47-15 34th Avenue Rezoning

*Revised Environmental Assessment Statement (EAS)

Lead Agency:
New York City Department of City Planning
Olga Abinader, Acting Director, EARD

Prepared By:
Philip Habib & Associates

November 9, 2018
Revised: April 5, 2019

**Following certification of the related land use application (ULURP No. 180530ZMQ) on November 13, 2018, the applicant has revised the proposed actions to replace the R7X/C2-4 district originally analyzed with an R7D/C2-4 district. This Revised Negative Declaration supersedes the Negative Declaration issued on November 13, 2018 and reflects the Revised EAS dated April 5, 2019, which assesses the change to the application. As described in the Revised EAS, the change would not alter the conclusions of the previous EAS.*

47-15 34th Avenue Rezoning

Revised Environmental Assessment Statement (EAS)

Environmental Assessment Statement ..... Short Form

Project Description ..... Attachment A

Supplemental Screening ..... Attachment B

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

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Appendices

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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* 47-15 34th Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
19DCP003Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
180530ZMQ, N180529ZRQ	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning			NAME OF APPLICANT Ashley Young LLC and John Young Associates		
NAME OF LEAD AGENCY CONTACT PERSON Olga Abinader, Acting Director, EARD			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Steven Sinacori, Esq.		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 666 Fifth Avenue, 20th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10103
TELEPHONE (212) 720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE (212) 880-3800	EMAIL steven.sinacori@akerman.com	

5. *Project Description*

The applicant, Ashley Young LLC and John Young Associates, is seeking approval for two discretionary actions (collectively the "Proposed Actions") in order to facilitate the redevelopment of the applicant-owned project site at 47-15 34th Avenue (Block 723, Lots 1, 8; Projected Development Site 1) in the Astoria neighborhood of Queens Community District 1. These actions include: (1) a zoning map amendment to rezone portions of C8-1, R5, and R6B districts to R7X/C2-4 and R6B/C2-4; and (2) a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to map the rezoning area as a Mandatory Inclusionary Housing (MIH) area.

The proposed rezoning area consists of southern portions of Queens Tax Blocks 723 and 722. Projected Development Site 1 is comprised of two tax lots (Block 723, Lots 1, 8) and the remaining rezoning area is comprised of all or portions of five tax lots (Block 722, Lots 1, 3, 4, 5, 70). In total, the proposed rezoning area comprises approximately 45,000 square feet (sf) of lot area bounded by the centerline of Block 722 to the west, 34th Avenue to the south, 48th Street to the east, and a line approximately 150 feet north of and parallel to 34th Avenue to the north (see Figure 1).

The Reasonable Worst-Case Development Scenario (RWCDS) identified two projected development sites for consideration in this environmental assessment. Under future RWCDS conditions at Projected Development Site 1, the applicant would demolish all existing structures on Lots 1 and 8 and construct a 14-story (145-foot tall), approximately 231,703 gross square foot (gsf) mixed-use building consisting of approximately 201 dwelling units (DUs)(161 market-rate, 40 affordable), 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 77 accessory parking spaces. A second projected development site, Projected Development Site 2, has been identified at Block 722, Lots 1, 3, 4, 5, 70 and would would be redeveloped pursuant to R6B/C2-4 zoning regulations. Projected Development Site 2 would be comprised of approximately 65,322 gsf with approximately 34,087 gsf (37 DUs) (30 market-rate, 7 affordable), 12,000 gsf of local retail, and 24 parking spaces. In total, projected development would result in approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 47-15 34th Avenue
TAX BLOCK(S) AND LOT(S) Block 723, Lots 1, 8		ZIP CODE 11103

Block 722, Lots 1, 3, 4, p/o 5, 70

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The applicant-owned site occupies a blockfront with frontage on 34th Avenue to the south, 48th Street to the east, and 47th Street to the west. Additionally, the proposed zoning map amendment would affect all or portions of five tax lots bounded by 34th Avenue to the south, 47th Street to the east, and the centerline of Block 722 to the west.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY C8-1, R5, R6B

ZONING SECTIONAL MAP NUMBER 9b

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 Appendix F

***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 If "yes," specify:

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.): Approx. 45,000 sf

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

Roads, buildings, and other paved surfaces (sq. ft.): Approx. 42,000 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): Approx. 297,025 gsf (total gsf assumed for analysis)

NUMBER OF BUILDINGS: 2

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): Projected Development Site 1: 231,703 gsf; Projected Development Site 2: 65,322 gsf

HEIGHT OF EACH BUILDING (ft.): Projected Development Site

NUMBER OF STORIES OF EACH BUILDING: Projected Development

1: 145'; Projected Development Site 2: 55' Site 1: 14; Projected Development Site 2: 4

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: Approx. 30,000 sf

The total square feet not owned or controlled by the applicant: Approx. 15,000 sf

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: Projected Development Site 1: 30,600 sf; Projected Development Site 2: 17,901 sq. ft. (width x length)

VOLUME OF DISTURBANCE: Projected Development Site 1: 306,000 cubic ft.; Projected Development Site 2: 179,010 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: Projected Development Site 1: 30,600 sf; Projected Development Site 2: 17,901 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.)	219,653 gsf	20,990 gsf	5,000 gsf	N/A
Type (*e.g.,* retail, office, school)	238 (191 market-rate, 47 affordable) units	Local retail	TBD	N/A

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 557 NUMBER OF ADDITIONAL WORKERS: 87

Provide a brief explanation of how these numbers were determined: Assumes 2.34 persons per DU (based on 2010 U.S. Census data for Queens Community District 1), 1 worker per 25 DUs, 3 workers per 1,000 sf commercial space, 1 worker per 1,000 sf of auto service/repair, and 3 workers per 1,000 sf of community facility space.

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: The No-Action scenario would be the same as existing conditions.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2022

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18-24

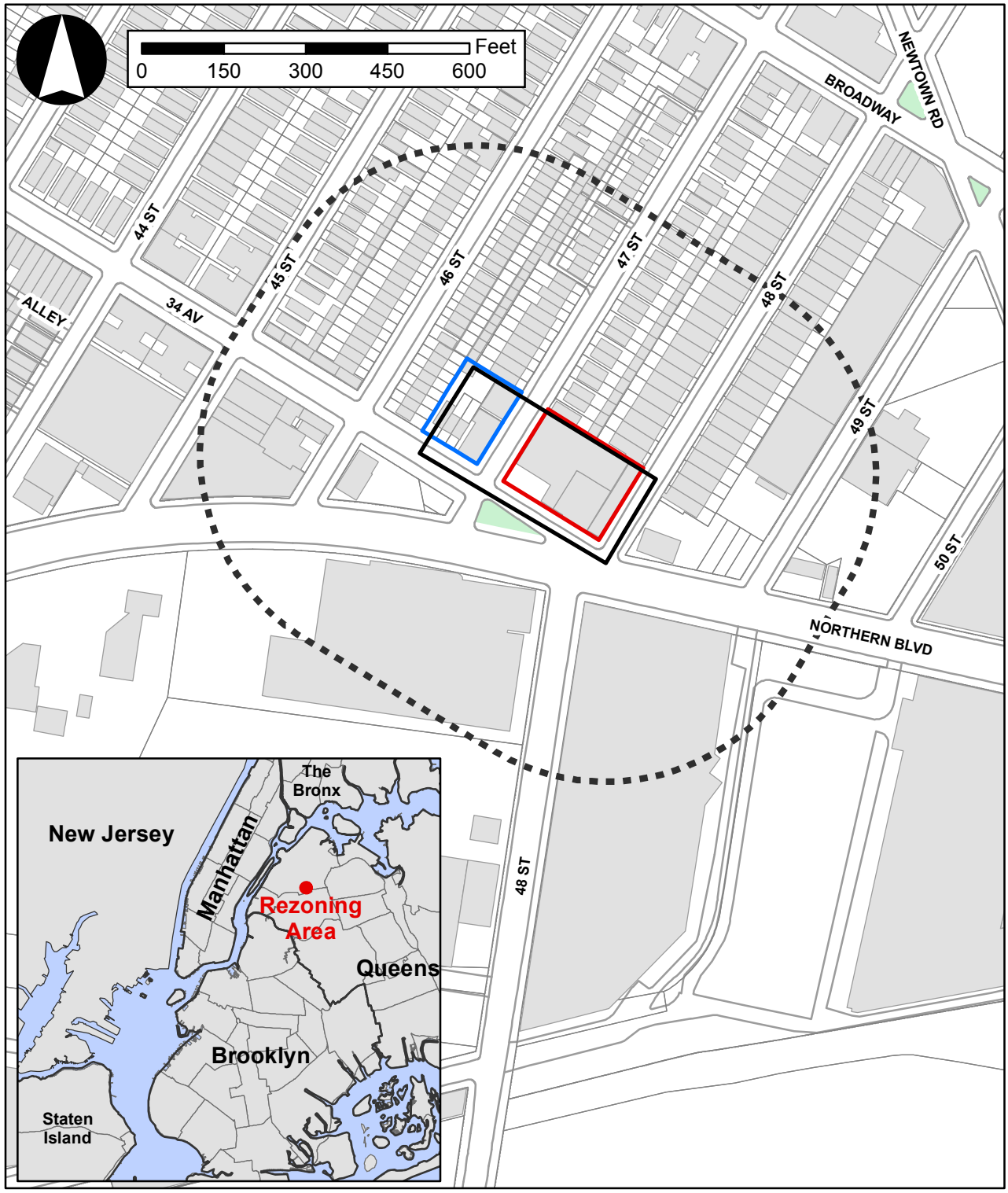
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: See Attachment B, "Supplemental Screening"

