ENVIRONMENTAL ASSESSMENT STATEMENT

33-01 11th Street Rezoning EAS

CEQR No. 24DCP128Q

Applicant:
Catholic Medical Mission Board

Lead Agency:
New York City Department of City Planning

Prepared by:
Philip Habib & Associates

1 July 2024

33-01 11th Street Rezoning EAS

Environmental Assessment Statement (EAS)

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ENVIRONMENTAL ASSESSMENT STATEMENT SHORT FORM

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

FOR UNLISTED ACTIONS ONLY • *Please fill out and submit to the appropriate agency* (see instructions)

Part I: GENERAL INFORMATION

1. *Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?* ☐ YES ☒ NO

If "yes," **STOP** and **complete the FULL EAS FORM**.

2. *Project Name* 33-01 11th Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
24DCP128Q	
ULURP REFERENCE NUMBER (if applicable)	**OTHER REFERENCE NUMBER(S) (if applicable)** (*e.g.*, legislative intro, CAPA)
240334ZMQ 240335ZRQ	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY New York City Department of City Planning			NAME OF APPLICANT Catholic Medical Mission Board		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director, EARD			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Richard Bass, AICP, Akerman LLP		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 1251 Avenue of the Americas, 37th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10020
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 212-259-6406	EMAIL richard.bass@akerman.com	

5. *Project Description*

Catholic Medical Mission Board (the "Applicant") is seeking approval for two discretionary actions (the "Proposed Actions") that would affect the entirety of Queens Block 317, which includes three lots: Lot 1, Lot 16, and Lot 18 (the "Project Area") in the Ravenswood neighborhood of Queens Community District 1. These actions are: (1) a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (MX-23 Special Mixed-Use district), and (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area.

Upon approval of the Proposed Actions, the Applicant would combine Lots 16 and 18 with Lot 1 to form a single zoning lot, the "Proposed Development Site," which would have a total lot area of approximately 42,569 sf. The proposed rezoning from R5 to M1-4/R7A (MIH) would allow the Applicant to develop a new, eight-story mixed-use building (the "Proposed Development") on the Proposed Development Site. The building would contain a total of approximately 267,442 gsf, and would include 227 dwelling units (DUs; of which approximately 57 [25%] would be affordable under MIH Option 1), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 parking spaces in a below-grade garage at the building's cellar level. The proposed building would rise to a height of approximately 85 feet (roof height), which would not maximize the allowable height of 95 feet under the proposed zoning. Therefore, for conservative analysis purposes, a 95-foot-tall building will be analyzed in the With-Action condition. In the future with the Proposed Actions, it is anticipated that CMMB would re-occupy the community facility and warehouse space in the Proposed Development and continue operating a medical distribution center at the Proposed Development Site, as in the existing conditions.

To facilitate construction of the Proposed Development, the existing buildings in the Project Area would be demolished, and the existing auto repair uses would be eliminated from the Project Area.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 33-01 11th Street

TAX BLOCK(S) AND LOT(S) Block 317, Lots 1, 16, 18 | ZIP CODE 11206

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Project Area is bounded by 33rd Avenue to the north, 33rd Road to the south, 11th Street to the west, and 12th Street to the east.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5 | ZONING SECTIONAL MAP NUMBER 9a

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

- ☐ VARIANCE (use)
- ☐ VARIANCE (bulk)
- ☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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:

7. *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
- ☒ TAX MAP
- ☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP
- ☒ ZONING MAP
- ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
- ☒ SANBORN OR OTHER LAND USE MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 42,569 sf (Project Area Total, same as Proposed Development Site)

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

Roads, buildings, and other paved surfaces (sq. ft.): 42,569 sf

Other, describe (sq. ft.): N/A

8. *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): 267,442 gsf (Proposed Development)

NUMBER OF BUILDINGS: One new building

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 267,442 gsf (Proposed Development)

HEIGHT OF EACH BUILDING (ft.): 85' (roof), 95' (bulkhead), although a 95' building and 115' bulkhead will be analyzed as per RWCDS.

NUMBER OF STORIES OF EACH BUILDING: Eight stories above grade (plus one cellar level).

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: approximately 37,531

The total square feet not owned or controlled by the applicant: approximately 5,038

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 permanent and temporary disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: ~42,569 sq. ft. (width x length) VOLUME OF DISTURBANCE: ~595,966 cubic ft. (width x length x depth) [estimate]

AREA OF PERMANENT DISTURBANCE: ~42,569 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	178,134 gsf	13,346 gsf	5,118	20,485
Type (*e.g.,* retail, office, school)	227 units	Local Retail	Nonprofit Office	Warehouse

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 506 (increment of 374 compared to No-Action) NUMBER OF ADDITIONAL WORKERS: 81 (same as No-Action)

Provide a brief explanation of how these numbers were determined: Estimate of residents based on average household size (2.23 persons per household) for Queens Community District (CD) 1. Number of workers calculated based on rates of 1 worker per 1,000 gsf of auto repair use; 1 worker per 1,000 gsf of warehouse use; 1 worker per 450 gsf of community facility office use; 1 worker per 333 gsf of retail use; and 1 worker per 25 residential DUs.

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☒ YES ☐ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly: In the future No-Action Condition, the Applicant would demolish the existing one-story, 39,896-gsf warehouse building on Lot 1 and redevelop the lot with a new four-story, approximately 123,710-gsf mixed-use residential and community facility building containing approximately 50,125 gsf of residential space (59 DUs) and 33,055 gsf of community facility (nonprofit office) space as well as 40,530 gsf of parking and mechanical area. The No-Action development would contain approximately 63 accessory parking spaces in the cellar, which would be accessed via an existing curb cut on 33rd Avenue. As warehouse uses would not be permitted under the existing R5 zoning, CMMB would relocate its medical distribution facility from the Project Area to a new location. The Applicant would not combine Lots 16 and 18 with Lot 1 in the No-Action condition, and the existing auto repair uses (totaling approximately 5,256 gsf) are expected to remain on those in absence of the Proposed Actions.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2028

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 23 months

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

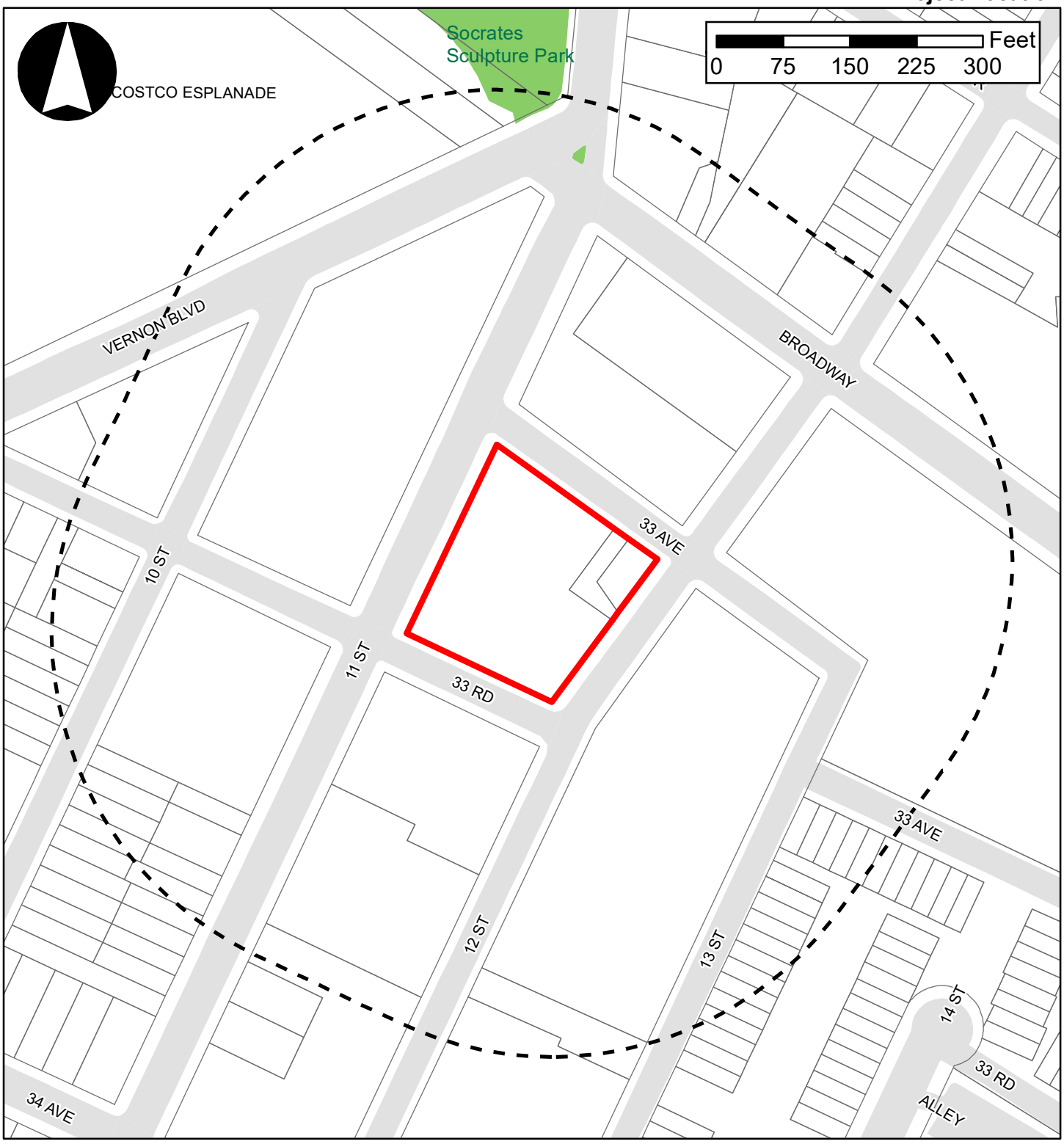
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: As most of the Proposed Development Site is owned by the Applicant, construction of the Proposed Development is expected to commence three to six months after approval of the Proposed Actions (to allow for finalizing design and permits). It is anticipated that project approval would occur in mid-2025. Following project approval, it is anticipated that construction would commence in late-2025 to early-2026. The 2028 analysis year assumes construction would take approximately 23 months, in which all work would be completed in a single phase.

Based on general conceptual construction for projects in the City, a project of this size (approximately 267,442 gsf) could take approximately 25 months to construct. It should be noted however that as the Applicant-owned Lot 1 is expected to be redeveloped either with or without the Proposed Actions, the existing buildings on the site are assumed to be demolished on an as-of-right basis prior to project approvals being granted. Additionally, the construction timeline for the Proposed Project is expected to be shorter than the typical project of this size given that the Project Area consists of the entirety of Block 317, meaning that staging and access could occur via all four street fronts during construction, which would allow on-site construction logistics to be expedited. As such, the expected construction timeline for the Proposed Development would not include a demolition stage. It is therefore estimated that excavation and foundation

work for the proposed 8-story Proposed Development would be completed in approximately 2 months, building superstructure and exterior would be completed in approximately 11 months, and interior fit-out would be completed in approximately 10 months, for a total duration of 23 months. It should be noted that this is a conservative estimate as it assumes that interior fit-out would not commence until the superstructure is fully completed, whereas it is likely that some of this work could overlap.

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

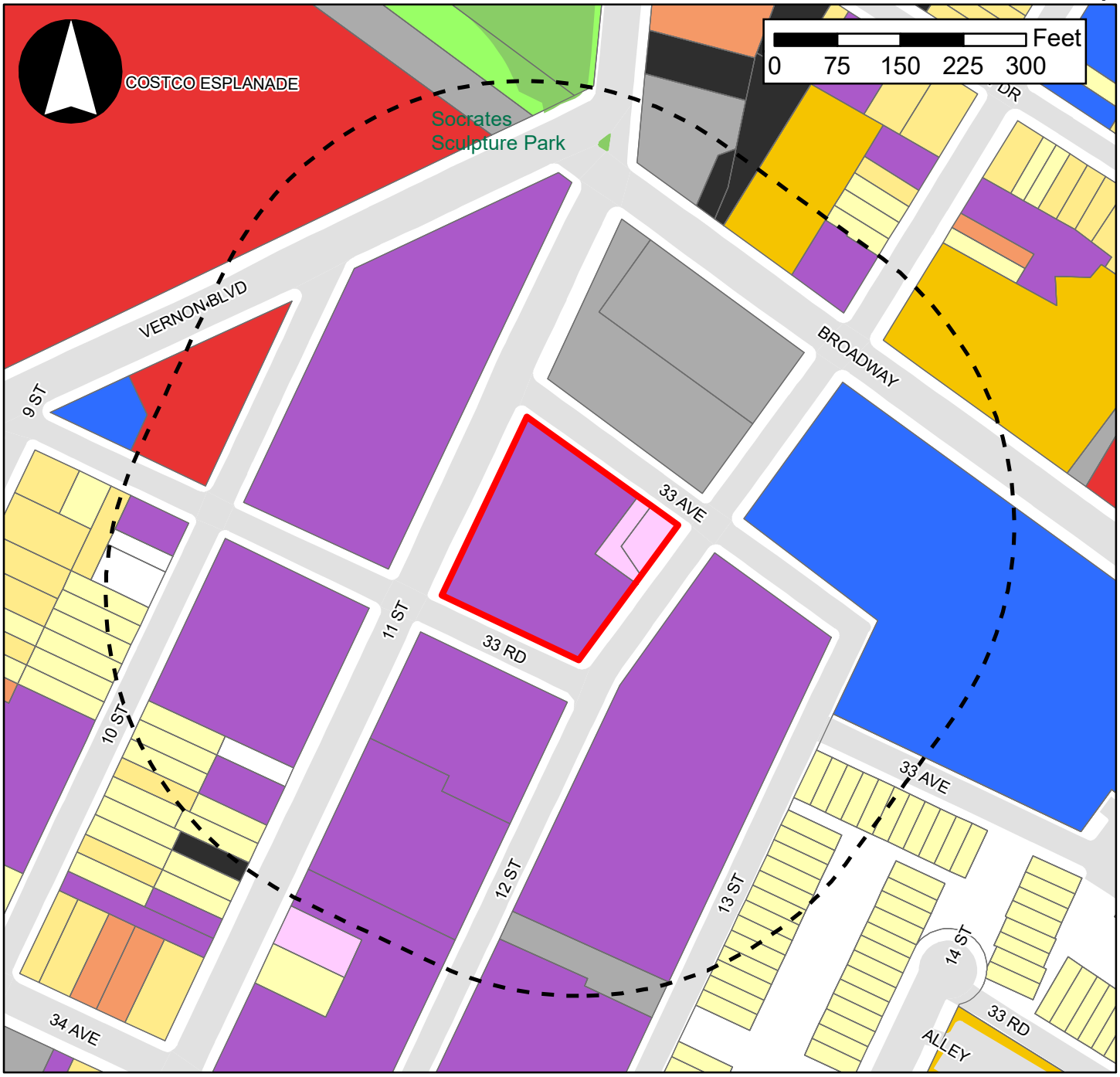
☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Public Facilities; Vacant Land



Legend

- 400-Foot Radius
- Project Site
- Water
- Open Space



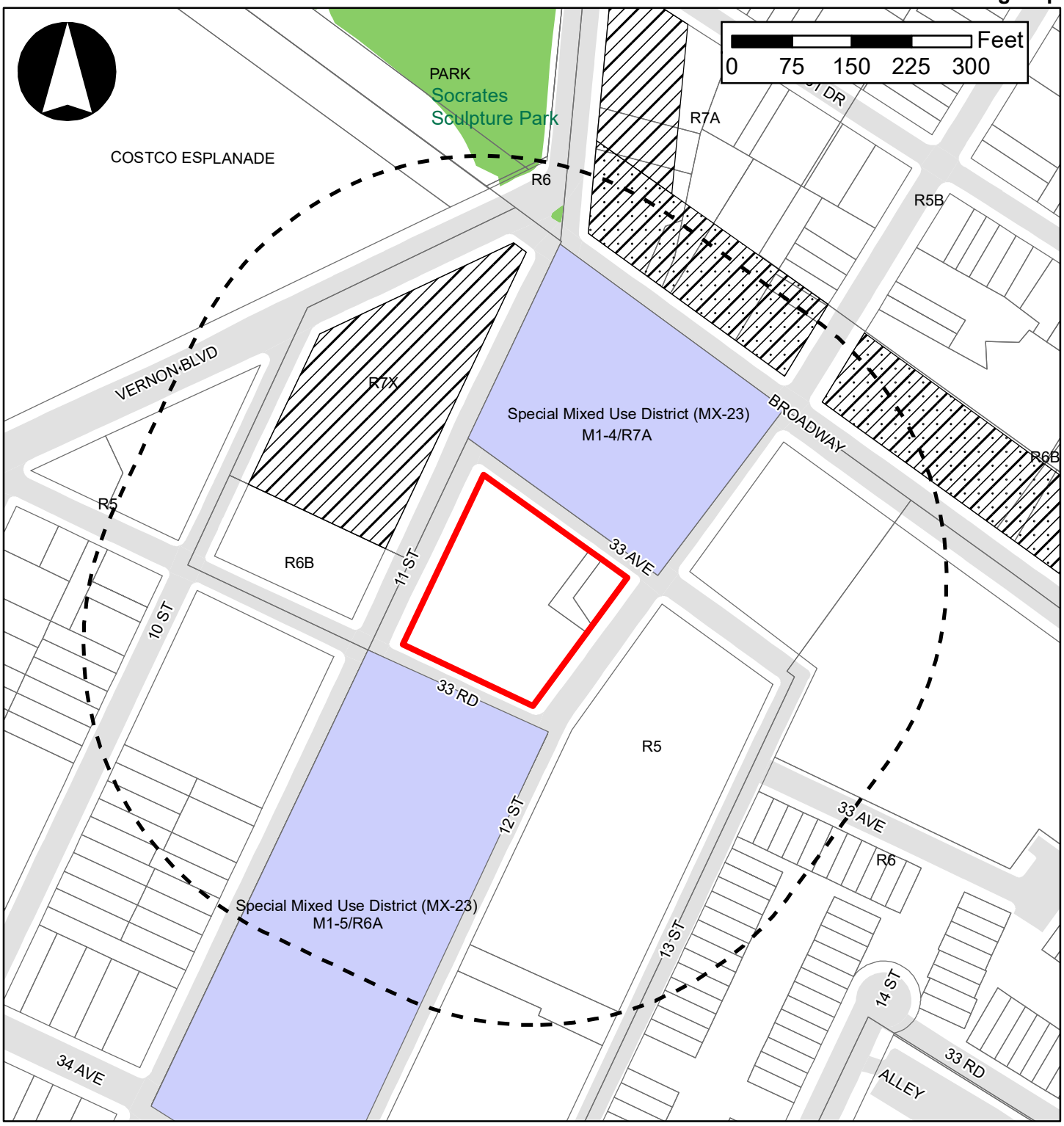


Legend

400-Foot Radius
Project Site
Water
Open Space

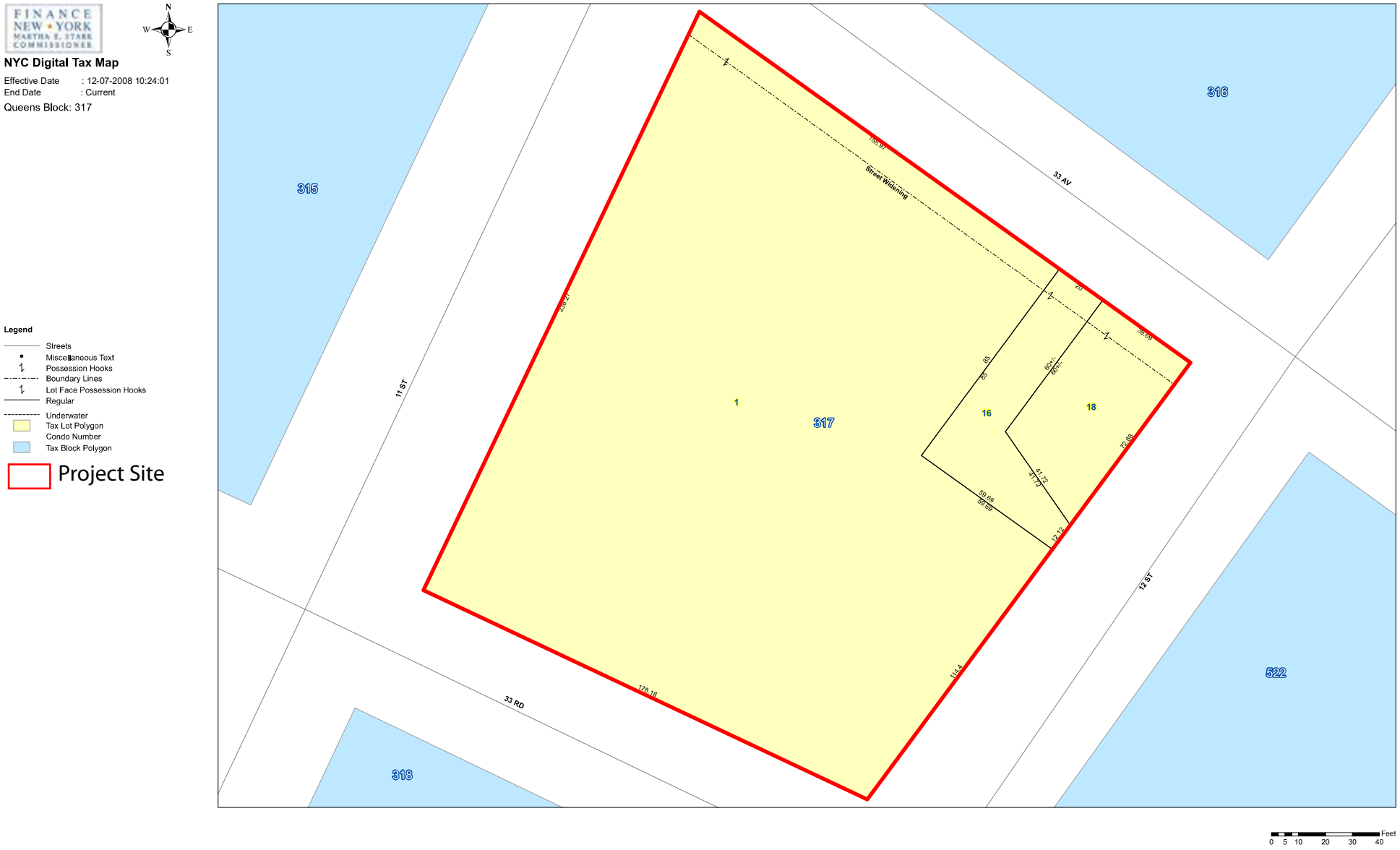
LandUse

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



Legend

- 400-Foot Radius
- Project Site
- R5 Zoning District Boundaries
- C1-3
- C2-3
- Special Mixed Use District (MX-23)
- Open Space



33-01 11th Street Rezoning EAS

Figure 4
Tax Map



1. View looking east at the Project Area from the intersection of 11th Street and 33rd Road.



2. View looking north at the Project Area from the intersection of 12th Street and 33rd Road.



3. View looking west at the Project Area from the intersection of 12th Street and 33rd Avenue.



4. View looking south at the Project Area from the intersection of 11th Street and 33rd Avenue.

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 Short 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.		
(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. Refer to Attachment C, "Land Use, Zoning, and Public Policy"		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
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, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 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)	☐	☒
○ **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)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *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?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		

	YES	NO
(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		
7. *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?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(d) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(f) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(g) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(h) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: • Historic use of the Project Area as a lacquer mixing facility and historic/current autobody shops operating on the site. • Historic industrial and manufacturing uses on sites surrounding the Project Area. Refer to Attachment B "Supplemental Screening" for details.	☒	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed?	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 13,930 (227 DUS x 41 pound per week; 40 retail employees x 79 pounds per week; 11 community facility workers x 13 pounds per week; 20 warehouse workers x 66 pounds per week)		
○ 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?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 20,543,178 (126.7 x 178,134 residential gsf) + (216.3 x 13,346 commercial gsf) + (250.7 x 5,118 community facility gsf) + (554.3 x 20,485 light industrial gsf)		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate 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, or bus stop, or Citywide Ferry Service landing? Refer to Attachment B, "Supplemental Screening"	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		

	YES	NO
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. No significant unmitigated adverse impact was found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, and therefore a public health analysis is not warranted.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. The Proposed Action is not expected to result in any significant adverse impacts in any of the technical areas related to neighborhood character, including land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. Therefore, the Proposed Action would not result in a significant adverse impact to neighborhood character, and further analysis is not warranted.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☒	☐
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. Refer to Attachment B, "Supplemental Screening"		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Abir Sabet, AICP Philip Habib and Associates	7/1/2024
SIGNATURE 	

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
NAME	DATE
SIGNATURE	

ATTACHMENT A:
PROJECT DESCRIPTION

I. INTRODUCTION

Catholic Medical Mission Board (the "Applicant") is seeking approval for two discretionary actions (the "Proposed Actions") that would affect the entirety of Queens Block 317, which includes three lots: Lot 1, Lot 16, and Lot 18 (the "Project Area") in the Ravenswood neighborhood of Queens Community District 1. These actions are: (1) a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (MX-23 Special Mixed-Use district), and (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area.

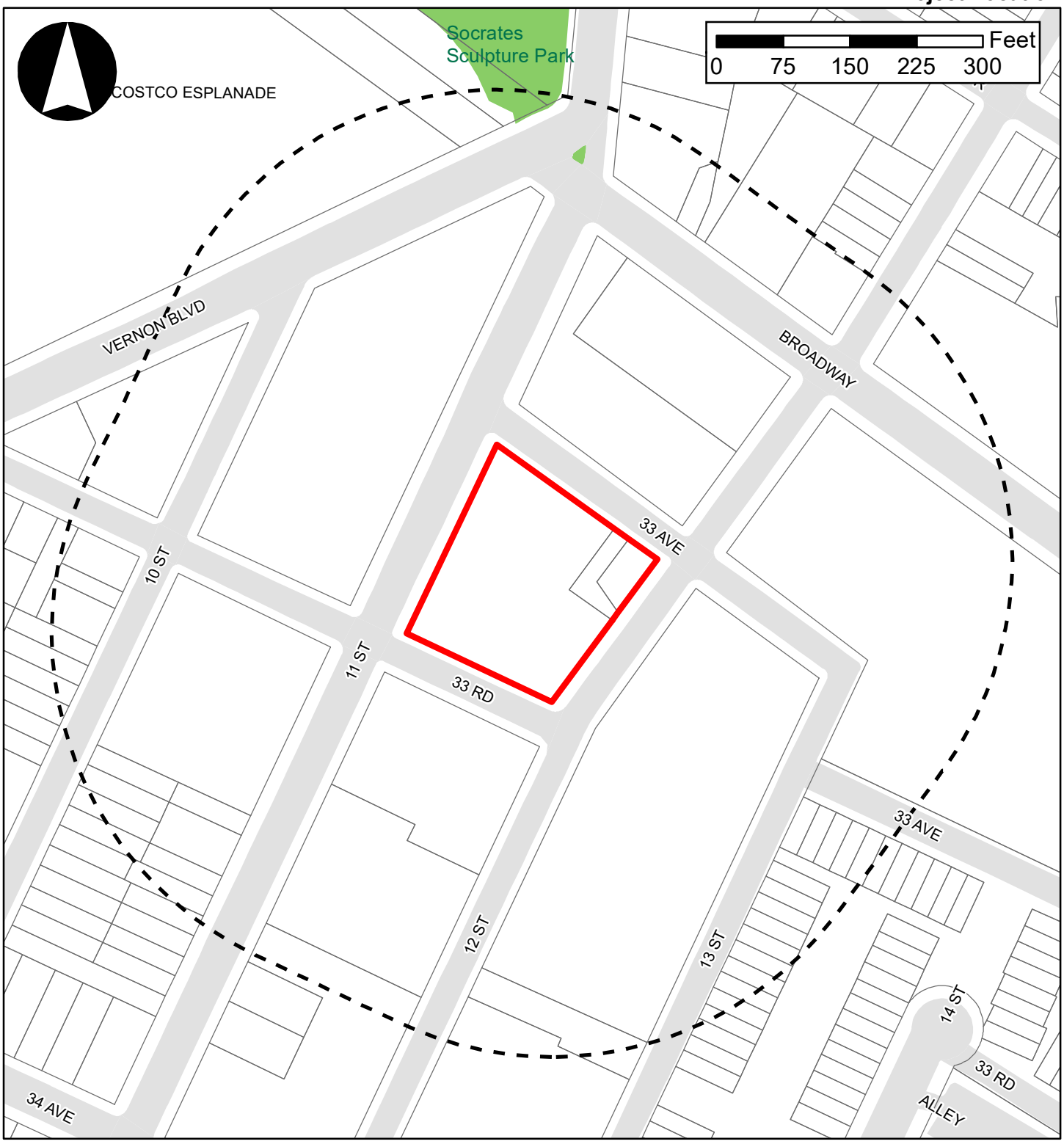
The Proposed Actions would allow the Applicant to develop a new, eight-story mixed-use building (the "Proposed Development") on the Proposed Development Site. The building would contain a total of approximately 267,442 gsf, and would include 227 dwelling units (DUs; of which approximately 57 [25%] would be affordable under MIH Option 1), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 parking spaces in a below-grade garage at the building's cellar level. Although the Proposed Development would rise to a maximum height of 85 feet, this analysis conservatively assumes that the With-Action condition would attempt to maximize the building envelope permitted through the proposed zoning (i.e., a maximum building height of 95 feet). In the future with the Proposed Actions, it is anticipated that CMMB would re-occupy the community facility and warehouse space in the Proposed Development and continue operating a medical distribution center at the Proposed Development Site, as in the existing conditions.

This attachment provides a summary and description of the Proposed Actions, including rezoning area, 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 analyses of land use, zoning, and public policy, open space, shadows, historic resources, urban design and visual resources, and noise, in **Attachments C through H**, respectively. All other technical areas either screened out in the EAS Form or warranted preliminary screening assessments, which are summarized in **Attachment B, "Supplemental Screening."**

II. EXISTING CONDITIONS

Project Area

The Project Area (area directly affected by the Proposed Actions) comprises the entirety of Queens Block 317, which is an irregularly-shaped block bounded by 33rd Avenue to the north, 33rd Road to the south, 11th Street to the west, and 12th Street to the east (see **Figure A-1**). It comprises a total of approximately 42,569 sf of lot area, consisting of three privately-owned tax lots: Applicant-owned Lot 1, as well as Lots 16 and 18, which are currently under separate ownership but would be combined with Lot 1 and redeveloped by the Applicant in the future with the Proposed Actions.



Legend

- 400-Foot Radius
- Project Site
- Water
- Open Space



33rd Avenue is a narrow street with a total width of 50 feet. It is a two-way local street running east-west directly north of the Project Area. 12th Street is a narrow street with a total width of 60 feet. It is a one-way local street running north directly to the east of the Project Area. 33rd Road is a narrow street with a total width of 50 feet. It is a two-way local street running east-west directly south of the Project Area. 11th Street is a wide street with a total width of 80 feet. It is a two-way local street running north-south directly west of the Project Area. The streets bordering the Project Area do not meet at right angles, resulting in Block 317 having an irregular (i.e., non-rectangular) shape.

The Project Area is occupied by three single-story buildings containing a total of approximately 45,151 gross square feet (gsf) of built area. Lot 1 has an area of 37,531 sf, is owned by the Catholic Medical Mission Board (CMMB, the Applicant), and is occupied by an approximately 39,896-gsf warehouse building operated as a medical distribution center by CMMB. The building has a Floor Area Ratio (FAR) of approximately 0.92 and covers the majority of Lot 1 excluding an unbuilt area at the southeast corner of the lot used for loading and vehicle storage. There are also loading docks along the north and south building frontages.

Lots 16 and 18 are located at the northeastern corner of the Project Area (refer to **Figure A-1**), and both lots are occupied by auto repair shops. Lot 16 has an area of 2,399 sf and is L-shaped with frontages on 12th Street and 33rd Avenue. It is occupied by a single-story, approximately 2,645-gsf auto repair shop with approximately 0.96 FAR. The building has garage entrances on both frontages. Lot 18 is occupied by a 2,611-gsf auto repair shop with approximately 0.86 FAR. The building also has garage entrances on both the 12th Street and 33rd Avenue frontages.

The Project Area is mapped within an R5 residential zoning district, which is a non-contextual residential district often mapped over transitional areas between low- and medium-density districts. The existing zoning allows for a maximum residential FAR of 1.25 and a maximum community facility FAR of 2.0. Manufacturing and commercial uses are not allowed in R5 districts, and the existing uses within the Project Area are non-conforming.

Surrounding Area and Context

The Project Area is located within the Ravenswood neighborhood of Queens. Land use in the 400-foot surrounding area is a mix of residential, commercial, light industrial, and community facility uses, and also includes several vacant lots. The predominant land uses in the area are light industrial and residential.

The area to the north of Broadway is characterized by two- to three-story residential buildings and four- to six-story pre-war multi-family walkup apartment buildings. The prevailing built form immediately to the east, south and west includes low-scale, high lot coverage commercial and industrial buildings that house food production, warehousing and distribution, and automobile repair uses. However, a slew of rezonings in recent years is expected to change the predominantly industrial character of the Project Area's immediate surroundings to more mid-rise mixed use development, with planned development to the immediate north, south, and west of the Project Area. Limited retail is concentrated along Broadway, which also serves as a boundary between the more residential Astoria neighborhood to the north and more mixed-use and industrial Ravenswood neighborhood to the south. There are recently constructed six- to eight-story multi-family residential buildings north and east of the Project Area along Broadway. The NYCHA Ravenswood Houses are located southeast and consist of 2,166 units across 31 six- and seven-story buildings on a 38-acre site. The North Queensview Homes cooperative is located to the southeast of the Project Area with 21 14-and 15-story apartment buildings across two superblocks.

Industrial uses within the surrounding area are typically located on larger lots at block ends with a range of uses, including a DHL warehouse, bakery wholesalers and warehouses, maintenance and construction wholesalers, media studios, artist studios, steel fabricators, and stone businesses. Other industrial uses of note in the area include the 63,850-gsf warehouse at 12-01 34th Avenue, and the 34,225-gsf warehouse operating as a marble supplier at 33-53 10th Street.

Nearby public facilities and institutions include the Isamu Noguchi Foundation and Museum located on the triangular block between 10th Street, 33rd Road, and Vernon Boulevard; Long Island City High School (Q450), located to directly northeast of the Project Area on Block 529 along Broadway between 12th Street and 21st Street; and the Islamic Unity Mosque and Ideal Islamic School, located further to the northeast of the Project Area on 12th Street at 31st Drive.

There are two large open space resources in the area. Socrates Sculpture Park, a 4.89-acre waterfront park dedicated to showcasing public art, is located northwest of the Project Area on Vernon Boulevard between Broadway and 30th Drive. Rainey Park, an 8.09-acre waterfront park, is located two blocks to the west of the Project Area between Vernon Boulevard, the East River, 33rd Road, and 34th Avenue.

The traffic grid to the north of the Project Area is irregular at the confluence of Vernon Boulevard and Broadway. The surrounding area includes or is adjacent to major thoroughfares including 34th Avenue as minor arterial, 11th Street as major collector, and 21st Street as principal arterial. The area is well-served by public transit, and is within a Transit Zone. The Broadway, 30th Avenue, and and 36th Street subway stations are serviced by the MTA with stops for the N and W lines and are within 0.75 mile to the east, northeast, and southeast of the Project Area, respectively. Stops for the Q103 and Q104 buses are in the immediate area. The area is also served by Citibike.

Zoning

As shown in **Figure A-2a**, the Project Area is mapped within an R5 residential zoning district, which is a non-contextual residential district often mapped over transitional areas between low- and medium-density districts. The existing zoning allows for a maximum residential FAR of 1.25 and a maximum community facility FAR of 2.0. Manufacturing and commercial uses are not allowed in R5 districts, and the existing uses within the Project Area are non-conforming.

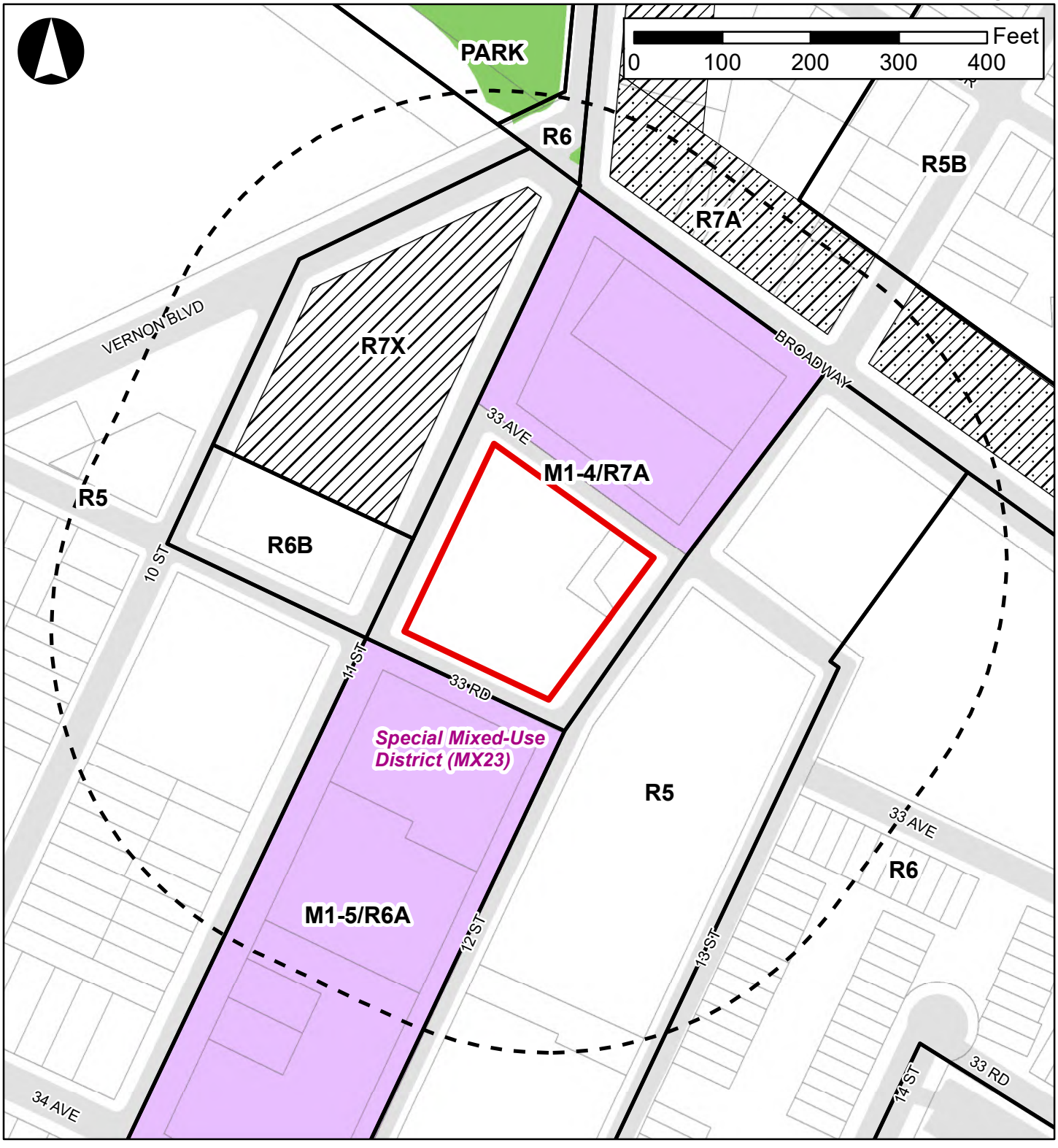
Zoning districts within 400 feet of the Project Area include M1-4/R7A and R7A to the north, R5 and R6 to the east, M1-5/R6A to the south, and R6B and R7X to the west, with a C1-3 commercial overlay to the west and C2-3 commercial overlays mapped along Broadway to the north.

III. THE PROPOSED ACTIONS

The Applicant's development proposal for 33-01 11th Street requires the following discretionary land use actions:

- ***Zoning Map Amendment*:** The Applicant is proposing a zoning map amendment to rezone the Project Area (Queens Block 317, Lots 1, 16 and 18) from the existing R5 zoning district mapped to M1-4/R7A (MX-23 Special Mixed-Use district). **Table A-1** compares the use and bulk requirements under the existing and proposed zoning districts, and **Figure A-2b** provides a map of the proposed rezoning. The proposed R7A residential district would increase the maximum allowable residential and community facility density as well as increase maximum base height and maximum building height, permitting a maximum building height of 95 feet with a qualifying ground floor. The proposed mixed-use zoning

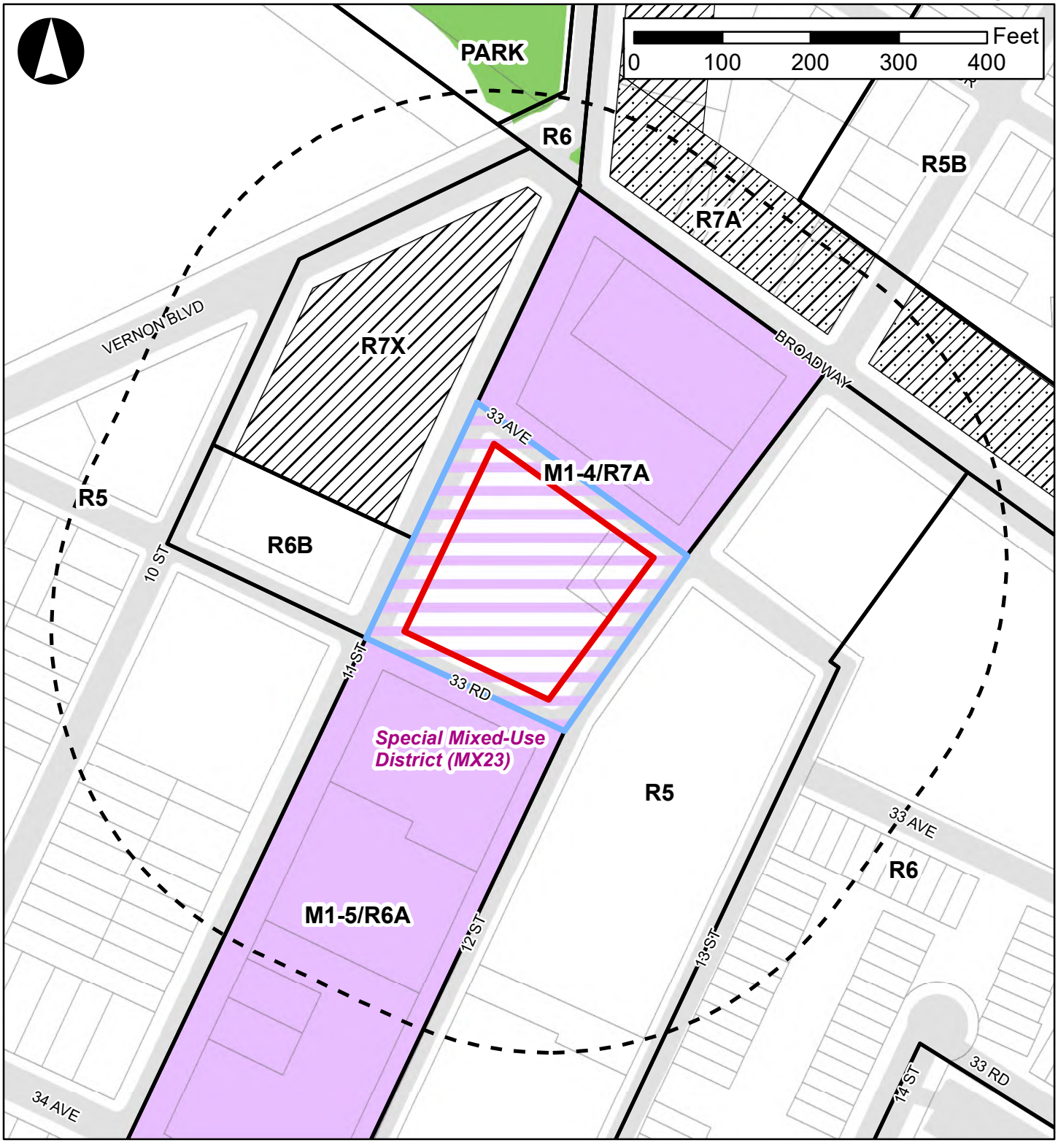
Figure A-2a
Proposed Zoning Map



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Tax Lot
- Open Space
- R5 Existing Zoning District
- Existing Special Purpose District
- **Commercial Overlay**
  - C1-3
  - C2-3

Figure A-2b
Proposed Zoning Map



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Tax Lot
- Open Space
- R5 Existing Zoning District
- **Commercial Overlay**
  - C1-3
  - C2-3
- Existing Special Purpose District
- Proposed M1-4/R7A District
- Proposed MX23 Special Purpose District

on the Proposed Development Site would also allow commercial and light industrial uses, which are not currently allowed under existing zoning.

TABLE A-1
Comparison of Allowable Uses and Maximum FAR for the Existing and Proposed Zoning

	Existing Zoning	Proposed Zoning
Zoning District	**R5**	**M1-4/R7A (MX-23)**
Use Groups	UG 1 to 4	UG 1 to 14, 16-17
Maximum FAR		
Residential	1.25	4.6 with MIH
Community Facility	2.0	4.0
Commercial	N/A	2.0
Manufacturing	N/A	2.0
Height and Setback		
Maximum Base Height	30’	75’ with MIH
Maximum Building Height	40’	95’ Residential with MIH Sky Exposure Plane for other uses or mixed-use buildings

Source: *Zoning Resolution of the City of New York.*
Notes: The MIH area sets a new maximum permitted residential FAR that supersedes the FAR permitted by the underlying zoning district. With both the designation of the proposed rezoning area as an MIH area and its rezoning to M1-4/R7A zoning district, the maximum permitted residential FAR within the Project Area would be 4.6, and the maximum building height would be up to 95 feet with qualifying ground floor.

- ***Zoning Text Amendment:*** The Applicant is proposing zoning text amendments to Appendix F of the *Zoning Resolution (ZR) of the City of New York* to establish the proposed M1-4/R7A district as a Mandatory Inclusionary Housing (MIH) designated area. The establishment of the MIH designated area would require a share of new housing to be permanently affordable where significant new housing capacity would be created. At this time, the Applicant is seeking to designate the proposed rezoning area as MIH area with Option 1. Under MIH Option 1, 25 percent of a MIH development’s residential floor area must be income restricted.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The proposed zoning map amendment would increase the permitted density and height to facilitate housing, including permanently affordable housing, activate the street frontage, and create new commercial and light industrial space. The proposed zoning map amendment from R5 to M1-4/R7A (MX-23 Special Mixed-Use district) is necessary to enable development consistent with residential, commercial, and industrial land use trends in the surrounding area. The Project Area, located along a wide street (11th Street) near transit within an existing mixed-use context, is an appropriate location for increased density and new mixed-use development.

The existing R5 zoning district mapped in the Project Area would not allow for development at a comparable density to new projects that have been approved in the surrounding area, particularly given recent zoning trends in the vicinity. Several private applications have recently been approved within the surrounding area. In 2019, the Vernon Boulevard and Broadway Rezoning (C190386ZSQ) rezoned a full block site (Block 315, Lot 1) from R5 to R6B and R7X/C1-3 zoning districts in conjunction with a Large-Scale General Development plan. In 2021, the Broadway and 11th Street Rezoning (C210025ZMQ) rezoned a full block site (Block 316, Lots 1 and 13) immediately north of the Project Area from R5 to an M1-4/R7A zoning district and established a Special Mixed Use District (MX-23). In 2022, the 11th Street and 34th Avenue

Rezoning (C210234ZMQ) rezoned a full block site (Block 318, Lots 1, 9, 11, 15 and 22) immediately south of the Project Area from R5 to an M1-5/R6A zoning district and amended the MX-23. These private rezonings were intended to facilitate new mixed-use developments with set asides for permanently income-restricted housing under MIH, and the Proposed Actions would be consistent with these trends.

The proposed zoning map amendment would also allow the Applicant, CMMB, to continue operating its medical distribution center, and to consolidate operations from its existing Manhattan office to new space at the Proposed Development Site in the future with the Proposed Actions. As the existing warehouse building on Lot 1 is non-conforming under the existing zoning, the Applicant would be unable to make any improvements or additions to the building, which could hamper the future operations of the distribution center in absence of the Proposed Actions. If the Applicant were to redevelop the existing warehouse building on Lot 1, under existing zoning, the non-conforming warehouse use would not be allowed to remain. However, approval of the proposed Special Mixed-Use district would allow CMMB to continue to operate its medical distribution center within the Proposed Development.

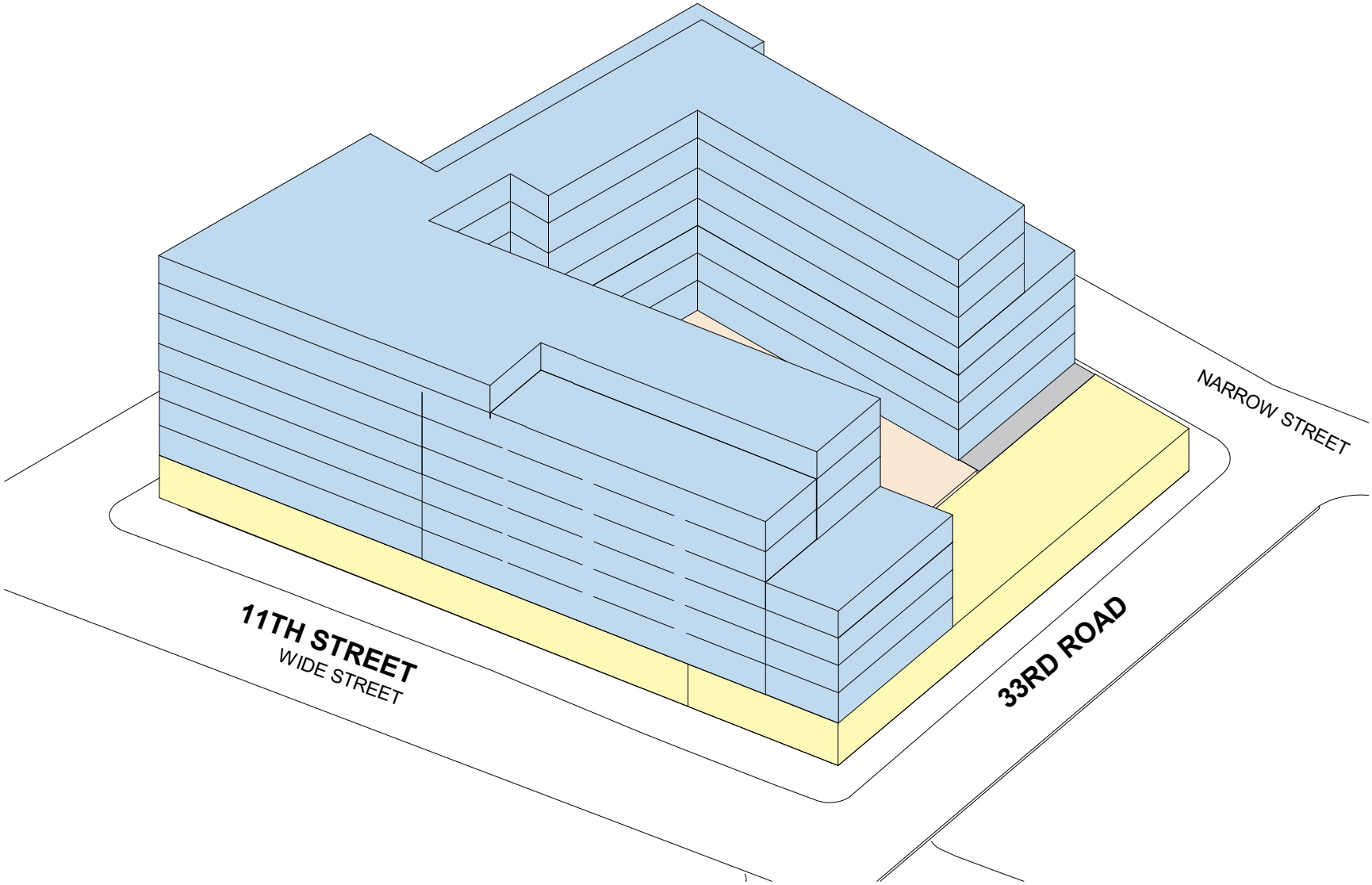
The proposed zoning text amendment to designate the Project Area as an MIH area is needed to ensure permanent affordability within the Project Area, and would be aligned with the objectives of the Adams administration outlined in "Housing Our Neighbors: A Blueprint for Housing and Homelessness" by creating affordable housing in an amenity-rich area.

V. PROPOSED DEVELOPMENT

Upon approval of the Proposed Actions, the Applicant would combine Lots 16 and 18 with Applicant-owned Lot 1 to form a single zoning lot, the "Proposed Development Site", which would have a total lot area of approximately 42,569 sf. As shown in **Figures A-3a-A-3c**, the proposed rezoning from R5 to M1-4/R7A (MIH) would allow the Applicant to develop a new, eight-story mixed-use building (the "Proposed Development") on the Proposed Development Site. The building would contain a total of approximately 267,442 gsf, and would include 227 dwelling units (DUs; of which approximately between 57 [25%] and 69 [30%] would be affordable depending on the MIH option chosen), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 parking spaces in a below-grade garage at the building's cellar level. The building would rise to a height of approximately 85 feet (roof height), 10 feet short of the maximum roof height of 95 feet in the proposed M1-4/R7A district. However, for the purposes of this analysis, it will be conservatively assumed that the Applicant will maximize the allowable 95 feet in roof height. In the future with the Proposed Actions, it is anticipated that CMMB would re-occupy the community facility and warehouse space in the Proposed Development and continue operating a medical distribution center at the Proposed Development Site, as in the existing conditions.

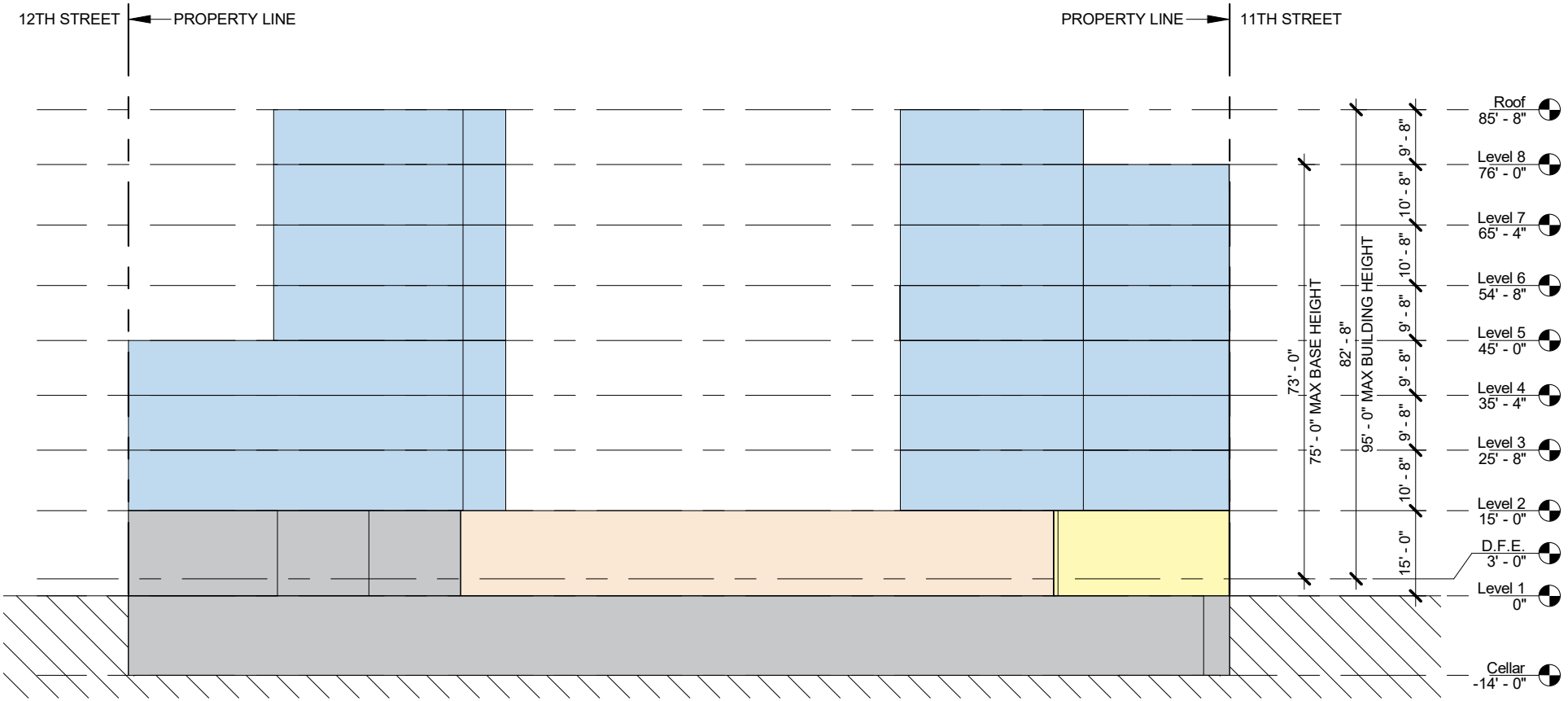
To facilitate construction of the Proposed Development, the existing buildings in the Project Area would be demolished, and the existing auto repair uses would be eliminated from the Project Area.

Depending on the MIH Option selected during ULURP, either 25% (approximately 57 DUs) or approximately 30% (approximately 68 DUs) of the residential floor area would be designated as permanently affordable pursuant to MIH. The Applicant intends to pursue MIH Option 1, which would result in approximately 57 DUs designated as permanently affordable at an average of 60 percent of Area Median Income (AMI).



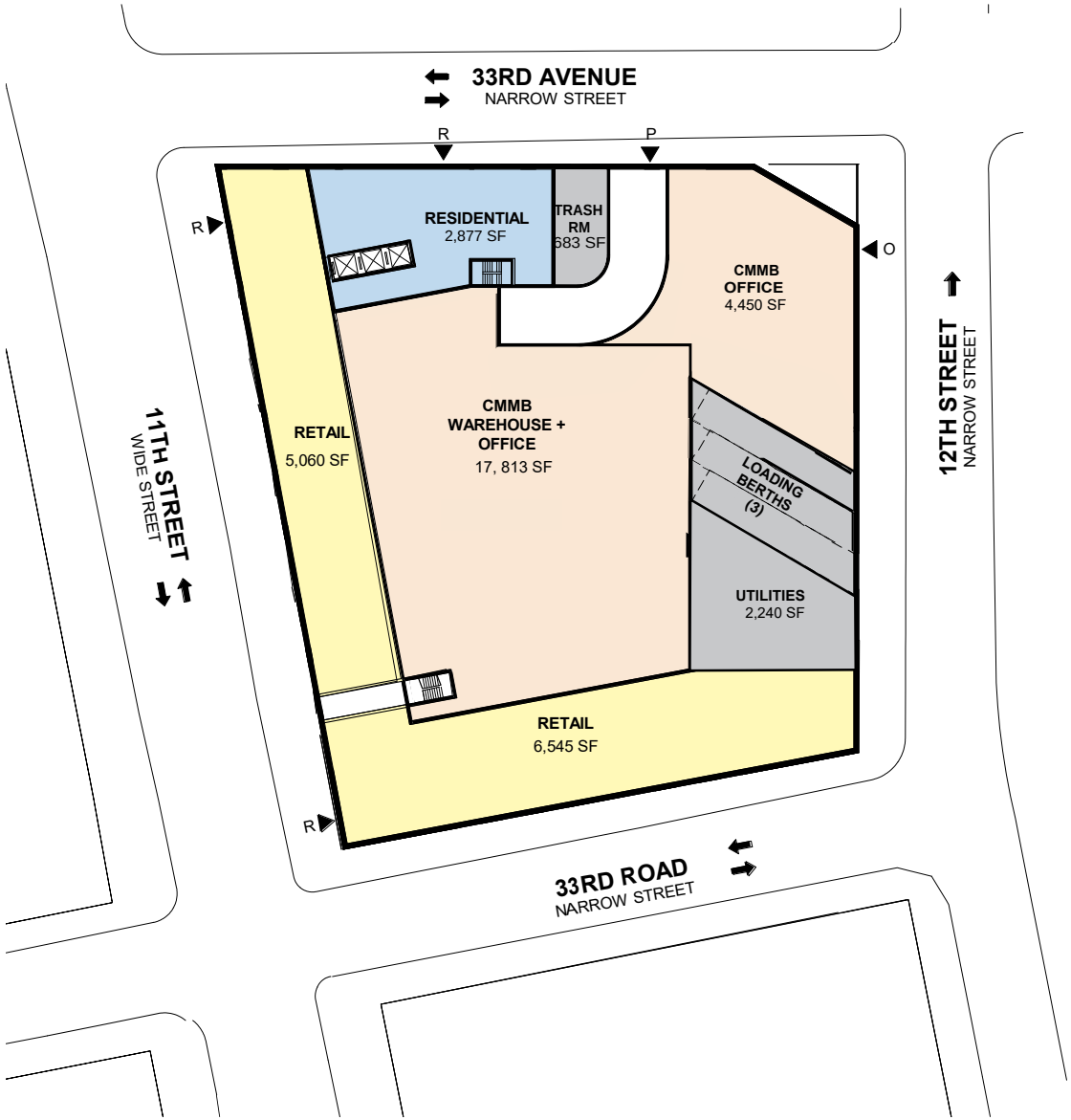
For Illustrative Purposes Only

Source: Dattner Architects



For Illustrative Purposes Only

Source: Dattner Architects



For Illustrative Purposes Only

Source: Dattner Architects

VI. ANALYSIS FRAMEWORK

Identification of Development Sites

As discussed above, the Proposed Actions would affect the Project Area, which consists of the entirety of Queens Block 317. The Project Area is made up of three tax lots: the Applicant-owned Lot 1, as well as non-Applicant-owned Lots 16 and 18. In the future with the Proposed Actions, the Applicant would combine Lots 16 and 18 with Lot 1 to form a single zoning lot, the "Proposed Development Site". In the future with the Proposed Actions, The Applicant-owned Proposed Development Site (Block 317, Lots 1, 6, and 18) would be the only site where development could occur as a result of the Proposed Actions, and there would be no additional "soft" sites according to *CEQR Technical Manual* criteria. 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 Development would commence three to six months after approval of the Proposed Actions (to allow for finalizing design and permits). It is anticipated that project approval would occur in mid-2025. Following project approval, it is anticipated that construction would commence in late-2025 to early-2026. The 2028 analysis year assumes construction would take approximately 23 months, in which all work would be completed in a single phase.

