes a baseline condition (the No-Action condition) that is compared to the future condition resulting from the Proposed Actions (the With-Action condition) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadows cast by the development of projected and potential development sites. In accordance with the CEQR Technical Manual, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June

21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold- weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive historic and natural resources. The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

The detailed analysis provides the data needed to assess the shadow impacts. The effects of incremental shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The result of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text. As described in the *CEQR Technical Manual*, an incremental shadow is generally not considered significant when its duration is no longer than ten minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of ten minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- Vegetation: a substantial reduction in sunlight duration available to sunlight-sensitive features of the resource to less than the time of its minimum sunlight needs (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum sunlight needs).
- Historic and cultural resources: a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- Open space utilization: a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected time periods.
- For any sunlight-sensitive feature of a resource: complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

III. PRELIMINARY SCREENING ASSESSMENT

First, an assessment of sites within the Project Area was performed in order to determine which sites and/or which development scenarios required a preliminary screening assessment. As noted above, pursuant to *CEQR Technical Manual* guidance, only new development or enlargement that would result in an incremental increase of 50 feet or more compared to the No-Action condition require assessment. In addition, any development site adjacent to, or across the street from, a sunlight sensitive resource requires a preliminary screening, regardless of its height. New structures of greater than 50 feet in incremental height are anticipated at both the Fulton Houses and Elliott-Chelsea Houses as part of the Proposed Project, and consequently, a preliminary screening assessment of shadows is warranted.

Figure F-1 shows the Project Area, the surrounding street layout, and all sunlight-sensitive resources (publicly-accessible open spaces and Greenstreets, and sunlight-sensitive architectural, natural, historic resources) as well as the Tier I longest shadow radius and Tier II screening area for the Proposed Project.

Tier I Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum shadow radius for the Fulton Houses and Elliott-Chelsea Houses was determined using each site's maximum height based on the RWCDS for the Proposed Project. The maximum shadow radius for the Fulton Houses and Elliott-Chelsea Houses were merged to form the longest shadow study area (Tier I Assessment).

Within this longest shadow study area, there are a number of potentially sunlight-sensitive open spaces, natural resources, and historic architectural resources. Due to the presence of sunlight-sensitive resources within the Tier I screening area, further screening is warranted in order to determine whether any sunlight-sensitive resources could be affected by project-generated shadows.

Tier II Screening Assessment

Due to the path of the sun 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. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening are located within portions of the longest shadow study area that could receive shade from the Proposed Development.

Table F-1, Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 1 and 2 Screening

Map No.[1]	Sunlight Sensitive Resource
1	Lewis Playground (sunlight-sensitive open space)
2	St. John the Baptist Roman Catholic Church (sunlight-sensitive historic resource)

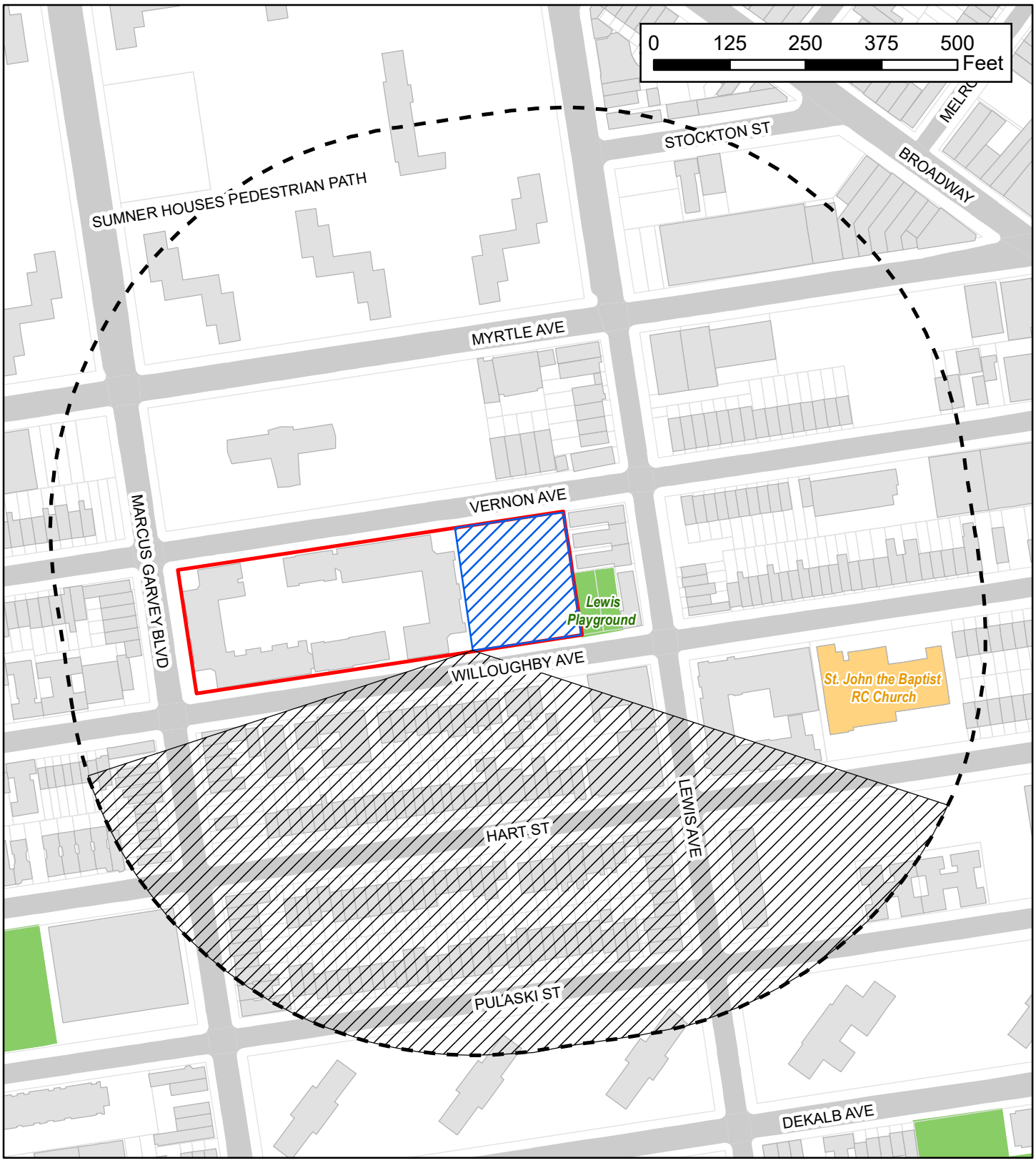
Notes: [1] Refer to Figure F-1

Figure F-1 provides a base map illustrating the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from southernmost portions of the Project Area). Two resources were identified as sunlight-sensitive resources that warranted further assessment, as shown in **Table F-1.**

Tier III Screening Assessment

According to the *CEQR Technical Manual*, a Tier III screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed action can reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier III screening assessment is used to determine if shadows resulting from a proposed action can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

Tier I and Tier II Shadows Screening



Legend

- Project Area
- Proposed Development Site
- Tier I - Longest Shadow Study Area
- Tier II - Area that Cannot be Shaded
- Open Space
- Sunlight-Sensitive Historic Resource

Table F-2, Tier 3 Assessment Results

Map No.[1]	Sunlight Sensitive Resource	March 21/ September 21	May 6/ August 6	June 21	December 21	Number of Analysis Days
1	Lewis Playground	Yes	Yes	Yes	Yes	4
2	St. John the Baptist Roman Catholic Church		Yes	Yes		2

Notes: [1] Refer to Figure F-1

As project-generated shadows could reach a number of sunlight-sensitive resources, a Tier III assessment was performed using three dimensional (3D) computer mapping software. The 3D model was used to calculate and display project-generated shadows on individual representative analysis dates. The model contained 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the projected development. At this stage of the assessment, surrounding buildings within the study area were not included in the model so that it may be determined whether project-generated shadows would reach any sunlight-sensitive resources.

The Tier III analysis showed that both sunlight-sensitive resources shown in **Table F-1** could receive incremental shadow on at least one analysis day. **Table F-2** presents a summary of the Tier III assessment, showing the sunlight-sensitive resources that could, in the absence of intervening buildings, receive project-generated shadows, and on which analysis days the new shadows would occur. The results of the Tier III analysis for the Project Area are illustrated in **Figure F-2a** to **Figure F-2b.**

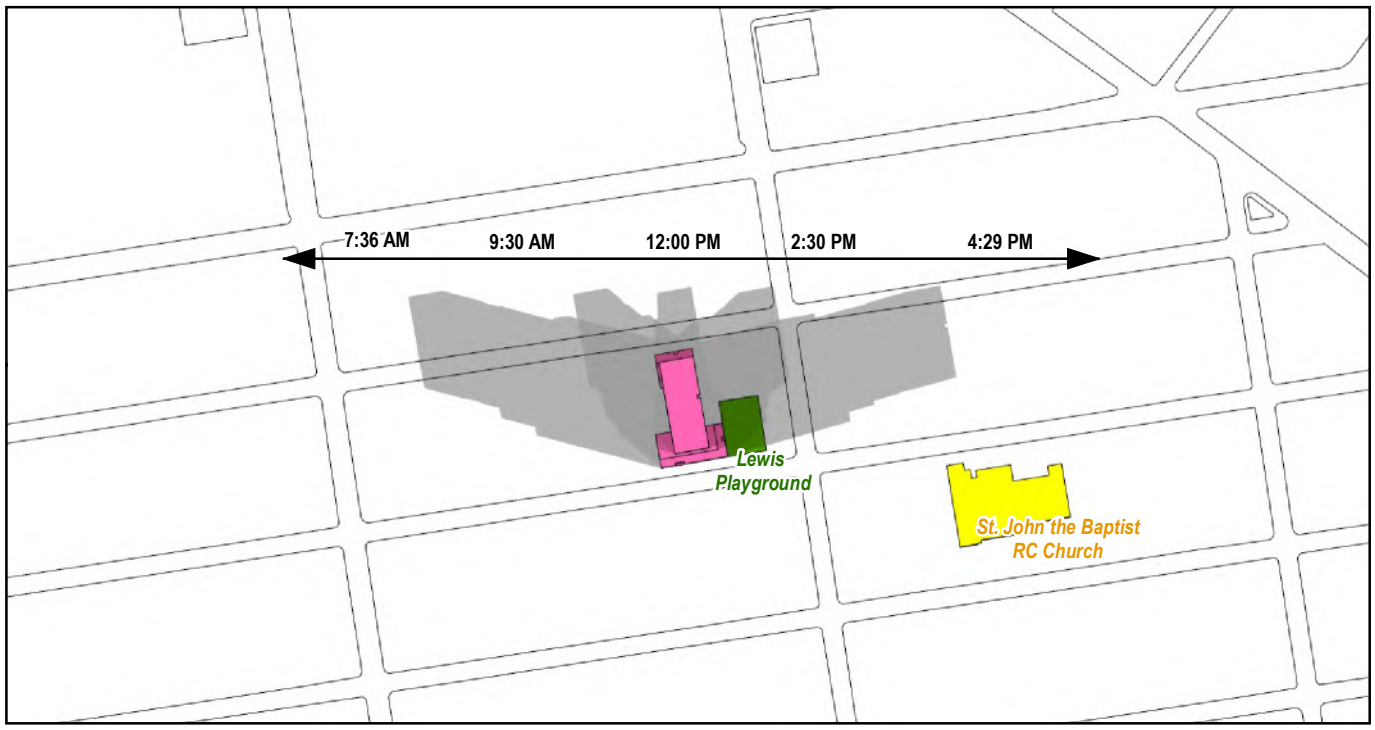
IV. DETAILED ANALYSIS OF SHADOW IMPACTS

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the 13 sunlight-sensitive resources identified above on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. *CEQR Technical Manual* guidance defines the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see **Table F-3**).

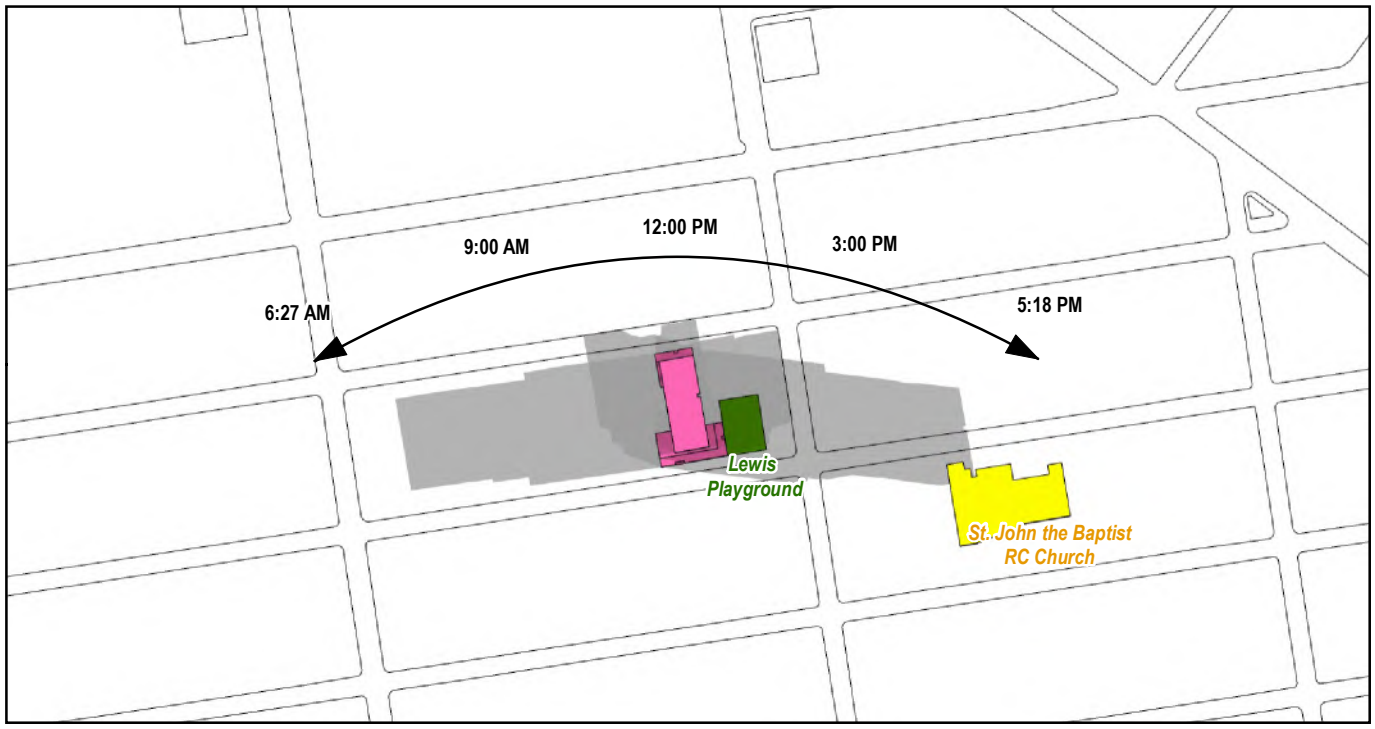
Table F-3, Duration of Shadows on Sunlight Sensitive Resources (Increment Compared to No-Action)

Sunlight Sensitive Resource	Analysis Day	March 21/ Sept. 21 7:36 AM - 4:29 PM	May 6/ August 6 6:27 AM - 5:18 PM	June 21 5:57 AM - 6:01 PM	December 21 8:51 AM - 2:53 PM
Lewis Playground	Shadow Enter/Exit Time	11:43 AM - 4:29 PM	11:40 AM - 4:58 PM	11:50 AM - 5:52 PM	11:21 AM - 2:53 PM
	Incremental Shadow Duration	3 hours 46 minutes	4 hours 18 minutes	6 hours 2 minutes	3 hours 32 minutes
St. John the Baptist Roman Catholic Church	Shadow Enter/Exit Time		5:09 PM - 5:18 PM	5:42 PM - 6:01 PM	
	Incremental Shadow Duration		9 minutes	19 minutes	

Notes: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *CEQR Technical Manual* guidance.
Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.



MARCH 21 / SEPTEMBER 21

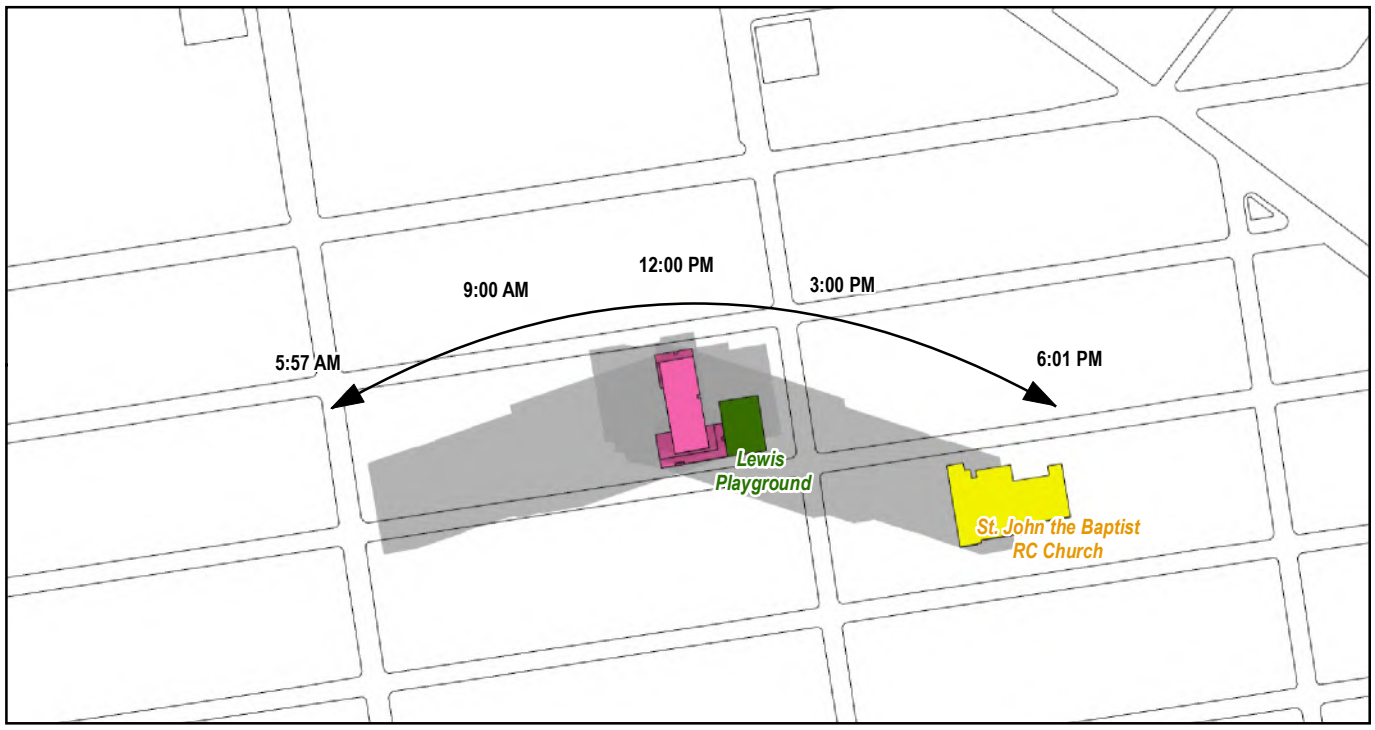


MAY 6 / AUGUST 6

Proposed Development

Sunlight-Sensitive Historic Resource

Sunlight-Sensitive Open Space Resource



JUNE 21



DECEMBER 21

Proposed Development

Sunlight-Sensitive Historic Resource

Sunlight-Sensitive Open Space Resource

As shown in **Table F-3**, incremental project-generated shadows would reach both resources identified in the Tier 3 assessment. Lewis Playground would experience incremental shadows from the Proposed Project on all four analysis days, for durations ranging from three hours 32 minutes to six hours two minutes. St. John the Baptist Roman Catholic Church would experience incremental shadows on two analysis days (May 6/August 6 and June 21), with a duration ranging from nine minutes to 19 minutes.

Figures F-3a through F-3k and F-4a through F-4b show representative shadow views for the sunlight-sensitive resources of concern on the representative analysis days during which they would receive shadows from the Proposed Project.

It should be noted that, per the *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this chapter for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight-Savings Time.

Sunlight Sensitive Resources

Lewis Playground

Lewis Playground is a 0.16-acre public playground located directly adjacent to the Project Area to the east, with its entrance along Willoughby Avenue to the south. The playground is located at Block 1588, Lots 39 and 40. Lewis's playground contains amenities for passive and active recreation, including landscaping and seating areas as well as playground equipment. In the future with the Proposed Actions, it should be noted that Lewis Playground would be reconstructed by NYC Parks as part of a planned capital project. The Lewis Playground Reconstruction is currently in the procurement phase, with construction slated to begin in late-2023. Therefore, it is assumed that with a construction period of 12 to 18 months, the capital project would be complete by the analysis year for the Proposed Project. Based on schematic plans from NYC Parks (shown in **Figure F-5**), the reconstructed playground would feature upgraded play equipment, new seating, new planted areas and trees, and an outdoor classroom space with a chalkboard wall.

As shown in **Table F-3**, as a result of the Proposed Project, Lewis Playground would receive new incremental shadows from the Proposed Project on all four analysis days. Given the location of the playground relative to the Project Area (directly east), shadows would generally be cast on Lewis Playground in the afternoon.

Assessment

Lewis Playground would receive incremental shadows from the Proposed Project for three hours 46 minutes on the March 21/September 21 analysis day, four hours 18 minutes on the May 6/August 6 analysis day, six hours two minutes on the June 21 analysis day, and three hours 32 minutes on the December 21 analysis day. The duration of project-generated incremental shadow coverage would be longest on June 21 and shortest on December 21.

As noted above, and as discussed in detail in **Attachment E, "Open Space,"** Lewis Playground is undergoing a planned reconstruction by NYC Parks, which would be complete by the 2028 analysis year. An illustrative site plan of the reconstructed park is presented in **Figure F-5.** As shown in the plan, playground equipment would be located in the northern half of the playground, an outdoor classroom space would be located in the southern half, and landscaped planting areas and seating would be scattered throughout the playground. Per *CEQR Technical Manual* guidance, the vegetation within the

Figure F-3a

Incremental Shadows - March 21/September 21
Lewis Playground



12:00 PM



1:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3b
Incremental Shadows - March 21/September 21
Lewis Playground



2:00 PM



3:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3c
Incremental Shadows - March 21/September 21
Lewis Playground



4:00 PM



4:29 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3d

Incremental Shadows - May 6/August 6
Lewis Playground



12:00 PM



1:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3e
Incremental Shadows - May 6/August 6
Lewis Playground



2:00 PM



3:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3f
Incremental Shadows - May 6/August 6
Lewis Playground



4:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3g
Incremental Shadows - June 21
Lewis Playground



12:00 PM



1:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3h
Incremental Shadows - June 21
Lewis Playground



2:00 PM



3:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3i
Incremental Shadows - June 21
Lewis Playground



4:00 PM



5:00 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3j
Incremental Shadows - December 21
Lewis Playground



11:30 AM



12:30 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-3j

Incremental Shadows - December 21
Lewis Playground



1:30 PM



2:53 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

Figure F-4

Incremental Shadows - May 6/August 6
St. John the Baptist Roman Catholic Church



5:18 PM

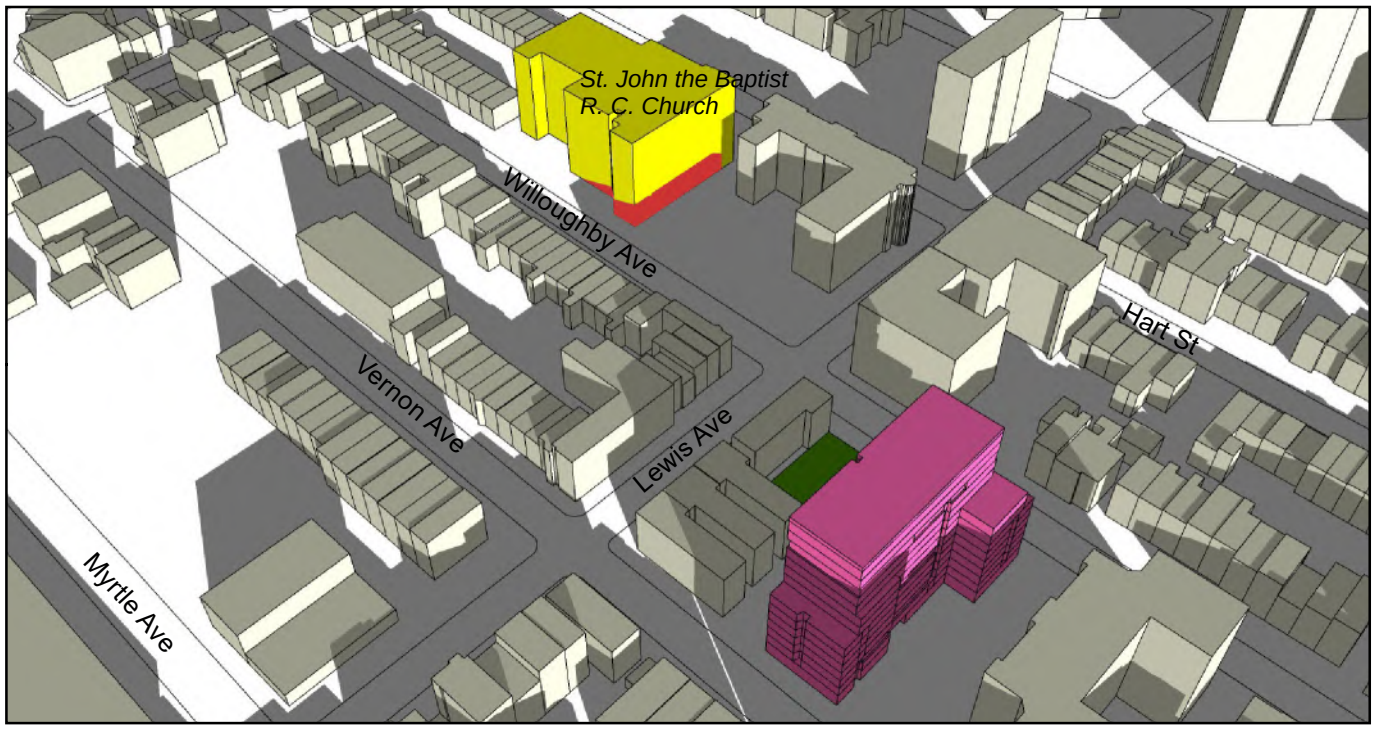
Proposed Project

Sunlight-Sensitive Historic Resource

Sunlight-Sensitive Open Space Resource

Project-Generated Incremental Shadow

Figure F-4b
Incremental Shadows - June 21
St. John the Baptist Roman Catholic Church



6:01 PM

Proposed Project
Sunlight-Sensitive Historic Resource
Sunlight-Sensitive Open Space Resource
Project-Generated Incremental Shadow

park could be affected by a loss of sunlight during the growing season (which occurs during March through October), and the active play areas could be affected by a loss of sunlight throughout the year.