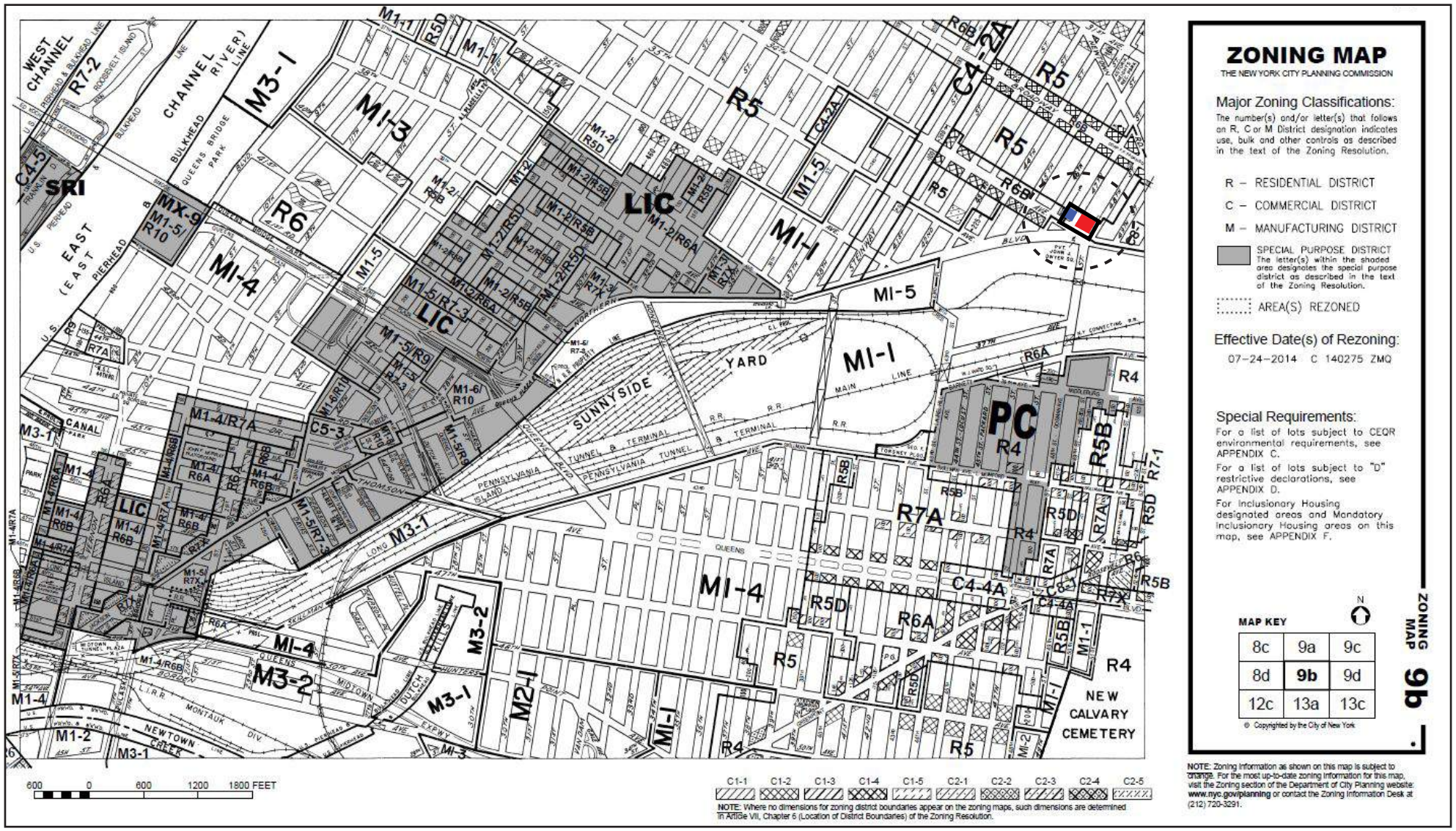
10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

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

Figure 1
Site Location Map

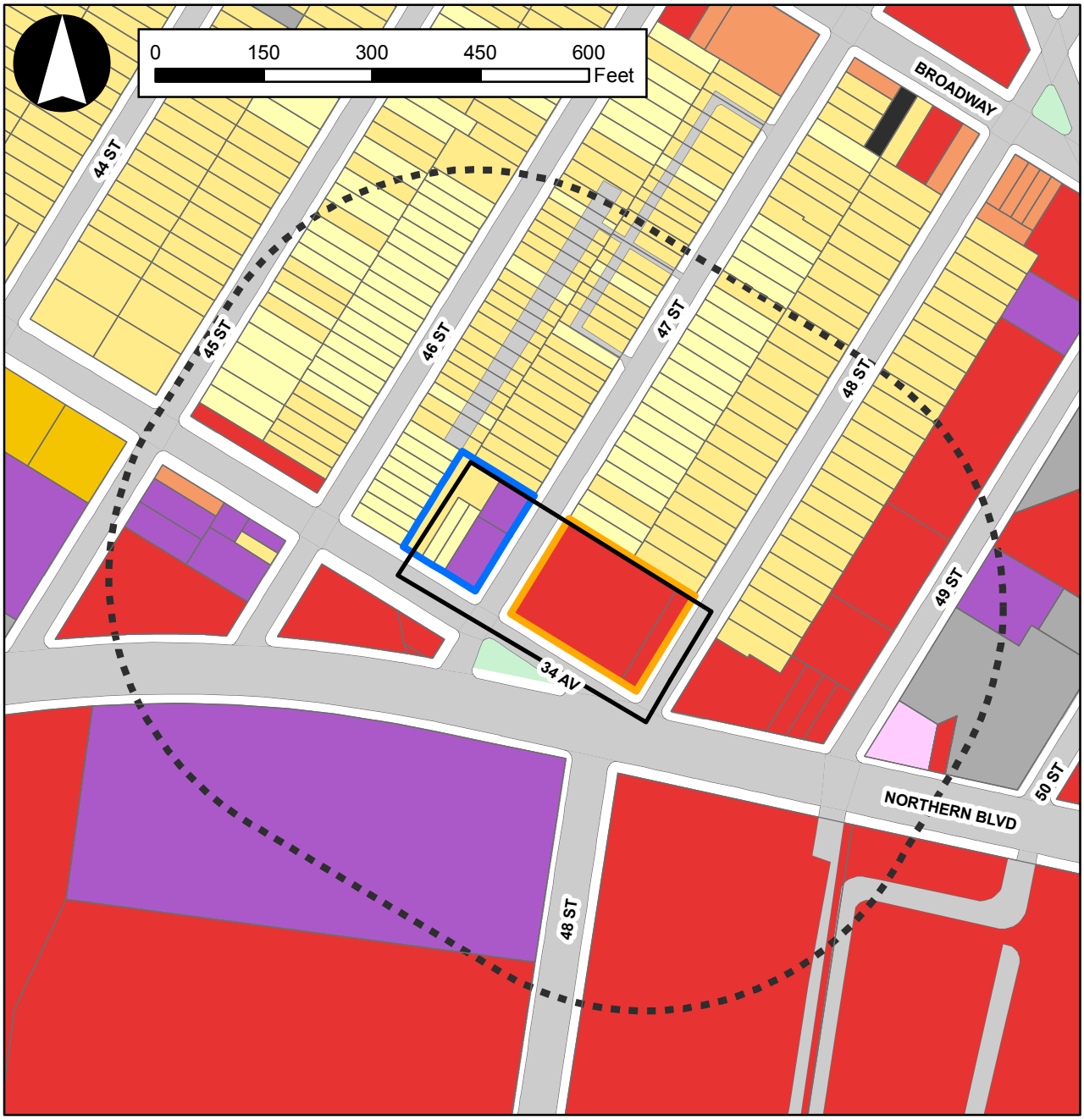


Source: DoITT, DCP



Projected Development Site 1 Projected Development Site 2 Rezoning Area 400-Foot Radius