As described in the EAS Form, based on general conceptual construction for projects in the City, a project of this size (approximately 267,442 gsf) could take approximately 25 months to construct. It should be noted however that as the Applicant-owned Lot 1 is expected to be redeveloped either with or without the Proposed Actions, the existing buildings on the site are assumed to be demolished on an as-of-right basis prior to project approvals being granted. Additionally, the construction timeline for the Proposed Project is expected to be shorter than the typical project of this size given that the Project Area consists of the entirety of Block 317, meaning that staging and access could occur via all four street fronts during construction, which would allow on-site construction logistics to be expedited. As such, the expected construction timeline for the Proposed Development would not include a demolition stage. It is therefore estimated that excavation and foundation work for the proposed 8-story Proposed Development would be completed in approximately 2 months, building superstructure and exterior would be completed in approximately 11 months, and interior fit-out would be completed in approximately 10 months, for a total duration of 23 months. It should be noted that this is a conservative estimate as it assumes that interior fit-out would not commence until the superstructure is fully completed, whereas it is likely that some of this work could overlap.

Future without the Proposed Actions (No-Action Condition)

In the 2028 future without the Proposed Actions (the "No-Action condition"), it is anticipated that the Applicant would demolish the existing building on Lot 1 within the Project Area, and construct a new mixed-use residential and community facility building. Although the applicant has not as of yet filed DOB permits, given that the existing use at the applicant's site is non-conforming, not able to expand under the existing zoning, and it's the applicant's intent to consolidate its operations, the existing business would likely relocate/vacate the site without the proposed zoning changes for the efficient future and long-term operations of the business. As such, given existing trends in the area, it is reasonable to assume that this

property would be redeveloped pursuant to existing zoning. This assumption is also consistent with the future No-Action assumptions of the recent rezonings in the surrounding area that had showed as-of-right R5 developments.[1]

The Applicant would not combine Lots 16 and 18 with Lot 1 in the No-Action condition. No development is expected to occur on the non-Applicant-owned lots in the future without the Proposed Actions; these lots would not be considered soft sites in the No-Action condition, per *CEQR Technical Manual* guidance, as both lots have an area of less than 5,000 sf. As such, the existing auto repair uses (totaling approximately 5,256 gsf) are expected to remain on those lots, and no development would occur on the non-Applicant-owned Lots 16 and 18 in absence of the Proposed Actions.

Therefore, in the future No-Action Condition, the Applicant would demolish the existing one-story, 39,896-gsf warehouse building on Lot 1 and redevelop the site with a new four-story, 123,710 -gsf (including 40,530 gsf of parking and mechanical area), mixed-use residential and community facility building containing approximately 50,125 gsf of residential space (59 market-rate DUs) and 33,055 gsf of community facility (nonprofit office) space. The No-Action development would contain approximately 63 accessory parking spaces in the cellar, which would be accessed via an existing curb cut on 33rd Avenue. As warehouse uses would not be permitted under the existing R5 zoning, CMMB would relocate its medical distribution facility from the Project Area to a new location.

Future with the Proposed Actions (With-Action Scenario)

In the future with the Proposed Actions (With-Action condition), the proposed zoning map and zoning text amendments would be approved. As such, an M1-4/R7A zoning district would be mapped on the Project Area, replacing the existing R5 zoning.

In the future with the Proposed actions, the Applicant would combine Lots 16 and 18 with Lot 1 (which is already owned by the Applicant) into a single zoning lot. The Applicant would demolish the existing uses in the Project Area and construct the Proposed Development: a new, eight-story (85-foot roof height, although the maximum allowable height of 95 feet will be analyzed) mixed-use building on the Proposed Development Site (Lots 1, 16, and 18). The Proposed Development would contain a total of approximately 267,442 gsf, and would include 178,134 gsf of residential space consisting of 227 dwelling units (of which between 57 [25%] and 69 [30%] would be affordable depending on the MIH option chosen), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 accessory parking spaces in a below-grade garage accessed via an existing curb cut along 33rd Avenue.

As also discussed above, it is anticipated that in the future with the Proposed Actions, CMMB would re-occupy the community facility and warehouse space in the Proposed Development and continue to operate a medical distribution center, as it does in the existing conditions.

The With-Action scenario for the Proposed Development Site is based on the Applicant's proposed plan for the site: an eight-story, 227-unit mixed-use building with ground-floor retail, warehouse, and community facility office space, as described above. The Applicant has indicated that it intends to combine Lots 16 and 18 upon approval of the Proposed Actions, which would facilitate construction of the

[1] Recent rezonings in the vicinity of the Project Area include "Broadway & 11th Street Rezoning EAS" (CEQR #21DCP022Q), "11th Street and 34th Avenue Rezoning EAS" (CEQR #21DCP118Q), and "Vernon Boulevard-Broadway Rezoning" (CEQR #12DCP139Q).

Proposed Development on Lots 1, 16, and 18. The Applicant's Proposed Development represents the RWCDS because it maximizes the FAR (4.60 FAR). Although the Proposed Development's 85-foot roof height would not maximize the 95 feet permitted by the proposed M1-4/R7A district, a roof height of 95 will be conservatively assumed for the purposes of this analysis. The Proposed Development would also provide the required accessory residential parking in the cellar garage.

Though *CEQR Technical Manual* guidance recommends that a rate of 850 gsf per DU should be generally assumed for analysis purposes (which would result in approximately 210 DUs), the Applicant's planned 227 DUs will be analyzed for conservative analysis purposes.

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 approximately 128,009 gsf of residential uses, resulting in approximately 168 incremental DUs, of which approximately 57 DUs would be affordable under MIH Option 1, an increment of 13,346 gsf of local retail, 15,229 gsf of warehouse space, and 7 accessory parking spaces, as well as a decrease of approximately 27,938 gsf of community facility (nonprofit office) space. In terms of population, the Proposed Actions are expected to generate an estimated 374 incremental residents and no net increase in workers, as compared to the 2028 No-Action condition.

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

	No-Action	With-Action	Increment
Land Use			
Residential (gsf)	50,125	178,134	+128,009
Residential (DUs)	59	227	+168
Market-Rate DUs	*59*	*170*	*+111*
Affordable DUs	*0*	*57-69*	*+57-69*
Local Retail (gsf)	0	13,346	+13,346
Community Facility – Nonprofit Office (gsf)	33,055	5,118	-27,938
Auto Repair (NA)/Warehouse (WA) (gsf)	5,256	20,485	15,229
Accessory Parking Spaces	63	70	+7
Parking/Loading/Mechanical (gsf)	40,530	50,360	+9,830
Total Building Area (gsf)	128,966	267,442	+138,477
Population			
Residents[1]	132	506	+374
Employees[2]	81	81	0

Notes:
[1] Residents calculated based on average household size for Queens Community District 1 (2.23 persons per household) per the 2020 US Census.
[2] Employees calculated using rates of 1 worker per 1,000 gsf of auto repair use; 1 worker per 1,000 gsf of warehouse use; 1 worker per 450 gsf of community facility office use; 1 worker per 333 gsf of retail use; and 1 worker per 25 residential DUs.

VII. REQUIRED APPROVALS

The proposed zoning map and text amendments are discretionary public actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and 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 Queens 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 Queens 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 Actions to determine whether detailed analysis of any technical area may be appropriate.

As described in **Attachment A, "Project Description,"** the Proposed Actions include a zoning map amendment and zoning text amendment that would affect the Project Area, which consists of Queens Block 317, Lots 1, 16, and 18 in the Ravenswood neighborhood of Queens Community District (CD) 1. The Proposed Actions would facilitate the construction of a new eight-story, 85-foot tall (roof height, 95-foot bulkhead height), approximately 267,442 gross square-foot (gsf) mixed-use building on Block 317, Lots 1, 16, and 18 (the "Project Area"), including approximately 178,134 gsf of residential floor area (227 dwelling units [DUs]), 13,346 gsf of ground-floor retail space, 20,485 gsf of warehouse space, 5,118 gsf of community facility (nonprofit office) space, and an approximate 70-space accessory parking garage in the building's cellar. Under the RWCDS, depending on the MIH option selected during the public review process, either 25 percent (57 DUs) or 30 percent (68 DUs) of the residential floor area would be designated as affordable housing. The Applicant intends to pursue MIH Option 1, which would result in approximately 57 DUs designated as permanently affordable at an average of 60% Area Median Income (AMI).

In absence of the Proposed Actions, it is assumed that the Applicant would develop a portion of the Project Area (Lot 1, which is currently owned by the Applicant) on an as-of-right basis in accordance with the existing R5 zoning. The Project Area would be developed with a four-story mixed-use building containing approximately 123,710 gsf, with approximately 50,125 gsf of residential floor area (59 market-rate DUs), approximately 33,055 gsf of community facility (nonprofit office) space, and approximately 63 accessory parking spaces in a cellar-level garage. It Is not anticipated that Lots 16 and 18 would be redeveloped in the future No-Action condition, given the Applicant does not own Lots 16 and 18 under existing conditions.

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, Open Space, Shadows, Historic and Cultural Resources, Urban Design and Visual Resources, Transportation, and Noise. These analyses are provided in **Attachments C to I**, respectively. 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 are unlikely to result in significant adverse impacts. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

TABLE B-1
Summary of CEQR Technical Areas Screening

CEQR TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SUPPLEMENTAL 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."**

Open Space

Refer to **Attachment D, "Open Space."**

Shadows

Refer to **Attachment E, "Shadows."**

Historic and Cultural Resources

Refer to **Attachment F, "Historic and Cultural Resources."**

Urban Design and Visual Resources

Refer to **Attachment G, "Urban Design and Visual Resources."**

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 semi volatile 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.

Phase I Environmental Site Assessment (ESA)

As the Proposed Actions would result in new in-ground disturbance and site excavation at the Applicant-owned Block 317, Lot 1 and the non-Applicant-owned Lots 16 and 18, a Phase I Environmental Site Assessment (ESA) was prepared to determine whether hazardous materials exist on or adjacent to the site. The Phase I ESA was prepared by ALC Environmental (ALC) in February 2024 in conformance with the guidelines described in ASTM International's Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – E1527-13. The Phase I ESA consisted of visual observations, a review of historical information, environmental databases, information provided by the Applicant, and interviews with current site representatives. The executive summary of the Phase I report is provided in **Appendix 4**.

According to the Phase I, the Applicant-owned Lot 1 comprises approximately 37,461 sf and is improved with a single-story commercial warehouse building at 33-01 11th Street, Lot 16 comprises approximately 2,396 sf and is improved with an automotive repair shop and upholstery facility, and Lot 18 comprises 2,614 sf and is occupied by an automotive engine repair facility. Based on a visual inspection, review of historical records, and interviews with individuals knowledgeable about the present and past uses, the Phase I ESA identified several Recognized Environmental Conditions (RECs)[1] within the Project Area. According to the historical sources reviewed (historical Fire Insurance maps and city directories), lacquer mixing & canning facilities identified as Ace Lacquer & Chemical Co. Inc., Anaconda Chemical Co. Lacquer, and Worth Lacquer & Chemical Co. operated at the subject building at 11-18 33rd Avenue (Lot 16) between at least 1939 and 1977. The historical records indicate that automotive repair and auto body shops have operated at 11-18 33rd Avenue as early as 1979 and at 1-20 33rd Avenue (Lot 18) as early as 1978. Based on the likely generation of hazardous wastes associated with lacquer mixing facilities and automotive repair shops (i.e., lacquer thinners and chemicals, spent solvents, and waste oil) coupled with the lack of hazardous waste disposal regulations before the 1970s, the former lacquer facilities and automotive repair shops at the Project Area are considered a REC.

Additionally, according to the historical sources reviewed, the properties adjacent to the Project Area appear to have been used for industrial/manufacturing purposes since the 1930s. Former uses of environmental concern associated with the adjoining properties include an iron and steel works, galvanizing facility, and automotive repair shop to the north at 11-01 33rd Avenue; an iron works, commercial garage and adjacent automotive repair shop with three gasoline tanks, pipe hanger manufacturer, and instruments manufacturer at 12-02 Broadway; and an automotive repair shop and

[1] Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under condition indicative of a release to the environment; or (3) under conditions that pose a material treat of a future release to the environment.

manufacturer of industrial displays at 12-12 33rd Avenue. Additionally, ALC identified two former steel works at the southwestern portion of 33-53 10th Street and a wood hydraulic shop and truck body manufacturer on the western portion of 33-53 10th Street. Based on the likely generation of hazardous wastes associated with the former uses of the adjoining properties, coupled with the lack of hazardous waste disposal regulations before the 1970s, the historical manufacturing/industrial uses of the adjoining properties are considered a REC.

The Phase I did not find any Controlled Recognized Environmental Conditions (CRECs)[2], or de minimis conditions[3] at the Project Area. It did not identify any other conditions at the Project Area that potentially present a significant environmental concern.

Assessment

Based on the RECs identified within the Phase I, prior to any planned site redevelopment activities, ALC recommended a Phase II subsurface investigation at the Project Area to confirm or deny impacts associated with the historical uses of the Project Area and adjoining properties. As discussed below, given the operational and administrative hardship –in particular considering that two of the lots that comprise the Development Site (Lots 16 and 18) are not currently owned by the Applicant-- that a Phase II subsurface investigation would have within the Project Area, it was determined that it would be appropriate to map an (E) designation at the site.

The existing business that occupies the Applicant's Lot 1 is a medical supplies distribution warehouse owned and operated by Catholic Medical Mission Board (the Applicant). Lots 16 and 18 are occupied by automotive repair facilities which are open nine-to-ten hours a day, six days a week.

Phase II ESA testing will require site investigative work in multiple locations on the property, including the drilling of multiple borings into pavement area, as no area of the property is undeveloped with exposed earth - and the only open area within the Project Area is paved parking located in the southeast corner of Lot 1. Furthermore, the parking lot is quite limited in area, and is actively utilized not only for employee parking, but as a loading bay for trucks distributing critical medical supplies. Lots 16 and 18 are entirely covered by existing structures, with no open area within which to bore.

Phase II ESAs require multiple borings (typically two to three) deep into the ground to capture subsurface conditions for the entire property, with a rig powerful enough to penetrate pavement. It should be noted these rigs are large enough to prevent parking lot and loading bay access. These tests typically take approximately a half-day to complete, with some additional time to patch the borings. Given the invasive nature of boring with a large rig, the businesses within the Project Area would be required to close to permit this work, as it would occur during business hours and/or utilization of the site for employee parking and medical supply loading.

Moreover, as the Applicant does not own Lots 16 or 18, it does not have the ability to force the businesses occupying the lots to close, which is anticipated to occur following approval of the Proposed Actions. As

[2] A controlled Recognized Environmental Condition (CREC) is an environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).

[3] A de minimis condition is one that generally does not present a material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement active if brought to the attention of appropriate governmental agencies (excluding local asbestos and lead situations).

such, Phase II investigative work is not feasible at this time and an (E) designation is required to undertake Phase II work once the property is vacated, demolished and cleared, following approval of the Proposed Actions.

The hazardous materials (E) designation is an institutional control that can be placed on a site as a result of the CEQR review of a zoning map or zoning text amendment or action pursuant to the Zoning Resolution. It provides a mechanism to ensure that testing for and mitigation and/or remediation of hazardous materials, if necessary, are completed prior to, or as part of, future development of an affected site, thereby eliminating the potential for hazardous materials impacts. The New York City Office of Environmental Remediation (OER) would provide regulatory oversight of the environmental investigation and remediation during any development process. Building permits would not be issued for the development by the New York City Department of Buildings (DOB) without prior OER approval of the investigation and/or remediation pursuant to the provisions of Section 11-15 of the Zoning Resolution of the City of New York (Environmental Requirements). The 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. Engineering controls may also be incorporated into the development to eliminate exposure risks for future occupants.

It should be noted that several adjoining properties have received (E) designations as part of rezonings to higher density, mixed use districts. To the immediate north of the Project Area at 11-01 33rd Avenue, at which the Phase I identified a former iron and steel works, galvanizing facility, and automotive repair shop, an (E) designation (E-613) was placed requiring testing and remediation prior to construction.[4] Similar (E) designations were also placed on 33-01 11th Street (Block 315), immediately to the west of the Project Area (E-518) and 33-33 to 33-71 11th Street (Block 318) immediately to the south of the Project Area (E-661).

As such, the (E) designation (E-XXX) for the Project Area would be the following:

Queens Block 317, Lots 1, 16 and 18:

The (E) designation text related to hazardous materials is as follows:

> **Task 1-Sampling Protocol**
>
> **The applicant submits to OER, for review and approval, a Phase I and Phase II of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.**

[4] As of February 2024, construction at this site has commenced, suggesting that testing and remediation have been completed.

Task 2-Remediation Determination and Protocol

A written report with 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 from test results, a proposed remediation plan must be submitted to 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.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

With the requirements of the (E) designation to be met before any new development could occur in the Project Area, there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined in the (E) designation on Lots 1, 16, and 18 would preclude the potential for significant adverse hazardous materials impacts from the Proposed Actions. Prior to development at Block 317, the property owners/developers will comply with the requirements of the (E) designation and coordinate with OER. Therefore, no further analysis is warranted.

Transportation

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to transportation and therefore require a detailed transportation analysis. As shown in Table 16-1 of the *CEQR Technical Manual*, actions that result in fewer than 50 peak hour vehicle trips are generally not likely to cause significant adverse impacts. For projects in Zone 4 (which includes areas not within 0.5-miles of a subway station in Queens), the development thresholds requiring trip generation analysis are 200 DUs, 10,000 gsf of local retail space, and 15,000 gsf of community facility space.

The RWCDS would result in a net increase of 168 DUs, a net increase of 13,346 gsf of local retail space, a net increase of 15,229 gsf of warehouse space, and a net decrease of 27,938 gsf of community facility (non-profit office) space. Given the retail uses exceed the thresholds in Table 16-1 of the *CEQR Technical Manual*, and the RWCDS involves a mix of land uses, per *CEQR Technical Manual* guidance, a preliminary trip generation assessment is warranted and has been provided in **Appendix 3.** Per CEQR guidance, a screening assessment was completed to determine if the Proposed Actions and RWCDS warrant detailed analyses of traffic, parking, transit, or pedestrians. The screening assessment consisted of a Level 1 Project Trip Generation and a Level 2 Project-Generated Trip Assignment, as presented in the "Transportation Planning Factors and Travel Demand Forecast" memo presented in **Appendix 3.**

As detailed in **Appendix 3**, the Proposed Actions do not warrant detailed analyses of traffic, transit, parking or ferry service. It is not expected that the Proposed Actions would result in more than 50 incremental vehicle peak hour vehicle trips. It is also not expected that any subway or bus lines near the

Project Area would experience an increase of more than 200 peak hour rail or 50 peak hour bus transit riders, the CEQR thresholds for a detailed transit analysis. As such, no significant adverse impacts to traffic, transit, or parking would be expected in the future with the Proposed Actions. However, the Level 1 assessment found that the expected peak hour pedestrian trips would exceed the maximum of 200 set by the *CEQR Technical Manual* during all peak periods. Additionally, the Level 2 screening projected an incremental increase of more than 200 pedestrian trips on one sidewalk in the vicinity of the Project Area, warranting further analysis. A detailed assessment of pedestrians is provided in **Attachment I, "Transportation"** (TO BE PROVIDED).

Air Quality

According to guidance provided in the *CEQR Technical Manual*, air quality analyses are conducted in order 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

As stated in the 2021 *CEQR Technical Manual*, projects—whether site-specific or generic—may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). According to the 2021 *CEQR Technical Manual* screening thresholds, if 170 or more project-generated vehicles pass through an intersection in any peak hour (for CO impact), or if a project would result in greater than 12 to 23 heavy duty diesel vehicle ("HDDV") trips or its equivalent vehicle emissions based on the type of road (for $PM_{2.5}$ impact), there is the potential for mobile source air quality impacts and a detailed analysis is required.

As presented in **Appendix 3, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum,"** the Proposed Actions' RWCDS would not introduce 170 or more project-generated vehicles through an intersection in any peak hour. As such, a detailed mobile source air quality analysis for CO emissions is not warranted.

The $PM_{2.5}$ equivalent truck calculation in vehicular emission screen ranges from 12 to 23 HDDVs depending on the type of roadway. The net incremental change in peak hour vehicle trips presented in **Appendix 3, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum,"** were used for the $PM_{2.5}$ equivalent truck calculations. All autos were assumed to be LDGT1 class vehicles, and all trucks were assumed to be HDDV7, based on guidance from the New York City Department of City Planning ("DCP"). **Table B-2** shows the incremental peak hour traffic volumes generated by the Proposed Actions' RWCDS (by vehicle type) and the 2021 *CEQR Technical Manual* Equivalent Truck Calculations.

Table B-2: Incremental Peak Hour Traffic Volumes Generated by the Proposed Actions' RWCDS

Roadway	Roadway Classification (Threshold HDDVs screen)[1]	Peak-Hour Period	Trucks Per Hour	Vehicle Per Hour	Equivalent Truck Calculation[2]	CTM Equivalent Truck Threshold	Pass/Fail
11th Street and 33rd Avenue	Major Collector (17)	AM	3	8	3	20	Pass
		Midday	3	23	7	20	Pass
		PM	3	26	7	20	Pass
		Saturday Midday	0	33	7	20	Pass
11th Street and 33rd Road	Major Collector (17)	AM	1	-6	1	20	Pass
		Midday	1	12	3	20	Pass
		PM	3	10	4	20	Pass
		Saturday Midday	0	14	3	20	Pass
12th Street and 33rd Avenue	Local Road	AM	1	9	5	13	Pass
		Midday	1	6	4	13	Pass
		PM	2	-10	2	13	Pass
		Saturday Midday	0	5	2	13	Pass
12th Street and 33rd Road	Local Road	AM	0	-26	0	13	Pass
		Midday	0	-1	0	13	Pass
		PM	2	0	2	13	Pass
		Saturday Midday	0	-2	0	13	Pass

Note:
1. Roadway classification obtained from the New York State Department of Transportation ("NYSDOT") Functional Class Maps https://www.dot.ny.gov/gisapps/functional-class-maps (May 2024)
2. Calculations based on the table provided in Section 210 of the *2021 CEQR Technical Manual*.

As shown in **Table B-2**, the Proposed Actions' RWCDS $PM_{2.5}$ equivalent truck calculations in vehicular emissions do not exceed the HDDVs screening threshold criterion(s) for any peak hour. As such, a detailed mobile source air quality analysis for $PM_{2.5}$ emissions is not warranted.

Therefore, the Proposed Actions would not exceed the 2021 *CEQR Technical Manual* screening thresholds for CO and $PM_{2.5}$ emissions, a detailed mobile source air quality analysis is not warranted, and the Proposed Actions would not result in significant adverse air quality impacts regarding CO and $PM_{2.5}$ emissions.

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 size 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.

As discussed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of a new eight-story mixed-use building. The new eight-story building (assumed to be 95-foot-tall for RWCDS purposes in order to maximize the proposed zoning; 110-foot-tall including a 15-foot-tall mechanical bulkhead) would contain approximately 267,442-gsf of total space and be located entirely within the Project Area (Block 317, Lots 1, 16, and 18).

Within a 400-foot-radius of the Proposed Development, there are three planned buildings of similar or greater height to the Proposed Development. A planned nine-story building is approximately 80 feet to the west of the Proposed Development and a planned 14-story building is approximately 220 feet to the northwest of the Proposed Development at 32-01 Vernon Boulevard (Block 315, Lot 1).[5] There is also a planned eight-story building approximately 50 feet to the south of the Project Area at 33-33 11th Street (Block 318, Lot 22).[6] To determine whether a detailed project-on existing HVAC analysis is warranted, an air quality nomograph preliminary screening was performed using Figure 17-3 of the *CEQR Technical Manual*. As shown in **Figure B-1**, using Figure 17-3 and the 267,442-gsf future building size, it was determined that the HVAC emissions from the proposed eight-story building in the Project Area could potentially affect the surrounding planned developments.

However, the project architect has confirmed that the Proposed Development would utilize an entirely electric HVAC system, and more specifically, variable refrigerant flow (VRF) with shared condensing elements. According to the architect, "VRF technology divides a building into zones customized for comfort and energy efficiency. With no need for fossil fuels, an all-electric VRF system provides heating and cooling by cycling refrigerant between an outdoor unit and each zone's ductless or ducted indoor unit(s)." Additionally, the architect confirmed that the building will feature an electric system for heating hot water. Given that an all-electric HVAC and water-heating system would generate minimal or no associated emissions, it was determined that the Proposed Development would not have a significant air quality impact on surrounding buildings, and therefore, no further analysis of air quality is warranted.

To ensure the use of an electric HVAC system, an air quality (E) designation (E-XXX) would be placed on the Project Area, as specified below:

Queens Block 317, Lots 1, 16, and 18:

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

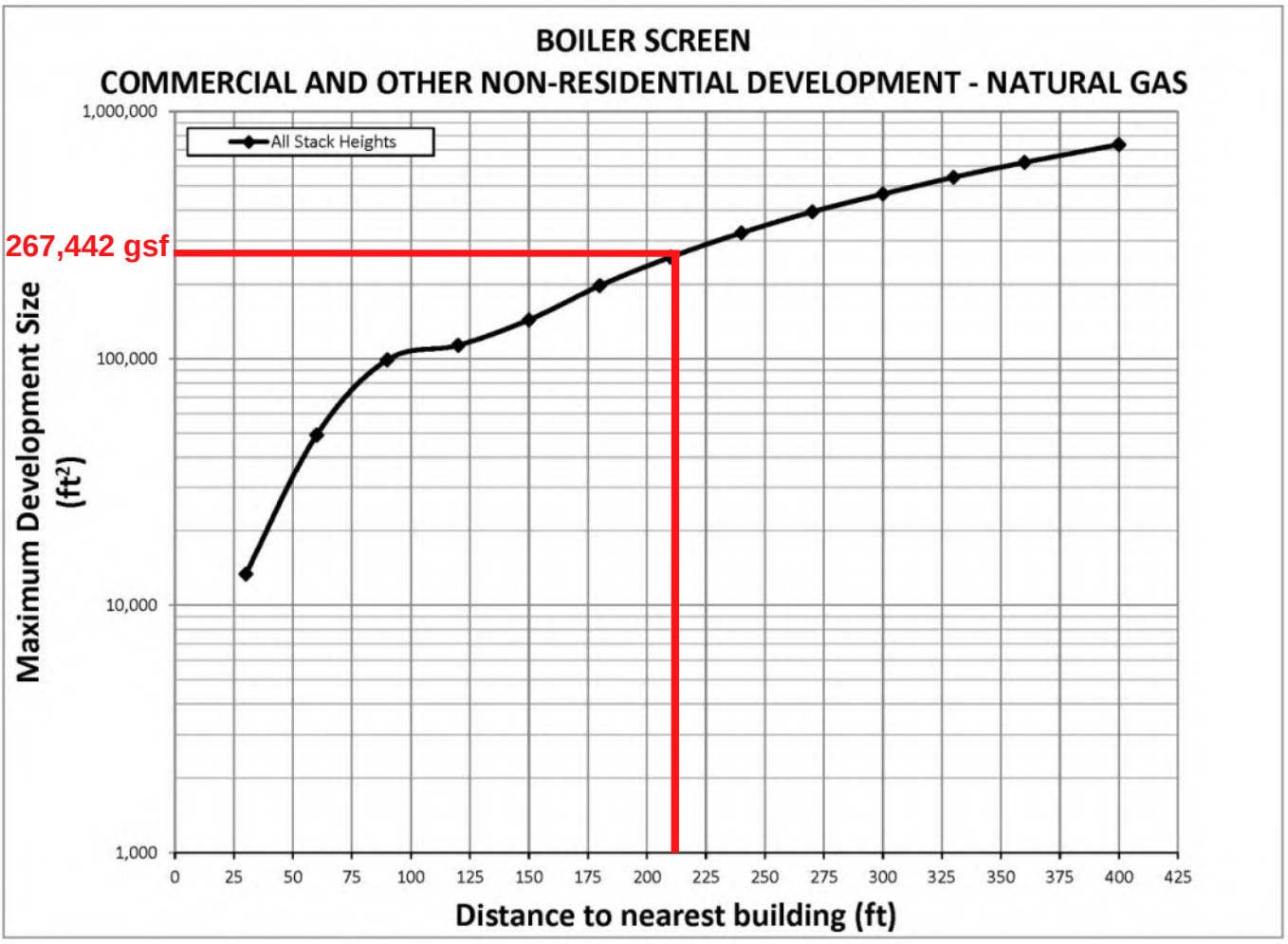
> **Any new residential, commercial, community facility and/or warehouse development must use an electrically powered Variable Refrigerant Flow (VRF) HVAC system and hot water equipment to avoid any potential significant adverse air quality impacts.**

In addition, land use maps were reviewed to identify any potential sources of emissions from manufacturing/industrial processing or transportation/utility operations. The 400-foot study area surrounding the Project Area supports a wide range of land uses, including institutional, commercial, residential, parking, and vacant land as well as light industrial and transportation uses (see **Figure B-2**).

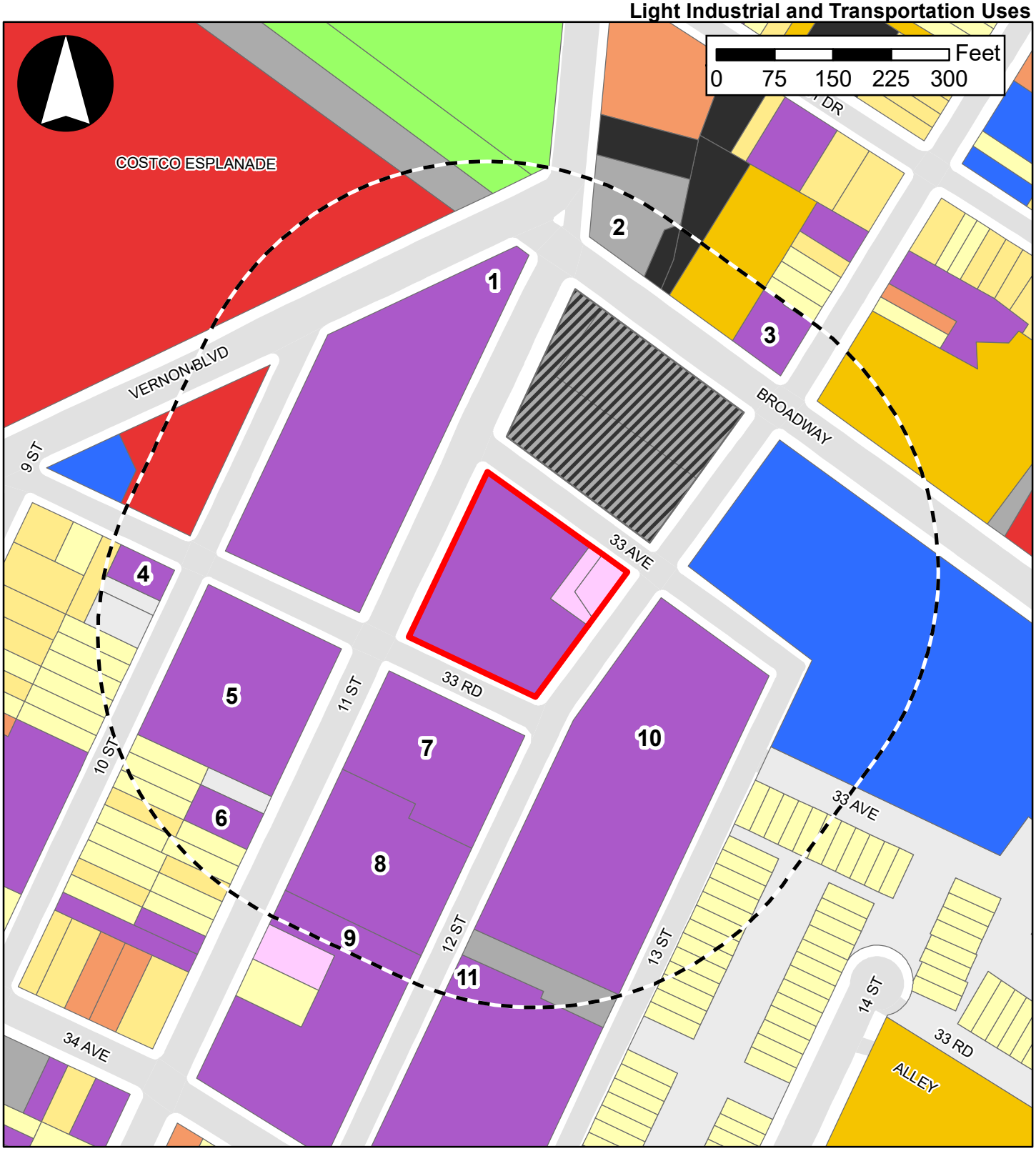
[5] These distances were estimated based on site plans included in the "Vernon Boulevard-Broadway Rezoning EAS," CEQR #12DCP139Q.

[6] This distance was estimated based on site plans included in the "11th Street and 34th Avenue Rezoning EAS," CEQR #21DCP118Q.

Figure App 17-3



Light Industrial and Transportation Uses



Legend

- Project Area
- 400-Foot Radius

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Mnaufacturing (keyed to Table B-2)
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data
- Site Under Construction (Mixed-Use Residential)

As shown in **Table B-3**, the existing light industrial and transportation uses within 400 feet of the site include shipping and logistics facilities, wholesale distributors, vehicle storage, an industrial bakery, a garbage collection service and storage. Based on a review of DEP's Clean Air Tracking System (CATS) Light Industrial Permit records, there are no current industrial air permits within 400 feet of the Project Area. There are also no major or large combustion sources located within 1,000 feet radius of the Project Area. Based on this information, no industrial source air quality analysis is warranted for the Proposed Actions. As such, no significant adverse industrial source or large emission source air quality impacts are expected in the future with the Proposed Actions.

TABLE B-3: Description of Existing Light Industrial or Automotive-Related Uses within 400-feet of the Project Area

Map No.	Block	Lot	Address	Existing Use	Business Name
1	315	1	33-02 11th Street	Wholesale/Distributor	Sovereign Hydroseal
2	502	1	31-65 Vernon Blvd	Vehicle Storage	Food Truck Storage
3	502	38	11-25 Broadway	Wholesale/Distributor	Odeko
4	320	28	33-38 10th Street	Storage	Noguchi Museum and Studio
5	319	20	33-53 10th Street	Wholesale/Distributor	Superior Selected Stone, Hellas Stone Fabrication, and United Stone Works
6	319	36	33-56 11th Street	Garbage Collection Service	The Junkluggers
7	318	22	33-33 11th Street	Shipping/Logistics	Control Cargo Solutions
8	318	15	33-51 11th Street	Bakery/Distributor	Automated Bread Distributing
9	318	1	33-80 12th Street	Vehicle Storage	Taxi Storage
10	522	29	12-12 33rd Avenue	Shipping/Logistics	DHL Express ServicePoint
11	522	1	12-01 34th Ave	Wholesale/Distributor	LIC Beverages

Noise

Refer to **Attachment H, "Noise."**

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 assessments of land use, zoning, and public policy (**Attachment C**), open space (**Attachment D**), shadows **(Attachment E),** historic and cultural resources (**Attachment F**), urban design and visual resources, noise (**Attachment G**), and Transportation (**Attachment I**, TO BE PROVIDED) a preliminary screening 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 above. Per the analyses provided in this EAS, although the Proposed Actions required

supplemental screening or assessment of some of these technical areas, there would be no action-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 Actions 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 Actions 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 development facilitated by the Proposed Actions would bring occupancy and additional activity to the Project Area, which is currently occupied by a warehouse and automotive repair shops. In the 2028 future without the No-Action condition, it is anticipated that the Applicant would demolish the existing building on Lot 1 within the Project Area, and construct a new mixed-use residential and community facility building. Given that the existing use at the applicant's site is non-conforming, not able to expand under the existing zoning, and it's the applicant's intent to consolidate its operations, the existing business would likely relocate/vacate the site without the proposed zoning changes for the efficient future and long-term operations of the business. Therefore, the RWCDS residential, commercial, and community facility uses in the Project Area would add additional residential uses including market-rate and affordable housing as well as convenient amenities to the neighborhood, introduce opportunities for commercial retail, and retain much of the existing Applicant-owned nonprofit warehouse and office space, thereby enhancing the mixed-use character of the area. The Proposed Development's residential and commercial uses would be in character with existing and planned mixed residential, commercial, industrial, and institutional uses, would not alter the existing land use patterns of the area, and be consistent with increased residential growth in the area. The With-Action development would also be in character with the scale, height, and massing of planned development in the surrounding area and not result in any visual or historic contextual impacts. As the Proposed Actions 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, and no further analysis is warranted .

Construction

Construction activities, although temporary in nature, can sometimes result in significant adverse impacts. A proposed project's construction activities may affect a number of technical areas analyzed for the operational period, such as air quality, noise, and traffic; therefore, a construction assessment relies to a significant extent on the methodologies and resulting information gathered in the analyses of these technical areas.

As noted in the EAS Forn, based on general conceptual construction for projects in the City, a project of this size (approximately 267,442 gsf) could take approximately 25 months to construct. It should be noted however that as the Applicant-owned Lot 1 is expected to be redeveloped either with or without the Proposed Actions, the existing buildings on the site are assumed to be demolished on an as-of-right basis prior to project approvals being granted. Additionally, the construction timeline for the Proposed Project is expected to be shorter than the typical project of this size given that the Project Area consists of the

entirety of Block 317, meaning that staging and access could occur via all four street fronts during construction, which would allow on-site construction logistics to be expedited. As such, the expected construction timeline for the Proposed Development would not include a demolition stage. It is therefore estimated that excavation and foundation work for the proposed 8-story Proposed Development would be completed in approximately 2 months, building superstructure and exterior would be completed in approximately 11 months, and interior fit-out would be completed in approximately 10 months, for a total duration of 23 months. It should be noted that this is a conservative estimate as it assumes that interior fit-out would not commence until the superstructure is fully completed, whereas it is likely that some of this work could overlap.

Since construction of the Proposed Development is expected to take less than two years (23 months) to complete, construction is considered short-term for CEQR analysis purposes. Additionally, the Project Area is not within a Central Business District nor along an arterial highway or major thoroughfare. Therefore, the Proposed Actions would not be considered to have any significant adverse construction effects as it pertains to air quality, noise, and traffic.

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. 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 Landmark Preservation Commission (LPC)-designated and New York State or National Register of Historic Places (S/NR)-listed historic resources located within 90 linear feet of a proposed construction site. For these structures, DOB's Technical Policy and Procedure Notice (TPPN) #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the New York City 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 described in **Attachment F, "Historic and Cultural Resources,"** the Project Area is located within 90 feet of the LPC-designated Barkin, Levin & Company Office Pavilion, and construction of the Proposed Development would be subject to TPPN #10/88. Under the TPPN, a Construction Protection Plan (CCP) would be provided to LPC for review and approval prior to any work in the Project Area. The Construction Protection Plan would take into account the guidance provided in *CEQR Technical Manual*, Chapter 9, Section 522, "Construction Protection Plan." As such, no construction-related impacts on historic resources would occur as a result of the Proposed Actions. Therefore, no further analysis of construction is warranted.

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 block consisting of three tax lots (Queens Block 317, Lots 1, 16, and 18, a.k.a. the "Project Area") in the Ravenswood neighborhood of Queens Community District (CD) 1. The Project Area is bounded by 33rd Avenue to the north, 33rd Road to the south, 11th Street to the west, and 12th Street to the east, and has a total lot area of approximately 42,569 square feet (sf). The Proposed Actions consist of a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (Special Mixed-Use District MX-23), and a zoning text amendment to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area.

The Proposed Actions would allow the Applicant to demolish the existing warehouse and auto repair uses and develop a new eight-story, 267,442 gross-square-foot (gsf) mixed-use building (the "Proposed Development") on Lots 1, 16, and 18. Under the Reasonable Worst-Case Development Scenario (RWCDS), the Proposed Development would contain 227 dwelling units (DUs), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space, along with 70 accessory parking spaces in a cellar garage. In the 2028 future without the Proposed Actions (the "No-Action condition"), it is anticipated that the Applicant would construct a four-story mixed-use residential and community facility building on Lot 1 pursuant to the existing zoning with approximately 59 DUs, 33,055 gsf of community facility space, and 63 accessory parking spaces.

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 in the Project Area, 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 2028 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 2023 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

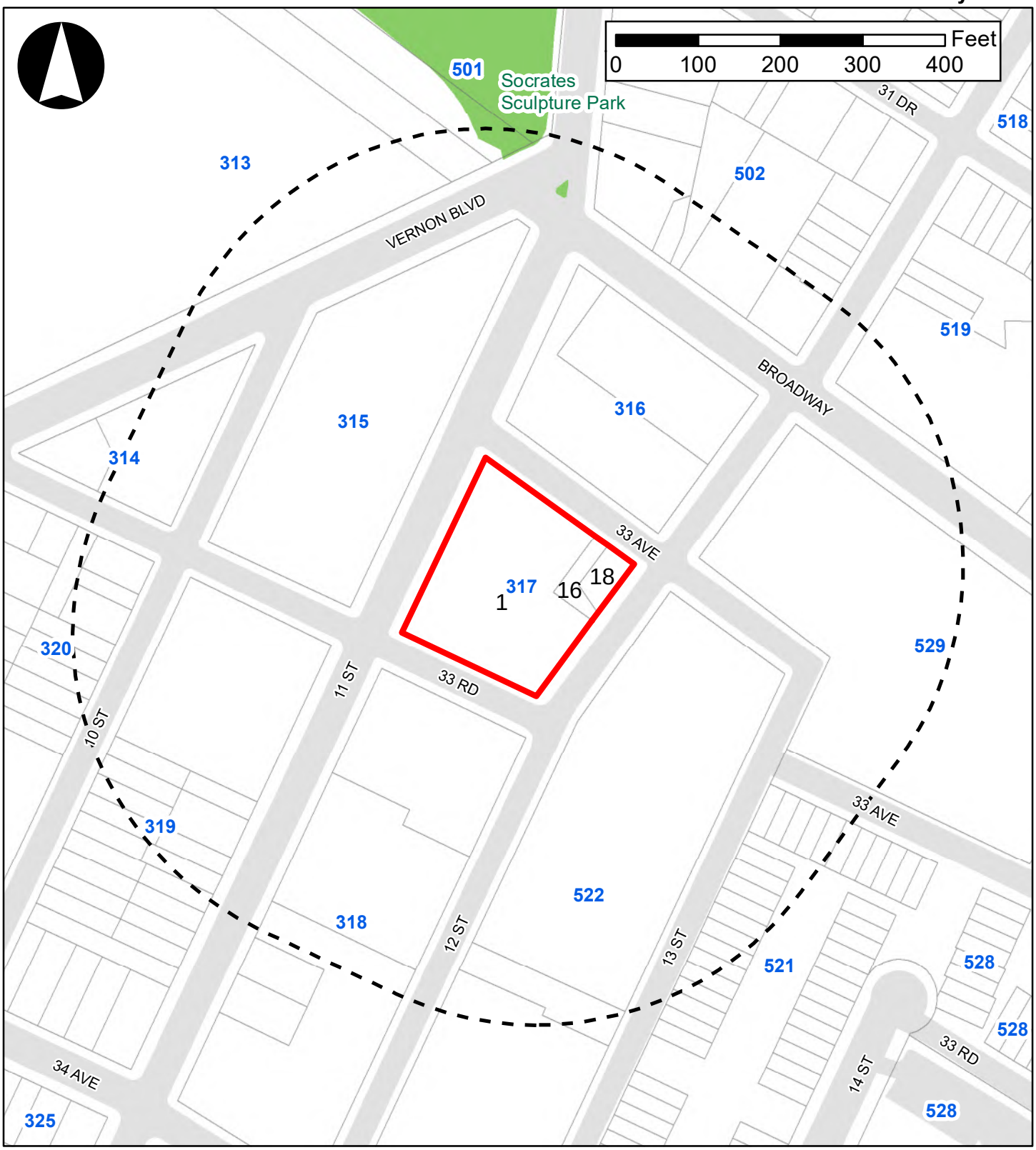
As discussed in **Attachment A, "Project Description,"** construction of the Proposed Development is expected to be completed by 2028. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2028. Future No-Action conditions account for planned development projects, initiatives, and proposals that are anticipated to be completed by 2028.

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: (1) the primary study area, which comprises the Project 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 lots fronting on Broadway, extends south to the midblock between 33rd Road and 34th Avenue, extends east to midblock between 13th Street and 14th Street, and extends west to the midblock between 10th Street and Vernon Boulevard.

Figure C-1
Land Use Study Areas



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- 317 Tax Block
- 1 Tax Lot

III. EXISTING CONDITIONS

Land Use

Primary Study Area (Project Area)

The primary study area is the area that would be directly affected by the Proposed Actions. The area includes a single tax block consisting of three lots (Queens Block 317, Lots 1, 16, and 18), and is bounded by 33rd Avenue to the north, 33rd Road to the south, 11th Street to the west, and 12th Street to the east. It has a total lot area of approximately 42,569 square feet (sf), with approximately 220 feet of frontage along 33rd Avenue, 180 feet of frontage along 33rd Road, 200 feet of frontage along 12th Street, and 235 feet of frontage along 11th Street.

Within the Project Area, Lot 1 is currently owned by the Applicant while Lots 16 and 18 are both privately owned by the same non-Applicant owner. The Project Area is currently occupied by three buildings. The Applicant-owned Lot 1 is occupied by a single-story (18-foot roof height), approximately 38,896-gsf warehouse that is used by the Applicant as a distribution center for medical supplies. The warehouse building has a loading dock that faces east and abuts an approximately 6,000-sf, paved, open vehicle storage and parking area which is located at the southeast corner of Lot 1. Lots 16 and 18 are located in the northeast corner of Block 317, and are both occupied by single-story (12-foot roof height) commercial auto repair shops with built areas of 2,645 and 2,611 gsf, respectively. Lots 1, 16, and 18 are built to a floor area ratio (FAR) of approximately 0.92, 0.96, and 0.86, respectively.

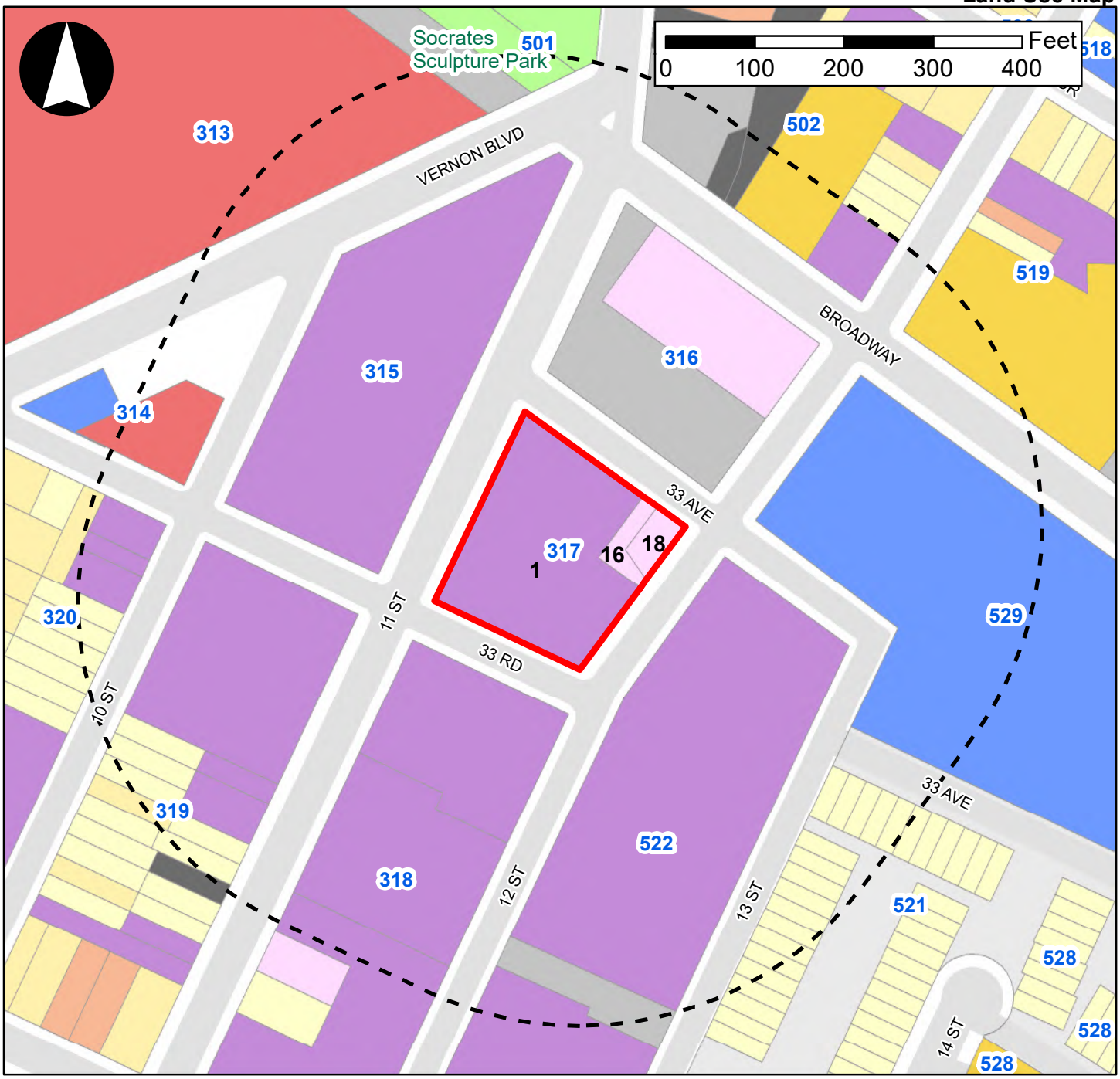
The Project Area is bordered by four streets. 33rd Avenue borders the Project Area to the north; it is 50 feet wide and is considered a Narrow Street for the purposes of zoning. It is a two-way street with on-street parking on both sides and no lane markings. The roadbed is approximately 32 feet wide, and both sidewalks are approximately nine feet wide (the northern sidewalk is unpaved). 33rd Road borders the Project Area to the south; it is 50 feet wide and is considered a Narrow Street for the purposes of zoning. It is a two-way street with on-street parking on both sides and no lane markings. The roadbed is approximately 30 feet wide, and the northern sidewalk is 11 feet wide while the southern sidewalk is nine feet wide. 12th Street borders the Project Area to the east; it is 60 feet wide and is considered a Narrow Street for the purposes of zoning. It is a one-way northbound street with on-street parking on both sides and no lane markings. The roadbed is approximately 30 feet wide, the western sidewalk is 16 feet wide, and the eastern sidewalk is 14 feet wide. 11th Street, which borders the Project Area to the west, is considered a wide street for zoning purposes, with a width of 80 feet. It is a two-way, north-south street with one moving lane per direction and parking lanes on both sides.

Secondary Study Area (400-foot Radius)

As shown in **Figure C-2**, the secondary study area is characterized by industrial and manufacturing uses and contains a mix of land uses that are primarily non-residential. The blocks directly to the south, east, and west of the Project Area contain industrial or manufacturing uses on large lots, while there are residential and commercial uses on smaller lots further from the Project Area. To the northeast of the Project Area is a large lot with public facility and institutional use (a public school). There are also parking facilities and vacant land within the study area.

Large single-story and two-story warehouses occupy the majority of the study area south of Broadway. These land uses include a DHL commercial cargo and shipping services warehouse to the east of the

Figure C-2
Land Use Map



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- 317 Tax Block

Land Use

- 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

Project Area on Block 522, two commercial distribution warehouses on Block 318 directly south of the Project Area, a stone products distribution warehouse and stonecutting shop on Block 319 to the southwest of the Project Area, and a mechanical and heating products distributor on Block 315 west of the Project Area. There are also other industrial uses on smaller lots scattered throughout the remainder of the study area, including a two-story food wholesale warehouse at 11-25 Broadway in the north of the study area, a two-story warehouse for a commercial junk removal service at 33-56 11th Street to the southwest, and a one-story workshop at 33-38 10th Street at the western edge of the secondary study area.

The remaining non-residential uses within the study area include parking facilities, transportation and utility uses, one institutional lot, and one lot with a commercial use. Block 316, directly north of the Project Area, includes a two-story automotive garage along Broadway. The remainder of the block is occupied by an unpaved open storage area that is used for vehicle storage but was observed to be vacant during a site visit in January 2024. There are several other small parking lots scattered throughout the study area. To the northeast of the Project Area on Block 529 is the accessory lot and playing fields of Long Island City High School, the only institutional use in the secondary study area. Finally, the Isamu Noguchi Foundation and Garden Museum is a cultural/commercial use at 32-55 Vernon Boulevard west of the Project Area.

Residential uses within the study area are limited. There are several attached, two-family residential buildings in the southeast portion of the study area along 13th Street. There are also several detached one- and two-family residential buildings in the southwest portion of the study area along 11th and 12th Streets.

Table C-1 provides a description of existing land use within the secondary study area. As shown in **Table C-1**, residential uses (consisting of one and two-family buildings exclusively within the study area) occupy the greatest percentage of total lots at 51.4 percent. Due to the relative differences in lot size, industrial and manufacturing uses make up the majority of building area (67.8 percent) despite only occupying 31.4 percent of lots. Parking uses occupy 11.4 percent of the lots, while commercial/office buildings and vacant land uses each make up 2.9 percent of lots.

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	18	51.4%	28,370	7.0%	39,961	15.4%
One & Two Family Buildings	18	51.4%	28,370	7.0%	39,961	15.4%
Multi-Family Walkup Buildings	0	0.0%	0	0.0%	0	0.0%
Multi-Family Elevator Buildings	0	0.0%	0	0.0%	0	0.0%
Mixed Commercial/Residential Buildings	0	0.0%	0	0.0%	0	0.0%
Commercial/Office Buildings	1	2.9%	19,432	4.8%	28,930	11.1%
Industrial/Manufacturing	11	31.4%	286,392	70.9%	176,072	67.8%
Transportation/Utility	0	0.0%	0	0.0%	0	0.0%
Public Facilities & Institutions[1]	0	0.0%	0	0.0%	0	0.0%
Open Space	0	0.0%	0	0.0%	0	0.0%
Parking Facilities	4	11.4%	68,253	16.9%	14,800	5.7%
Vacant Land	1	2.9%	1,619	0.4%	0	0.0%
All Others/No Data	0	0.0%	0	0.0%	0	0.0%
Total	35	100.0%	404,066	100.0%	259,763	100.0%

Source: NYC Department of City Planning (PLUTO 2023 v3)

[1]Table C-1 excludes the lot area for Long Island City High School (Block 529, Lot 2), given that only a small portion of the total area of the lot falls within the secondary study area.

Given the sizes and relative locations of some lots near the Project Area, there are several large tax lots with notable land uses that are partially within 400 feet of the Project Area, but have less than 50 percent of their area within 400 feet. These lots are not included in **Table C-1.** Long Island City High School, a public facility land use, is located at 12-02 Broadway (Block 529, Lot 2). The high school building is located on the eastern portion of the lot outside the 400-foot radius. The high school's turf athletic field is located on the western portion of the lot and is partially within 400 feet of the Project Area. There are also two multi-family elevator residential buildings along Broadway (12-15 Broadway and 11-09 Broadway) on lots that have less than 50 percent of their area within the 400-foot radius.

Zoning

Primary Study Area

As shown in **Figure C-3**, the primary study area is zoned R5. The maximum allowable FAR in R5 districts is 1.25.

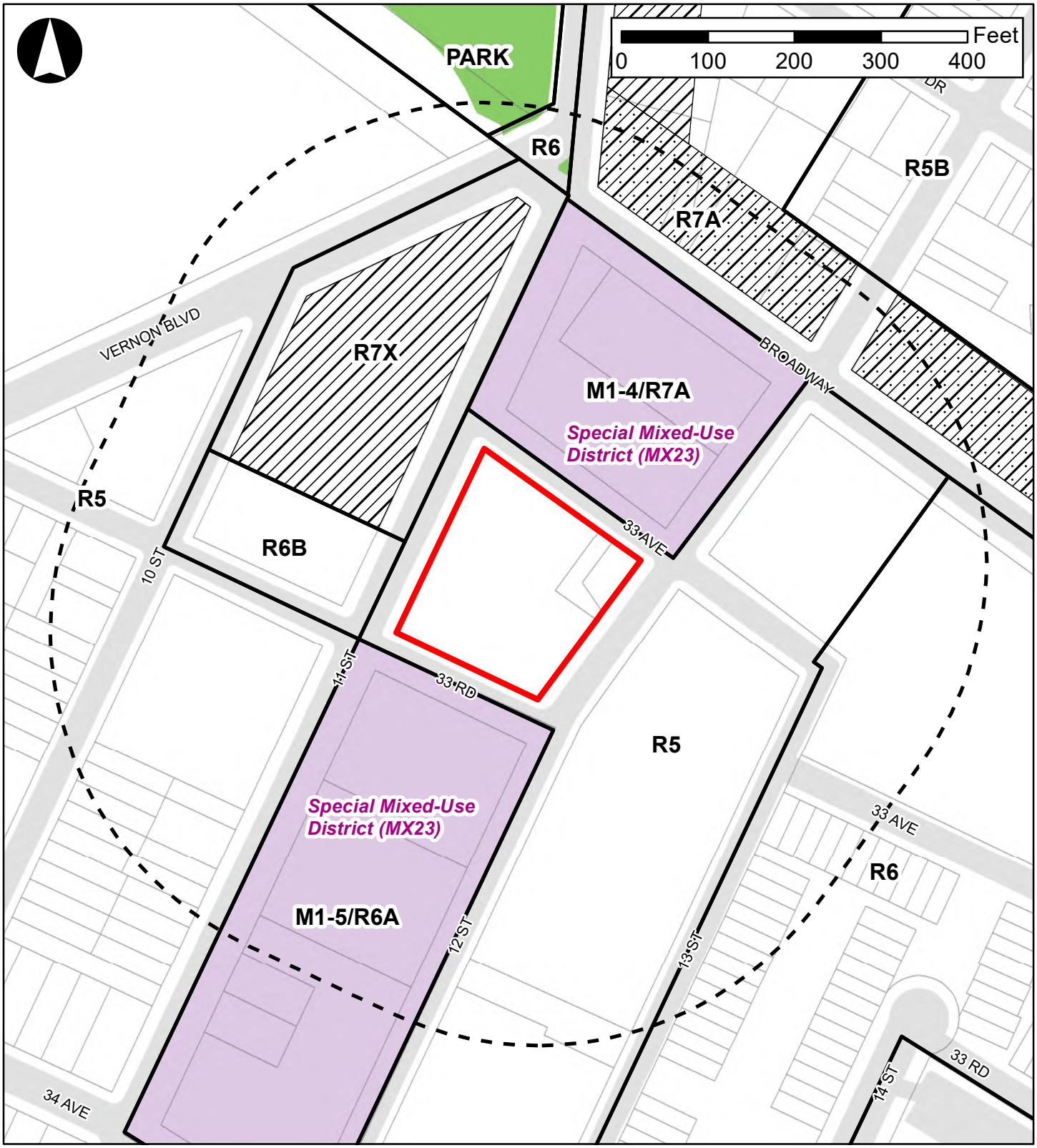
Secondary Study Area

Zoning classifications within the secondary study area are shown in **Table C-2** and consist of residential districts and commercial overlays, as well as special mixed use districts (MX). The Project Area is mapped within an R5 district that extends east and south along 12th and 13th Streets—another R5 district is situated west of the Project Area along Vernon Boulevard and 10th Street. Three recent rezonings have changed zoning designations on blocks adjacent to the study area, with Block 315 west of the Project Area split between R6B and R7X with a C1-3 commercial overlay, Block 315 north of the Project area zoned M1-4/R7A (MX), and Block 318 south of Project Area zoned M1-5/R6A (MX). Other zoning designations in the secondary study area include R6, which is mapped east and north of the Project Area, and R7A, which is mapped on the north side of Broadway and is coterminous with a C2-3 commercial overlay. **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		
R5	R5 non-contextual districts are widely mapped districts intended for neighborhoods with an assortment of housing types at densities higher than those found in R3-2 or R4 districts.	R: 1.25 CF: 2.00 C: Not permitted M: Not permitted
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

Figure C-3
Zoning Map



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Tax Lot
- R5 Zoning District
- Special Purpose District
- **Commercial Overlay**
  - C1-3
  - C2-3

R7A	R7A 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
R7X	R7X is a medium-density contextual district governed by Quality Housing bulk regulations. The higher FAR and height maximums typically produce taller, bulkier buildings than in other R7 disticts, with additional FAR and height bonuses available for buildings participating in the Inclusionary Housing program.	R: 5.0/6.0 (IH) CF: 5.0 C: Not permitted M: Not permitted
Commercial Districts		
C1-3 Overlay	C1 commercial overlays are mapped within residential districts along streets that serve local retail needs. With an FAR of 1.0, C1 overlays typically produce one or two-story commercial units in mixed-use buildings, such as food stores, local shops, and dry cleaners.	R & CF: Same as underlying R strict C: 1.0 within R1-R5 districts & 2.0 within R6-R10 districts M: Not permitted
C2-3 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 strict C: 1.0 within R1-R5 districts & 2.0 within R6-R10 districts M: Not permitted
Special Mixed Use Districts		
M1-4/R7A	M1-4/R7A is a Mixed Use (MX) zoning district that pairs M1-4, a manufacturing district that supports a mix of low-density commercial and industrial uses, with R7A, a medium density contextual residential district. Industrial, commercial, and community facility uses are subject to the M1-4 district bulk controls, except that community facilities are subject to residential FAR limits. MX zoning districts also have special regulations that enable residential and certain industrial uses to be located either side by side or within the same building.	R: 4.0/4.6 (IH) C: 2.0 CF 4.0 M: 2.0
M1-5/R6A	M1-5/R6A is a Mixed Use (MX) zoning district that pairs M1-5, a manufacturing district that supports a mix of commercial and industrial uses, with R6A, a medium density contextual residential district. Industrial, commercial, and community facility uses are subject to the M1-4 district bulk controls, except that community facilities are subject to residential FAR limits. MX zoning districts also have special regulations that enable residential and certain industrial uses to be located either side by side or within the same building.	R: 3.0/3.6 (IH) CF: 6.50 C: 5.00 M: 5.00

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. Both the primary and secondary study area are located within New York City's designated Coastal Zone, and therefore the Proposed Actions are subject to review of consistency with the City's Waterfront Revitalization Program (WRP). The study areas

are not part of, or subject to, an Urban Renewal Plan, adopted community 197-a Plan, or Industrial Business Zone (IBZ). 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.