On March 21/September 21, project-generated shadows would enter Lewis Playground at 11:43 AM and would travel from west to east throughout the analysis day until the end of the day at 4:29 PM (see **Figures F-3a through F-3c**). In the morning and early afternoon, incremental shadows would be limited to the western portion of the playground. The largest incremental shadow would occur at approximately 3:00 PM, with southern areas of the playground still receiving direct sunlight throughout the day. Shadows cast by existing buildings would cover most of the playground by 4:29 PM, the end of the analysis day. As shown in **Figures F-3a through F-3c**, incremental shadows on March 21/September 21 (representing the beginning and end of the growing season) would move from west to east through the park during the analysis day, primarily affecting the playground equipment and landscaping that is assumed would be located in the north and west of the playground. With the exception of vegetation along the westernmost edge of the playground, all sunlight-sensitive vegetation in the playground would receive six hours or more of sunlight, which is the minimum required during the growing season per *CEQR Technical Manual* guidance. The playground equipment would receive sunlight until approximately 2:00 PM, and it is not expected that incremental shadows from the Proposed Project would significantly alter the public's use of the park or threaten the viability of vegetation or other resources on this analysis day.

On May 6/August 6, project-generated shadows would enter Lewis Playground at 11:40 AM and would travel from west to east until 4:58 PM, when shadows from existing buildings would cover the entire playground in absence of the Proposed Project (see **Figures F-3d through F-3f**). In the morning and early afternoon, incremental shadows would be limited to the western portion of the playground. The largest incremental shadow would occur at approximately 4:00 PM, at which point most of the playground would be shaded by the Proposed Project. On this analysis day, all sunlight-sensitive vegetation in the playground would receive six hours or more of sunlight, which is the minimum required during the growing season per CEQR Technical Manual guidance. The playground equipment would receive sunlight until approximately 2:00 PM, and it is not expected that incremental shadows from the Proposed Project would significantly alter the public's use of the park or threaten the viability of vegetation or other resources on May 6/August 6.

On June 21, project-generated shadows would enter Lewis Playground at 11:50 AM and would travel from west to east throughout the analysis day until the end of the day at 6:01 PM (see **Figures F-3g through F-3i**). Incremental shadows would cover all or almost all of the playground from approximately 3:00 PM to 4:00 PM, at which point the shadows from existing buildings would begin moving across the park from west to east. Similar to March 21/September 21 and May 6/August 6, all vegetation in the playground would receive enough sunlight to enable growth. Again, the playground equipment would receive sunlight until approximately 2:00 PM. Incremental shadows on June 21 are not expected to significantly alter the public's use of the park or threaten the viability of vegetation or other resources.

On December 21, project-generated shadows would enter Lewis Playground at 11:21 AM and would travel from west to east until the end of the analysis day at 2:53 PM (see **Figures F-3j and F-3k**). Incremental shadows coverage would be concentrated in the western and northern portions of the playground, with the largest area of incremental coverage occurring at the end of the analysis day at 2:53 PM. December 21 is outside the growing season, so although the vegetation in the playground would likely not receive six hours of sunlight throughout the day, this would not inhibit the growth of vegetation. Though the play equipment would receive project-generated shadows on December 21, it is likely that use of the space would be diminished during the winter, and the incremental shadows from the Proposed Project are unlikely to significantly affect the utilization or enjoyment of this open space resource on December 21.

Though Lewis Playground would receive incremental shadows from the Proposed Project throughout the year, the Proposed Project is not expected to cause a significant adverse impact to the playground through project-generated incremental shadows. This is due to several factors. First, in the future with the Proposed Project, Lewis Playground would still receive direct sunlight on all four analysis days. All sunlight-sensitive features (the landscaped areas and active play equipment) would receive sunlight during the day, and all sunlight-sensitive vegetation would receive adequate sunlight during the growing season. As such, the Proposed Project would not create a fundamentally different condition. Additionally, according to correspondence with DPR on April 22, 2024, plantings in the reconstructed playground (as shown in **Figure F-5**) are shade-tolerant species and their health should not be impacted by a reduction of sunlight. As such, the Proposed Actions would not result in a significant adverse impact to Lewis Playground due to incremental shadows.

St. John the Baptist Roman Catholic Church

The St. John the Baptist Roman Catholic Church Complex is composed of four buildings on four lots constructed in the late-19th and early-20th centuries on the original campus of St. John's University. Of these four buildings within the S/NR-eligible church complex, the main church building at 333 Hart Street (Block 1592, Lot 100) is the only one containing sunlight-sensitive features. The church building has stained-glass windows along the northern, western, and southern facades that are considered sunlight-sensitive features, per *CEQR Technical Manual* guidance. Given the location of the church relative to the Project Area, only the stained-glass windows on the northern and western facades could receive incremental shadows from the Proposed Project.

As shown in **Table F-3,** incremental shadows from the Proposed Project would reach the St. John the Baptist Roman Catholic Church in the evening for nine minutes (from 5:09 PM to the end of the analysis day at 5:18 PM) on the May 6/August 6 analysis day, and for 19 minutes (from 5:42 PM to the end of the analysis day at 6:01 PM) on the June 21 analysis day. As shown in **Figure F-4a and Figure F-4b,** incremental shadows from the Proposed Project could be cast on the western and southern building facades.

Assessment

The St. John the Baptist Roman Catholic Church building would receive incremental shadows from the Proposed Project on two analysis days (May 6/August 6 and June 21) briefly in the evening. **Figure F-6** shows a 3-d representation of the historic church building looking southeast towards the building's northern and western facades from the direction of the Project Area. Building facades containing stained-glass windows are indicated on the figure. Additionally, the location of the planned future residential development at 71 Lewis Avenue within the historic church building complex is also indicated on the figure. As shown in **Figures F-4a and F-4b** as well as **Figure F-6**, the incremental shadows from the Proposed Project could reach the stained-glass windows on the west side of the church. However, given the minimal duration and area of incremental shadow coverage that could reach the stained-glass windows, it is unlikely that the increase in shadow coverage would noticeably affect the use or enjoyment of these sunlight-sensitive features by the public, per *CEQR Technical Manual* guidance. The stained-glass windows would receive direct sunlight throughout most of the day on all four analysis days, only receiving incremental shadows briefly in the evening. The public experience of the stained-glass windows would be largely unaffected. Given that the incremental shadows from the Proposed Project would not affect the use or enjoyment of sunlight-sensitive features of the St. John the Baptist Roman Catholic Church, the Proposed Project would not cause an adverse shadows impact on this historic resource.

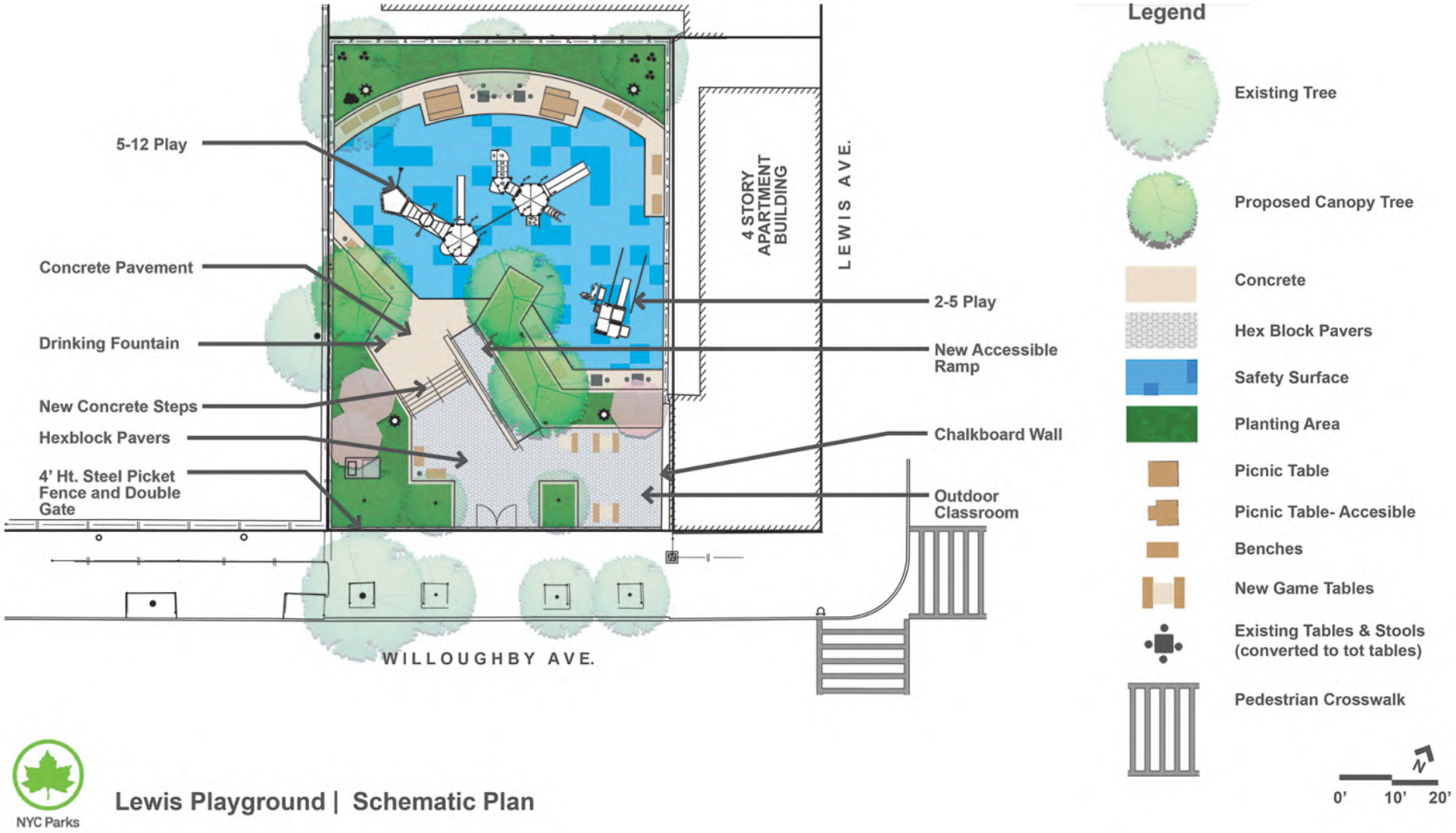
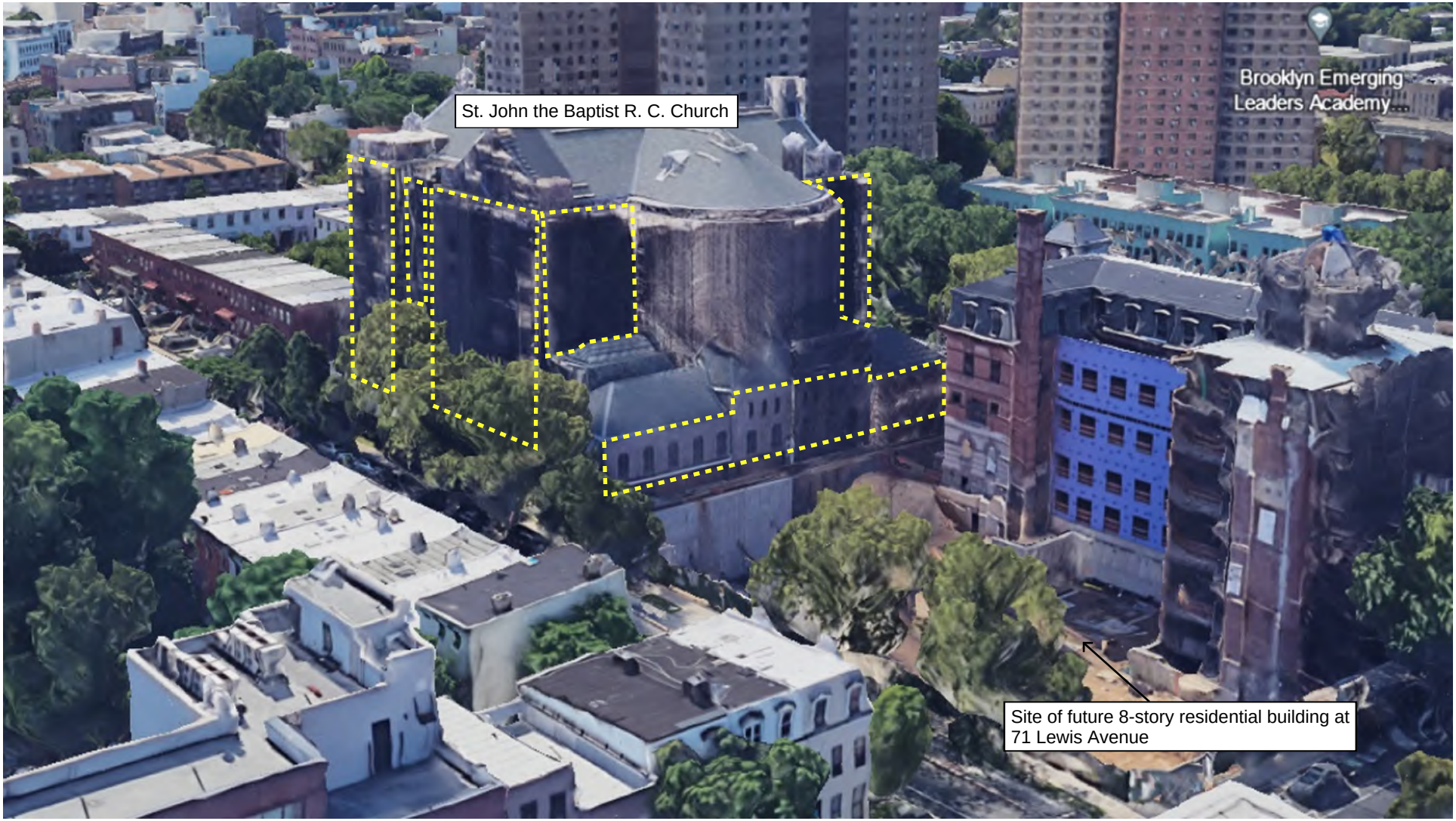


Figure F-5
Lewis Playground Reconstruction - Illustrative Site Plan



Building facade with stained-glass windows (sunlight-sensitive)

Figure F-6
St. John the Baptist Roman Catholic Church - 3-D View

ATTACHMENT G

HISTORIC AND CULTURAL RESOURCES

I. INTRODUCTION

Historic and cultural resources include both architectural and archaeological resources. The *2021 City Environmental Quality Review* (CEQR) *Technical Manual* identifies historic and cultural resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Registers of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHL); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

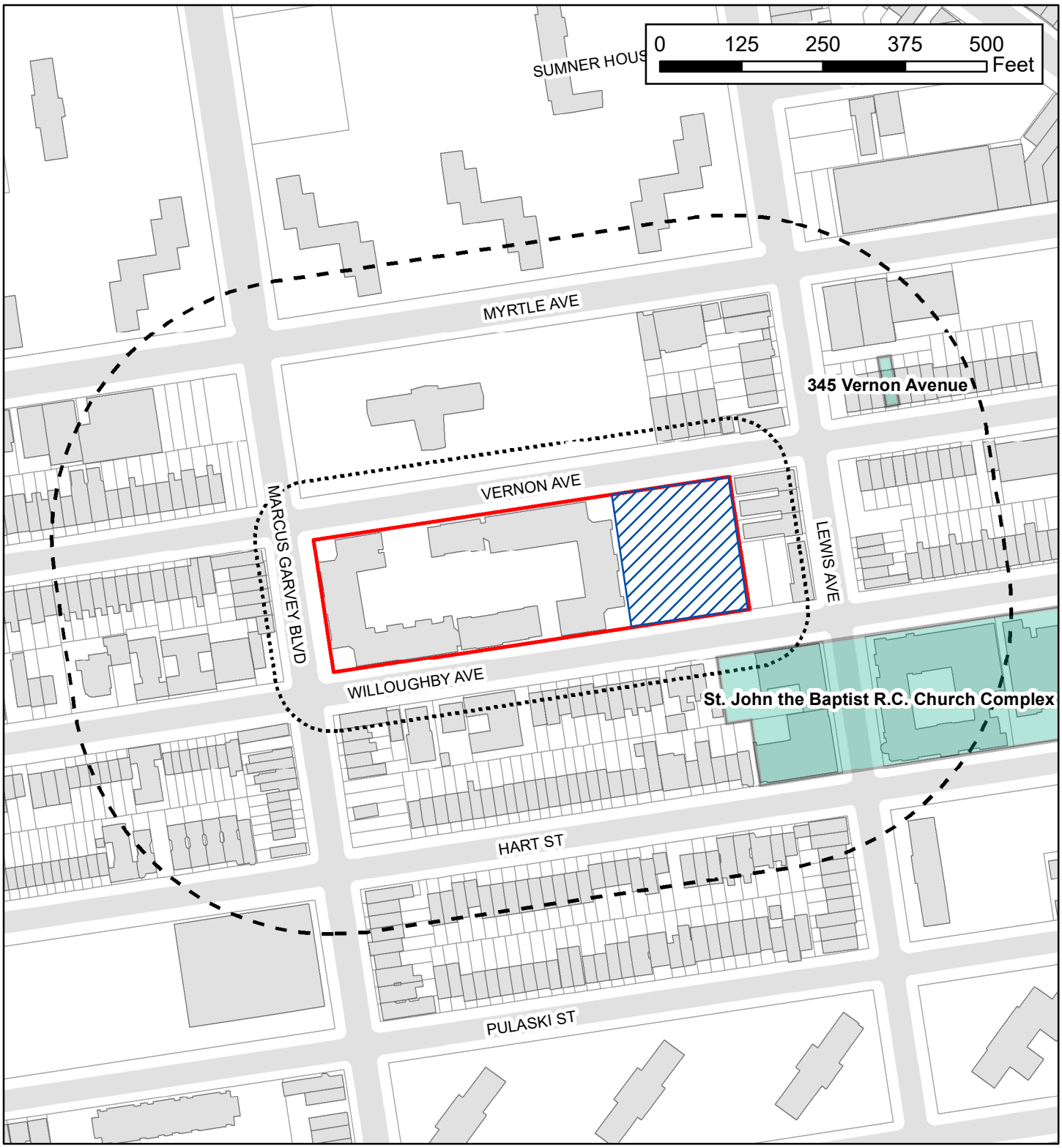
As the Project Area is located in close proximity to two S/NR-eligible historic resources (345 Vernon Avenue and the St. John the Baptist R.C. Church Complex), it is necessary to assess the potential impacts of the Proposed Action on historic architectural resources. According to *CEQR Technical Manual* guidance, impacts on historic architectural resources are considered on those sites affected by a proposed action and in the area surrounding the project area. The historic resources study area for the Proposed Actions is therefore defined as the Project Area (Brooklyn Block 1588, Lot 1) plus an approximate 400-foot radius around the Project Area (refer to **Figure G-1**), which is typically adequate for the assessment of historic architectural resources in terms of physical, visual, and historical relationships.

Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance as compared to No-Action conditions; these are limited to sites that may be developed as a result of a proposed action. As determined by LPC in a letter dated May 2, 2023 (provided in **Appendix 3**), the Project Area does not have any archaeological significance. Therefore, the Proposed Actions would not have the potential to result in any significant adverse archaeological impacts and an archaeological analysis is not warranted. As such, this chapter focuses exclusively on historic architectural resources.

II. ARCHITECTURAL RESOURCES

Criteria & Regulations

Once the study area was determined, an inventory of officially recognized architectural resources was compiled. Criteria for listing on the National Register are in the Code of Federal Regulations, Title 36, Part 63. As recommended in the 2021 *CEQR Technical Manual*, Chapter 9, Section 160, LPC has adopted these criteria for use in identifying National Register listed and eligible architectural resources for CEQR review. Following these criteria, districts, sites, buildings, structures, and objects are eligible for the National Register if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and: (1) are associated with events that have made a significant contribution to the broad patterns of history (Criterion A); (2) are associated with significant people (Criterion B); (3) embody



Legend

- Project Area
- Proposed Development Site
- 90-Foot Radius
- 400-Foot Study Area
- Existing Building
- S/NR-Eligible Resource

distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); or (4) may yield [archaeological] information important in prehistory or history. Properties younger than 50 years of age are ordinarily not eligible, unless they have achieved exceptional significance. Official determinations of eligibility are made by the New York State Office of Parks, Recreation & Historic Preservation (OPRHP).

In addition, LPC designates historically significant properties in the City as NYCLs and/or Historic Districts, following the criteria provided in the Local Laws of the City of New York, New York City Charter, Administrative Code, Title 25, Chapter 3. Buildings, properties, or objects are eligible for landmark status when a part is at least 30 years old. Landmarks have a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the city, state, or nation. There are four types of NYCLs: individual landmarks, interior landmarks, scenic landmarks, and historic districts.

Existing Conditions

Project Area

In a letter dated May 2, 2023 (provided in **Appendix 3**), LPC determined that there are no designated or eligible historic architectural resources in the Project Area.

400-Foot Study Area

As shown in **Figure G-1**, there are two historic architectural resources located within the 400-foot study area surrounding the Project Area: 345 Vernon Avenue and St. John the Baptist R.C. Church Complex. A brief description of each resource is presented below, and photos are provided in **Figure G-2**.

345 VERNON AVENUE (S/NR-ELIGIBLE)

The S/NR-eligible residential building at 345 Vernon Avenue (Block 1586, Lot 69) was constructed in 1899 as part of a group of eight rowhouses, grouped into pairs, of which seven still stand. As shown in **Figure G-2**, the building is three stories tall with a raised basement and stoop, and is 20 feet wide with three bays in the upper floors. Similar to its neighbors, the building is clad in red brick with intricate designs and stone embellishments, particularly around the rectangular windows and entrance. Its raised stoop contains iron railings and the shallow front yard is surrounded by a stylized iron fence. The first floor window and entrance are topped with heavy projecting stone lintels, and there are projecting brick pilasters on both ends of the façade and in-between windows, giving the rowhouse an added verticality. The building is topped with an elaborately detailed projecting cornice.

ST. JOHN THE BAPTIST R.C. CHURCH COMPLEX (S/NR-ELIGIBLE)

The St. John the Baptist Roman Catholic (R.C.) Church Complex is comprised of four buildings on four lots constructed in the late-19th and early-20th centuries on the original campus of St. John's University. The main church building at 333 Hart Street (Block 1592, Lot 100) was constructed in 1888-1894 to the designs of prolific church architect Patrick C. Keely. The monumental, cathedral-scale church features brown rock-face granite ashlar walls, round-arched windows, and a slate roof (see **Figure G-2**). Embellished with Renaissance Revival decorative elements, including a pediment metal cornice with rosettes, a large central rose window, and a pair of square towers, the church is considered Keely's master work.