Figure 3
Land Uses



Legend

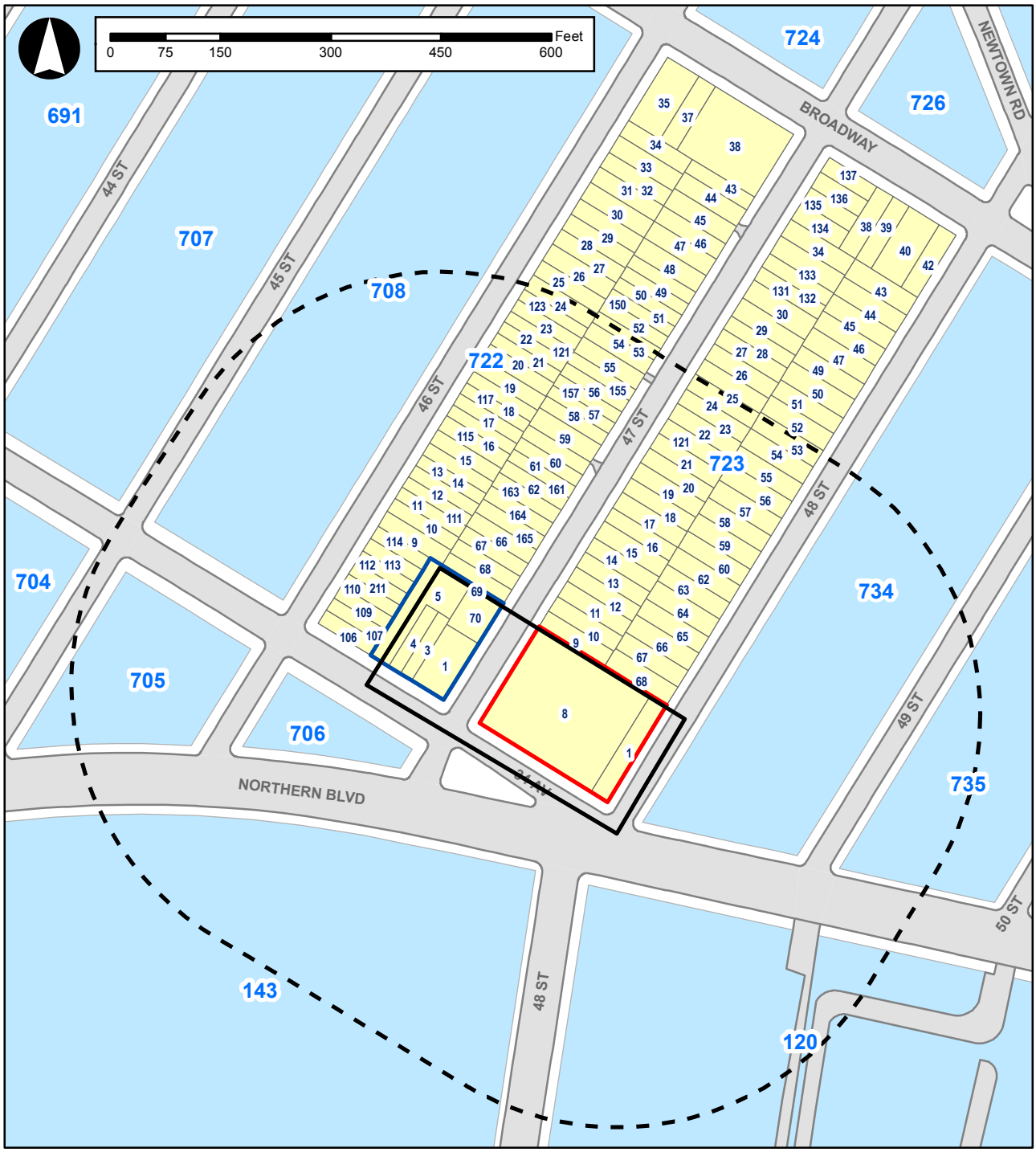
- Projected Development Site 1
- Projected Development Site 2
- Rezoning Area
- Study Area (400-foot radius)

Land Use

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

Source: DoITT, DCP, PHA site visit (March, 2018)

Figure 4
Tax Map



Legend

- Projected Development Site 1
- Projected Development Site 2
- 400-Foot Radius
- Rezoning Area
- Tax Lots
- Tax Blocks

Source: DoITT, DCP

Figure 5a
Existing Conditions Photos



Legend

- Projected Development Site 1
- Projected Development Site 2
- Rezoning Area
- 1 Photo Location
- 400-Foot Study Area

Source: DoITT, DCP



1.) Looking north at Projected Development Site 1 from the intersection of 48th Street and Northern Boulevard



2.) Looking southwest at Projected Development Site 1 (Lot 1) from 48th Street



3.) Looking east along the 34th Avenue frontage of Projected Development Site 1



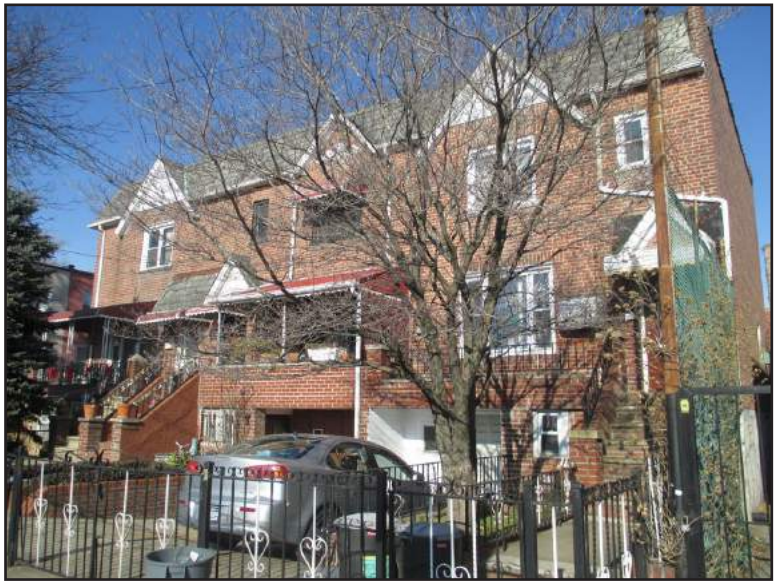
4.) Looking north at Projected Development Site 1 (Lot 8) from across 34th Avenue



5.) Looking west at Projected Development Site 2 (Lots 1, 70) from 47th Street



6.) Looking southeast from 47th Street at Projected Development Site 1 (Lot 8)



7.) Looking north at Projected Development Site 2 (Lots 3, 4, 5) along 34th 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. See Attachment C.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 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		
○ **Child Care Centers:** 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)	☐	☒
○ **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)	☐	☒
○ **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)	☒	☐
○ **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 proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

	YES	NO
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		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☐	☒
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project 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 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) 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?	☐	☒
(c) 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 Appendix 1 (including nonconforming uses)?	☒	☐
(d) 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?	☒	☐
(e) 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)?	☒	☐
(f) 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?	☐	☒
(g) 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?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment B.	☐	☐
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?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or 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): 14,930 pounds per week, based on the sum of 41 lb x 238 DUs; 79 lb x 63 retail worker; and 13 lb x 15 community facility (office) workers.		
○ 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): 33,623,672 MBtu/sf, based on sum of 126.7 MBtu x 219,653 sf residential, 216.3 MBtu x 20,990 sf commercial, and 250.7 MBtu x 5,000 sf community facility.		
(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 or bus 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) or 200 subway trips per station or line?	☐	☐
○ 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?	☐	☐
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		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 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?	☐	☒

	YES	NO
(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. The proposed project does not have the potential to result in significant adverse impacts to air quality, hazardous materials, or noise. Nor would the proposed project result in a combination of moderate effects to several elements that cumulatively may affect public health. Therefore, an assessment of public health 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 project does not have the potential to result in significant adverse impacts to land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. Nor would the proposed project result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. Therefore, an assessment of neighborhood character 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. Proposed new construction may result in temporary disruptions, including noise, dust, and traffic associated with the delivery of materials and arrival of workers on the construction site. There is also the potential for the operation of several pieces of diesel equipment on the construction site. The effects, however, would be temporary (approximately 18-24 months) and all applicable city, state, and federal guidelines and regulations would be followed. Therefore, none of these disruptions should be considered significant. Refer to Attachment B, "Supplemental Screening" for additional information.		

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
Philip Habib, P.E	April 5, 2019
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
Acting Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Olga Abinader	04/05/19

SIGNATURE

Olga Abinader

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

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

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would have no significant effect on the quality of the environment. Reasons supporting this determination are noted below.

Hazardous Materials, Air Quality, and Noise

To ensure that the proposed actions would not result in significant adverse hazardous materials, air quality, and noise impacts an (E) Designation (E-509) has been incorporated into the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) Designation" for a list of the sites affected by the proposed (E) designation and the applicable (E) designation requirements. The analyses conducted for hazardous materials, air quality, and noise conclude that with the (E) Designation requirements in place, the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, or noise.

Land Use, Zoning, and Public Policy

A detailed analysis of the effects of the proposed actions on Land Use, Zoning and Public Policy was included in the EAS. The proposed actions would facilitate an increase in residential and commercial density within the directly affected area. The proposed actions would be compatible with the land use and zoning patterns within the surrounding area and recent development trends. The analysis concludes that no significant adverse impacts related to Land Use, Zoning and Public Policy would result from the proposed actions.

Community Facilities and Services

A detailed analysis of the effects of the proposed actions on Community Facilities and Services was conducted for Public Schools and it was determined that no significant adverse impacts would be expected to result from the proposed actions.

Public Schools

Pursuant to the CEQR Technical Manual, a significant impact on public schools may occur if the collective utilization rate of the elementary and/or intermediate schools in the Sub-district study area would be greater than or equal to 100 percent in the With-Action condition, and if the proposed actions would result in an increase of five percentage points or more in the collective utilization rate between the No-Action and the With-Action conditions. The utilization rate of elementary schools within Community School District 30, Sub-district 2 would increase by one percentage point from 123.8 percent to 124.8 percent in the 2022 build year as a result of the Proposed Actions, and as such, no significant adverse impacts would occur. The utilization rate of intermediate schools within Community School District 30, Sub-district 2 would increase by approximately 1.8 percentage points from 132.5 percent to 134.4 percent in the 2022 build year as a result of the Proposed Actions, and as such, no significant adverse impacts would occur.