Waterfront Revitalization Program (WRP)

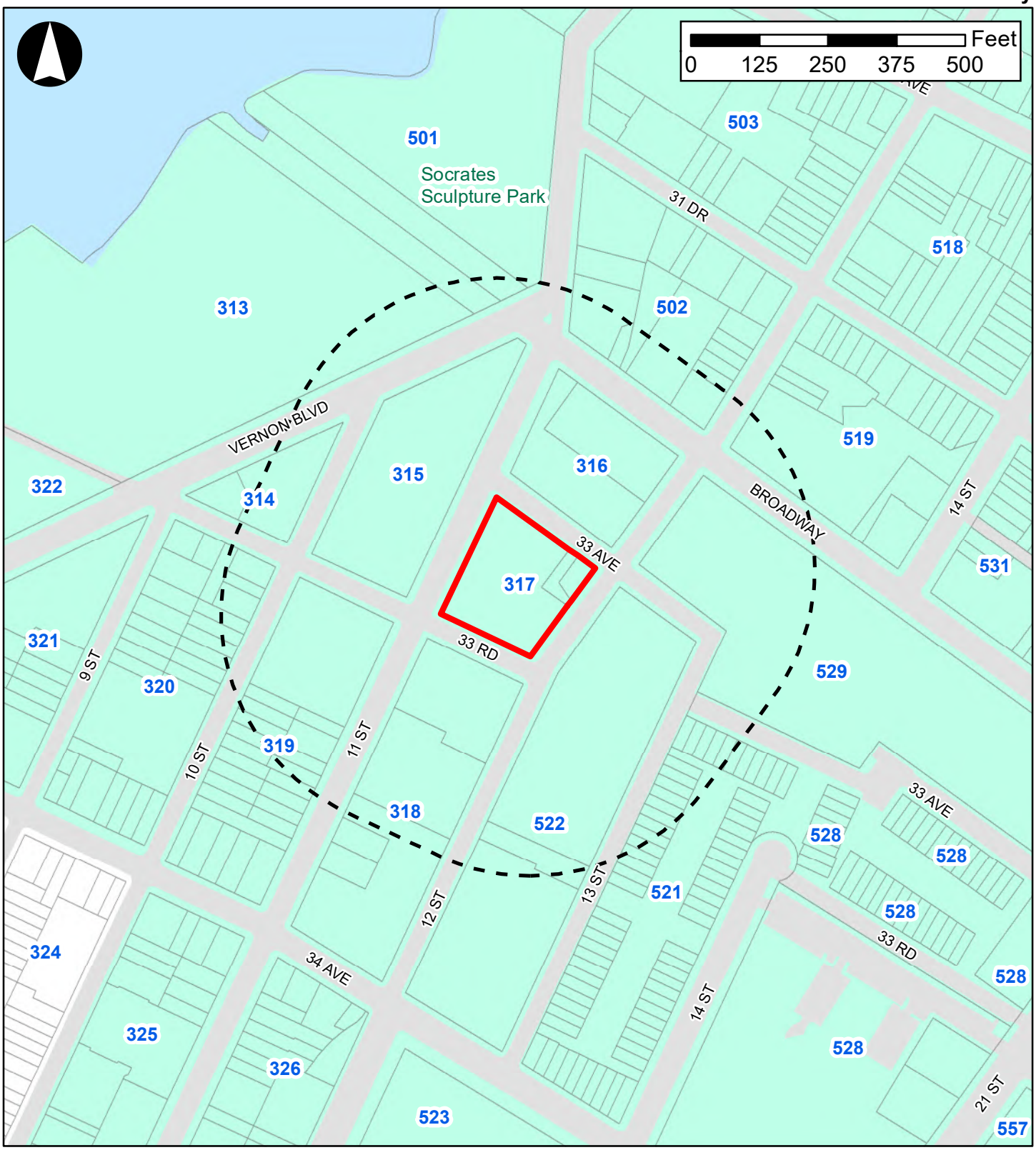
As shown in **Figure C-4**, the Project Area and the entirety of the secondary study area are located within the City's designated coastal zone. Proposed projects that are located within the designated boundaries of New York City's Coastal Zone must be assessed for their consistency with the City's WRP.

Legislative and Regulatory Background

The federal Coastal Zone Management Act (CZMA) of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed projects along coastlines. The program responded to City, State, and Federal concerns about the deterioration and inappropriate use of the waterfront. In accordance with the CZMA, New York State adopted its own Coastal Management Program (CMP), which provides for local implementation when a municipality adopts a local waterfront revitalization program (WRP), as is the case in New York City. The New York City WRP is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and federal authorities (i.e., the U.S. Army Corps of Engineers [USACE] and the U.S. Fish and Wildlife Service [USFWS]) adopted the City's ten WRP policies for most of the properties located within its boundaries.

In October 2013, the City Council approved revisions to the WRP in order to proactively advance the long-term goals laid out in Vision 2020: The New York City Comprehensive Waterfront Plan, released in 2011. The changes solidify New York City's leadership in the area of sustainability and climate resilience planning as one of the first major cities in the U.S. to incorporate climate change considerations into its Coastal Zone Management Program. They also promote a range of ecological objectives and strategies, facilitate interagency review of permitting to preserve and enhance maritime infrastructure, and support a thriving, sustainable working waterfront. The New York State Secretary of State approved the revisions to the WRP on February 3, 2016. The U.S. Secretary of Commerce concurred with the State's request to incorporate the WRP into the New York State CMP.

Figure C-4
Coastal Zone Boundary



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- 317 Tax Block
- Tax Lot
- NYC Coastal Zone

New York City Panel on Climate Change: Projections

In 2013, the New York City Panel on Climate Change (NPCC) released a report (Climate Risk Information 2013: Observations, Climate Change Projections, and Maps) outlining New York City-specific climate change projections to help respond to climate change and accomplish PlaNYC goals. The 2013 NPCC report predicted future City temperatures, precipitations, sea levels, and extreme event frequency for the 2020s and 2050s. Subsequently, in January 2015, the Second NPCC (NPCC2) released an updated report that presented the full work of the NPCC2 from January 2013 to 2015 and includes temperature, precipitation, sea level, and extreme event frequency predictions for the 2081 to 2100 time period. While the projections will continue to be refined in the future, current projections are useful for present planning purposes and to facilitate decision-making in the present that can reduce existing and near-term risks without impeding the ability to take more informed adaptive actions in the future. Specifically, as shown in **Table C-3**, the NPCC2 report predicts that mean annual temperatures will increase by 2.0 to 2.8˚F, 4.1 to 5.7˚F, 5.3 to 8.8˚F, and 5.8 to 10.3˚F by the 2020s, 2050s, 2080s, and 2100, respectively; total annual precipitation will rise by one to eight percent, four to 11 percent, five to 13 percent, and -one to +19 percent by the 2020s, 2050s, 2080s, and 2100, respectively; sea level will rise by four to eight inches, 11 to 21 inches, 18 to 39 inches, and 22 to 50 inches by the 2020s, 2050s, 2080s, and 2100, respectively; heat waves and heavy downpours are also very likely to become more frequent, more intense, and longer in duration, with coastal flooding very likely to increase in frequency, extent, and elevation.

TABLE C-3 : NPCC Projections

Time Period	Increase in Mean Annual Temperatures	Increase in Total Annual Precipitation	Increase in Sea Level
2020s	2.0 – 2.8 ˚F	1 – 8%	4 – 8 inches
2050s	4.1 – 5.7˚F	4 – 11%	11 – 21 inches
2080s	5.3 – 8.8˚F	5 – 13%	18 – 39 inches
2100	5.8 – 10.3˚F	-1 – 19%	22 – 50 inches

A WRP consistency assessment for the Proposed Actions is summarized below under Section V, "Future With the Proposed Actions." The WRP Consistency Assessment Form and analysis is provided in ***Appendix I.***

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 2028 future without the Proposed Actions, it is assumed that Lot 1, which is owned by the Applicant, would be developed on an as-of-right basis in

accordance with the existing R5 zoning. Absent the Proposed Actions, the non-Applicant-owned Lots 16 and 18 would remain as existing. In the No-Action scenario, it is assumed that Lot 1 would be developed with a four-story mixed-use building totaling approximately 123,710 gsf, with approximately 33,055 gsf of community facility (nonprofit office) space and 50,125 gsf of residential space (59 market-rate DUs). The No-Action development would contain approximately 63 accessory parking spaces in the cellar, which would be accessed via an existing curb cut on 33rd Avenue. As warehouse uses would not be permitted under the existing R5 zoning, the Applicant would relocate its medical distribution facility from the Project Area to a new location.

Secondary Study Area

Within the secondary study area, the predominant land uses are expected to change as a result of several rezonings that were approved in recent years. There are three known projects anticipated to be completed in the future without the Proposed Actions:

At 33-02 11th Street (Block 1591, Lot 54) to the west of the Project Area, a three-building development with a maximum height of 14 stories has begun excavation. Rezoned in 2019 from an R5 district to R6B, R7X, and C1-3 districts, the planned development will total 349,935 gsf, with 332,308 gsf of residential space (351 DUs), 11,236 gsf of commercial retail space, and 6,882 gsf of community facility (medical office) space. The project will also introduce two privately accessible and one publicly accessible open space.[1]

A new mixed-use development is expected to be completed at 33-33/33-51 11th Street (Block 318, Lots 15 and 22) immediately to the south of the Project Area. Although construction on the development has not yet started, the lots were rezoned in 2022 from the existing R5 zoning to an R6A/M1-5 special mixed use district.[2] According to the EAS, the development would include 2 eight-story buildings totaling 586,569 gsf, with 354,508 gsf of residential uses (392 DUs), 102,198 gsf of commercial office and 24,042 of retail space, 27,109 gsf of industrial uses, and 10,000 gsf of community facility uses.

Finally, a third No-Action development in the secondary study area is under construction at 11-20 Broadway (Block 316, Lot 13) immediately to the north of the Project Area. Rezoned in 2021 from R5 to an R7A/M1-4 special mixed use zoning district, the nine-story building will include 104,890 gsf, with 100,607 gsf of residential space (148 DUs) and 4,282 gsf of ground-floor local retail.[3]

In total, new development in the secondary study area in the future without the Proposed Actions is expected to add approximately 787,423 gsf of residential uses (891 total DUs), 102,198 gsf of commercial office uses, 39,559 gsf of retail uses, 27,109 gsf of industrial uses, and 16,882 gsf of community facility uses, as well as 374 parking spaces.

In the 2028 future without the Proposed Actions, no changes to zoning are expected to occur in the secondary study area.

[1] "Vernon Boulevard-Broadway Rezoning," CEQR Reference No.12DCP139Q, ULURP No.100421ZMQ; 190152ZMQ,; 190151ZRQ

[2] "11th Street and 34th Avenue Rezoning," CEQR Reference No.21DCP118Q, ULURP No.210134ZMQ; N210235ZRQ

[3] "Broadway and 11th Street Rezoning," CEQR Reference No.21DCP022Q, ULURP No. 210025ZMQ; N210026ZRQ

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 would be approved. As such, the Project Area would be rezoned from R5 to M1-4/R7A (MX-23 Special Mixed-Use District) and would be designated as an MIH area. The Applicant would construct a new building at the Proposed Development Site as outlined above. The existing single-story warehouse and autobody shops within the Project Area would be replaced with a new eight-story building consisting of approximately 178,134 gsf of residential space (227 DUs, of which 57 would be permanently affordable according to MIH Option 1), and 13,346 gsf of local retail space, as well as 5,118 gsf of community facility (nonprofit office) space and 20,485 gsf of warehouse space, both of which would be occupied by the existing warehouse tenants on the site. The Proposed Development would also include a 50,360 gsf parking facility at the cellar level, containing 70 accessory spaces.

Land Use

Primary Study Area

The Proposed Actions would result in changes to land use within the primary study area, increasing allowable density and introducing residential[4] and commercial 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 2.00 FAR to 4.60 FAR (with MIH). The allowable community facility FAR would increase from 0.75 FAR to 4.00 FAR. Additionally, approval of the Proposed Actions would allow manufacturing uses within the Project Area, with an FAR of 2.00. The Proposed Actions would facilitate the replacement of the low-rise industrial buildings within the Project Area with a new eight-story mixed-use building. Compared to No-Action conditions, the Proposed Actions under the RWCDS would result in a net increase of 128,009 gsf of residential space (168 DUs), a net increase of 13,346 gsf of commercial space, a net decrease of 27,938 gsf of community facility space, a net increase of 15,229 gsf of warehouse space, and a net increase of 7 parking spaces.

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.

[4] Note that although the existing R5 zoning at the Project Area allows for residential uses, the existing buildings are entirely industrial and are therefore considered non-conforming uses.

Assessment

The Proposed Actions would facilitate a change in land use on three lots (the Project Area), allowing the replacement of existing warehouse and autobody shop buildings with new mixed-use development consisting of a single, eight-story building containing residential, retail, warehouse, and community facility uses. This change in use would result in an appropriate introduction of new uses and increased density given the character of the Project Area and the slew of planned, mixed-use developments in its surroundings. The Proposed Actions would allow a new mixed-use development to be constructed in an increasingly residential and mixed-use urban neighborhood where there is a strong demand for housing, local retail and other commercial uses. Additionally, the Proposed Actions would result in the development of approximately 168 additional housing units compared to No-Action conditions, including 57 affordable housing units pursuant to the MIH program which would not be developed under No-Action conditions. The Proposed Actions would activate an underutilized site, continuing a land use development trend in an area that has been experiencing increased residential and commercial development. The concentration of new development in this area is due to the availability of large, underutilized parcels and the desirability of the area for its proximity to transit and the waterfront. As such, the Applicant anticipates that the Proposed Actions would result in a new mixed-use development that, in addition to being appropriate for the Project Area, would complement the land use character of the 400-foot study area by redeveloping an underutilized site with a mix of affordable and market-rate residential units as well as local retail, community facility, and warehouse uses.

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. Although the surrounding area is currently characterized by blocks of large, low-rise industrial buildings, the neighborhood is rapidly transforming into a mixed use district with planned mid-rise buildings similar to the Proposed Development. The proposed eight-story building would be in context with nearby mixed-use buildings of comparable or greater height, including the planned 14-story building directly west of the Project Area, the planned nine-story building directly north of the Project Area, and the planned eight-story buildings directly south 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, and would result in a more efficient use of space within the Project Area.

The new residential, commercial, community facility and warehouse uses in the Applicant's Proposed Development would be consistent with, and complementary to, the No-Action planned developments in the secondary study area, which all reflect a neighborhood-wide trend towards residential and mixed-use development on formerly underutilized sites. As such, the Proposed Actions would support existing land use trends in the secondary study area and would not introduce any new land uses that would be incompatible with their surroundings.

Zoning

Primary Study Area

In the future with the Proposed Actions, the Project Area would be rezoned from R5 to M1-4/R7A (MX-23 Special Mixed-Use district). 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. Additionally, the MX-23 Special Mixed-Use district allows for certain industrial uses according to an M1-4 designation. M1-4 districts allow for light industrial uses (UG 17) at a maximum FAR of 2.0.

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.

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 special mixed use zoning districts in the secondary study area. The Project Area is well suited for additional density 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.

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 168 DUs compared to No-Action conditions. Under MIH, approximately 25-30 percent of any future residential floor area 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 Proposed Development would support the initiatives outlined in the City's *Housing our Neighbors: A Blueprint for Housing and Homelessness* plan by creating permanently affordable housing, increasing access to transit and amenities for low-income New Yorkers, and supporting the work of a faith-based and mission-driven organization. The Proposed Actions would also be consistent with the *Blueprint* goal of increasing the diversity of affordable housing options.

Waterfront Revitalization Plan

As the Proposed Development Site is located within the city's designated Coastal Zone (see **Figure C-4**), the Proposed Actions are subject to review for consistency with the policies of the WRP. The WRP includes policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form (CAF) (see **Appendix 1**) lists the WRP policies and indicates whether the Proposed Actions would promote or hinder that policy, or if that policy would not be applicable.

Based on the CAF completed for the Proposed Actions, two WRP policies (policies 1 and 6) required further assessment. Assessment of the applicable WRP policies was prepared and is also provided in **Appendix I**. The assessment found that the Proposed Actions would be consistent with all applicable WRP policies. Therefore, the Proposed Actions are not expected to result in any significant adverse impacts related to the WRP. DCP's division of Climate and sustainability Planning, on behalf of the New York City Coastal Commission, has reviewed the WRP assessment, and the Proposed Project has been assigned WRP No. [TBD].

ATTACHMENT D:
OPEN SPACE

I. INTRODUCTION

This attachment assesses the potential effects of the Proposed Actions on open space resources. Open space is defined in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. An open space analysis should be conducted if an action would result in a direct effect or an indirect effect on open space. 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 *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.

While the Proposed Actions would not directly displace any existing open space resources, development facilitated by the Proposed Actions at the Proposed Development Site (Queens Block 317, Lots 1, 16, and 18) is expected to result in an incremental increase of up to 168 dwelling units (DUs) over the 2028 No-Action condition. This would result in an incremental increase of approximately 374 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. 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. The Proposed Actions are not expected to introduce a net increment of employees[2] to the Project Area. Therefore, the analysis of indirect open space impacts focuses exclusively on the open space needs of the area's residential population.

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.

Open Space Study Area

The first step in assessing potential open space impacts is to establish the appropriate study areas for the new population(s) to be added as a result of the Proposed Actions. Pursuant to *CEQR Technical Manual*

[1] The estimated number of residents is based on the average household size in Queens Community District 1 (2.23 persons per household) per the 2020 Decennial Census.

As shown in **Table A-2** of **Attachment A, "Project Description"** the RWCDS for the Proposed Actions would result in 81 workers at the Proposed Development Site in both the No-Action and With-Action conditions. As a result, the Proposed Actions would not result in any net increase in workers compared to No-Action conditions.

guidance, 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, which differs by user. Workers typically use passive open spaces within a short walking distance of their workplaces. Residents are more likely to travel farther to reach parks and recreational facilities, and they use both passive and active neighborhood open spaces. While residents may also visit certain regional parks (like Flushing Meadows Corona Park and Forest Park), such open spaces were not included in the study area's quantitative analysis but are described qualitatively. Workers are assumed to walk up to a ¼-mile distance to reach neighborhood open spaces, and residents are assumed to walk up to a ½-mile distance.

In accordance with the guidance established in the *CEQR Technical Manual*, 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 Proposed Development Site and all open spaces within it that are publicly accessible. As described above, residents typically walk up to a ½-mile distance for recreational spaces.

The Proposed Development Site comprises three lots (Lots 1, 16, and 18) which form the entirety of Queens Block 317, between 11th Street and 12th Street, south of Broadway and north of 33rd Avenue. As shown in **Figure D-1**, the half-mile open space study area includes the following 10 census tracts in their entirety: census tracts 37, 39, 43, 45, 47, 75, 77, 79, 81, and 85[3]. The open space study area extends approximately as far north as Astoria Boulevard, as far south as the Queensboro Bridge, as far east as 30th Street, and as far west as the East River.

Analysis Framework

Indirect Effects Analysis

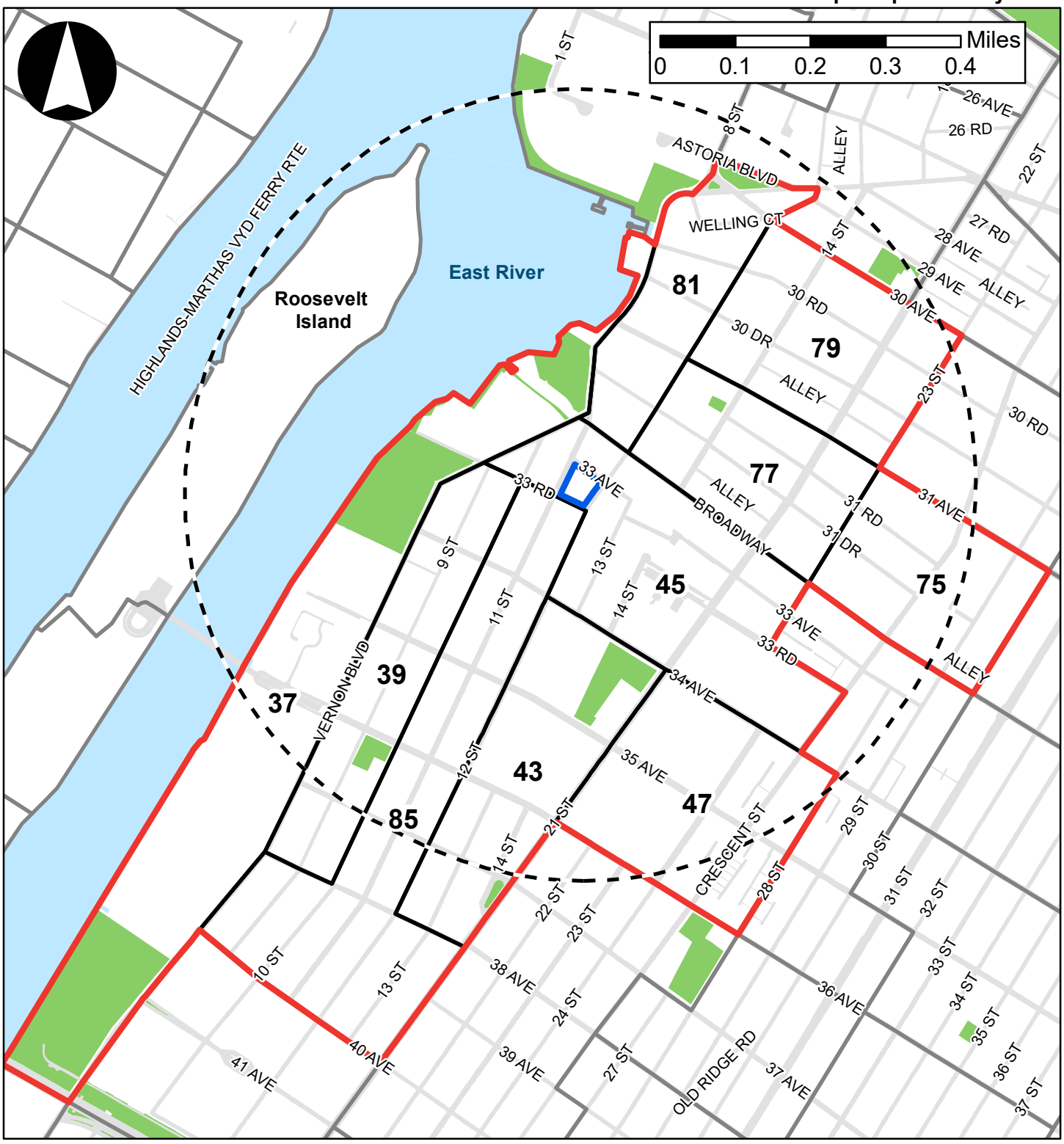
As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future populations. Indirect effects may 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., within a ½-mile distance). Areas not located within a WtPSA are considered "walk gaps", which are areas of New York City that are not within walking distance to a park. As shown in **Figure D-2**, the Project Area (a.k.a. Proposed Development Site) and a majority of the ½-mile study area are located within area of the City that has been identified as a WtPSA as it is within a walking distance of a park (i.e. not a walk gap 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

[3] Note that despite the fact that the northernmost census tract on Roosevelt Island (CT 238.02) falls within the study area based on the criteria established above, it was conservatively not included in the Open Space Study Area. This is because it cannot reasonably be expected that Queens residents within the Open Space Study Area would regularly use open space resources on Roosevelt Island, nor would residents of the island regularly travel to Queens to utilize parks in that borough. This assumption is based on the fact that Roosevelt Island is accessible via the pedestrian bridge at 36th Avenue, which would not be within a convenient walking distance for much of the study area.

Figure D-1
Open Space Study Area



Legend

- Project Area
- 1/2-Mile Radius
- Open Space Study Area
- 45 Study Area Census Tracts
- Census Tracts
- Open Space

Figure E-2
Walk to a Park Service Area



Legend

- Project Site
- Open Space Study Area
- Walk to a Park Service Area
- 1/2-Mile Radius
- Open Space

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 Decennial 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 the percentage thresholds outlined in Table 7-1 of the *CEQR Technical Manual*, 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.

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 D-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 D-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 D-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 D-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, and determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment.

III. PRELIMINARY ASSESSMENT

Existing Conditions

Study Area Population

To determine the residential population served by existing open space resources, data from the U.S. Census was compiled for the census tracts comprising the ½-mile study area. As shown in **Table D-2**, the study area has a total residential population of approximately 25,089.

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

Census Tract	Residential Population
37	903[1]
39	1,462
43	2,326
45	3,252
47	4,090
75	4,477
77	2,114
79	3,628
81	1,761
85	1,979
Total	***25,089***

Source: 2020 Decennial Census

[1] The population of CT 37 was adjusted to reflect the recent completion of Vordonia Towers, a 404-unit apartment complex. The original 2020 Census population of 2 was increased to 903 based on an average household size of 2.23 for Queens CD 1.

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.

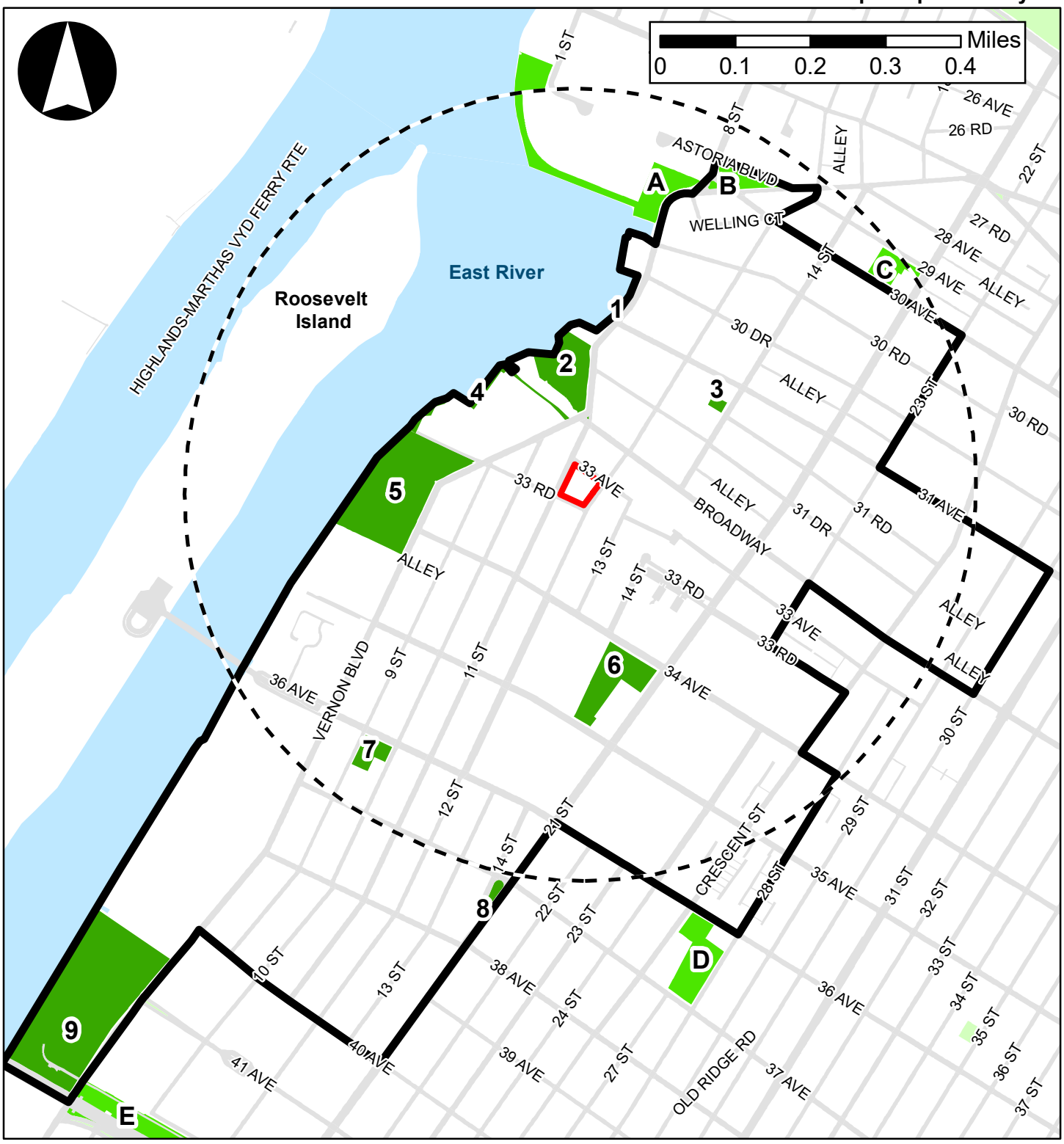
An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, 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 January 2024, the New York City Department of Parks and Recreation (NYC Parks)'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. Determination of the conditions was 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 D-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 D-3** maps their location in the study area.

Figure E-3
Open Space Analysis



Legend

- Project Site
- 1/2-Mile Radius
- Open Space Study Area
- 1 Quantitative Open Space Resources
- A Qualitative Open Space Resources
- Open Space Not Included in Analysis

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

Map No. [1]	Name	Address	Owner/ Agency [2]	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Included in Quantitative Assessment												
1	Halletts Cove Beach	Vernon Blvd and 31st Ave	NYC Parks	Kayak launch and public beach	Children, teenagers, adults	Sunrise to sunset	0.11	100%	0.11	0%	0	Fair, Moderate
2	Socrates Sculpture Park	Vernon Blvd between Broadway and 30th Dr	NYC Parks	Benches, plantings, artwork, landscaping	Adults, Seniors	9AM - Sunset	6.28	15%	0.94	85%	5.34	Good, High
3	Astoria Health Playground	14th St between 31st Ave and 31st Dr	NYC Parks	Playgrounds, basketball court, chess tables	Children, Teenagers, Adults, Seniors	6AM – 9PM	0.21	90%	0.19	10%	0.02	Excellent, Moderate
4	Costco Waterfront Esplanade	Vernon Blvd, between Broadway and 33rd Road	Costco Wholesale	Waterfront esplanade, benches, landscaping	Adults, Seniors	24 hrs	1.04	0%	0.00	100%	1.04	Excellent, Moderate
5	Rainey Park[3]	Vernon Blvd, between Broadway and 34th Ave	NYC Parks	Baseball fields, basketball courts, bike paths, dog-friendly areas, eateries, playgrounds, spray showers, benches landscaping	Children, Teenagers, Adults, Seniors	6AM - 10PM	8.09	65%	5.26	35%	2.83	Under Construction
6	Ravenswood Playground	21st St between 34th Ave and 35th Ave	NYC Parks	Handball courts, ball fields, playgrounds, benches, landscaping	Children, Teenagers, Adults, Seniors	6AM – 9PM	2.76	80%	2.21	20%	0.55	Fair, Moderate
7	Spirit Playground	36th Ave between 9th St and 10th St	NYC Parks/DOE	Handball courts, playgrounds, spray showers, basketball courts	Children, teenagers	6AM – 9PM	0.79	80%	0.63	20%	0.16	Excellent, Low
8	Sixteen Oaks Grove	37th Ave, 14th St, and 21st St	NYC Parks	Benches, landscaping	Adults, Seniors	6AM – 10PM	0.22	0	0.00	100%	0.22	Poor, Low
9	Queensbridge Park	Vernon Blvd, between the Queensboro Bridge and 40th Ave	NYC Parks	Barbecuing areas, baseball fields, dog-friendly areas, handball courts, playgrounds, bike path, spray showers, benches, landscaping	Children, Teenagers, Adults, Seniors	6AM – 9PM	12.37[4]	50%	6.19	50%	6.19	Good, Moderate
						½-Mile Study Area Total:	**26.27**	**44%**	**11.51**	**56%**	**14.76**	
Open Space Resources Not Included in Quantitative Assessment												
A	Halletts Cove Playground and Esplanade	Vernon Blvd, Maine Ave, to Astoria Blvd, 1st St	NYC Parks	Playgrounds, handball courts, kayak launch, restrooms, benches, landscaping	Children, Teenagers, Adults, Seniors	6AM – 9PM	5.84	70%	4.09	30	1.75	Excellent, Moderate

B	Two Coves Community Garden	11-01 30th Ave	NYC Parks	Benches, plantings, picnic benches, bike racks	Adults, Seniors	20 hours a week from April 1 – October 31 Saturdays and Sundays only	0.78	25%	0.20	75%	0.59	Unknown (open only weekends)
C	Van Alst Playground	21st St between 29th Ave and 30th Ave	NYC Parks/DOE	Playground, handball courts, benches, landscaping	Children, Teenagers	6AM – 9PM	1.03	90%	0.93	10%	0.10	Excellent, Moderate
D	Dutch Kills Playground	28th St, Crescent St, between 37th Ave and 36th Ave	NYC Parks/DOE	Handball courts, roller hockey rink, playgrounds, spray showers, restrooms benches, landscaping	Children, Teenagers, Adults	6AM – 9PM	2.40	90%	2.16	10%	0.24	Excellent, Moderate
E	Queensbridge "Baby" Park	Queens Plaza North, between Vernon Blvd and 21st Street	NYC Parks	Greenway, handball courts, landscaping	Children, teenagers, adults, seniors	6AM – 10PM	5.86	90%	5.27	10%	0.59	Excellent, Moderate
						Total:	**15.91**	**79%**	**12.64**	**21%**	**3.27**	

Sources: NYC OASIS, NYC Parks, January 2024 field visits.

Notes:

[1] Refer to **Figure D-3**.

[2] DPR = New York City Department of Parks and Recreation; DOE= New York City Department of Education.

[3] As of January 15th, 2024, Rainey Park is closed for renovations. According to NYC Park's Capital Project Tracker, construction is expected to be completed by September 2024. Therefore, the park is excluded from the acreage totals in **Table D-1** and will instead be incorporated into the No-Action acreage totals.

[4] The 12.37 acres included in Queensbridge Park excludes the connected but distinct Queensbridge "Baby" Park, a greenway along Queensboro Bridge that falls just outside the study area.

Open Space Resources

As shown in **Table D-4**, approximately 26.27 acres of open space are included in the quantitative analysis, of which approximately 11.51 acres are considered active open space and approximately 14.76 acres 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, 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.

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 are open space resources exhibit low to heavy utilization. With the exception of the Costco Waterfront Esplanade, which is privately owned, and Spirit Playground, which is under joint jurisdiction, all open space resources are under the jurisdiction of NYC Parks.

Halletts Cove Beach (Map No. 1) is a small, 0.11-acre portion of the greater Halletts Cove Esplanade, and the only portion within the secondary study area. A small beach lacking typical open space amenities (e.g. benches or recreational equipment), Halletts Cove Beach was included for its recreational purpose, which is to provide a NYC Parks-administered kayak launch to the East River.

Socrates Sculpture Park (Map No. 2) is an approximately 6.28-acre park located on Vernon Boulevard between Broadway and 30th Drive. Socrates Sculpture Park consists mainly of passive amenities, with the park centered around its rotating installation of public artwork. It is in good condition and exhibits high utilization.

Astoria Health Playground (Map No. 3) is an approximately 0.21-acre playground located at 14th Street between 31st Avenue and 31st Drive. The park features both passive and active amenities such as basketball courts, playgrounds, chess tables, and benches. During field observations, the park was found to be in excellent condition and exhibited moderate utilization.

Costco Waterfront Esplanade (Map No. 4) is an approximately 1.04-acre walking path located adjacent to the Costco parking lot west of Vernon Boulevard between Broadway and 33rd Road. The esplanade is entirely passive, with a waterfront walking path, benches, and landscaping.

Rainey Park (Map No. 5) is an approximately 8.09-acre park located at Vernon Boulevard between 33rd Road and 34th Avenue. The park features numerous active and passive amenities such as baseball fields, basketball courts, bike paths, eateries, playgrounds, and benches. As of January 2024, the park is closed for renovation and its acreage is therefore excluded from the quantitative analysis for existing conditions. According to NYC Parks' Capital Projects tracker, the park is scheduled to reopen in September 2024.

Ravenswood Playground (Map No. 6) is an approximately 2.76-acre playground located on 21st Street between 34th Avenue and 35th Avenue. The playground includes both active and passive amenities, with playground equipment, handball courts, ball fields, and benches. The park exhibited fair condition and moderate usage according to field observations.

Spirit Playground (Map No.7) is an approximately 0.79-acre playground that is part of the Schoolyards to Playgrounds program administered jointly by the Department of Education (DOE) and NYC Parks. The playground features mostly active amenities, with handball courts, spray showers, and basketball courts in addition to playground equipment. Spirit Playground exhibited excellent condition and low utilization.

Sixteen Oaks Grove (Map No. 8) is a small, 0.79-acre pedestrian plaza located in the median of 37th Avenue, between 14th Street and 21st Street. An entirely passive resource featuring only benches and landscaping, the plaza exhibited poor conditions and low utilization.

Queensbridge Park, the largest resource in the open space study area at 20.34 acres, is located along the Queensboro Bridge, and bounded approximately by 41st Road, 40th Avenue, Vernon Boulevard, 21st Street, and the East River. The park features numerous passive and active amenities, including barbecue areas, baseball fields, dog-friendly areas, handball courts, playgrounds, and a bike path. During field observation, Queensbridge Park was found to be in good condition and exhibited moderate usage.

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 D-4** were included, except for Rainey Park, which is under construction until 2025 and included in the No-Action scenario; Resources A to E were not included in the quantitative analysis but are mentioned qualitatively below.

Table D-5 shows that, with an existing study area residential population of approximately 25,089 people and 26.27 acres of open space, the existing total open space ratio in the study area is approximately 1.047 acres per 1,000 residents; the study area has approximately 0.459 acres acres of active open space per 1,000 residents and approximately 0.588 acres of passive open space per 1,000 residents. As indicated in **Table D-5**, the existing total and active residential open space ratios are below the City's open space planning goals of 2.5 and 2.0 acres per 1,000 residents, respectively, although the existing passive open space ratio exceeds the planning goal of 0.5 acres per 1,000 residents.

TABLE D-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	25,089	26.27	11.51	14.76	1.047	0.459	0.588	2.50	2.0	0.50

Qualitative Assessment

As shown in the table, the passive open space resources within the open space study area are above the City's quantitative guidelines. However, the total and active open space resources that exist within the open space study area fall below the City's quantitative guidelines, as discussed above. This quantitative deficiency in total and active open space ratios may be partially ameliorated by several factors.

As shown in **Table D-4**, the residential study area resources are mostly in good to excellent condition and feature low to heavy utilization levels, depending on the resource. The residential study area includes a

variety of programming for passive and active open space uses, such as playgrounds, basketball courts, handball courts, ball fields, spray showers, benches, and landscaped areas. A variety of active programming is available and appropriate for all user groups including children, teenagers, and adults within the study area. As shown in **Figure D-3**, the second largest open space resource in the quantitative analysis, Socrates Sculpture Park, is located approximately within three blocks of the Project Area. This resource constitutes 6.28 acres (approximately 24 percent) of all open space resources in the quantitative analysis and includes walking paths, benches, and public artwork.

Additionally, there are four open space resources that either have limited hours or are located within a half-mile radius of the Project Area but outside the study area boundary, which are not included in the quantitative analysis but could be used or enjoyed by residents within the study area (refer to **Figure D-3** and **Table D-4**). Halletts Cove Playground, located just outside the open space study area, features 5.84 acres of active and passive recreational activities, including playgrounds, handball courts, benches, and landscaping. Two Coves Community Garden, which is part of the NYC Parks Greenthumb program, provides 0.78 acres of primarily passive open space, featuring a community planting area, benches, and picnic tables. Van Alst Playground, part of the Schoolyards to Playgrounds program, provides 1.03 acres of mostly active open space, with a playground, handball courts, and benches. Likewise Dutch Kills Playground, which is just outside both the half-mile radius and the defined study area, provides 2.40 acres of primarily active open space, featuring handball courts, a roller hockey rink, playgrounds, spray showers, restrooms, and benches. In total, open space resources not included in the quantitative analysis but in the vicinity of the Project Area provide an additional approximately 10.05 acres of open space for residents in the study area. It is expected that a proportion of open space users in the study would frequent these spaces given their proximity, size, and range of amenities.

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

In the absence of the Proposed Actions, it is expected that the Applicant would develop a portion of the Project Area (excluding Lots 16 and 18, which would not be combined with Lot 1 absent the Proposed Actions) pursuant to the existing R5 zoning district. As described in **Attachment A**, "**Project Description**," The No-Action development would be a four-story, approximately 123,710-gsf mixed use residential and community facility building, comprising approximately 50,125 gsf of residential space (59 DUs) and approximately 30,055 gsf of community facility space. There would also be an approximately 63-space accessory parking garage located in the cellar of the building. The No-Action development is anticipated to add 59 new residential units to the study area, generating approximately 132 residents.[4]

Study Area Population

As presented below in **Table D-6** and shown in **Figure D-4**, in addition to the anticipated Applicant-owned No-Action development in the Project Area discussion above, 24 other new developments are currently planned or anticipated to be completed within the ½-mile open space study area in the future without the Proposed Actions by 2028, which would increase the residential population within the study area. These No-Action developments are anticipated to add approximately 1,727 new residential units to the study area. **Table D-6** shows that with the Applicant-owned No-Action development, the 24 No-Action developments are anticipated to increase the ½-mile study area population by approximately 3,851 residents, for a total residential population of approximately 28,940 by 2028.

[4] The estimated number of residents is based on the average household size in Queens Community District 1 (2.23 persons per household) per the 2020 Decennial Census.

Figure D-4
No-Action Developments



Legend

- Project Area
- 1/2-Mile Radius
- 45 Open Space Study Area
- No-Action Developments
- Open Space

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

Address	Dwelling Units (DUs)	Estimated Residents[1]
33-01 11th Street (Development Site)	59	132
33-02 11th Street	351	783
33-33/33-51 11th Street	392	874
11-20 Broadway	148	330
31-61 Vernon Boulevard	51	114
11-24 31st Drive	51	114
12-19 31st Drive	17	38
31-65 14th Street	12	27
14-35 Broadway	12	27
14-41 Broadway	30	67
33-64 11th Street	3	7
11-08 30th Road	122	272
30-07 Vernon Boulevard	67	149
12-16 30th Avenue	16	36
21-27 30th Drive	14	31
21-11 31st Avenue	43	96
21-10 31st Avenue	14	31
31-16 21st Street	52	116
31-29 Crescent Street	28	62
31-48 Crescent Street	25	56
31-90 29th Street	92	205
23-09 Broadway	10	22
35-01 Vernon Boulevard	107	239
34-31 9th Street	6	13
35-21 10th Street	5	11
Half-Mile Total	1,727	3,851

Source: NYC DOB January 2024, CEQR Access
Notes:
[1] The estimated number of residents is based on the average household size in Queens Community District 1 (2.23 persons per household) per the 2020 Decennial Census.

Open Space Resources

There are two open space resources in the study area expected to be completed by the 2028 analysis. The first of these is Rainey Park which, as discussed above, is currently closed for construction until approximately January 2025. Rainey Park (Map No. 5) is an approximately 8.09-acre park located at Vernon Boulevard between 33rd Road and 34th Avenue. The park features numerous active and passive amenities such as baseball fields, basketball courts, bike paths, eateries, playgrounds, and benches. The other No-Action open space resources will be located immediately to the west of the Project Area at 33-02 11th Street (Block 315, Lot 1). This open space is a part of the planned residential development at that site, and includes 0.77 acres of primarily passive open space consisting of landscaping and benches. The No-Action open space acreage accounts for the addition of these two open space resources.

Open Space Adequacy

As detailed above, it is anticipated that under 2028 No-Action conditions, new development in the residential (½ -mile) study area would result in an increase in the population, and thus, would increase the demand on the area's open spaces, whereas the open space acreage would also increase as a result of one new resource as well as the reopening of Rainey Park. As shown in **Table D-7**, the total, active, and passive open space ratios in the No-Action condition would be 1.214, 0.579, and 0.634, respectively, which is less than the City's open space planning goals of 2.5 acres of total open space per 1,000 residents and 2.5 acres of active open space per 1,000 residents, but greater than the City's goal of 0.50 acres of passive

open space. The total, active, and passive open space ratios would experience a net increase of approximately 0.167, 0.120, and 0.046, respectively, compared to existing conditions, as a result of the anticipated population growth and the planned open space in the 2028 No-Action condition.

TABLE D-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	28,940	35.13	16.77	18.36	1.214	0.579	0.634	2.5	2.0	0.5

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

This section describes the open space conditions that would result from the Proposed Actions by 2028. 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.

As described in **Attachment A, "Project Description,"** the Applicant is seeking a zoning map amendment and text amendment to facilitate new development in the Project Area. The With-Action development would be an eight-story, approximately 267,442-gsf mixed commercial and residential building (4.6 FAR), containing approximately 178,134 gsf of residential space (227 DUs, of which approximately 57 DUs would be permanently affordable pursuant to MIH Option 1), 13,346 gsf of local retail space, 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The development would include approximately 20,690 gsf of landscaped terraces on the second and eighth floors accessible to residents. There would also be an accessory parking garage with 70 parking spaces.

Compared to No-Action conditions, the Proposed Development would result in a net increment of approximately 168 DUs; of which, up to approximately 57 units would be permanently affordable pursuant to MIH. The Proposed Development would also result in a net increment of approximately 13,346 gsf of local retail space, a net decrease of 27,938 gsf of community facility (non-profit office) space, and a net increase of 9,380 of parking and loading space (7 parking spaces). The Proposed Development is expected to generate approximately 374 incremental residents and 0 incremental workers, as compared to the 2028 No-Action condition.

Direct Effects Analysis

No publicly accessible open space is currently located within the Project Area. Therefore, the Proposed Actions would not cause the physical loss of publicly accessible open space. In addition, the Proposed Actions would not result in any significant adverse shadows, operational air quality, or noise impacts affecting existing open space resources. Furthermore, the Proposed Actions would not change the use of a publicly accessible open space resource so that it no longer serves the same user population, nor would they limit public access to any open space resources.

Indirect Effects Analysis

Study Area Population

In the 2028 future with the Proposed Actions, the Proposed Development would introduce approximately 227 DUs to the Proposed Development Site, for a net increment of approximately 168 DUs. Using the same planning assumptions as the No-Action conditions of 2.23 residents per DU, the Proposed Actions are expected to introduce a net increase of approximately 374 residents, and would therefore increase the study area's population to approximately 29,481 residents in the 2028 With-Action condition (refer to **Table D-8**).

TABLE D-8
2028 With-Action Open Space Study Area Population

	No-Action Population	Additional Population from With-Action Developments[1]	Future 2024 With-Action Population
Residential (0.5-mile)	28,940	374	29,314

Notes:
[1] Residential population estimate for With-Action developments based on Queens CD 1 average of approximately 2.23 persons per household (U.S. Census Bureau, 2020 Census).

Open Space Resources

The Proposed Actions would not introduce any new publicly-accessible active or passive open space resources to the study area as part of the Proposed Development. As such, under the With-Action condition, open space in the ½-mile open space study area would total approximately 35.15 acres, comprised of approximately 16.77 acres of active open space and approximately 18.36 acres of passive open space.

Open Space Adequacy

The total open space ratio in the study area would decrease to approximately 1.198 acres per 1,000 residents in the With-Action condition (from 1.214 in the No-Action), which would continue to fall below the 2.5 total open space ratio goal set by the City (see **Table D-9**). The active open space ratio would decrease from approximately 0.579 acres to 0.572 acres per 1,000 residents and the passive open space ratio would also decrease from approximately 0.634 acres to 0.626 acres per 1,000 residents. Both active and passive open space ratios would remain below the City's open space planning ratio goal. Thus, the total, active, and passive open space ratios are expected to decrease slightly from the No-Action to the With-Action conditions.

TABLE D-9: 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	29,584	35.13	16.77	18.36	1.198	0.572	0.626	2.5	2.0	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 D-10**.

TABLE D-10: 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 D-11 expresses the percentage change from No-Action to With-Action conditions for the study area as a result of the Proposed Actions. As noted previously, in the future with the Proposed Actions, ratios of total and active open spaces to residents would continue to be lower than the City's optimal planning goals. As shown in **Table D-11**, the study area's total open space ratio in the future with the Proposed Actions would fall to 1.198 acres per 1,000 residents, which constitutes a minor decrease from the No-Action condition. The active open space ratio for residents would also decrease from approximately 0.579 acres per 1,000 residents in the No-Action condition to approximately 0.572 acres per 1,000 residents in the With-Action condition. The passive open space ratio in the study area would also decrease from approximately 0.634 acres per 1,000 residents in the No-Action condition to approximately 0.626 acres per 1,000 residents in the With-Action condition.

TABLE D-11: 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	1.047	1.214	1.198	-1.276%
Active – Residents	2.0	0.459	0.579	0.572	-1.276%
Passive – Residents	0.5	0.588	0.634	0.626	-1.276%

As shown in **Table D-11**, the Proposed Actions would result in a reduction of 1.276 percent for total, active and passive open space ratios, compared to No-Action conditions. This percentage change in open space ratios falls below the three percent threshold signifying a possible adverse impact for total open space, the two percent impact threshold for active open space, and the five percent impact threshold for passive open space, as referenced in **Table D-10**. In addition, considering the Proposed Development's location (within an area of the City that has been identified as a WtPSA), the quality, quantity, and types of nearby open space, and the balance of passive and active open space, the Proposed Actions would not result in a possible adverse open space impact, and a detailed analysis is not warranted.

ATTACHMENT E:
SHADOWS

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions and associated reasonable worst-case development scenario (RWCDS) to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *City Environmental Quality Review* (CEQR) *Technical Manual*, a shadows assessment is warranted if a proposed action(s) would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Actions would facilitate the development of a new building that would be greater than 50 feet in height. As such, a shadows analysis was prepared in accordance with 2021 *CEQR Technical Manual* guidance to determine the potential for the Proposed Actions to result in significant adverse shadows impacts on 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 an action or 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 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 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 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.

[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 sunlight-sensitive resources.

- *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 each of the development sites 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 action-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 – or the additional, or new, shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year – resulting from the proposed project. Incremental shadows are determined by establishing a baseline condition (the No-Action condition) and comparing it to the future condition resulting from the Proposed Actions (i.e., the With-Action condition), thus illustrating the shadows cast by existing or future buildings and distinguishing the additional (incremental) shadows cast by the Proposed Actions. 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 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 results 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 ten minutes or less 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 because of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected times.
- *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 action falls on a sunlight-sensitive resource and substantially reduces or eliminates completely 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

Tier 1 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 radius for the Development Site warranting a preliminary shadow analysis was determined using the site's maximum height, including the mechanical bulkhead. The longest shadows that could be cast by the new 95-foot-tall building envelope allowed in the Project Area would be approximately 408.5 feet in length.[2]

Within the maximum shadow radius for the Development Site, there are three identified potentially sunlight-sensitive open spaces, including a private garden associated with the nearby Noguchi Museum, a public park, and a Greenstreet (refer to **Figure E-1**). Within the Tier I study area, there are two architecturally and historically significant resources. The Landmarks Preservation Commission (LPC)-designated Barkin, Levin & Company office is located across from the Project Area at 12-12 33rd Avenue (Block 522, Lot 29). Additionally, the Noguchi studio located at 33-38-33-42 10th Street (Block 320, Lots

[2] Although the proposed zoning district would allow a maximum building height of 95 feet, the proposed massing for the Applicant's Proposed Development, which maximizes the allowable FAR, would be 85 feet tall. However, in order to provide a more conservative CEQR analysis, the maximum allowable height of 95 feet is being used for this shadows analysis.

28 and 29) is listed as eligible as a State/National historic resource. However, neither of these historic buildings contain features that rely on direct sunlight for their enjoyment by the public as outlined by the criteria in the *CEQR Technical Manual*. As such, further screening will focus on the three identified potentially sunlight-sensitive open spaces.

Tier 2 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 development 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 incremental shadows from the Proposed Development.

Figure E-1 illustrates 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 the southernmost portions of the development sites). As shown in **Figure E-1**, three sunlight-sensitive resources were identified as sunlight-sensitive resources that warranted further assessment (refer to **Table E-1** below).

Table E-1: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 2 Screening

Map Number [1]	Sunlight-Sensitive Resources
1	Noguchi Museum Garden
2	Greenstreet
3	Socrates Sculpture Park

[1] Numbers keyed to **Figure E-1**.

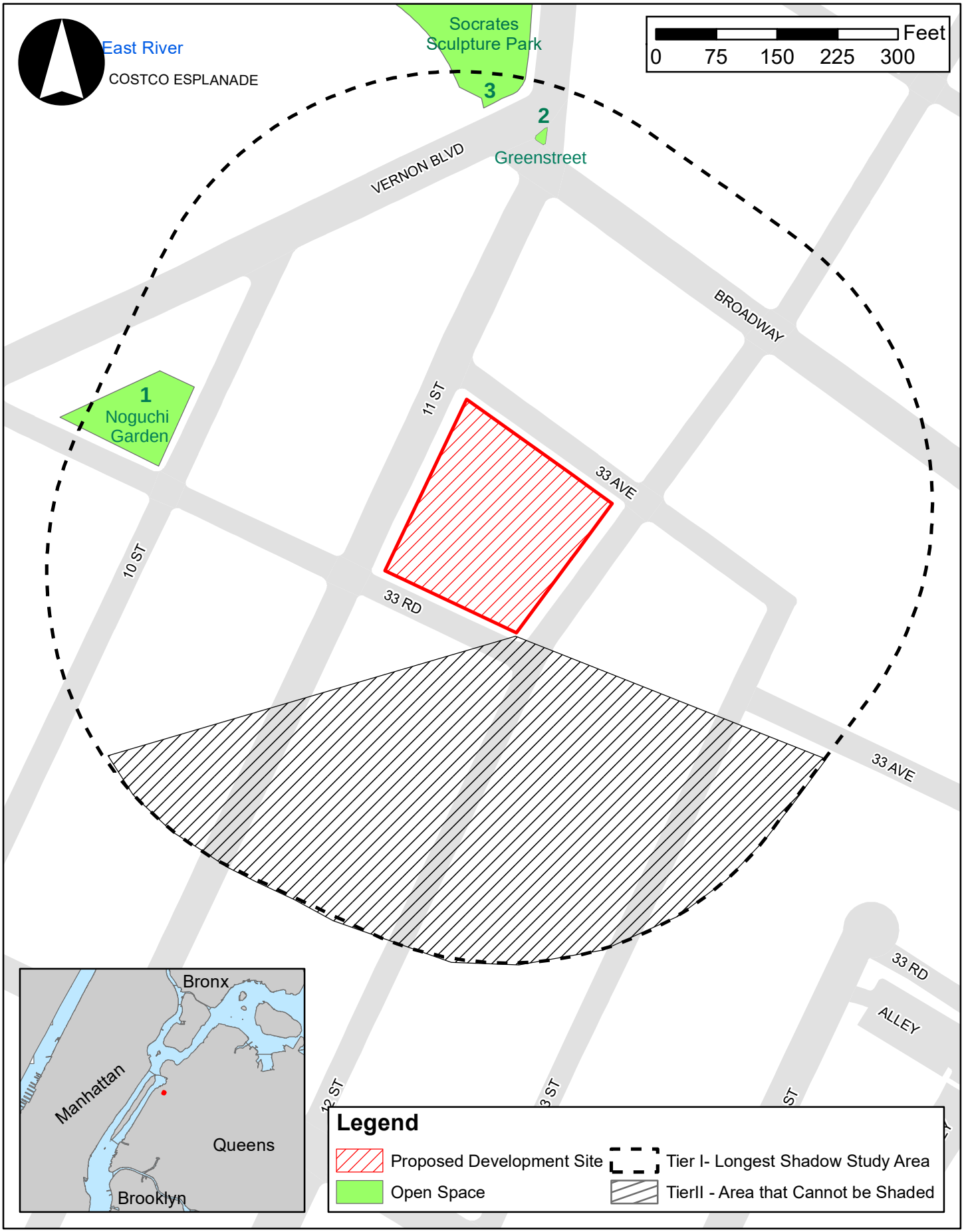
Tier 3 Screening Assessment

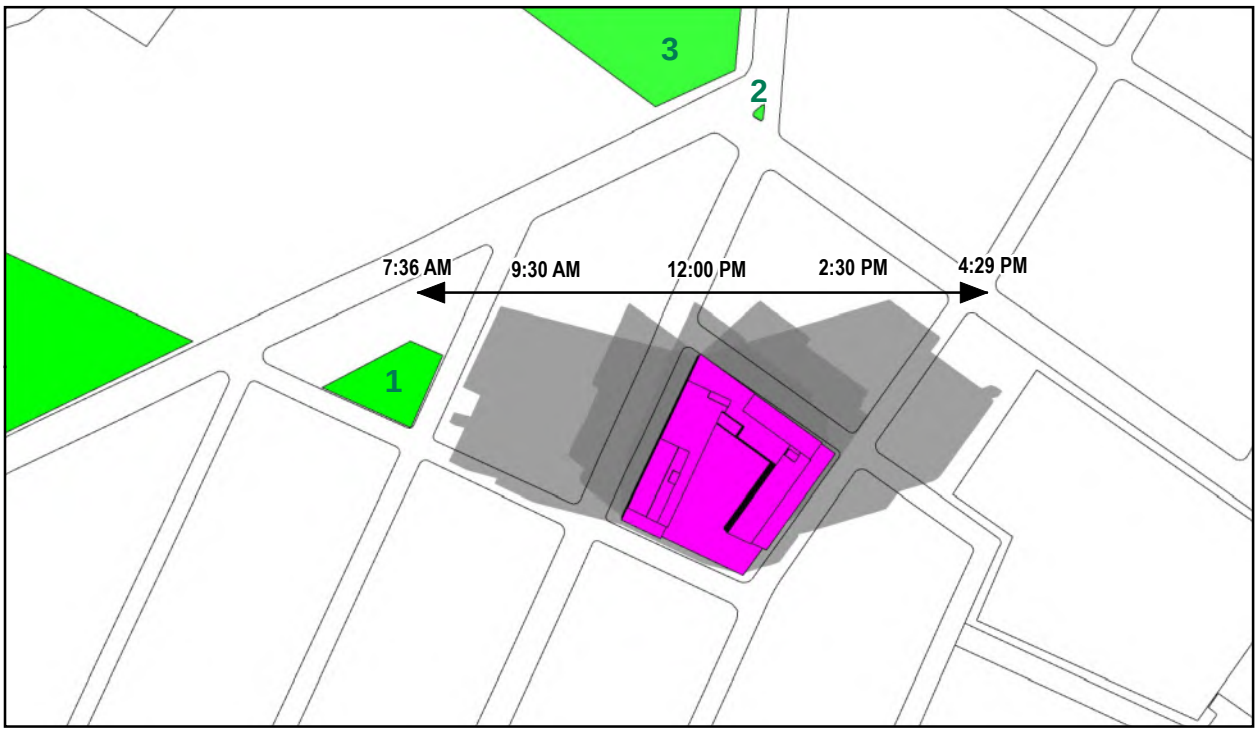
According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed action(s) could reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier 3 screening assessment is used to determine if shadows resulting from a proposed action(s) 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.