1. S/NR-eligible building at 345 Vernon Street (to the left), along with 347-351 Vernon Street to the right.



2. S/NR-eligible St. John the Baptist R.C. Church at 333 Hart Street.



3. S/NR-eligible St. John the Baptist school building at 80 Lewis Avenue.



4. S/NR-eligible St. John the Baptist school building at 82 Lewis Avenue.



5. S/NR-eligible St. John the Baptist former parish center at 75 Lewis Avenue.



6. Portion of the S/NR-eligible St. John the Baptist former parish center currently under construction

To the west at 75 Lewis Avenue (Block 1592, Lot 1) is the former St. John's University Parish Center. Built in 1889, the building features elements of the Italian Renaissance style, including rusticated stonework between the window and door openings of the first floor, smooth ashlar on the upper stories, regular fenestration, and round-arched windows with keystones (see **Figure G-2**). The two-story central entrance pavilion fronting Lewis Avenue is notable for its extensive carved panels above the entrances and below the second-story windows, as well as its denticulated cornice. The building features intricate brickwork, a multicolored slate mansard roof, turrets and towers, dormers, bays, bows, and a domed cupola. It was eventually expanded into two new buildings across Lewis Avenue. As detailed further in "The Future without the Proposed Actions" section below, the former parish center is currently being converted into a residential building.

In 1903, a new school building was constructed on the campus at 80 Lewis Avenue (Block 1591, Lot 40). As shown in **Figure G-2**, the five-story Renaissance Revival-style building is clad in buff brick, and features steps leading up to a Gothic-style arched entrance on Lewis Avenue flanked by niches which once held ecclesial sculptures. In 1926, another new school building was constructed to the north at 82 Lewis Avenue (Block 1591, Lot 45). The five-story Collegiate Gothic-style building is also clad in buff brick, with steps up to the recessed, round-arched main entrance on Lewis Avenue, which is topped with the inscription "St. John's Parochial School" (see **Figure G-2**).

The Future without the Proposed Actions (No-Action Condition)

Under No-Action conditions, the status of historic resources could change. S/NR-eligible architectural resources could be listed on the Registers, and properties found eligible for consideration for designation as NYCLs could be calendared and/or designated. Changes to the historic resources identified above or to their settings could also occur irrespective of the Proposed Action. Future projects could affect the settings of architectural resources. It is possible that some architectural resources in the area surrounding the Project Area could deteriorate, while others could be restored. In addition, future projects could accidentally damage architectural resources through adjacent construction.

Properties that are designated NYCLs are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition of those resources can occur. All properties within LPC-designated historic districts also require LPC permit and approval prior to new construction, additions, enlargements, or demolition. The owners of a property may work with LPC to modify their plans to make them appropriate. Properties that have been calendared for consideration for designation as NYCLs are also afforded a measure of protection insofar as, due to their calendared status, permits may not be issued by the New York City Department of Buildings (DOB) for any structural alteration to the buildings for any work requiring a building permit, without at least 40 days prior notice being given to LPC. During the 40-day period, LPC has the opportunity to consider the case and, if it so chooses, schedule a hearing and move forward with designation.

The New York City Building Code provides some measure of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Additional protective measures apply to designated NYCLs and S/NR-listed historic buildings located within 90 linear feet of a proposed construction site. For these structures, the DOB's Technical Policy and Procedure Notice (TPPN) #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent NYCL-designated or S/NR-listed historic resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

Additionally, historic resources that are listed on the S/NR or that have been found eligible for listing are given a measure of protection from the effects of federally-sponsored or federally-assisted projects under Section 106 of the National Historic Preservation Act, and are similarly protected against impacts resulting from state-sponsored or state-assisted projects under the New York State Historic Preservation Act. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. Private property owners using private funds can, however, alter or demolish their S/NR-listed or S/NR-eligible properties without such a review process.

Anticipated Developments in the No-Action Condition

PROJECT AREA

As detailed further in **Attachment A, "Project Description,"** absent approval of the Proposed Actions, the existing residential and mixed-use buildings and surface parking lot would remain at the Project Area, and no new development or changes to the existing uses are expected to occur.

400-FOOT STUDY AREA

As detailed in **Attachment C, "Land Use, Zoning, & Public Policy,"** there are three known projects anticipated to be completed in the 400-foot study area in the future without the Proposed Actions. A four-story residential building is currently under construction at 315 Hart Street, and a new mixed residential/commercial building is slated for completion at 1100 Myrtle Avenue. Additionally, the S/NR-eligible building at 75 Lewis Avenue (the former parish center within the St. John the Baptist R.C. Church Complex detailed above) is being converted into a residential structure. As shown in **Figure G-2**, the Willoughby Street wing of the structure was demolished, and is currently being rebuilt. The remainder of the building is undergoing interior renovations and exterior rehabilitation. When complete, the former parish center will contain 205 new rental apartments, which will provide revenue to begin restorations of the adjacent S/NR-eligible church building.

The Future with the Proposed Actions (With-Action Condition)

According to the 2021 *CEQR Technical Manual*, generally, if a project would affect those characteristics that make a historic resource eligible for NYCL designation or S/NR listing, this could be a significant adverse impact. This section assesses the Proposed Actions' potential to result in significant adverse impacts on identified historic architectural resources in the study area, including impacts resulting from construction of the Proposed Project, project-generated shadows, or other indirect effects on existing historic resources in the study area.

The Proposed Actions were assessed in accordance with guidance established in the *CEQR Technical Manual* (Chapter 9, Part 420) to determine (a) whether there would be a physical change to any designated or listed property as a result of the Proposed Actions; (b) whether there would be a physical change to the setting of any designated or listed resource, such as context or visual prominence, as a result of the Proposed Actions; and (c) if so, whether the change is likely to diminish the qualities of the resource that make it important. Whereas this attachment focuses specifically on the Proposed Actions' effects on the visual context of historic resources, an assessment of the Proposed Actions' effects on the visual character of the study area in general is provided separately in **Attachment H, "Urban Design & Visual Resources."**

As detailed in **Attachment A, "Project Description,"** the Proposed Action would facilitate the development of a new 14-story residential building with approximately 292 Affordable Independent

Residences for Seniors (AIRS) units and an approximately 20,400 gsf underground parking garage, replacing the existing surface parking lot in the Project Area (the "Proposed Development Site" in **Figure G-1**). The four existing buildings on the site would remain unchanged in the future with the Proposed Actions. The proposed new building would rise to a base height of approximately 103 feet and a roof height of approximately 143 feet (155-foot bulkhead height), with 15-foot setbacks above the seventh floor along Vernon and Willoughby Avenues. In addition to construction of a new building, the Proposed Project would also involve multiple improvements throughout the Project Area, including upgraded landscaping, new courtyard furniture, and external upgrades to existing building entrances, stairways, and railings.

Direct (Physical) Impacts

Historic resources can be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. For example, alterations, such as the addition of a new wing to a historic building or replacement of the resource's entrance, could result in significant adverse impacts, depending on the design. Direct effects also include changes to an architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.

The Proposed Actions are site-specific, and, as discussed above, the Project Area does not contain any designated or eligible historic resources. Therefore, the Proposed Actions would not result in any direct impacts to historic architectural resources.

Indirect (Contextual) Impacts

Contextual impacts may occur to architectural resources under certain conditions. According to the *CEQR Technical Manual*, possible impacts to architectural resources may include isolation of the property from, or alteration of, its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. Significant indirect impacts can occur if a project would cause a change in the quality of a property that qualifies it for listing on the S/NR or for designation as a NYCL.

The Proposed Actions would not result in significant adverse indirect impacts on historic architectural resources. The Proposed Project would not significantly alter the context or setting of the building at 345 Vernon Avenue or St. John the Baptist R.C. Church Complex as compared to No-Action conditions. As detailed above, the Proposed Actions would facilitate the development of a 14-story infill residential building in the Project Area. Although the top of the Proposed Project would be visible when looking west towards 345 Vernon Avenue and when looking northwest towards the St. John the Baptist R.C. Church Complex on Lewis Avenue and Hart Street, this would not be significant or adverse. The study area is a dense urban environment with multiple existing mid-rise buildings that currently form the backdrop for these eligible historic resources. The Proposed Project would not substantially change the visual setting of the surrounding neighborhood so as to affect those characteristics that make either 345 Vernon Avenue or the Church Complex eligible for listing on the S/NR.

Additionally, in the future with the Proposed Actions, no incompatible visual, audible, or atmospheric elements would be introduced to any historic resource's setting. The Proposed Project would not alter the relationship of any identified historic architectural resources to the streetscape, as all streets in the study area would remain open and all historic resources' relationships to the street would remain unchanged in the future with the Proposed Actions. The Proposed Project would not eliminate or screen public views of any historic architectural resources, which would remain visible in view corridors on adjacent public streets and sidewalks. No primary facades, significant architectural ornamentation, or

notable features of the buildings at 345 Vernon Avenue or within St. John the Baptist R.C. Church Complex would be obstructed by the Proposed Project.

The Proposed Actions would not result in development that would diminish the qualities that make the S/NR-eligible 345 Vernon Avenue or St. John the Baptist R.C. Church Complex historically and architecturally significant. As such, the Proposed Actions would not result in any significant adverse indirect or contextual impacts on historic architectural resources.

Construction-Related Impacts

Any new construction taking place within historic districts or adjacent to individual landmarks has the potential to cause damage to those historic resources from ground-borne construction vibrations. As noted above, the New York City Building Code provides some measure of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Additional protective measures apply to LPC-designated and S/NR-listed historic resources located within 90 linear feet of a proposed construction site. For these structures, DOB's TPPN #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

As shown in **Figure G-1**, the Project Area is located within 90 feet of St. John the Baptist R.C. Church Complex. However, as the complex is not listed on the S/NR or designated a NYCL, construction of the Proposed Project would not be subject to TPPN #10/88. Nevertheless, in order to avoid any potential impacts to the S/NR-eligible resource during construction of the Proposed Project, the Applicant will prepare a construction protection plan (CPP) pursuant to DOB's TPPN, taking into account the guidance provided in *CEQR Technical Manual*, Chapter 9, Section 522, "Construction Protection Plan." The CPP would be provided to LPC for review and approval prior to any work in the Project Area. As such, no construction-related impacts on historic resources would occur as a result of the Proposed Actions.

Shadows Impacts

The Proposed Project would not result in any significant adverse shadows impacts on historic resources. As detailed further in **Attachment F, "Shadows,"** the Proposed Project would result in incremental shadow on the S/NR-eligible St. John the Baptist Roman Catholic Church, which contains stained-glass windows. The analysis determined that incremental shadows from the Proposed Project cast on this sunlight-sensitive historic resource would generally be limited in duration and/or size, and would not affect public use or enjoyment.

ATTACHMENT H

URBAN DESIGN & VISUAL RESOURCES

I. INTRODUCTION

This attachment considers the potential effects of the Proposed Actions on urban design and visual resources. As defined in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual*, urban design is the totality of elements that shape and may affect a pedestrian's experience of public space. Elements such as streets, buildings, visual resources, open space, natural resources, wind, and sunlight play an important role in the pedestrian experience. The Applicant is seeking approval for discretionary actions (the "Proposed Actions") including a zoning map amendment, zoning text amendment, and CPC special permit, that would facilitate infill development at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area"), in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. The Proposed Actions would increase the allowable bulk and maximum building height in the Project Area, and would result in new development that would differ from what is currently permitted as-of-right.

The Proposed Actions would enable the Applicant to construct a new infill development in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area, and is currently occupied by a surface parking lot. The Proposed Project would consist of a new 14-story (143-foot roof height, 155-foot bulkhead height) approximately 192,519 gross square foot (gsf) affordable senior housing development with 292 Affordable Independent Residences for Seniors (AIRS) units and 63 accessory parking spaces (approximately 20,400 sf) located in a single cellar level.

The Project Area is currently occupied by four buildings totaling approximately 313,540 gross square feet (gsf), containing a mix of 267 income restricted dwelling units (DUs), approximately 6,642 gsf of ground floor commercial retail, and approximately 5,339 gsf of community facility space for social services offices. These existing buildings would remain in the future with the Proposed Actions.

In absence of the Proposed Actions, it is anticipated that the Proposed Development Site would not be improved and the existing conditions, including the surface parking lot, would remain. In accordance with *CEQR Technical Manual* guidance, the urban design and visual resources assessment focuses on the components of the Proposed Actions that may have the potential to alter the arrangement, appearance, and functionality of the built and natural environment for the pedestrian in the study area as compared to the No-Action Condition.

II. METHODOLOGY

Together, the urban design components and visual resources of an area define the distinctive identity of a neighborhood. In an urban design assessment under CEQR, one considers whether and to what degree a project may change the visual experience of a pedestrian in the study area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment from the pedestrian point of view. These components include

building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. The concept of bulk is created by the size of a building and the way it is massed on a site. Height, length, and width define a building's size; volume, shape, setbacks, lot coverage, and density define its mass. A visual resources analysis identifies and assesses the effects of the proposed action on the study area's visual resources, which are its unique, or important public view corridors, vistas, or natural or built features. Waterfront views, public parks, landmarked structures, landmarked districts, and natural resources are examples of visual resources. As per the guidance of CEQR, only views of visual resources from public and publicly-accessible locations will be assessed. The analysis in this attachment addresses each of these characteristics of existing conditions and the future without and with the Proposed Actions for the year 2027.

In accordance with the *CEQR Technical Manual*, this assessment considers the effects of the Proposed Actions under the RWCDS on the following elements that play an important role in the pedestrian's experience of public space:

- ***Streets*** – the arrangement and orientation of streets define location, flow of activity, street views, and create blocks on which buildings and open spaces are arranged. Other elements including sidewalks, plantings, streetlights, curb cuts, and street furniture also contribute to an area's streetscape.
- ***Buildings*** – building size, shape, pedestrian and vehicular entrances, lot coverage and orientation to the street are important urban design components that define the appearance of the built environment.
- ***Open Space*** – open space consists of public and private areas that do not include structures, such as parks and other landscaped areas, cemeteries, and parking lots.
- ***Natural Features*** – natural features include vegetation, geologic and aquatic features that are natural to the area.
- ***View Corridors and Visual Resources*** – visual resources include significant natural or built features, such as important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings.
- ***Wind*** – Channelized wind pressure from between tall buildings and down-washed wind pressure from parallel tall buildings may cause winds that may jeopardize pedestrian comfort and safety.

As the Proposed Actions would result in physical changes within the Project Area beyond the bulk and form currently permitted as-of-right, it has the potential to result in development that could change a pedestrian's experience of the Project Area. Therefore, an assessment of the Proposed Actions' potential effects on urban design and visual resources is provided. As described in **Attachment A, "Project Description,"** the Proposed Project represents the RWCDS for the Proposed Actions in terms of height, bulk, and setback. The urban design analysis presented below follows the guidance of the *CEQR Technical Manual.*

Per *CEQR Technical Manual* guidance, a preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including projects that permit the modification of yard, height, and setback requirements, and projects that result in an increase in built floor area beyond what would be allowed "as-of-right" or in the future without the proposed project. Detailed analyses are generally needed for all area-wide rezonings that include an increase in permitted floor area or changes in height and setback requirements, general large-scale developments, or projects that would result in substantial changes to a historic district

or building. Although the Proposed Actions do involve a CPC special permit for large-scale general development, given the small size and scale of the Proposed Project relative to the surrounding neighborhood context (i.e., the Proposed Actions would result in the development of a single building on one lot), a detailed analysis of urban design and visual resources is not appropriate for this project. Accordingly, a preliminary analysis is included below, starting in **Section III**.

Pedestrian Wind Conditions Screening

As per Section 230 of the *CEQR Technical Manual*, projects involving multiple, tall buildings at or in close proximity to the waterfront may result in an exacerbation of wind conditions due to "downwash" effects that may affect the pedestrian experience in the area. There are no bodies of water in proximity to the Project Area. The Proposed Actions are not expected to result in the construction of unusually tall buildings. Under the Proposed R7A district with MIH, the maximum roof height in the Project Area would be approximately 95 feet (assuming a qualifying ground floor under Quality Housing regulations, and not including mechanical bulkhead), which is not significantly taller than other buildings in the area. Under the proposed CPC special permit, the height of the Proposed Project would be greater than the maximum allowed under the proposed zoning, at 143 feet (roof height; 155-feet bulkhead height). This would still not be significantly taller than nearby buildings, and would not result in the conditions outlined in Section 230 of the *CEQR Technical Manual.* Therefore, a study of wind conditions and their effect on pedestrian level safety is not warranted.

Study Area Definition

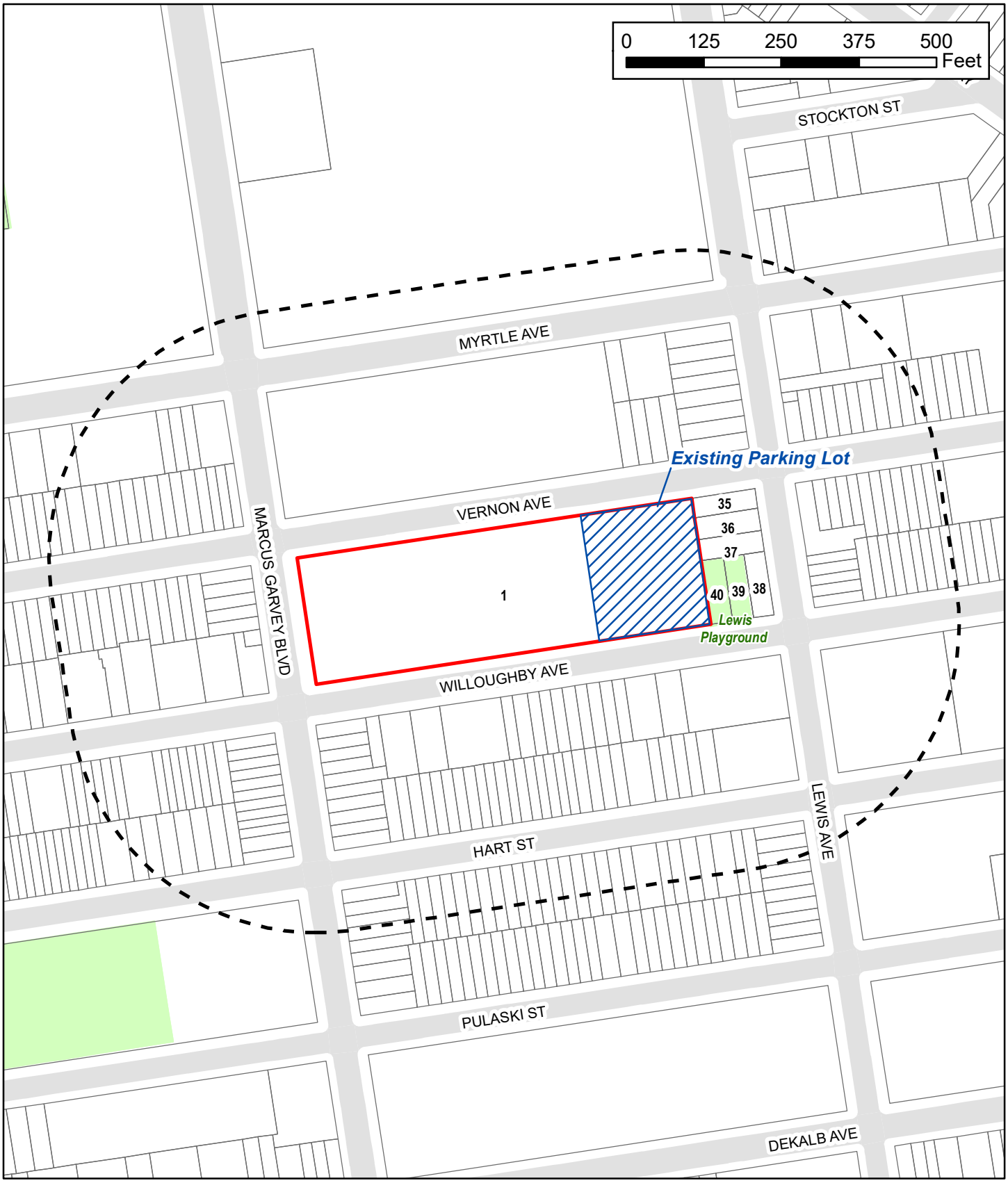
The *CEQR Technical Manual* defines the urban design study area as the area "where the project may influence land use patterns and the built environment, and is generally consistent with [the study area] used for the land use analysis." The urban design study area is divided into the Project Area (where urban design effects of the proposed action are direct), also referred to as the primary study area, and a secondary study area (where the effects of the proposed action are indirect). As stated above, the Proposed Actions would apply to the Project Area: Brooklyn Block 1588, Lot 1. As discussed in **Attachment C**, **"Land Use, Zoning, and Public Policy,"** the secondary study area for this analysis has been identified as a 400-foot radius from the primary study area, with that boundary extended to include lots with buildings that fall substantially within the 400-foot radius. This is considered the area within which land use and the built environment have the potential to be indirectly affected by the Proposed Actions. As shown in **Figure H-1**, the secondary study area is bounded to the north by the midblock between Myrtle Avenue and Park Avenue, to the east by the midblock between Lewis Avenue and Stuyvesant Avenue, to the south by the midblock between Hart Street and Pulaski Street, and to the west by the midblock between Marcus Garvey Blvd and Throop Avenue.

III. PRELIMINARY ASSESSMENT

Existing Conditions

As noted above, **Figure H-1** shows both the primary (i.e., Project Area) and 400-foot secondary study areas. **Figure H-2** provides a photograph key for the approximate locations of where each of the photographs included in **Figures H-3a** to **Figure H-3f** were taken.