Open Space

A detailed analysis of the effects of the proposed actions on Open Space was conducted and it was determined that no significant adverse impacts would be expected to result from the proposed actions. A significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below

the City's median community district open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction as little as one percent may be considered significant.

As a result of the proposed actions, the total residential study area open space ratio would decrease by 1.87 percent to 0.105 acres per 1,000 residents; the active residential study area open space ratio would decrease by 2.70 percent to 0.036 acres per 1,000 residents; and the passive residential study area open space ratio would decrease 2.37 percent to 0.068 acres per 1,000 residents. In the future with the proposed actions, the total, active, and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, 2.0 acres, and 0.5 acres per 1,000 residents, respectively. However, the increase in demand for open space as a result of the proposed actions would not result in significant reductions in the open space ratios, would not overburden existing open space resources, and are not expected to introduce a population that would place a heavy demand on facilities that cater to specific user groups. The proposed actions would not result in the physical loss of existing public open space resources, and would not result in any adverse shadow, air, noise, or other environmental impacts that would affect the usefulness of any study area open space. Therefore, the proposed actions would not result in significant adverse impacts to open space.

Shadows

A detailed assessment of the potential for the proposed actions to result in significant adverse shadows impacts is included in the EAS. A shadow impact occurs when the incremental shadow would fall on a sunlight sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant or not depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs. In the future with the proposed actions incremental shadows would be cast on Dwyer Square. On all analysis days, incremental shadows would generally be cast on portions of the open space containing trees and benches during the early morning hours. The extent and duration of the incremental shadows would not significantly alter the public's use of the open space or threaten the viability of vegetation within this open space. Therefore, it was determined that the proposed actions would not result in significant adverse impacts related to shadows.

Urban Design and Visual Resources

A detailed assessment of the effects of the proposed actions on urban design is included in the EAS. The projected developments would be set at or near the street line and would be programmed with active ground floor uses. The tallest portions of Projected Development Sites 1 and 2 would be located on the southern edge of each site along the main thoroughfares of 34th Avenue and Northern Boulevard. The projected developments would incorporate a variety of building heights and a tiered massing to provide a contextual transition from the rezoning area to the surrounding area. Overall, the proposed actions would not result in any negative effects on the urban design characteristics of the rezoning area and would not eliminate or alter existing views of visual resources. Therefore, the proposed actions would not result in a significant adverse impact related to urban design and visual resources.

Project Name: 47-15 34th Avenue Rezoning
CEQR #: 19DCP003Q
SEQRA Classification: Unlisted

**Following certification of the related land use application (ULURP No. 180530ZMQ) on November 13, 2018, the applicant has revised the proposed actions to replace the R7X/C2-4 district originally analyzed with an R7D/C2-4 district. This Revised Negative Declaration supersedes the Negative Declaration issued on November 13, 2018 and reflects the Revised EAS dated April 5, 2019, which assesses the change to the application. As described in the Revised EAS, the change would not alter the conclusions of the previous EAS.*

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

TITLE	LEAD AGENCY
Acting Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME Olga Abinader	DATE 04/05/2019
SIGNATURE	

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE 04/10/2019
SIGNATURE	

Project Name: 47-15 34th Avenue Rezoning
CEQR #: 19DCP003Q
SEQRA Classification: Unlisted

Determination of Significance Appendix: (E) Designation

To ensure that the proposed actions would not result in significant adverse hazardous materials, air quality, and noise impacts, an (E) Designation **(E-509)** will be placed on the development sites as described below:

Hazardous Materials

The (E) Designation requirements for hazardous materials will be placed on **Projected Development Site 1 (Block 723; Lots 1 and 8) and Projected Development Site 2 (Block 722; Lots 1, 3, 4, 5, and 70)** and are as follows:

Task 1-Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I 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.

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he 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.

Project Name: 47-15 34th Avenue Rezoning
CEQR #: 19DCP003Q
SEQRA Classification: Unlisted

Air Quality

The (E) Designation requirements for air quality will be placed on **Projected Development Site 2 (Block 722; Lots 1, 3, 4, 5, and 70)** and are as follows:

> **Any new residential/commercial development or enlargement on the above referenced property must ensure that heating and hot water (HVAC) systems utilize natural gas as the type of fuel exclusively, and ensure that the HVAC stack is located at the highest tier and at least 58 feet above grade to avoid any potential significant adverse air quality impacts.**

Noise

The (E) Designation requirements for noise will be placed on **Projected Development Site 1 (Block 723; Lots 1 and 8)** and are as follows:

> **To ensure an acceptable interior noise environment, building façades must provide minimum composite building façade attenuation as shown in Table H-7 of the 47-15 34th Avenue Rezoning EAS in order to ensure an interior L10 noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial uses. To maintain a closed-window condition in these areas, an alternate means of ventilation that brings outside air into the buildings without degrading the acoustical performance of the building façade(s) must also be provided.**

ATTACHMENT A
PROJECT DESCRIPTION

47-15 34th Avenue Rezoning EAS
Attachment A: Project Description

I. INTRODUCTION

The applicant, Ashley Young LLC and John Young Associates, is seeking approval for two discretionary actions (collectively the "Proposed Actions") in order to facilitate the redevelopment of the applicant-owned site at 47-15 34th Avenue (Block 723, Lots 1, 8; Projected Development Site 1) in the Astoria neighborhood of Queens Community District 1. These actions include: (1) a zoning map amendment to rezone portions of C8-1, R5, and R6B districts to R7X/C2-4 and R6B/C2-4; and (2) a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to map the rezoning area as a Mandatory Inclusionary Housing (MIH) Area.

The proposed rezoning area consists of southern portions of Queens Block 723 and 722. Projected Development Site 1 is comprised of two tax lots (Block 723, Lots 1, 8) and the remaining rezoning area is comprised of all or portions of five tax lots (Block 722, Lots 1, 3, 4, 5, 70). In total, the proposed rezoning area comprises approximately 45,000 square feet (sf) of lot area bounded by the centerline of Block 722 to the west, 34th Avenue to the south, 48th Street to the east, and a line approximately 150 feet north of and parallel to 34th Avenue to the north (see Figures 1 and 5 of the EAS Form).

The Reasonable Worst-Case Development Scenario (RWCDS) identified two projected development sites for consideration in this environmental assessment. Under future RWCDS conditions, the applicant would demolish the existing structures on Projected Development Site 1 and construct a new, 14-story (145-foot tall), approximately 231,703 gross square foot (gsf) mixed-use building consisting of approximately 201 dwelling units (DUs)(161 market-rate, 40 affordable), 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 77 accessory parking spaces. The proposed project would introduce affordable and market-rate housing and new space for local retail and community facility uses to the site. The RWCDS assumes that Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70), located across the street from the applicant-owned site, would be redeveloped pursuant to R6B/C2-4 zoning regulations. Projected Development Site 2 would be comprised of approximately 65,322 gsf with approximately 37 DUs (30 market-rate, 7 affordable), 12,000 gsf of local retail, and 24 parking spaces. In total, projected development would result in approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces (see Section VI, "Analysis Framework" below for additional information).

The New York City Department of City Planning (DCP) acting on behalf of the New York City Planning Commission (CPC), will serve as the lead agency for environmental review. This document has been prepared in accordance with the guidance presented in the 2014 *City Environmental Quality Review (CEQR) Technical Manual.*

II. BACKGROUND AND EXISTING CONDITIONS

Projected Development Site 1

Projected Development Site 1 is comprised of two tax lots (Block 723, Lots 1, 8) and has an area of approximately 30,600 sf (see Figure 4 of the EAS Form). The site occupies a blockfront with frontage of

approximately 153 feet along 47th Street to the west, approximately 200 feet along 34th Avenue to the south, and approximately 153 feet along 48th Street to the east. Both 47th and 48th Streets are considered narrow streets with widths of 60 feet, while 34th Avenue is considered a wide street with a width of 80 feet. The site is occupied by four buildings: a one-story retail building on Lot 1, a two-story retail building on Lot 8, a one-story auto repair shop on Lot 8, and a one-story storefront church on Lot 8. An approximately 5,122 gsf portion of the two-story retail building on Lot 8 is vacant. The New York City Department of Buildings (DOB) estimates that the building on Lot 1 was constructed in 2008 while the three buildings on Lot 8 date to the 1950s. The site has a built floor area of approximately 29,678 gsf (FAR 0.97).

The site is located on a split zoning lot with an approximately 2,600 sf northern portion located within an R5 residential zoning district and an approximately 28,000 sf southern portion located within a C8-1 commercial zoning district (see Figure 2 of the EAS Form). Per ZR § 77-11, as the majority of the site is located within a C8-1 zoning district and the district boundary is within 25 feet of the tax lot line, C8-1 regulations apply to the entire site. C8-1 districts permit a maximum FAR of 1.0 for commercial uses and 2.4 FAR for community facility uses. Residential uses are not permitted in C8-1 districts and building height is controlled by the sky exposure plane, which begins 30 feet above the street line. Off-street parking requirements in C8-1 districts vary depending on the land use.