A Tier 3 assessment was performed using three-dimensional (3D) computer mapping software for the Development Site to calculate and display action-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 Development Site as a result of the Proposed Actions. 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 action-generated shadows would reach any sunlight sensitive resources.

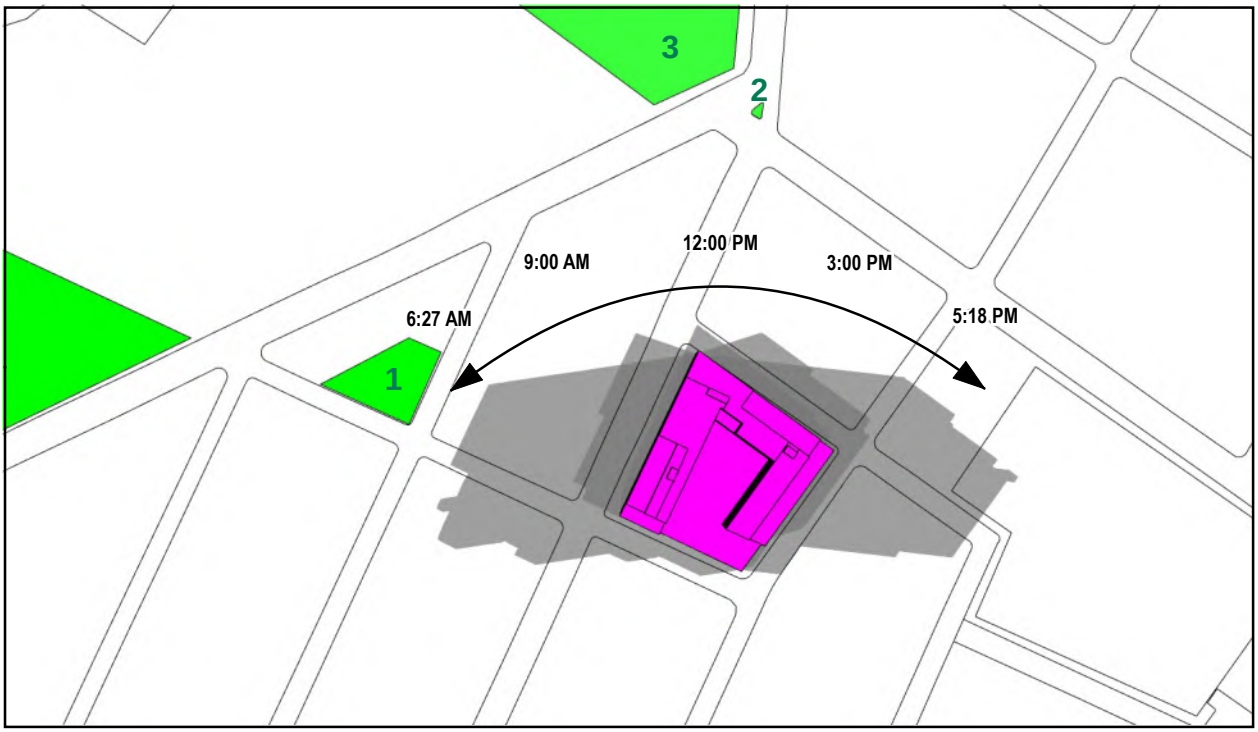
As shown in **Figure E-2a** and **Figure E-2b** and summarized in **Table E-2**, the Tier 3 screening assessment results determined that none of the three sunlight-sensitive open space resources within the maximum shadow radius could receive incremental shadows from the With-Action RWCDS development. Therefore, the With-Action RWCDS development would not result in significant adverse shadow impacts.

Shadows Tier I and II





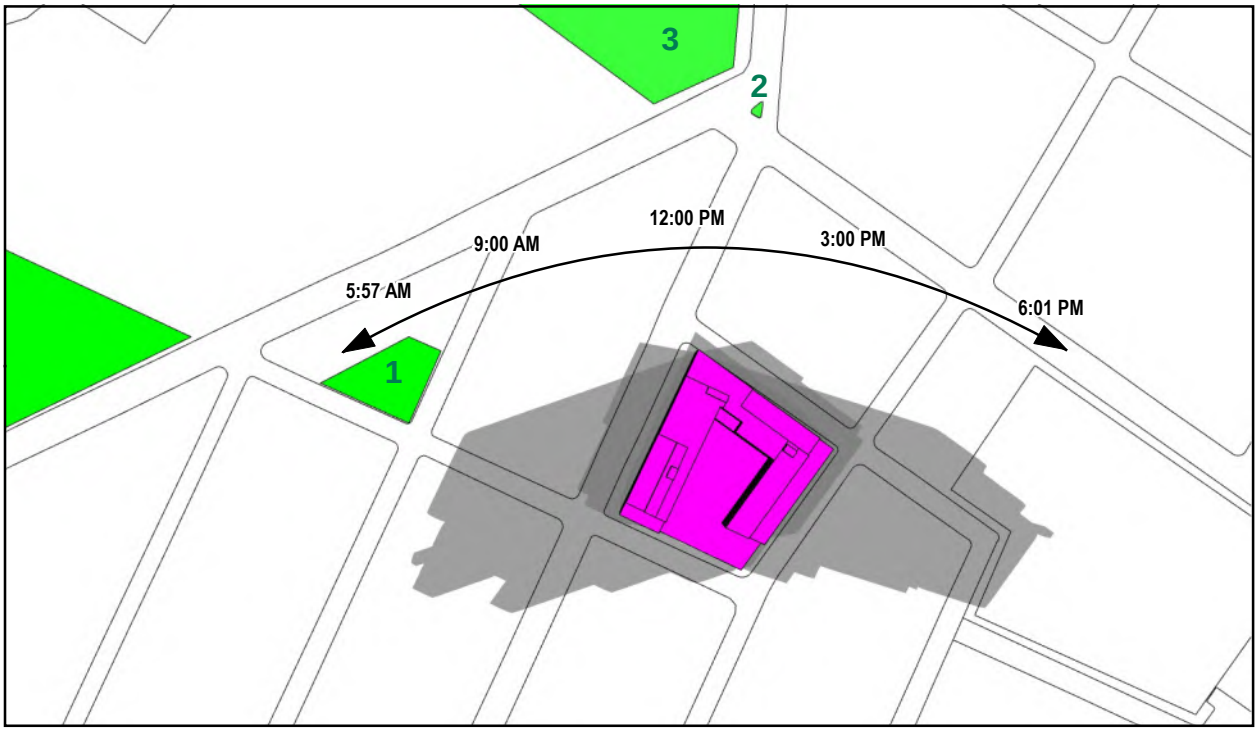
MARCH 21 / SEPTEMBER 21



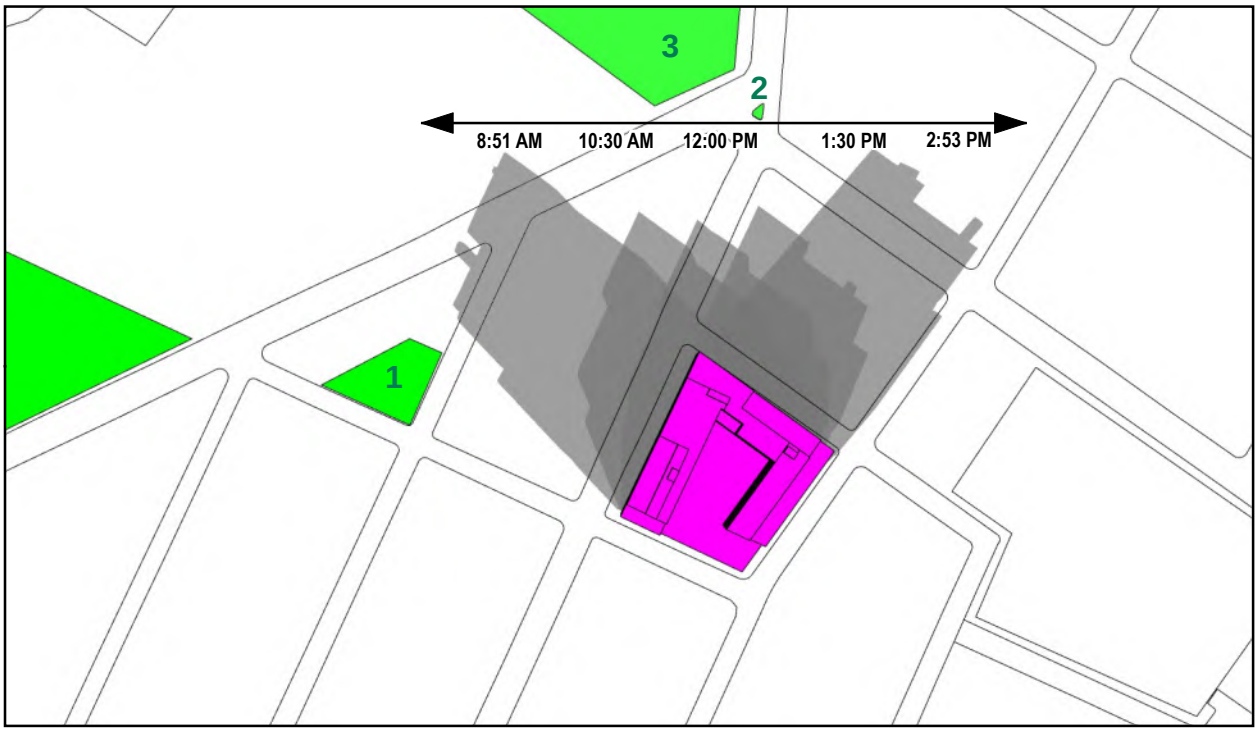
MAY 6 / AUGUST 6

Proposed Development

Sunlight-Sensitive Open Space Resource



JUNE 21



DECEMBER 21

Proposed Development

Sunlight-Sensitive Open Space Resource

Table E-2: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

No.[1]	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	Noguchi Museum Garden	**NO**	**NO**	**NO**	**NO**	**0**
2	Greenstreet	**NO**	**NO**	**NO**	**NO**	**0**
3	Socrates Sculpture Park	**NO**	**NO**	**NO**	**NO**	**0**

Notes:

[1] Numbers keyed to sunlight-sensitive resources shown in **Figures E-2a and E-2b.**

ATTACHMENT F:
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 the LPC-designated Barkin, Levin & Company Office Building and the S/NR-eligible Isamu Noguchi Studio & Museum, it is necessary to assess the potential impacts of the Proposed Actions 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 site. The historic resources study area for the Proposed Actions is therefore defined as the Project Area (Queens Block 317, Lots 1, 16, and 18) plus an approximate 400-foot radius around the Project Area (refer to **Figure F-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 a LPC in a letter dated January 8, 2024 (provided in **Appendix II**), none of the lots comprising the Project Area have 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 attachment focuses exclusively on historic architectural resources.

II. DEVELOPMENT BACKGROUND

Prior to the arrival of the European colonists in the 17th century, Queens was inhabited by the Matinecocs Native Americans, a subgroup of the Leni Lenape tribe. In 1638, Jacques Benfyn, a member of the Dutch West India Company, settled in what is now Long Island City; his land was acquired by William Hallet in 1652. By 1664, Hallet had expanded his land holdings to include nearly all of present-day Astoria. Ferry service to New York City was introduced to the area in the mid-18th century, and the village of Astoria was incorporated in 1839. Stephen A. Hasley purportedly named the area Astoria to attract financial backing from the millionaire John Jacob Astor.

In 1870, the villages of Hunter's Point, Blisswood-Laurel Hill, Ravenswood, and two sections of Astoria were incorporated into Long Island City, the fourth independent municipality established within the current boundaries of New York City (following New York City, Brooklyn, and Williamsburgh). By this time, the area was a prosperous suburb of New York City, with large houses lining the East River waterfront. However, the area quickly turned industrial with the development of factories, particularly near Broadway. By the mid-20th century, the area was characterized by low-rise commercial structures and warehouses, often set back within open lots and parking areas.

Manufacturing declined throughout New York City in the second half of the 20th century, leading to many abandoned factories in this area of Queens. In the 1950s, the 31-building New York City Housing Authority (NYCHA) Ravenswood Houses were constructed on a 38-acre site to the southeast of the Project Area. Rezonings of the area in the early 21st century have led to substantial commercial and residential development in and around the study area; by the mid-2010s, Long Island City was considered one of New York City's fastest-growing neighborhoods.

III. EXISTING CONDITIONS

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 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.

Project Area

In a letter dated January 8, 2024 (provided in **Appendix II**), LPC determined that there are no designated or eligible historic architectural resources on any of the lots that comprise the Project Area.

400-Foot Study Area

Barkin, Levin & Company Office Pavilion (LPC-Designated): *12-12 33rd Avenue*

The Barkin, Levin & Company Office Pavilion is significant as a distinguished example of mid-20th century commercial architecture. It was constructed in 1957-58 to the designs of German-American architect Ulrich Franzen for Barkin, Levin & Company, a women's coat manufacturer that was relocating from Manhattan's Garment Center. As shown in **Figure F-2**, the minimalist modern office building contains an unusual structural system with nine concrete pillars supporting an umbrella-like roof canopy that extends up and outside the glass walls, shading the pavilion. Set on a landscaped parcel, the pavilion was the highlight of the factory – the first major plant in the garment industry to incorporate all stages of production in one place. Restored with minor modifications in 2009, the Barkin, Levin & Company Office Pavilion remains an important and well-preserved example of mid-20th century modern architecture.

Isamu Noguchi Studio and Museum (S/NR-Eligible): *33-38 – 33-42 10th Street*

The Isamu Noguchi Studio and Museum complex is significant for its association with Isamu Noguchi, one of the 20th century's most important and critically acclaimed sculptors known for his artwork as well as his furniture, architecture, and gardens. As shown in **Figure F-2**, Noguchi's studio, located on the south side of 33rd Road, is a single-story brick building with a flat roof and multi-light ribbon windows which wrap around three sides of the structure. Its largely intact interior, including his workspace on the first level and living quarters on the first and mezzanine levels, retains its Japanese-influenced design elements of natural wood, sliding screen shoji doors, and partitions. Originally constructed circa 1931, Noguchi purchased and converted the building in 1961. In 1974, he acquired the former factory building across 33rd Road and adapted the space for the display and storage of his sculptures, and subsequently purchased adjacent lots for the installation of garden space. As shown in **Figure F-2**, The Noguchi Museum (opened in 1985) is a two-story brick building with a flat roof and multi-light windows, and features a two-story, concrete-block addition from 1983.

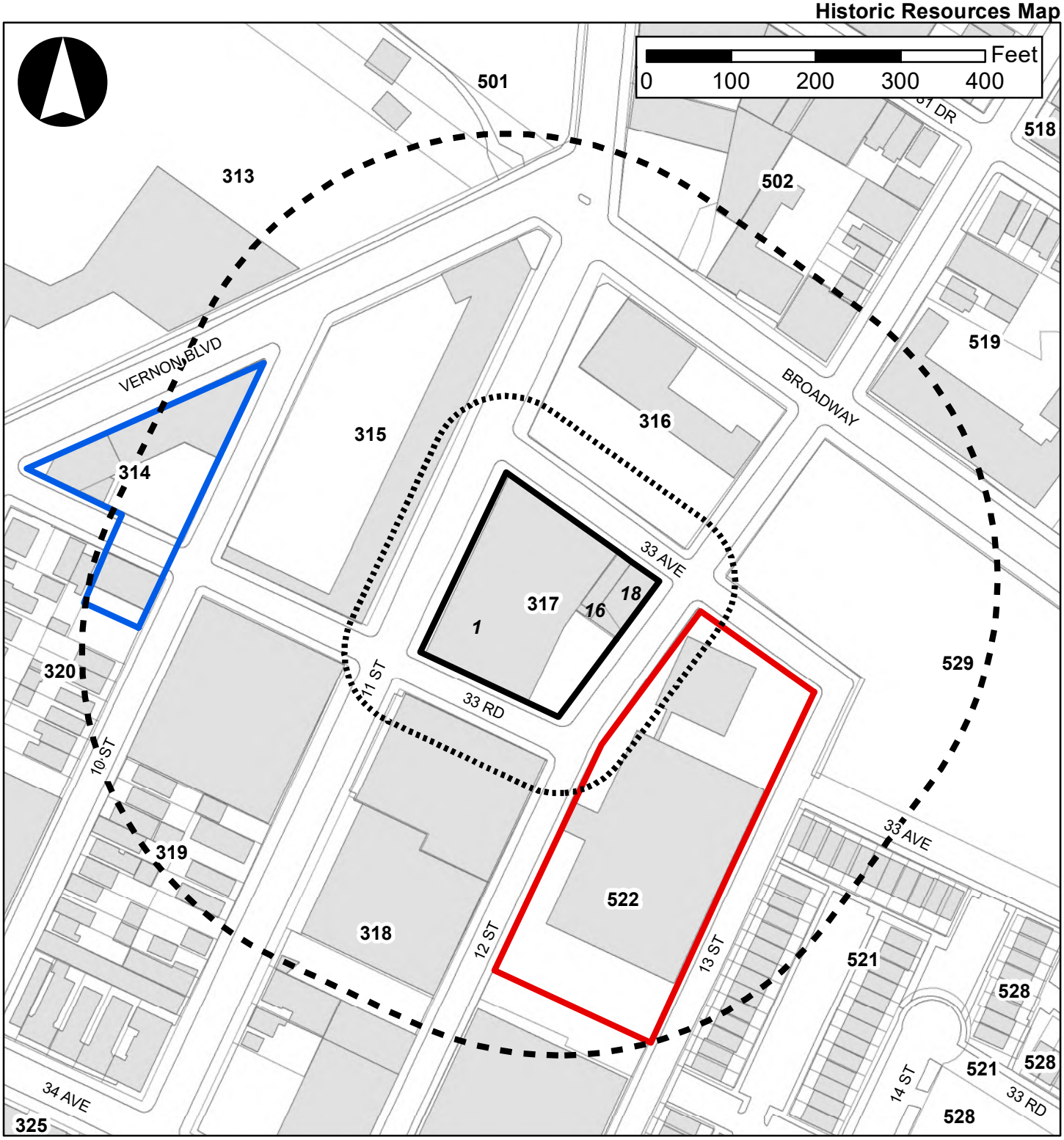
IV. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

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.

Figure F-1

Historic Resources Map



Legend

- Project Area
- 90-Foot Radius
- 400-Foot Study Area
- Existing Building Foodprints
- 1 — Project Area Tax Lots
- 317 — Tax Blocks

Historic Resources

- LPC-Designated Barkin, Levin & Company Office Pavilion
- S/NR-Eligible Isamu Noguchi Studio & Museum





1 & 2) LPC-Designated Barkin, Levin & Company Office Pavilion *(photos courtesy of LPC's Designation Report, December 2023).* at 12-12 33rd Avenue, Queens.



3) The S/NR-Eligible Isamu Noguchi Studio at 10th Street and 33rd Road, Queens. .



4) The S/NR-Eligible Isamu Noguchi Museum at Vernon Boulevard and 10th Street, Queens.

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

In the 2028 future without the Proposed Actions, it is anticipated that the Applicant would demolish the existing one-story warehouse building on Lot 1 and redevelop the site with a new four-story mixed-use residential and community facility building containing approximately 59 market-rate dwelling units (DUs) and 33,055 gross square feet (gsf) of non-profit office space. Additionally, as Lots 16 and 18 would not be combined with Lot 1 in the No-Action condition, no development is expected to occur on these non-Applicant-owned lots in the future without the Proposed Actions.

400-Foot Study Area

As detailed further in **Attachment C, "Land Use, Zoning, and Public Policy,"** there are three known projects slated for completion in the 400-foot study area in the future without the Proposed Actions. A 14-story mixed-use residential, commercial, and medical office building is under construction at 33-02 11th Street (Block 315, Lot 1); two eight-story mixed-use residential, commercial, industrial, and community facility buildings are expected at 33-33/33-51 11th Street (Block 318, Lots 15 & 22); and a nine-story residential building with ground-floor retail space is under construction at 11-20 Broadway (Block 316, Lot 13).

V. 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 Development, 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 G, "Urban Design and Visual Resources."**

As detailed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of a new, eight-story mixed-use building in the Project Area. The building would contain a total of approximately 267,442 gsf, and would include 227 DUs, approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of non-profit office space, and approximately 20,485 gsf of warehouse space. The Proposed Development would rise to a height of approximately 85 feet (roof height)[1] and would be built out to the lot lines, creating uniform streetwalls along 33rd Avenue, 12th Street, 33rd Road, and 11th Street.

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. As detailed above, absent the Proposed Actions, a four-story building would be constructed on Lot 1 in the Project Area; in the future with the Proposed Actions, an eight-story building would be constructed on Lots 1, 16, and 18 of the Project Area. Both the No-Action and With-Action buildings would be visible when looking southeast along 33rd Road towards the S/NR-eligible Isamu Noguchi Studio & Museum and when looking northeast and southwest along 12th Street and northwest along 33rd Avenue

[1] As discussed in **Attachment A, "Project Description**," although the proposed zoning district would allow a maximum building height of 95 feet, the proposed massing for the Applicant's Proposed Development, which maximizes the allowable FAR, would be 85 feet tall. However, in order to provide a more conservative CEQR analysis, the maximum allowable height of 95 feet is being used for this analysis of historic resources.

towards the LPC-designated Barkin, Levin & Company Office Pavilion. However, the With-Action building would be four stories taller than the No-Action building and would also extend into Lots 16 and 18 in the northeast corner of the Project Area. Nevertheless, these changes would not be significant or adverse to the identified surrounding historic architectural resources. The study area surrounding the Project Area is an established urban environment with multiple existing mid-rise buildings that form the backdrop of these historic resources. Moreover, as detailed above, the study area is currently undergoing massive redevelopment as a result of recent rezonings, including the construction of a 14-story building on Block 315 to the northwest of the Project Area and a nine-story building in the northern portion of Block 316 to the north of the Project Area, as well as two eight story buildings planned on Block 318 to the south of the Project Area. As compared to No-Action conditions, the Proposed Development would not substantially change the visual setting of any surrounding historic resources so as to affect those characteristics that make them eligible for listing on the S/NR or designation as NYCLs.

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 Development would not alter the relationship of either the LPC-designated Barkin, Levin & Company Office Building or the S/NR-eligible Isamu Noguchi Studio & Museum to the streetscape, as all streets in the study area would remain open and both historic resources' relationships to the street would remain unchanged in the future with the Proposed Actions. The Proposed Development would not eliminate or screen significant public views of either historic architectural resource, both of which would remain visible in view corridors on adjacent public streets and sidewalks. No primary facades, significant architectural ornamentation, or notable features of the LPC-designated Barkin, Levin & Company Office Building or the S/NR-eligible Isamu Noguchi Studio & Museum would be obstructed by the Proposed Development.

The Proposed Actions would not result in development that would diminish the qualities that make the LPC-designated Barkin, Levin & Company Office Building or the S/NR-eligible Isamu Noguchi Studio & Museum 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 the Project Area is located within 90 feet of the LPC-designated Barkin, Levin & Company Office Pavilion, construction of the Proposed Development would be subject to TPPN #10/88. Under the TPPN, a Construction Protection Plan would be provided to LPC for review and approval prior to any work in the Project Area. The Construction Protection Plan would take into account the guidance provided in *CEQR Technical Manual*, Chapter 9, Section 522, "Construction Protection Plan." As such, no construction-related impacts on historic resources would occur as a result of the Proposed Actions.

Shadows Impacts

The Proposed Actions would not result in any significant adverse shadows impacts on historic resources. As detailed further in **Attachment E, "Shadows,"** there are no historic resources in the vicinity of the Project Area with sunlight-sensitive features. Therefore, development facilitated by the Proposed Actions would not have the potential to cast shadows on any sunlight-sensitive features of historic resources, and no significant adverse shadows impacts would occur.

ATTACHMENT G:
URBAN DESIGN AND VISUAL RESOURCES

I. INTRODUCTION

The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* states that the urban design components and visual resources determine the "look" of a neighborhood – its physical appearance, including the street pattern, the size and shape of buildings, their arrangement on blocks, streetscape features, natural resources, and noteworthy views that may give an area a distinctive character. Pursuant to CEQR methodology, actions that would allow a project to potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings may warrant a detailed urban design and visual resources analysis. Since the Proposed Actions/RWCDS would facilitate the construction of buildings that would be different in bulk, type, and/or height than what is allowed or required by existing zoning, a detailed urban design and visual resources analysis was prepared.

This attachment considers the potential for the Proposed Actions to affect urban design characteristics and visual resources of the Project Area and the surrounding study area. The technical analysis presented in this attachment follows the guidance of the *CEQR Technical Manual* and addresses each of the previously listed characteristics for existing conditions, the future without the Proposed Actions (the No-Action condition), and the future with the Proposed Actions (the With-Action condition) for the Proposed Development.

As described in **Attachment A, "Project Description,"** the Proposed Actions consist of two discretionary actions: a zoning map amendment and zoning text amendment, affecting an area in the Ravenswood neighborhood of Queens Community District (CD) 1. The actions being requested are: (1) a zoning map amendment to rezone Queens Block 317 in its entirety, comprised of Lots 1, 16, and 18 ("Project Area") from the existing R5 zoning district to M1-4/R7A (MX-23 Special Mixed-Use district); and (2) a concurrent zoning text amendment to amend Zoning Resolution (ZR) Appendix F to establish the Project Area within a Mandatory Inclusionary Housing (MIH) area.

Upon approval of the Proposed Actions, as also described in **Attachment A, "Project Description,"** the Applicant would combine Lots 16 and 18 with the Applicant-owned Lot 1 to form a single zoning lot (the "Proposed Development Site") totaling approximately 42,569-sf. Under the With-Action condition, an eight story, approximately 267,442-gsf mixed-use building would be constructed at the Proposed Development Site, consisting of 227 dwelling units (DUs), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 parking spaces in a below-grade garage at the building's cellar level. Although the proposed zoning district would allow a maximum building height of 95 feet, the proposed massing for the Applicant's building would be 85 feet tall.

Under the No-Action condition, it is assumed that the Project Area would be developed on an as-of-right basis in accordance with the existing R5 zoning, with a four-story, mixed-use building totaling approximately 123,710-gsf. The building would consist of 50,125-gsf of residential space (59 DUs) and 33,055-gsf of community facility (nonprofit office) space. The No-Action development would also contain approximately 63 accessory parking spaces in the cellar, which would be accessed via an existing curb cut

on 33rd Avenue. Note that under the No-Action, the Applicant would not combine the non-Applicant-owned Lots 16 and 18, and that development would therefore be limited to the Applicant-owned Lot 1.

As discussed in **Attachment C, "Land Use, Zoning, and Public Policy,"** the existing R5 district mapped on the Project Area allows a maximum FAR of 1.25 for residential uses, and 2.00 for community facility uses. The R5 district allows for a maximum base height of 30 feet, a maximum building height of 40 feet, and requires a 30-foot minimum rear yard.

As the Proposed Actions would result in the construction of new development built due to a rezoning that would change bulk regulations and increase permitted density, an urban design and visual resources analysis is warranted.

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 the 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 2028.

In accordance with the *CEQR Technical Manual*, this assessment considers the effects of the Proposed Actions/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 alter the arrangement, appearance, and functionality of the built environment and, therefore, change a pedestrian's experience of the Project Area. Therefore, it is appropriate to assess the Proposed Actions' potential impacts to urban design and visual resources. As described in **Attachment A, "Project Description,"** although the Applicant's Proposed Development would have a maximum building height of 85 feet, this analysis conservatively assumes that the With-Action condition would attempt to maximize the building envelope permitted through the proposed zoning (i.e., a maximum building height of 95 feet). The urban design analysis presented below follows the guidance of the *CEQR Technical Manual.*

Wind Screening

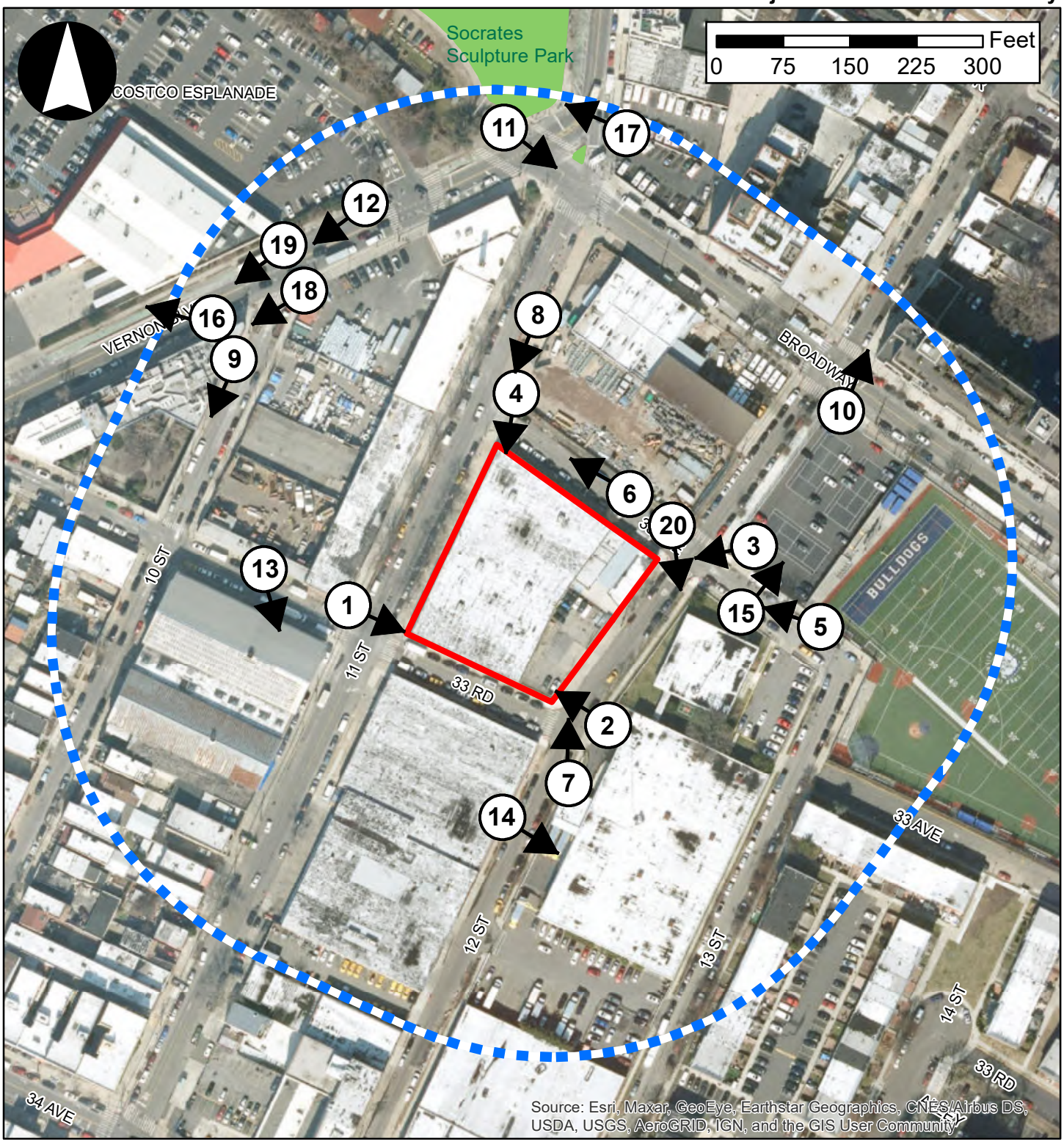
As per Section 230 of the *CEQR Technical Manual*, projects involving multiple, tall buildings at or in close proximity to the waterfront may result in an exacerbation of wind conditions due to "downwash" effects that may affect the pedestrian experience in the area. The Proposed Actions are not expected to result in the construction of unusually tall buildings. Under the Proposed Actions, building heights in the Project Area would be limited to a height of 95 feet by the proposed zoning (not including mechanical equipment), which is not significantly taller than other buildings in the area. Though the Project Area is in the vicinity of the East River, it is far enough from the waterfront (approximately 1,100 feet away) that its proximity would not result in high wind conditions. Additionally, the Proposed Development would not introduce multiple buildings, with only one building on a single site as proposed. 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 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 Project Area, with that boundary extended to include lots with buildings that fall substantially within the 400-foot radius. This is considered the area within the surrounding area whose land use and built environment have the potential to be indirectly affected by the Proposed Actions. As shown in **Figure G-1**, the secondary study area boundary generally extends to lots fronting Broadway to the north, lots fronting 13th Street to the east, a boundary approximately 375 feet south of 33rd Road to the south, and Vernon Boulevard to the west.

The analysis is based on field visits, aerial views, photographs, and other graphic images of the rezoning area and surrounding study area. Zoning calculations, including floor area calculations, and building height information is also provided. An aerial photo of the study area and photo key is provided in **Figure G-1**. **Figures G-2a through G-3c** present photos and display urban design characteristics of the study area.

Project Location and Photo Key



Legend

- Project Area
- 400-Foot Radius
- 1 → Photo Location



1. View looking east at the Project Area from the intersection of 11th Street and 33rd Road.



2. View looking north art the Project Area from the intersection of 12th Street and 33rd Road.



3. View looking west at the Project Area from the intersection of 13th Street and 33rrd Avenue.



4. View looking south at the Project Area from the intersection of 11th Street and 33rd Avenue.



5. View looking west along 33rd Avenue from the midblock of 33rd Avenue between 12th Street and 13th Street.



6. View looking west along 33rd Avenue from the midblock of 33rd Avenue between 11th Street and 12th Street.



7. View looking north along 12th Street from the midblock of 12th Street between 33rd Road and 34th Avenue.



8. View looking south along 11th Street from the intersection of 11th Street and 33rd Avenue.



9. View looking south along 10th Street from the midblock between Vernon Boulevard and 33rd Road.



10. View looking north along 12th Street from the intersection of 12th Street and Broadway.



11. View looking southwest along Broadway at the intersection of Broadway, Vernon Boulevard, and 11th Street.



12. View looking southwest along Vernon Boulevard from the intersection of Vernon Boulevard and 10th Street.



13. View looking south at low-rise industrial buildings from the midblock of 33rd Road between 10th Street and 11th Street.



14. View looking east at th DHL Lot and distribution center from the midblock of 12th Street between 33rd Road and 34th Avenue.



15. View looking north at the high school parking lot and mid-rise residential buildings from the intersection of 33rd Avenue and 12th Street.



16. View looking south at Costco Wholesale from the midblock of Vernon Boulevard between 9th Street and 34th Avenue.



17. View looking east at Socrates Sculpture Park from the intersection of Vernon Boulevard, Broadway, and 11th Street.



18. View looking south at the Noguchi Museum from the intersection of Vernon Boulevard and 10th Street.



19. View looking southwest at the midtown Manhattan skyline from the intersection of Vernon Boulevard and 10th Street.



20. View looking south at the LPC-designated Brooks, Levin & Company office building from the intersection of 33rd Avenue and 12th Street.

III. PRELIMINARY ASSESSMENT

Under CEQR, a preliminary assessment of urban design 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 the following: 1) projects that permit the modification of yard, height, and setback requirements; and 2) 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 action. According to the *CEQR Technical Manual*, detailed analyses are generally appropriate if an action introduces a new building requiring exception to existing zoning and would result in changes in height and setback requirements. As the Proposed Actions include a zoning map amendment that would facilitate a building with bulk characteristics and density beyond what is permitted as-of-right, a detailed urban design and visual resources assessment is warranted.

IV. EXISTING CONDITIONS

Primary Study Area/Project Area

The Primary Study Area is defined as the area that would be directly affected by the Proposed Actions. The Primary Study Area for this analysis is the area affected by the proposed zoning map amendment and zoning text amendment (the "Project Area"), Queens Block 317, which consists of Lots 1, 16, and 18.

Streets

As shown in **Figure G-1**, the Project Area is roughly rectangular in shape, occupying the entirety of Block 317. The Project Area is bounded to the north by 33rd Avenue, to the east by 12th Street, to the south by 33rd Road, and to the west by 11th Street. The Project Area has approximately 219 feet of frontage along 33rd Avenue, 200 feet of frontage along 12th Street, 181 feet of frontage along 33rd Road, and 236 feet of frontage along 11th Street. **Figure G-2b** shows the streetscapes in the primary study area.

11th Street is an approximately 80-foot wide, two-way street with an approximately 40-foot-wide roadbed and approximately 20-foot-wide sidewalks. There is on-street parking on both sides, and double yellow lane markings. In addition to the standard street signage, 11th Street features street trees on both sides, as well as a fire hydrant on the western side of the street close to the intersection with 33rd Road.

12th Street is an approximately 60-foot wide, northbound one-way street with an approximately 30-foot wide roadbed and 15-foot-wide sidewalks. There is a single moving vehicle lane flanked by on-street parking on both sides. The streetscape features several street trees as well as planters along the western side of the street. There are also curb cuts along the western side of the street, with a large curb cut providing access to the parking lot and loading dock area within the eastern portion of Lot 1 in the Project Area.

33rd Road is a 50-foot wide, two-way street with an approximately 30-foot wide roadbed and approximately 10-foot wide sidewalks. 33rd Road has two moving lanes and on-street parking on both sides. Streetscape elements include standard signage, as well as several street trees and landscaping elements on the south side of the street. There is a curb cut on the north side of the street providing access to a garage within Lot 1 of the Project Area.

33rd Avenue has a total width of approximately 50 feet (considered a narrow street by zoning) with an approximately 30-foot wide roadbed and 10-foot-wide sidewalks. It is a two-way street that runs east-

west, with two moving lanes and on-street parking on both sides. Streetscape elements include standard signage and street trees. There are three curb cuts on the south side of the street, which provide access to existing auto repair businesses and loading docks in the Project Area (see photo #5 in **Figure G-2b**). As shown in photo #6 in **Figure G-2b**, the sidewalk on the north side of 33rd Avenue is in poor condition.

Buildings

The Project Area Is occupied by three single-story buildings containing a total of approximately 45,151 gsf of built area. The Applicant-owned building occupying Lot 1 is a one-story, 39,896-gsf warehouse building currently utilized as a distribution center for the Catholic Mission Medical Board. The building has a Floor Area Ratio (FAR) of approximately 0.92 and covers the majority of Lot 1 excluding an unbuilt area at the southeast corner of the lot used for loading and vehicle storage (see photo #2 in **Figure G-2a**). There are also loading docks along the north and south building frontages.

The non-Applicant-owned Lots 16 and 18, located at the northeastern corner of the Project Area, are both occupied by auto repair shops. Lot 16 is occupied by a single-story, approximately 2,645-gsf auto repair shop with approximately 0.97 FAR. The building has garage entrances on both frontages. Lot 18 is occupied by 2,611-gsf auto repair shop with approximately 0.86 FAR. The building also has vehicle entrances on both the 12th Street and 33rd Avenue frontages (see photo #5 in **Figure G-2b**).

Visual Resources

There are no notable visual resources located within the Project Area, nor are there any visual resources visible from the Project Area.

Open Space

As defined by the *CEQR Technical Manual* for the purposes of urban design assessment, open space is defined as unenclosed areas including public and private areas such as parks, yards, cemeteries, parking lots, and privately owned public spaces (POPS). There are no parks or landscaped areas in the Project Area, as all three lots are occupied by buildings or storage areas utilized for industrial and auto-related purposes.

Natural Features

Elevations within the Project Area are generally flat, ranging from +9 to +11 feet (NAVD88). As mentioned in the discussion of open space above, there are no green spaces or unique natural features in the Project Area.

Secondary Study Area

The larger secondary study area contains all or part of 13 tax blocks. As discussed previously, the secondary study area extends to lots fronting Broadway to the north, lots fronting 13th Street to the east, a boundary approximately 375 feet south of 33rd Road to the south, and Vernon Boulevard to the west (see **Figure G-1**). **Figures G-3 and G-3b** show the existing streetscapes and buildings in the secondary study area.

Streets

The street pattern in the secondary study area is irregular, forming blocks of varying shapes and sizes. The main north-south oriented streets which cut through the center of the study area are 11th Street and 12th

Street, forming three roughly rectangular blocks, as shown in **Figure G-1**. The other major north-south oriented streets are 10th Street to the west of the Project Area and 13th Street to the east. 33rd Avenue, which runs immediately north of the Project Area, is an irregular east-west street which briefly runs north-south before turning east again after intersecting with 13th Street. For this reason, Block 528, which is located northeast of the Project Area is irregularly shaped. This block is entirely occupied by Long Island City High School, whose football field and parking lot are situated on the portion of the block formed by the disjointed intersection between 33rd Avenue and 12th Street. Running in an east-west direction directly south of the Project Area is 33rd Road which, like 33rd Avenue, is disjointed as it crosses through the secondary study area, as 33rd Road temporarily ends in its intersection with 12th Street before continuing southeast of the secondary study area. The other two streets in the secondary study area are Broadway and Vernon Boulevard, both situated north of the Project Area and running in a northwest-southeast and southwest-northeast direction, respectively. The diagonal direction of Broadway and Vernon Boulevard accounts for the formation of more irregular and triangular blocks in the northern portion of the secondary study area. In addition, Vernon Boulevard, Broadway, and 11th Street form an irregular three-way intersection north of the Project Area near the edge of the secondary study area.

As discussed above, 11th Street is an approximately 80-foot wide, two-way street with an approximately 40-foot-wide roadbed and approximately 20-foot-wide sidewalks. In the secondary study area, the western side of 11th Street is bordered by industrial buildings and lots, with the only street-facing windows located at three small residential buildings southeast of the Project Area. The building directly across 11th Street from the Project Area features a brick wall with graffiti facing the sidewalk and scaffolding built out above the sidewalk (see photo #8 in **Figure G-2b**). Several of the buildings south of the Project Area feature curb cuts providing access to warehouse loading docks and garages, with structures built out to varying distances from the property line. Additionally, there are two fenced-off parking lots on the east side of 11th Street, with one located to the south of the Project Area utilized by the nearby DHL facility and the other north of the Project Area utilized for construction materials storage (see photo #6 in **Figure G-2b**). Nearly all of the sidewalk space along 11th Street is utilized for either parking or loading. Thus, despite some street trees and characteristically wide sidewalks, 11th Street is a highly auto-oriented corridor and exhibits a rather unfriendly pedestrian experience.

12th Street is an approximately 60-foot wide, northbound one-way street with an approximately 30-foot wide roadbed and 15-foot-wide sidewalks. South of the Project Area, the pedestrian experience of the western side of 12th Street is characterized by manufacturing and warehouse buildings built to the property line. To the east are parking lots utilized by DHL which are flush with the property line and behind fencing (see photo #14 in **Figure G-3b**). North of the DHL facilities is a low rise office building with relatively large front and rear yards, also located behind fencing (see photo #20 in **Figure G-3c**). Parking dominates 12th street in the northern portion of the secondary study area, with the aforementioned construction lot to the west and a repurposed tennis court utilized for parking by Long Island City High School to the east (see photo #15 in **Figure G-3b**). There are street trees distributed throughout 12th Street, as well as curb cuts to provide access to the parking and warehouse facilities along the street (see photo #7 in **Figure G-2b**). In general, 12th Street is an industrial and auto-oriented corridor that presents a somewhat more amenable pedestrian experience than 11th Street.

10th Street is a 50 foot wide, northbound one-way street with one vehicle moving lane and parking on either side. Sidewalks on 10th Street measure approximately 10 feet in width. The western side of 10th Street in the southern part of the study area is mostly characterized by low-rise residential buildings with front yards and street-facing windows. At the intersection with 33rd Road and north to Vernon Boulevard, the western side of 10th Street is characterized by the Noguchi Museum, whose facilities are red-brick and feature landscaped vines (see photo #9 in **Figure G-3a**). On the other hand, the eastern side of 10th Street

is dominated by industrial facilities and parking lots, with exterior walls and fencing built to the property line. In addition to standard signage, streetscape elements are limited to street trees which are mostly situated on the western side of the street.

13th Street is a 50 foot wide, two-way street with two vehicle moving lanes, parking on both sides of the street, and sidewalks measuring approximately 10 feet wide. Within the secondary study area, 13th Street terminates at its intersection with 33rd Avenue. 13th Street is characterized by low-rise residential units with small front yards and street facing windows on one side and the DHL facility, which features no windows and is built to the property line, on the other. Street trees are scattered throughout 13th Street, although the eastern, more residential side of the street is better shaded than the western side.

As mentioned above, 33rd Avenue is a 50-foot-wide, two-way street with an approximately 30-foot-wide roadbed and sidewalks measuring 10 feet in width. As noted above, 33rd Avenue is an east-west street that briefly turns south for approximately 115 feet before turning east again. Streetscape elements on 33rd Avenue are scarce, with limited street trees and a fire hydrant on the northern sidewalk east of the Project Area. The portion of 33rd Avenue which forms an elbow east of the Project Area is characterized by wide sightlines, with the office building south of the street set back approximately 40 feet behind a yard and the northern side of the street lacking buildings, given the adjacent parking lot and sports field for Long Island City high school (see photo #15 **in Figure G-3b**).

33rd Road is a 50-foot wide, two-way street with an approximately 30-foot wide roadbed and approximately 10-foot wide sidewalks. 33rd Road has two moving lanes and on-street parking on both sides. Within the study area, 33rd Road is characterized by industrial structures with no street facing windows built to the property line (see photo #13 in **Figure G-3b**). Streetscape elements are limited to a few street trees, bollards on the north side of the street between 10th and 11th Streets, and a defunct FDNY emergency phone at the intersection of 33rd Road and 11th Street.

Broadway is a 75-foot wide, two-way street with two vehicle moving lanes in an approximately 43-foot-wide roadbed, parking on both sides, and sidewalks measuring approximately 16 feet in width. Broadway runs diagonally through the study area, with its western terminus at the intersection with Vernon Boulevard. With access to the grounds of Long Island City high school and containing a wider range of uses (including multi-family residential buildings), Broadway is the most active pedestrian corridor in the study area. On the north side of the street are two mid-rise residential buildings built to the lot line with relatively large street-facing windows. Additionally, there is a smaller industrial building built to the lot line and a parking lot behind sheet metal fencing, both of which provide curb cuts for access (see photo #11 in Figure G-3a). In addition to the playing field and parking lot belonging to Long Island City High School, the south side of Broadway features underutilized private parking and small automotive buildings flush with the property line, with several accompanying curb cuts. Streetscape elements on the south side of the street include a 29-dock Citibike Station, two fire hydrants, a bus shelter for the Q104 bus, and a blue postal mailbox, in addition to standard street signage and several street trees. Streetscape elements on the north side of the street are limited to a few street trees and an FDNY alarm box.

Vernon Boulevard is a 75-foot-wide, two way street with two vehicle moving lanes in an approximately 45-foot-wide roadbed and sidewalks measuring approximately 15 feet wide. Vernon Boulevard also contains a parking lane on the south side of the street, as well as a protected, two-way bike lane on the north side (see photo #12 in **Figure G-3a**). Running diagonally through the northwest part of the secondary study area, Vernon Boulevard is bordered by industrial and commercial lots, including the Costco Wholesale building and Noguchi Museum building, neither of which have street level windows. Vehicle access to the Costco is provided via a three-lane signaled entrance just south of the intersection with

Broadway and 11th Street. The Noguchi Museum also features wheelchair accessible ramps built out into the sidewalk. Vernon Boulevard contains numerous streetscape features. On the east side of the street in front of the Noguchi Museum are several street trees, as well as a Citibike station with capacity for 39 bikes (see photo #12 in **Figure G-3a**). In addition, there is an FDNY alarm box at the intersection with 10th Street, as well as a simple bus stop (with no shelter) for the Q103 across from the entrance to the Costco lot.

Buildings

There are approximately 48 buildings in the secondary study area. These buildings can be categorized into several general typologies. **Figures G-3a and Figure G-3b** shows photos of buildings within the secondary study area; **Figures G-4 and G-5,** respectively, show built densities and heights of buildings throughout the study area.

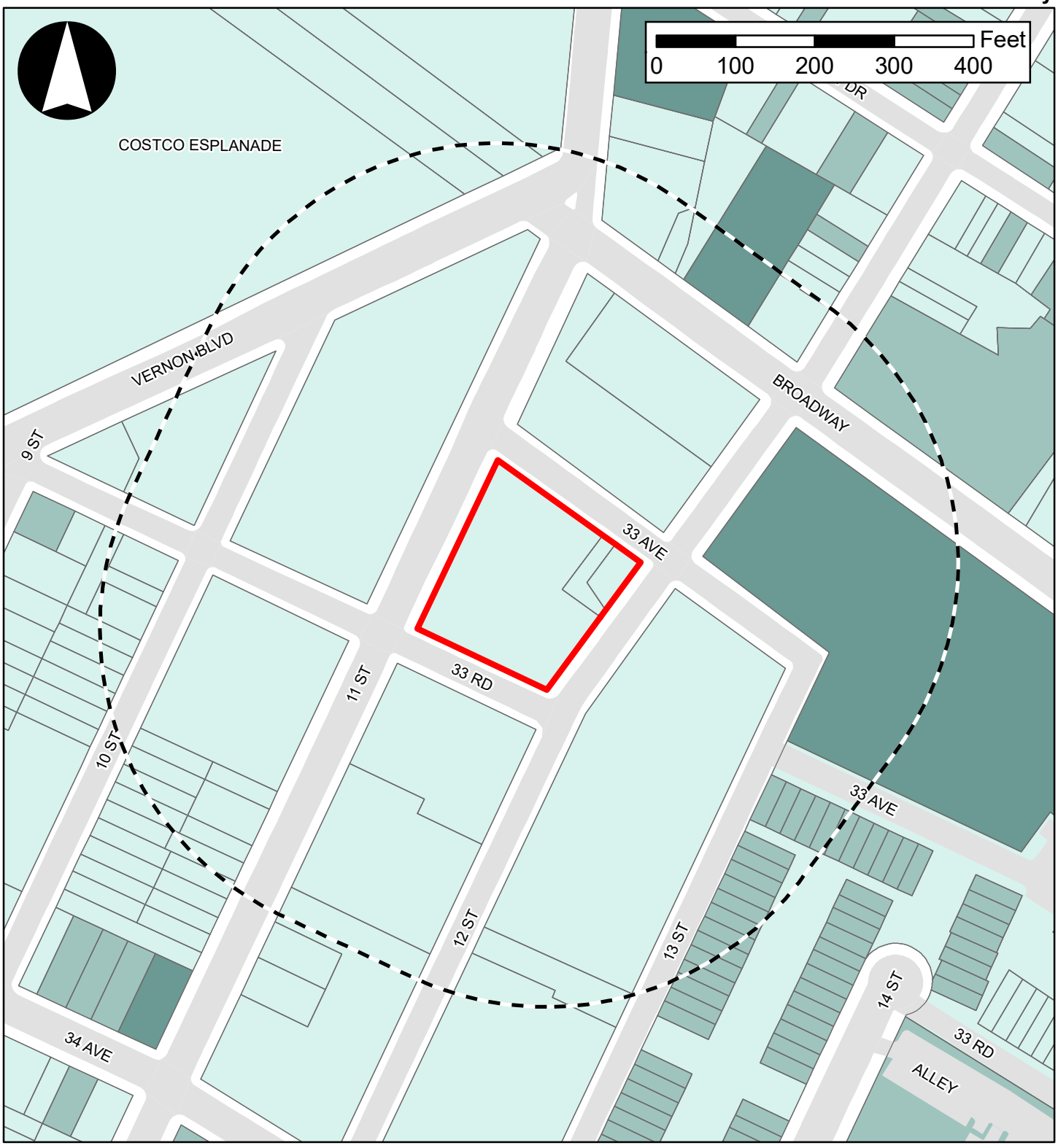
In terms of the amount of land area occupied, industrial, warehouse, and automotive buildings are the predominant building type in the study area. For the most part, these buildings are low-rise structures situated on large lots. Some, like the building south of the Project Area at 33-33 11th Street (Block 316, Lot 22) as well as the DHL distribution center at 12-12 33rd Avenue (Block 522, Lot 29), are brick and cinderblock buildings which are largely built to the property line and lack fenestration (see photo #14 in **Figure G-3b**, for example). Others, like the building at 33-53 10th Street (Block 319, Lot 20) are slightly taller sheet-metal buildings with some upper level windows (see photo #13 in **Figure G-3b**). There are some smaller industrial structures in the study area as well, many of which are more automotive in nature (e.g. Block 216, Lot 13). Many of the industrial buildings in the area feature street-facing garages, lots, and loading bays, which are accessible via curb cuts.

Another common building typology in the secondary study area is low-rise residential buildings. These structures are entirely situated in the southern portion of the study area along 10th Street, 11th Street, and 13th Street. The residential buildings along 10th and 11th Streets are detached and semi-detached single-family rowhomes, all of which are two stories and feature either brick or vinyl siding facades. On the other hand, the low-rise residential buildings southeast of the Project Area along 13th Street are three-story terraced rowhomes with pitched roofs. Low-rise residential buildings in the study area are transitionary areas between the more residential portions of Ravenswood to the south and east of the Project Area and the more industrial blocks to the north and west.

Additionally, there are two mid-rise, multi-family elevator buildings located north and west of the Project Area at 12-15 Broadway (Block 502, Lot 41) and 11-15 Broadway (Block 502, Lot 41). Both buildings are relatively new construction, having been built in 2011. 12-15 Broadway is constructed of red brick and features black metal window frames and balconies. Similarly, 11-15 Broadway is constructed of red and gray brick and stone with street facing windows and balconies (see photo #15 in **Figure G-3b**). New construction in the area denotes the neighborhood's changing character from a predominantly industrial to a more residential area.

There are three historically and architecturally notable buildings in the secondary study area. The first and second of these are the Noguchi Museum and garden at 9-01 33rd Road (occupying the entirety of Block 314) and its associated studio at 33-38 10th Street (Block 320, Lot 28). The museum was founded and designed by the famed sculpture artist Isamu Noguchi and is housed in a former industrial plant and gas station purchased by the artist in 1985. The building, which is a two-story red brick structure with small street facing windows, was renovated in 2004 and houses the artists' sculptures, set designs, and furniture. Within the secondary study area, the building is visible along 10th Street as well as along Vernon Boulevard (see photo #18 in **Figure G-3c**). There is additionally a sculpture garden in the southeast corner

Figure G-4
Built Density



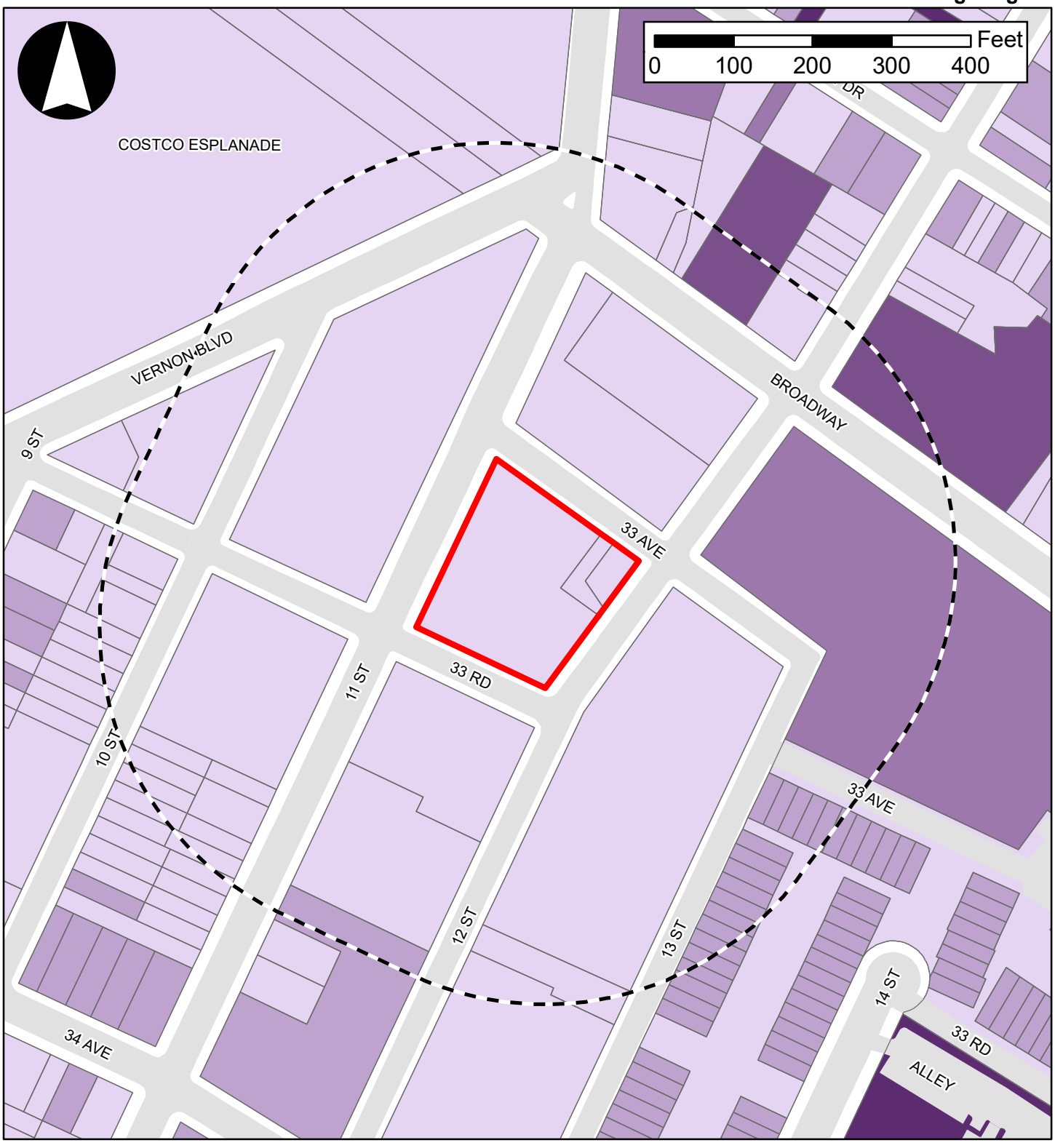
Legend

- Project Area
- 400-Foot Radius

Built FAR

- Less than 1.5 FAR
- 1.5 - 3.0 FAR
- 3.0 - 4.5 FAR
- 4.5 - 8.0 FAR
- Greater than 8.0 FAR

Figure G-5
Building Heights



Legend

- Project Area
- 400-Foot Radius

NumFloors

- Less than 2 Stories
- 3-4 Stories
- 5-6 Stories
- 7-8 Stories
- Greater than 8 Stories

of the lot which is obscured from street view by cinder block walls and fencing. Noguchi's studio is located across 33rd Road from the museum and served as his main workspace from 1960 until his death in 1988. Like the museum, Noguchi's studio is a relatively non-descript, one-story red brick building with tinted, elevated street facing windows and landscaped vines. Both the museum and studio are eligible for registration in the State and National Register of Historic Places.

The third notable structure in the study area is the LPC-designated office pavilion at 12-12 33rd Avenue (Block 522, Lot 29). The building was constructed in 1958 and was the home of Barkin, Levin & Company, a manufacturer of women's coats. Designed by Ulrich Franzen in the modernist style, the single-story, ranch style building features glass walls and a vaulted roof canopy, drawing attention from architectural critics upon its completion (see photo #20 in **Figure G-3c**). The building was restored with minor modifications in 2009 and received LPC landmark status in December 2023. It is currently occupied by the DHL distribution facility which also occupies the southern portion of the block/lot. The office is visible from 12th Street, 13th Street, and 33rd Avenue.

Visual Resources

As shown in photo #19 in **Figure G-3c**, views of the midtown Manhattan skyline, including the Empire State Building, are visible looking south along Vernon Boulevard. Socrates Sculpture Park, including its iconic entrance sign which is itself an art installation curated by park administrators, is visible from the intersection of Vernon Boulevard, Broadway, and 11th Street (see photo #17 in **Figure G-3c**). The Noguchi Museum is visible along Vernon Boulevard and 10th Street, and the walls to the attached garden are visible along 10th Street and 33rd Road. Additionally, the S/NR-eligible Noguchi studio (described above) is visible along 33rd Road and 10th Street. Finally, the LPC landmark Barkin, Levin & Company office building is visible along 12th Street and 33rd Avenue. Refer to **Figure G-3c** for photos of visual resources in the study area.

Open Space

A small portion of the waterfront Socrates Sculpture Park falls within the secondary study area to the north of the Project Area. Founded in 1986, the four-acre park is dedicated to exhibiting sculpture, and has featured work from over 1,000 artists since its inception.

Natural Features

Like the Project Area, the topography of the secondary study area is mostly flat. Elevations in the study area range from +8 to +12 feet (NAVD88), gently sloping downward from the upland southeastern portion of the study area to portions closer to the waterfront.

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

Primary Study Area/Project Area

Under the No-Action condition, it is assumed that Lots 16 and 18 of Block 317 would not be combined with the Applicant-owned Lot 1 and that Lot 1 would be redeveloped on an as-of-right basis under the existing R5 zoning. This would result in the construction of a four-story, approximately 42-foot-tall, mixed-use building of approximately 123,710 gsf with approximately 50,125 gsf of residential space (59 DUs) and 33,050 gsf of community facility (nonprofit office) space. The No-Action development would contain approximately 63 accessory parking spaces in the cellar, which would be accessed via an existing curb cut

on 33rd Avenue. In compliance with existing R5 zoning regulations, the building would be built with a setback of 15 feet on 33rd Road.