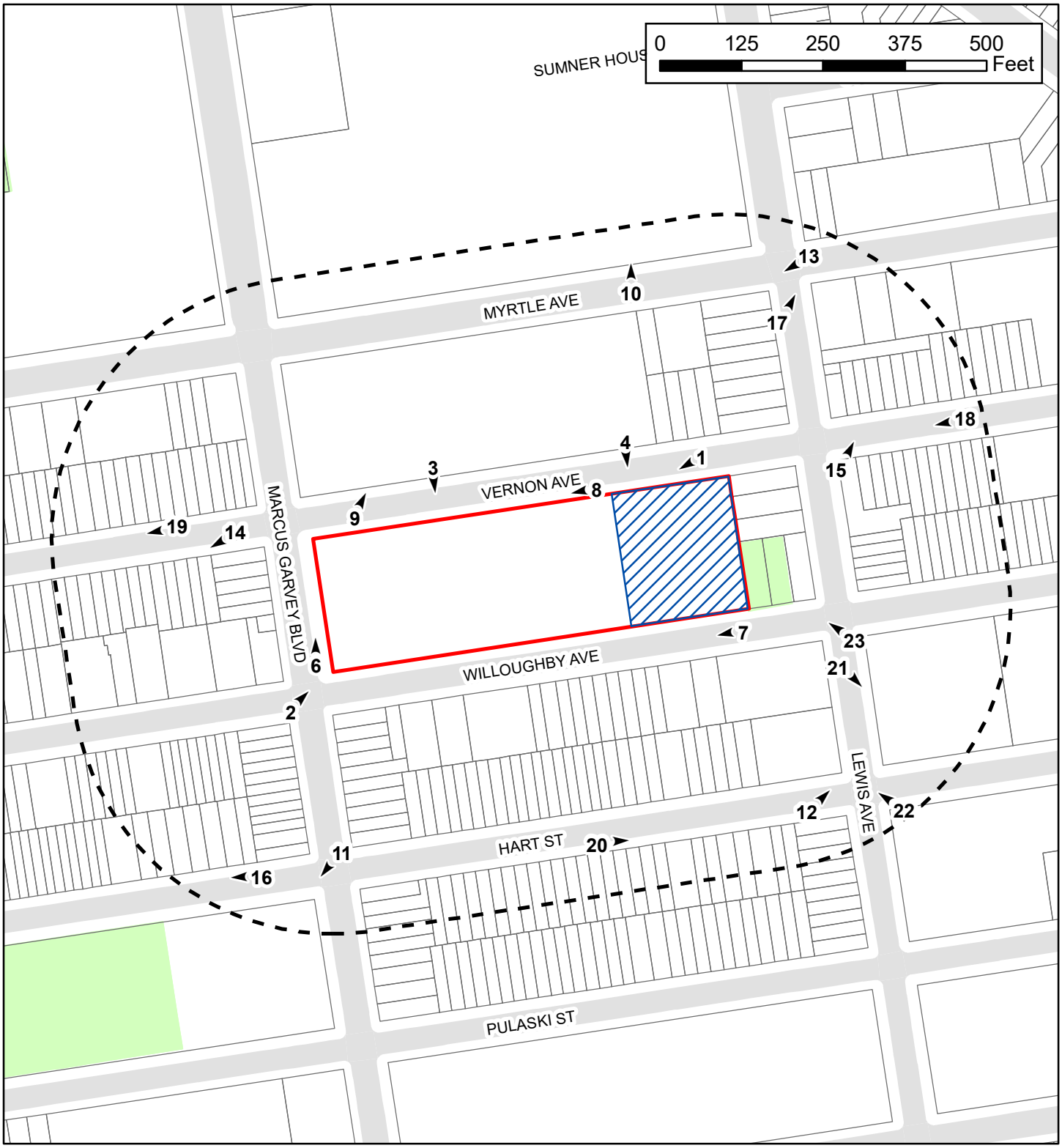
Figure H-1
Urban Design Study Areas



Legend

Proposed Development Site | 1 Tax Lot | Project Area (Primary Study Area) | 400-foot Radius (Secondary Study Area)

Urban Design Photo Key Map



Legend

- Proposed Development Site
- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- 1 ➤ Photo Location (refer to Figures H-3a through H-3f)



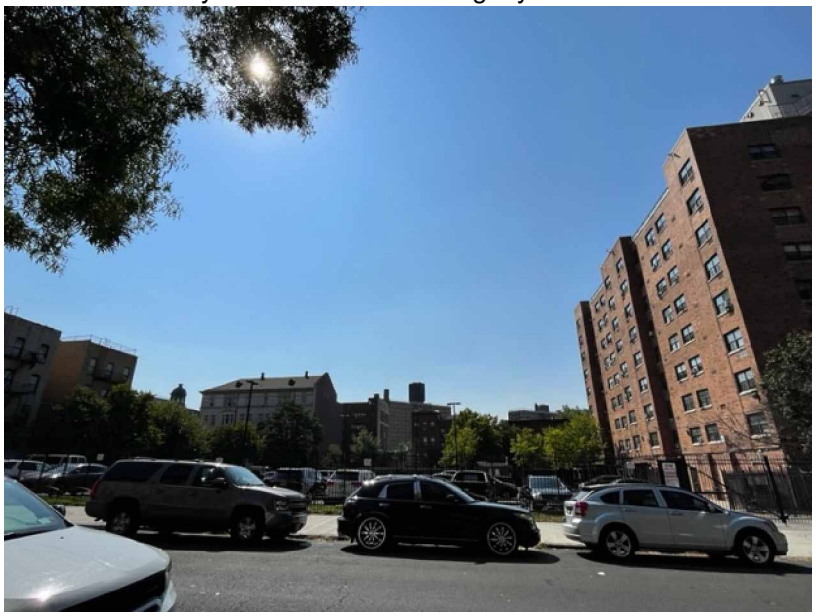
1. Looking west along Vernon Avenue, Proposed Development Site at left



2. View of the Project Area looking northeast from the intersection of Marcus Garvey Boulevard and Willoughby Avenue



3. View of the Project Area looking south across Vernon Avenue



4. View of the Proposed Development Site looking south across Vernon Avenue



5. Looking east along Willoughby Avenue, Project Area at left



6. Looking north along Marcus Garvey Boulevard at the corner of Willoughby Avenue, Project Area at right



7. Looking west along Willoughby Avenue, Proposed Development Site at right



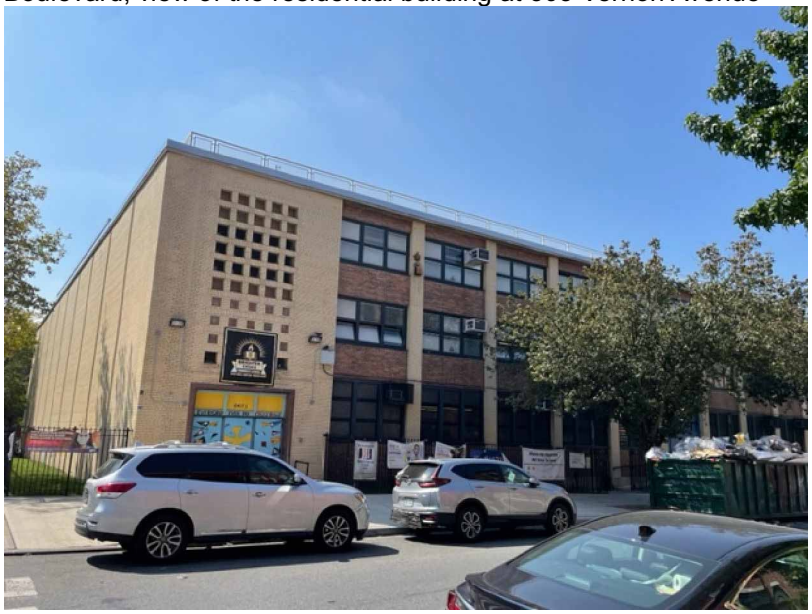
8. Looking west along Vernon Avenue, Project Area at left



9. Looking north across Vernon Avenue near Marcus Garvey Boulevard, view of the residential building at 303 Vernon Avenue



10. View of the NYCHA Sumner Houses, looking north across Myrtle Avenue near Lewis Avenue



11. Looking southwest towards the Brighter Choice school at the intersection of Marcus Garvey Boulevard and Hart Street



12. Looking east along Hart Street across Lewis Avenue, view of a portion of the St. John the Baptist church complex



13. Looking west across the intersection of Myrtle and Lewis Avenues



14. View of residential buildings along Vernon Avenue west of Marcus Garvey Boulevard



15. View of residential buildings along Vernon Avenue east of Lewis Avenue



16. Looking west along Hart Street from Marcus Garvey Boulevard



17. Looking northeast across the intersection of Myrtle and Lewis Avenues, view of the elevated MTA structure



18. View of residential streetscape along Vernon Avenue east of Lewis Avenue



19. View of residential streetscape along Vernon Avenue west of Marcus Garvey Boulevard



20. Looking east along Hart Street at midblock between Marcus Garvey Boulevard and Lewis Avenue



21. View of the S/NR-eligible St. John the Baptist Roman Catholic Church complex looking east across Lewis Avenue



22. View of the S/NR-eligible school buildings that are part of the St. John the Baptist complex, looking northwest across Lewis Avenue



23. Looking north across the intersection of Willoughby Avenue and Lewis Avenue, Lewis Playground is visible at the left

Urban Design

Primary Study Area

The 130,000 sf primary study area is coterminous with the Project Area, which comprises Brooklyn Block 1588, Lot 1, bounded by Vernon Avenue to the north, Marcus Garvey Boulevard to the west, and Willoughby Avenue to the south. The primary study area contains the Proposed Development Site, which comprises an approximately 30,000 sf eastern portion of the primary study area with a northern frontage on Vernon Avenue, a southern frontage on Willoughby Avenue, and an eastern frontage along Block 1588, Lots 35, 36, 37, and 40. As shown in **Figure H-1**, Lot 1 is a rectangular-shaped lot with frontages on three bounding streets and four lots to the east.

Building Bulk, Use, Type, and Arrangement

Brooklyn Block 1588, Lot 1 comprises 130,000 sf at 109 Marcus Garvey Boulevard with approximately 200 feet of frontage along Marcus Garvey Boulevard and 650 feet of frontage along both Willoughby Avenue and Vernon Avenue. It currently contains four predominantly residential buildings containing a mix of residential, commercial (local retail) and community facility uses. The existing buildings range from three to eight stories tall, and contain a total of approximately 313,540 gsf, which includes 267 income-restricted DUs, approximately 6,642 gsf of ground floor commercial uses, and approximately 5,339 gsf of community facility space for social services offices. The total built FAR within the Project Area is approximately 2.19. As shown in **Figure H-3a**, the buildings are set back approximately five feet from the lot line along the Myrtle and Willoughby Avenue frontages, forming a continuous streetwall behind a fenced and landscaped area. The buildings are built out to the lot line along Marcus Garvey Boulevard. Ground floor commercial uses are located on Marcus Garvey Boulevard frontage while residential and community facility uses are located on all three frontages. As shown in **Figure H-3a,** the eastern portion of the Project Area is occupied by a surface parking lot with approximately 95 accessory residential parking spaces, which is accessible via an existing curb cut along Vernon Avenue. The parking lot is bordered by landscaped strips approximately five feet wide at the lot lines (refer to **Figure H-3a**).

Block Form, Street Pattern, and Street Hierarchy

Vernon Avenue is a one-way, west-bound local street with on-street parking on both sides and no lane markings. Vernon Avenue is considered under the Zoning Resolution (ZR) to be a "narrow street" with a mapped width of 70 feet. Vernon Avenue is approximately one mile long, connecting Broadway in the east to Nostrand Avenue in the west. Marcus Garvey Boulevard is a one-way, south-bound minor arterial street with two moving lanes and on-street parking on both sides. Marcus Garvey Boulevard is considered under the ZR to be a narrow street with a mapped width of 70 feet. Marcus Garvey Boulevard is just under 1.5 miles long, connecting Broadway in the north to Fulton Street in the south. Willoughby Avenue is a one-way, east-bound local street with a single moving vehicle lane, a marked bike lane along the north side, and on-street parking on both sides. Willoughby Avenue is considered under the ZR to be a narrow street with a mapped width of 70 feet. Willoughby Avenue is approximately 4.5 miles long and connects Ridgewood, Queens, in the east to Downtown Brooklyn, Brooklyn, in the west. Refer to **Figure H-3b** for photos of streets in the Project Area.

Streetscape Elements

Streetscape elements along the primary study area's street frontages include several street trees, parking signage, and streetlamps. As shown in **Figure H-3b,** the sidewalks on Willoughby Avenue and Vernon Avenue are narrow with landscaped areas adjacent to the Project Area buildings while the sidewalk on Marcus Garvey Boulevard is wide and does not contain landscaped areas adjacent to the Project Area (refer to **Figure H-3b**). The sidewalks along Willoughby Avenue and Vernon Avenue are approximately 12 feet wide while the sidewalk along Marcus Garvey Boulevard is approximately 20 feet wide.

Topography, Natural Features and Open Space

The topography of the primary study area is generally flat. There are no natural features or open spaces within the Project Area, though Lewis Playground is directly adjacent to the Project Area, as discussed below. The Project Area contains a few trees as well as landscaped areas, but these areas are inaccessible to the public.

Secondary Study Area

As discussed above, the secondary study area has been defined as the area within an approximate 400-foot radius of the primary study area. As shown in **Figure H-1**, it is generally bound by Myrtle Avenue to the north, the midblock of Marcus Garvey Boulevard and Throop Avenue to the west, the middle of the block between Hart Street and Pulaski Street to the south, and the midblock of Lewis Avenue and Stuyvesant Avenue to the east.

Building Bulk, Use, Type, and Arrangement

As described in **Attachment C, "Land Use, Zoning, and Public Policy,"** residential uses are the most prevalent land use and are distributed throughout the secondary study area. Residential uses are varied and include attached and detached two- and three-story single- to two-family homes that occupy narrow rectangular-shaped lots, as well as taller, higher-density four- to six-story multi-family walkup buildings that occupy larger sites. Higher-density multi-family residential elevator buildings are generally located closer to Myrtle Avenue, Marcus Garvey Boulevard, and Lewis Avenue, and one- and two-family homes characterize the mid-block areas. Mixed commercial and residential uses with ground floor retail are concentrated along Marcus Garvey Boulevard and Lewis Avenue and generally range between one and four stories in height. Commercial only buildings are located on Myrtle Avenue.

Multi-family elevator buildings are located throughout the secondary study area including 303 Vernon Avenue, a New York City Housing Authority (NYCHA) complex, which is located directly north of the Project Area. Other notable NYCHA complexes containing multi-family elevator buildings are located directly outside the secondary study area. They include the Sumner Houses, which is partially located within the secondary study area north of Myrtle Avenue, and the Roosevelt I and II Houses, which is partially located within the secondary study area on the corner of Hart Street and Lewis Avenue, but primarily located south of Pulaski Street. As shown in **Figure H-3c,** these taller buildings are visible from the bounding streets within the secondary study area.

There are several public facilities and institutions within the secondary study area as well. They are located along Myrtle Avenue, Willoughby Avenue, and Hart Street. The southwestern-most portion of the

secondary study area contains a portion of the Brighter Choice Community School, located at 280 Hart Street (Block 1773, Lot 14), which occupies the entire street frontage on Marcus Garvey Boulevard between Hart Street and Pulaski Street. As shown in **Figure H-3c, Photo #11**, the entrance to the school can be seen from the corner of Hart Street and Marcus Garvey Boulevard. The secondary study area also includes the complex for the St. John the Baptist Roman Catholic Church, which is located at 333 Hart Street (Block 1592, Lot 100). As shown in **Figure H-3c, Photo #12**, the church's main entrance is located on Willoughby Street and can be seen from the street within the secondary study area. The church has a stone façade with stained glass windows. The church is set back from the street and fenced off.

As shown in **Figure H-4**, most buildings within the study area contain five or fewer stories with larger lots containing buildings exceeding five stories. As shown in **Figure H-3d,** narrower streets typically contain lower-density buildings of five or fewer stories. Higher-density buildings greater than five stories in height are located on the NYCHA campuses discussed above as well as along Myrtle Avenue.

Most buildings are oriented to the street, and are built at the street line, or include shallow front yards with stoops and patios. As shown in **Figure H-5**, various built FARs are scattered throughout the study area, and range from 1.0 to 4.0 FAR, with five buildings having FARs greater than 4.01 including the buildings located at 1090 Myrtle Avenue (Block 1586, Lot 8), 1066 Myrtle Avenue (Block 1585, Lot 31), 75 Lewis Avenue (Block 1592, Lot 1), 988 Myrtle Avenue (Block 1757, Lot 25), and 82 Lewis Avenue (Block 1591, Lot 45), which has the highest built FAR of 5.72.

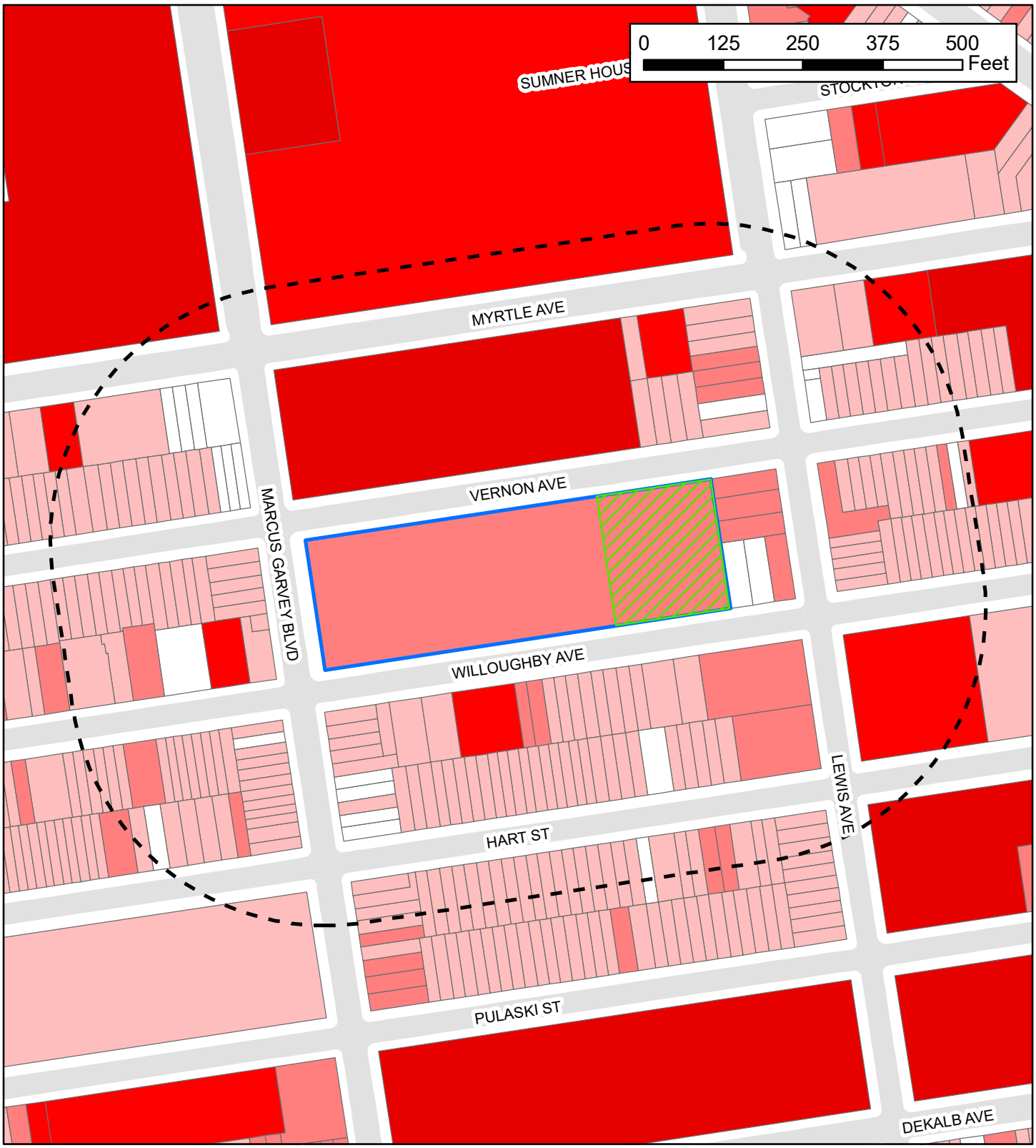
Block Form, Street Pattern, and Street Hierarchy

Streets in the study area follow a grid pattern alignment and form rectangular-shaped blocks. This block form has generally resulted in regular rectangular-shaped lots that vary in size and width. In addition to Vernon Avenue, Marcus Garvey Boulevard, and Willoughby Avenue discussed above, other one-way narrow streets within the secondary study area include Hart Street and Lewis Avenue. Myrtle Avenue is the only two-way wide street (greater than 75 feet wide) within the secondary study area. Myrtle Avenue is also the only local truck route located within the secondary study area. All streets generally have on-street parking. Willoughby Avenue is the only street with any kind of bike infrastructure in the form of a bike lane. **Figure H-3e** shows views of the existing streetscape within the secondary study area.

Streetscape Elements

Concrete sidewalks flank all streets in the secondary study area and are generally in good condition. All sidewalks in the secondary study area accommodate streetlights, street signs, fire hydrants, mailboxes, trash receptacles, bicycle racks, and street trees. Sidewalks along Myrtle Avenue are slightly larger than sidewalks on other streets within the secondary study area. Additionally, a major streetscape element is the elevated trestle which terminates at Myrtle Avenue and Lewis Avenue. As shown in **Figure H-3e, Photo #17**, the elevated metal structure runs east above Myrtle Avenue to eventually meet the MTA New York City Transit (NYCT) Myrtle Avenue subway station at Broadway (which is outside the study area). The elevated structure is a remnant of the former BMT Lexington Avenue elevated subway line, which was discontinued and demolished in 1969; the structure does not support any tracks and there is no elevated rail service within the study area.

Figure H-4
Number of Floors



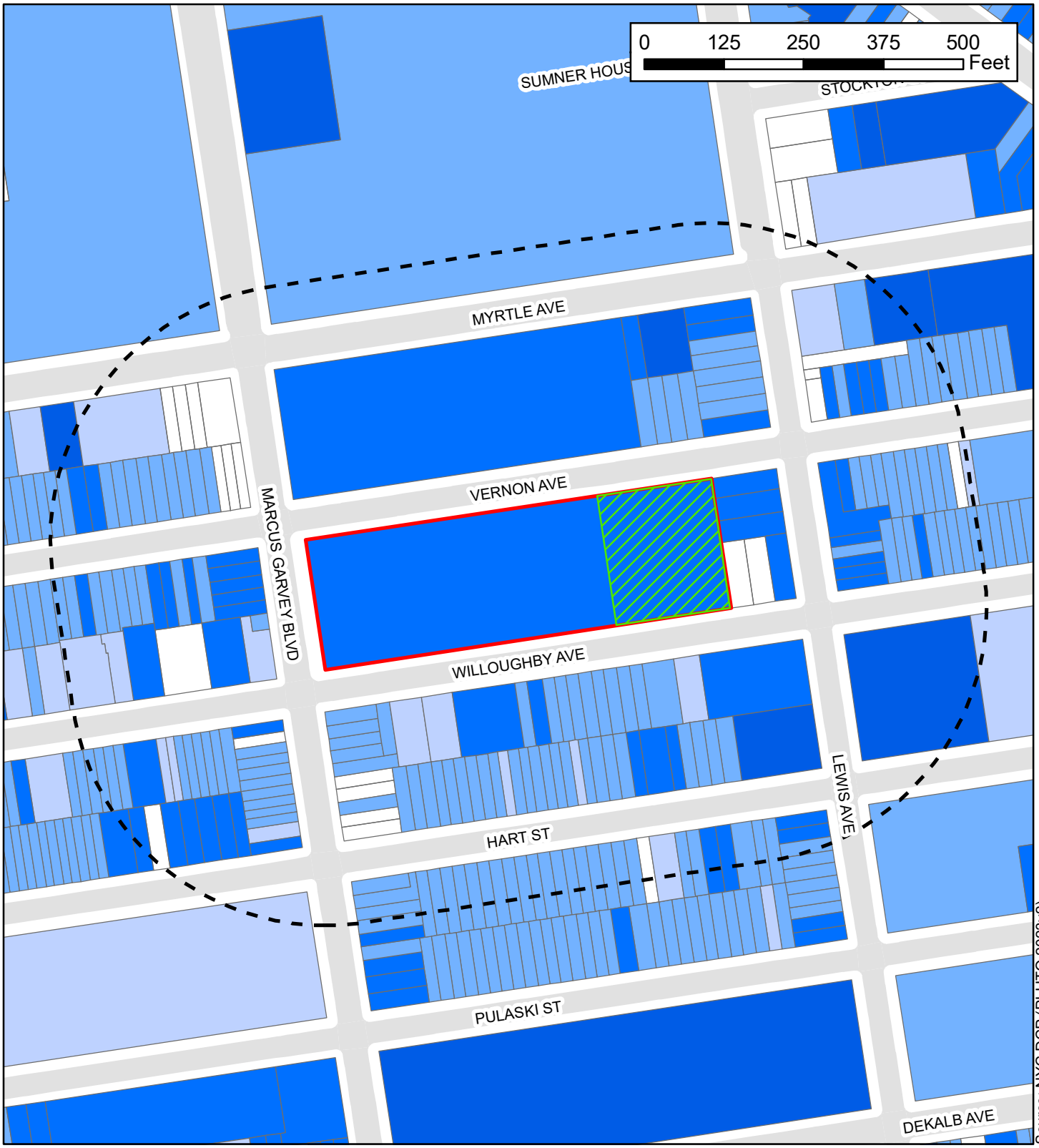
Legend

- Project Area (Primary Study Area)
- Proposed Development Site
- 400-foot Radius (Secondary Study Area)

Number of Floors

- 0
- 1-3
- 4-5
- 5-10
- Greater than 10

Figure H-5
Built FAR



Legend

- Project Area (Primary Study Area)
- Proposed Development Site
- 400-foot Radius (Secondary Study Area)

Built FAR

- 0.0
- 0.01 - 1.0
- 1.01 - 2.0
- 2.01 - 4.0
- 4.01 and Greater

Topography, Natural Features and Open Space

The topography of the secondary study area is generally flat. There are no natural features located within the secondary study area. There are several landscaped areas and recreational spaces, including on the campuses of 303 Vernon Avenue, the Sumner Houses, and the Roosevelt I and II Houses. There is also one public park within the secondary study area: Lewis Playground is located directly adjacent to the primary study area on Willoughby Avenue (shown in **Figure H-3f**). The playground is under the ownership of NYC Department of Parks and Recreation, and features landscaping, seating areas, and play equipment.

Visual Resources

Primary Study Area

There are no significant natural or built features, including public parks, designated landmark structures or districts, or otherwise distinctive buildings or groups of buildings in the primary study area. Nor are there any views to the waterfront from the Project Area. There are landscaped areas and private recreation space located within the Project Area, however these are fenced off and inaccessible for the public's use. However, visual resources can be seen from the surrounding streets bounding the primary study area, including Lewis Playground, located directly adjacent to the Project Area on Willoughby Avenue (see **Figure H-3f**). Lewis Playground is visible from the north side of Willoughby Avenue adjacent to the Project Area. The State/National Register (S/NR)-eligible St. John the Baptist Roman Catholic Church complex is also visible along Willoughby Avenue bordering the primary study area.

Secondary Study Area

As described above, there are several open spaces within the secondary study area, including a single public park. Lewis Playground, which is located on Willoughby Avenue near Lewis Avenue, is the only public park within the secondary study area, and features play equipment, seating areas, and landscaping. There is one public park just outside the secondary study area, but visible from the street: Pulaski Playground can be seen from Hart Street within the secondary study area. The playground, which is adjacent to the Brighter Choice Community School, contains basketball courts, handball courts, seating areas, and a playground. Only the basketball court can be easily seen from within the secondary study area. As mentioned above, there are also several landscaped areas and recreational spaces on the campuses of 303 Vernon Avenue, the Sumner Houses, and the Roosevelt I and II Houses within the secondary study area.