Rezoning Area

In addition to the applicant-owned site, the proposed zoning map amendment would affect all or portions of five tax lots (Block 722, Lots 1, 3, 4, 5, 70) located across 47th Street (see Figure 4 of the EAS Form). The affected area is occupied by two-story attached homes on Lots 3, 4, and 5, a one-story light industrial building on Lot 1, and a two-story light industrial building on Lot 70. The affected tax lots on Block 722 range in size from approximately 1,900 sf to 6,557 sf and have a total area of approximately 17,901 sf.

In addition to the R5 and C8-1 zoning districts described above, an R6B residential zoning district is located on a portion of the block along 34th Avenue. As shown in Figure 2 of the EAS Form, three of the affected tax lots are subject to split zoning regulations, including Lot 3 (R6B, C8-1), Lot 5 (R5, R6B, C8-1), and Lot 70 (R5, C8-1). Buildings in R6B districts are subject to Quality Housing bulk regulations and have a permitted maximum residential FAR of 2.0 (2.2 FAR with Mandatory Inclusionary Housing [MIH] floor area bonus, where applicable). Industrial and manufacturing uses are not permitted. Building height is limited to a maximum of 50 feet. Off-street parking is required for 50 percent of dwelling units.

Surrounding Area

Land uses in the surrounding area are predominantly residential and commercial with some light industrial uses interspersed throughout the area (see Figure 3 of the EAS Form). Residential uses in the surrounding area are located to the north, west, and east of the proposed rezoning area and predominantly include multi-family walkup buildings and one- and two-family buildings set back from the street line ranging from two- to three-stories in height. Commercial uses are generally limited to big box stores along Northern Boulevard to the south and ground-floor retail space along 34th Avenue and Broadway. Industrial uses are generally light-intensity and include a variety of business types. These uses are generally low-rise, high lot coverage warehouses and are mainly located to the south, east, and west of the proposed rezoning area. Notable open spaces in the surrounding area include Dwyer Square, Sunnyside Gardens Park, Windmuller Park, and Astoria Heights Playground. The surrounding area is also well served by public transportation, including the E, M, and R subway lines that run along Steinway Street and Broadway and numerous New York City Transit (NYCT) bus lines, including the Q18, Q66, Q101, and Q104.

The scale and density of the area tends to reflect underlying zoning. A variety of zoning districts are located within the surrounding area including R5, R5/C2-1, R5/C2-2, R6B, R6B/C1-4, R6B/C2-4, C8-1, and M1-1. R5 and R6B residential zoning districts generally permit low-rise medium density development and are mapped to the north, west, and east of the proposed rezoning area. C8-1 zoning permits low-rise, low-density development and generally provides a transition between commercial and manufacturing uses, allowing for automotive and other heavy commercial services such as showrooms, repair shops, and gas stations. The proposed rezoning area is located on the western edge of a C8-1 zoning district that runs along Northern Boulevard and 49th Street. M1-1 zoning permits low-density development and generally serves as a buffer between heavier industrial/manufacturing zones and adjacent residential or commercial districts. M1-1 zoning is generally mapped to the south of the proposed rezoning area along Northern Boulevard.

III. DESCRIPTION OF THE PROPOSED ACTIONS

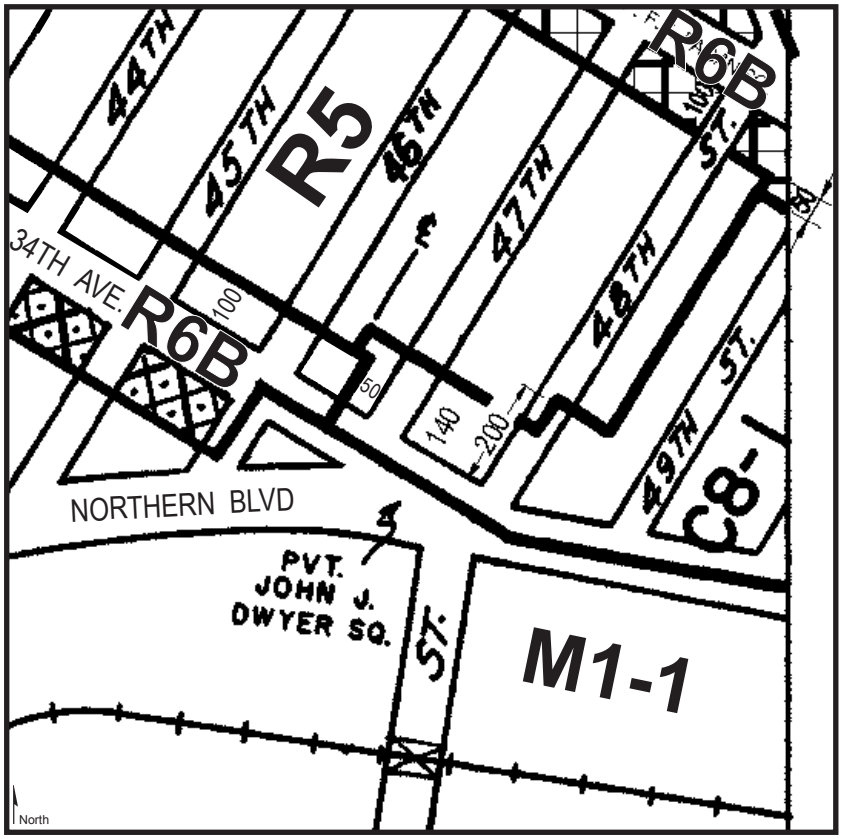
The following discretionary approvals are requested from the CPC: (1) a zoning map amendment to rezone portions of C8-1, R5, and R6B districts to R7X/C2-4 and R6B/C2-4; and a (2) zoning text amendment to Appendix F of the ZR to map an MIH Area. These actions are described in greater detail below.

Zoning Map Amendment

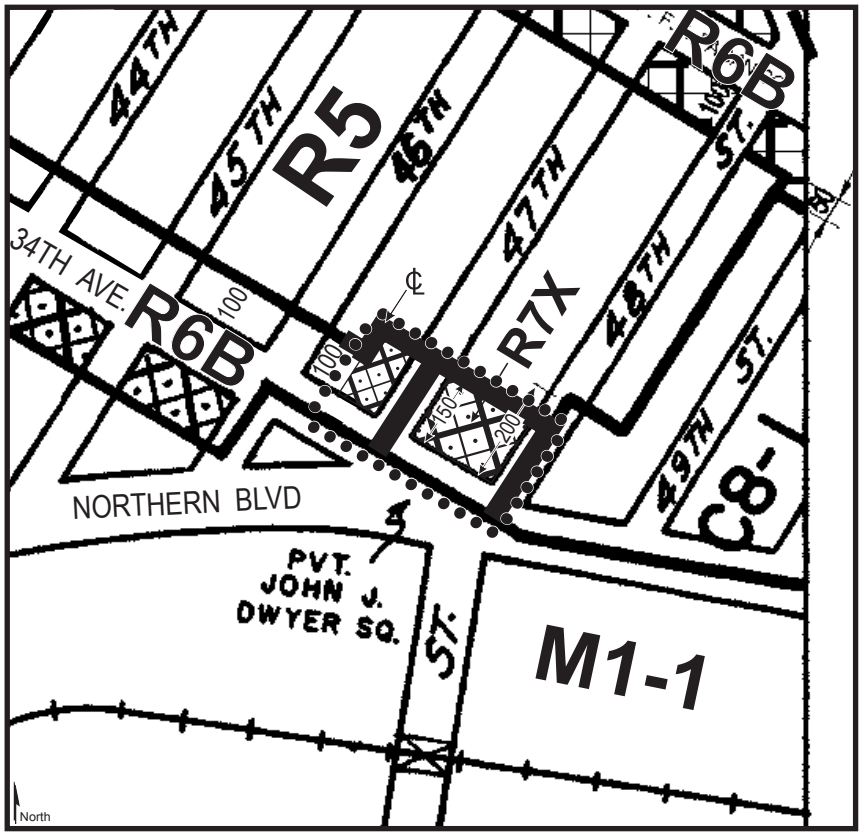
The proposed R7X/C2-4 district would be mapped to a depth of 150 feet from 34th Avenue, the easternmost boundary would be located on the centerline of 48th Street, and the westernmost boundary would be located on the centerline of 47th Street. The proposed zoning map amendment would also extend the R6B zoning district on Block 722 eastward to the centerline of 47th Street and map a C2-4 overlay. The proposed R6B/C2-4 district would be mapped to a depth of 150 feet from 34th Avenue east of the Block 722 centerline (see Figure A-1). The rezoning of C8-1 districts to R7X/C2-4 and R6B/C2-4 would allow new residential and non-residential uses (commercial and community facility) to be developed as-of-right and would allow for increases in the overall permitted density and changes to bulk regulations within the rezoning area. See Table A-1 below and Attachment C, "Land Use, Zoning, and Public Policy" for additional information.