Under the No-Action condition, it is assumed that the non-Applicant Lots 16 and 18 would remain as single-story autobody shops.

Visual Resources

Under the No-Action condition, there are no changes to visual resources expected within the Project Area, as there are no existing visual resources in the Project Area and the Proposed Actions would not result in the addition of new visual resources to the Project Area.

Secondary Study Area

Within the approximately 400-foot secondary study area, there are three known projects (other than the No-Action development that would be constructed on the Applicant-owned Lot 1) anticipated to be completed in the 2028 future without the Proposed Actions.

At 11-20 Broadway to the north of the Project Area, a seven-story, mixed-use building of 254,73 gsf, with 205 DUs and ground-floor retail space[1], is under construction. Work is underway on excavation and utilities, and it is expected to be complete and occupied by the 2028 analysis year. When completed, the structure will occupy the entirety of Block 316 and feature a roof height of 75 feet after a 15-foot setback above the base height of 65 feet. The glass and stone façade will form a continuous streetwall on Broadway, 11th Street, 12th Street, and 33rd Avenue.

A mixed-use, three-building development totaling 349,935 gsf is planned to the west of the Project Area at 32-01 Vernon Boulevard (Block 315)[2]. Planned Building A, a five-story (55 foot) tall structure built to the property line on the southeastern corner of the block at the intersection of 33rd Road and 11th Street, is expected to total 33,130 gsf, with 28,044 gsf of residential space (30 DUs) and 4,266 gsf of ground-floor community facility (medical office) space. Planned Building B, situated to the north of Building A, will be an L-shaped, through-lot building with frontages on both 10th and 11th Streets. The eastern wing of Building B, which fronts 11th Street, will be nine stories (95-feet tall) and its western wing fronting 10th Street will be four stories (45-feet tall). Building B is expected to total approximately 103,325 gsf, with 102,138 gsf of residential space (110 DUs) and 1,295 gsf of community facility (medical office) uses. Finally, Planned Building C will be an irregularly shaped structure that will be built to the property line along 10th Street, Vernon Boulevard, and 11th Street. The building is expected to have a maximum of 14 stories (145 feet) set back from Vernon Boulevard behind a 65-foot continuous streetwall and feature a stepped roof that will decrease in height moving to the southwest along Vernon Boulevard. It is expected to total approximately 214,480 gsf, with 202,026 gsf of residential space (211 DUs), 1,321 gsf of ground floor community facility (medical office) space, and 11,236 gsf of retail commercial space. Additionally, the project is also expected to feature three open spaces, two of which will be private and situated between Buildings B and C in the northern portion of the lot. There will also be a publicly accessible open space on the southwestern corner of the block at the intersection of 33rd Road and 10th Street, which will total 16,547 sf. The project at 32-01 Vernon Boulevard is expected to be completed by the No-Action analysis year of 2028.

[1] Project information and square footage totals are according to *Broadway and 11th Street Rezoning EAS* (CEQR #21DCP022Q), approved on October 21st 2021.

[2] Refer to *Vernon Boulevard and Broadway Rezoning* EAS (CEQR #12DCP139Q), approved on October 17th, 2019.

A third project is expected to be completed by the 2028 analysis year at 11th Street and 34th Avenue (Block 318). The project will be a mixed-use, two-building project totaling 586,569 gsf. Development Site 1, which will occupy Lots 15 and 21 in the northern portion of the block, will consist of an 8-story (95-foot tall), 338,474-gsf building with 204,834 gsf of residential use (204 DUs), and 90,251 of commercial uses. As described in the EAS for that project, the building would wrap the block, maintaining a continuous streetwall along its frontages with 11th Street, 12th Street, and 33rd Road with a base height of 75 feet. Similarly, Development Site 2 (Lot 1) will feature an 8-story (95-foot tall), mixed-use, 248,095-gsf building with 148 DUs as well as industrial, community facility, and commercial space.

Visual Resources

Under the No-Action condition, the anticipated development in the Project Area is not expected to obstruct views of the midtown Manhattan skyline, the S/NR eligible Noguchi studio, or the LPC-designated Barkin, Levin & Company office building.

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

Primary Study Area/Project Area

Under the With-Action condition, the Project Area (Block 317, Lots 1, 16, and 18) would be developed by the Applicant with a new eight-story, mixed-use building with approximately 227 DUs as well as ground floor local retail, community facility (nonprofit office), and warehouse uses. The proposed building would maximize the allowable FAR under the proposed MX zoning. The building would total approximately 267,442 gsf including approximately 171,490 gsf of residential floor area, 13,346 gsf of commercial retail space, 5,118 gsf of community facility space, and 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 parking spaces in a below-grade garage at the building's cellar level. The building would extend to the property line along all four of its frontages (11th Street, 12th Street, 33rd Avenue, and 33rd Road), with only a small setback at the corner of 33rd Avenue and 11th Street. The building would have a base height of 75 feet along 11th Street, 45 feet along 12th Street, 15-54 feet along 33rd Road, and 75 feet along 33rd Avenue. Although the proposed zoning district would allow a maximum building height of 95 feet, the proposed massing for the Applicant's Proposed Development, which maximizes the allowable FAR, would be 85 feet tall. However, in order to provide a more conservative CEQR analysis, the maximum allowable height of 95 feet is being used for this analysis of urban design (see **Attachment A, "Project Description"**).

The Proposed Actions would likely lead to increased pedestrian activity in the streets directly bordering the Project Area as well as the surrounding street network. Both the residential and commercial uses in the Project Area under the With-Action conditions could contribute to increased foot traffic as opposed to the existing and No-Action conditions. The Proposed Actions are not expected to result in changes to natural features or open space in the Project Area.

Visual Resources

In the With-Action condition, development facilitated by the Proposed Actions would not obstruct any view corridors or alter any visual resources in the primary study area, as the new development would occur on an existing block that contains no visual resources, and no new visual resources are anticipated to be introduced within the primary study area as a result of the Proposed Actions.

Secondary Study Area

Though the Proposed Actions would facilitate the development of a building with greater bulk, height, and density than what is permitted under existing zoning, as well as facilitating construction of commercial uses and the expansion of warehouse uses that would not be permitted under existing zoning, they are site-specific and would therefore not result in any changes to buildings, streets, natural resources, or open space within the secondary study area.

Visual Resources

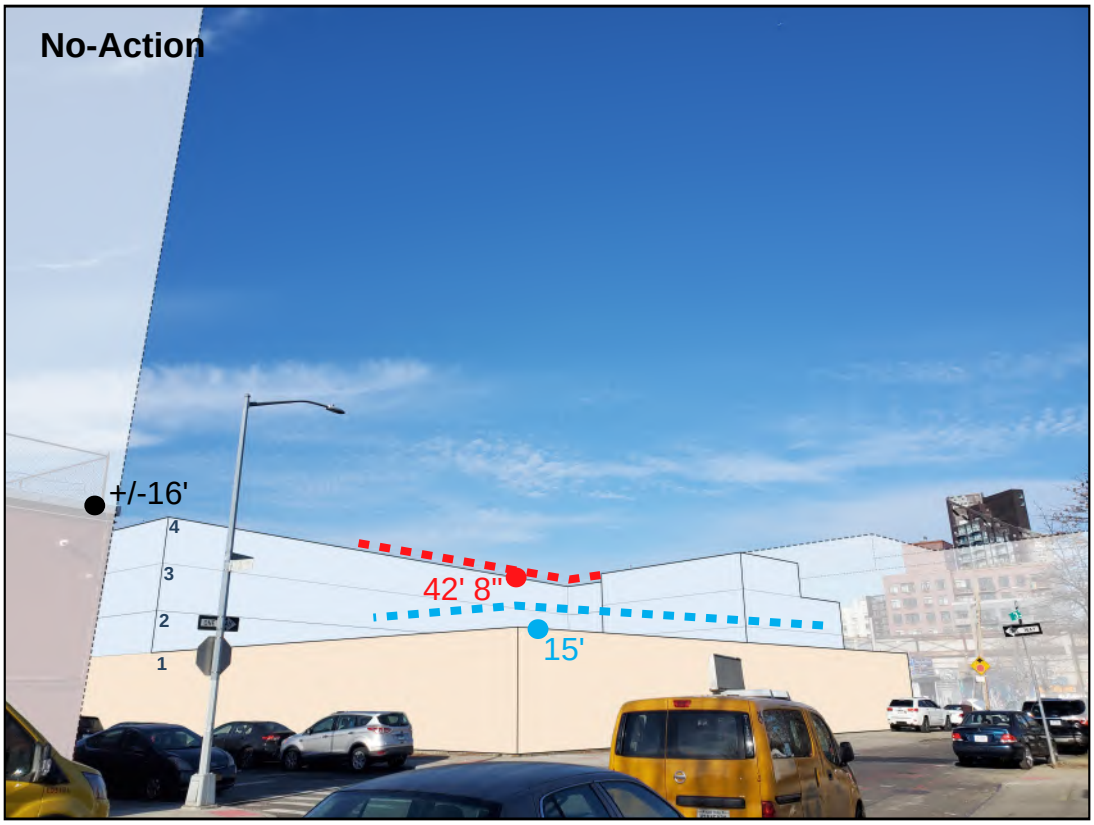
As in the No-Action condition described above, development facilitated by the Proposed Actions in the Project Area would not obstruct views of the midtown Manhattan skyline, the S/NR-eligible Noguchi studio, or the LPC-designated Barkin, Levin, & Company office building.

Assessment

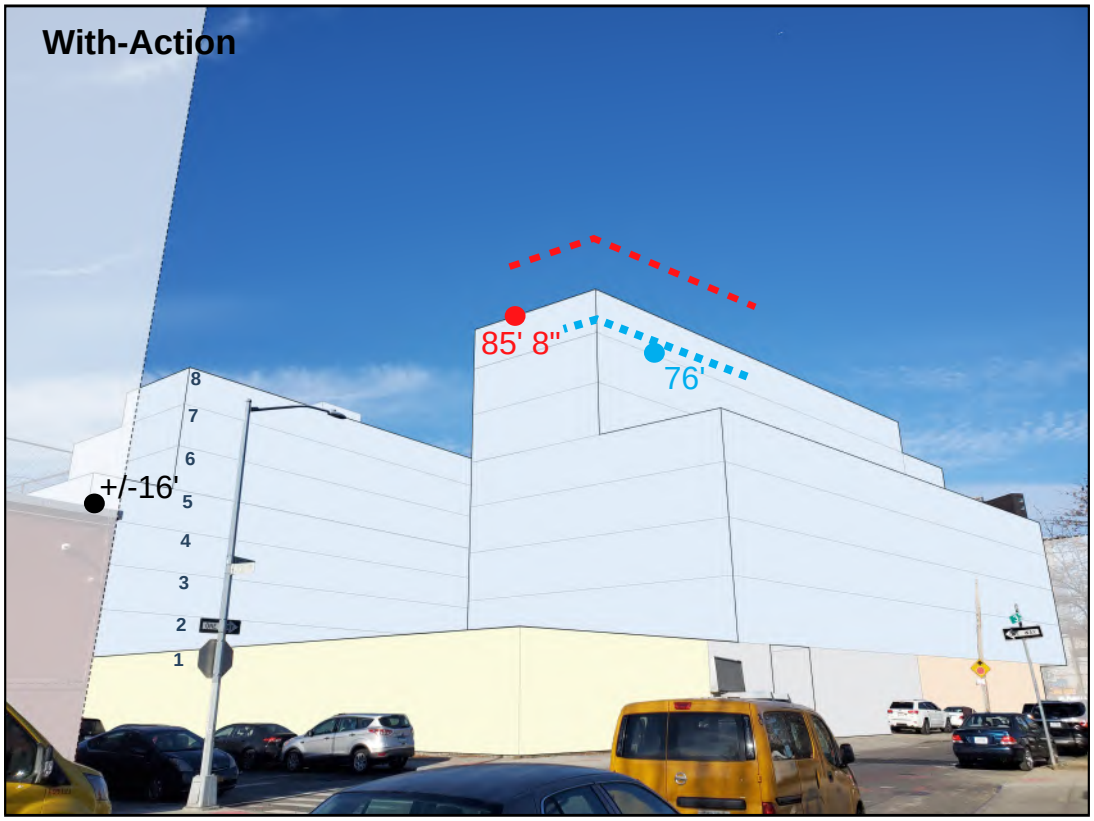
The Proposed Actions would facilitate development that is not currently permitted as-of-right in the Project Area, which would create a change in the urban design character of the area. **Figures G-6a – G-6c** show a visual comparison of pedestrian views of the Project Area in the No-Action and With-Action conditions. Compared to the future without the Proposed Actions, the visual appearance, and the pedestrian experience of the Project Area, would change. The Proposed Actions would facilitate developments that could reach a maximum height of 95 feet, an approximately 52-foot increment over the No-Action development assumed in the Project Area. However, this change would not constitute a significant adverse urban design impact as it would not alter the arrangement or functionality of the Project Area nor would it negatively affect a pedestrian's experience. Rather, development anticipated in the Project Area in the future with the Proposed Actions is expected to positively affect the urban design character of the surrounding area and improve the pedestrian experience through the redevelopment of a currently underutilized site that is occupied by warehouse and auto-related uses. Moreover, the adjacent sidewalks would be planted with street trees under With-Action conditions in accordance with zoning requirement. As such, the Proposed Development would activate the streetscape around the Proposed Development Site, further enhancing the pedestrian experience along 11th and 12th Streets, 33rd Avenue and 33rd Road.

As detailed further in **Attachment C, "Land Use, Zoning, and Public Policy,"** the proposed zoning and resulting Proposed Development would be compatible with the area surrounding the Project Area, given the more residential and mixed-use construction underway or planned in the secondary study area. Although the existing neighborhood surrounding the Project Area is currently typified by low-density industrial uses, the slate of rezonings in recent years will transform the area in the No-Action condition into a medium-density mixed-use neighborhood characterized by mid-rise buildings with continuous streetwalls on large lots. The study area surrounding the Project Area is an established urban environment with multiple existing and planned mid-rise buildings that form the backdrop of these historic and visual resources. Moreover, as detailed above, the study area is currently undergoing significant redevelopment as a result of recent rezonings, including the construction of a 14-story building on Block 315 to the northwest of the Project Area and a nine-story building in the northern portion of Block 316 to the north of the Project Area, as well as two eight story buildings planned on Block 318 to the south of the Project Area. Thus, based on the increasingly residential and higher density character of the secondary study area and the high demand for housing in the surrounding area, the Proposed Development resulting from the Proposed Actions would be in line with the neighborhood context.

Illustrative Comparison of the No-Action vs. With-Action Conditions

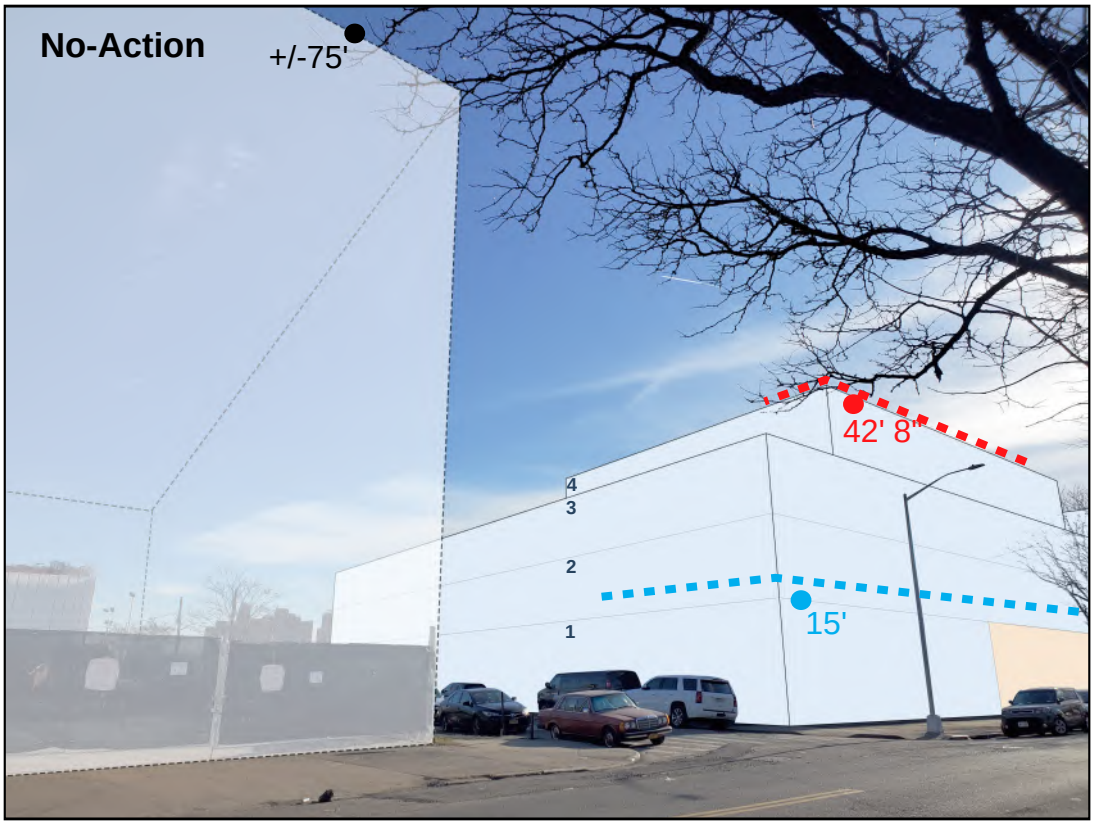


Maximum Permitted Base Height (18')
Proposed Base Height
Maximum Permitted Building Height (43')
Proposed Building Height
Approximate Adjacent Building Height



Maximum Permitted Base Height (78')
Proposed Base Height
Maximum Permitted Building Height (98')
Proposed Building Height
Approximate Adjacent Building Height

Illustrative Comparison of the No-Action vs. With-Action Conditions



Maximum Permitted Base Height (18') | Maximum Permitted Building Height (43') | Approximate Adjacent Building Height

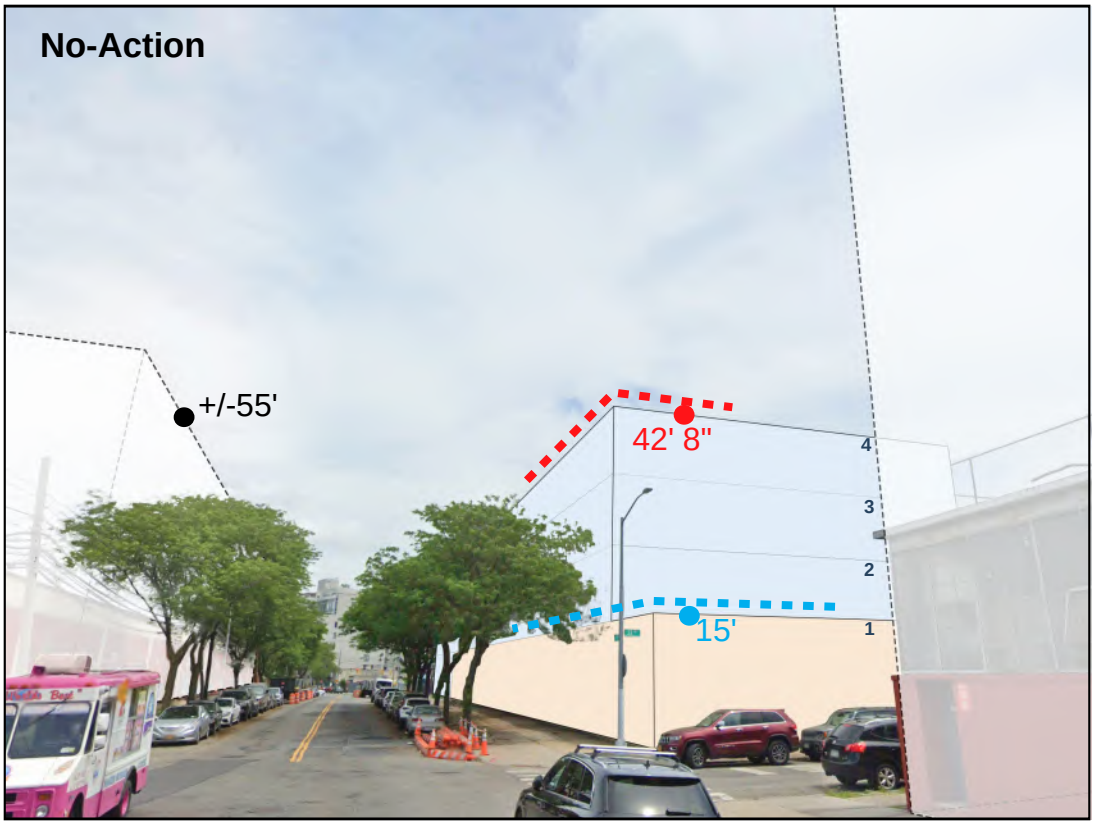
Proposed Base Height | Proposed Building Height



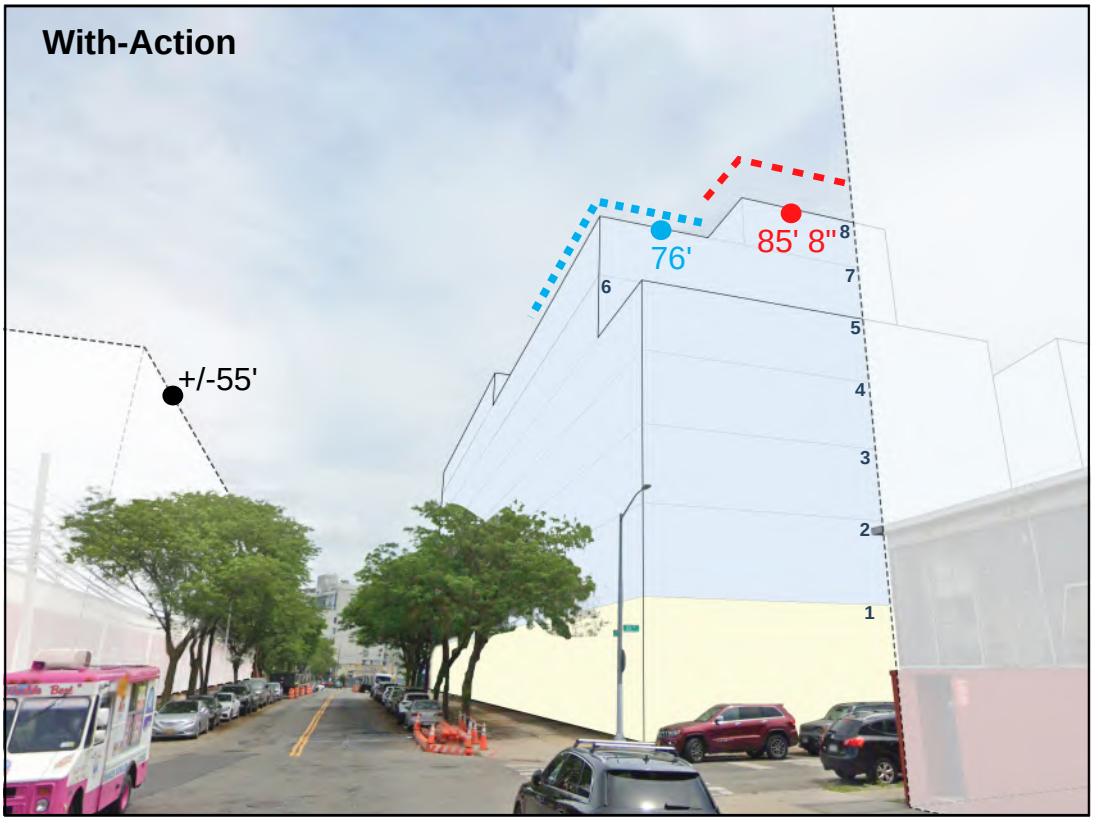
Maximum Permitted Base Height (78') | Maximum Permitted Building Height (98') | Approximate Adjacent Building Height

Proposed Base Height | Proposed Building Height

Illustrative Comparison of the No-Action vs. With-Action Conditions



Maximum Permitted Base Height (18')
Proposed Base Height
Maximum Permitted Building Height (43')
Proposed Building Height
Approximate Adjacent Building Height



Maximum Permitted Base Height (78')
Proposed Base Height
Maximum Permitted Building Height (98')
Proposed Building Height
Approximate Adjacent Building Height

Although the With-Action building would be four stories taller than the No-Action building and would also extend into Lots 16 and 18 in the northeast corner of the Project Area, these changes would not adversely affect any of the visual resources identified in the surrounding area. As the Proposed Development in the Project Area would be constructed on an existing block, the current viewsheds of the Manhattan skyline when looking southwest along Vernon Boulevard would not be obstructed. Moreover, as detailed in **Attachment F, "Historic and Cultural Resources,"** compared to No-Action conditions, the Proposed Development would not substantially change the visual setting of any surrounding historic resources so as to affect those characteristics that make them eligible for listing on the S/NR or designation as NYCLs.

The development facilitated by the Proposed Actions within the Project Area would represent a change in urban design as compared to what is permitted under existing zoning. However, this change would not negatively affect the pedestrian experience in the Project Area or secondary study area. Rather, it would represent the activation of underutilized parcels and streetscape with contextual and compatible mixed-use development. Visual resources would remain readily visible throughout the primary and secondary study areas. As such, the Proposed Actions would not have a significant adverse impact on urban design or visual resources within the Project Area or the secondary study area.

ATTACHMENT H:
NOISE

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in significant adverse noise impacts. As detailed in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum"** the Reasonable Worst Case Development Scenario ("RWCDS") facilitated by the Proposed Actions would generate approximately 13, 37, 34, and 44 incremental vehicle trips in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Therefore, operation of the Proposed Project would change traffic patterns and volumes in the general vicinity of the Project Area. As local vehicular traffic is a major source of ambient noise in the area surrounding the Project Area, vehicular traffic generated by the RWCDS facilitated by the Proposed Actions could lead to changes in the ambient noise levels. According to the 2021 *City Environmental Quality Review* ("CEQR") *Technical Manual*, if existing noise passenger car equivalent ("PCE") values are increased by 100 percent or more due to a proposed project (which is equivalent to an increase of 3 dBA or more) a detailed analysis is generally warranted. Conversely, if existing noise PCE values are not increased by 100 percent or more it is likely that a proposed project would not cause a significant adverse vehicular noise impact, and therefore no further vehicular noise analysis is needed.

The noise analysis for the Proposed Actions was carried out in compliance with 2021 *CEQR Technical Manual* guidelines and has two components:

1. A screening analysis to determine whether traffic generated by the Proposed Actions' RWCDS would have the potential to result in significant adverse noise impacts on existing receptors;
2. An analysis to determine the level of building attenuation necessary to ensure that interior noise levels for future development within the Project Area satisfy applicable interior noise criteria. This attachment does not include an analysis of mechanical equipment because such mechanical equipment would be designed to meet all applicable noise regulations and, therefore, would not result in adverse noise impacts.

II. ACOUSTICAL FUNDAMENTALS

Sound is a fluctuation in air pressure. Sound pressure levels ("SPLs") are measured in units called "decibels" ("dB"). The particular character of the sound that we hear (a whistle compared with a French horn, for example) is determined by the speed, or "frequency," at which the air pressure fluctuates, or "oscillates." Frequency defines the oscillation of sound pressure in terms of cycles per second. One cycle per second is known as one Hertz ("Hz"). People can hear over a relatively limited range of sound frequencies, generally between 20 Hz and 20,000 Hz, and the human ear does not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernible and, therefore, more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

"A"-Weighted Sound Level (dBA)

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human ear. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise. As shown in **Table H-1**, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a library, for example) are approximately 40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening as the scale approaches 130 dBA.

In considering these values, it is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the background noise in an office, at 50 dBA, is perceived as twice as loud as a library at 40 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 3 dBA, the change will be readily noticeable.

Table H-1: Noise Levels of Common Sources

Sound Source	SPL (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
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of hearing	0

Note: A change in 3 dBA is a just noticeable change in SPL. A change in 10 dBA is perceived as a doubling or halving of SPL.
Source: Cowan, James P. *Handbook of Environmental Acoustics*, Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

Noise Descriptors Used in Impact Assessment

As the SPL unit of 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., one 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. The Day-Night Sound Level (L_{dn}) refers to a 24-hour average noise level with a 10 dB penalty applied to the noise levels during the hours between 10 PM and 7 AM, due to increased sensitivity to noise levels during these hours. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are used to indicate noise levels that are exceeded 1, 10, 50, 90, and x percent of the time, respectively.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or

the background level by ten or more decibels. Thus, the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the L_{eq} is generally between L_{10} and L_{50}.

For purposes of the Proposed Actions, the maximum one-hour equivalent sound level ($L_{eq(1)}$) has been selected as the noise descriptor to be used in this noise impact evaluation. $L_{eq(1)}$ is the noise descriptor recommended for use in the 2021 *CEQR Technical Manual* for vehicular traffic and is used to provide an indication of highest expected sound levels. For dominant traffic noise, the one-hour L_{10} is the noise descriptor used in the 2021 *CEQR Technical Manual* noise exposure guidelines for city environmental impact review classification. As the Proposed Actions do not include federal sources of funding, only the required attenuation levels to meet CEQR noise guidelines are provided in this attachment.

III. APPLICABLE NOISE CODES AND NOISE STANDARDS AND CRITERIA

New York City Noise Code

The New York City Noise Control Code, which was enacted in December 2005 and became effective July 2007, defines "unreasonable and prohibited noise standards and decibel levels" for the City of New York. The Noise Code generally seeks to reduce ambient noise, prohibiting all unreasonable and unnecessary noise and addressing construction hours and activities. It also (1) establishes sound level standards for specific noise sources, such as motor vehicles, air compressors, and construction activities; (2) requires that all exhausts be muffled; and (3) prohibits all unnecessary noise adjacent to schools, hospitals, or courts. It specifies maximum allowable SPLs for designated octave bands emanating from a commercial or business enterprise as measured within a receiving property (such as a mixed-use and residential property). The Noise Code's enforcement is driven by complaints of violations.

New York CEQR Technical Manual Noise Standards

The 2021 *CEQR Technical Manual* sets external noise exposure standards, which are shown in **Table H-2** below. Noise exposure is classified into four categories based on the L_{10} or L_{dn}: Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable. The 2021 *CEQR Technical Manual* Noise Exposure Guidelines shown in **Table H-2** are guidelines, not a law. However, city reviewing agencies use the guidelines in determining potential impacts when a project comes under their review.

Table H-2: Noise Exposure Guidelines for Use in City Environmental Impact Review[1]

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]		$L_{10} \leq 55$ dB(A)	---------- DNL ≤ 60 dB(A) ----------		---------- 60 < DNL ≤ 65 dB(A) ----------		(1) 65 < DNL ≤ 75 dB(A)		---------- 75 dB(A) < DNL ----------
2. Hospital, Nursing Home		$L_{10} \leq 55$ dB(A)		$55 < L_{10} \leq 65$ dB(A)		$65 < L_{10} \leq 80$ dB(A)		$L_{10} > 80$ dB(A)	
3. Residence, residential hotel, or motel	7 AM to 10 PM	$L_{10} \leq 65$ dB(A)		$65 < L_{10} \leq 70$ dB(A)		$70 < L_{10} \leq 80$ dB(A)		$L_{10} > 80$ dB(A)	
	10 PM to 7 AM	$L_{10} \leq 55$ dB(A)		$55 < L_{10} \leq 70$ dB(A)		$70 < L_{10} \leq 80$ dB(A)		$L_{10} > 80$ dB(A)	
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 ("DEP"); 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 2021 *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 nursing homes.
3. One may use the Federal Aviation Administration- ("FAA-") approved DNL contours supplied by the Port Authority of New York and New Jersey ("PANYNJ"), or the noise contours may be computed from the federally approved Aviation Environmental Design Tool ("AEDT") Computer Model using flight data supplied by the PANYNJ.
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 bands).

The 2021 *CEQR Technical Manual* also defines attenuation requirements for buildings based on exterior noise levels (refer to **Table H-3**). For dominant traffic noise, recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential, hotel, or community facility uses and interior noise levels of 50 dBA or lower for commercial office uses and are determined based on exterior $L_{10(1)}$ noise levels.

Table H-3: Required Attenuation Values to Achieve Acceptable Interior Noise Level

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Aircraft[A]	65<DNL≤68	68<DNL≤71	71<DNL≤73	73<DNL≤75	75<DNL
Train	$65<L_{dn}\leq68$	$68<L_{dn}\leq71$	$71<L_{dn}\leq73$	$73<L_{dn}\leq75$	$75<L_{dn}$
Attenuation[B]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	See note[C]

Source: DEP; 2021 *CEQR Technical Manual*, Table 19-3.

Notes:

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.

C. The required attenuation value is the difference between L_{huild} and $L_{interior}$, using the appropriate noise descriptor

Where:

L_{build} is the projected noise level under the build condition rounded up to the whole number

$L_{interior}$ is the designed interior noise level (45 dBA for vehicular noise, 40 dBA for aircraft and train noise)

IV. METHODOLOGY

Noise Prediction Methodology

Future No-Action and With-Action noise levels were calculated using a proportional modeling technique, which is used as a screening tool to estimate changes in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the 2021 *CEQR Technical Manual*.

Using the proportional modeling 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 noise levels in the future without the Proposed Actions (the No-Action condition) and with the Proposed Actions (the With-Action condition). Vehicular traffic volumes are converted into noise PCE values, for which one medium-duty truck (cargo vehicles with two axles and six tires) is assumed to generate the noise equivalent of 13 cars, one heavy-duty truck (cargo vehicles with three or more axles) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles having two or three axles and designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

F NL - E NL = 10 * log10 (F PCE / E PCE)

where:

F NL = Future Noise Level
E NL = Existing Noise Level
F PCE = Future PCEs
E PCE = Existing PCEs

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 volume 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 dBA.

For the purpose of this analysis, during the noise recording, vehicles were counted and classified. To calculate the 2028 No-Action PCE values, an annual background growth rate of 0.5 percent (for 2024 to 2028)[1], plus the estimated travel demand from the No-Action condition (refer to **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum"** for the No-Action condition's estimated travel demand) was applied to the counted PCE values. In order to obtain the necessary 2028 With-Action PCE values to calculate the With-Action noise levels, the With-Action condition's estimated travel demand presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum,"** were converted into PCE values and added to the calculated No-Action PCE values.

Building Attenuation Analysis Procedure

In general, the following procedure was used in performing the 2021 *CEQR Technical Manual* building attenuation analysis:

- Noise receptor locations that have the greatest potential for being adversely affected by project-generated noise in the 2028 build year and the location of dominant sources of ambient noise were identified;
- Noise receptor locations were selected based on the following criteria: (1) locations where the highest noise levels are likely to occur based upon the consideration of existing land use patterns (e.g., locations near major commercial roadways, industrial uses, or stationary sources, etc.); and (2) along the future street frontage of the Project Area;
- Existing noise levels were determined through field measurements of ambient noise adjacent to the Project Area;
- Future (2028) noise levels without the Proposed Actions were predicted using the PCE-based proportionality equation (per 2021 *CEQR Technical Manual* guidelines) for all locations where traffic is the dominant source of noise and were based on the No-Action condition's estimated travel demand presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum;"**
- Future (2028) noise levels with the Proposed Actions were predicted using the PCE-based proportionality equation (per 2021 *CEQR Technical Manual* guidelines) based on the With-Action condition's estimated travel demand presented in **Appendix III, "Transportation Planning Factors and Travel Demand Forecast Technical Memorandum;"**
- Future (2028) noise levels with the Proposed Actions were compared with future noise levels without the Proposed Actions to determine, by applying 2021 *CEQR Technical Manual* impact criteria, whether the Proposed Actions would have the potential to result in a significant adverse impact;
- Noise levels were determined for exterior building façades at the Project Area; and
- In compliance with CEQR requirements to determine an acceptable interior space noise environment, façade-based composite window/wall attenuation specifications for the Project Area were estimated based on future projected maximum exterior noise exposure at the Project

[1] Growth rate according to Table 16-4 in the 2021 *CEQR Technical Manual.*

Area; CEQR requirements are based on the maximum L_{10} values for dominant traffic noise condition.

Impact Significance Criteria

According to 2021 *CEQR Technical Manual*, for the purposes of determining a significant impact during daytime hours, it is reasonable to consider a L_{eq} noise level of 65 dBA as an absolute noise level that should not be significantly exceeded. Therefore, a significant noise impact would occur at a noise receptor (i.e., residences, play areas, parks, schools, libraries, and houses of worship) during daytime hours under the following circumstances:

- A noise increase of 3 dBA or greater is predicted in the With-Action condition, when the future noise level in the No-Action condition is 62 dBA or greater; or
- When the No-Action noise level is below 62 dBA, a predicted With-Action noise increase that exceeds the difference between 65 dBA and the No-Action noise level. For example, if the No-Action noise level is 61 dBA, then the maximum noise increment with the Proposed Actions would be 4 dBA, since an increase higher than 4 dBA would result in a noise level that exceeds the 65 dBA L_{eq} significant impact threshold.
- Additionally, an increase of With-Action noise levels by 5 dBA over a No-Action noise level that is at or below 60 dBA would be considered significant.

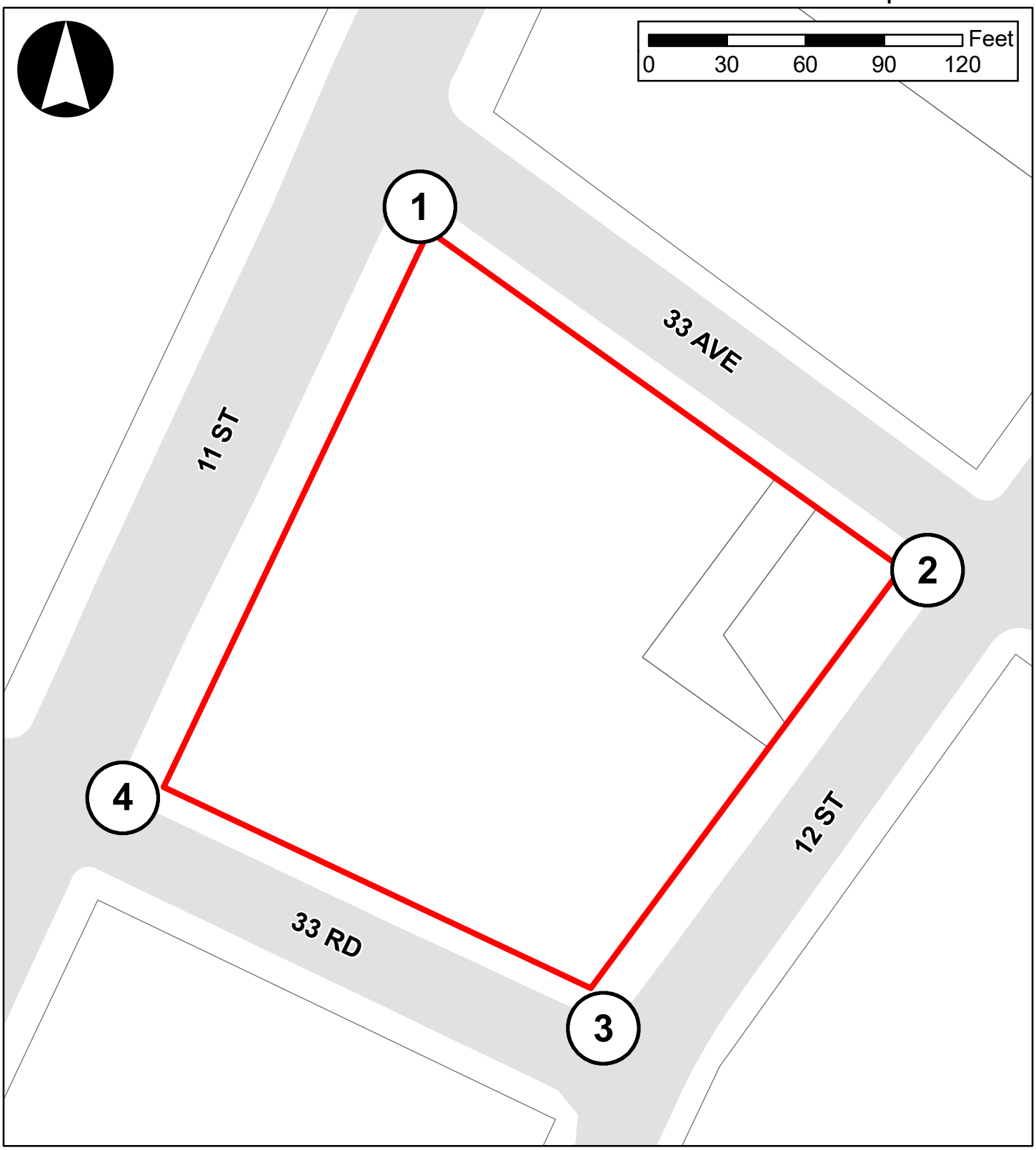
V. EXISTING NOISE LEVELS

According to the established RWCDS for the Proposed Actions, and as described in further detail in **Attachment A, "Project Description,"** the Project Area contains approximately 218 feet of total frontage along 33rd Avenue, 199 feet of frontage along 12th Street, 181 feet of frontage along 33rd Road and 236 feet of frontage along 11th Street. The Project Area has a total lot area of approximately 42,569 square feet (sf) of lot area, and is occupied by three single-story buildings containing a total of 45,151 gross square feet (gsf) of built area. Lot 1 has an area of 37,531 sf, is owned by the Catholic Mission Medical Board (CMMB, the Applicant), and is occupied by an approximately 39,896-gsf warehouse building operated as a medical distribution center by CMMB. Lots 16 and 18, neither of which are currently Applicant-owned, are located at the northeastern corner of the Project Area, and are both occupied by auto repair shops. Lot 16 has an area of 2,399 sf, and is L-shaped with frontages on 12th Street and 33rd Avenue. It is occupied by a single-story, approximately 2,645-gsf auto repair shop. The 2,640-sf Lot 18 is a corner lot with frontages on 33rd Avenue and 12th Street, and is similarly occupied by an auto-repair shop consisting of 2,270 square feet. In the With-Action condition, Lots 16 and 18 would be combined with the Applicant-owned Lot 1 to form the Project Area.

Noise Monitoring Locations

As traffic is the dominant source of noise in the vicinity of the Project Area, the receptor locations were selected based upon the assumption that the future development within the Project Area would be built to their respective lot lines. As such, existing noise levels at the Project Area were measured at four locations along the Project Area's frontages. These locations are shown in **Figure H-1** and described below:

Figure H-1
Noise Receptor Locations



- Receptor Location 1 – Northwestern corner of the Project Area at the intersection of 33rd Avenue and 11th Street.
- Receptor Location 2 – Northeastern corner of the Project Area at the intersection of 33rd Avenue and 12th Street.
- Receptor Location 3 – Southeastern corner of the Project Area at the intersection of 33rd Road and 12th Street.
- Receptor Location 4 – Southwestern corner of the Project Area at the intersection of 33rd Road and 11th Street.

At the four receptor locations, 20-minute spot measurements were performed during the weekday AM (8:00 – 9:00 AM) peak period, midday (12:00 – 1:00 PM) peak period, and PM (5:00 – 6:00 PM) peak period. The noise monitoring occurred on Thursday, January 11th, 2024. During the three measurements periods, the weather was primarily sunny and in the high-30s to mid-40s°F, with a wind speed range of six to 11 miles per hour. Additionally, vehicle classification counts were conducted during the 20-minute spot measurements, which were used in the proportional modeling analysis.

Equipment Used During Noise Monitoring

Measurements were performed using Brüel & Kjær Sound Level Meters ("SLM") Type 2250 and 2260, Brüel & Kjær ½-inch microphones Type 4189, and Brüel & Kjær Sound Level Calibrators Type 4231. The Brüel & Kjær SLMs are Type 1 instruments according to ANSI Standard S1.4- 1983 (R2006). The SLMs had a laboratory calibration date within one year of the time of use. For the four receptor locations, the microphones were mounted at a height of approximately five feet above the ground surface on a tripod and approximately six feet or more away from any large sound-reflecting surface to avoid major interference with sound propagation. The SLMs were calibrated before and after readings with a Brüel & Kjær Type 4231 Sound Level Calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (i.e., dBA). The data were digitally recorded by the SLMs and displayed at the end of the measurement period in units of dBA. Measured quantities included the L_{eq}, L_1, L_{10}, L_{50}, and L_{90} values, as well as ⅓-octave bands. A windscreen was used during all sound measurements except for calibration. All measurement procedures were based on the guidelines outlined in ANSI Standard S1.13-2005.

Existing Noise Levels at Receptor Locations

Measured Noise Levels

Noise monitoring results for Receptor Locations 1 through 4 are summarized in **Table H-4**. Traffic was the dominant noise source and the values shown reflect the level of vehicular activity on 11th Street and the other streets adjacent to the Project Area. Vehicular traffic volumes were counted during the noise recordings for each peak period and converted into hourly PCE values. It is important to note, however, that noise measurements during the AM and midday peak periods at Locations 1 and 2 were heavily impacted by the presence of ongoing construction immediately to the north of the Project Area at 11-01 Broadway (Queens Block 316, Lots 1 and 13). The relatively high L_{10} values for locations along the northern boundary of the Project Area are reflective of the nearby use of construction equipment, including chainsaws, excavators, and idling heavy trucks. The influence of construction equipment on existing noise measurements was taken into account when considering the potential for noise impacts, as will be discussed further below.

As shown in **Table H-4**, the results of the noise monitoring indicated that noise levels are generally highest during the weekday AM peak period. The highest measured L_{10} noise levels were observed at Receptor Location 2, measuring 72.6 dBA in the weekday AM peak period, falling into the "Marginally Unacceptable (I)" CEQR noise exposure category. Receptor Location 2 was the closest receptor to the ongoing construction, which was at its most active in the AM peak period. Similarly, noise levels at Location 1 were highest during the AM peak period, when an idling dump truck was situated near Location 1 for the entirety of the noise reading, thus resulting in an L_{10} of 69.6 within the "Marginally Acceptable" CEQR noise exposure category. Given that Locations 3 and 4 were situated further from ongoing construction, noise readings indicated L_{10} levels of 61.5 and 64.4, respectively, placing them in the "Acceptable" CEQR noise exposure category.

Table H-4: Existing Noise Levels (dBA)

Receptor[1]	Measurement Location	Time[2]	L_{eq}	L_1	L_{10}[3]	L_{50}	L_{90}	CEQR Noise Exposure Category
1	Intersection of 11th Street and 33rd Avenue	AM	67.1	76.2	**69.6**	64.5	62.6	Marginally Acceptable
		MD	64.2	76.0	67.1	57.8	52.6	
		PM	61.2	71.6	65.4	54.6	52.3	
2	Intersection of 12th Street and 33rd Avenue	AM	67.8	76.8	**72.6**	63.3	58.7	Marginally Unacceptable
		MD	61.9	69.5	65.1	58.8	56.6	
		PM	62.0	72.6	62.6	55.1	51.5	
3	Intersection of 12th Street and 33rd Road	AM	61.0	73.3	61.1	55.7	52.4	Acceptable
		MD	58.6	69.8	58.4	52.8	50.2	
		PM	60.0	71.0	**61.5**	53.7	51.4	
4	Intersection of 11th Street and 33rd Road	AM	61.3	71.3	64.2	57.2	52.8	Acceptable
		MD	61.8	71.5	**64.4**	58.0	54.5	
		PM	59.8	69.5	62.9	55.4	50.4	

Notes: Field measurements were performed by Philip Habib & Associates on Thursday, January 11th, 2024.
[1] Receptor locations are shown in **Figure H-1**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] The highest existing noise level at each receptor is indicated in **bold**.

Due to ongoing construction immediately to the north of the Project Area, noise measurements from Location 1 (AM period) and Location 2 (AM, MD, and PM periods) were not representative of expected noise levels. During the AM measurement period for Location 1, this was due to a nearby truck idling and loading for the entirety of the measurement interval, and at Location 2 this was due to ongoing use of construction equipment, such as chainsaws, drills, and generators. Therefore, data from the noise analysis conducted for the *Broadway and 11th Street Rezoning EAS* (CEQR No. 21DCP022Q) were utilized. Specifically, Location 3 from the noise analysis in the *Broadway and 11th Street Rezoning EAS* was utilized for Location 2 in this analysis, and data from Location 2 from the *Broadway and 11th Street Rezoning EAS* was utilized for the AM period of Location 1 in this analysis. These locations were selected due to their proximity to the respective monitoring locations utilized in this EAS's noise analysis, and are shown in **Figure H-2**. As shown in **Table H-5**, noise levels at those two locations were generally highest during the midday measurement period, with the highest L_{10} measurement for Location 2 at 65.6 dBA and the highest L_{10} measurement for Location 3 at 61.5 dBA. These measurements fall into the Marginally Acceptable and Acceptable categories, respectively.

Noise Monitoring Locations: Broadway and 11th Street Rezoning EAS
Source: CEQR #21DCP022Q, Page 112

Figure 2.9-1 – Noise Monitoring Location Map

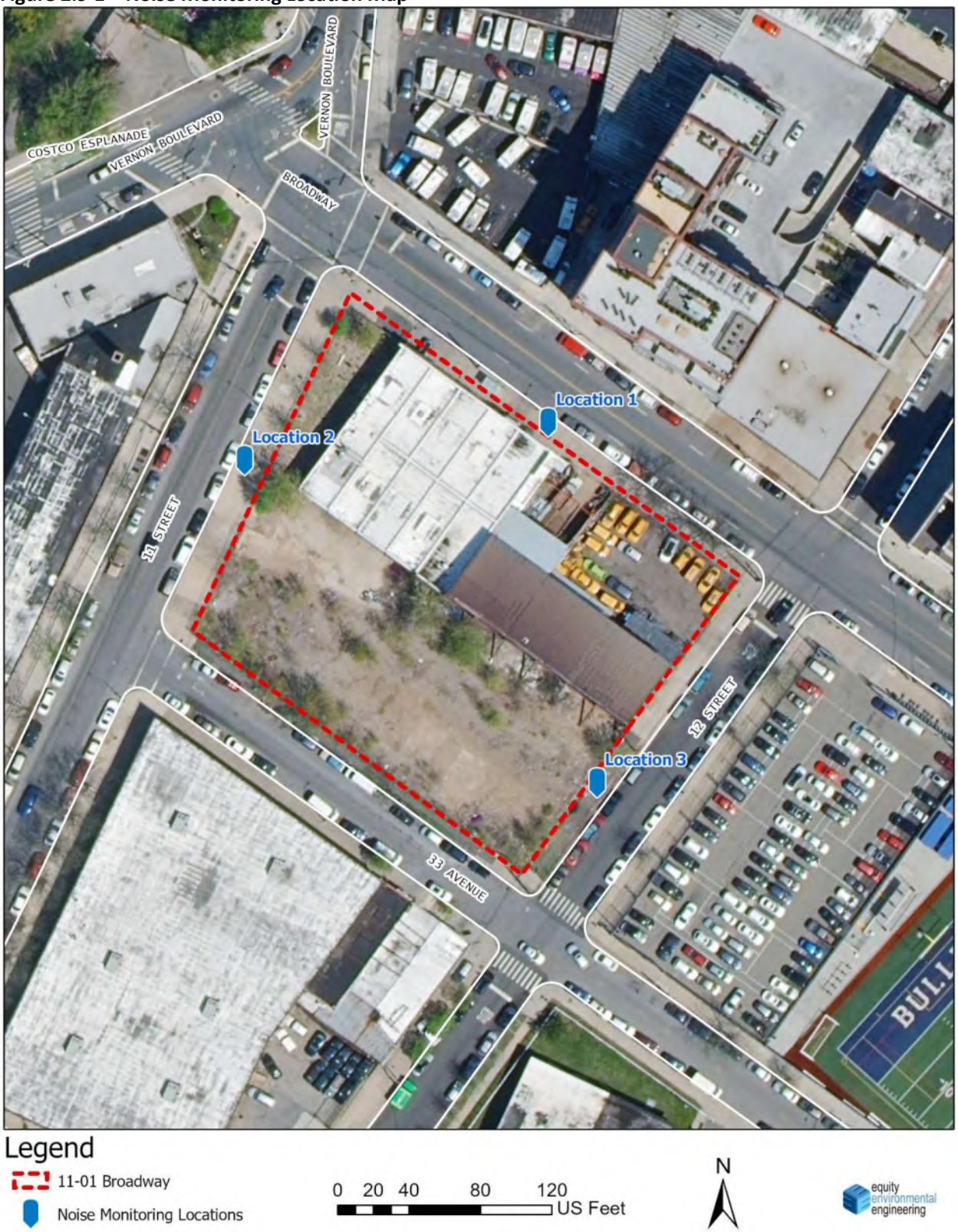


Table H-5: Existing Noise Levels (dBA) from *Broadway and 11th Street Rezoning EAS* (CEQR #21DCP022Q)

Receptor[1]	Measurement Location	Time[2]	L_{eq}	L_1	L_{10}[3]	L_{50}	L_{90}	CEQR Noise Exposure Category
2	11th Street midblock between Broadway and 33rd Avenue	AM	61.3	-	62.6	57.3	53.7	Marginally Acceptable
		MD	63.8	-	**65.6**	58.7	55.4	
		PM	59.9	-	62.9	55.7	53.8	
3	12th Street midblock between Broadway and 33rd Avenue	AM	57.6	-	59.5	54.1	50.4	Acceptable
		MD	59.5	-	**61.5**	52.6	50.1	
		PM	56.8	-	59.5	54.4	51.3	

Notes: Field measurements performed by Environmental Studies Corp. on September 10th, 2019.
[1] Receptor locations are shown in **Figure H-2**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] The highest existing noise level at each receptor is indicated in **bold**.

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

Mobile Source Noise Screening Analysis

In the future without the Proposed Actions (the No-Action condition), it is assumed that the Applicant-owned Lot 1 would be redeveloped on an as-of-right basis, and that the non-Applicant-owned Lots 16 and 18 would remain as existing. As a result, one new mixed-use building would be constructed on Applicant-owned Lot 1. In total, the 123,710-gsf No-Action development would contain approximately 59 DUs, 33,055 gsf of community facility (nonprofit office) space, and 63 accessory parking spaces. Catholic Medical Mission Board (the Applicant) would relocate its existing medical distribution facility from the Project Area to a new location. No other changes to the remaining lots within the Project Area are anticipated in the future without the Proposed Actions.

As such, traffic patterns and volumes under the No-Action condition are expected to differ from existing conditions. As traffic along the streets bordering the Project Area is the dominant source of noise at Receptor Locations 1 through 4, the change in traffic patterns is expected to affect the levels of ambient noise at those locations. Using the noise prediction methodology described in **Section IV** above, future noise levels in the No-Action condition were calculated for the three analysis periods for the 2028 build year. **Table H-6** shows the existing noise levels and calculated future No-Action condition noise levels at Receptor Locations 1 through 4.

Comparing future No-Action noise levels with existing noise levels, the increases in L_{eq} noise levels would range from a minimum of 0.3 dBA to a maximum of 1.2 dBA for all analysis periods. The maximum projected No-Action L_{10} noise levels at Receptor Location 1 would be 67.5 dBA and would remain in the "Marginally Acceptable" CEQR Noise Exposure category, as under existing conditions. The maximum projected L_{10} noise levels at Receptor Location 2 would be 62.7 dBA and would remain in the "Acceptable" CEQR Noise Exposure category, as under existing conditions. The maximum projected L_{10} noise levels at Receptor Location 3 would be 62.1 dBA and would remain in the "Acceptable" CEQR Noise Exposure category, as under existing conditions. The maximum projected L_{10} noise levels at Receptor Location 4 would be 64.7 dBA and would remain in the "Acceptable" CEQR Noise Exposure category, as under existing conditions. Compared to the existing conditions, there would not be a perceptible increase in noise levels (an increase of greater than 3 dBA) at any of the four noise receptor locations.

Table H-6: 2028 No-Action Condition Noise Levels and PCE Values (dBA)

Noise Receptor Location[1]	Time[2]	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change in L_{eq}[3]	No-Action L_{10}[4]	CEQR Noise Exposure Category
1	AM	927.0	1,026.7	61.3[5]	61.7	0.4	63.0	Marginally Acceptable
	MD	609.0	664.3	64.2	64.6	0.4	**67.5**	
	PM	270.0	326.4	61.2	62.0	0.8	66.3	
2	AM	261.0	347.3	57.6[6]	58.8	1.2	60.7	Acceptable
	MD	138.0	183.8	59.5[6]	60.7	1.2	**62.7**	
	PM	279.0	335.6	56.8[6]	57.6	0.8	60.3	
3	AM	381.0	469.7	61.0	61.9	0.9	62.0	Acceptable
	MD	315.0	364.3	58.6	59.2	0.6	59.1	
	PM	372.0	430.5	60.0	60.7	0.6	**62.1**	
4	AM	882.0	980.8	61.3	61.7	0.5	64.6	Acceptable
	MD	921.0	982.6	61.8	62.1	0.3	**64.7**	
	PM	366.0	424.4	59.8	60.5	0.6	63.5	

Notes:
Values are rounded to the nearest 0.1 dBA.
[1] Receptor locations are shown in **Figure H-1**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] Change in L_{eq} = No-Action L_{eq} – Existing L_{eq}.
[4] The highest No-Action noise level at each receptor is indicated in **bold**.
[5] Sourced from Location 2 measurements in *Broadway and 11th Street Rezoning EAS*, refer to **Table H-5.**
[6] Sourced from Location 3 measurements in *Broadway and 11th Street Rezoning EAS*, refer to **Table H-5**.

VII. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

In the future with the Proposed Actions (the With-Action condition), the requested zoning map amendment and zoning text amendment would be approved, allowing the Applicant to construct the Proposed Project in the Project Area. Under the RWCDS, the Proposed Project comprises a new mixed-use building containing approximately 227 DUs, 13,346 gsf of retail space, 5,118 gsf of community facility (nonprofit office) space, 20,485 gsf of warehouse space, and 70 accessory parking spaces. No other development is expected to occur as a result of the Proposed Actions.

Mobile Source Noise Screening Analysis

Using the methodology described in **Section IV**, future noise levels in the With-Action condition were calculated for the three analysis periods for the 2028 build year, which are presented in **Table H-7**. As presented in the table, after accounting for additional traffic introduced by the Proposed Actions' RWCDS, the maximum projected L_{10} noise level at Location 1 in the With-Action condition would be 67.9 dBA during the weekday AM peak period, which would remain in the "Marginally Acceptable" CEQR Noise Exposure category. The maximum projected L_{10} noise level at Receptor Location 2 would be 64.0 dBA during the weekday MD peak period, which would remain in the "Acceptable" CEQR Noise Exposure category. The maximum projected L_{10} noise level at Receptor Location 3 would be 62.7 dBA during the weekday PM peak period, which would remain in the "Acceptable" CEQR Noise Exposure category. The maximum projected L_{10} noise level at Receptor Location 4 would be 64.9 dBA during the weekday MD peak period, which would remain in the "Acceptable" CEQR Noise Exposure category.

Table H-7: 2028 No-Action and With-Action Condition Noise Levels and PCE Values (dBA)

Noise Receptor Location[1]	Time[2]	No-Action PCEs	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change in L_{eq}[3]	With-Action L_{10}[4]	CEQR Noise Exposure Category
1	AM	1,026.7	1,063.7	61.7	61.9	0.2	63.2	Marginally Acceptable
	MD	664.3	725.3	64.6	65.0	0.4	**67.9**	
	PM	326.4	384.4	62.0	62.7	0.7	67.0	
2	AM	347.3	384.3	58.8	59.3	0.4	61.2	Acceptable
	MD	183.8	244.8	60.7	62.0	1.2	**64.0**	
	PM	335.6	393.6	57.6	58.3	0.7	61.0	
3	AM	469.7	506.7	61.9	62.2	0.3	62.3	Acceptable
	MD	364.3	425.3	59.2	59.9	0.7	59.7	
	PM	430.5	488.5	60.7	61.2	0.5	**62.7**	
4	AM	980.8	1,017.8	61.7	61.9	0.2	64.8	Acceptable
	MD	982.6	1,043.6	62.1	62.3	0.3	**64.9**	
	PM	424.4	482.4	60.5	61.0	0.6	64.1	

Notes:
Values are rounded to the nearest 0.1 dBA.
[1] Receptor locations are shown in **Table H-1**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] Change in L_{eq} = With-Action L_{eq} – No-Action L_{eq}.
[4] The highest With-Action noise level at each receptor is indicated in **bold**.

Comparing the future With-Action noise levels with No-Action noise levels, increases in L_{eq} noise levels would range from less than 0.2 to 1.2 dBA. Compared with the No-Action condition, increases of these magnitudes would not be perceptible as they are less than 3 dBA, and based upon CEQR impact criteria would not be significant. As the noise levels at all locations would experience changes less than the CEQR impact thresholds described in **Section IV** above in all peak periods, the overall changes to noise levels as a result of the Proposed Actions would not result in any significant adverse noise impacts.