Although there are no Landmarks Preservation Commission (LPC)- or S/NR-designated historic resources within, or visible from, the secondary study area, there are several S/NR-eligible buildings within the secondary study area. The St. John the Baptist Roman Catholic Church complex contains four buildings, three of which (a 1903 Renaissance Revival school at 80 Lewis Avenue, a 1926 Collegiate Gothic school at 82 Lewis Avenue, and the former St. John's University building at 75 Lewis Avenue) are located in the secondary study area. The buildings in the complex form an S/NR-eligible historic building district, and are visible in the southeast of the study area, as shown in **Figure H-3f, Photos #21 and #22.** The remaining S/NR-eligible sites within the secondary study area are four residential brownstones along Vernon Avenue: 240 Vernon Avenue, 258A Vernon Avenue, 264 Vernon Avenue, and 345 Vernon Avenue. These buildings are only visible along Vernon Avenue in the study area.

The Future without the Proposed Actions (No-Action Condition)

Primary Study Area

Under the No-Action condition, no changes would occur within the primary study area. In the absence of the Proposed Actions, the existing zoning would remain, and the primary study area would continue to be zoned R6/C2-4. The existing residential and mixed-use buildings and surface parking lot would remain at the Project Area, and no new development or changes to the existing uses are expected to occur.

Secondary Study Area

As described in **Attachment C, "Land Use, Zoning, and Public Policy,"** there are three known No-Action developments anticipated by the 2027 analysis year in the secondary study area. These three developments are anticipated to add a total of 444 new DUs and 24,798 gsf of commercial uses to the secondary study area. At 75 Lewis Avenue (Block 1592, Lot 1), which is part of the St. John the Baptist complex described above, it is anticipated that a new residential development consisting of 205 DUs would be constructed on a vacant portion of the lot. It is likely that this development would obstruct views of some parts of the S/NR-eligible church complex from the Project Area in the future without the Proposed Actions. However, eligible buildings in the complex would still be visible from certain points within the Project Area and throughout the study area.

No changes to the area's views of parks, open spaces, or natural features are anticipated. It is assumed that any physical changes to buildings in the primary and secondary study areas would comply with applicable as-of-right zoning regulations. Pedestrian activity within the study areas under the No-Action condition would not experience dramatic changes compared to existing conditions.

The Future with the Proposed Actions (With-Action Condition)

In the future with the Proposed Actions, the proposed zoning map and zoning text amendments and CPC special permit for Large-Scale General Development would be approved. As such, the primary study area would be rezoned from R6/C2-4 to R7A/C2-4 and would be designated as an MIH area. The proposed zoning changes would retain the area's contextual zoning but would allow for greater residential floor area density and increase the allowable building height within the primary study area compared to what is currently permitted under the existing zoning. Additionally, the proposed special permit would waive certain regulations governing the arrangement and proximity of buildings, such as the modification of street wall location and the minimum distance between buildings on the same zoning lot, as described in detail in **Attachment A, "Project Description"**. The Proposed Actions are intended to provide the flexibility needed to develop a substantial amount of affordable senior housing as infill development, and allow for the programmatic needs and residential amenities at the Project Area that would not be feasible under existing zoning.

Residential uses in the proposed R7A (MIH) district would be permitted up to a maximum of 5.01 FAR (with AIRS), and community facilities would be permitted up to 4.0 FAR. The maximum FAR for commercial uses in the C2-4 overlay would continue to be 2.0. The proposed R7A district would permit buildings up to a maximum height of approximately 95 feet with MIH, and the proposed CPC special permit would allow the Proposed Project to rise to a bulkhead height of 155 feet.

As detailed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of a single residential building with 14 stories and a qualifying ground floor (155 feet tall with bulkhead), replacing the existing 95-space accessory surface parking lot. The proposed With-Action building would be built to the street line on both Willoughby Avenue and Vernon Avenue and include 192,519 gsf of residential space, which would contain approximately 292 AIRS units. The Proposed Actions would also contain 63 accessory parking spaces, which would be located in a cellar level. As part of the project, the Applicant would also carry out site improvements throughout the Project Area including upgrades to existing landscaping, courtyard furniture, and external upgrades to existing building entrances, stairways, and railings.

Urban Design

Primary Study Area (Project Area)

New development facilitated by the Proposed Actions would be built on an existing block, and would not entail any changes to topography, street patterns and hierarchy, block shapes or natural features in the Project Area. It also is not expected to adversely affect the pedestrian experience, nor would it disturb the vitality, walkability, or visual character of the area. The Proposed Actions would introduce a single residential building on the Proposed Development Site (the eastern portion of the Project Area, which is currently a parking lot) accommodating affordable senior housing units (AIRS). The existing buildings in the Project Area would remain unchanged, though the Applicant would also undertake landscaping upgrades and site improvements within the Project Area.

The proposed zoning changes would increase the allowable floor area and bulk in the Project Area. In addition, the proposed R7A district would increase the maximum allowable building height within the Project Area to 95 feet (or 9 stories) and maximum base height to 65 feet. The proposed CPC special permit, which would allow the Proposed Project to rise to a height of 14 stories (143 feet roof height; 155 feet bulkhead height), would be site-specific and would not apply to any other development in the Project Area. The Project Area's existing R6 district permits a maximum FAR (with AIRS) of 2.2. The Project Area has a built FAR of 2.19, leaving limited opportunity for additional affordable units to be developed at the site (only 0.24 FAR remaining). The proposed rezoning of the Project Area to R7A, which has a maximum AIRS FAR of 5.01, would facilitate the infill development of a new building on the Proposed Development Site. This new building would contain approximately 292 additional AIRS units.

In accordance with the proposed R7A district regulations and proposed CPC special permit, the With-Action building would be built to the street line along the Willoughby Avenue and Vernon Avenue frontages, forming strong street wall presence. The With-Action building would have a maximum height of 143 feet (155 with bulkhead) with a base height of 105 feet. The With-Action development would introduce new height to the existing scale of the neighborhood as compared to the No-Action scenario. The ground floor would be occupied by supportive office space, a super's apartment, and access to the cellar level garage, which would contain 63 accessory parking spaces. AIRS residential units would occupy all the floors above.

The Proposed Actions would further enhance the pedestrian environment and enliven the streetscape with the introduction of new residential uses to replace an existing parking lot. In addition, the active ground floor uses are expected to further increase pedestrian activity along Willoughby Avenue and Vernon Avenue, an existing mixed-use corridor.

With a maximum building height of 143 feet (155-foot bulkhead height) and building square footage of 192,519 gsf, the height and bulk of the With-Action building would be taller and have a greater scale than existing buildings in the Project Area. As shown in **Figure H-6a and H-6b**, the increased scale, both in terms of bulk and height, would be a notable change from the pedestrian's perspective to the appearance and character of the Proposed Development Site as compared to the No-Action condition. Nevertheless, as compared to the No-Action condition, this change would not result in a significant adverse impact to urban design because the proposed increases in both height and density at the Project Area would be moderate and well-suited to the neighborhood. A taller and bulkier building at the Proposed Development Site, as proposed, would not significantly alter the urban design character of the primary study area, which is largely residential, or be so tall or large as to detract from the character of the Project Area. The Proposed Project would result in infill development on an underbuilt portion of the Project Area, which is a relatively large lot at approximately 130,000 sf. **Figures H-6a and H-6b** provide illustrative renderings of the With-Action development including a view looking west along Willoughby Avenue and a view looking east on Vernon Avenue.

Compared to the future without the Proposed Actions, the pedestrian experience of the Proposed Development Site would change, as a 14-story With-Action building would replace an accessory surface parking lot. In terms of urban design, it is likely that this change would have a positive effect on the pedestrian experience within the primary study area. The existing parking lot breaks up the streetwall, and in comparison, the new building would activate the street frontages along Myrtle and Willoughby Avenues. This would be achieved not only through the addition of a continuous street wall along both frontages, but through landscaping and site plan improvements, which would be required for approval of the proposed LSGD special permit. Additionally, the Proposed Project would provide street trees in accordance with zoning requirements, which would improve the streetscape on the adjacent streets. As such, changes in urban design as a result of the Proposed Actions would be largely positive, and would not meet the 2021 *CEQR Technical Manual* threshold for a significant adverse urban design impact. The Proposed Project would be constructed on an existing block and would not entail any changes to topography, street patterns, street hierarchy, block shapes, or natural features within the primary or secondary study areas. In addition, the Proposed Actions would not introduce land uses nor structures that would be substantially incompatible with the existing character of the surrounding neighborhood that would negatively affect a pedestrian's experience of the area.

Secondary Study Area

As the Proposed Actions are site-specific, they would not result in any changes in the urban design in the secondary study area. New development facilitated by the Proposed Actions would be limited to the Proposed Development Site within the primary study area. The Proposed Actions would not alter any street patterns, street hierarchies, block forms, building uses, and bulk regulations in the secondary study area.

The proposed R7A district that would be mapped on the Project Area is a contextual medium-density district governed by Quality Housing bulk regulations, which encourage high lot coverage buildings set at or near the street line with fixed height limits and mandatory setbacks. The permissible density and height regulations of R7A district would be greater than that of the surrounding C4-4L, R6B, and R6, but slightly less than that of the nearby R7D district, and as such, the density and height of the resultant development of the Applicant's Proposed Project would be a middle ground in permitted height and floor area density as compared to existing surrounding development.

Illustrative Street View - Facing West on Willoughby Avenue



No-Action



With-Action

Maximum Permitted Base Height (75') Maximum Permitted Building Height (95') Zoning Envelope Waiver (155')

Proposed Base Height Proposed Building Height

Illustrative Street View - Facing East on Vernon Avenue



No-Action



With-Action

Maximum Permitted Base Height (75') Maximum Permitted Building Height (95') Zoning Envelope Waiver (155')

Proposed Base Height Proposed Building Height

Development on the Applicant-controlled Project Area under the With-Action scenario would total approximately 526,459 gsf of residential, commercial, and community facility space, which would be comparable to many of the larger sites within the neighborhood including the NYCHA Sumner Houses, 303 Vernon Boulevard, and the Roosevelt I and II Houses. The Sumner Houses total approximately 876,200 gsf of residential area across two blocks, of which one is partially located within the secondary study area north of the Project Area. The Roosevelt I and II Houses total approximately 335,033 gsf across portions of four blocks and are located south and southeast of the Project Area. And 303 Vernon Avenue, which totals approximately 110,000 gsf, is located directly north of the Project Area. The With-Action building on the Applicant-owned site would be consistent with study area buildings' land uses, including multi-family residential, active ground floors uses, and building placement and orientation near the street line. The Applicant believes that the With-Action development would reinforce the existing development pattern within the secondary study area. The With-Action development would introduce a senior housing facility to the area, while maintaining and enhancing the existing residential and local retail uses within the Project Area, and replacing the surface parking lot which is out of context with the surrounding residential character of the neighborhood.

The Proposed Actions would allow the development of additional affordable senior housing units, including permanently affordable housing units, in the Bedford-Stuyvesant neighborhood of Brooklyn, which would assist in addressing the City's well-documented shortage of affordable housing, particularly senior affordable housing.

The With-Action development would introduce strong street walls along Willoughby Avenue and Vernon Avenue that would be consistent with surrounding development. With a maximum building height of 155 feet (including bulkhead), the upper floors of the With-Action building would be visible from surrounding streets. As described previously, the surrounding area supports a mix of building types, scales, and heights, including low-rise three- to five-story residential buildings, and six- to ten-story multi-family apartment buildings as well as several NYCHA complexes with taller buildings. While the With-Action development would be taller than most of the existing small residential structures in the secondary study area, the building would be comparable to the larger NYCHA developments that help define the neighborhood. As the proposed building would be constructed on a through lot with frontages along Willoughby Avenue and Vernon Avenue, which also contain other buildings of comparable bulk and height, the scale of future development would be appropriate for the scale of the streets adjacent to the Proposed Development Site and secondary study area. The proposed street wall height of 73 feet with a setback of 15 feet above seven stories and setback of 20 feet above nine stories would fit into the existing context and provide adequate light and air circulation to the surrounding buildings and streetscape. The setback of the Proposed Project above seven stories would be in line with NYCHA buildings in the vicinity of the Project Area, many of which are six stories or greater in height and built close to the lot line. As such, the Proposed Actions are not expected to result in any significant adverse impacts to urban design in the study area surrounding the Project Area, nor would they result in significant adverse impacts to the experience of the pedestrian.

Visual Resources

As discussed above, the primary study area does not contain any visual resources, and this would not change in the future with the Proposed Actions. The Proposed Actions would facilitate the construction of a single building that is expected to rise to a maximum height of up to 155 feet tall with bulkhead under

With-Action conditions. As the With-Action development would be constructed on an existing lot, no view corridors would be blocked or partially obstructed.

Under the With-Action condition, public views of the adjacent Lewis Playground would not change. While the Proposed Actions would result in new development adjacent to the playground that would obstruct views of the open space resource from certain points within the Project Area, the locations from which these views would be altered are not publicly accessible. Lewis Playground would still be visible from the pedestrian perspective along Willoughby Avenue and Lewis Avenue within the secondary study area. As the Proposed Development would be directly adjacent to Lewis Playground, the construction of this building would change the context in which the playground is viewed. However, this change would still be consistent with the urban setting of the playground, which is already adjacent to several residential buildings along its eastern edge.

The Proposed Actions would result in the partial obstruction of views of the S/NR-eligible St. John the Baptist Roman Catholic Church complex from the north of the Project Area. These views would be obstructed at points along Myrtle Avenue. However, the church complex would remain visible from publicly-accessible vantage points throughout the Project Area and the secondary study area, and as such, the partial obstruction of these views as a result of the Proposed Actions would not constitute a significant adverse impact to visual resources.

The With-Action building on the Proposed Development Site is expected to further define view corridors in the secondary study area by replacing a surface parking lot with new contextual development that would be constructed at the street line.

Conclusions

In summary, the Proposed Actions would not change the area's urban design such that the context of natural or built features would be adversely altered, nor would they partially or fully block any significant public views to a visual resource. Therefore, the Proposed Actions would not result in significant adverse impacts to study area urban design or visual resources.

ATTACHMENT I

NOISE

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in significant adverse noise impacts. As described in **Attachment A, "Project Description,"** the Proposed Actions include a zoning map amendment to rezone Brooklyn Block 1588, Lot 1 (the "Project Area") from R6 and R6/C2-4 to R7A and R7A/C2-4, a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area, and a City Planning Commission ("CPC") special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot. As a reasonable worst-case development scenario (RWCDS), the Proposed Actions would facilitate the net increase of 292 Affordable Independent Residences for Seniors (AIRS) units (the "Proposed Project"). It is expected that the Proposed Project would be completely constructed and fully occupied by 2027.

Approval of the Proposed Actions would not generate sufficient traffic volumes near the Project Area to trigger a detailed traffic analysis, and thus, with the moderate to high number of vehicles in the immediate area, it is unlikely that the Proposed Actions would result in a significant noise impact due to mobile sources (i.e., it would not result in a doubling of noise passenger car equivalents [PCEs] which would be necessary to a cause a 3 dBA increase in noise levels). As the Proposed Actions would create new noise-sensitive uses (or "receptors") within the proposed rezoning area, a noise analysis was conducted in order to determine the level of building attenuation required to ensure that future interior noise levels within the projected developments would satisfy applicable noise exposure criteria.

Additionally, based on a field survey of land uses in the area, it was determined that no stationary noise sources contribute significantly to noise levels in the area, and a stationary source noise analysis was not warranted.

II. NOISE FUNDAMENTALS

Quantitative information on the effects of airborne noise on people is well documented. If sufficiently loud, noise may adversely affect people in several ways. For example, noise may interfere with human activities such as sleep, speech communication, and tasks requiring concentration or coordination. It may also cause annoyance, hearing damage, and other physiological problems. Although it is possible to study these effects on people on an average or statistical basis, it must be remembered that all the stated effects of noise on people vary greatly with the individual. Several noise scales and rating methods are used to quantify the effects of noise on people. These scales and methods consider factors such as loudness, duration, time of occurrence, and changes in noise level with time.

"A"-Weighted Sound Level (dBA)

Noise is typically measured in units called decibels (dB), which are ten times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared. Because loudness is important in the assessment of the effects of noise on people, the dependence of loudness on frequency must be taken into account in the noise scale used in environmental assessments. Frequency is the rate at which sound

pressures fluctuate in a cycle over a given quantity of time, and is measured in Hertz (Hz), where 1 Hz equals 1 cycle per second. Frequency defines sound in terms of pitch components. In the measurement system, one of the simplified scales that accounts for the dependence of perceived loudness on frequency is the use of a weighting network - known as A-weighting - that simulates the response of the human ear. For most noise assessments, the A-weighted sound pressure level in units of dBA is used due to its widespread recognition and its close correlation to perception. In this analysis, all measured noise levels are reported in dBA or A-weighted decibels. Common noise levels in dBA are shown in **Table I-1**.

TABLE I-1: Common Noise Levels

Sound Source	(dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Soft Whisper at 5 meters	30
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Source: *2021 CEQR Technical Manual* / Cowan, James P. Handbook of Environmental Acoustics. Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.
Note: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.

Community Response to Changes in Noise Levels

Table I-2 shows the average ability of shows the average ability of an individual to perceive changes in noise. Generally, changes in noise levels less than three dB(A) are barely perceptible to most listeners. However, as indicated in **Table I-2**, five dB(A) changes are readily noticeable. Ten-dB(A) changes are normally perceived as doublings (or halvings) of noise levels. These guidelines permit direct estimations of an individual's probable perception of changes in noise levels.

TABLE I-2: Average Ability to Perceive Changes in Noise Levels

Change (dB(A))	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Beranek and Neuman, Inc., *Fundamentals and Abatement of Highway Traffic Noise* (Report No. PB-222-703). Prepared for the Federal Highway Administration (FHA), June 1973.

Noise Descriptors Used in Impact Assessment

As the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it

had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level", L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound-energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The one-hour equivalent continuous noise level ($L_{eq\ (1h)}$ in dBA) and the tenth percentile level L_{10} were selected as the noise descriptors for the purposes of this analysis. Hourly statistical noise levels (particularly L_{10} and L_{eq} levels) were used to characterize the relevant noise sources and their relative importance at each receptor location.

Applicable Noise Codes and Impact Criteria

New York City Noise Code

The New York City Noise Control Code, as amended in December 2005, contains prohibitions regarding unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties.

CEQR Technical Manual Noise Standards

The New York City Department of Environmental Protection (DEP) has set external noise exposure standards. These standards are shown in **Table I-3**.

Noise Exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of less than or equal to 45 dBA and L_{dn} of less than or equal to 40 dBA for residential uses. Attenuation requirements are shown in **Table I-4.**

TABLE I-3: Noise Exposure Guidance for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	DNL ≤ 60 dBA		60 < DNL ≤ 65 dBA		(1) 65 < DNL ≤ 75 dBA		75 dBA < DNL
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		$65 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	

4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

Source: New York City Department of Environmental Protection (adopted policy 1983).

Notes: (i) In addition, any new activity shall comply with the Impact Thresholds detailed in Section 410 of Chapter 19, "Noise" of the *CEQR Technical Manual*;

[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

[2] Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.

[3] One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.

[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

TABLE I-4: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				**Clearly Unacceptable**
Vehicular Traffic	70< L_{10} ≤73	73< L_{10} ≤76	76< L_{10} ≤78	78< L_{10} ≤80	80<L_{10}
Aircraft[A]	65<DNL≤68	68<DNL≤71	71<DNL≤73	73<DNL≤75	75<DNL
Train	65<Ldn≤68	68<Ldn≤71	71<Ldn≤73	73<Ldn≤75	75<Ldn
Attenuation[B]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	See Note C

Note: [A] DNL descriptor based on average values of L_{dn} over a year period.

[B] The above 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.

[B] Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.

[C] The required attenuation value is the difference between L_{Build} and $L_{interior}$, using the appropriate 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 (45dBA for vehicular noise, 40 dBA for aircraft and train noise).

Source: New York City Department of Environmental Protection / 2021 *CEQR Technical Manual,* Table 19-3.

III. NOISE PREDICTION METHODOLOGY

Proportional modeling was used to determine future No-Action and With-Action noise levels at the receptor locations adjacent to the Project Area, as discussed in more detail below. Proportional modeling is one of the techniques recommended in the 2021 *City Environmental Quality Review (CEQR) Technical Manual* for mobile source analysis.

Using this technique, the prediction of future noise levels (where traffic is the dominant noise source) is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine future No-Action and With-Action noise levels. Vehicular traffic volumes (counted during the

noise recording), are converted into PCE values, for which one medium-duty truck (i.e., vehicles with two axles and six tires) is assumed to generate the noise equivalent of thirteen cars, one heavy-duty truck (i.e., cargo vehicles with three or more axles) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of eighteen cars. Future noise levels are calculated using the following equation:

FNA NL =10 log (NA PCE/E PCE) + E NL

where:

FNA NL = Future No-Action Noise Level
NA PCE = No-Action PCEs
E PCE = Existing PCEs
E NL = Existing Noise Level

Sound levels are measured in decibels and therefore increase logarithmically with sound source strength. In this case, the sound source is traffic volumes measured in PCEs. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCEs and if the future traffic volumes were increased by 50 PCEs to a total of 150 PCEs, the noise level would increase by 1.8 dBA. Similarly, if the future traffic were increased by 100 PCEs, or doubled to a total of 200 PCEs, the noise level would increase by 3.0 dBA.

To calculate the No-Action noise levels, an annual background growth rate of 0.5 percent for the 2027 Build or Analysis year was applied to the PCE noise values based on counted vehicles.[1] In order to obtain the necessary With-Action PCE values to calculate the With-Action noise levels, a trip generation and vehicle trip assignments were prepared based on the projected amount of incremental residential and local retail space generated by the 2027 With-Action development, utilizing existing modal split data for the census tracts within which the Project Area is located.[2] This trip generation with the 2027 With-Action traffic increment assignments was converted into PCE values and added to the calculated No-Action PCE values for each of the analyzed peak hours.

Play Area Noise

While people are not usually thought of as stationary noise, children in playgrounds or spectators at outdoor sporting events or concerts can introduce additional sources of noise within communities. According to the *CEQR Technical Manual*, noise generated by children in playgrounds or people using parks is considered a stationary source of noise. As noted above, the Project Site is located directly adjacent to an existing playground: Lewis Playground, which is located at 773 Willoughby Avenue directly adjacent to the Project Area and Proposed Development Site to the east. As such, a preliminary play area noise assessment was conducted to determine the need for additional attenuation requirements for the building facades that could be affected by the existing playground.

Potential noise impacts at the Project Area due to the use of the existing playground were determined using methodology based on the measurements and procedures outlined in a study entitled, "SCA

[1] The background growth rate is based on information provided in Table 16-4 of the 2021 *CEQR Technical Manual.*
[2] Based on 2015-2019 *American Community Survey (ACS) Means of Transportation to Work Table* & AASHTO CTPP Peak Hour Reverse Journey to Work 5-Year data for Kings County census tracts 259.01, 259.02, 261, 281, 283, 285.02, and 287.

Playground Noise Study" (1992).[3] This study was conducted for the New York City School Construction Authority (SCA), and included intensive noise monitoring programs at a total of nine schools – one early childhood center, four elementary schools, three intermediate schools, and one high school. Based on the noise monitoring results, hourly equivalent (L_{eq}) noise levels were determined for the various types of schools. To predict potential noise impacts at a given distance from a play area boundary, the study suggests a 4.5 dBA reduction in L_{eq} noise levels per doubling of distance at a distance between 40 and 300 feet, with initial reductions of 4.8 dBA at 20 feet, 6.8 dBA at 30 feet, and 9.1 dBA at 40 feet. Noise levels can be estimated with the following equation at sensitive receptors with a direct line of sight to the play area between 40 to 300 feet:

$Lp1 = Lp2 - 15*\log(d/10)$

Where:

Lp1 = the predicted noise level at a specific distance.

Lp2 = the maximum L_{eq} at the boundary of the play area.

d = the distance from the play area boundary to the sensitive receptor in feet.

In certain situations, these values may overstate play area noise levels.

Table I-7 shows the results of the play area noise assessment at these receptors using the methodology described above for predicting play area-generated noise levels. As indicated in the table, the maximum predicted L_{eq} noise levels along the eastern facades of the future residential building at the Proposed Development Site within 50 feet of the existing play area would be 71.5. The predicted play area noise level presented in **Table I-7** will be utilized to determine the maximum predicted L_{eq} and L_{10} noise levels at the sensitive receptor by combining the predicted play area noise value with existing background noise values presented in the "Existing Conditions" section below.