Zoning Text Amendment

The zoning text amendment to Appendix F of the ZR is proposed to establish a portion of the proposed rezoning area as an MIH Area. The MIH Area would be bound by the centerline of 48th Street to the east, the centerline of 34th Avenue to the south, the centerline of Block 722 to the west, and a line approximately 150 feet north of and parallel to 34th Avenue to the north (see Appendix 4). The applicant is seeking compliance with Option 2 of the MIH program, which would require the construction of 30 percent of residential floor area at an average of 80 percent of AMI with no more than three income bands. However, the CPC and ultimately the City Council determine the requirements applicable to each MIH-designated area during the Uniform Land Use Review Process (ULURP).



Existing Zoning Map (9b)



Proposed Zoning Map (9b) - Area being rezoned is outlined with dotted lines

Rezoning from C8-1 to R7X/C2-4
Rezoning from C8-1 to R6B/C2-4
Rezoning from R6B to R6B/C2-4
Rezoning from R5 to R7X/C2-4
Rezoning from R5 to R6B/C2-4

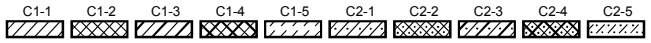


Table A-1
Comparison of Existing (C8-1) and Proposed Zoning Districts

	EXISTING	PROPOSED	
	C8-1	R7X/C2-4 (MIH)	R6B/C2-4 (MIH)
Use Groups:	4-14, 16	1-9, 14	1-9, 14
Max. Floor Area Ratio (FAR):			
- Residential	N/A (not permitted)	6.0	2.2
- Community Facility	2.4	5.0	2.0
- Commercial	1.0	2.0	2.0
- Manufacturing	N/A (not permitted)	N/A (not permitted)	N/A (not permitted)
Building Height:			
- Streetwall max. height	30'	105'	45'
- Initial setback distance	20' narrow street, 15' wide street	15' narrow street, 10' wide street	15' narrow street, 10' wide street
- Max. building height	Sky exposure plane ratio of 1:1	145'	55'
Required Accessory Parking:			
- Residential	N/A	50% of DUs above 80% AMI[1]	50% of DUs above 80% AMI[1]
- General Comm. Facility	Varies by use	Varies by use	Varies by use
- General Retail or Service	Varies by use	Varies by use	Varies by use
- Manufacturing	N/A	N/A	N/A

Source: *New York City Zoning Resolution*
Note: [1] No parking required for housing meeting MIH standards in the Transit Zone; the rezoning area is in the Transit Zone.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

Residential use is not permitted within the C8-1 zoning district. The proposed zoning map and text amendments would allow the applicant to develop up to approximately 201 DUs (161 market-rate, 40 affordable), 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 77 accessory parking spaces and would address the continuing need for affordable housing for a range of household income levels in the Astoria neighborhood and surrounding area.

Rezoning Projected Development Sites 1 and 2 to R7X/C2-4 and R6B/C2-4, respectively, would be consistent with existing land uses and zoning designations in the surrounding area. Additionally, with the required zoning text amendment to map a portion of the rezoning area as an MIH Area, the Proposed Actions would provide the flexibility needed to develop a larger supply of market-rate and affordable dwelling units than would be allowed under existing conditions and would therefore address both a recognized local need and city-wide need for new affordable housing. Pursuant to the MIH program, at least 20 percent of the proposed residential units would be required to remain permanently affordable, ensuring that affordable housing remains a resource for the community in the future, even as neighborhood economic conditions may change. The mapping of a C2-4 overlay would continue to permit commercial (retail) uses along 34th Avenue and strengthen its identity as a commercial corridor for area residents by permitting commercial development at greater densities than permitted under existing zoning.

Projected Development Site 1 is currently occupied by commercial and community facility uses with a total FAR of 0.97. In the applicant's opinion, the proposed project would facilitate the best use for the land, enlivening the site and adding a substantial number of market-rate and affordable dwelling units to a community that anticipates population growth and has a need for such mixed-income housing. Furthermore, the rezoning area is situated near major thoroughfares and within close proximity to public transit including bus and subway. As such, it is the applicant's opinion that the site would be an appropriate location to accommodate additional much-needed density.

V. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed approximately 231,703 gsf (FAR 6.0) development at Projected Development Site 1 is expected to be comprised of approximately 201 DUs (140 market-rate, 61 affordable), 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and approximately 77 parking spaces.

Local retail space, community facility space, residential amenity space, and accessory parking would be located on the ground-floor. Local retail uses would have frontage along 34th Avenue while community facility uses would be located along 47th Street. The 48th Street frontage would be occupied by the residential lobby. Residential uses would be located on the floors above with an approximately 6,113 sf landscaped deck located at the center of the site on the second floor (see Figure A-2). The residential floors on the northern portion of the site would rise to a maximum height of 45 feet before stepping up to a height of 65 feet and rising to a final height of 145 feet (plus a 32-foot mechanical penthouse) on the southern portion of the site (see Figure A-3). The proposed design would help concentrate density along the main thoroughfares of 34th Avenue and Northern Boulevard and would help mark the transition from the low-rise residential character of the area to the north (see Figure A-4).

As noted above, the applicant is proposing compliance with Option 2 of the MIH program. Under Option 2, 30 percent of residential floor area would be dedicated to permanently affordable housing for low- and moderate-income tenants (average affordability level of 80 percent of AMI with no more than three income bands) and would result in the creation of approximately 61 affordable DUs at the site. An additional approximately 140 market-rate DUs would also be provided. However, the CPC and ultimately the City Council determine the requirements applicable to each MIH-designated area during the ULURP.

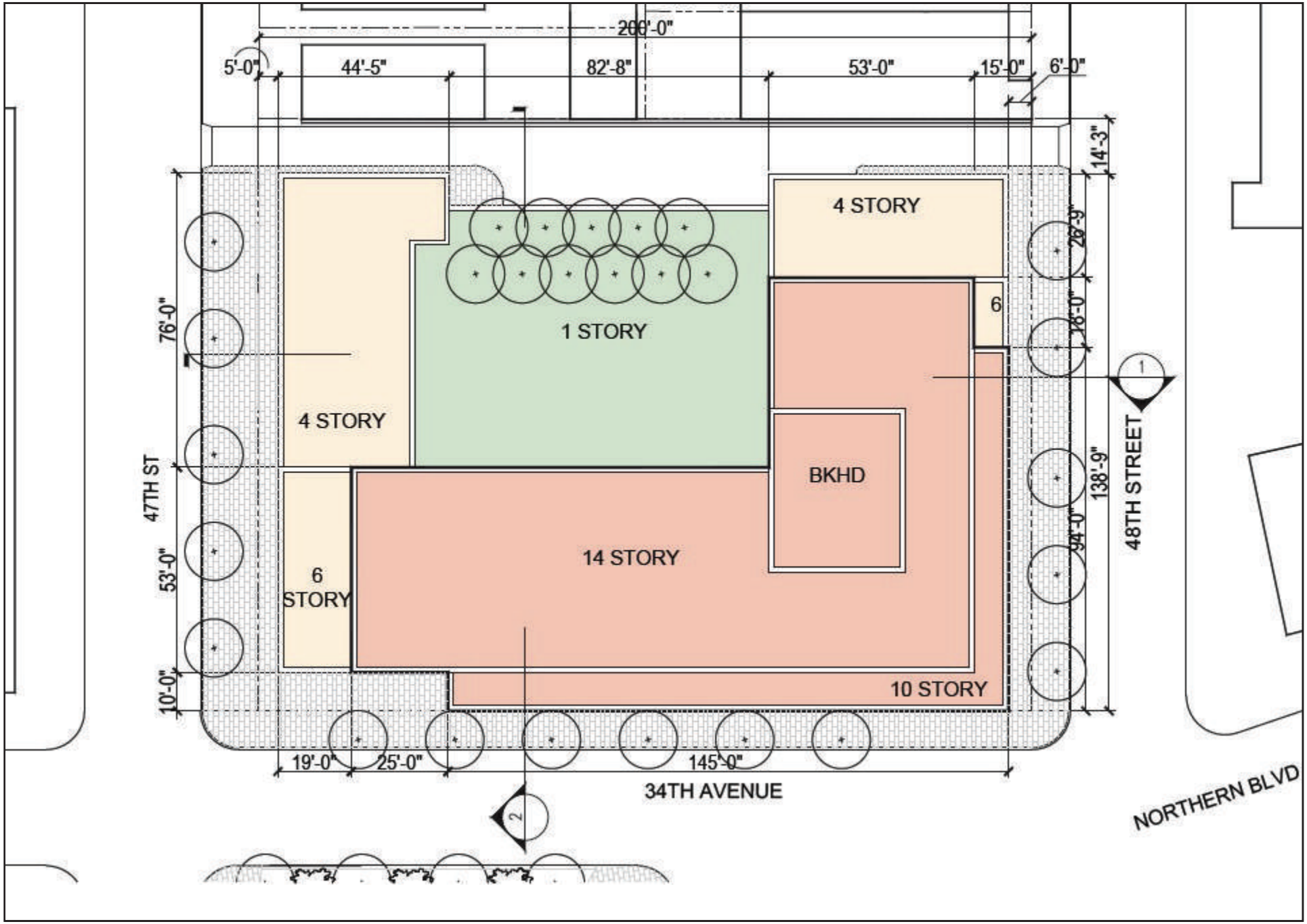
Due to the site's location within a Transit Zone, accessory parking requirements would not be required for income-restricted housing units but would be required for 50 percent of market-rate units under R7X zoning. Parking would be provided on-site and the entrance to the proposed parking garage would be located on 48th Street. At this time, it is expected that parking would be located on the ground-floor and cellar levels. Vehicles would enter the parking garage using a new curb cut located approximately 140 feet north of 34th Avenue.