VIII. NOISE ATTENUATION REQUIREMENTS

As shown in **Table H-3**, the 2021 *CEQR Technical Manual* has noise attenuation guidance for buildings based on exterior noise levels. For dominant traffic noise, recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential uses and interior noise levels of 50 dBA or lower for commercial office uses and are determined based on exterior L_{10} noise levels.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Typically, a building façade is composed of the wall, windows, and any vents or louvers for heating, ventilation, and air conditioning ("HVAC") systems in various ratios of area. Window/Wall attenuation can be described in terms of sound transmission class ("STC"), transmission loss ("TL"), and outdoor-indoor transmission class ("OITC"). Although these terms are sometimes used interchangeably, they are unique from each other. Transmission loss refers to how many decibels of sound a façade (wall) or façade accessory (window or door) can stop at a given frequency. The TL for a given construction material varies with the individual frequencies of the noise.

To simplify the noise attenuation properties of a wall, the STC rating was developed. It is a single number that describes the sound isolation performance of a given material for the range of test frequencies between 125 and 4,000 Hz. These frequencies sufficiently cover the range of human speech. Higher STC

values reflect greater efficiencies to block airborne sound. HUD uses the STC when identifying the required sound attenuation for a façade.

The OITC is similar to the STC, except that it is weighted more towards the lower frequencies associated with aircraft, rail, and truck traffic. The OITC classification is defined by the American Society of Testing and Materials (ASTM E1332-90 [Reapproved 2003]) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise. DEP uses the OITC when identifying the required sound attenuation for a façade.

For dominant traffic noise, all façades that would experience an L_{10} of 70 dBA or greater must provide an alternate means of ventilation ("AMV") permitting a closed window condition during warm weather. This can be achieved by installing double-glazed windows on a heavy frame for masonry structures or windows consisting of laminated glass, along with AMV such as central air conditioning, through-wall sleeve-fitted air conditioners, packaged terminal air conditioning ("PTAC") units, trickle vents integrated into window frames, or other approved means. Where the required window/wall attenuation is above 40 dBA, special design features may be necessary that go beyond the normal double-glazed window and air conditioning. These may include specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.) and additional building insulation.

Noise Attenuation Measures

Based on With-Action exterior noise levels and 2021 *CEQR Technical Manual* criteria, With-Action noise levels at none of the receptors would exceed CEQR noise thresholds, given they all fall below the "Marginally Unacceptable" limit of 70.0 dBA. Maximum With-Action L_{10} noise levels at Receptor Locations 2, 3, and 4 would remain in the "Acceptable" category, and Receptor Location 1 would remain in the "Marginally Acceptable" category.

Given that the With-Action L_{10} noise levels during the impacted peak hours would be less than 70 dBA, interior noise levels at these receptors would remain below the CEQR interior noise level guideline of 45 dBA for residential/community facility uses. Therefore, the cumulative mobile source noise impact within the vicinity of the Project Area is not considered a significant adverse noise impact, and no further noise analyses are warranted. However, the minimum 35 dBA of façade attenuation and the requirement for an alternate means of ventilation included in ZR Section 123-32, as enforced by the New York City Department of Buildings (DOB), still apply. Further study under the purview of OER would be required to alter the attenuation requirements. Regardless of the final attenuation requirement, requirements of ZR Section 123-32 would be sufficient to ensure acceptable interior noise levels at all DUs. Therefore, no significant adverse noise impacts would occur.

IX. 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.

Train Noise

An initial train noise impact screening analysis would be warranted if a new receptor would be located within 1,500 feet of existing rail activity and have a direct line of sight to that activity. Given the nearest rail line, the elevated N and W subway lines, are over 3,000 feet from the Project Area, no initial train noise impact screening analysis is warranted for the Proposed Actions.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the Proposed Actions would either generate or reroute aircraft or introduce new receptor(s) that would be located within a 65 dBA DNL contour. Since the Proposed Actions would not generate or reroute aircraft, and as the Project Area is not located within a 65 dBA DNL contour, no initial aircraft noise impact screening analysis is warranted for the Proposed Actions.

ATTACHMENT I
TRANSPORTATION

I. INTRODUCTION

This attachment describes and assesses the transportation characteristics and effects of two discretionary actions (the "Proposed Actions") that would affect the entirety of Queens Block 317, which includes three lots: Lot 1, Lot 16, and Lot 18 ("Project Area") in the Ravenswood neighborhood of Queens Community District 1 (**Figure I-1)**. Specifically, the Proposed Actions include a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (MX-23 Special Mixed-Use district) and a zoning text amendment to designate the Project Area as a Mandatory Inclusionary Housing ("MIH") area.

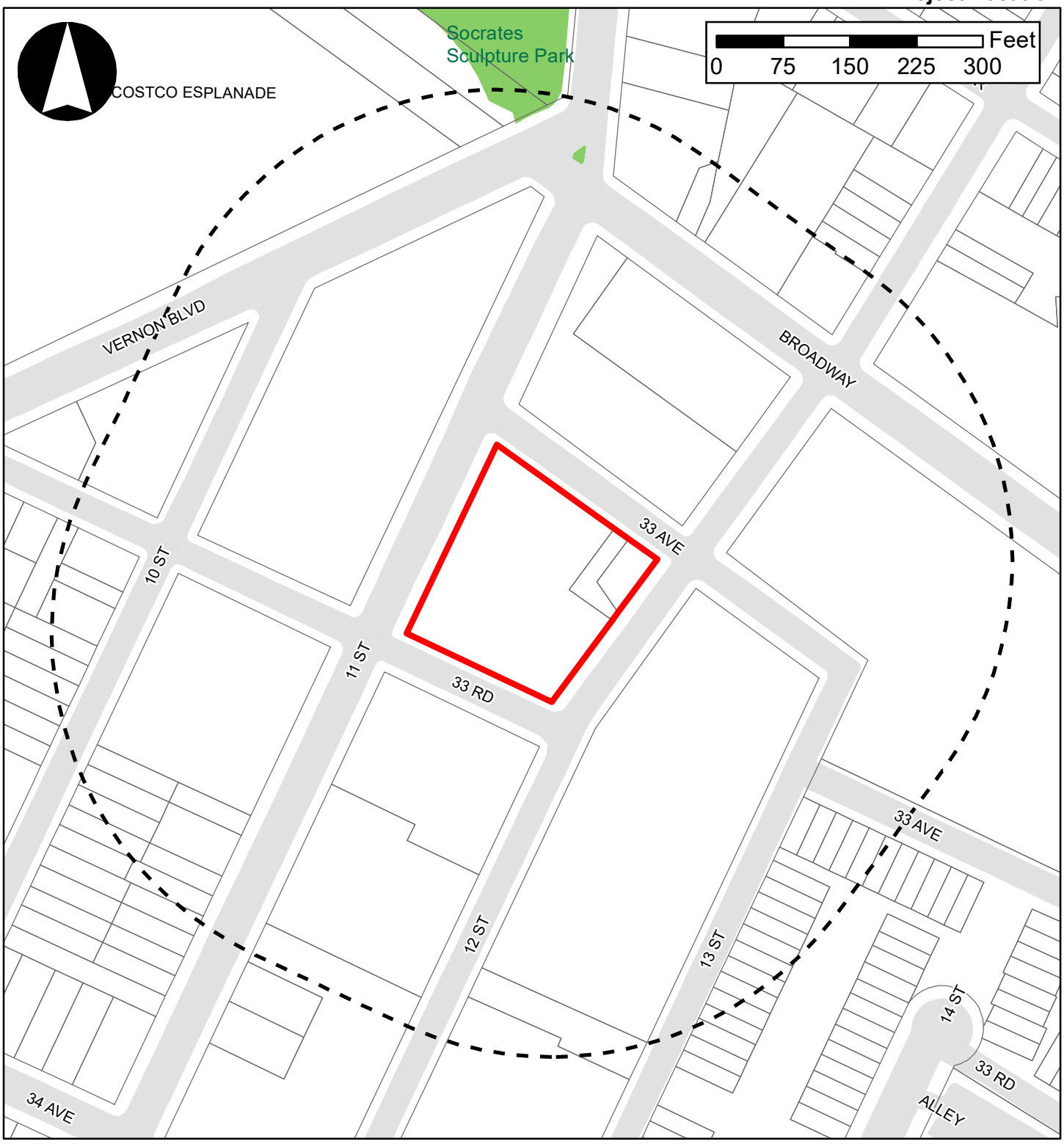
The Proposed Actions, which are discretionary public actions subject to both the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR), would combine the non-Applicant owned Lots 16 and 18 with the Applicant-owned Lot 1 into a single zoning lot. This would allow the development of a new eight-story, approximately 267,442 gross square feet (gsf) mixed-use building on the Project Area, including approximately 178,134 gsf residential space (227 total dwelling units [DUs], of which approximately between 57 [25%] and 69 [30%] would be affordable under depending on the MIH option chosen), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space (the "Proposed Development"). Additionally, the building would contain approximately 50,360 gsf of storage, mechanical, and parking area, including 70 below-grade parking spaces. It is anticipated that construction on the Proposed Development would be completed by 2028.

In order to assess the potential effects of the Proposed Actions, a Reasonable Worst-Case Development Scenario (RWCDS) for both "future without the Proposed Actions" (No-Action) and "future with the Proposed Actions" (With-Action) conditions are analyzed for an analysis year of 2028. In the future without the Proposed Actions (the No-Action condition), it is anticipated that the Applicant would demolish the existing one-story, 39,896 gsf warehouse building on Lot 1 and redevelop the site with a new four-story, 123,710 gsf mixed-use residential and community facility building containing approximately 50,125 gsf of residential space (59 market-rate DUs), approximately 33,055 gsf of community facility (nonprofit office) space, and approximately 40,530 gsf of parking and mechanical area with 63 accessory parking spaces in the cellar accessible via an existing curb cut on 33rd Avenue.

Additionally, without approval of the Proposed Actions, Lots 16 and 18 would not be combined with the Applicant-owned Lot 1. As such, the existing auto repair uses (totaling approximately 5,256 gsf) are expected to remain on those lots, and no development would occur on the non-Applicant-owned Lots 16 and 18 in absence of the Proposed Actions.

In the future with the Proposed Actions (With-Action condition), the proposed zoning map and zoning text amendments would be approved. As such, Lots 16 and 18 would be combined with the Applicant-owned Lot 1 into a single zoning lot. The Applicant would demolish the existing uses and construct the Proposed Development: an approximately 267,442 gsf mixed-use building including approximately

Figure I-1
Project Location



Legend

- 400-Foot Radius
- Project Site
- Water
- Open Space



178,134 gsf of residential space (227 total DUs), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 accessory parking spaces in a below-grade garage accessed via an existing curb cut along 33rd Avenue.

It is also anticipated that in the future with the Proposed Actions, Catholic Medical Mission Board ("CMMB") would re-occupy the community facility and warehouse space in the Proposed Development and continue to operate a medical distribution center, as it does in the existing conditions.

As shown in **Table I-1**, for the purposes of transportation forecasting, compared to the No-Action condition, the Proposed Actions would result in a net incremental increase of 128,009 gsf of residential uses (approximately 168 DUs), approximately 13,346 gsf of local retail uses, and approximately 20,485 gsf of warehouse space as well as a net reduction of approximately 27,938 gsf of community facility space and approximately 5,256 gsf of auto repair uses, compared to the No-Action condition. The Proposed Actions would also result in a net incremental increase of approximately seven accessory parking spaces.

TABLE I-1: 2028 Comparison of No-Action and With-Action Development Scenarios

Land Use	No-Action	With-Action	Increment
Residential (gsf)	50,125	178,134	+128,009
Residential (DUs)	59	227	+168
Local Retail (gsf)	0	13,346	+13,346
Community Facility – Nonprofit Office (gsf)	33,055	5,118	-27,938
Auto Repair (gsf)	5,256	0	-5,256
Warehouse (gsf)	0	20,485	+20,485
Accessory Parking Spaces	63	70	+7

II. PRELIMINARY ANALYSIS METHODOLOGY

The *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, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the numbers of person and vehicle trips attributable to the Proposed Actions. According to the *CEQR Technical Manual*, if the Proposed Actions are expected to result in fewer than 50 vehicle or ferry trips in each peak hour 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 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 show that the Proposed Actions 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, 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, ferry, pedestrians, vehicular and pedestrian safety, and parking.

III. LEVEL 1 SCREENING ASSESSMENT

In accordance with *CEQR Technical Manual* guidance, a Level 1 trip generation screening assessment was conducted to estimate the number of person and vehicle trips by mode expected to be generated by the Proposed Actions during the weekday AM, midday, and PM peak hours, and Saturday peak hour. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday (typical peak periods for retail demand). The person and vehicle trip estimates were then compared to the *CEQR Technical Manual* analysis thresholds to determine if a Level 2 screening and/or quantified operational analyses may be warranted. The travel demand assumptions used for the assessment are discussed below and a detailed travel demand forecast is provided.

Transportation Planning Factors

The trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies, and truck trip factors used to forecast travel demand for the RWCDS's residential, local retail, community facility, auto body repair, and warehouse uses are summarized in **Table I-2**. They were based on factors cited in the 2021 *City Environmental Quality Review (CEQR) Technical Manual;* 2012-2016 American Association of State Highway Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data and 2015-2019 American Community Survey (ACS) journey-to-work data for Queens census tracts in proximity to the Project Site (tracts 39, 43, 45, 77, 81, and 85); and factors developed for recent environmental reviews. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Residential

Residential person trip rates, temporal distribution, and directional in/out splits reflect data from the 2021 *CEQR Technical Manual*. Modal split and auto occupancy were based on 2015-2019 5-year ACS journey-to-work data for Queens Census Tracts 39, 43, 45, 77, 81, and 85, and taxi vehicle occupancy was based on data from the 2022 *Innovation QNS Rezoning and LSGD FEIS*. The modal splits based are on the ACS journey-to-work data were conservatively assumed for all periods. Truck generation rates and temporal distributions reflect those cited in the 2021 *CEQR Technical Manual*.

Local Retail

The trip generation rates, temporal distributions, modal splits, and in/out splits for local retail reflect data from the 2021 *CEQR Technical Manual*. The vehicle occupancy rates for local retail were based on data provided by the New York City Department of Transportation (NYCDOT). Truck trip generation rates and

temporal distributions were based on data from the 2021 *CEQR Technical Manual*. There was no linked / pass-by trip credit applied to the local retail use.

Community Facility (Non-Profit Office)

The trip generation rates, temporal distributions, and directional in/out splits for the non-profit office community facility use reflect data from the 2021 *CEQR Technical Manual*. Modal splits for the weekday AM, weekday PM, and Saturday periods, as well as auto occupancy for all periods, were based on 2012-2016 AASHTO CTPP reverse-journey-to-work data for Queens census tracts 39, 43, 45, 77, 81, and 85. Weekday midday modal splits and taxi occupancy for all periods were based on data from the 2022 *Innovation QNS Rezoning and LSGD FEIS*. Truck generation rates and temporal distributions reflect those cited in the 2021 *CEQR Technical Manual*.

Auto Body Repair

The trip generation rates, temporal distributions, modal splits, directional in/out splits, auto and taxi occupancies, truck generation rates, and truck temporal distributions are based on data from the 2015 *East New York Rezoning Proposal FEIS*.

Warehouse

The trip generation rates, temporal distributions, and directional in/out splits are based on data provided by NYCDOT. Modal splits for all periods and auto occupancy are based on 2012-2016 AASHTO CTPP reverse-journey-to-work data for Queens census tracts 39, 43, 45, 77, 81, and 85. Taxi occupancy, truck generation rates, and truck temporal distributions are also based on data provided by NYCDOT.

TABLE I-2: Transportation Planning Factors

Land Use:	Residential	Local Retail		Non-Profit Office		Auto Body Repair		Warehouse	
Trip Generation:	(1)	(1)		(1)		(6)		(4)	
Weekday	8.18	329		18		19.42		2.36	
Saturday	9.08	358		3.9		19.42		0.20	
	per DU	per 1,000 gsf		per 1,000 gsf		per 1,000 gsf		per 1,000 gsf	
Temporal Distribution:	(1)	(1)		(1)		(6)		(4)	
AM	9.3%	4.8%		12.4%		13.2%		10.0%	
Midday	5.6%	8.0%		11.0%		11.0%		9.0%	
PM	8.5%	10.9%		10.5%		14.2%		11.0%	
Saturday	8.4%	11.7%		14.1%		10.7%		33.0%	
Modal Splits:	(2)	(1)		(3)(5)		(6)		(5)	
	All Periods	Weekday	Weekend	AM/PM/SAT	MD	All Periods		All Periods	
Auto	22.9%	11.0%	8.0%	54.7%	2.0%	85.0%		54.7%	
Taxi	0.8%	0.0%	0.0%	0.2%	1.0%	5.0%		0.2%	
Subway/Rail	53.4%	4.0%	7.0%	26.4%	7.0%	1.0%		26.4%	
Transit Bus	6.9%	3.0%	4.0%	8.4%	7.0%	1.0%		8.4%	
Ferry	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	
Bike	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	
Walk/Other	11.5%	82.0%	81.0%	10.2%	83.0%	8.0%		10.2%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	
In/Out Splits:	(1)	(1)		(1)		(6)		(4)	
	In Out	In	Out	In	Out	In	Out	In	Out
AM	22% 78%	52%	48%	86%	14%	65%	35%	77.0%	23.0%
Midday	50% 50%	50%	50%	52%	48%	50%	50%	53.0%	47.0%
PM	62% 38%	50%	50%	16%	84%	50%	50%	27.0%	73.0%
Saturday	55% 45%	50%	50%	48%	52%	50%	50%	64.0%	36.0%
Vehicle Occupancy:	(2)(3)	(4)		(3)(5)		(6)		(5)(4)	
	All Periods	All Periods		All Periods		All Periods		All Periods	
Auto	1.11	1.40		1.09		1.30		1.09	
Taxi	1.40	1.40		1.42		1.30		1.30	
Truck Trip Generation:	(1)	(1)		(1)		(6)		(4)	
Weekday	0.06	0.35		0.32		0.89		0.91	
Saturday	0.02	0.04		0.01		0.89		0.08	
	per DU	per 1,000 gsf		per 1,000 sf		per 1,000 gsf		per 1,000 sf	
Truck Temporal Distribution:	(1)	(1)		(1)		(6)		(4)	
AM	12.0%	8.0%		10.0%		14.0%		9.9%	
MD	9.0%	11.0%		11.0%		9.0%		8.0%	
PM	2.0%	2.0%		2.0%		1.0%		7.0%	
Saturday	9.0%	11.0%		11.0%		0.0%		28.0%	
Truck Directional Distribution:	In Out	In	Out	In	Out	In	Out	In	Out
AM	50% 50%	50%	50%	50%	50%	50%	50%	67%	33%
MD	50% 50%	50%	50%	50%	50%	50%	50%	57%	43%
PM	50% 50%	50%	50%	50%	50%	50%	50%	60%	40%
Saturday	50% 50%	50%	50%	50%	50%	50%	50%	42%	58%

Notes:
(1) 2021 *City Environmental Quality Review (CEQR) Technical Manual*.
(2) 2015-2019 ACS journey-to-work data for Queens Census Tracts 39, 43, 45, 77, 81, and 85.
(3) Based on data from the 2022 *Innovation QNS Rezoning & LSGD FEIS*.
(4) Based on data provided by NYCDOT.
(5) Based on AASHTO CTPP Reverse journey-to-work 5-year (2012-2016) data for Queens census tracts 39, 43, 45, 77, 81, and 85.
(6) Based on data from 2015 *East New York Rezoning Proposal FEIS*.

Travel Demand Forecast

Table I-3 provides the person and vehicle trips expected to result from the Proposed Actions for each user type, respectively. As shown in **Table I-3**, compared to the No-Action condition, the Proposed Action would generate a net increase of approximately 269 person trips (in + out combined) in the weekday AM peak hour, 366 trips in the weekday midday peak hour, 536 trips in the weekday PM peak hour, and 663 trips in Saturday peak hour. As summarized in **Table I-4**, peak hour vehicle trips (including auto, taxi and truck trips) would increase by a net total of approximately 14, 37, 34, and 44 during the weekday AM, midday, PM, and Saturday peak hours, respectively. Subway demand would increase by approximately 59, 50, 70, and 105 trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. Bus demand would increase by approximately 10, 12, 18, and 29 trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. Lastly, trips made entirely on foot (walk-only trips) or by other non-motorized modes would increase by approximately 250, 317, 490, and 604 during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Bike trips would add approximately five, four, three, and four trips in the weekday AM, midday, and PM and Saturday peak hours, respectively.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if the Proposed Actions would result in 50 or more vehicle trip-ends in a peak hour at one or more intersections. As summarized in **Table I-4**, under the Proposed Actions there would be net increases of 14, 37, 34, and 44 vehicle trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. As the numbers of trips would not potentially exceed the 50-trip *CEQR Technical Manual* threshold in any peak hour, further traffic analysis is not warranted. Therefore, significant adverse impacts to nearby intersections are not expected to occur under the Proposed Actions, and a detailed analysis of traffic conditions is not warranted based on *CEQR Technical Manual* guidance.

Table I-3: Travel Demand Forecast

Land Use:		Local Retail		Residential		Non-Profit Office		Auto Body Repair		Warehouse			
Size/Units:		13,346 gsf		168 DUs		-27,937 gsf		-5,256 gsf		20,485 gsf			
Peak Hour Trips:												Total Trips	
	AM	212		128		-63		-13		5		269	
	Midday	352		76		-55		-11		4		366	
	PM	480		117		-52		-14		5		536	
	Saturday	560		128		-15		-11		1		663	
Person Trips:													
AM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	12	12	7	22	-29	-4	-7	-4	2	2	-15	28
	Taxi	0	0	0	1	0	0	0	0	0	0	0	1
	Subway	4	4	15	53	-15	-3	0	0	1	0	5	54
	Public Bus	3	3	2	7	-4	-1	0	0	0	0	1	9
	Ferry	0	0	0	1	0	0	0	0	0	0	0	1
	Bike	0	0	1	4	0	0	0	0	0	0	1	4
	Walk/Other	90	84	3	12	-6	-1	-2	0	0	0	85	95
	Total	109	103	28	100	-54	-9	-9	-4	3	2	77	192
Midday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	19	19	9	9	-1	-1	-6	-5	1	1	22	23
	Taxi	0	0	0	0	0	0	0	0	0	0	0	0
	Subway	7	7	19	19	-2	-2	0	0	1	1	25	25
	Public Bus	5	5	3	3	-2	-2	0	0	0	0	6	6
	Ferry	0	0	1	1	0	0	0	0	0	0	1	1
	Bike	0	0	2	2	0	0	0	0	0	0	2	2
	Walk/Other	145	145	4	4	-23	-22	0	0	0	0	126	127
	Total	176	176	38	38	-28	-27	-6	-5	2	2	182	184
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	26	26	16	10	-4	-24	-6	-6	2	2	34	8
	Taxi	0	0	1	0	0	0	0	0	0	0	1	0
	Subway	10	10	40	24	-3	-12	0	0	0	1	47	23
	Public Bus	7	7	5	3	-1	-3	0	0	0	0	11	7
	Ferry	0	0	1	1	0	0	0	0	0	0	1	1
	Bike	0	0	2	1	0	0	0	0	0	0	2	1
	Walk/Other	197	197	8	5	-1	-4	-1	-1	0	0	203	197
	Total	240	240	73	44	-9	-43	-7	-7	2	3	299	237
Saturday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	22	22	15	12	-4	-4	-6	-5	1	0	28	25
	Taxi	0	0	1	1	0	0	0	0	0	0	1	1
	Subway	20	20	38	31	-2	-2	0	0	0	0	56	49
	Public Bus	11	11	5	4	-1	-1	0	0	0	0	15	14
	Ferry	0	0	1	1	0	0	0	0	0	0	1	1
	Bike	0	0	2	2	0	0	0	0	0	0	2	2
	Walk/Other	227	227	8	7	-1	0	0	0	0	0	234	234
	Total	280	280	70	58	-8	-7	-6	-5	1	0	337	326
Vehicle Trips :		Local Retail		Residential		Non-Profit		Auto Body Repair		Warehouse		Total Trips	
AM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	9	9	6	20	-26	-4	-5	-3	2	2	-14	24
	Taxi	0	0	0	1	0	0	0	0	0	0	0	1
	Taxi (Balanced)	0	0	1	1	0	0	0	0	0	0	1	1
	Truck	0	0	1	1	-1	-1	0	0	1	1	1	1
	Total	9	9	8	22	-27	-5	-5	-3	3	3	-12	26
Midday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	14	14	8	8	-1	-1	-5	-4	1	1	17	18
	Taxi	0	0	0	0	0	0	0	0	0	0	0	0
	Taxi (Balanced)	0	0	0	0	0	0	0	0	0	0	0	0
	Truck	0	0	1	1	-1	-1	0	0	1	1	1	1
	Total	14	14	9	9	-2	-2	-5	-4	2	2	18	19
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	19	19	15	9	-4	-22	-5	-5	2	2	27	3
	Taxi	0	0	1	0	0	0	0	0	0	0	1	0
	Taxi (Balanced)	0	0	1	1	0	0	0	0	0	0	1	1
	Truck	0	0	0	0	0	0	0	0	1	1	1	1
	Total	19	19	16	10	-4	-22	-5	-5	3	3	29	5
Saturday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	16	16	14	10	-4	-4	-5	-4	1	0	22	18
	Taxi	0	0	1	1	0	0	0	0	0	0	1	1
	Taxi (Balanced)	0	0	2	2	0	0	0	0	0	0	2	2
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	16	16	16	12	-4	-4	-5	-4	1	0	24	20

Notes: A 0% pass-by trip credit was applied to the local retail use.

TABLE I-4: Trip Generation Increment Summary

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Bus			Ferry			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	-12	26	14	5	54	59	1	9	10	0	1	1	85	95	180	91	159	250
Midday	18	19	37	25	25	50	6	6	12	1	1	2	126	127	253	158	159	317
PM	29	5	34	47	23	70	11	7	18	1	1	2	203	197	400	262	228	490
Saturday	24	20	44	56	49	105	15	14	29	1	1	2	234	234	468	306	298	604

Notes:
(1) Includes auto, taxi, and truck trips.
(2) Includes walk-only trips and pedestrians walking to/from subway stations, bus stops, and ferry stops but doesn't include bike trips.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if the Proposed Actions are projected to result in fewer than 200 peak hour rail or bus transit riders. If the Proposed Actions 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 summarized in **Table I-4**, the Proposed Actions are expected to generate a net total of approximately 59 and 70 incremental subway trips in the weekday AM and PM peak hours, respectively. As these trips would not exceed the 200-trip *CEQR Technical Manual* analysis threshold, further subway analysis is not warranted. As also shown in **Table I-4,** there is expected to be a net increase of 10 and 18 incremental bus trips in the weekday AM and PM peak hours, respectively. If subway trips utilized bus service to get to the subway, total bus trips would amount to 69 and 88 incremental trips in the weekday AM and PM peak hours, respectively. These trips would be distributed across the four bus routes in close proximity to the Project Site, these include the Q69, Q100, Q103, and Q104 bus routes. As these trips would not exceed the 50-trip *CEQR Technical Manual* analysis threshold (in one direction), further bus analysis is not warranted. Therefore, significant adverse impacts to transit subway and bus services are not expected to occur under the Proposed Actions, and a detailed analysis of subway and bus conditions is not warranted based on *CEQR Technical Manual* guidance.

Citywide Ferry Service (CWFS)

According to *CEQR Technical Manual* guidance, detailed analyses of the CWFS are not typically required if the Proposed Actions would result in 50 or fewer peak hour CWFS peak hour ferry riders to a ferry landing within a half-mile of the Project Site. As shown in **Table I-4**, the Proposed Actions would result in a net increase of no more than two ferry riders in each peak hour. As such, a Level 2 screening analysis is not warranted according to *CEQR Technical Manual* guidance.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if the Proposed Actions would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table I-4**, the Proposed Actions would generate a net incremental increase of approximately 250, 317, 490, and 604 total pedestrian trips in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. These would include walk-only trips and pedestrians walking to and from the subway, bus, and ferry stop. In addition, approximately five, four, three, and four trips bike trips would conservatively be included with pedestrian trips during the weekday AM, midday, and PM and Saturday peak hours, respectively; this would amount to 255, 321, 493, and 608 total pedestrian trips during the same peak hours. As the number of trips would exceed the 200-trip threshold in all peak hours, a Level 2 screening assessment is warranted to determine which, if any, pedestrian elements require quantified analysis.

Parking

Under *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 analyses. Based on the screening analyses detailed above, a quantified traffic analysis would not be warranted for the Proposed Action. Therefore, based on *CEQR Technical Manual* guidance, quantified on- and off-street parking analyses would also not be warranted.

Street User Safety

Under *2021 CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the analyzed traffic study areas that have been identified as high crash locations. As such, an assessment of street user safety is warranted and presented below at intersections within the study area.

IV. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment of project-generated trips to the study area's traffic, pedestrian elements and parking, and the identification of specific locations where the incremental increase in demand may potentially exceed *CEQR Technical Manual* analysis thresholds and, therefore, require a quantitative analysis. As the incremental pedestrian trips generated by the Proposed Actions exceed the *CEQR Technical Manual* thresholds, a Level 2 screening was conducted and is discussed below.

Pedestrians

Based on *CEQR Technical Manual* guidance, detailed pedestrian analyses are generally warranted if the Proposed Actions are projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner area, or crosswalk. As shown in **Table I-4**, the Proposed Actions are expected to generate a net increase of 180, 253, 400, and 468 new incremental walk-only trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. In addition, there would be an increase of 75, 68, 93, and 140 pedestrians walking to and from bus stops, subway stations, and ferry landings as well bike trips during

the weekday AM, midday, and PM and Saturday peak hours, respectively. As the net incremental total pedestrian trips (including walk-only and pedestrians walking to/from subway stations, bus stops, and ferry landings) exceeds the 200-prson trip *CEQR Technical Manual* threshold during all weekday AM, midday, and PM and Saturday peak hours, a preliminary assignment of net incremental pedestrian trips was conducted and is shown in **Figure I-2**.

Subway, bus, and walk-only trips each have different assignment patterns. Bus trips were assigned to stops for the Q69, Q100, Q103 and Q104 bus routes along 21st Street / Ditmars Boulevard, 21st Street / 20th Avenue, Broadway and Vernon Boulevard. Subway trips were assigned to the bus stops with the quickest bus routes enroute to the Broadway (N/W) subway station at Broadway and 21st Street (located approximately 0.8 mile from the Project Site). Walk-only trips were distributed throughout the local street network.

Overall, as shown in **Figure 2**, the greatest incremental increases in pedestrian demand under the Proposed Actions are expected to occur on pedestrian elements (sidewalks, corner areas and crosswalks) in the immediate proximity of the Project Site, along the 11th Street, 33rd Avenue, and 33rd Road corridors. Based on the pedestrian assignments shown in **Figure 2** and the *CEQR Technical Manual* guidance, a detailed pedestrian analysis is warranted in the EAS along the western Project Site frontage, the eastern sidewalk of 11th Street between 33rd Avenue and 33rd Road, during the weekday PM and Saturday midday peak hours.

V. Methodology

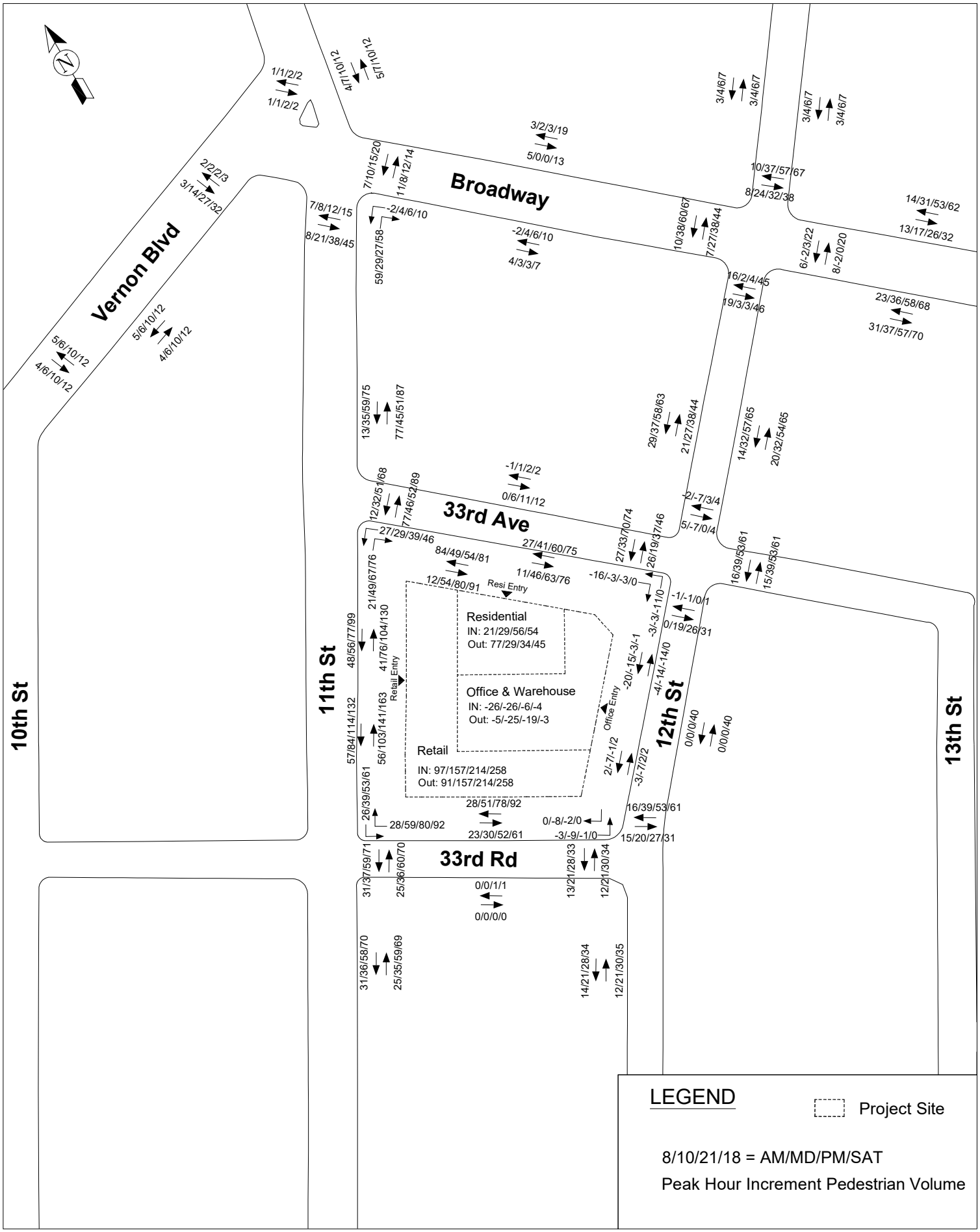
Pedestrians

Data on peak period pedestrian flow volumes was collected along the eastern sidewalk of 11th Street between 33rd Avenue and 33rd Road in April 2023 during the Weekday PM and Saturday midday peak hours. Peak hours were determined by comparing rolling hourly averages, and the highest 15-minute volumes within the selected peak hours were used for analysis. The peak hours selected for analysis are 4:30 PM to 5:30 PM during the Weekday PM peak hour and 1:45 to 2:45 PM during the Saturday midday peak hour.

Peak 15-minute pedestrian flow conditions during the weekday PM and Saturday midday peak hours are analyzed using the *Highway Capacity Manual 2010* methodology and procedures outlined in the *CEQR Technical Manual*. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with level-of-service (LOS) standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level.

LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and

Incremental Project Pedestrian Assignments



inconvenience. **Table I-5** defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the *Highway Capacity Manual* methodology.

The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooning generally results in an LOS one level poorer than that determined for average flow rates.

Table I-5: Pedestrian Crosswalk/Corner Area and Sidewalk Levels of Service Descriptions

LOS	Description	Sidewalk Criteria (sf/ped)
A	(Unrestricted)	> 530
B	(Slightly Restricted)	> 90 to 530
C	(Restricted but fluid)	> 40 to 90
D	(Restricted, necessary to continuously alter walking stride and direction)	> 23 to 40
E	(Severely restricted)	> 11 to 23
F	(Forward progress only by shuffling; no reverse movement possible)	≤ 11

Notes:
Based on average conditions for 15 minutes
sf/ped – square feet of area per pedestrian
Source: 2021 *CEQR Technical Manual*

Significant Impact Criteria

Sidewalk

Since the analysis location is not located within a Central Business District (CBD), the *CEQR Technical Manual* impact criteria for a non-central business district (non-CBD) location is used to identify significant adverse impacts due to the Proposed Actions. These criteria define a significant adverse sidewalk impact to have occurred under platoon conditions. For starters, if the average pedestrian space under the No-Action condition is greater than or equal to 44.3 square feet/pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 40.0 sf/ped or less (LOS D or worse), the impact should be considered significant. However, if the average pedestrian space under the With-Action condition is greater than 40.0 sf/ped (LOS C or better), the impact should not be considered significant. If the No-Action pedestrian space is between 6.4 and 44.2 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on **Table I-6**, which shows a sliding-scale that identifies what decrease in pedestrian space is considered a significant impact for a given pedestrian space value in the No-Action condition. If the reduction in pedestrian space is less than the value in **Table I-6**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than or equal to 6.3 sf/ped, then a reduction in pedestrian space greater than or equal to 0.3 sf/ped, under the With-Action condition, should be considered significant.

Table I-6: Significant Impact Criteria for Sidewalks in a non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)	With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact(sf/ped)
≥44.3	With-Action Condition ≤ 40.0
43.5 to 44.2	Reduction ≥ 4.3
42.5 to 43.4	Reduction ≥ 4.2
41.6 to 42.4	Reduction ≥ 4.1
40.6 to 41.5	Reduction ≥ 4.0
39.7 to 40.5	Reduction ≥ 3.9
38.7 to 39.6	Reduction ≥ 3.8
37.8 to 38.6	Reduction ≥ 3.7
36.8 to 37.7	Reduction ≥ 3.6
35.9 to 36.7	Reduction ≥ 3.5
34.9 to 35.8	Reduction ≥ 3.4
34.0 to 34.8	Reduction ≥ 3.3
33.0 to 33.9	Reduction ≥ 3.2
32.1 to 32.9	Reduction ≥ 3.1
31.1 to 32.0	Reduction ≥ 3.0
30.2 to 31.0	Reduction ≥ 2.9
29.2 to 30.1	Reduction ≥ 2.8
28.3 to 29.1	Reduction ≥ 2.7
27.3 to 28.2	Reduction ≥ 2.6
26.4 to 27.2	Reduction ≥ 2.5
25.4 to 26.3	Reduction ≥ 2.4
24.5 to 25.3	Reduction ≥ 2.3
23.5 to 24.4	Reduction ≥ 2.2
22.6 to 23.4	Reduction ≥ 2.1
21.6 to 22.5	Reduction ≥ 2.0
20.7 to 21.5	Reduction ≥ 1.9
19.7 to 20.6	Reduction ≥ 1.8
18.8 to 19.6	Reduction ≥ 1.7
17.8 to 18.7	Reduction ≥ 1.6
16.9 to 17.7	Reduction ≥ 1.5
15.9 to 16.8	Reduction ≥ 1.4
15.0 to 15.8	Reduction ≥ 1.3
14.0 to 14.9	Reduction ≥ 1.2
13.1 to 13.9	Reduction ≥ 1.1
12.1 to 13.0	Reduction ≥ 1.0
11.2 to 12.0	Reduction ≥ 0.9
10.2 to 11.1	Reduction ≥ 0.8
9.3 to 10.1	Reduction ≥ 0.7
8.3 to 9.2	Reduction ≥ 0.6
7.4 to 8.2	Reduction ≥ 0.5
6.4 to 7.3	Reduction ≥ 0.4
≤ 6.3	Reduction ≥ 0.3
Source: 2021 *CEQR Technical Manual.*	

Street User Safety

Under the *2021 CEQR Technical Manua*l guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the analyzed traffic and pedestrian study areas that have been identified as high crash locations. These are defined as locations at a Vision Zero priority intersection where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent

three-year period for which data are available. In addition, any location along a Vision Zero priority corridor with three or more pedestrian/bicyclist injury crashes in any consecutive 12 months of the most recent three-year period for which data is available should be identified as a high crash location. For these locations, crash trends would be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips. The determination of potential significant safety impacts depends on the type of area where the project site is located, traffic and pedestrian volumes, crash types and severity, and other contributing factors.

VI. PEDESTRIAN ASSESSMENT

Existing Conditions

As discussed previously in Section IV "Level 2 Screening Assessment", the eastern sidewalk of 11th Street between 33rd Avenue and 33rd Road has been selected for detailed analysis because the project-generated pedestrian trips at this location are expected to exceed the 200-trip *CEQR Technical Manual* analysis threshold. It should be noted that per *CEQR* guidelines, a free-flow walking speed of 3.3 ft/s is assumed for sidewalk elements near a school. **Table I-8** shows the existing average pedestrian space (in square feet per pedestrian), as well as the level of service analyzed for the sidewalk during the PM and SAT peak hours. As shown in **Table I-8,** the analyzed sidewalk currently operates at an uncongested LOS A during the PM and SAT peak hours.

Table I-8: Sidewalk Analysis – Existing Conditions

Location	Sidewalk	Time Period	Effective Width (ft)	Peak Hour Volume	Average Pedestrian Space (SFP)	Platoon-Adjusted LOS
11th Street Between 33rd Avenue and 33rd Road	East	PM	12	15	4,466.9	A
	East	SAT	12	18	5,940.0	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

The Future Without the Proposed Action (No-Action)

Increased pedestrian demand due to background growth was added to existing volumes to determine future volumes without the Proposed Actions. An annual compounded background growth rate of 0.50 percent was applied to existing travel demand through 2028 pursuant to *CEQR Technical Manual* criteria. Three large development projects are also expected to occur within a quarter mile of the Project Area. These development projects include 11th Street and 34th Avenue Rezoning, Broadway & 11th Street Rezoning, and Vernon Boulevard & Broadway Rezoning. The potential demand that is expected to traverse the analyzed sidewalk due to these developments is included in the No-Action volumes. Additional demand from the conversion of a warehouse to a mixed-use residential building (No-Action condition) was also included.

Table I-9 shows the forecasted No-Action average pedestrian space and LOS along the analyzed sidewalk during the PM and Saturday peak hours. As shown in **Table I-9**, under the no-action conditions, the analyzed sidewalk would operate at an acceptable LOS B during the PM and SAT peak hours.

Table I-9: Sidewalk Analysis – 2028 No-Action Conditions

Location	Sidewalk	Time Period	Effective Width (ft)	Peak Hour Volume	Average Pedestrian Space (SFP)	Platoon-Adjusted LOS
11th Street Between 33rd Avenue and 33rd Road	East	PM	12	223	300.4	B
	East	SAT	12	258	414.3	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

The Future With the Proposed Action (With-Action)

As discussed previously, the Proposed RWCDS is expected to generate a net total of 493 and 608 total pedestrian trips (including walk-only trips, bike trips, and pedestrians en route to and from subway stations, bus stops, and ferry landing as well as bicyclists) during weekday PM and Saturday midday peak hours respectively. A net total of 470 and 544 pedestrian trips are expected to be generated by the proposed project will traverse the analyzed sidewalk during the PM and Saturday peak hours, respectively. These volumes were added to the projected No-Action volumes to estimate the With-Action pedestrian volumes for the sidewalk analysis.

Table I-10 shows the average pedestrian space and levels of service at the analyzed sidewalk during the PM and Saturday peak hours under the 2028 With-Action conditions. It should be noted that the effective width was conservatively decreased under the With-Action conditions Since the proposed building frontage along the analyzed sidewalk would be converted from a windowless display under Existing conditions to a window display (retail space) under With-Action conditions.

As shown in **Table I-10**, under the With-Action conditions, the analyzed sidewalk would operate at a LOS B during the weekday PM and Saturday midday peak hours. Based on *CEQR Technical Manual* criteria, the Proposed Actions would not result in any significant adverse impacts to the analyzed sidewalk in the weekday PM and Saturday midday peak hours.

Table I-10: Sidewalk Analysis – 2028 With-Action Conditions

Location	Sidewalk	Time Period	Effective Width (ft)	Peak Hour Volume	Average Pedestrian Space (SFP)	Platoon-Adjusted LOS
11th Street Between 33rd Avenue and 33rd Road	East	PM	11	470	130.4	B
	East	SAT	11	544	180.0	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

VII. ASSESSMENT OF STREET USER SAFETY

Recent NYCDOT Initiatives

Vision Zero Queens Pedestrian Safety Action Plan

Consistent with the City's Vision Zero initiative, the *Vision Zero Queens Pedestrian Safety Action Plan* was initially released in 2015 and recently updated in 2023. The plan identifies a series of engineering/planning, enforcement, and education/awareness campaign strategies to enhance pedestrian safety along the borough's Priority Corridors and Priority Intersections. These strategies include measures such as reducing the speed limit to 25 miles per hour, expanding exclusive pedestrian crossing time, installing additional lighting around key transit stops, expanding the bicycle network, prioritizing targeted enforcement and deploying speed cameras, and targeting intensive street-level outreach.

The City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. In an effort to drive these fatalities down, NYCDOT and the New York City Police Department (NYPD) developed a set of five plans, each of which analyzes the unique conditions of one New York City borough and recommends actions to address the borough's specific challenges to pedestrian safety. These plans pinpoint the conditions and characteristics of pedestrian fatalities and severe injuries; they also identify priority corridors, intersections, and areas that disproportionately account for pedestrian fatalities and severe injuries, prioritizing them for safety interventions. The plans outline a series of recommended actions comprised of engineering, enforcement, and education measures that intend to alter the physical and behavioral conditions on City streets that lead to pedestrian fatality and injury.

Engineering And Planning

- Implement at least 50 Vision Zero safety engineering improvements at Priority Corridors, Intersections, and Areas citywide, informed by community input
- Expand exclusive pedestrian crossing time, install expanded speed limit signage, and modify signal timing to reduce off-speak speeding on Priority Corridors and Intersections where feasible
- Expand community outreach and engagement around Priority Corridors, Intersections, and Areas
- Expand the off-hour delivery program to reduce truck conflicts with pedestrians
- Coordinate with MTA to ensure bus operations contribute to a safe pedestrian environment
- Expand a bicycle network in Manhattan that improves safety for all road users
- Proactively design for pedestrian safety in high-growth areas in Manhattan

Enforcement

- Deploy speed camera at Priority Corridors, Intersections, and Areas
- Focus enforcement and deploy dedicated resources to Manhattan NYPD precincts that overlap substantially with Priority Areas
- Prioritize targeted enforcement at all Priority Corridors, Intersections, and Areas annually
- Focus failure-to-yield enforcement on nighttime hour (9 PM to midnight)
- Initiate a series of target truck enforcement blitzes to reduce failure to yield and keep trucks on truck routes

Education And Awareness Campaigns

- Target child and senior safety education at Priority Corridors and Priority Areas
- Target intensive street-level outreach at Priority Corridors, Intersections, and Areas

Within a quarter mile of the Project Site, the *Vision Zero Queens Pedestrian Safety Action Plan Update*, released in 2023, identifies Broadway and 21st Street as a "Priority Corridors." No intersections within a quarter mile of the Project Site are identified as "Priority Intersections." However, within a quarter mile of the Project Site, a majority of the area is identified as a "Priority Area," especially east of the Project Site.

Study Area High Crash Locations

Crash data for analyzed intersections in the traffic and pedestrian study areas were obtained from NYCDOT for the three-year period between January 1, 2017 and December 31, 2019 (the most recent three-year period for which data are available). The data, quantify the total number of reportable and non-reportable crashes (reportable crashes are those involving a fatality, injury, or more than $1,000 in property damage), as well as the total number of crashes involving injuries to pedestrians or bicyclists at each location in the study area. **Table I-11** provides a summary of these crashes by year and location, including a breakdown of pedestrian and bicycle crashes.

During the three-year reporting period, a total of 119 reportable and non-reportable crashes, 65 total injuries, 17 pedestrian/bicyclist-related injury crashes, and zero fatalities occurred at study area intersections. No intersections have experienced five or more pedestrian/bicyclist injury crashes in 12 consecutive months of the analyzed three-year period. As shown in **Table I-11**, the intersection of Broadway at Vernon Boulevard / 11th street (not a traffic or pedestrian stud location) experienced three or more pedestrian/bicyclist injury crashes in 12 consecutive months of the analyzed three-year period along a Vision Zero Priority Corridor (Broadway). Based on the most recent crash data and the analyzed elements, no intersections have been identified as a high crash location based on the criteria outlined by the *CEQR Technical Manual.*

Table I-11: Summary of Crash Data (2017-2019)

Intersection		Pedestrian Injury Crashes			Bicycle Injury Crashes			Total Pedestrian/Bicyclist Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
		2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
31 Ave	Vernon Blvd	0	0	0	0	0	0	0	0	0	0	1	4
	12th St	0	0	0	0	0	0	0	0	0	0	0	3
31st Rd	14th St	0	0	0	1	0	0	1	0	0	1	0	1
31 Dr	Vernon Blvd	0	0	0	0	0	0	0	0	0	0	3	1
	12th St	0	0	0	0	0	0	0	0	0	0	1	2
	14th St	0	0	0	0	0	0	0	0	0	0	1	0
Broadway	11th St/ Vernon Blvd	2	2	0	0	1	0	2	3	0	4	7	5
	12th St	0	0	0	0	0	0	0	0	0	3	1	4
	14th St	1	0	0	0	0	1	1	0	1	1	2	6
33rd Ave	12th St	0	0	0	0	0	0	0	0	0	1	0	1
	21st St	0	0	1	1	0	1	1	0	2	2	3	3
33rd Road	10th St	0	0	0	0	0	0	0	0	0	0	1	2
	11th St	0	0	1	0	0	0	0	0	1	0	1	1
	12th St	0	0	0	0	0	0	0	0	0	0	0	1
	21st St	0	0	1	0	0	0	0	0	1	3	5	7
34th Ave	Vernon Blvd	0	0	0	0	0	0	0	0	0	3	1	2
	9th St	0	0	0	0	0	0	0	0	0	0	2	3
	10th St	1	0	0	0	0	0	1	0	0	4	1	1
	11th St	0	1	0	0	0	0	0	1	0	1	2	3
	12th St	0	0	0	0	0	0	0	0	0	0	2	2
	13th St	0	0	0	0	0	0	0	0	0	1	0	0
	14th St	0	0	0	0	0	0	0	0	0	0	0	1
35th Ave	12th St	1	0	0	0	0	0	1	0	0	1	0	1
Vernon Blvd	9th St	0	0	0	0	0	0	0	0	0	0	0	3
	10th St	0	0	0	1	0	0	1	0	0	3	0	0

Notes:
Shading indicates intersections high crash locations.
There were no crashes on 33rd Avenue/11th Street and 33rd Avenue/13th Street between 2017 and 2019.

APPENDIX I:
WRP CONSISTENCY ASSESSMENT

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Catholic Medical Mission Board

Name of Applicant Representative: Richard Bass, AICP, PP, Akerman LLP

Address: 1251 Avenue of the Americas.37th Floor

Telephone: 212-259-6406 Email: richard.bass@akerman.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

Catholic Medical Mission Board (the "Applicant") is seeking approval for two discretionary actions (the "Proposed Actions") that would affect the entirety of Queens Block 317 (the "Project Area") in the Ravenswood neighborhood of Queens Community District 1. These actions are: (1) a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (MX-23 Special Mixed-Use district), and (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area as a Mandatory Inclusionary Housing ("MIH") area. The Proposed Actions would allow the Applicant to develop a new, eight-story mixed-use building (the "Proposed Development") on the Proposed Development Site. The building would contain a total of approximately 267,442 gsf, and would include 227 dwelling units (DUs; of which approximately 57 [25%] would be affordable under MIH Option 1), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. It is anticipated that the Proposed Development would be completed and occupied by 2028.

2. Purpose of activity

The proposed zoning map amendment would increase the permitted density and height to facilitate housing, including permanently affordable housing, activate the street frontage, and create new commercial and light industrial space. The proposed zoning map amendment from R5 to M1-4/R7A (MX-23 Special Mixed-Use district) is necessary to enable development consistent with residential, commercial, and industrial land use trends in the surrounding area. The Project Area, located along a wide street (11th Street) near transit within an existing mixed-use context, is an appropriate location for increased density and new mixed-use development.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 317, Lots 1, 16, 18

Street Address: 33-01 11th Street

Name of water body (if located on the waterfront): N/A

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? ☐ Yes ☑ No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? ☐ Yes ☑ No
3. Is the project located on publicly owned land or receiving public assistance? ☐ Yes ☑ No
4. Is the project located within a FEMA 1% annual chance floodplain? *(6.2)* ☑ Yes ☐ No
5. Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)* ☑ Yes ☐ No
6. Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).* ☐ Yes ☑ No

   ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)
   ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
   ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)
   ☐ Recognized Ecological Complex (REC) (*4.4*)
   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Philip Habib, P.E., Philip Habib & Associates

Address: 432 Park Avenue South, 6th Floor

Telephone: 212-929-5656 Email: phabib@phaeng.com

Applicant/Agent's Signature: _____

Date: _____

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☑ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

As the Proposed Development Site is located within the city's designated Coastal Zone (see **Figure I-1**), the Proposed Actions are subject to review for consistency with the policies of the Waterfront Revitalization Plan (WRP). The WRP includes policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form (CAF) lists the WRP policies and indicates whether the Proposed Actions would promote or hinder that policy, or if that policy would not be applicable. The development facilitated by the Proposed Actions would not hinder any of the applicable WRP policies, and as such is not likely to have any adverse effect on economic development, environmental preservation, and public use of the waterfront. This appendix provides additional information for the policies that have been checked "promote" in the WRP CAF. As the Proposed Actions would not hinder any of the applicable policies, all other policies not discussed below have been checked "not applicable" in the WRP CAF.

Policy 1: Support and facilitate commercial and residential development in areas well suited to such development.

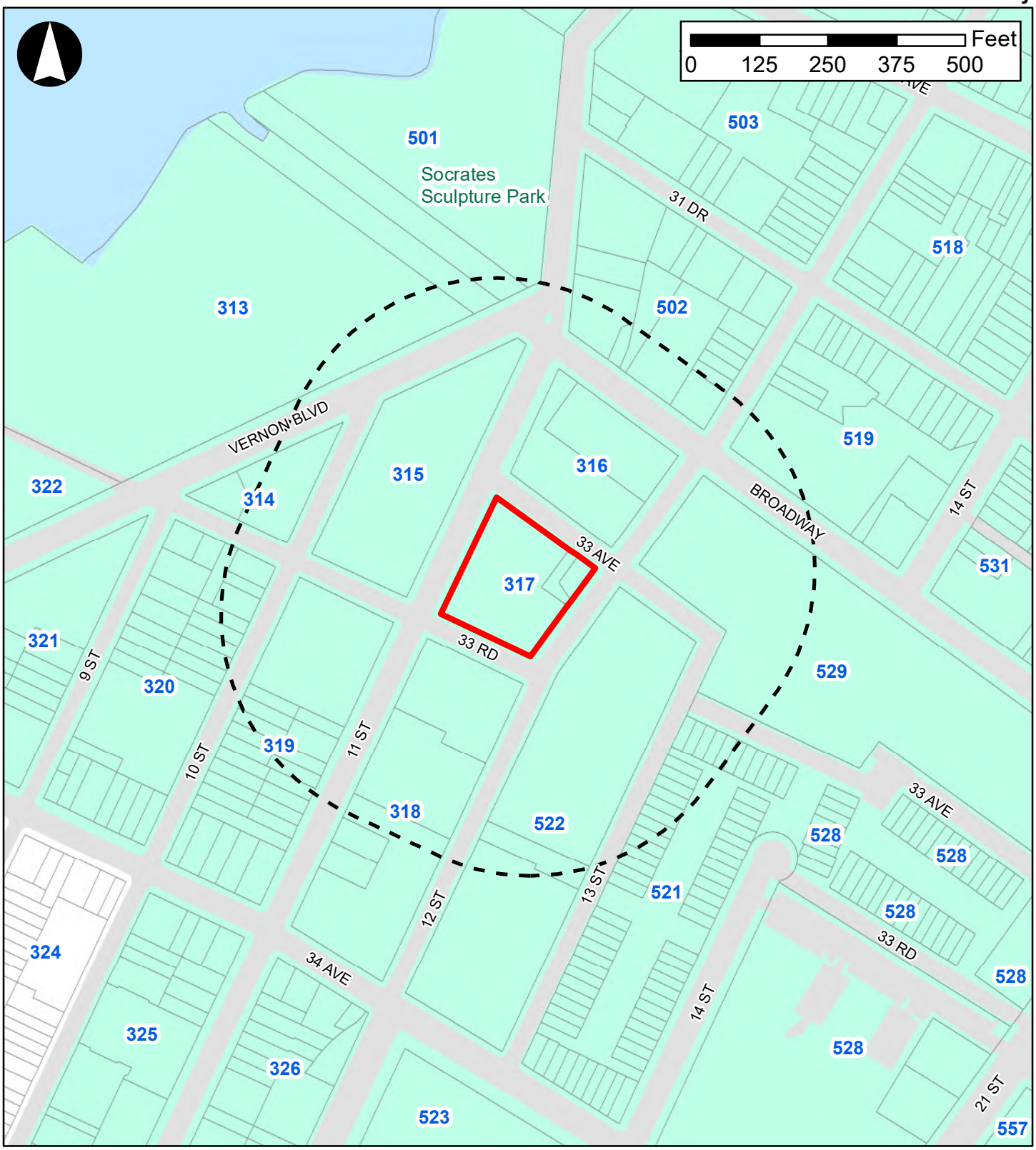
Policy 1.1: Encourage commercial and residential development in appropriate Coastal Zone areas.

Compliance Statement: The primary study area is not located on the waterfront. The primary study area is an upland block that is located approximately 1,100 feet to the east of the East River, separated from the waterfront by several blocks. Within the primary study area, the Proposed Actions would facilitate the development of a new residential building containing approximately 227 DUs (of which 57 would be affordable under MIH Option 1), as well as 13,346 gsf of commercial retail space. The primary study area is located in an area appropriate for residential and commercial development, as it is located in Ravenswood, a formerly industrial neighborhood that has undergone mixed-use development in recent years and is well served by public infrastructure. Additionally, although the surrounding neighborhood is characterized by industrial uses, the Proposed Development Site is located within an R5 district and is thus suitable for residential development on an as-of-right basis. Therefore, the Proposed Actions would introduce land uses that would be complementary to the neighborhood's existing land uses. The primary study area is not located within a Significant Maritime and Industrial Area (SMIA), Special Natural Waterfront Area (SNWA), Priority Maritime Activity Zone (PMAZ), Recognized Ecological Complex (REC), or West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA), as defined in the WRP, and is therefore not located in a special area that may be inappropriate for the development of new residential land uses. For these reasons, the Proposed Actions would advance Policy 1.1.

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Compliance Statement: The Proposed Actions would encourage new development in an area served by existing public facilities and infrastructure. The density of the Proposed Development is compatible with the capacity of surrounding roadways, public transportation, infrastructure, and essential community services. It is anticipated that the mix of residential and commercial land uses, and the scale of the resultant development would not overburden the surrounding Ravenswood neighborhood and the primary study area would continue to be adequately served by existing public facilities and infrastructure. Overall, the Proposed Actions would encourage redevelopment in an area adequately served by existing public facilities and infrastructure. For these reasons, the Proposed Actions would advance Policy 1.3.

Figure I-1
Coastal Zone Boundary



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- 317 Tax Block
- Tax Lot
- NYC Coastal Zone

Policy 1.5: Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.

Compliance Statement: As detailed in the Compliance Statement for WRP Policy 6.2 below, the Proposed Development would integrate consideration of the latest projections of climate change and sea level rise in New York City into planning and design. All new vulnerable, critical, or potentially hazardous features would be protected through flood damage reduction measures or future adaptive actions, and through compliance with all applicable rules and regulations. For these reasons, the Proposed Actions would advance Policy 1.5.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Compliance Statement: In June 2013, FEMA issued Preliminary Work Maps for New York City to show coastal flood hazard data. Subsequently, the city made immediate accommodations to zoning regulations and upgrades to the New York City Building Code to ensure that new construction would be built to these higher standards. In January 2015, FEMA issued Revised Preliminary FIRMs for New York City, which are considered the best available flood hazard data, replacing the FEMA Preliminary Work Maps.

Based on the most recent flood hazard data, the primary study area is located within an area of special flood hazard. According to the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRMs), the primary study area is mostly located within the 100-year flood zone (Zone AE), with the balance being in the 500-year flood zone (Shaded Zone X) (refer to **Figure I-2**). The Base Flood Elevation ("BFE") of the 100-year flood zone is approximately 12 feet (NAVD88).

The primary study area is within the boundaries of the 100-year and 500-year floodplains, and the area to be developed (the building footprint of the Proposed Development) is delineated as an area of special flood hazard. As such, Appendix G of the *New York City Building Code* applies to the Proposed Development. The Proposed Development has a Design Flood Elevation (DFE), which will be provided at an elevation of +3 feet above grade. The BFE of the 100-year floodplain in the primary study area is 12 feet (NAVD88). Therefore, the Proposed Development's DFE would have an elevation of approximately 15 feet (NAVD88). The Proposed Development would contain a cellar, which would feature a depth of approximately 14 feet below-grade.