TABLE I-7: Highest Predicted Noise Levels due to Play Area Noise (in dBA)

Receptor Location		Closest Approximate Distance (feet) to Existing Playground	Play Area L_{eq} at Receptor (in dBA)
Building	**Façade**		
Proposed Development Site	Eastern (≤50 ft from play area)	0	71.5

Note: Play Area L_{eq} noise levels presented in this table do not factor in background noise levels.

IV. EXISTING CONDITIONS

Selection of Noise Receptor Locations

The Project Area is located in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. It includes the entirety of Block 1588, Lot 1, which is bound by Vernon Avenue to the north, Marcus Garvey Boulevard to the west, Willoughby Avenue to the south, and 100 feet west of Lewis Avenue to the east and comprises approximately 130,000-sf. Approval of the Proposed Actions would allow the Applicant to develop the Proposed Project on an approximately 30,000-sf portion of the Project Area to the east (the "Proposed Development Site"), which is currently occupied by a surface parking lot.

[3] Cowan, James P. & Holley, Stephen J., AKRF, Inc. "SCA Playground Noise Study," October 23, 1992.

Noise receptor locations were selected along each of the two street frontages bounding the Proposed Development Site (see **Table I-8** below and **Figure I-1**). As discussed, local traffic is the dominant source of noise near the Proposed Development Site.

Table I-8: Noise Receptor Locations

Receptor Location/Map Number [1]	Duration	Monitoring Location
1	24 hours	Fronting the Proposed Development Site on the southern side of Vernon Avenue (at a depth of roughly 150 feet west of Lewis Avenue)
2	20 minutes	Fronting the Proposed Development Site on the northern side of Willoughby Avenue (at a depth of roughly 150 west of Lewis Avenue)

[1] Noise receptor locations are keyed to **Figure I-1**.

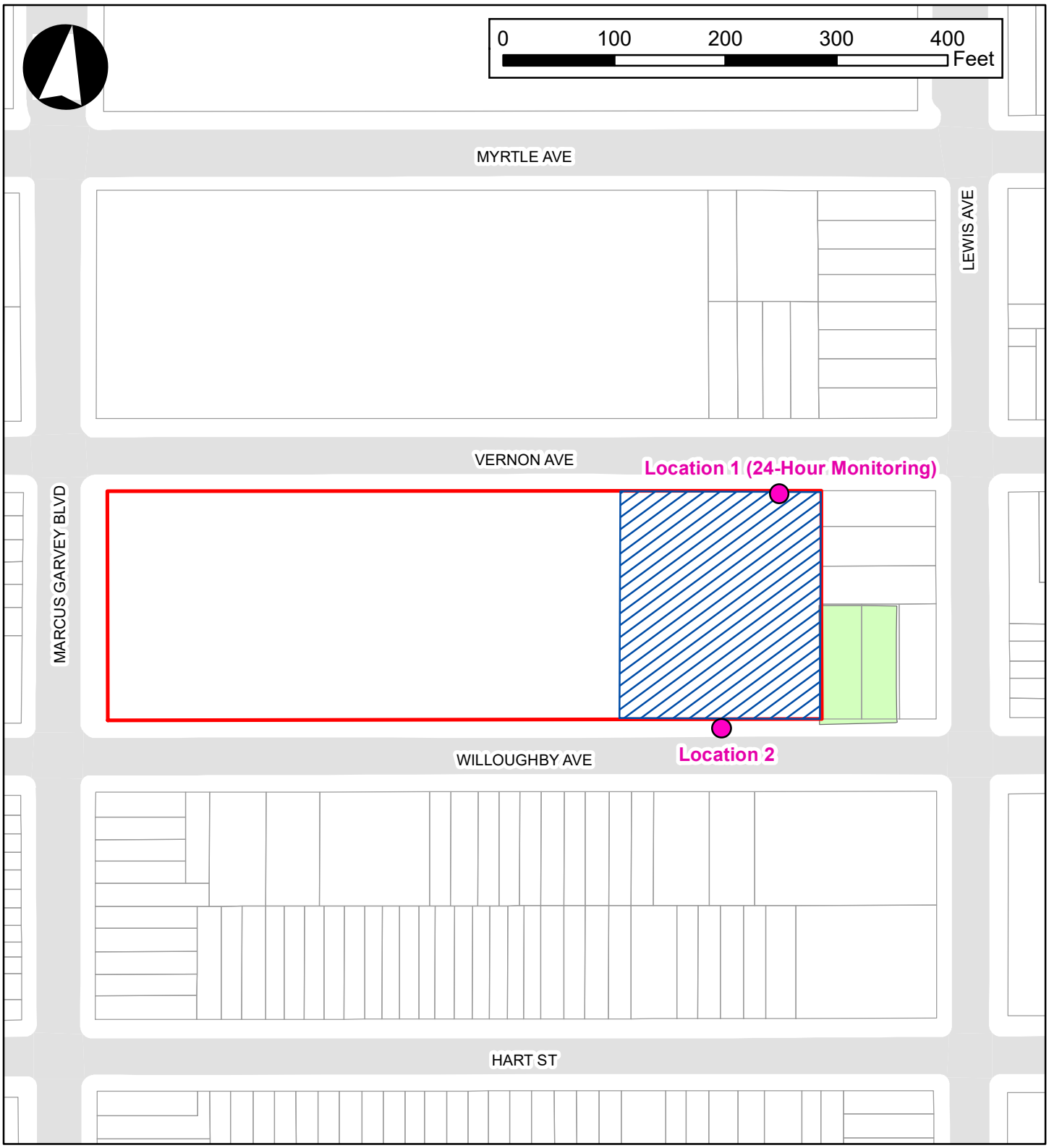
Noise Monitoring

Monitoring was conducted during the typical midweek conditions. At receptor location 1, 24-hour measurements of existing noise levels were performed between September 27, 2023, and September 28, 2023. The monitor was placed at an elevation of approximately 5 feet along the northern frontage of the Proposed Development Site, at the property line of the existing parking lot (refer to **Figure I-1**). Traffic was collected to coincide with traffic counts collected at receptor location 2. However, as receptor location 1 is used to calculate train noise associated with the elevate M/J/Z subway, the vehicular traffic data was not used to determine future noise levels at the northern façade frontage. At receptor location 2, 20-minute spot measurement was performed for the following weekday peak periods: morning (AM) peak hour (8:00 AM to 9:00 AM), midday (MD) peak hour (12:00PM to 1:00PM), and weekday PM peak hour (5:00PM to 6:00PM). Additional noise measurement was performed receptor location 2 during the school dismissal/bus departure (School PM) peak period (2:30 PM to 3:30 PM), due to the proximity of an existing school on Lewis Avenue (St. Johns Preparatory School). Noise monitoring was conducted during the School PM weekday peak period to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods. Noise measurements for receptor location 2 were performed on Thursday September 28, 2023, for the AM, MD, and School PM measurements, and Thursday October 12, 2023, for the PM measurement. On September 27 and September 28, the weather was cloudy with a high temperature of 63 ºF and average wind speeds of ten miles-per-hour. On October 12, the weather was sunny with a high temperature of 71 ºF and average wind speeds of seven miles-per-hour. Traffic volumes and vehicle classifications were documented during the noise monitoring.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements at receptor locations 1 and 2 was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 5 feet above the ground surface on a tripod and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound level that is being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at the receptor location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Only traffic-related noise was measured; noise from other sources (e.g., emergency sirens, irregular aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were

Figure I-1
Noise Monitor Locations



Legend

- Project Area
- Existing Playground
- Proposed Development Site
- Noise Receptor Location (Refer to Table I-5)

noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at the Noise Receptor Locations

Measured Noise Levels

The noise monitoring results are shown in **Table I-9**. Noise from vehicular traffic was the dominant sources of noise at Receptor Location 2. The existing noise levels reflect the level of vehicular activity on the roadway bounding the southern frontage of the Proposed Development Site, with the highest existing noise levels observed during the weekday School PM monitoring period.

As shown in **Table I-9**, the highest L_{10} value at receptor location 2 was recorded in the weekday School PM peak hour (69.0 dBA), placing this receptor location in the "Marginally Acceptable" CEQR Noise Exposure category pursuant to the guidance of the *CEQR Technical Manual*.

TABLE I-9: Existing Noise Levels (in dBA) at the Receptor Location 2

Receptor Location[1]	Time[2]	L_{eq}	L_{max}	L_{min}	L_1	L_{10}[3]	L_{50}	L_{90}	CEQR Noise Exposure Category
2	AM	63.7	86.3	51.0	72.0	67.4	59.1	54.1	Marginally Acceptable
	MD	64.4	79.2	51.0	72.0	68.3	61.8	55.1	
	SC PM	66.0	93.9	53.0	75.0	**69.0**	60.9	55.4	
	PM	62.4	82.0	50.0	72.9	65.6	58.8	54.9	

Notes: [1] Refer to **Figure I-1** for noise monitoring receptor location.
[2] The weekday AM, MD, and School PM noise readings were taken on September 28, 2023. The weekday PM noise reading was taken on October 12, 2023.
[3] The highest L_{10} noise levels at each monitoring location are shown in **bold**.

L_{dn} and Train Noise

L_{dn} is the day-night equivalent sound level, defined as a 24-hour continuous L_{eq} with a 10 dB adjustment added to all hourly noise levels recorded between the hours of 10 PM and 7 AM. This 10 dB addition accounts for the extra sensitivity people have to noise during typical sleeping hours.

Train noise is inclusive of transit or freight train activity. Similar to aircraft noise, train noise is comprised of a series of single events over time. Depending on the location of the receptor and ambient noise levels, these single events may be easily distinguishable from background noise levels. This is particularly true, for example, at noise receptors close to elevated train lines. The Federal Transit Administration (FTA) uses $L_{eq(1)}$ and/or L_{dn} as its principal noise descriptors for mass transit noise, depending on the adjacent land use. Noise assessments require the use of the daily L_{dn} for impact assessment. Because of these standards, the *CEQR Technical Manual* recommends that the L_{dn} be used in the analysis of train noise.

The elevated M/J/Z train is located approximately 1,100 feet to the east of the Proposed Development Site's easternmost boundary in the Project Area. At Receptor Location 1, 24-hour measurements were performed at a location with a direct line of sight to the elevated subway line. As shown in **Figure I-1,** the noise monitor was placed along the northern frontage of the Proposed Development Site approximately three feet from the property line. The monitor was at a height of approximately five feet. The 24-hour measurements, completed between September 27 and September 28, 2023, were used to calculate the L_{dn}. The calculated L_{dn} noise level is 65.61 dB(A).

V. FUTURE WITHOUT THE PROPOSED ACTION (NO-ACTION CONDITION)

Using the methodology described in Section III, "Noise Prediction Methodology," future noise levels in the No-Action condition were calculated for the analysis periods for the 2027 Build year for Receptor Location 2. **Table I-10** shows the measured existing noise levels, as well as the No-Action PCE values and the No-Action noise levels at the receptor location.

Table I-10: Future 2027 No-Action Noise Levels and Total PCE Values at Receptor Locations (in dBA)

Receptor Location	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change[1]	No-Action L_{10}[2]	CEQR Noise Exposure Category
2	AM	228	233	63.68	63.77	0.09	67.46	Marginally Acceptable
	MD	333	340	64.41	64.50	0.09	68.35	
	SC PM	384	392	66.04	66.13	0.09	**69.12**	
	PM	465	474	62.41	62.50	0.09	65.66	

Notes: All PCE and noise value are shown for a weekday.
[1] No-Action Leq - Existing Leq
[2] The highest L_{10} noise levels at each monitoring location are shown in **bold**.

Comparing future No-Action noise levels with existing noise levels, the increases in L_{eq} noise levels would be approximately 0.09 dBA. Increases of this magnitude would be barely perceptible. The projected No-Action L_{10} noise levels would remain in the same respective CEQR Noise Exposure categories as under existing conditions.

VI. FUTURE WITH THE PROPOSED ACTION (WITH-ACTION)

Using the methodology described in Section III, "Noise Prediction Methodology," future noise levels in the With-Action condition were calculated for the analysis periods at Receptor Location 2 for the 2027 Build year.

As shown in **Table I-11**, after accounting for additional traffic introduced by the Proposed Actions, the maximum projected L_{10} noise level in the With-Action condition would be 69.36 dBA during the School PM peak hour, and therefore would remain under the "Marginally Acceptable" CEQR Noise Exposure category, as under existing and No-Action conditions. Comparing future With-Action noise levels with No-Action noise levels, the increases in L_{eq} noise levels would be approximately 0.51 dBA for the AM period, 0.22 dBA for the MD period, 0.25 dBA for the School PM period, and 0.21 dBA for the PM period. Increases of this magnitude would be barely perceptible. The projected No-Action L_{10} noise levels would remain in the same respective CEQR Noise Exposure categories as under existing and No-Action conditions.

Table I-11: Future With-Action Noise Levels and Total PCE Values at Receptor Locations (in dBA)

Receptor Location	Time	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change[1]	With-Action L_{10}[2]	CEQR Noise Exposure Category
2	AM	262	63.77	64.28	0.51	67.97	Marginally Acceptable
	MD	358	64.50	64.72	0.22	68.57	
	SC PM	415	66.13	66.37	0.25	**69.36**	
	PM	497	62.50	62.70	0.21	65.86	

Notes: All PCE and noise value are shown for a weekday.

[1] With-Action Leq – No-Action Leq
[2] The highest L_{10} noise levels at each monitoring location are shown in **bold**.

Play Area Noise

As the Proposed Development Site would be directly adjacent to an existing playground to the east (Lewis Playground), this noise assessment will utilize the maximum playground boundary noise levels presented in **Table I-11**. Therefore, the referenced noise levels in L_{eq} from the playground is assumed to be:

- 71.5 dB(A) at the eastern façade of the Proposed Development Site.[4]

As presented in **Table I-11** below, due to the location of the existing playground, the eastern façade of the Proposed Development Site would experience combined L_{eq} play area noise levels of up to 72.7 dB(A).

TABLE I-11: Noise Levels due to Proposed Play Area Noise and Existing Play Area Noise (in dB(A))

Sensitive Receptor		Approximate Distance (feet) to Existing or Proposed Play Area	Play Area L_{eq} at Receptor[1]	Highest Predicted Combined L_{eq} at Receptor	Highest Predicted Combined L_{10} at Receptor
Building	Façade				
Proposed Development Site	Eastern	0'	71.5	72.7	74.7

Notes:
[1] Estimated play area noise level based on the $L_{eq(1)}$ noise levels at the boundary of a playground being 71.5 dB(A) (Source: Cowan, James P. & Holley, Stephen J, AKRF Inc. "SCA Playground Noise Study," October 1992).

After calculating the predicted L_{10} noise levels from the existing and proposed stationary noise sources (refer to **Table I-11** above), the eastern façade of the Proposed Development Site would fall in the "Marginally Unacceptable (III)" CEQR Noise Exposure category. With implementation of the attenuation levels outlined in Section VII below, the Proposed Project would provide sufficient attenuation to achieve *CEQR Technical Manual* interior L_{10} noise level guidance of 45 dB(A) for residential/community facility uses.

TABLE I-12: Required Attenuation (CEQR)

Sensitive Receptor		Highest Predicted Combined L_{10} at Receptor	Calculated L_{dn} at Receptor	CEQR Noise Exposure Category	CEQR Minimum Required Attenuation
Building	Façade				
Proposed Development Site	Northern	-	65.61	Marginally Unacceptable (I)	**28 dBA**
	Eastern	74.7	-	Marginally Unacceptable (III)	**31 dBA**

Notes: [1] Receptor locations shown in **Figure I-1**; required attenuation levels are shown in **Figure I-2.**
[2] Additional noise attenuation measures above standard construction practices are not required to achieve interior noise levels of 45 dBA or lower along all other building frontages. For residential/community facility and 50 dBA or lower for commercial uses.
[3] The above composite window-wall attenuation values are for residential/community facility uses. Commercial office and retail uses would be 5.0 dBA less in each A closed window situation and an alternate means of ventilation are required.

[4] Cowan, James P. & Holley, Stephen J, AKRF Inc. "SCA Playground Noise Study," October 1992.

VII. ATTENUATION REQUIREMENTS

The composite window/wall noise attenuations outlined above in **Table I-12** would be required through the assignment of an (E) Designation for noise to portions of the Project Area (Block 1588, Lot 1) in conjunction with the Proposed Actions. With the implementation of this composite window/wall noise attenuation, no significant adverse noise impacts would occur as a result of the Proposed Actions. The text of the (E) Designation (E-779) for window/wall attenuation would be as follows:

> **Block 1588, Lot 1 (Proposed Development Site): To ensure an acceptable interior noise environment, future residential, community facility, and commercial office uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on the eastern facade facing Lewis Avenue and on the southern façade facing Willoughby Avenue within 50 feet of the eastern lot line, and a minimum of 28 dBA window/wall attenuation on any facades facing Vernon Avenue to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office use, as illustrated in the EAS. To maintain a closed window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.**

With the implementation of the attenuation levels outlined above and outlined in **Table I-12** and shown in **Figure I-2**, the Proposed Project would provide sufficient attenuation to achieve *CEQR Technical Manual* interior noise level guidance. Therefore, the Proposed Actions would not result in any significant adverse noise impacts.

IV. OTHER NOISE CONCERNS

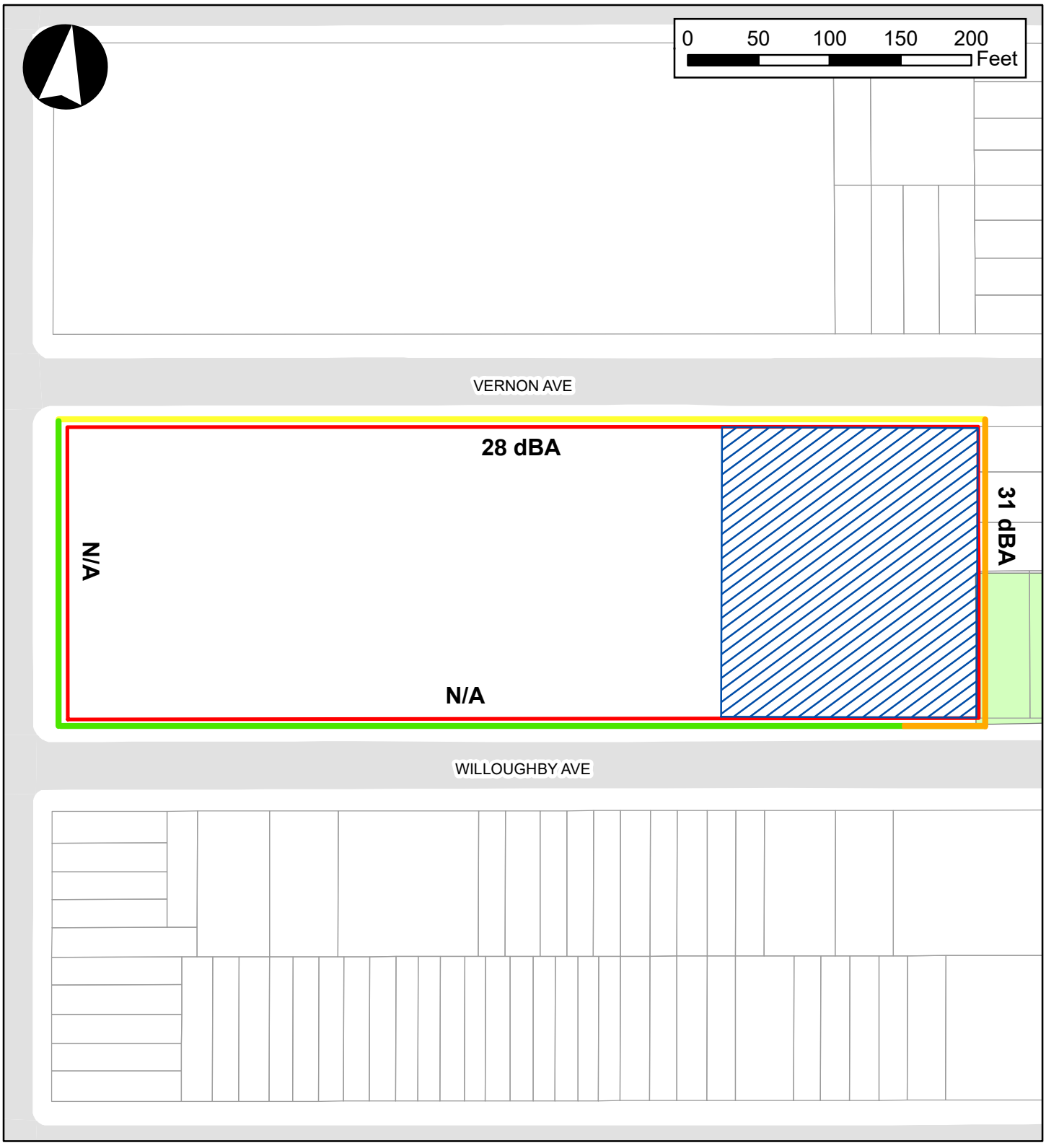
Mechanical Equipment

The Proposed Actions would not result in the operation of any unenclosed mechanical equipment for building ventilation purposes, and would not include any active outdoor recreational space that could result in stationary source noise impacts to the surrounding area. All mechanical equipment would be located either inside the building(s) or would be enclosed on the roof of the building(s) and would be designed to meet all applicable noise regulations and requirements (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code). Therefore, the Proposed Actions would not result in any significant increase in ambient noise levels in the vicinity of the Project Area or the surrounding area.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptors would be located within a 65 dB(A) DNL contour. Since the Project Area is not located within an existing 65 dB(A) DNL contour, no further aircraft noise impact analysis is warranted.

Figure I-2
Noise Attenuation Requirements



Legend

- Project Area
- Existing Playground
- Proposed Development Site

CEQR Attenuation Requirements

N/A | 28 dBA | 31 dBA

APPENDIX 1

PHASE I ENVIRONMENTAL SITE ASSESSMENT

(EXECUTIVE SUMMARY)

PHASE II WORK PLAN AND HEALTH AND SAFETY PLAN

WORK PLAN AND HASP APPROVAL FROM DEP

PARTNER

More Than Just Assessments.
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PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Willoughby Court
300 Vernon Avenue
Brooklyn, New York 11206

Report Date
June 28, 2023

Partner Project No.
23-411938.1

Prepared for:
Phoenix Realty Group, LLC
551 Madison Avenue, 8th Floor
New York, New York 10022

Building Science | Environmental Consulting | Construction & Development | Energy & Sustainability

PARTNER

June 28, 2023

Mr. Abraham Teitelbaum
Phoenix Realty Group, LLC
551 Madison Avenue, 8th Floor
New York, New York 10022

Subject: Phase I Environmental Site Assessment
Willoughby Court
300 Vernon Avenue
Brooklyn, New York 11206
Partner Project No. 23-411938.1

Dear Mr. Teitelbaum:

Partner Assessment Corporation (Partner) is pleased to provide this Phase I Environmental Site Assessment (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and Client Agreement.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate your trust in Partner and the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (310) 765-7243.

Sincerely,

Jenny Redlin
Relationship Manager

EXECUTIVE SUMMARY

Partner Assessment Corporation (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Practice E1527-21, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Phoenix Realty Group, LLC for the property located at 300 Vernon Avenue in Brooklyn, Kings County, New York (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Phoenix Realty Group, LLC with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the south side of Vernon Avenue, north side of Willoughby Avenue, and west side of Marcus Garvey Boulevard within a residential, commercial, and institutional area of Kings County. Please refer to the table below for a further description of the subject property:

Subject Property Data	
Address(es):	300 Vernon Avenue, Brooklyn, New York
Additional Current Address(es):	276-322 Vernon Avenue, 99-113 Marcus Garvey Boulevard, 721-735 Willoughby Avenue
Historical Address(es):	99-113 Sumner Avenue, 326-332 Vernon Avenue
Property Use:	Mixed use (residential over commercial)
Land Acreage (Ac):	2.98 Ac
Number of Buildings:	Two
Number of Floors:	721 Willoughby Avenue: Three- to Eight-story with cellar; 300 Vernon Avenue: Three- to Six-story with cellar
Gross Building Area (SF):	290,715 SF
Net Rentable Area (SF):	290,715 SF
Date of Construction:	1976
Parcel Number:	Borough 3, Block 1588, Lot 1
Type of Construction:	Brick
Current Tenants:	267 apartments for multi-family residential use and Hook'T Juice Bar & Grill, King Organic Wet Cleaners, and Thomas A. DeStefano Headstart for commercial use.
Site Assessment Performed By:	Maggie Ellis of Partner
Site Assessment Conducted On:	June 20, 2023
Regulatory Radius Report Date:	June 9, 2023
Report Date:	June 28, 2023
FOIAs Date:	June 2023

The subject property is currently occupied by 267 apartments for multi-family residential use and Hook'T Juice Bar & Grill, King Organic Wet Cleaners, and Thomas A. DeStefano Headstart for commercial use. Onsite operations consist of residential, child daycare, restaurant, and wet drycleaning activities, and associated property maintenance. In addition to the current structures, the subject property is also improved with a playground and paved courtyard in the center of the property between the buildings, and an asphalt-paved parking lot on the eastern portion of the property. City sidewalks bound the subject property to the north, south, and east along Vernon Avenue, Willoughby Avenue, and Marcus Garvey Boulevard, respectively.