VI. ANALYSIS FRAMEWORK

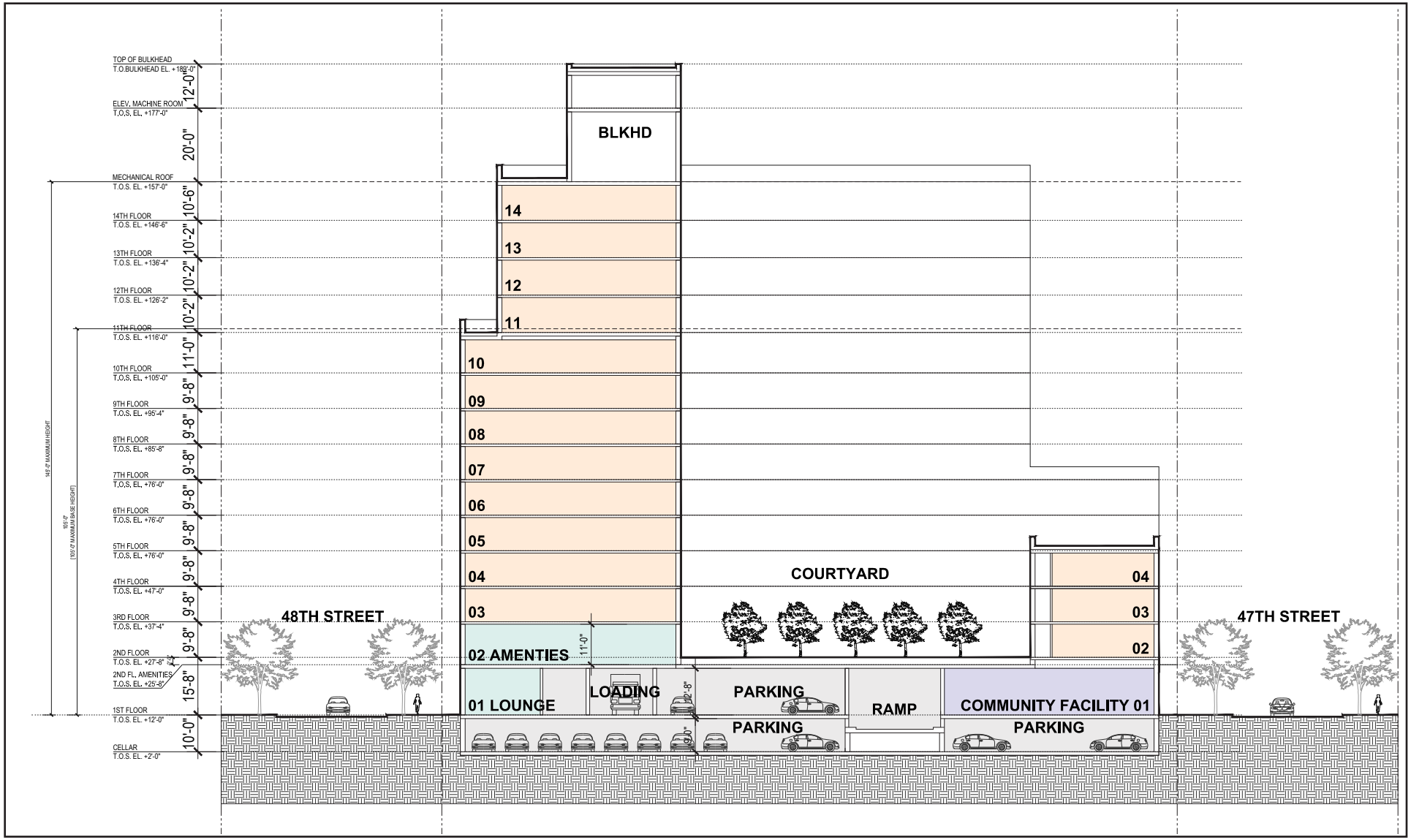
The Proposed Actions would change the regulatory controls governing land use and development within the project area. The *CEQR Technical Manual* will serve as the general guide on the methodologies and impact criteria for evaluating the Proposed Actions' potential effects on the various environmental areas of analysis. The EAS assesses the reasonable worst-case impacts that may occur as a result of the Proposed Actions.

Analysis Year

As existing tenants at Projected Development Site 1 have lease agreements running through 2020, no construction activity could begin until that time. Construction is expected to last for an approximate 18- to 24-month period with all components complete and fully operational by late 2022. As there are currently no plans for redevelopment at Projected Development Site 2, completion of any new building on is not anticipated until late 2022, which accounts for completion of the ULURP process (approximately seven months), preparation of building designs and procurement of construction financing (approximately



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one to two years), and an approximately 18-month construction process beginning in mid-2021. Accordingly, the analysis framework will use a 2022 Build Year for analysis purposes. As the analysis framework assumes a full build-out of the RWCDS by 2022, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses assess current conditions and forecast these conditions to the expected 2022 Build Year for the purposes of determining potential impacts. Each attachment of the EAS will provide a description of the "existing condition" and assessment of future conditions without the Proposed Actions (No-Action condition) and with the Proposed Actions (With-Action condition).

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Actions, a RWCDS for the proposed project was established for both Future No-Action and Future With-Action conditions. The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis of the impact category analyses in the EAS. The applicant's proposed development would be built to the maximum floor area (FAR 6.0) permitted under R7X/C2-4 and is therefore evaluated as the RWCDS in this analysis as Projected Development Site 1. While the applicant is seeking compliance with Option 2 of the MIH program, which would require the construction of 30 percent of residential floor area at an average of 80 percent of AMI, for the purposes of conservative analysis the RWCDS assumes that 20 percent of residential floor area would be provided at or below 80 percent of AMI.

Development Site Criteria

Pursuant to the *CEQR Technical Manual*, several factors were considered in projecting the amount and timing of new development on the non-applicant owned lots within the proposed rezoning area. These include known development proposals, past development trends, and the development site criteria described below. The first step in establishing the RWCDS was to identify those sites where new development could reasonably occur.

According to the *CEQR Technical Manual* the following factors, commonly referred to as "soft site criteria," are generally considered when evaluating whether some amount of development would likely be constructed by the build year as a result of the Proposed Actions:

- The uses and bulk allowed: Lots located in areas where changes in use would be permitted and/or contain buildings built to substantially less than the maximum allowable FAR under the existing zoning are considered "soft" enough such that there would likely be sufficient incentive to develop in the future, depending on other factors specific to the area (e.g., the amount and type of recent as-of-right development in the area, recent real estate trends, site specific conditions that make development difficult, and issues relating to site control or site assemblage that may affect redevelopment potential); and

- Size of the development site: Lots must be large enough to be considered "soft." Generally, lots with a small lot size are not considered likely to be redeveloped, even if currently built to substantially less than the maximum allowable FAR. A small lot is often defined for this purpose as 5,000 square feet or less, but the lot size criteria is dependent on neighborhood specific trends, and common development sizes in the study area should be examined prior to establishing these criteria.

However, the following uses and types of buildings that meet the soft site criteria are typically excluded from development scenarios because they are unlikely to be redeveloped as a result of the proposed project:

- Full block and newly constructed buildings with utility uses, as these uses are often difficult to relocate;
- Lots where construction is actively occurring, or has recently been completed, as well as lots with recent alterations that would have required substantial capital investment, unless recently constructed or altered lots were built to less than or equal to half of the maximum allowable FAR under the proposed zoning;
- Lots whose location or irregular shape would preclude or greatly limit future as-of-right development. Generally, development on irregular lots does not produce marketable floor space;
- Long-standing institutional uses with no known development plans; or
- Residential buildings with six or more units constructed before 1974. These buildings are likely to be rent-stabilized and difficult to legally demolish due to tenant re-location requirements.

Table A-2 lists each of the five tax lots on Block 722 that are within the proposed rezoning area (see Figure 5 of the EAS Form for photos). To help determine the eligibility of each lot as a soft site, the table provides the existing lot area, ownership, existing FAR and compares the existing and proposed maximum allowable floor areas under No-Action and With-Action conditions.

Although each site is currently in separate ownership and would not individually meet the CEQR soft site criteria, given the proposed changes in zoning to Block 722, Lots 1, 3, 4, 5, 70 and development trends in this area of Queens, these sites are collectively being considered a projected development site (Projected Development Site 2) for reasonable worst-case CEQR analysis purposes.