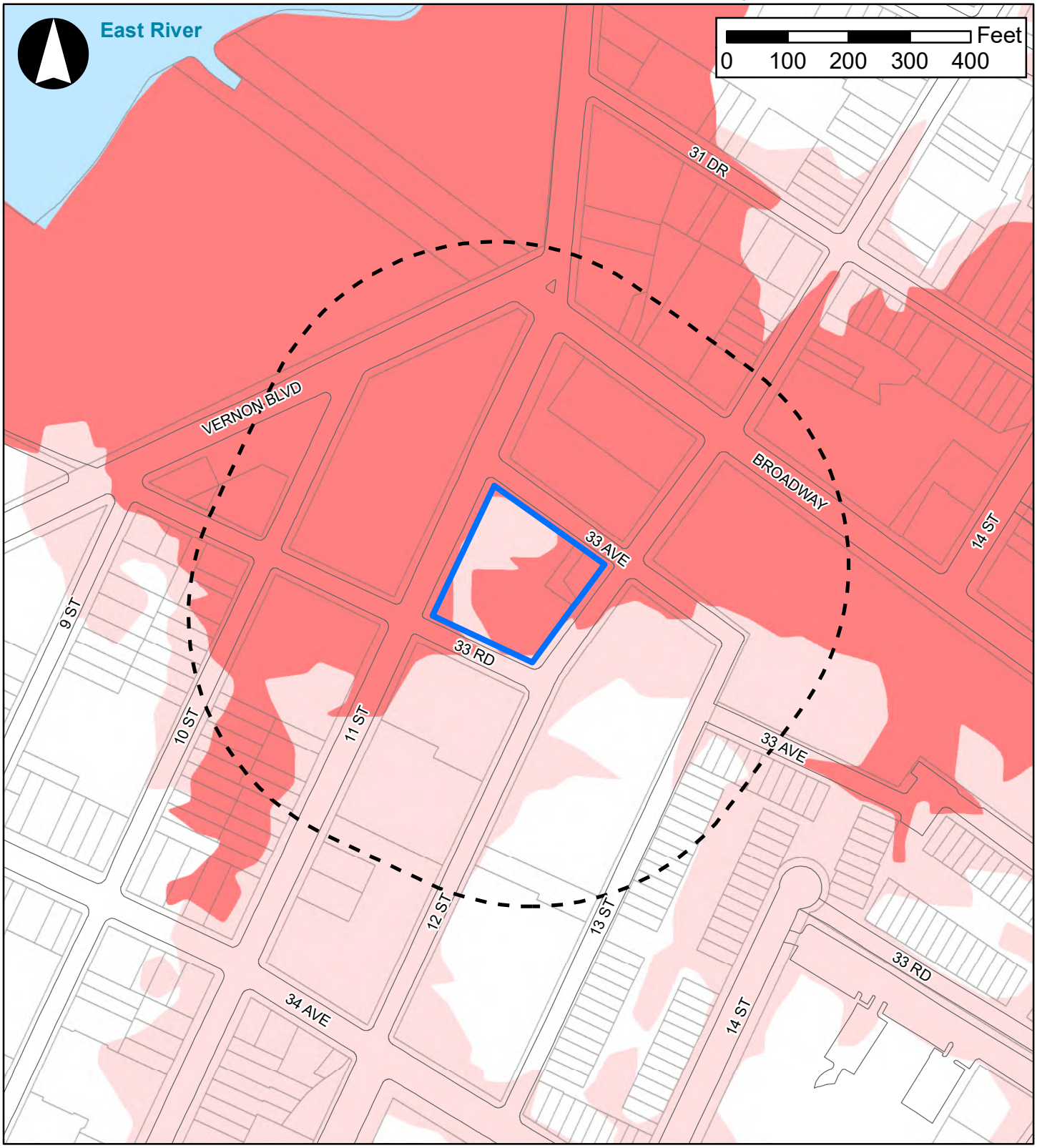
The Proposed Development would be designed and constructed in accordance with city and state flooding and erosion regulations, where applicable, including New York City Administrative Code, Title 28, Section 104.9 ("Coastal Zones and Water-Sensitive Inland Zones"). For these reasons, the Proposed Actions would advance Policy 6.1.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in the New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

Compliance Statement: The Proposed Development has considered potential risks related to coastal flooding to features specific to the Proposed Development, including, but not limited to, the location of critical mechanical, electrical, and plumbing ("MEP") services and residential dwelling units. As outlined in The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document,

Figure I-2

FEMA Preliminary Flood Insurance Maps 2015



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Water
- 100-Year Floodplain
- 500-Year Floodplain

for site-specific actions that include (or would facilitate the development of) new vulnerable, critical, or potentially hazardous features, the detailed methodology approach should be utilized to assess a project or action's consistency with Policy 6.2.

STEP 1: IDENTIFY VULNERABILITIES AND CONSEQUENCES

The goal of this first step is to assess the project's vulnerabilities to future coastal hazards and what potential consequences may result.

As discussed above, the primary study area is within New York City's CZB, and is within the boundary of the 100-year flood zone (Zone AE) and 500-year flood zone (Shaded Zone X) as delineated in the 2015 FEMA PFIRMs. The Proposed Development would be constructed within the "0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile" (Zone X), where the risk of major flooding is low.

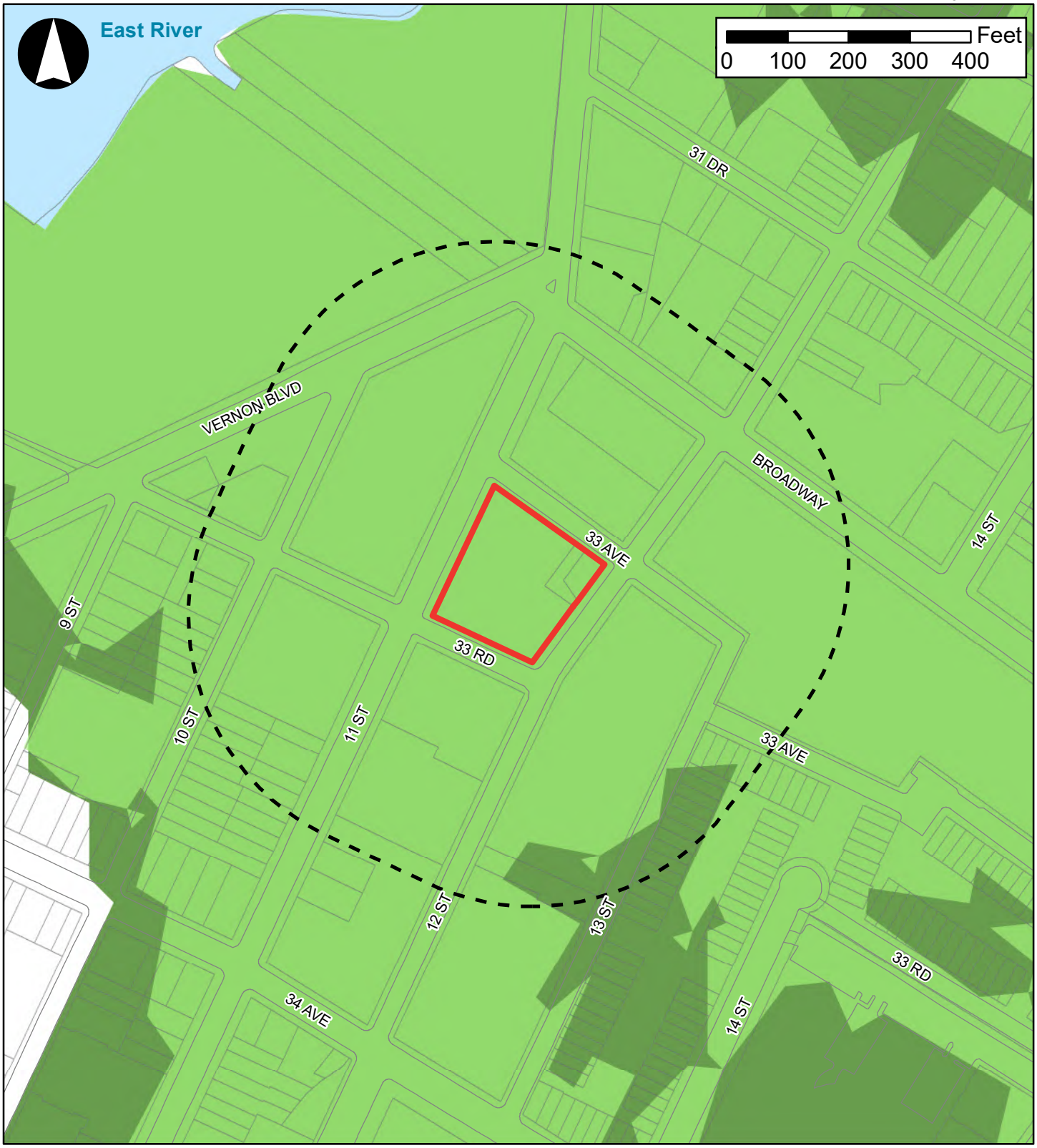
Coastal storms could bring high winds in addition to flood hazards to the primary study area. However, the primary study area is not located within a Coastal A or V zone. The Proposed Development is not expected to make flooding on adjacent properties worse, nor would the Proposed Development conflict with other plans for flood protection on adjacent properties.

The New York City Panel on Climate Change ("NPCC") recommends assessing the impacts of projected sea level rise on the lifespan of projects. While the NPCC developed a series of flood projection maps that incorporate sea level rise projections with FEMA's January 2015 FIRMs, because of limitations in the accuracy of flood projections, the NPCC recommends that these flood projection maps not be used to judge site-specific risks. However, in general, the NPCC estimates that in the New York City area, sea level will rise up to a high estimate of 10 inches by the 2020s, and up to a high estimate of 30 inches by the 2050s. The NPCC projects that the frequency, extent, and height of 100-year and 500-year floods will increase by the 2050s. As illustrated in **Figure I-3** through **Figure I-5**, the primary study area is expected to continue to fall within the 100-year flood zone in the future (2050s through 2100s), as published by the NPCC. Per 2021 *CEQR Technical Manual* guidance, the Flood Elevation Worksheet was prepared for the Proposed Development and is attached to this **Appendix**.

The East River, which is the body of water in the vicinity of the Primary Study Area, is a tidal estuary. Therefore, the flood elevation is controlled by the tidal conditions within New York Bay, Long Island Sound, and the Atlantic Ocean. Because the coastal floodplain adjacent to the primary study area is affected by coastal flooding, rather than local or fluvial flooding, the operation of the Proposed Development would not exacerbate flooding conditions on or near the primary study area. Furthermore, coastal floodplains are influenced by astronomic tide and meteorological forces (e.g., northeasters and hurricanes) and not by fluvial flooding (e.g., rivers and streams overflowing their banks), and, as such, are not affected by the placement of obstructions (e.g., buildings) within the coastal floodplain. As shown in **Figures I-6 through I-9**, between the 2020s and 2100s, the Proposed Project would not fall within an area that is anticipated to be impacted by tidal flooding.

As shown in the Mean Higher High Water + Sea Level Rise graph below, only the Proposed Development's cellar, a vulnerable and potentially critical feature, would be located below the elevation of the Mean Higher High Water for the Proposed Development's lifespan (spanning an estimated 75 years subsequent to completion in 2028). As shown in the graph, no other critical and vulnerable features of the Proposed Development are anticipated to be located below the elevation of the Mean Higher High Water at any point over the Proposed Development's lifespan. Therefore, operation of the Proposed Development is not expected to exacerbate future projected coastal flooding conditions.

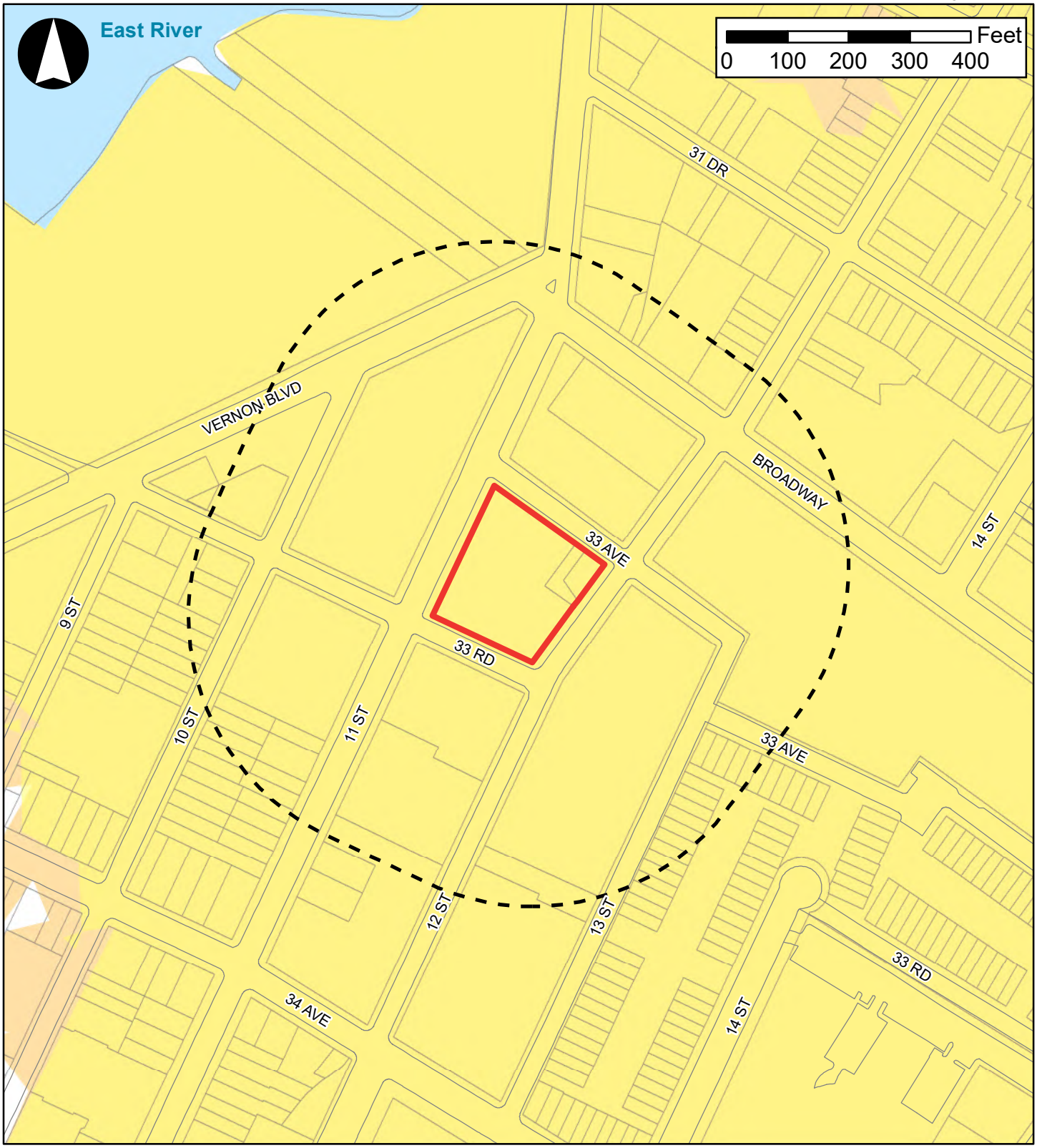
Figure I-3
NPCC 2050s Flood Zone Projections



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Water
- 2050s 100-Year Floodplain
- 2050s 500-Year Floodplain

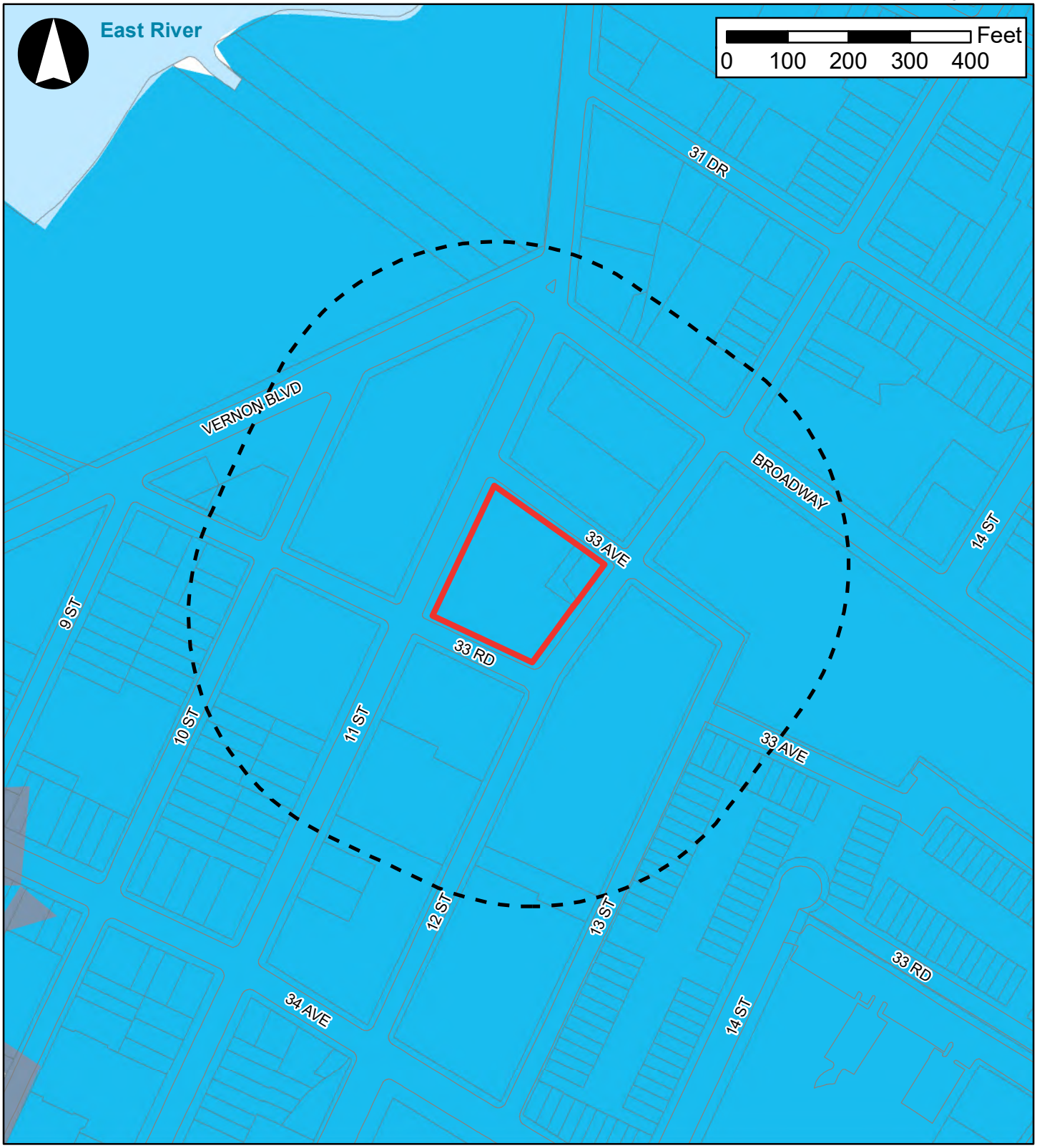
Figure I-4
NPCC 2080s Flood Zone Projections



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Water
- 2080s 100-Year Floodplain
- 2080s 500-Year Floodplain

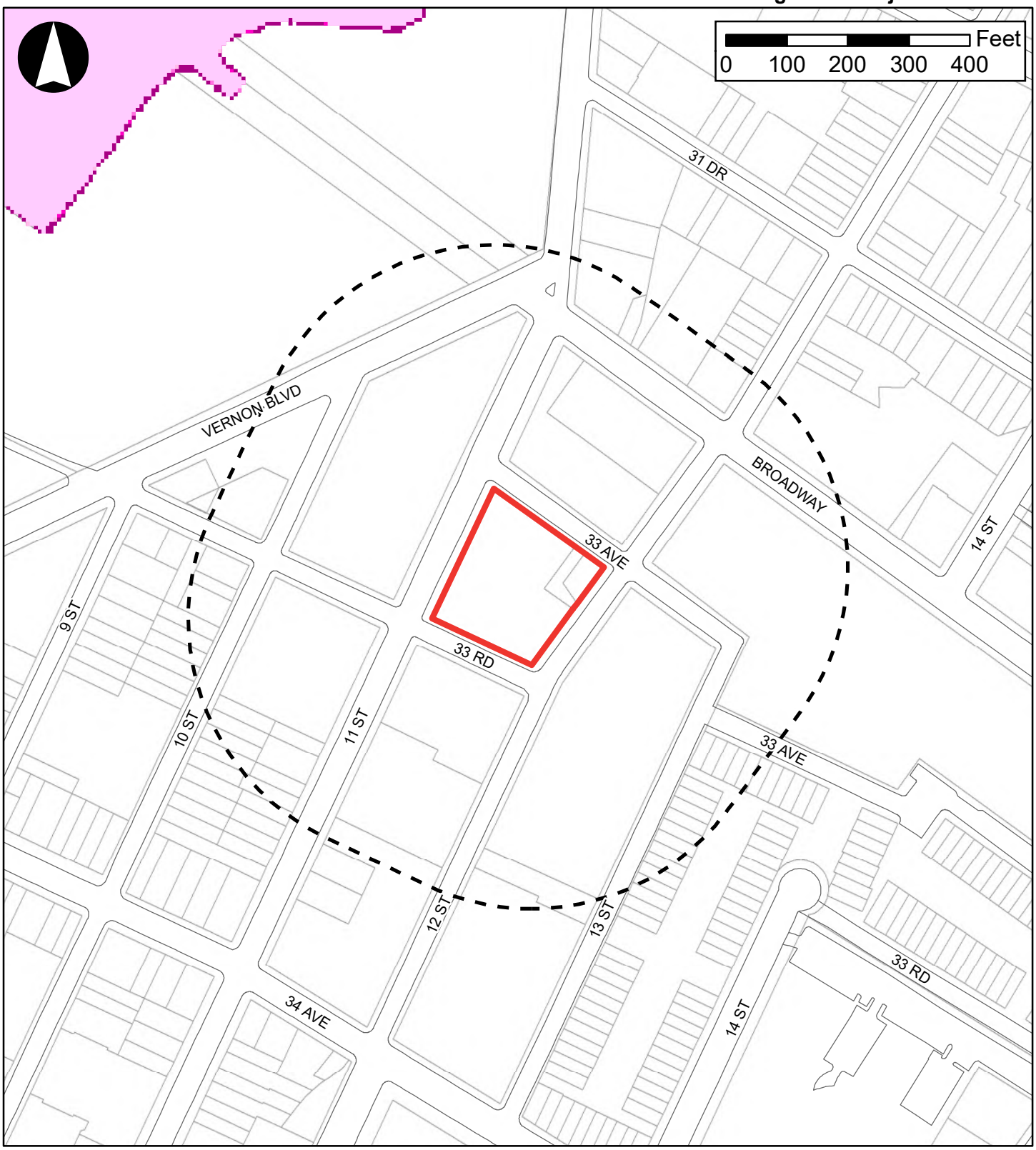
Figure I-5
NPCC 2100s Flood Zone Projections



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Water
- 2100s 100-Year Floodplain
- 2100s 500-Year Floodplain

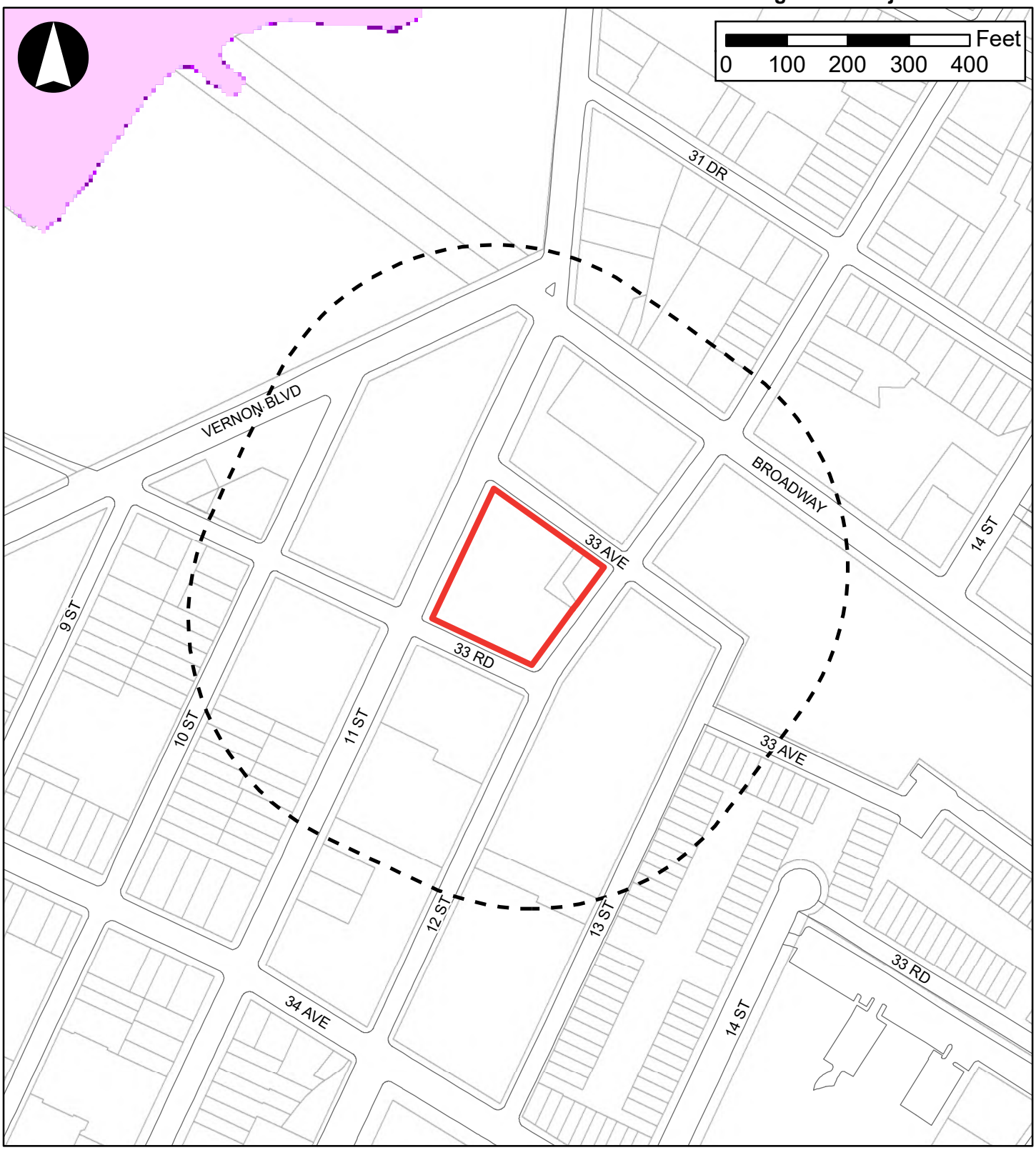
Figure I-6
High Tide Projections 2020s



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Low Esetimate (2 inches SLR)
- Low-Mid Estimate (4 inches SLR)
- Middle Estimate (6 inches SLR)
- Mid-High Estimate (8 inches SLR)
- High Estimate (10 inches SLR)

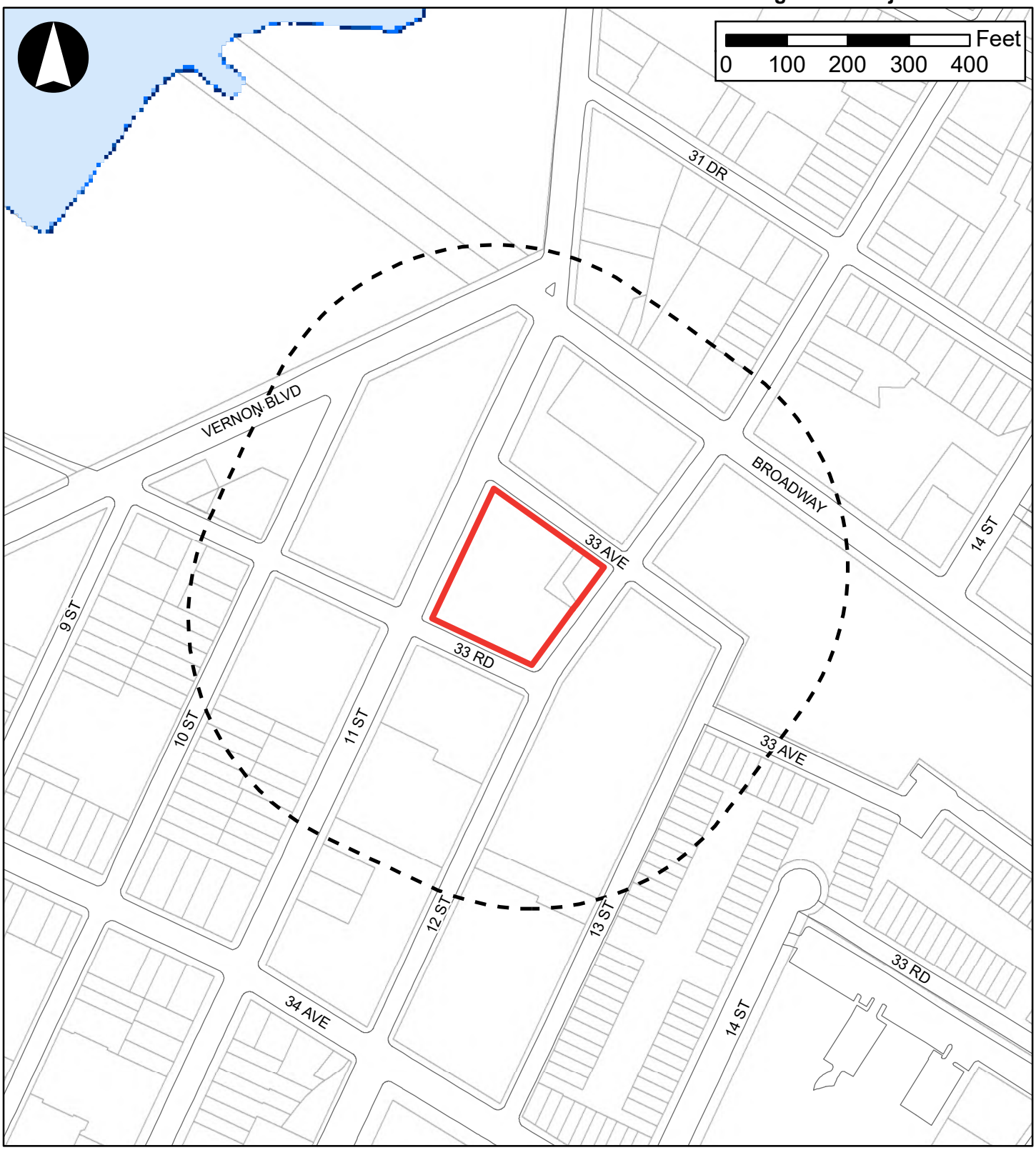
Figure I-7
High Tide Projections 2050s



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Low Estimate (8 inches SLR)
- Low-Mid Estimate (11 inches SLR)
- Middle Estimate (16 inches SLR)
- Mid-High Estimate (21 inches SLR)
- High Estimate (30 inches SLR)

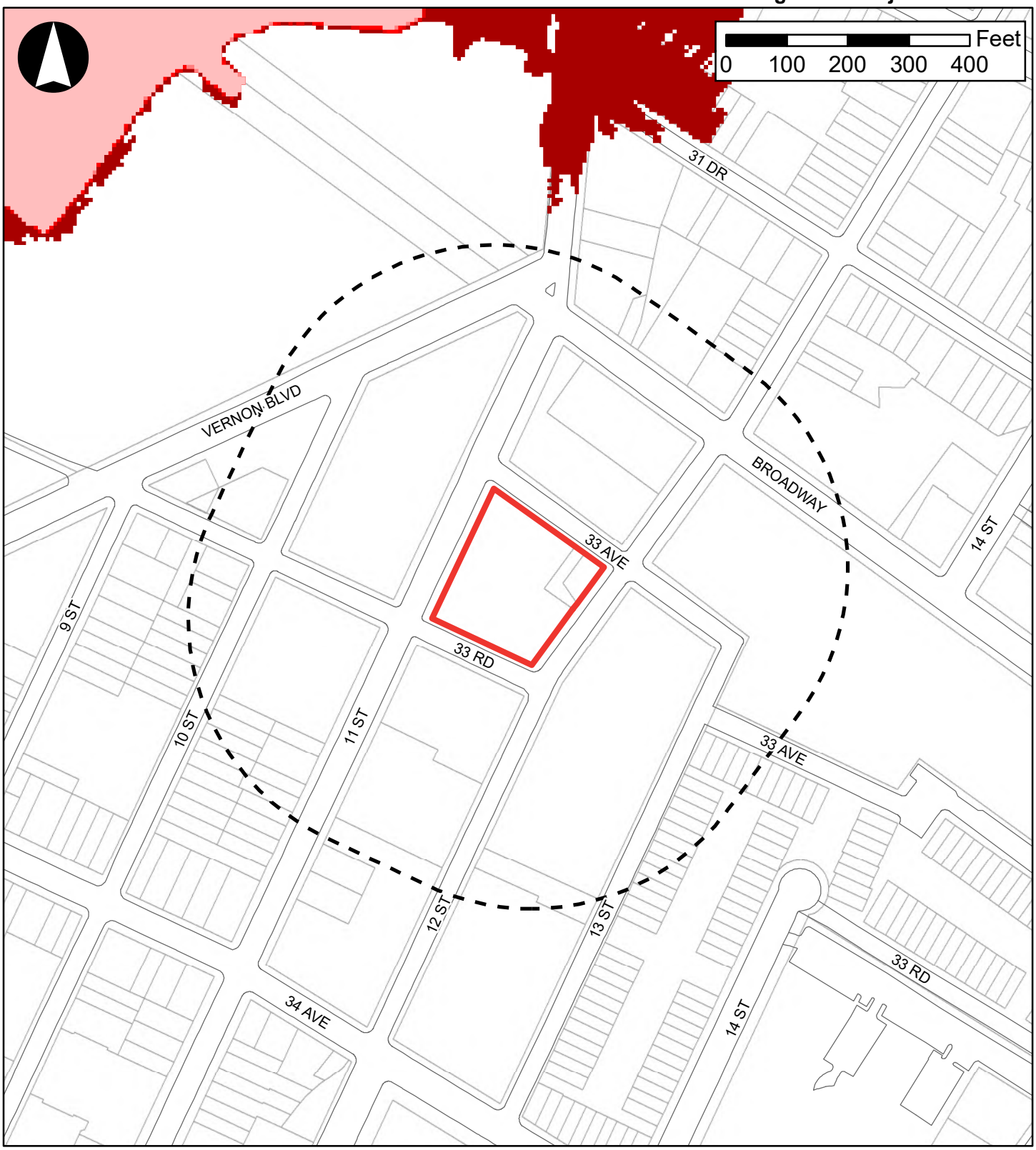
Figure I-8
High Tide Projections 2080s



Legend

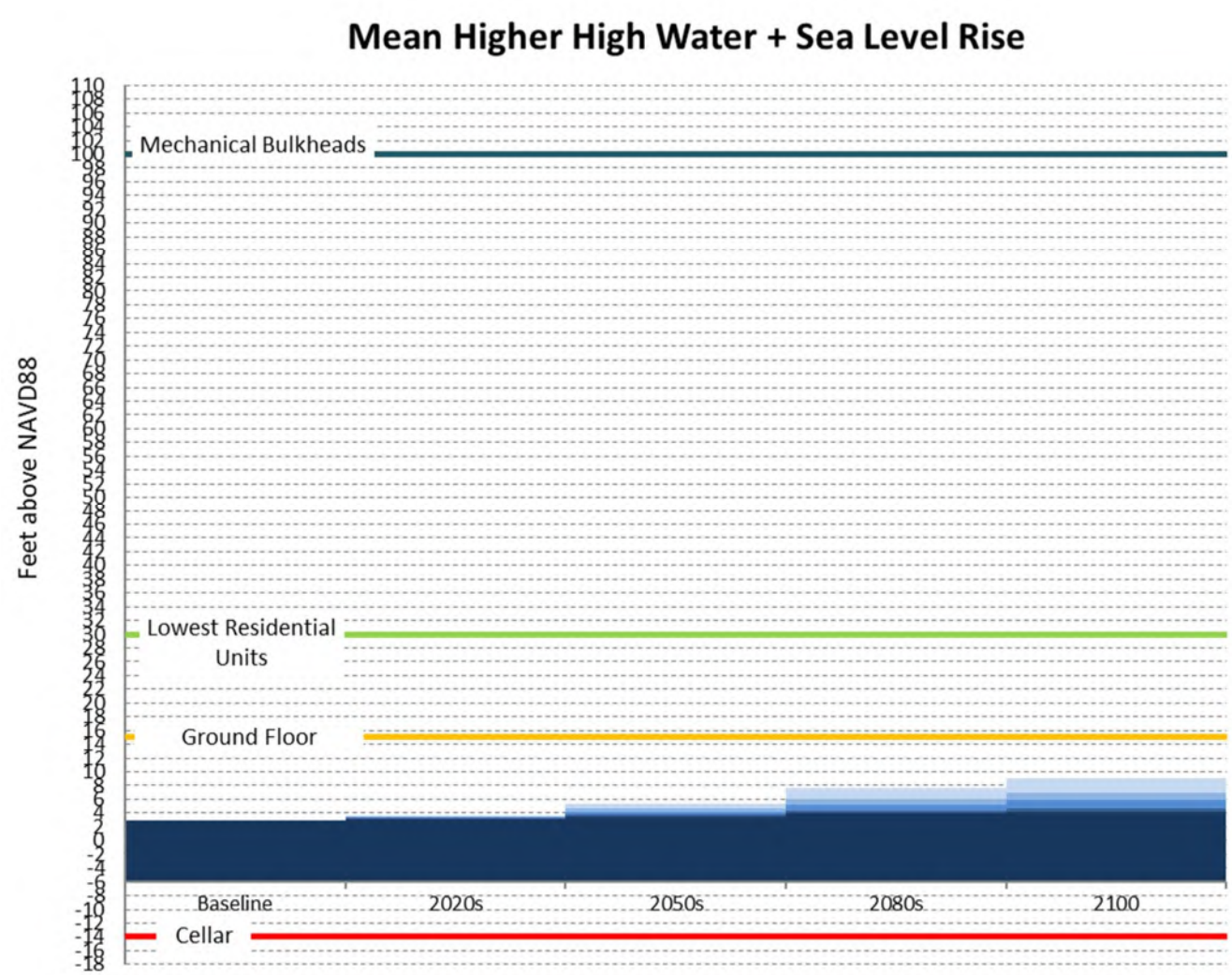
- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Low Estimate (13 inches SLR)
- Low-Mid Estimate (18 inches SLR)
- Middle Esitmate (29 inches SLR)
- Mid-High Estimate (39 inches SLR)
- High Estimate (58 inches SLR)

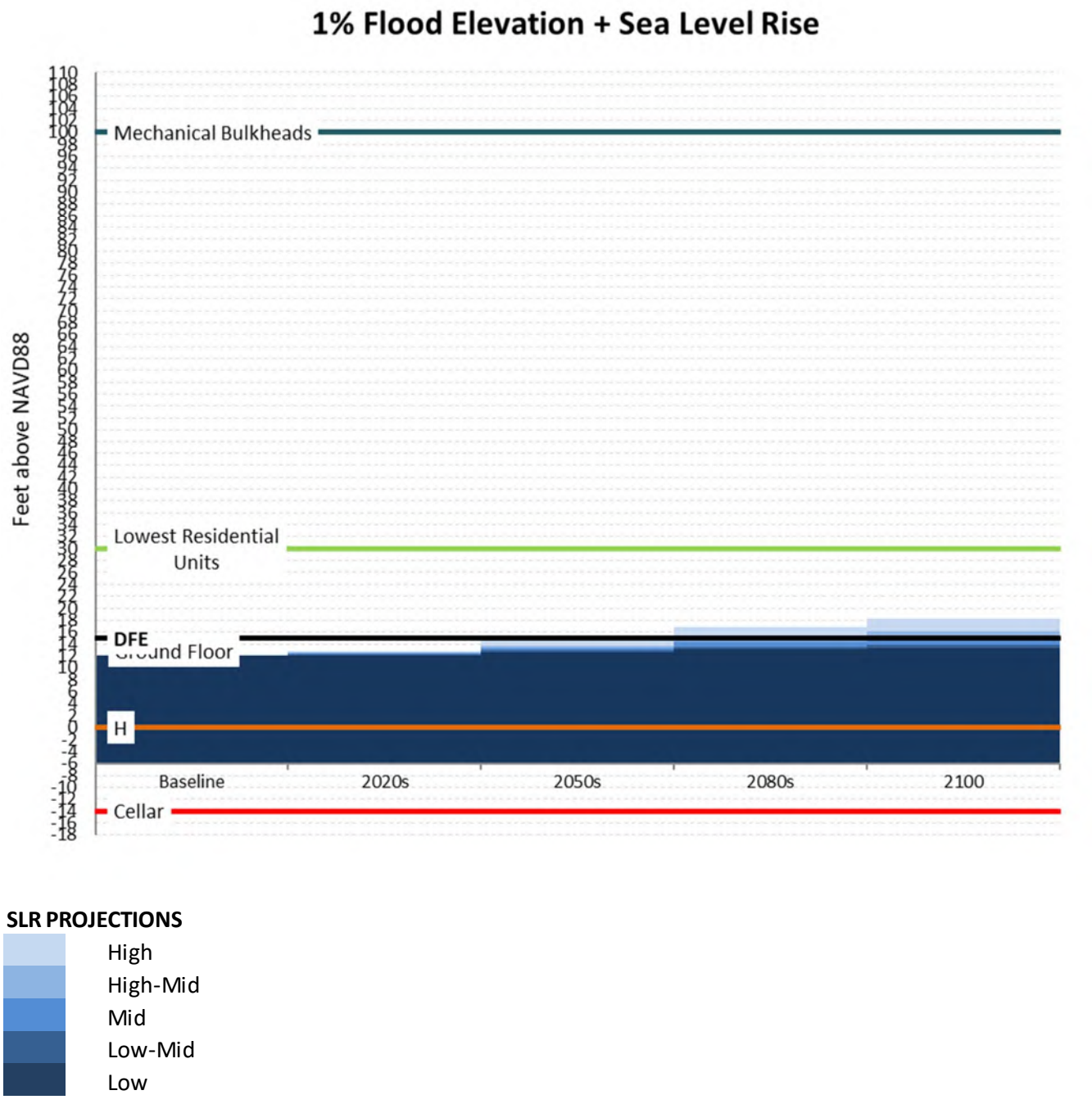
Figure I-9
High Tide Projections 2100s



Legend

- Project Area (Primary Study Area)
- 400-Foot Radius (Secondary Study Area)
- Low Estimate (15 inches SLR)
- Low-Mid Estimate (22 inches SLR)
- Middle Estimate (36 inches SLR)
- Mid-High Estimate (50 inches SLR)
- High Estimate (75 inches SLR)


Mean Higher High Water + Sea Level Rise
Feet above NAVD88
Mechanical Bulkheads
Lowest Residential Units
Ground Floor
Cellar
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low


1% Flood Elevation + Sea Level Rise
Feet above NAVD88
Mechanical Bulkheads
Lowest Residential Units
DFE
Ground Floor
H
Cellar
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

As shown in the 1% Flood Elevation and Sea Level Rise graph above, the Proposed Development's cellar, which would contain the residential parking garage and storage, would have a depth of approximately 14 feet below grade. The parking garage and storage located within the Proposed Development's cellar would be a vulnerable feature. As illustrated in the 1% Flood Elevation + Sea Level Rise graph, the Proposed Development's cellar would be located below the BFE of the 100-year flood zone (12 feet [NAVD88]) and any critical features within the cellar would remain below the elevation of the 100-year flood zone for the remainder of the Proposed Development's lifespan (approximately 75 years). As a result, future flooding events could result in a loss of building services, temporary displacement of residents, structural damage and damage to personal property (e.g., vehicles and bicycles), loss of inventory, or potentially increased flood insurance costs. However, the NPCC recommends that these flood projection maps not be used to judge site-specific risks, and they are subject to change. The Proposed Development's cellar would be designed and constructed in accordance with all applicable city and state flooding and erosion regulations, including New York City Administrative Code, Title 28, Section 104.9 ("Coastal Zones and Water-Sensitive Inland Zones"). As noted previously, Appendix G of the *New York City Building Code* would apply to the Proposed Development; therefore, the Proposed Development's cellar would be required to be floodproofed. For this reason, the Applicant does not intend to place any mechanical equipment or other critical features in the cellar of the Proposed Development.

The Proposed Development's ground floor (the lowest occupied floor), which would contain a residential lobby, warehouse (including loading berths), office, retail, and utility space would feature a proposed elevation of approximately 15 feet (NAVD88) with the DFE of three feet; these building features would be elevated approximately three feet above BFE of the 100-year flood zone (12 feet [NAVD88]). The residential lobby, office, retail, and warehouse space located on the Proposed Development's ground floor would be vulnerable features. Though the future design has not been finalized, mechanical equipment located on the ground floor could contain critical features, as this space could contain MEP equipment such as electrical, gas, water meter, and telecom rooms. At this time, the Applicant plans to include a Design Flood Elevation of three feet for the ground floor, which would put MEP equipment above the 100-year flood zone.

Beginning in the 2020s, the elevation of the Proposed Development's ground floor would fall below the elevation of the one percent annual chance flood zone (under high sea level rise projections), and would remain below the elevation of the future one percent annual chance flood zone for the remainder of the Proposed Development's lifespan (approximately 75 years). If any of the Proposed Development's critical and vulnerable features located on the ground floor were to fall below the elevation of the future one percent annual chance flood zone, future flooding events could result in a loss of building services, temporary displacement of residents, structural damage, loss of inventory, or potentially increased flood insurance costs.

The building's HVAC systems would include variable refrigerant flow (VRF) heating and cooling units, which would allow for independent climate control run on separate condensers located on elevated rooftop areas so that if one condenser fails the entire building would not lose temperature control. The independent climate control feature allows for different areas of the building (down to the individual room more or less) to have different temperatures, even allowing some rooms to have heat while others operate cooling simultaneously. Because of its location on the rooftop as well as its redundancy, this system is unlikely to be affected by a hypothetical flood event.

As shown in the 1% Flood Elevation + Sea Rise graph, the Proposed Development's lowest residential units (vulnerable features at an elevation of approximately 30 feet [NAVD88]) and rooftop mechanical bulkhead (critical features at an elevation of approximately 100 feet [NAVD88]) would be located well above the current and future one percent annual chance flood zone under high sea level rise projections. The

Proposed Development's lowest residential units and lowest mechanical bulkhead would remain above the elevation of the future one percent annual chance flood zone for the full lifespan of the Proposed Development.

STEP 2: IDENTIFY ADAPTIVE STRATEGIES

The Proposed Development would be designed and constructed in accordance with all applicable city and state flooding and erosion regulations, including New York City Administrative Code, Title 28, Section 104.9 ("Coastal Zones and Water-Sensitive Inland Zones"). This also includes Appendix G of the *New York City Building Code*, for which purpose the cellar of the Proposed Development would be floodproofed.

Based on the future 100-year flood zone projections for the 2020s, 2050s, 2080s, 2100, the Project Area would continue to remain within the 100-year flood zone, but would fall outside the future tidal zone by the 2050s and beyond (see **Figures I-7** through **I-9**). However, as described above, the NPCC recommends that these maps not be used to judge site-specific risks and they are subject to change. As previously stated, coastal floodplains are influenced by astronomic tide and meteorological forces and not by fluvial flooding, and as such are not affected by the placement of obstructions within the floodplain. In the event of a 100-year flood event, the Proposed Development would respond well, as it will be built with the lowest occupied floor above the BFE of 12 feet (NAVD88), with a DFE of 15 feet. With the very unlikely event of a 100-year flood event combined with a 50" sea level rise, the cellar level (which would contain no residential units and no critical equipment) as well as the ground floor level (which would contain non-residential space and could contain critical mechanical equipment) may be vulnerable. However, as described above, where practicable and feasible, the building's MEP equipment would be located on either the rooftop or above the ground floor level, which would be well above the BFE that is projected to be 50" higher than today's. In the event that locating critical equipment above the ground floor is infeasible or impracticable, such equipment will be placed in floodproofed mechanical rooms on the ground and/or cellar level. Should the sea level rise 50" in the future, additional flood proofing measures may need to be implemented to adapt the lowest floors of the building to minimize damage.

If the elevation of the floodplain increases, potential adaptive actions to be considered may include elevating critical features from the Proposed Development's ground floor to the Proposed Development's second floor. If elevated, these critical features would feature an elevation of approximately 30 feet (NAVD88) and would be located well above the current and future one percent annual chance flood zone under high sea level rise projections. An additional potential adaptive action may include the utilization of portable flood barriers at all of the Proposed Development's points of ingress and egress. Such portable flood barriers could be mobilized and installed prior to future storm events that may result in extreme flooding. In addition, while the Applicant is committed to floodproofing any mechanical rooms containing critical equipment at or below grade, additional potential retrofits could be pursued to further floodproof, as appropriate, the cellar and ground floor of the Proposed Development. The Proposed Development is not expected to make flooding on adjacent properties worse, nor would the Proposed Development conflict with other plans for flood protection on adjacent properties.

STEP 3: ASSESS POLICY CONSISTENCY

The Proposed Actions would advance Policy 6.2 and there would be no significant adverse impacts associated with the primary study area's location within the 100-year and 500-year flood zones. At present, the primary study area is susceptible to flooding risk. In the future, according to NPCC projections, the primary study area would continue to be susceptible to flooding risk. In addition, the NPCC recommends that these flood projection maps not be used to judge site-specific risks and they are subject to change. All new vulnerable, critical, or potentially hazardous features would be protected through flood

damage reduction measures or future adaptive actions, where applicable. Therefore, the Proposed Project would be consistent with New York City policies regarding adaptation to climate change.

Based on the CAF completed for the Proposed Actions, which is provided in **Appendix I**, two WRP policies required further assessment. The assessment provided herein found that the Proposed Actions would be consistent with all applicable WRP policies. Therefore, the Proposed Actions are not expected to result in any significant adverse impacts related to the WRP. DCP's division of Climate and sustainability Planning, on behalf of the New York City Coastal Commission, has reviewed the WRP assessment, and the Proposed Project has been assigned WRP No. [TBD].

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	
Location	
Type(s)	☑ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☐ Coastal Protection
Description	The Proposed Development is a new, eight-story mixed-use building, containing a total of 267,442 gsf, with 178,134 gsf pf residential space (227 DUs), above 13,346 gsf of local retail, 20,485 gsf of warehouse, and 5,118 of community facility (nonprofit office) space on the first floor. There would also be a cellar containing 50,360 of parking and storage space, with 70 accessory parking spaces. The project has a DFE of 3 feet.
Planned Completion Date	2028
Expected Project Lifespan	75 Years

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.87	**2.87**	**NAVD88**	*Horns Hook; NOAA VDATUM*
1% flood height	12.00	**12.00**	**NAVD88**	*DCP Flood Hazard Mapper*
Design flood elevation	15.00	**15.00**	**NAVD88**	*Assuming BFE + 36" Freeboard*
As relevant:				
0.2% flood height	14.00	14.00	**NAVD88**	*FEMA FIS Report East River Transect Q-56*

Data will be converted based on the following datums:

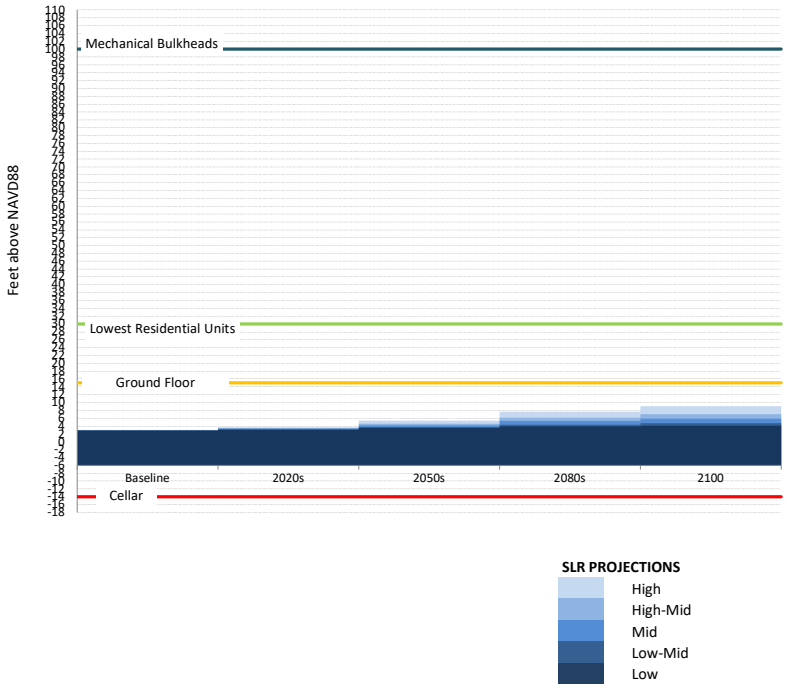
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

Describe key physical features of the project.

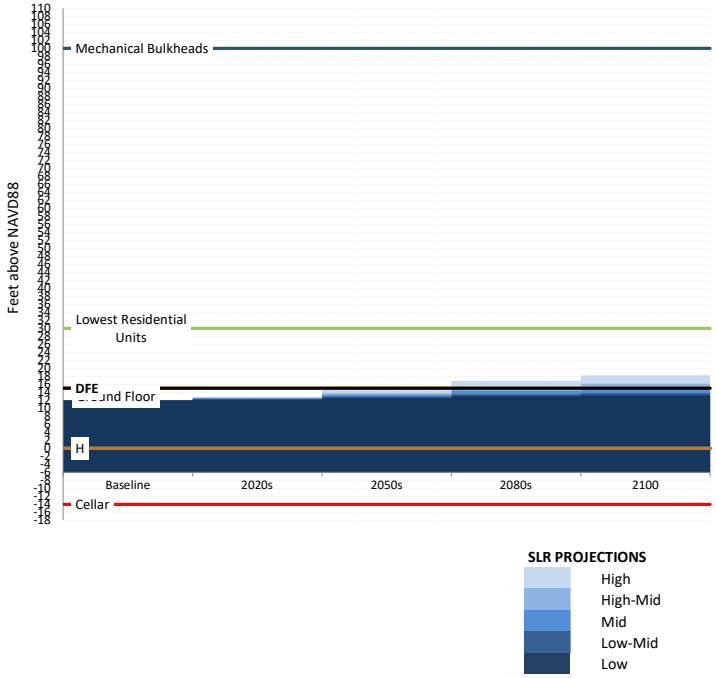
Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Cellar	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2103	-14.0	Feet	NAVD88	*-14.0*	*-14.0*	*-16.9*	*-28.0*
The cellar of the Proposed Development would contain a parking garage (accessed by a ramp leading up to an at-grade entrance along the north side of the building), as well as storage at the northern and southern sides of the building.									
Ground Floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2103	15.0	Feet	NAVD88	*15.0*	*15.0*	*12.1*	*1.0*
The ground floor would contain 1) a residential lobby and trash room 2) an entry ramp for the below-grade parking garage 3) warehouse and office space for the Catholic Medical Mission Board 4) mechanical equipment and loading space for the CMMB warehouse 5) local retail space									
Lowest Residential Units	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2103	30.0	Feet	NAVD88	*30.0*	*30.0*	*27.1*	*16.0*
Residential units would be located on floors 3-8.									
Mechanical Bulkheads	☑ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	2103	100.0	Feet	NAVD88	*100.0*	*100.0*	*97.1*	*86.0*
The Proposed Development's lowest mechanical bulkhead is at +100 feet.									
E	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

Assess project vulnerability over a range of sea level rise projections.

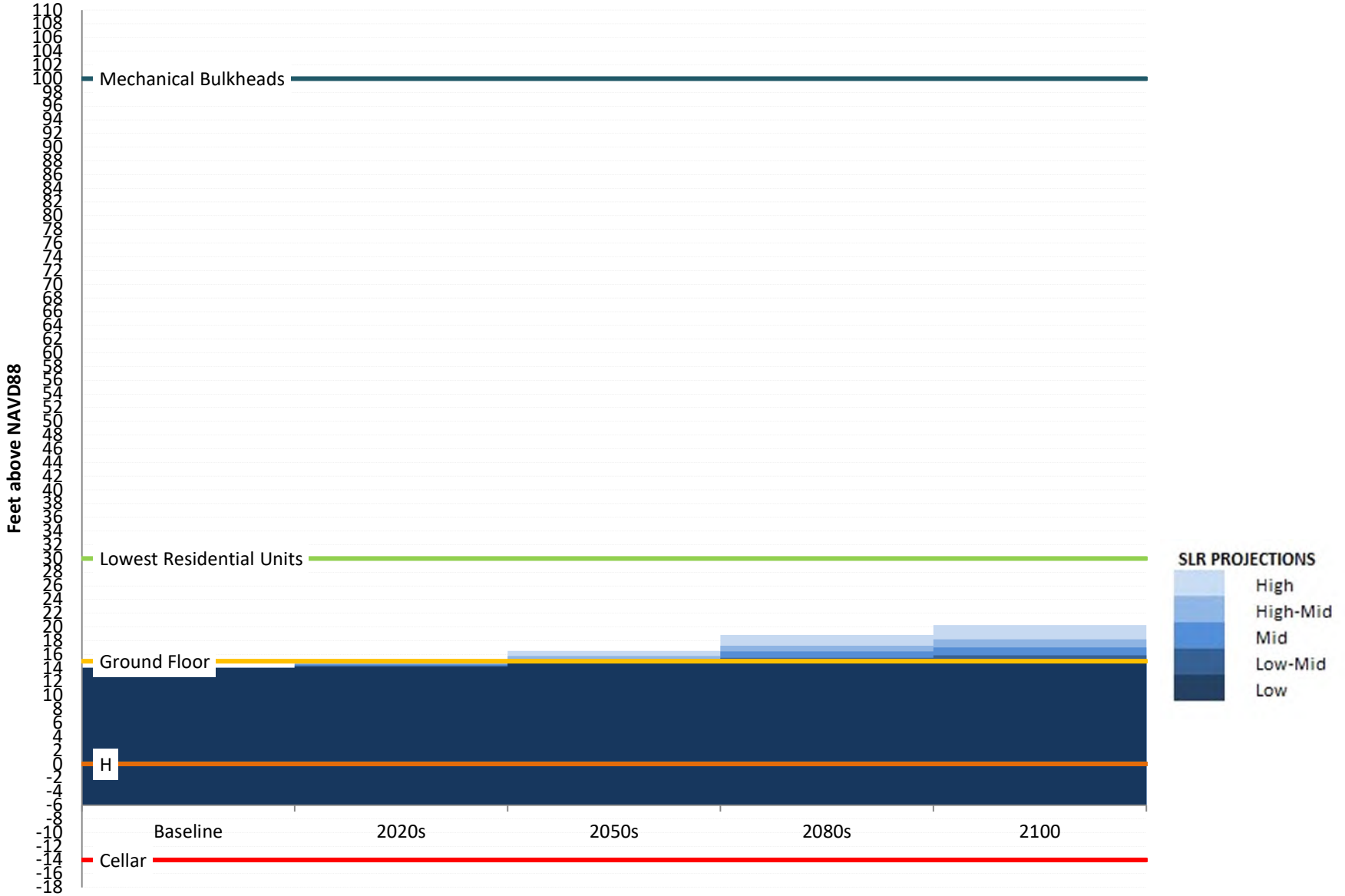
Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise



0.2% Flood Elevation + Sea Level Rise



	SLR (ft)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	0.00	0.00	0.00	0.00	0.00
2020s	0.17	0.33	0.50	0.67	0.83
2050s	0.67	0.92	1.33	1.75	2.50
2080s	1.08	1.50	2.42	3.25	4.83
2100	1.25	1.83	3.00	4.17	6.25

	SLR (in)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
2014	0	0	0	0	0
2020s	2	4	6	8	10
2050s	8	11	16	21	30
2080s	13	18	29	39	58
2100	15	22	36	50	75

	MHHW+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.87	2.87	2.87	2.87	2.87
2020s	3.04	3.20	3.37	3.54	3.70
2050s	3.54	3.79	4.20	4.62	5.37
2080s	3.95	4.37	5.29	6.12	7.70
2100	4.12	4.70	5.87	7.04	9.12

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	12.00	12.00	12.00	12.00	12.00
2020s	12.17	12.33	12.50	12.67	12.83
2050s	12.67	12.92	13.33	13.75	14.50
2080s	13.08	13.50	14.42	15.25	16.83
2100	13.25	13.83	15.00	16.17	18.25

	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	14.00	14.00	14.00	14.00	14.00
2020s	14.17	14.33	14.50	14.67	14.83
2050s	14.67	14.92	15.33	15.75	16.50
2080s	15.08	15.50	16.42	17.25	18.83
2100	15.25	15.83	17.00	18.17	20.25

	0	1
Cellar	-14	-14
Ground Floor	15	15
Lowest Residential Units	30	30
Mechanical Bulkheads	100	100
E	0	0
F	0	0
G	0	0
H	0	0
DFE	15.00	15.00

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**	*Source*
8518687	Queensboro Bridge	2.27	2.60	NOAA Tides and Currents
8530095	Alpine	2.11	2.44	NOAA Tides and Currents
8516614	Glen Cove	3.72	4.05	NOAA Tides and Currents
8516990	Willets Point	3.72	4.05	NOAA Tides and Currents
8518639	Port Morris	3.33	3.66	NOAA Tides and Currents
8518699	Williamsburg Bridge	2.14	2.47	NOAA Tides and Currents
8518750	The Battery	2.28	2.61	NOAA Tides and Currents
8531680	Sandy Hook	2.41	2.74	NOAA Tides and Currents
8518490	New Rochelle	3.71	4.04	NOAA Tides and Currents
8531545	Keyport	2.66	2.99	NOAA Tides and Currents
8516891	Norton Point	2.08	2.41	NOAA VDATUM
8517201	North Channel	2.72	3.05	NOAA Tides and Currents
8517137	Beach Channel	2.10	2.43	NOAA VDATUM
8517756	Kingsborough	2.13	2.46	NOAA VDATUM
8519436	Great Kills	2.22	2.55	NOAA VDATUM
8531142	Port Reading	2.82	3.15	NOAA VDATUM
8519483	Bergen Point	2.56	2.89	NOAA VDATUM
8519050	USCG	2.28	2.61	NOAA Tides and Currents
8518902	Dyckman St	2.01	2.34	NOAA Tides and Currents
8517251	Worlds Fair Marina	3.59	3.92	NOAA VDATUM
8518668	Horns Hook	2.54	2.87	NOAA VDATUM
8518643	Randalls Island	2.60	2.93	NOAA VDATUM
8518526	Throggs Neck	3.68	4.01	NOAA Tides and Currents

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-2001 tidal epoch.