According to available historical sources, the subject property was formerly developed with a portion of the St. Joseph's Orphan Asylum as early as 1887, with the asylum expanded over the years until the subject property was developed with the current structures in 1976. Tenants on the subject property have included St. Joseph's Orphan Asylum (1887-1965); residential tenants (1937-present); professional offices (1979-2022); child daycare centers (1979-present); commercial retail tenants (1985-present); AM&H Cleaners (1985); Eddie Cleaners (2003-2008); and King Organic Wet Cleaners (2011-present). A review of available regulatory records indicates that former onsite dry cleaners used chlorinated dry cleaning solvents; however, during the site reconnaissance, the current onsite dry cleaner, King Organic Cleaners, was identified as an organic cleaners which uses a water-based alternate solvent and had no chlorinated solvents onsite. The organic cleaners has reportedly occupied the property since at least 2011, and the property has a full cellar below. The presence of a cellar level would likely mitigate any potential releases from the current and former cleaners to the subsurface. As indicated in Section 4.2.2, based on the lack of open violations, regulatory oversight, and presence of a full cellar, the former dry cleaning operations are not expected to represent a significant environmental concern.

The adjoining properties are tabulated below:

Adjoining Properties	
North:	Vernon Avenue beyond which is one 24-story residential building (301-305 Vernon Avenue/95 Marcus Garvey Boulevard/1060 Myrtle Avenue) and four three-story residential buildings (327-333 Vernon Avenue)
Northeast:	Vernon Avenue beyond which is one three-story residential building (54 Lewis Avenue/335 Vernon Avenue)
East:	One four-story mixed commercial and residential building (330-336 Vernon Avenue/56 Lewis Avenue) and three four-story residential buildings (58-62 Lewis Avenue, 64-70 Lewis Avenue/775-777 Willoughby Avenue)
Southeast:	Willoughby Avenue beyond which is one four-story residential building (774-780 Willoughby Avenue/72-78 Lewis Avenue)
South:	Willoughby Avenue beyond which is a church (728-730 Willoughby Avenue), one six-story residential building (736-740 Willoughby Avenue) and 15 three- to four-story residential buildings (115 Marcus Garvey Boulevard/718 Willoughby Avenue, 726, 732-734, 744-764 Willoughby Avenue)
Southwest:	The intersection of Marcus Garvey Boulevard and Willoughby Avenue beyond which is one three-story mixed commercial and residential building (114 Marcus Garvey Boulevard/710-716 Willoughby Avenue)
West:	Marcus Garvey Boulevard beyond which are six two- to three-story mixed commercial and residential buildings (98 Marcus Garvey Boulevard/266 Vernon Avenue, 100-106 Marcus Garvey Boulevard) and one three-story residential building (112 Marcus Garvey Boulevard/709-713 Willoughby Avenue)
Northwest:	The intersection of Marcus Garvey Boulevard and Vernon Avenue beyond which is a parking lot (90-96 Marcus Garvey Boulevard/269-271 Vernon Avenue)

According to topographic map interpretation and information obtained from regulatory database report, the physical setting features of the subject property identify the terrain as sloping to the northeast with the depth to groundwater in the vicinity of the subject property inferred to be approximately greater than 50 feet below ground surface (bgs) and groundwater flow inferred to be toward the northeast.

Findings and Opinions

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any RECs during the course of this assessment.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any CRECs during the course of this assessment.

Historical Recognized Environmental Condition

A historical recognized environmental condition (HREC) refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any HRECs during the course of this assessment.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and/or lead-based paint (LBP) are present. Readily visible suspect ACMs and painted surfaces were observed in good condition. Should these materials be replaced, the identified suspect ACMs and LBPs would need to be sampled to confirm the presence or absence of asbestos or lead prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

Significant Data Gaps

No significant data gaps affecting the ability of the Environmental Professional to identify a REC were encountered during this assessment.

Conclusions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of 300 Vernon Avenue in Brooklyn, Kings County, New York (the

“subject property”). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs, CRECs, or HRECs were identified in connection with the subject property; however, a BER was identified. Based on the conclusions of this assessment, Partner recommends the following:

- An Operations and Maintenance (O&M) Program should be implemented in order to safely manage the suspect ACMs and LBP located at the subject property.

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Purpose 1
1.2 Scope of Work 1
1.3 Limitations 2
1.4 User Reliance 2
1.5 Limiting Conditions 3
2.0 SITE DESCRIPTION 4
2.1 Site Location and Legal Description 4
2.2 Current Property Use 4
2.3 Current Use of Adjoining Properties 4
2.4 Physical Setting Sources 5
2.4.1 Topography 5
2.4.2 Hydrology 5
2.4.3 Geology/Soils 6
2.4.4 Flood Zone Information 6
3.0 HISTORICAL INFORMATION 7
3.1 Aerial Photograph Review 7
3.2 Fire Insurance Maps 9
3.3 City Directories 12
3.4 Historical Topographic Maps 43
4.0 REGULATORY RECORDS REVIEW 46
4.1 Regulatory Agencies 46
4.1.1 State Department 46
4.1.2 Health Department 46
4.1.3 Fire Department 47
4.1.4 Building Department 47
4.1.5 Planning Department 48
4.1.6 Oil & Gas Exploration 48
4.1.7 Assessor's Office 49
4.1.8 Other Agency 49
4.2 Mapped Database Records Search 49
4.2.1 Regulatory Database Summary 49
4.2.2 Subject Property Listings 51
4.2.3 Adjoining Property Listings 52
4.2.4 Surrounding Area Listings of Concern to Subject Property 58
4.2.5 Unplottable Listings 58
5.0 USER PROVIDED INFORMATION AND INTERVIEWS 59
5.1 Interviews 59
5.1.1 Interview with Owner 59
5.1.2 Interview with Report User 59
5.1.3 Interview with Key Site Manager 60
5.1.4 Interviews with Past Owners, Operators and Occupants 60
5.2 User Provided Information 60
5.2.1 Title Records, Environmental Liens, and AULs 60
5.2.2 Specialized Knowledge 60
5.2.3 Actual Knowledge of the User 60
5.2.4 Valuation Reduction for Environmental Issues 60
5.2.5 Commonly Known or Reasonably Ascertainable Information 60

5.2.6 Previous Reports and Other Provided Documentation 60
6.0 SITE RECONNAISSANCE 61
6.1 General Site Characteristics 61
6.1.1 Solid Waste Disposal 61
6.1.2 Sewage Discharge and Disposal 61
6.1.3 Stormwater and Surface Water Drainage 61
6.1.4 Source of Heating and Cooling 61
6.1.5 Wells and Cisterns 62
6.1.6 Wastewater 62
6.1.7 Septic Systems 62
6.1.8 Additional Site Observations 62
6.2 Potential Environmental Hazards 62
6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site 62
6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs) 62
6.2.3 Evidence of Releases 62
6.2.4 Polychlorinated Biphenyls (PCBs) 62
6.2.5 Strong, Pungent or Noxious Odors 62
6.2.6 Pools of Liquid 62
6.2.7 Drains, Sumps and Clarifiers 62
6.2.8 Pits, Ponds and Lagoons 63
6.2.9 Stressed Vegetation 63
6.2.10 Additional Potential Environmental Hazards 63
6.3 Non-ASTM Services 63
6.3.1 Asbestos-Containing Materials (ACMs) 63
6.3.2 Lead-Based Paint (LBP) 64
6.3.3 Radon 64
6.3.4 Lead in Drinking Water 64
6.3.5 Mold 65
6.3.6 Wetlands 65
6.4 Adjoining Property Reconnaissance 65
7.0 VAPOR ENCROACHMENT CONDITIONS 66
8.0 FINDINGS AND CONCLUSIONS 67
9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS 69
10.0 REFERENCES 70

FIGURES

Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3: Topographic Map

APPENDICES

Appendix A: Site Photographs
Appendix B: Historical/Regulatory Documentation
Appendix C: Regulatory Database Report
Appendix D: Qualifications

1.0 INTRODUCTION

Partner Assessment Corporation (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E1527-21 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 300 Vernon Avenue in Brooklyn, Kings County, New York (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-21) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the User to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "landowner liability protections," or "LLPs"). ASTM Standard E1527-21 constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with and to the extent necessary to achieve the goal of the requirements set forth in the ASTM Standard E1527-21. This assessment included: 1) a property and adjoining site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments to obtain readily ascertainable information to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched readily available information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-21, AULs include both legal (that is, institutional) and physical (that is, engineering) controls that may include legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, or surface water on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, soil vapor, groundwater, and/or surface water on a property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the compliance and safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Phoenix Realty Group, LLC engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Phoenix Realty Group, LLC. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

1.5 Limiting Conditions

The findings and conclusions contain all the limitations inherent in these methodologies that are referred to in ASTM Practice E1527-21.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources, this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, and a title search from the Report User. This information was not provided at the time of the assessment. Based on information obtained from other historical sources, this data gap is not expected to alter the findings of this assessment.
- Partner was not able to document the historical use of the subject property prior to 1887, since city directories were not available prior to 1937, aerial photographs were not available prior to 1924, topographic maps were not available prior to 1889, and fire insurance maps were not available prior to 1887. This data failure is not considered critical and does not change the conclusions of this report, as the 1887 fire insurance map revealed the subject property to be developed with a portion of the St. Joseph's Orphan Asylum, which was later demolished for construction of the current structures. In addition, the adjoining and surrounding areas are also shown mostly as developed with small residential buildings.
- Partner was unable to determine the property use at five-year intervals, which constitutes a data gap. Information concerning historical use of the subject property was unavailable from 1891 to 1897; 1904 to 1918; 1918 to 1924; 1924 to 1935; 1939 to 1945; and 1959 to 1965. Except for property tax files and recorded land title records, which were not considered to be sufficiently useful, Partner reviewed all standard historical sources and conducted appropriate interviews. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner inspected approximately 8.4% of all interior units and all common areas. Based on the size and nature of use of the uninspected units (residential), this limited method of inspection is not expected to alter the overall findings of this assessment.
- Partner submitted Freedom of Information Act (FOIA) requests to The New York State Department of Environmental Conservation (NYSDEC) and New York City Department of Health (NYCDOH) for information pertaining to hazardous substances, underground storage tanks, releases, inspection records, etc. for the subject property and/or adjoining properties. As of this writing, these agencies have not responded to Partner's request. Based on information obtained from other historical resources, this limitation is not expected to alter the overall findings of this assessment.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 300 Vernon Avenue in Brooklyn, New York is located on the south side of Vernon Avenue, north side of Willoughby Avenue, and west side of Marcus Garvey Boulevard. According to the New York City Department of Finance (NYCDOF), the subject property is legally described as Borough 3, Block 1588, Lot 1. According to the NYCDOF, ownership is currently vested in HP Willoughby Housing Corporation since 2012.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently occupied by 267 apartments for multi-family residential use and Hook'T Juice Bar & Grill, King Organic Wet Cleaners, and Thomas A. DeStefano Headstart for commercial use. Onsite operations consist of residential, child daycare, restaurant, and drycleaning activities, and associated property maintenance. The subject property consists of one three- to eight-story building with a full cellar (721 Willoughby Avenue) located on the west-southwest side of the property and one three- to nine-story building with a full cellar (300 Vernon Avenue) located on the east-northeast side of the property. In addition to the current structures, the subject property is also improved with a playground and paved courtyard in the center of the property between the buildings, and an asphalt-paved parking lot on the eastern portion of the property. City sidewalks bound the subject property to the north, south, and east along Vernon Avenue, Willoughby Avenue, and Marcus Garvey Boulevard, respectively.

The subject property is designated for multi-family residential development by the City of Brooklyn.

The subject property was identified as a Resource Conservation and Recovery Act (RCRA) small quantity generator (SQG), Air Facility System (AFS), Federal Drycleaners, Facility Index System (FINDS), Integrated Compliance Information System (ICIS), NY Delisted Drycleaners, NY Drycleaners, and NY Manifest site in the regulatory database report of Section 4.2.

2.3 Current Use of Adjoining Properties

The subject property is located within a residential, commercial, and institutional area of Kings County. During the vicinity reconnaissance, Partner observed the land uses on adjoining properties as defined in ASTM Practice E1527-21 as any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. The adjoining properties are tabulated below:

Adjoining Properties	
North:	Vernon Avenue beyond which is one 24-story residential building (301-305 Vernon Avenue/95 Marcus Garvey Boulevard/1060 Myrtle Avenue) and four three-story residential buildings (327-333 Vernon Avenue)
Northeast:	Vernon Avenue beyond which is one three-story residential building (54 Lewis Avenue/335 Vernon Avenue)
East:	One four-story mixed commercial and residential building (330-336 Vernon Avenue/56 Lewis Avenue) and three four-story residential buildings (58-62 Lewis Avenue, 64-70 Lewis Avenue/775-777 Willoughby Avenue)
Southeast:	Willoughby Avenue beyond which is one four-story residential building (774-780 Willoughby Avenue/72-78 Lewis Avenue)

South:	Willoughby Avenue beyond which is a church (728-730 Willoughby Avenue), one six-story residential building (736-740 Willoughby Avenue) and 15 three- to four-story residential buildings (115 Marcus Garvey Boulevard/718 Willoughby Avenue, 726, 732-734, 744-764 Willoughby Avenue)
Southwest:	The intersection of Marcus Garvey Boulevard and Willoughby Avenue beyond which is one three-story mixed commercial and residential building (114 Marcus Garvey Boulevard/710-716 Willoughby Avenue)
West:	Marcus Garvey Boulevard beyond which are six two- to three-story mixed commercial and residential buildings (98 Marcus Garvey Boulevard/266 Vernon Avenue, 100-106 Marcus Garvey Boulevard) and one three-story residential building (112 Marcus Garvey Boulevard/709-713 Willoughby Avenue)
Northwest:	The intersection of Marcus Garvey Boulevard and Vernon Avenue beyond which is a parking lot (90-96 Marcus Garvey Boulevard/269-271 Vernon Avenue)

The adjoining property to the north was identified as a NY underground storage tank (UST), NY leaking storage tank (LST), NY Spills, and FINDS site; an adjoining property to the east was identified as a NY aboveground storage tank (AST) and NY Spills site; adjoining properties to the south were identified as NY AST and NY Spills sites; and an adjoining property to the west was identified as a NY Spills site in the regulatory database report of Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The 2019 United States Geological Survey (USGS) *Brooklyn, New York* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 71 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping gently towards the northeast.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

While under natural and undisturbed conditions shallow groundwater flow most frequently follows the topography of the land surface, natural or man-made features can affect flow direction, and the presumed flow may not match the actual flow directions at the subject property and vicinity. Topographic map interpretation suggests the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the northeast.

According to information obtained from regulatory database report, the depth to groundwater in the vicinity of the subject property is inferred to be approximately greater than 50 feet bgs.

The nearest surface water in the vicinity of the subject property is the Newtown Creek located approximately 5,150 feet and northeast of the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

According to available information, a public water system operated by the New York City Department of Environmental Protection (NYCDEP) serves the subject property vicinity. The sources of public water for the City of New York are surface water from a network of 19 reservoirs and three controlled lakes in a nearly 2,000 square-mile watershed that extends 125 miles north and west of New York City. Sources include: the Catskill/Delaware supply located in Delaware, Greene, Schoharie, Sullivan and Ulster counties; the Croton supply which is composed of 12 reservoir basins in Putnam, Westchester and Dutchess counties; and a groundwater supply in southeastern Queens.

2.4.3 Geology/Soils

The subject property is situated within the Atlantic Coastal Plain physiographic province of the State of New York. The uppermost geologic formation underlying the soils at the subject property consists of the Upper Glacial aquifer that are characterized by southward sloping deposits of sand, gravel, and silt. The Upper Glacial deposits have a maximum thickness of 600 feet. They are underlain by the Magothy, Raritan, and Lloyd Formations. The Gardiners clay and Jameco gravel separate the Upper Glacial deposits and the Magothy Formation along the southwest portion of Long Island.

Based on information obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Urban land- Greenbelt complex. Urban Land complex are those soils in which the soils' original structure and content have been so altered by human activities it has lost its original characteristics and is thus unidentifiable. Urban soils consist of nearly level to moderately steep areas where the soils have been altered or obscured by urban works and structures. Included in this unit in mapping are many small areas where the original soil material has been disturbed by construction and areas where fill has been added. Also included are small areas of undisturbed soils. Slopes range from 3 to 8 percent.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 3604970204F, dated September 05, 2007, the subject property appears to be located in Zone X (unshaded); defined as minimal risk areas outside the 1-percent and 0.2-percent-annual-chance floodplains.

A copy of the reviewed flood map is included in Appendix B of this report.

Phase II Site Investigation Work Plan

109 Marcus Garvey Boulevard

Block 1588, Lot 1

Borough of Brooklyn, Kings County, NY

CEQR No. 24DCP100K

PREPARED FOR

CB Emmanuel Realty
221-10 Jamaica Ave
Lower Level 1
Queens Village, NY 11428

PREPARED BY

One Penn Plaza
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August 7, 2024

Table of Contents

1 Introduction 1

2 Site Location, Current Use, and Proposed Redevelopment Plan 2

3 Phase I ESA Summary 3

4 Phase II Investigation Work Plan Scope 4

4.1 Soil and Soil Vapor Summary 4
4.1.1 Soil Sampling 4
4.1.2 Soil Vapor Sampling 5
4.1.3 Sample Analysis 5
4.1.4 Quality Assurance/Quality Control Procedures 6
4.1.5 Investigation Derived Waste 6

5 Reporting 7

6 Health and Safety Plan (HASP) 8

List of Figures

Figure No.	Description
Figure 1	Site Location Map
Figure 2	Site Features Map
Figure 3	Proposed Sample Location Map

List of Attachments

Appendix No.	Description
Attachment A	Environmental Assessment Statement
Attachment B	Phase I ESA, Partner Engineering and Science Inc, June 28, 2023
Attachment C	Geotechnical Engineering Report
Attachment D	Health and Safety Plan (HASP)

1

Introduction

VHB was retained by CB Emmanuel Realty, LLC (the Client) to perform a Phase II Site Investigation (SI) of the property located at 109 Marcus Garvey Boulevard, Brooklyn, New York (Site or subject property) as shown on **Figure 1** and **Figure 2**. The subject property is further defined by the City of New York as Brooklyn Block 1588, Lot 1. This Phase II SI Work Plan has been developed for the Site based on the findings of Partner Assessment Corporation (Partner's) Phase I Environmental Site Assessment (ESA), dated June 28, 2023, Philip Habib & Associates' Environmental Assessment Statement (EAS), dated December 25, 2023, GTA Engineering Services of New York, P.C (GTA's) Geotechnical Engineering Report, dated June 28, 2024, and in response to the comments received from the New York City Department of Environmental Protection (NYCDEP) on March 26, 2024.

CB Emmanuel Realty, LLC is seeking three discretionary actions (the Proposed Actions) to rezone the subject property from a R6 zoning district to a R7A zoning district, a zoning text amendment to amend Zoning Resolution Appendix F to establish the subject property within a Mandatory Inclusionary Housing area, and a City Planning Commission special permit for Large Scale General Development to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot. The Proposed Actions would enable the development and construction of a new, 14-story building with approximately 292 affordable independent residences for seniors, with approximately 63 accessory parking spaces in the cellar level of the proposed building, replacing an approximately 30,000 square foot portion of the greater 130,000 square foot lot currently used as a 95-space surface parking lot. The zoning text amendment requires review under the City Environmental Quality Review (CEQR) process and the project team must demonstrate that the project complies with the *CEQR Technical Manual*. NYCDEP will review and provide approval of submittals.

2

Site Location, Current Use, and Proposed Redevelopment Plan

The Site is located at 109 Marcus Garvey Boulevard in the Bedford-Stuyvesant neighborhood of Brooklyn and is identified as Block 1588, Lot 1. Currently, the Site consists of a 95-space asphalt-paved parking lot, encompassing a 30,000 square foot portion of the total 130,000 square foot lot. Four residential buildings and a parking lot are located to the north; the Lewis Playground is located adjacent to the east; residential buildings and the St John's Preparatory School are located to the south; and a residential building complex is located adjacent to the west of the subject property.

As described above, the proposed project consists of a new 14-story residential building, which will include approximately 292 affordable independent residential units for seniors with 63 accessory parking spaces in the cellar. The cellar level will span a portion of the footprint of the site, with the remaining footprint to be used for outdoor space. Further details are provided in the Philip Habib & Associates, Environmental Assessment Statement (EAS), dated December 5,2023 (**Attachment A**).

3

Phase I ESA Summary

A Phase I Environmental Site Assessment (Phase I ESA), dated June 28, 2023, was prepared for the subject property by Partner Engineering and Science Inc. (**Attachment B**). At the time of the site reconnaissance, the subject property was developed with an asphalt-paved parking lot and no structures. The remainder of Block 1588, Lot 1 was developed with four multi-family residential buildings containing 267 units and three at-grade commercial units containing a restaurant, wet dry cleaner, and a day care facility.

Formerly, Lot 1 was improved with a portion of the St. Joseph's Orphan Asylum, until the current buildings were developed in 1976. Past commercial tenants have included professional offices, day care facilities, and dry cleaners.

In addition to the above, the following findings were presented in the Phase I ESA:

- The Site has a topographic elevation of approximately 71 feet above mean sea level (amsl). Based upon topographic gradient and nearest surface water body (Newtown Creek, approximately 5,150 feet to the northeast), groundwater flow beneath the Site is expected to flow in a north-to-northeast direction. Depth-to-groundwater is expected to be greater than 50 feet below ground surface (bgs).
- Lot 1 was identified in the EDR Resource Conservation and Recovery Act (RCRA) database and New York State and Federal Drycleaners databases. These listings are associated with drycleaning operations in the west-adjoining building complex to the subject property portion of Lot 1. These listings indicate use and storage of cleaning solvents and other chemicals on-site.
- The Site was not identified in Federal or New York State (NYS) regulatory agency database listings. However, several regulatory agency database listings were identified within 300 feet of the Site with the potential to impact environmental conditions at the Site. These listings were reviewed, and Partner found that they were unlikely to have impacted environmental conditions at the Site.

No Recognized Environmental Conditions (RECs) were identified in the Phase I ESA.

4

Phase II Investigation Work Plan Scope

4.1 Soil and Soil Vapor Summary

Ten soil borings will be advanced to approximately 12 feet below ground surface (bgs) or bedrock interface (whichever is shallower). Twenty grab soil samples will be collected, two samples per boring, one from the 0-2' bgs interval and another from the two-foot interval or termination of the boring (whichever is shallower). Nine soil vapor implants will be installed across the Site to approximately 10 feet bgs or bedrock interface (whichever is shallower).

As discussed with NYCDEP, the June 2024 Geotechnical Engineering Report (**Attachment C**), prepared for the Site, reports groundwater a depth of 75 feet below ground surface (bgs). Based on this information, the water table is greater than 30 feet beneath the deepest level of the proposed on-site cellar foundation slab (assumed to be ~10 feet). Therefore, temporary groundwater monitoring wells will not be installed as part of this investigation. The proposed soil and soil vapor sample locations are shown on **Figure 3.**

If underground storage tank(s) (USTs) are identified at the Site, additional test borings would be advanced to adequately characterize the UST areas. A minimum of two test borings would be advanced per tank cluster. Test borings would 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 would be collected from each soil boring as described above 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.

4.1.1 Soil Sampling

VHB will direct the installation of ten soil borings across the Site. Each boring will be advanced to approximately 12 feet bgs or groundwater/bedrock interface (whichever is shallower) using a Geoprobe® direct-push or equivalent drill rig. One surface soil sample will be collected from the upper two feet of soil (0-2 feet bgs interval) and one subsurface soil sample will be collected from the two-foot interval below the proposed maximum excavation depth(s) and/or above the groundwater/bedrock interface (whichever is encountered first). The soil samples collected will be discrete (grab) samples. VHB understands that the maximum excavation depths will be

approximately 10 feet bgs for the new development. If evidence of gross contamination is observed between two-feet bgs and the proposed maximum excavation depth (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using accepted field instruments), an additional sample will be collected from that interval. The samples will be focused on any sections exhibiting evidence of contamination based on field screening. 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.

VHB will oversee the advancement of the soil borings under the supervision of a Qualified Environmental Professional (QEP). The proposed soil sample locations are shown on **Figure 3**. Soil will be collected and continuously screened in each boring to the termination depth using Geoprobe® macro-core sampling disposable acetate sleeves. Lithological descriptions will be recorded in a field log. Following soil screening, the soil samples will be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Accredited Program (ELAP)-certified laboratory.