APPENDIX II:
LPC DETERMINATION

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: DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
Project: 11 ST. REZONING
Date Received: 1/2/2024

Properties with no Architectural or Archaeological significance:

1) 33-01 11 STREET, BBL: 4003170001
2) 11-18 33 AVENUE, BBL: 4003170016
3) 11-20 33 AVENUE, BBL: 4003170018

Comments:

LPC DESIGNATED BARKIN, LEVIN & COMPANY OFFICE PAVILION, 12-22 33 STREET AND S/NR ELIGIBLE ISAMU NOGUCHI STUDIO, 33-38 10 STREET; SHED 33-42 10 STREET AND NOGUCHI STUDIO AND MUSEUM WITHIN RADIUS.

Gina Santucci

1/8/2024

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 37214_FSO_DNP_01082024.docx

APPENDIX III:
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: **NYCDCP**

FROM: **Philip Habib & Associates**

DATE: **March 29, 2023**

PROJECT: **33-01 11th Street Rezoning EAS (PHA No. 202003)**

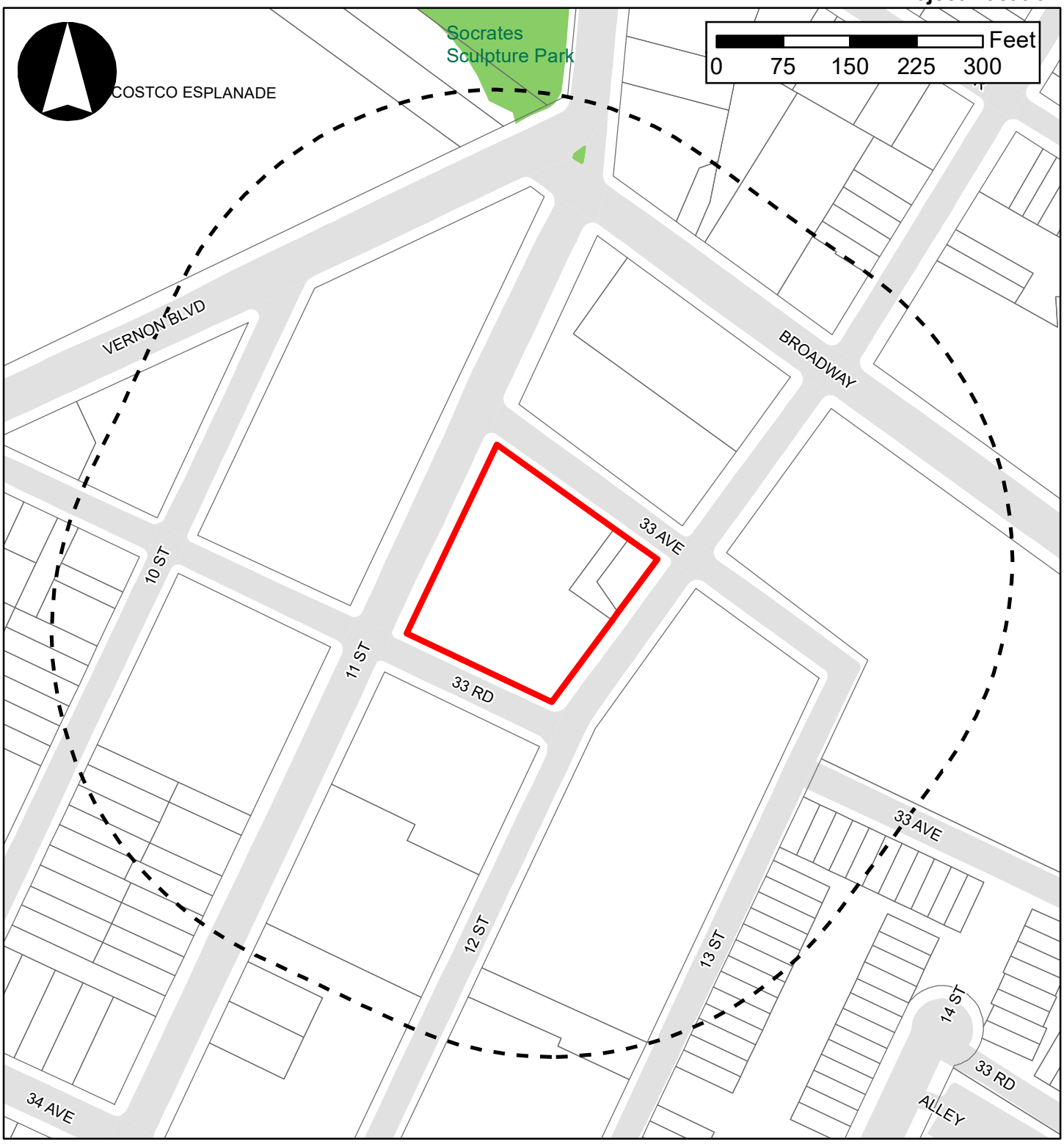
RE: **Transportation Planning Factors and Travel Demand Forecast**

This memorandum summarizes the transportation planning factors to be used for the assessment of traffic, parking, transit, and pedestrian conditions for the 33-01 11th Street Rezoning EAS. Estimates of the peak travel demand for the Proposed Actions' reasonable worst-case development scenario (RWCDS) are provided, along with a discussion of trip assignment methodologies and study area definitions.

THE PROPOSED ACTIONS

The Applicant, Catholic Medical Mission Board ("CMMB"), seeks approval for two discretionary actions (the "Proposed Actions") to facilitate development on the entirety of Queens Block 317 (applicant-owned Lot 1 and non-Applicant-owned Lots 16 and 18) ("Proposed Development Site") in the Ravenswood neighborhood of Queens Community District (CD) 1 ("the "Project Area") (**Figure 1**). Specifically, the Proposed Actions include a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (MX-23 Special Mixed-Use district) and a zoning text amendment to designate the Project Area as a Mandatory Inclusionary Housing ("MIH") area.

Upon approval of the Proposed Actions, which are discretionary public actions subject to both the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR), Lots 16 and 18 would be combined with the Applicant-owned Lot 1 into a single zoning lot. This would allow the development of a new eight-story, approximately 267,442 gross square feet (gsf) mixed-use building on the Project Area, including approximately 178,134 gsf residential space (227 total dwelling units [DUs], with approximately 57 DUs [25%] affordable under MH Opt. 1), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. Additionally, the building would contain approximately 50,360 gsf of storage, mechanical, and parking area, including 70 below-grade parking spaces. It is anticipated that



Legend

- 400-Foot Radius
- Project Site
- Water
- Open Space



construction on the Proposed Development Site would be completed by 2028.

THE REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

In order to assess the potential effects of the Proposed Actions, a RWCDS for both "future without the Proposed Actions" (No-Action) and "future with the Proposed Actions" (With-Action) conditions are analyzed for an analysis year of 2028.

Future without the Proposed Actions (No-Action Conditions)

In the 2028 future without the Proposed Actions (the No-Action condition), it is anticipated that the Applicant would demolish the existing one-story, 39,896 gsf warehouse building on Lot 1 and redevelop the site with a new four-story, 123,710 gsf mixed-use residential and community facility building containing approximately 50,125 gsf of residential space (59 market-rate DUs), approximately 33,055 gsf of community facility (nonprofit office) space, and approximately 40,530 gsf of parking and mechanical area with 63 accessory parking spaces in the cellar accessible via an existing curb cut on 33rd Avenue.

Additionally, without approval of the Proposed Actions, lots 16 and 18 would not be combined with the Applicant-owned Lot 1. As such, the existing auto repair uses (totaling approximately 5,256 gsf) are expected to remain on those lots, and no development would occur on the non-Applicant-owned Lots 16 and 18 in absence of the Proposed Actions.

Future with the Proposed Actions (With-Action Condition)

In the future with the Proposed Actions (With-Action conditions), the proposed zoning map and zoning text amendments would be approved. As such Lots 16 and 18 would be combined with the Applicant-owned Lot 1 into a single zoning lot. The Applicant would demolish the existing uses and construct the Proposed Development: an approximately 267,442 gsf mixed-use building including approximately 178,134 gsf of residential space (227 total DUs), approximately 13,346 gsf of commercial retail space, approximately 5,118 gsf of community facility (nonprofit office) space, and approximately 20,485 gsf of warehouse space. The building would also contain approximately 50,360 gsf of storage, mechanical, and parking area including 70 accessory parking spaces in a below-grade garage accessed via an existing curb cut along 33rd Avenue.

It is also anticipated that in the future with the Proposed Actions, CMMB would re-occupy the community facility and warehouse space in the Proposed Development and continue to operate a medical distribution center, as it does in the existing conditions.

RWCDS Increment

As shown in **Table 1**, for the purposes of transportation forecasting, compared to the No-Action condition, the Proposed Actions would result in a net incremental increase of 128,009 gsf of residential uses (approximately 168 DUs), approximately 13,346 gsf of local retail uses, and approximately 20,485 gsf of warehouse space as well as a net reduction of approximately 27,938 gsf of community facility space and approximately 5,256 gsf of auto repair uses, compared to the No-Action condition. The Proposed Actions would also result in a net incremental increase of approximately seven accessory parking spaces.

TABLE 1: 2028 Comparison of No-Action and With-Action Development Scenarios

Land Use	No-Action	With-Action	Increment
Residential (gsf)	50,125	178,134	+128,009
Residential (DUs)	59	227	+168
Local Retail (gsf)	0	13,346	+13,346
Community Facility – Nonprofit Office (gsf)	33,055	5,118	-27,938
Auto Repair (gsf)	5,256	0	-5,256
Warehouse (gsf)	0	20,485	+20,485
Accessory Parking Spaces	63	70	+7

TRANSPORTATION PLANNING FACTORS

The trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies, and truck trip factors used to forecast travel demand for the RWCDS's residential, local retail, community facility, auto body repair, and warehouse uses are summarized in **Table 2**. They were based on factors cited in the 2021 *City Environmental Quality Review (CEQR) Technical Manual;* 2012-2016 American Association of State Highway Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data and 2015-2019 American Community Survey (ACS) journey-to-work data for Queens census tracts in proximity to the Project Site (tracts 39, 43, 45, 77, 81, and 85); and factors developed for recent environmental reviews. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Residential

Residential person trip rates, temporal distribution, and directional in/out splits reflect data from the 2021 *CEQR Technical Manual*. Modal split and auto occupancy were based on 2015-2019 5-year ACS journey-to-work data for Queens Census Tracts 39, 43, 45, 77, 81, and 85, and taxi vehicle occupancy was based on data from the 2022 *Innovation QNS Rezoning and LSGD FEIS*. The modal splits based on the ACS journey-to-work data were conservatively assumed for all periods. Truck generation rates and temporal distributions reflect those cited in the 2021 *CEQR Technical Manual*.

Local Retail

The trip generation rates, temporal distributions, modal splits, and in/out splits for local retail reflect data from the 2021 *CEQR Technical Manual*. The vehicle occupancy rates for local retail were based on data provided by the New York City Department of Transportation (NYCDOT). Truck trip generation rates and temporal distributions were based on data from the 2021 *CEQR Technical Manual*. There was no linked / pass-by trip credit applied to the local retail use.

Community Facility (Non-Profit Office)

The trip generation rates, temporal distributions, and directional in/out splits for the non-profit office community facility use reflect data from the 2021 *CEQR Technical Manual*. Modal splits for the weekday AM, weekday PM, and Saturday periods, as well as auto occupancy for all periods, were based on 2012-2016 AASHTO CTPP reverse-journey-to-work data for Queens census tracts 39, 43, 45, 77, 81, and 85. Weekday midday modal splits and taxi occupancy for all periods were based on data from the 2022 *Innovation QNS Rezoning and LSGD FEIS*. Truck generation rates and temporal distributions reflect those cited in the 2021 *CEQR Technical Manual*.

Auto Body Repair

The trip generation rates, temporal distributions, modal splits, directional in/out splits, auto and taxi occupancies, truck generation rates, and truck temporal distributions are based on data from the 2015 *East New York Rezoning Proposal FEIS*.

Warehouse

The trip generation rates, temporal distributions, and directional in/out splits are based on data provided by NYCDOT. Modal splits for all periods and auto occupancy are based on 2012-2016 AASHTO CTPP reverse-journey-to-work data for Queens census tracts 39, 43, 45, 77, 81, and 85. Taxi occupancy, truck generation rates, and truck temporal distributions are also based on data provided by NYCDOT.

TABLE 2: Transportation Planning Factors

Land Use:	Residential	Local Retail		Non-Profit Office		Auto Body Repair		Warehouse	
Trip Generation:	(1)	(1)		(1)		(6)		(4)	
Weekday	8.18	329		18		19.42		2.36	
Saturday	9.08	358		3.9		19.42		0.20	
	per DU	per 1,000 gsf		per 1,000 gsf		per 1,000 gsf		per 1,000 gsf	
Temporal Distribution:	(1)	(1)		(1)		(6)		(4)	
AM	9.3%	4.8%		12.4%		13.2%		10.0%	
Midday	5.6%	8.0%		11.0%		11.0%		9.0%	
PM	8.5%	10.9%		10.5%		14.2%		11.0%	
Saturday	8.4%	11.7%		14.1%		10.7%		33.0%	
Modal Splits:	(2)	(1)		(3)(5)		(6)		(5)	
	All Periods	Weekday	Weekend	AM/PM/SAT	MD	All Periods		All Periods	
Auto	22.9%	11.0%	8.0%	54.7%	2.0%	85.0%		54.7%	
Taxi	0.8%	0.0%	0.0%	0.2%	1.0%	5.0%		0.2%	
Subway/Rail	53.4%	4.0%	7.0%	26.4%	7.0%	1.0%		26.4%	
Transit Bus	6.9%	3.0%	4.0%	8.4%	7.0%	1.0%		8.4%	
Ferry	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	
Bike	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	
Walk/Other	11.5%	82.0%	81.0%	10.2%	83.0%	8.0%		10.2%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	
In/Out Splits:	(1)	(1)		(1)		(6)		(4)	
	In	Out	In	Out	In	Out	In	Out	In	Out
AM	22%	78%	52%	48%	86%	14%	65%	35%	77.0%	23.0%
Midday	50%	50%	50%	50%	52%	48%	50%	50%	53.0%	47.0%
PM	62%	38%	50%	50%	16%	84%	50%	50%	27.0%	73.0%
Saturday	55%	45%	50%	50%	48%	52%	50%	50%	64.0%	36.0%
Vehicle Occupancy:	(2)(3)	(4)		(3)(5)		(6)		(5)(4)	
	All Periods	All Periods		All Periods		All Periods		All Periods	
Auto	1.11	1.40		1.09		1.30		1.09	
Taxi	1.40	1.40		1.42		1.30		1.30	
Truck Trip Generation:	(1)	(1)		(1)		(6)		(4)	
Weekday	0.06	0.35		0.32		0.89		0.91	
Saturday	0.02	0.04		0.01		0.89		0.08	
	per DU	per 1,000 gsf		per 1,000 sf		per 1,000 gsf		per 1,000 sf	
Truck Temporal Distribution:	(1)	(1)		(1)		(6)		(4)	
AM	12.0%	8.0%		10.0%		14.0%		9.9%	
MD	9.0%	11.0%		11.0%		9.0%		8.0%	
PM	2.0%	2.0%		2.0%		1.0%		7.0%	
Saturday	9.0%	11.0%		11.0%		0.0%		28.0%	
Truck Directional Distribution:	In	Out	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	50%	50%	50%	50%	50%	50%	67%	33%
MD	50%	50%	50%	50%	50%	50%	50%	50%	57%	43%
PM	50%	50%	50%	50%	50%	50%	50%	50%	60%	40%
Saturday	50%	50%	50%	50%	50%	50%	50%	50%	42%	58%

Notes:

(1) 2021 *City Environmental Quality Review (CEQR) Technical Manual*.

(2) 2015-2019 ACS journey-to-work data for Queens Census Tracts 39, 43, 45, 77, 81, and 85.

(3) Based on data from the 2022 *Innovation QNS Rezoning & LSGD FEIS*.

(4) Based on data provided by NYCDOT.

(5) Based on AASHTO CTPP Reverse journey-to-work 5-year (2012-2016) data for Queens census tracts 39, 43, 45, 77, 81, and 85.

(6) Based on data from 2015 *East New York Rezoning Proposal FEIS*.

TRIP GENERATION

The net incremental change in person and vehicle trips expected to result from the Proposed Actions by the 2028 analysis year was derived based on the net change in land uses shown in **Table 1** and the transportation planning factors shown in **Table 2. Table 3** shows estimates of the net incremental change in peak hour person trips and vehicle trips, which would occur in 2028 under the Proposed Actions. As shown in **Table 3**, compared to the No-Action condition, the Proposed Actions would generate a net increase of approximately 269 person trips (in + out combined) in the weekday AM peak hour, 366 trips in the weekday midday peak hour, 536 trips in the weekday PM peak hour, and 663 trips in Saturday peak hour. As summarized in **Table 4**, peak hour vehicle trips (including auto, taxi, and truck trips) would increase by a net total of approximately 14, 37, 34, and 44 trips during the weekday AM, midday, and PM and Saturday peak hours, respectively. Subway demand would increase by approximately 59, 50, 70, and 105 trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. Bus demand would increase by approximately 10, 12, 18, and 29 trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. Ferry trips would increase by approximately one trip in the weekday AM peak hour and two trips in each of the weekday midday, weekday PM, and Saturday peak hours. Lastly, trips made entirely on foot (walk-only trips) or by other non-motorized modes would increase by approximately 180, 253, 400, and 468 trips during the weekday AM, midday, and PM and Saturday peak hour, respectively. Total pedestrian trips (including walk-only trips and pedestrians walking to/from subway stations, bus, and ferry stops) would increase by approximately 250, 317, 490, and 604 trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. Bike trips would add approximately five, four, three, and four trips in the weekday AM, midday, and PM and Saturday peak hours, respectively.

LEVEL 1 SCREENING ASSESSMENT

The *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, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the numbers of person and vehicle trips attributable to the Proposed Actions. According to the *CEQR Technical Manual*, if the Proposed Actions are expected to result in fewer than 50 vehicle or ferry trips in each peak hour 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 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 show that the Proposed Actions 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, 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, ferry, pedestrians, vehicular and pedestrian safety, and parking.

TABLE 3: Travel Demand Forecast

Land Use:		Local Retail		Residential		Non-Profit Office		Auto Body Repair		Warehouse			
Size/Units:		13,346 gsf		168 DUs		-27,937 gsf		-5,256 gsf		20,485 gsf			
Peak Hour Trips:												Total Trips	
	AM	212		128		-63		-13		5		269	
	Midday	352		76		-55		-11		4		366	
	PM	480		117		-52		-14		5		536	
	Saturday	560		128		-15		-11		1		663	
Person Trips:													
AM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	12	12	7	22	-29	-4	-7	-4	2	2	-15	28
	Taxi	0	0	0	1	0	0	0	0	0	0	0	1
	Subway	4	4	15	53	-15	-3	0	0	1	0	5	54
	Public Bus	3	3	2	7	-4	-1	0	0	0	0	1	9
	Ferry	0	0	0	1	0	0	0	0	0	0	0	1
	Bike	0	0	1	4	0	0	0	0	0	0	1	4
	Walk/Other	90	84	3	12	-6	-1	-2	0	0	0	85	95
	Total	109	103	28	100	-54	-9	-9	-4	3	2	77	192
Midday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	19	19	9	9	-1	-1	-6	-5	1	1	22	23
	Taxi	0	0	0	0	0	0	0	0	0	0	0	0
	Subway	7	7	19	19	-2	-2	0	0	1	1	25	25
	Public Bus	5	5	3	3	-2	-2	0	0	0	0	6	6
	Ferry	0	0	1	1	0	0	0	0	0	0	1	1
	Bike	0	0	2	2	0	0	0	0	0	0	2	2
	Walk/Other	145	145	4	4	-23	-22	0	0	0	0	126	127
	Total	176	176	38	38	-28	-27	-6	-5	2	2	182	184
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	26	26	16	10	-4	-24	-6	-6	2	2	34	8
	Taxi	0	0	1	0	0	0	0	0	0	0	1	0
	Subway	10	10	40	24	-3	-12	0	0	0	1	47	23
	Public Bus	7	7	5	3	-1	-3	0	0	0	0	11	7
	Ferry	0	0	1	1	0	0	0	0	0	0	1	1
	Bike	0	0	2	1	0	0	0	0	0	0	2	1
	Walk/Other	197	197	8	5	-1	-4	-1	-1	0	0	203	197
	Total	240	240	73	44	-9	-43	-7	-7	2	3	299	237
Saturday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	22	22	15	12	-4	-4	-6	-5	1	0	28	25
	Taxi	0	0	1	1	0	0	0	0	0	0	1	1
	Subway	20	20	38	31	-2	-2	0	0	0	0	56	49
	Public Bus	11	11	5	4	-1	-1	0	0	0	0	15	14
	Ferry	0	0	1	1	0	0	0	0	0	0	1	1
	Bike	0	0	2	2	0	0	0	0	0	0	2	2
	Walk/Other	227	227	8	7	-1	0	0	0	0	0	234	234
	Total	280	280	70	58	-8	-7	-6	-5	1	0	337	326
Vehicle Trips :		Local Retail		Residential		Non-Profit		Auto Body Repair		Warehouse		Total Trips	
AM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	9	9	6	20	-26	-4	-5	-3	2	2	-14	24
	Taxi	0	0	0	1	0	0	0	0	0	0	0	1
	Taxi (Balanced)	0	0	1	1	0	0	0	0	0	0	1	1
	Truck	0	0	1	1	-1	-1	0	0	1	1	1	1
	Total	9	9	8	22	-27	-5	-5	-3	3	3	-12	26
Midday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	14	14	8	8	-1	-1	-5	-4	1	1	17	18
	Taxi	0	0	0	0	0	0	0	0	0	0	0	0
	Taxi (Balanced)	0	0	0	0	0	0	0	0	0	0	0	0
	Truck	0	0	1	1	-1	-1	0	0	1	1	1	1
	Total	14	14	9	9	-2	-2	-5	-4	2	2	18	19
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	19	19	15	9	-4	-22	-5	-5	2	2	27	3
	Taxi	0	0	1	0	0	0	0	0	0	0	1	0
	Taxi (Balanced)	0	0	1	1	0	0	0	0	0	0	1	1
	Truck	0	0	0	0	0	0	0	0	1	1	1	1
	Total	19	19	16	10	-4	-22	-5	-5	3	3	29	5
Saturday		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	16	16	14	10	-4	-4	-5	-4	1	0	22	18
	Taxi	0	0	1	1	0	0	0	0	0	0	1	1
	Taxi (Balanced)	0	0	2	2	0	0	0	0	0	0	2	2
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	16	16	16	12	-4	-4	-5	-4	1	0	24	20

Notes: A 0% pass-by trip credit was applied to the local retail use.

TABLE 4: Trip Generation Increment Summary

Peak Hour	Vehicle Trips[1]			Person Trips														
				Subway			Bus			Ferry			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	-12	26	14	5	54	59	1	9	10	0	1	1	85	95	180	91	159	250
Midday	18	19	37	25	25	50	6	6	12	1	1	2	126	127	253	158	159	317
PM	29	5	34	47	23	70	11	7	18	1	1	2	203	197	400	262	228	490
Saturday	24	20	44	56	49	105	15	14	29	1	1	2	234	234	468	306	298	604

Notes:
(1) Includes auto, taxi, and truck trips.
(2) Includes walk-only trips and pedestrians walking to/from subway stations, bus stops, and ferry stops but doesn't include bike trips.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if the Proposed Actions would result in 50 or more vehicle trip-ends in a peak hour at one or more intersections. As summarized in **Table 4**, under the Proposed Actions there would be net increases of 14, 37, 34, and 44 vehicle trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. As the numbers of trips would not potentially exceed the 50-trip *CEQR Technical Manual* threshold in any peak hour, further traffic analysis is not warranted. Therefore, significant adverse impacts to nearby intersections are not expected to occur under the Proposed Actions, and a detailed analysis of traffic conditions is not warranted based on *CEQR Technical Manual* guidance.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if the Proposed Actions are projected to result in fewer than 200 peak hour rail or bus transit riders. If the Proposed Actions 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 summarized in **Table 4**, the Proposed Actions are expected to generate a net total of approximately 59 and 70 incremental subway trips in the weekday AM and PM peak hours, respectively. As these trips would not exceed the 200-trip *CEQR Technical Manual* analysis threshold, further subway analysis is not warranted. As also shown in **Table 4,** there is expected to be a net increase of 10 and 18 incremental bus trips in the weekday AM and PM peak hours, respectively. If subway trips utilized bus service to get to the subway, total bus trips would amount to 69 and 88 incremental trips in the weekday AM and PM peak hours, respectively. These trips would be distributed across the four bus routes in close proximity to the Project Site, these include the Q69, Q100, Q103, and Q104 bus routes. As these trips would not

exceed the 50-trip *CEQR Technical Manual* analysis threshold (in one direction), further bus analysis is not warranted. Therefore, significant adverse impacts to transit subway and bus services are not expected to occur under the Proposed Actions, and a detailed analysis of subway and bus conditions is not warranted based on *CEQR Technical Manual* guidance.

CWFS

According to *CEQR Technical Manual* guidance, detailed analyses of the CWFS are not typically required if the Proposed Actions would result in 50 or fewer peak hour CWFS peak hour ferry riders to a ferry landing within a half-mile of the Project Site. As shown in **Table 4**, the Proposed Actions would result in a net increase of no more than two ferry riders in each peak hour. As such, a Level 2 screening analysis is not warranted according to *CEQR Technical Manual* guidance.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if the Proposed Actions would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table 4**, the Proposed Actions would generate a net incremental increase of approximately 250, 317, 490, and 604 total pedestrian trips in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. These would include walk-only trips and pedestrians walking to and from the subway, bus, and ferry stop. In addition, approximately five, four, three, and four trips bike trips would conservatively be included with pedestrian trips during the weekday AM, midday, and PM and Saturday peak hours, respectively; this would amount to 255, 321, 493, and 608 total pedestrian trips during the same peak hours. As the number of trips would exceed the 200-trip threshold in all peak hours, a Level 2 screening assessment is warranted to determine which, if any, pedestrian elements require quantified analysis.

LEVEL 2 SCREENING ASSESSMENT

Pedestrians

Based on *CEQR Technical Manual* guidance, detailed pedestrian analyses are generally warranted if the Proposed Actions are projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner area, or crosswalk. As shown in **Table 4**, the Proposed Actions are expected to generate a net increase of 180, 253, 400, and 468 new incremental walk-only trips in the weekday AM, midday, and PM and Saturday peak hours, respectively. In addition, there would be an increase of 75, 68, 93, and 140 pedestrians walking to and from bus stops, subway stations, and ferry landings as well bike trips during the weekday AM, midday, and PM and Saturday peak hours, respectively.

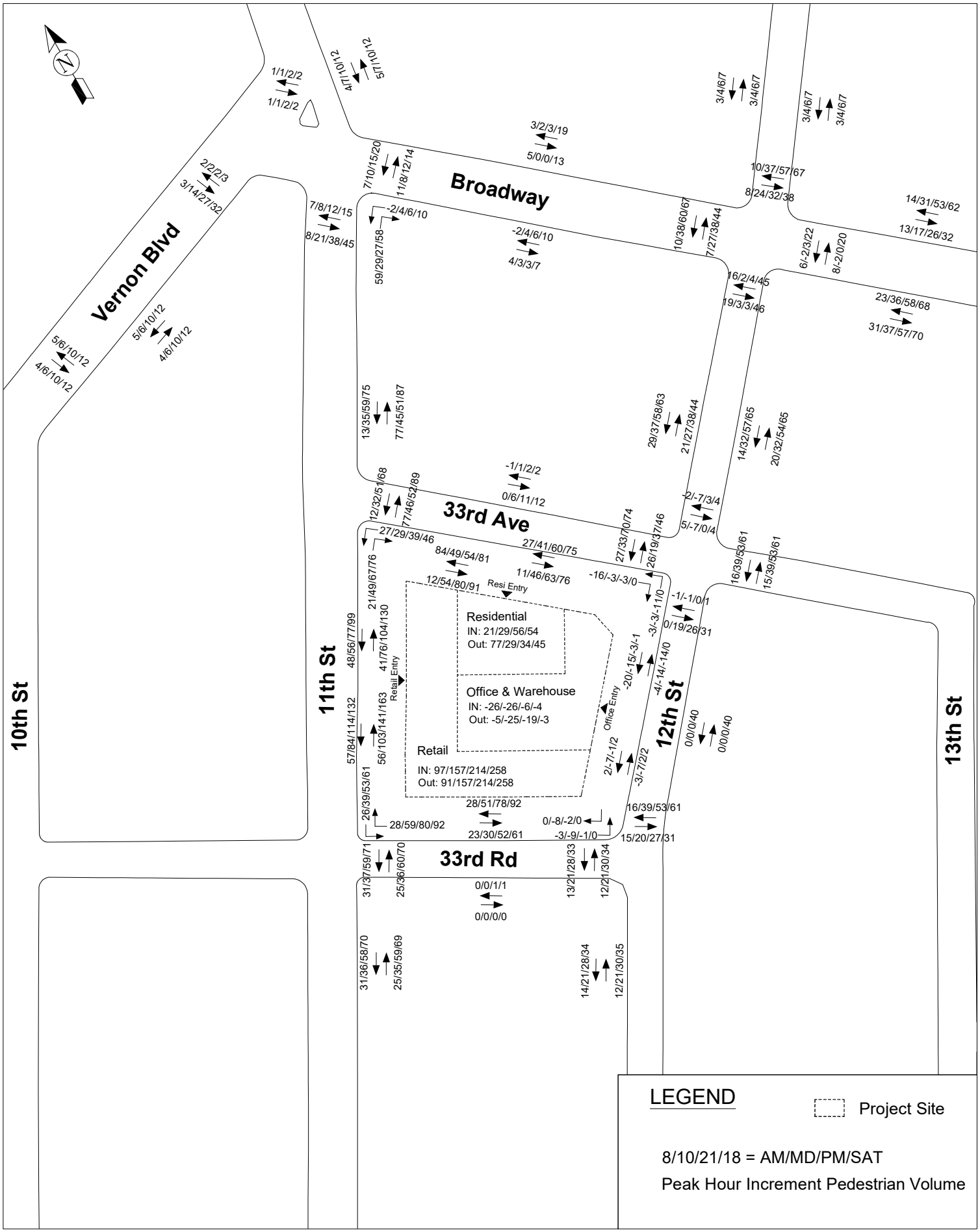
As the net incremental total pedestrian trips (including walk-only and pedestrians walking to/from subway stations, bus stops, and ferry landings) exceeds the 200-prson trip *CEQR Technical Manual*

threshold during all weekday AM, midday, and PM and Saturday peak hours, a preliminary assignment of net incremental pedestrian trips was conducted and is shown in **Figure 2**.

Subway, bus, and walk-only trips each have different assignment patterns. Bus trips were assigned to stops for the Q69, Q100, Q103 and Q104 bus routes along 21st Street / Ditmars Boulevard, 21st Street / 20th Avenue, Broadway and Vernon Boulevard. Subway trips were assigned to the bus stops with the quickest bus routes enroute to the Broadway (N/W) subway station at Broadway and 21st Street (located approximately 0.8 mile from the Project Site). Walk-only trips were distributed throughout the local street network.

Overall, as shown in **Figure 2**, the greatest incremental increases in pedestrian demand under the Proposed Actions are expected to occur on pedestrian elements (sidewalks, corner areas and crosswalks) in the immediate proximity of the Project Site, along the 11th Street, 33rd Avenue, and 33rd Road corridors. Based on the pedestrian assignments shown in **Figure 2** and the *CEQR Technical Manual* guidance, a detailed pedestrian analysis is warranted in the EAS along the western Project Site frontage, the eastern sidewalk of 11th Street between 33rd Avenue and 33rd Road, during the weekday PM and Saturday midday peak hours.

Incremental Project Pedestrian Assignments



APPENDIX IV:
PHASE I ENVIRONMENTAL SITE ASSESSMENT (TO BE PROVIDED)



ALC ENVIRONMENTAL

CONSULTING | MANAGEMENT | TRAINING



Phase I Environmental Site Assessment Report

PERFORMED AT:
33-01 11th Street, 11-18 & 11-20
33rd Avenue, Astoria, NY 11106
Block 317, Lots 1, 16 & 18

PERFORMED FOR:
Philip Habib & Associates
102 Madison Avenue
New York, NY 10016

REPORT DATE:
February 16, 2024

PREPARED BY
ALC ENVIRONMENTAL
39 West 29 Street 8th Floor
New York, NY 10001 | 212-675-554

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1.0 EXECUTIVE SUMMARY

ALC Environmental (ALC) was contracted by Philip Habib & Associates, the Client, to conduct a Phase I Environmental Site Assessment (ESA) of the properties at 33-01 11th Street, 11-18 33rd & 11-20 33rd Avenue, Astoria, NY 11106 (collectively referred to as the **"Subject Property"**). The objective of this assessment was to evaluate past and current environmental conditions at the Subject Property and identify any potential areas of environmental concern or recognized environmental conditions that could affect the environmental integrity of the property. This Phase I ESA was performed in general conformance with the scope and limitations of the ASTM International Practice E1527-21. The information included in this report was gathered from state and municipal offices and officials, site interviews, the environmental database search, and from the site inspection.

Property Description

The Subject Property occupies an entire street block within a mixed commercial and residential area of Queens County, bordered by 33rd Avenue to the north, 12th Street to the east, 33rd Road to the south, and 11th Street to the west. Please refer to the table below for a further description of the Subject Property:

Item	Description		
Block	317	317	317
Lot	1	16	18
Address (Street, State, Zip)	33-01 11th Street, Astoria, NY 11106	11-18 33rd Avenue, Astoria, NY 11106	11-20 33rd Avenue, Astoria, NY 11106
Alternate Address(es)	33-01 – 33-21 11th Street/11-02 – 11-16 33rd Avenue/33-20 12th Street	-	-
Acreage	0.86	0.055	0.06
Property Use	Commercial warehouse- storage of medical supplies	Automotive repair shop and upholstery facility	Automotive engine repair facility
Number of Buildings	1	1	1
Total Floors	1	1	1
Construction Date	1963	1916	1916
Gross Building Area (SF)	34,692	2,300	2,270
Emergency Generator	No	No	No
Other Improvements	Asphalt-paved outdoor parking lot.	-	-
Current Occupants	Catholic Medical Mission Board	Harry´s Alignment and Broadway Covers Upholstery	Foreign Car Center
County	Queens		
Assessor	Brian Mende		
Assessment Date	January 29, 2024 and February 14, 2024		

The Subject Property is located in the Astoria neighborhood of the New York City (NYC) borough of Queens. The general vicinity of the property consists of a vacant lot, an outdoor asphalt-paved parking lot for a high-school sports field, warehouses, and shipping and receiving facilities.

Per the historical sources reviewed (Fire Insurance maps, historical aerial photographs, and city directories), prior to the current improvements Lots 1 and 16 were undeveloped and Lot 18 was improved with a two-story dwelling on the northeast corner of the Subject Property. The warehouse building in Lot 1 was built in 1963 and has always been used for storage of medical supplies. The single-story buildings in Lots 16 and 18 were constructed circa 1916 and were originally live poultry markets. The building at 11-18 33rd Avenue (Lot 16) was subsequently occupied by lacquer mixing and canning facilities identified in the historical records between 1939 and 1977 and automotive repair and auto body shops from as early as 1979 until the present. The building at 11-20 33rd Avenue (Lot 18) has been occupied by automotive repair and auto body shops as early as 1978. Additional former tenants associated with the 11-20 33rd Avenue building include a deli (Maria´s Deli) in 2000 and Perma Iron Craft in 2005. A more detailed discussion of the historical uses of the Subject Property is included in Section 6.3 of the report.

1.1 SUMMARY OF FINDINGS/RECOMMENDATIONS

	Acceptable	Corrective Action	Further Investigation	Reference Section
USER PROVIDED INFORMATION				
Environmental Cleanup Liens	✓			**4.2**
Activity & Land Use Limitations (AULs)	✓			**4.3**
Specialized Knowledge or Experience	✓			**4.3**
Relationship of Purchase Price to Fair Market Value	✓			**4.0**
Commonly Known or Reasonable Ascertainable Information	✓			**4.0**
Degree of Obviousness	✓			**4.0**
RECORDS REVIEW				
Standard Environmental Records	✓			**6.0**
HISTORICAL USE INFORMATION				
Subject Property			✓	**6.3**
Adjoining Properties			✓	**6.3**
Surrounding Areas	✓			**6.4**
INTERIOR & EXTERIOR OBSERVATIONS				
Hazardous Substance & Petroleum Products	✓			**7.2.1**
Storage Tanks	✓			**7.2.2**
Solid Waste	✓			**7.2.3**
Hazardous Waste	✓			**7.2.4**

	Acceptable	Corrective Action	Further Investigation	Reference Section
INTERIOR & EXTERIOR OBSERVATIONS				
Wastewater	✓			**7.2.9**
Polychlorinated Biphenyls (PCBs)	✓			**7.2.18**
Vapor Encroachment			✓	**7.2.19**
Asbestos Containing Materials	✓			**7.3.1**
Lead-Based Paint	✓			**7.3.2**
Radon	✓			**7.3.3**
Mold	✓			**7.3.4**

RECOGNIZED ENVIRONMENTAL CONDITIONS

A recognized environmental condition (REC) is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property 1) due to a release of any hazardous substances or petroleum products; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment.

- According to the historical sources reviewed (historical Fire Insurance maps and city directories), lacquer mixing & canning facilities identified as Ace Lacquer & Chemical Co. Inc., Anaconda Chemical Co. Lacquer, and Worth Lacquer & Chemical Co. operated at the subject building at 11-18 33rd Avenue (Lot 16) between at least 1939 and 1977. The historical records and the 1978 and 1979 Certificates of Occupancy obtained from the NYC Department of Buildings indicate that automotive repair and auto body shops have operated at 11-18 33rd Avenue as early as 1979 and at 1-20 33rd Avenue (Lot 18) as early as 1978. Based on the likely generation of hazardous wastes associated lacquer mixing facilities and automotive repair shops (i.e., lacquer thinners and chemicals, spent solvents, and waste oil) coupled with the lack of hazardous waste disposal regulations before the 1970s, the former lacquer facilities and automotive repair shops at the Subject Property are considered a REC.

- According to the historical records reviewed, the properties adjacent to the Subject Property appear to have been used for industrial/manufacturing purposes since the 1930s. Former uses of environmental concern associated with the adjoining properties include:

  North- 11-01 33rd Avenue
  - American Petrometal Corporation-Wholesale Iron & Steel between at least 1936 and 1950.
  - Nelson Galvanizing Inc. between at least 1962 and 2006.
  - An automotive repair shop between at least 1994 and 2006.

  East- 12-02 Broadway
  - J. Klein Iron Works depicted in the 1915 Fire Insurance (Sanborn) map.
  - A single-story commercial garage with two gasoline tanks and an adjacent automotive repair shop with one gasoline tank depicted in the 1936 Sanborn map.
  - A pipe hanger manufacturer between at least 1948 and 1993.
  - Central Iron Manufacturing Co. listed in 1962 city directory.

- An instruments manufacturer depicted in the 1967 Sanborn map.

Southeast- 12-12 33rd Avenue
- An automotive repair shop depicted in the 1948 Sanborn map.
- Structural Display Co.- Manufacturers of Industrial Displays between at least 1962 and 2017.

Southwest- 33-53 10th South Street
- Dreier Structural Steel Co. Inc. between at least 1948 and 1967.
- Leifer Brothers Steel Company between at least 1977 and 2006.

West- 33-53 10th South Street
- Wood Hydraulic Hoist & Body Co. listed in the 1934 city directory.
- Gar Wood Industries Inc.- Truck Body Building between at least 1934 and 1989.
- A manufacturing building occupied by a truck body building facility between at least 1990 and 2006.

Based on the likely generation of hazardous wastes associated with above referenced former uses of the adjoining properties, coupled with the lack of hazardous waste disposal regulations before the 1970s, the historical manufacturing/industrial uses of the adjoining properties are considered a REC.

HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITION

A historical recognized environmental condition (HREC) is defined as an environmental condition which in the past would have been considered a *recognized environmental condition*, but which may or may not be considered a *recognized environmental condition* currently. The final decision rests with the environmental professional and will be influenced by the current impact of the historical recognized environmental condition on the property.

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

CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITION

Controlled recognized environmental conditions (CRECs) refer to sites that have achieved regulatory closure, where no further remediation is required but residual contamination still exists and the site is subject to some sort of control or use restrictions.

The following CRECs associated with the Subject Property were identified during the course of this assessment. A brief description of the identified CRECs is provided below:

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

BUSINESS ENVIRONMENTAL RISKS

A Business Environmental Risk (BER) refers to environmental concerns identified by ALC, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- ALC did not identify any BERs during the course of this assessment.

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

ALC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of properties at 33-01 11th Street, 11-18 33rd & 11-20 33rd Avenue, Astoria, NY 11106, Queens County (the "Subject Property"). Any exceptions to, or deletions from, this practice are described in Section 2.5 of this report.

This assessment revealed evidence of RECs in connection with the Subject Property. Based on the conclusions of this assessment, prior to the any planned site redeveloped activities and/or acquisition or transfer of the Subject Property, ALC recommends a Phase II subsurface investigation at the Subject Property to confirm or deny impacts associated with the historical uses of the Subject Property and adjoining properties.

APPENDIX V:
TECHNICAL MEMORANDUM FOR CITY OF YES FOR HOUSING OPPORTUNITY

Technical Memorandum for City of Yes for Housing Opportunity

A. INTRODUCTION

The New York City Department of City Planning 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. It is anticipated that this proposed zoning text amendment would be referred into public review in spring 2024. Given that the 33-01 11th Street project may be affected by the proposals included in the proposed zoning text amendment, this technical memorandum assesses whether the conclusion of the project's environmental review would by altered by CHO.

Catholic Medical Mission Board (the "Applicant") is seeking approval for two discretionary actions (the "Proposed Actions") that would affect the entirety of Queens Block 317, which includes three lots: Lot 1, Lot 16, and Lot 18 (the "Project Area") in the Ravenswood neighborhood of Queens Community District 1. These actions are: (1) a zoning map amendment to rezone the Project Area from R5 to M1-4/R7A (MX-23 Special Mixed-Use district), and (2) a zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") area. The Project Area is bounded by 11th Street to the west, 33rd Road to the south, 12th Street to the east, and 33rd Avenue to the north. The Project Area is an irregularly shaped block spanning three privately owned lots. In the future with the Proposed Actions, Lots 16 and 18 would be combined with Lot 1 (which is already owned by the Applicant) into a single zoning lot. The Project Area contains approximately 220 feet of frontage along 33rd Avenue, 180 feet of frontage along 33rd Road, 200 feet of frontage along 12th Street, and 235 feet of frontage along 11th Street.

The Applicant's Proposed Development would contain a total of approximately 267,442 gsf, with 178,134 gsf of residential uses, approximately 13,346 gsf of commercial (local retail) uses, approximately 5,118 gsf of community facility (nonprofit office) space, 20,485 gsf of warehouse space, and an approximately 50,360-gsf cellar-level accessory parking garage. The Proposed Development's residential floor area would comprise approximately 227 dwelling units ("DUs"), 25-30% (approximately 57-68 DUs) of which would be affordable pursuant to Mandatory Inclusionary Housing ("MIH") at a range of 60-80% of the Area Median Income ("AMI") depending on the MIH Option selected. The Applicant intends to pursue MIH Option 1, which would result in the provision of approximately 57 DUs. Approximately 70 total spaces would be provided within a cellar level parking garage. The cellar level parking garage would be accessed via ramps on the ground floor of the Proposed Development. The Proposed Development's accessory parking garage would be accessed via an existing curb cut on 33rd Street. At its highest point, the Proposed Development would reach eight stories (85-feet-tall rooftop height).

EAS Reasonable Worst Case Development Scenario

The Project Area would be developed with the Proposed Development, an approximately 267,442-gsf mixed-use residential, commercial, and community facility development containing approximately 227 total DUs, 13,346 gsf of commercial (local retail) space, 5,118 gsf of community facility (nonprofit office) space, and 20,485 gsf of warehouse space. Of the 227 DUs, 25-30% (approximately 57-68 DUs) would be affordable pursuant to MIH at a range of 60-80% AMI depending on the MIH Option selected. For CEQR analysis purposes presented in the EAS (i.e., Early Childhood Programs), 20% of the residential floor area (45 DUs) is assumed to be affordable at an average of 80% AMI.

Although the Proposed Development's 85-foot roof height would not maximize the 95 feet permitted by the proposed M1-4/R7A district, a roof height of 95 has been conservatively assumed for the purposes of the EAS analysis. Consistent with the Proposed Project, under the With-Action RWCDS, the With-Action condition would also provide approximately 50,360 gsf of storage, mechanical, and parking area gsf of accessory parking garage space on the Proposed Development's ground floor and cellar level. The With-Action condition would provide approximately 70 accessory residential parking spaces within the cellar level parking garage that would be accessible from an existing curb cut on 33rd Street.

The Applicant-owned Proposed Development Site (Block 317, Lots 1, 6, and 18) would be the only site where development could occur as a result of the Proposed Actions, and there would be no additional "soft" sites according to *CEQR Technical Manual* criteria. As such, for CEQR analysis purposes, the Applicant's Proposed Development Site is the only development site analyzed in the EAS.

B. ANALYSIS FRAMEWORK

This technical memorandum provides a preliminary assessment of the effects of CHO on the Proposed Actions and evaluates whether CHO would affect the analyses and conclusions presented in the EAS. The City of Yes for Housing Opportunity proposal as presented in the Draft Scope of Work would change the allowable residential FARs for the 33-01 11th Street project's proposed zoning districts. In the proposed M1-4/R7A (MX-23 Special Mixed-Use district), the allowable residential FAR would change from 4.6 (pursuant to MIH) to 5.0 (pursuant to CHO's proposed Universal Affordability Preference ["UAP"]).

CHO's proposed UAP would increase the Proposed Development's maximum allowable developable residential floor area by approximately 0.40 FAR, or approximately 17,028 zoning square feet ("zsf") (approximately 18,731 gsf), comprising approximately 24 DUs (assuming an average unit size of approximately 713 zsf, which is line with the average DU size for the Proposed Development). CHO would change the maximum building heights analyzed in the EAS for the proposed M1-4/R7A from 95 feet to 115 feet, and would change the maximum base height from 75 feet to 85 feet. No parking spaces would be required because CHO proposes to eliminate parking requirements for new residential developments.

Future No-Action Condition

In the 2028 No-Action condition, the Project Area's existing R5 zoning would remain in place and City of Yes for Housing Opportunity would be approved. Under the existing zoning, it is anticipated that the Applicant would demolish the existing building on Lot 1 within the Project Area, and construct a new mixed-use residential and community facility building. Therefore, in the No-Action condition, the Applicant would redevelop the site with a new four-story, 123,710 -gsf (including 40,530 gsf of parking and mechanical area), mixed-use residential and community facility building containing approximately

50,125 gsf of residential space (59 market-rate DUs) and 33,055 gsf of community facility (nonprofit office) space. The No-Action development would contain approximately 63 accessory parking spaces in the cellar, which would be accessed via an existing curb cut on 33rd Avenue. As warehouse uses would not be permitted under the existing R5 zoning, CMMB would relocate its medical distribution facility from the Project Area to a new location.

Lots 16 and 18 would not be combined with Lot 1 in the No-Action condition. No development is expected to occur on the non-Applicant-owned lots in the future without the Proposed Actions. As such, the existing auto repair uses (totaling approximately 5,256 gsf) are expected to remain on those lots, and no development would occur on the non-Applicant-owned Lots 16 and 18 in absence of the Proposed Actions.

Future With-Action Condition

As shown in **Table 1**, in the 2028 With-Action condition, City of Yes for Housing Opportunity would modify the With-Action condition analyzed in the EAS for the Proposed Development by facilitating the incremental development of approximately 18,731 gsf (approximately 17,028 zsf) of additional total residential floor area (resulting in the incremental development of an additional 24 total DUs pursuant to CHO's UAP). No changes would occur for the proposed commercial, warehouse, community facility, and accessory parking uses. As also shown in **Table 1**, the changes facilitated by CHO would generate an additional 54 residents and one worker.

Table 1: EAS No-Action Condition, EAS With-Action, and CHO With-Action Condition RWCDS

Use	EAS No-Action	EAS With-Action	CHO With-Action	CHO Increment
Residential (GSF)	50,125 GSF	178,134 GSF	196,865 GSF	+18,731 GSF
Total Dwelling DUs	59 DUs	227 DUs	251 DUs	+24 DUs
Income-restricted DUs (Pursuant to MIH Option 1)	0 DUs	57 DUs	81 DUs	+24 DUs
Commercial (GSF)	0 GSF	13,346 GSF	13,346 GSF	0 GSF
Community Facility (GSF)	33,055 GSF	20,485 GSF	20,485 GSF	0 GSF
Auto Repair/Warehouse (GSF)	5,256 GSF	20,485 GSF	20,485 GSF	0 GSF
Accessory Parking Spaces	63 spaces	70 spaces	70 spaces	0 spaces
Population	**EAS No-Action**	**EAS With-Action**	**CHO With-Action**	**CHO Increment**
Residents	132	506	560	+54
Workers	81	81	82	+1

Note: Estimates of the residential population have been calculated based on the average household size of 2.23 persons per household for Queens Community District 1 per the 2020 U.S. Census. 1 worker per 450 gsf of community facility office use; 1 worker per 333 gsf of retail use; and 1 worker per 25 residential DUs.

CHO would increase the Proposed Development's maximum building heights by an increment of 20 feet in the proposed M1-4/R7A district from 95 feet to 115 feet.

C. SUPPLEMENTAL SCREENING PROPOSED ACTIONS WITH CHO

The changes facilitated by CHO would not substantially alter the site-specific characteristics of the Project Area. The changes would not exceed the thresholds requiring analysis within the 2021 *CEQR Technical Manual* for Socioeconomic Conditions, Community Facilities, Natural Resources, Water and Sewer Infrastructure, Solid Waste and Sanitation Services, Energy, Greenhouse Gas Emissions and Climate Change, Public Health, or Neighborhood Character. The conclusions presented in the EAS would not change and no further analysis related to these site-specific impact categories is warranted.

The proposed (E) Designations for Hazardous Materials would remain the same as presented in the EAS to avoid significant adverse impacts to this technical area. The potential changes to the With-Action condition facilitated by CHO would not alter the conclusions of the EAS related to Hazardous Materials, and no further analysis related to this impact category is warranted.

Land Use, Zoning, and Public Policy

The potential changes that would be facilitated by CHO would not require new analysis nor change the conclusion of the Land Use, Zoning, and Public Policy attachment in the EAS. The changes facilitated by CHO would continue to result in land uses that are compatible with the existing and No-Action residential character of the secondary study area. The proposed M1-4/R7A (MX) district would be compatible with the secondary study area's R5, R6, R6B, R7A, R7X, M1-4/R7A, and M1-5/R6A zoning districts. The addition of 24 DUs facilitated by CHO's UAP would be supportive of the City's housing goals as identified in *Housing Our Neighbors: A Blueprint for Housing and Homelessness*. The incorporation of changes facilitated by CHO would not result in a significant adverse impact on Land Use, Zoning, and Public Policy and no further analysis is warranted.

Open Space

The potential changes that would be facilitated by CHO would not require new analysis nor change the conclusion of the Open Space attachment in the EAS. Compared to the With-Action condition analyzed in the EAS for Projected Development Sites 1 and 2, the addition of 24 DUs facilitated by CHO's UAP would generate approximately additional 54 residents.[1] As displayed in **Table D-11** of **Attachment D, "Open Space"** of the EAS, in the With-Action condition, the residential total, active, and passive open space ratios would each decrease by approximately 1.28 percent from the No-Action condition. Compared to the With-Action condition analyzed in the EAS, the addition of 54 residents facilitated by CHO would decrease the residential total, active, and passive open space ratios by an additional approximately 0.18 percent from the With-Action condition, to approximately 1.46 percent. However, this additional reduction would not constitute a significant adverse impact. As described in **Attachment D, "Open Space,"** the half-mile open space study area's passive open space ratio would exceed the city's optimal planning guidelines for passive open space ratio in the With-Action condition, while the half-mile open space study area's total and active open space ratios would fall below the city's optimal planning guideline for total and active open space ratios in the With-Action condition. The potential changes that would be facilitated by CHO would not alter these conclusions.

As described in **Attachment D, "Open Space,"** in accordance with 2021 *CEQR Technical Manual* impact criteria, the reduction in the total, passive, and active open space ratios in the half-mile open space study

[1] Estimates of the residential population have been calculated based on the average household size of 2.23 persons per household for Queens Community District 1 per the 2020 U.S. Census.

area would fall below the three percent threshold signifying a possible adverse impact for total open space, the two percent impact threshold for active open space, and the five percent impact threshold for passive open space. The potential changes that would be facilitated by CHO would not alter these conditions. Additionally, these decreases in the open space ratios would be ameliorated by several factors, including the range of active and passive open space uses, the fact that the Project Area is within the Walk to a Park Service Area (that is, not within an identified walk gap area), and the good to excellent condition of open space uses in the half-mile open space study area. These decreases would also be ameliorated by proximity of additional open space acreage located adjacent to the boundaries of the half-mile open space study area that feature a range of active open space uses and would be accessible options to residents of the half-mile open space study area. Therefore, the potential changes that would be facilitated by CHO would not alter the conclusions of **Attachment D, "Open Space"** of the EAS and the incorporation of changes facilitated by CHO would not result in a significant adverse impact on open space in the half-mile open space study area.

Therefore, analysis of Open Space is not warranted for the changes facilitated by CHO. The incorporation of changes facilitated by CHO would not result in a significant adverse impact on Open Space and no further analysis is warranted.

Shadows

The Tier 1 Screening Assessment (i.e., the longest shadow study area) provided in the EAS was determined based on the Proposed Development's maximum building height of 95 feet (115 feet tall including mechanical bulkhead) applicable in the proposed M1-4/R7A district. The Tier 1 and 2 Screening Assessment identified three sunlight-sensitive resources of concern within the 495-foot longest shadow study area. However, the Tier 3 screening determined that none of the three identified resources would receive shadows from the Proposed Development, and that therefore no further analysis is warranted. CHO would change the Proposed Development's maximum building height analyzed in the EAS from 95 feet to 115 feet (135 feet including the mechanical bulkhead). This would lengthen the Tier I longest shadow study area from 495 feet to 581 feet. There were no additional sunlight sensitive resources of concern identified as a result of the increase of the longest shadow study area.

As a result of the allowable building heights introduced by CHO, it was determined that one sunlight-sensitive resource (the garden of the Noguchi Museum) would receive incremental shadows according to the Tier 3 assessment. As shown in **Table 2**, shadows on this resource would occur only on the March 21/September 21 analysis day.

Table 2: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

No.[1]	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	Noguchi Museum Garden	**YES**	**NO**	**NO**	**NO**	**0**
2	Greenstreet	**NO**	**NO**	**NO**	**NO**	**0**
3	Socrates Sculpture Park	**NO**	**NO**	**NO**	**NO**	**0**

Notes:
[1] Numbers keyed to sunlight-sensitive resources shown in **Figures E-2a and E-2b** in **Attachment E, "Shadows."**

A detailed analysis of the CHO-generated incremental shadows was performed, with results shown in **Table 3**. As shown in **Table 3**, incremental shadows cast by the Proposed Development would occur for a total of 16 minutes in the early morning on the March 21/September 21 analysis day, from 7:36 AM to 7:52 AM. Incremental shadows would be limited to the northeast corner of Noguchi Garden and would

move continuously east before exiting the resource. No part of the Noguchi Garden would be in constant shadow as incremental shadows would sweep across the playground during the day. Moreover, at no point would the garden be unusable due to the additional shadows. Because incremental shadows generated by the Proposed Development in the future CHO With-Action condition would be limited in duration and coverage, and because vegetation would continue to receive significantly more than the minimum six to eight hours of direct sunlight established the *CEQR Technical Manual*, no significant adverse impact is expected as a result of CHO. Therefore, the additional maximum building heights potentially enabled by CHO would not result in significant adverse shadows impacts and no further analysis is warranted.

Table 3: Duration of Shadows on Sunlight Sensitive Resources (CHO 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
Noguchi Museum Garden	Shadow Enter/Exit Time	7:36 AM – 7:52 AM			
	Incremental Shadow Duration	16 minutes			

Urban Design and Visual Resources

The additional maximum building heights and density potentially enabled by CHO, which would be 20 feet taller and 0.40 FAR higher than what was assumed in the EAS, would result in a negligible change in the appearance of buildings that would not negatively affect the pedestrian experience adjacent to the Project Area. The additional maximum building heights potentially enabled by CHO would not obstruct important visual resources, nor would they result in building heights that would be incompatible with their surroundings. Therefore, the additional maximum building heights potentially enabled by CHO would not result in significant adverse impacts on Urban Design and Visual Resources and no further analysis is warranted.

Transportation

The potential changes that would be facilitated by CHO would not require new analysis nor change the conclusion of the Transportation screening assessments presented in **Appendix III** of the EAS. The additional 24 DUs allowable under CHO would not exceed the thresholds for detailed traffic or transit analysis provided in the *CEQR Technical Manual*. Additionally, incremental changes introduced by CHO would not alter the conclusions reached in **Attachment I, "Transportation,"** regarding pedestrians. The incorporation of changes facilitated by CHO would not result in a significant adverse impact on Transportation and no further analysis is warranted.

Noise

The potential changes that would be facilitated by CHO would not require new analysis nor change the conclusion of the Noise attachment in the EAS. Noise levels would continue to be below the level requiring additional window and wall attenuation to maintain interior noise levels of 45 dB(A) or lower for residential uses. The incorporation of changes facilitated by CHO would not result in a significant adverse impact on Noise and no further analysis is warranted.

Neighborhood Character

The potential increase in allowable height and density facilitated by CHO would not cause significant adverse impacts to any of the technical areas specified in the CEQR Technical Manual that comprise neighborhood character, including land use, zoning, and public policy, shadows, urban design and visual resources, historic and cultural resources, and noise. Therefore, the conclusions of the EAS are not affected by the potential changes facilitated by CHO, and no further analysis of neighborhood character is warranted.

Construction

Potential changes introduced by CHO would not affect the With-Action condition construction schedule presented in the EAS. Additionally, in the future With-Action condition with CHO, the Applicant would still be required to submit a Construction Protection Plan (CPP) to protect the Landmarks Preservation Commission (LPC)-designated Barkin, Levin & Company Office Pavilion, which is located within 90 feet of the Project Area. The CPP would take into account the guidance provided in *CEQR Technical Manual*, Chapter 9, Section 522, "Construction Protection Plan." As such, no construction-related impacts on historic resources would occur as a result of CHO, and no further analysis of construction is warranted.

D. SUMMARY CONCLUSION

This technical memorandum assesses whether the City of Yes for Housing Opportunity proposal would potentially alter the analysis of the Proposed Actions and conclusions presented in the corresponding EAS for the 33-01 11th Street project. The City of Yes for Housing Opportunity proposal as presented in the Draft Scope of Work dated September 29, 2023 would increase the allowable residential FARs for this project's proposed zoning districts by up to 0.4 FAR, as well as increase the allowable maximum building heights by 20 feet.

This technical memorandum concludes that the potential changes facilitated by CHO would not exceed thresholds nor create conditions that require new analysis or improvement measures, nor would the proposed changes affect the conclusions presented in the EAS.