Soil cuttings that are generated during the advancement of the soil borings will be backfilled into each original borehole unless free-product or grossly contaminated soil is observed. If observed, the soil cuttings will be containerized in properly labeled New York City Department of Transportation (NYCDOT)-approved 55-gallon drums for future off-site disposal at a permitted facility.

4.1.2 Soil Vapor Sampling

VHB will direct the installation of nine soil vapor implants across the Site. Each of the soil vapor implants will be installed via direct-push, remote-access Geoprobe® drill rig. The soil vapor implants will be installed approximately 6-inches below the proposed concrete building slab or six-inches above groundwater or bedrock interface (whichever is shallower). Each soil vapor implant will consist of a stainless retract-a-tip soil vapor screen attached to polyethylene tubing. One soil vapor sample will be collected from each soil vapor implant.

Prior to sampling, VHB will purge each soil vapor sampling point no more than one to three equipment volumes of soil vapor. A laboratory supplied vacuum Summa canister will then be connected to the polyethylene tubing, and the sample will be collected over a two-hour period using a laboratory-calibrated flow controller and consistent with NYSDOH Guidance. Flow rates for both purging and sampling soil vapor will not exceed 0.2 liters per minute to minimize outdoor air infiltration.

A helium tracer gas test will be performed prior to and following sample collection in general accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor implant seal. Samples will be collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006, revised May 2017). Conditions in the field may require adjustment of sampling locations. The proposed soil vapor sample locations are shown on **Figure 3**.

4.1.3 Sample Analysis

Soil and soil vapor samples will be submitted to a NYSDOH ELAP-certified laboratory for the following:

Soil

- Volatile Organic Compounds (VOCs) by USEPA Method 8260;
- Semi-volatile Organic Compounds (SVOCs) by USEPA Method 8270;
- Pesticides by USEPA Method 8081;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082; and
- Target Analyte List (TAL) Metals.

Samples to be analyzed for VOCs will be collected using laboratory-provided EnCore® samplers and will be collected from a discrete point within the sample.

Soil Vapor

- VOCs by USEPA Method TO-15.

4.1.4 Quality Assurance/Quality Control Procedures

Quality Assurance/Quality Control (QA/QC) procedures will be used to provide performance information regarding accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analysis for this investigation. Field QA/QC procedures will be used (1) to document that samples are representative of actual conditions at the site and (2) identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses will be used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process.

4.1.5 Investigation Derived Waste

Cuttings may be disposed at the Site within the borehole that generated them to within 24 inches of the surface unless:

- Free product or grossly contaminated soil, are present in the cuttings;
- The borehole has penetrated an aquitard, aquiclude or other confining layer; or extends significantly into bedrock;
- Backfilling the borehole with cuttings will create a significant path for vertical movement of contaminants. Soil additives (bentonite) may be added to the cuttings to reduce permeability; and
- The soil cannot fit into the borehole.

Soil cuttings that need to be managed on-site will be containerized in a properly labeled New York Department of Transportation (NYDOT) approved 55-gallon drum for future off-site disposal at a permitted facility. Disposable sampling equipment including, spoons, gloves, bags, paper towels, etc. that came in contact with environmental media will be double bagged and disposed as municipal trash in a facility trash dumpster as non-hazardous trash.

5

Reporting

A Phase II Site Investigation Report will be prepared following completion of the field activities and receipt of the laboratory data. The report will provide detailed summaries of the investigative findings. Soil analytical results will be compared to the NYSDEC Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives and appropriate Part 375-6.8(b) Restricted Use Soil Cleanup Objectives. Soil vapor results will be compared to the NYSDOH October 2006, revised May 2017, Final Guidance for Evaluating Soil Vapor Intrusion Matrices. The report will include an updated sampling plan, diagrams, analytical data tables for all reported constituent compounds (including non-detectable concentrations) and remedial recommendations, as warranted.

6

Health and Safety Plan (HASP)

An Occupational Safety and Health Administration (OSHA) compliant Health and Safety Plan will be implemented during the site work to protect worker safety. The Site Safety Coordinator will ensure compliance of the HASP in accordance with applicable health and safety laws and regulations. All field personnel involved in investigation activities will participate in training required under OSHA HAZWOPER 29 CFR 1910.120, including 40-hour hazardous waste operator training and annual 8-hour refresher training. Emergency telephone numbers will be posted at the site location before any work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; personal protective equipment (PPE) levels and other relevant safety topics including a highlighted route map to the nearest hospital/emergency room. Meetings will be documented in a logbook or specific form. Potential on-site chemicals of concern include VOCs, SVOCs, Pesticides/PCBs, and Metals (specifically arsenic, lead, and mercury at a minimum). Information fact sheets and/or summary tables for each contaminant group are included in the HASP. A copy of this HASP will be on-site during the sampling event and is included as **Attachment D**.

Environmental Protection

Rohit T. Aggarwala
Commissioner

Angela Licata
Deputy Commissioner
Sustainability

59-17 Junction Blvd.
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August 30, 2024

Andrew Martini
Senior Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 109 Marcus Garvey Boulevard
Block 1588, Lot 1
CEQR # 24DCP100K

Dear Mr. Martini:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the August 2024 Phase II Site Investigation Work Plan (Phase II Work Plan) and Site Specific Health and Safety Plan (HASP) prepared by VHB on behalf of CB Emmanuel Realty (applicant) for the above referenced project. It is our understanding that the applicant is seeking approval for three discretionary actions (Proposed Actions) from the New York City Department of City Planning (DCP) that would facilitate infill development at Block 1588, Lot 1 (Project Area), in the Bedford-Stuyvesant neighborhood of Brooklyn Community District 3. These actions are: (1) a zoning map amendment to rezone the Project Area from R6 to R7A, (2) a zoning text amendment to amend Zoning Resolution (ZR) Appendix F to establish the Project Area within a Mandatory Inclusionary Housing area, and (3) a City Planning Commission special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot. The Proposed Actions would enable the applicant to construct a new infill development in the eastern portion of the Project Area, (Proposed Development Site), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area and is currently occupied by a surface parking lot. The remainder of the Project Area is occupied by four buildings totaling approximately 313,540 gross square feet (gsf), containing a mix of 267 income restricted dwelling units, approximately 6,642 gsf of ground floor commercial retail, and approximately 5,339 gsf of community facility space for social services offices. Approval of the Proposed Actions would allow the applicant to develop a new 14-story building with approximately 292 Affordable Independent Residences for Seniors units in place of the existing 95-space surface parking lot on the Proposed Development Site. Approximately 63 accessory parking spaces would be located in the cellar level of the proposed building, replacing the existing 95-space surface lot. The four existing buildings in the Project Area would remain unchanged. The new building would have a total of approximately 192,519 gsf of residential space.

The August 2024 Phase II Work Plan proposes to advance 10 soil borings (SB-1 through SB-10) to a depth of approximately 12 feet below grade surface (bgs) or groundwater and bedrock interface (whichever is shallower). A minimum of two (2) grab soil samples will be collected from each soil boring. One surface soil sample will be collected from the upper two feet of soil (0-2 feet bgs interval) and one subsurface soil sample will be collected from the two-foot interval below the proposed maximum excavation depth(s) and/or above the groundwater/bedrock interface (whichever is encountered first). The soil samples collected will be discrete (grab) samples. If evidence of gross contamination is observed between two-feet bgs and the proposed maximum excavation depth (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using accepted field instruments), an additional sample will be collected from that interval. The samples will be focused on any sections exhibiting evidence of contamination based on field screening. 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. The June 2024 Geotechnical Engineering Report prepared for the Site, reports groundwater a depth of 75 feet bgs. Therefore, temporary groundwater monitoring wells will not be installed as part of this investigation. Soil samples will be collected and analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls by EPA Method 8082, and Target Analyte List metals. Nine soil vapor implants (SV-1 through SV-9) will be installed approximately 6-inches below the proposed concrete building slab or six-inches above groundwater or bedrock interface (whichever is shallower). Soil vapor samples will be analyzed for VOCs by EPA Method TO-15.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

DEP finds the August 2024 Phase II Work Plan and HASP for the proposed investigation acceptable. DCP should inform the applicant that upon completion of the investigation activities, the applicant should submit a detailed Phase II report for DEP review and approval. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data and conclusions, comparison of soil and soil vapor analytical results (i.e., New York State Department of Environmental Conservation 6 NYCRR Part 375 and the New York State Department of Health October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York), updated site plans depicting sample locations, boring logs, and remedial recommendations, if warranted.

Future correspondence and submittals related to this project should include the following CEQR # **24DCP100K**. If DCP has any questions, you may contact me at weiy@dep.nyc.gov.

Sincerely,

Wei Yu

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
M. Wimbish
S. Shellooe – DCP
E. Ulker Kacar – DCP

APPENDIX 2

TRANSPORTATION PLANNING FACTORS AND TRAVEL DEMAND FORECAST MEMORANDUM

Philip Habib & Associates
Engineers and Planners • 432 Park Avenue South • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

TECHNICAL MEMORANDUM

TO: **New York City Department of Housing Preservation and Development (HPD)**

FROM: **Philip Habib & Associates (PHA)**

DATE: **October 20, 2023**

PROJECT: **109 Marcus Garvey Boulevard EAS**

RE: **Transportation Planning Factors and Travel Demand Forecast**

This memorandum summarizes the transportation planning factors to be used for the analyses of traffic, transit, pedestrian, and parking conditions for the *109 Marcus Garvey Boulevard EAS*. Estimates of the peak travel demand for the Proposed Actions are provided, along with a discussion of trip assignment methodologies and study area definitions.

THE PROPOSED ACTIONS

The proposal involves an application by the CB Emmanuel Realty for three actions (the "Proposed Actions") subject to City Environmental Quality Review ("CEQR") to facilitate the construction of a new infill development in the eastern portion of the Project Area, (the "Proposed Development Site"), which is a roughly 30,000-square-foot (sf) portion of the 130,000-sf Project Area at 109 Marcus Garvey Boulevard (Brooklyn Block 1588, Lot 1; the "Project Area") in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3.

The Proposed Actions include: (1) Zoning Map Amendment to rezone Brooklyn Block 1588, Lot 1, from R6 and R6/C2-4 to R7A and R7A/C2-4; (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area, and (3) a City Planning Commission ("CPC") special permit for Large Scale General Development pursuant to ZR Section 74-74 to waive regulations relating to height, street wall location, and minimum distance between buildings on the same zoning lot. Approval of the Proposed Actions would allow the Applicant to develop a new 14-story building with approximately 292 Affordable Independent Residences for Seniors (AIRS) units (the "Proposed Project")

DEVELOPMENT SCENARIOS

In order to assess the potential effects of the Proposed Project, development scenarios for both the "future without the Proposed Project" (No-Action scenario) and the "future with the Proposed Project" (With-Action scenario) are analyzed for an analysis year of 2027; these scenarios are outlined in **Table 1**. The incremental difference between the No-Action and With-Action scenarios will serve as the basis of the impact category analyses of the EAS. In the future (2027) without the Proposed Project, the Proposed Actions would not be approved and the Applicant would not proceed with the Proposed Project. Absent approval of the Proposed Actions (the "No-Action Condition"), the existing residential and mixed-use buildings and surface parking lot would remain at the Project Area, and no new development or changes to the existing uses are expected to occur as unused FAR remaining is too small for any additional development to feasibly occur within the Project Area absent the Proposed Actions. Thus, Project Area conditions in the 2027 future without the Proposed Actions are assumed to be the same as the existing conditions for the purpose of CEQR technical analysis.

In the future (2027) with the Proposed Project, the Project Area would be rezoned from R6 and R6/C2-4 to R7A and R7A/C2-4, and would be designated as an MIH area. A new 14-story building with a 143-foot roof height and approximately 292 Affordable Independent Residences for Seniors (AIRS) units would be constructed (The new building would have a total of approximately 192,519 gsf of residential space, and approximately 63 accessory parking spaces would be located in a 20,400-gsf garage in the cellar level of the proposed building, replacing the existing surface lot on the eastern portion of the Project Area. No additional changes to any of the existing residential, commercial, or community facility uses are expected to occur in the future with the Proposed Actions. As shown in **Table 1**, the incremental (net) change that would result from the Proposed Actions is the addition of 192,519 gsf of residential space, with approximately 292 AIRS Dus compared to the No-Action condition.

Table 1: Comparison of No-Action and With-Action Scenarios

	No-Action	With-Action	Increment
Land Use			
Residential (gsf)	301,558	494,077	+192,519
Residential (DUs)	267	559	+292
AIRS DUs	0	292	+292
Local Retail (gsf)	6,642	6,642	-
Community Facility (gsf)	5,339	5,339	-

TRANSPORTATION PLANNING FACTORS

The transportation planning factors used to forecast the travel demand that would be generated by the No-Action and With-Action scenarios on the Development Site are summarized in **Table 2** and discussed below. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factors for each of the land uses were primarily based on those cited in the 2021 *City Environmental Quality Review* ("CEQR") *Technical Manual,* census data, and factors cited in the 2021 *Gowanus Neighborhood Rezoning Rezoning FEIS*. Factors are shown for the weekday AM and PM peak hours (the

typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (the typical peak periods for retail demand and for office pedestrian demand).

Residential

The forecast of travel demand for the residential portion used trip generation rates, directional splits, temporal distributions, and truck trip generation rates sourced from the 2021 *CEQR Technical Manual*. A weekday trip generation rate of 8.18 person trips per DU and a Saturday trip generation rate of 9.08 person trips per DU were utilized to forecast residential demand. Temporal distributions of 9.3 percent, 5.6 percent, 8.5 percent, and 8.4 percent for the weekday AM, midday, PM, and Saturday peak hours, respectively, were sourced from the 2021 *CEQR Technical Manual*. The residential modal split and auto vehicle occupancy were derived from 2015-2019 American Community Survey ("ACS") Five-Year Estimates Journey-to-Work data for Brooklyn census tracts 259.01, 259.02, 261, 281, 283, 285.02 and 287. The modal splits used to forecast residential demand were 12.9 percent, 1.1 percent, 64.6 percent, 9.5 percent, 2.8 percent, and 9.1 percent for autos, taxis, subway, bus, bike, and walk/other, respectively. A residential vehicle occupancy of 1.39 was utilized based on the 2015-2019 ACS data. A taxi occupancy rate of 1.40 was based on data from the 2021 *Gowanus Neighborhood Rezoning Avenue Rezoning FEIS*.

Table 2: Transportation Planning Factors

Land Use:	**Residential**	
Trip Generation:	(1)	
Weekday	8.18	
Saturday	9.08	
	per DU	
Temporal Distribution:	(1)	
AM	9.3%	
Midday	5.6%	
PM	8.5%	
Saturday	8.4%	
Modal Splits:	(2)	
	All Periods	
Auto	12.9%	
Taxi	1.1%	
Subway/Rail	64.6%	
Transit Bus	9.5%	
Ferry	0.0%	
Bike	2.8%	
Walk/Other	9.1%	
	100.0%	
In/Out Splits:	(1)	
	In	Out
AM	22%	78%
Midday	50%	50%
PM	62%	38%
Saturday	55%	45%
Vehicle Occupancy:	(2)(3)	
	All Periods	
Auto	1.39	
Taxi	1.40	
Truck Trip Generation:	(1)	
Weekday	0.06	
Saturday	0.02	
	per DU	
Truck Temporal Distribution:	(1)	
AM	12.0%	
MD	9.0%	
PM	2.0%	
Saturday	9.0%	
Truck Directional Distribution:	In	Out
AM	50%	50%
MD	50%	50%
PM	50%	50%
Saturday	50%	50%

Notes: (1) 2021 City Environmental Quality Review (CEQR) Technical Manual

(2) 2015-2019 ACS journey-to-work data for Brooklyn Tracts 259.01, 259.02, 261, 281, 283,285.02 & 287.

(3) Based on 2021 *Gowanus Neighborhood Rezoning Avenue Rezoning FEIS*

TRIP GENERATION

The net incremental change in person and vehicle trips expected to result from the Proposed Project by the 2027 analysis year was calculated based on the net change in land uses shown in **Table 1** and the transportation planning factors shown in **Table 2**.

Table 3 shows an estimate for the total net incremental change in peak hour person and vehicle trips (as compared to the No-Action scenario) that would occur in 2027 with implementation of the Proposed Actions. As shown in **Table 3**, the Proposed Actions would generate a net change of approximately 224 person trips in the weekday AM peak hour, 134 person trips in the weekday midday peak hour, 204 person trips in the weekday PM peak hour, and 224 person trips in the Saturday peak hour.

As shown in **Table 3**, peak hour vehicle trips (including auto, truck, and balanced taxi trips) would increase by a net total of approximately +27, +18, +23, and +25 (in and out combined) in the weekday AM, midday, and PM peak hours, and the Saturday peak hour, respectively. Peak hour subway trips would increase by a net total of approximately +144, +86, +132, and +145 during these periods, respectively, while bus trips would increase by approximately +22, +12, +19, and +22 during these periods, respectively. Bike trips would increase by +6, +4, +6, +6, and +6 trips during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Walk-only trips would increase by +20, +12, +19, and +20 trips during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. The total pedestrian trips (subway, bus, and walk-only trips) would increase by +192, +114, +176, and +193 trips during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively.

LEVEL 1 SCREENING ASSESSMENT

The 2021 *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections of this memorandum, the preliminary analysis begins with a trip generation (a Level 1 screening assessment) analysis to estimate the numbers of person and vehicle trips attributable to a proposed action. According to the 2021 *CEQR Technical Manual*, if a proposed action is expected to result in fewer than 50 peak hour vehicle or ferry trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (a Level 2 screening assessment) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments demonstrate that a proposed action would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, 25 or more peak hour trips by Citywide Ferry Service ("CWFS") in a single direction on a single route or 50 or more at a ferry landing, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area, or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrian, vehicular and pedestrian safety, and parking conditions.

Table 3: Travel Demand Forecast

Land Use:	Residential		Total	
Size/Units:	292 DUs			
Peak Hour Trips:			Total Trips	
AM	224		224	
Midday	134		134	
PM	204		204	
Saturday	224		224	
Person Trips:				
AM	In	Out	In	Out
Auto	6	23	6	23
Taxi	1	2	1	2
Subway	32	112	32	112
Bus	5	17	5	17
Ferry	0	0	0	0
Bike	1	5	1	5
Walk/Other	4	16	4	16
Total	49	175	49	175
Midday	In	Out	In	Out
Auto	9	9	9	9
Taxi	1	1	1	1
Subway	43	43	43	43
Bus	6	6	6	6
Ferry	0	0	0	0
Bike	2	2	2	2
Walk/Other	6	6	6	6
Total	67	67	67	67
PM	In	Out	In	Out
Auto	16	10	16	10
Taxi	1	1	1	1
Subway	82	50	82	50
Bus	12	7	12	7
Ferry	0	0	0	0
Bike	4	2	4	2
Walk/Other	12	7	12	7
Total	127	77	127	77
Saturday	In	Out	In	Out
Auto	16	13	16	13
Taxi	1	1	1	1
Subway	80	65	80	65
Bus	12	10	12	10
Ferry	0	0	0	0
Bike	3	3	3	3
Walk/Other	11	9	11	9
Total	123	101	123	101
Vehicle Trips :	Residential		Total	
AM	In	Out	In	Out
Auto	4	17	4	17
Taxi	1	1	1	1
Taxi (Balanced)	2	2	2	2
Truck	1	1	1	1
Total	7	20	7	20
Midday	In	Out	In	Out
Auto	6	6	6	6
Taxi	1	1	1	1
Taxi (Balanced)	2	2	2	2
Truck	1	1	1	1
Total	9	9	9	9
PM	In	Out	In	Out
Auto	12	7	12	7
Taxi	1	1	1	1
Taxi (Balanced)	2	2	2	2
Truck	0	0	0	0
Total	14	9	14	9
Saturday	In	Out	In	Out
Auto	12	9	12	9
Taxi	1	1	1	1
Taxi (Balanced)	2	2	2	2
Truck	0	0	0	0
Total	14	11	14	11

Traffic

According to 2021 *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if a proposed action would result in 50 or more vehicle trip ends in a peak hour at one or more intersections. As shown in **Table 3**, the net number of incremental vehicle trips associated with the Proposed Actions — +27, +18, +23, and +25 in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively — would not exceed the 50-trip threshold in any peak hour. Therefore, according to 2021 *CEQR Technical Manual* guidance, a Level 2 screening assessment is not warranted and significant adverse impacts to traffic conditions are not anticipated.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority ("MTA") and cited in the 2021 *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action would result in fewer than 200 peak hour subway/rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus route in one direction, or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours, as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Table 3**, the Proposed Actions are expected to generate a net increase of approximately +144 and +132 incremental subway trips in the weekday AM and PM peak hours, respectively. As the numbers of trips in the weekday AM and PM peak hours would not exceed the 200-trip 2021 *CEQR Technical Manual* analysis threshold, a Level 2 screening assessment is not warranted. As also shown in **Table 3,** the Proposed Actions are expected to generate a net increase of approximately +22 and +19 incremental bus trips in the weekday AM and PM peak hours, respectively. As the numbers of trips do not exceed the 50-trip per direction 2021 *CEQR Technical Manual* analysis threshold on any route, a Level 2 screening assessment is not warranted for the bus mode. Therefore, according to 2021 *CEQR Technical Manual* guidance, significant adverse impacts to transit conditions are not anticipated.

CWFS

According to 2021 *CEQR Technical Manual* guidance, detailed analyses of the CWFS are not typically required if a proposed action would result in 50 or fewer peak hour CWFS peak hour ferry riders to a ferry landing within a half-mile of the Development Site. As the Development Site is not located within a half-mile of a CWFS ferry landing, a Level 2 screening analysis is not warranted according to 2021 *CEQR Technical Manual* guidance.

Pedestrians

According to 2021 *CEQR Technical Manual* guidance, a quantified or detailed analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area, or crosswalk).

As shown in **Table 3**, the Proposed Actions would generate an incremental demand of approximately +192, +114, +176, and +193 total pedestrian trips (including walk-only trips, pedestrians en route to and from nearby subway stations and bus stops, as well as pedestrians walking bikes to Development Site) in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. As the number of trips in the weekday midday, PM, and Saturday midday periods would not exceed the 200-trip threshold, a Level 2 screening assessment is not warranted and significant adverse impacts to pedestrian conditions are not anticipated, per 2021 *CEQR Technical Manual* guidance.

Parking

According to 2021 *CEQR Technical Manual* guidance, on- and off-street parking analyses may be warranted if a quantified traffic analysis is necessary based on the Levels 1 and 2 screening assessments. Based on the screening assessments detailed above, a quantified traffic analysis would not be warranted for the Proposed Actions. Therefore, according to 2021 *CEQR Technical Manual* guidance, quantified on- and off-street parking analyses would also not be warranted for the Proposed Actions.

CONCLUSION

According to 2021 *CEQR Technical Manual* guidance, if a proposed action is expected to result in fewer than 200 peak hour pedestrian and subway trips, and fewer than 50 peak hour bus and vehicle trips, further quantified analyses are not warranted.

As shown in **Table 3**, the Proposed Actions would generate less than the 2021 *CEQR Technical Manual* Level 1 screening assessment threshold of 50 incremental vehicle trips during the weekday AM, midday, PM, and Saturday peak hours. As also shown in **Table 3**, the Proposed Actions would generate less than the 2021 *CEQR Technical Manual* Level 1 screening assessment threshold of 200 incremental subway trips during each of the analysis peak hours. Similarly, the Proposed Actions would generate less than the 2021 *CEQR Technical Manual* Level 1 screening assessment threshold of 50 incremental bus trips during each of the analysis peak hours. Finally, the incremental pedestrian trips generated by the Proposed Actions would not exceed the 2021 *CEQR Technical Manual* 200-trip Level 1 screening assessment threshold during each of the analysis peak hours. As these 2021 *CEQR Technical Manual* thresholds would not be exceeded, detailed traffic, subway, bus, and pedestrian analyses are not warranted for the Proposed Actions.

APPENDIX 3

NYC LANDMARKS PRESERVATION COMMISSION
CORRESPONDENCE

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: LA-CEQR-K (DEPARTMENT OF CITY PLANNING)
Project: 109 MARCUS GARVEY BLVD
Address: 721 WILLOUGHBY AVENUE BBL: 3015880001
Date Received: 4/20/2023

[X**] No architectural significance**

[X**] No archaeological significance**

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

Comments:

S/NR ELIGIBLE ST. JOHN THE BAPTIST R.C. CHURCH COMPLEX, 333 HART STREET AND 345 VERNON AVENUE WITHIN RADIUS.

Gina Santucci 5/2/2023

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 37055_FSO_DNP_05022023.docx