Table A-2
Proposed Rezoning Area Tax Lots – Existing and Proposed Maximum Allowable FAR

Lot	Lot Area (sf)	Ownership	Existing Use	Primary Existing Zoning	Max. Allowable FAR		Existing FAR
					Existing (R/CF/C)	Proposed R6B/C2-4 (R/CF/C)	
1	4,401	32-86 47th Street, LLC	Light Industrial	C8-1	0/1.0/2.4	2.0/2.0/2.0	1.45
3	1,900	Martin Ramotar	Residential	R6B	2.0/2.0/0	2.0/2.0/2.0	0.82
4	1,900	Eramian Loucin	Residential	R6B	2.0/2.0/0	2.0/2.0/2.0	0.93
5	6,557	Nikolaos Hartofylis	Residential	R6B	2.0/2.0/0	2.0/2.0/2.0	0.40
70	3,255	32-78 47th Street, LLC	Light Industrial	C8-1	0/1.0/2.4	2.0/2.0/2.0	1.07

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

In the 2022 future without the Proposed Actions, it is expected that no changes to zoning or land use would occur, and the proposed rezoning area would remain the same as existing conditions.

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

By 2022 under the With-Action condition, the requested actions would be granted, and it is expected that projected development would result in the construction of approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces within the rezoning area.

Projected Development Site 1

In the future with the Proposed Actions, the applicant would demolish the existing buildings on Projected Development Site 1 and the proposed approximately 231,703 gsf (FAR 6.0) 14-story mixed-use building would be constructed and occupied. As described above in "Description of the Proposed Development," Projected Development Site 1 would consist of approximately 201 DUs (161 market-rate, 40 affordable), 8,990 gsf of local retail, 5,000 gsf of community facility uses, and 77 accessory parking spaces (see Table A-3).

In the future with the Proposed Actions, the proposed zoning map amendment would allow for residential uses on the site and would result in an increase in the maximum permitted FAR. As discussed above, the RWCDS assumes that 20 percent of residential floor area would be dedicated to permanently affordable housing and Proposed Development Site 1 would result in the creation of approximately 40 affordable DUs at an average affordability level of 80 percent of AMI with no more than three income bands. An additional approximately 161 market-rate DUs would also be provided.

Projected Development Site 2

In the future with the Proposed Actions, small northern and western portions of Projected Development Site 2 would not be located within the MIH Area and would therefore not be subject to MIH zoning regulations including floor area bonuses and increases in allowable base/maximum building height. However, for conservative analysis purposes in this EAS, it is assumed that Projected Development Site 2 would be redeveloped pursuant to MIH regulations. As a result, Projected Development Site 2 is expected to be redeveloped with a 65,322 gsf (2.2 FAR) 4-story mixed-use building with approximately 37 DUs (30 market-rate, 7 affordable), 12,000 gsf of local retail, and 24 accessory parking spaces (see Table A-3).

It is assumed that Projected Development Site 2 would be designed to maximize height and density under the proposed R6B/C2-4 (MIH) zoning regulations. Local retail space, residential amenity space, and some parking would be located on the ground-floor along both the 34th Avenue and 47th Street frontages. Building setbacks would vary by frontage, with a minimum of 10 feet along 34th Avenue (a wide street) and 15 feet along 47th Street (a narrow street). It is assumed that the building would rise to a maximum height of 55 feet.

As discussed above, the RWCDS assumes that 20 percent of residential floor area would be dedicated to permanently affordable housing and would result in the creation of approximately 7 affordable DUs at an average affordability level of 80 percent AMI with no more than three income bands.

Parking would be provided on-site for approximately 24 vehicles pursuant to zoning requirements. It is expected that the entrance to the parking garage would be located on 47th Street, with parking located on the ground-floor and cellar levels. Table A-3 provides a summary of the projected development sites.

Table A-3
RWCDS Projected Development Site Summary[1]

Site Info				Existing/No-Action Conditions						With-Action Conditions							
#	*Tax Block*	*Tax Lot*	*Lot Area SF*	*Zoning*	*Com. SF*	*CF SF*	*Ind. CF*	*Vacant SF*	*DU*	*Zoning*	*Res. SF*	*Retail SF*	*CF SF*	*DU*	*Afford. DU*	*Parking SF*	*Parking Spaces*
1	723	1	3,819	C8-1, R5	3,804	0	0	0	0	R7X/ C2-4, R5	185,566	8,990	5,000	201	61	28,511	77
		8	26,755	C8-1, R5	10,952	9,800	0	5,122	0								
2	722	1	4,401	C8-1	0	0	6,380	0	0	R6B/ C2-4, R6B, R5	34,087	12,000	0	37	7	10,624	24
		3	1,900	R6B, C8-1	0	0	0	0	2								
		4	1,900	R6B	0	0	0	0	2								
		5	6,557	R6B, R5, C8-1	0	0	0	0	3								
		70	3,255	C8-1, R5	0	0	3,495	0	0								
TOTAL			**48,587**		**14,756**	**9,800**	**9,875**	**5,122**	**7**		**219,653**	**20,990**	**5,000**	**238**	**68**	**39,135**	**101**

Notes: SF = square feet; Com. = commercial; CF = community facility; Ind. = industrial; DU = dwelling unit; Res. = residential; Afford. = affordable; Build. = building.
[1] Table does not include mechanical space.

Possible Effects of the Proposed Project

Table A-4 below provides a comparison of the No-Action and With-Action conditions for the two projected development sites. As shown, compared to No-Action conditions, With-Action development would result in a net increase of 231 DUs (184 market-rate, 47 affordable), 6,234 gsf of commercial space, and 94 parking spaces, and a net loss of 4,800 gsf of community facility space, 9,875 gsf of light industrial space, and 5,122 gsf of vacant space. The proposed project would also result in an increase of approximately 541 residents and 20 workers compared to No-Action conditions.

Table A-4
Comparison of No-Action and With-Action Development Conditions

Use	**No-Action Condition**	**With-Action Condition**	**Increment**
Residential (Total)	7 DUs (5,970 gsf)	238 DUs (219,653 gsf)	**+231 DUs (213,683 gsf)**
Market-Rate[1]	7 DUs	191 DUs	**+184 DUs**
Affordable[1]	0 DUs	47 DUs	**+47 DUs**
Commercial	14,756 gsf	20,990 gsf	**6,234 gsf**
Community Facility	9,800 gsf	5,000 gsf	**-4,800 gsf**
Light Industrial	9,875 gsf	0 gsf	**-9,875 gsf**
Vacant	5,122 gsf	0 gsf	**-5,122 gsf**
Parking	7 spaces	101 spaces	**+94 spaces**
Population/Employment[2]	**No-Action Condition**	**With-Action Condition**	**Increment**
Residents	16 residents	557 residents	**+541 residents**
Workers	67 workers	87 workers	**20 workers**

Notes: [1] The number of dwelling units reflects an average unit size of 925 sf
[2] Assumes 2.34 persons per DU (based on 2010 U.S. Census data for Queens Community District 1), 1 worker per 25 DUs, 3 workers per 1,000 sf of commercial, 1 worker per 1,000 sf of auto service/repair, 1 worker per 1,000 sf of light industrial space, and 3 workers per 1,000 sf of community facility.

VII. PUBLIC REVIEW PROCESS

The applicant is requesting zoning text and map amendments to implement the proposed project, which 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 for the purpose of identifying 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*. CEQR rules guide environmental review through the following steps:

- *Establish a Lead Agency*. Under CEQR, the "lead agency" is the public entity responsible for conducting environmental review. The lead agency for the environmental review of the Proposed Actions is DCP.

- *Environmental Review and Determination of Significance*. The lead agency will determine whether the Proposed Actions may have a significant impact on the environmental. To do so, an EAS must be prepared. This EAS will be reviewed by the lead agency, which will determine if the Proposed Actions and development would result in any significant adverse impacts on the environment.

ATTACHMENT B
SUPPLEMENTAL SCREENING

47-15 34th Avenue Rezoning EAS
Attachment B: Supplemental Screening

I. INTRODUCTION

This Environmental Assessment Statement (EAS) has been prepared in accordance with the guidance and methodologies presented in the 2014 *CEQR Technical Manual*. For each technical area, thresholds are defined which if met or exceeded, require that a detailed technical analysis be undertaken. Using CEQR guidance, preliminary screening assessments were conducted for the Proposed Actions to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. The technical areas that warranted a "Yes" answer in Part II of the EAS form were Land Use, Zoning, and Public Policy, Socioeconomics, Community Facilities and Services, Open Space, Shadows, Historic and Cultural Resources, Urban Design and Visual Resources, Hazardous Materials, Transportation, Air Quality, Noise, and Construction. For these technical areas, a supplemental screening assessment is provided in this attachment. All remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts.

The supplemental screening assessment contained herein identified that a detailed analysis is required in a number of technical areas. Table B-1 identifies for each CEQR technical area whether (a) the potential for impacts can be screened out based on the EAS Form, Part II, Technical Analyses; (b) the potential for impacts can be screened out based on a supplemental screening per the *CEQR Technical Manual*, (c) or whether a more detailed assessment is required.

Table B-1
Summary of CEQR Technical Areas Screening

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

II. BACKGROUND AND EXISTING CONDITIONS

LAND USE, ZONING, AND PUBLIC POLICY

According to *CEQR Technical Manual* guidance, a detailed analysis of land use and zoning is appropriate if a proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on the site or result in the loss of a particular use.

As the Proposed Actions include zoning map and text amendments, a detailed analysis of land use, zoning and public policy is provided in Attachment C, "Land Use, Zoning, and Public Policy." As discussed in Attachment C, the Proposed Actions would allow for new land uses and would permit an increase in overall density within the rezoning area, but would not result in land use or zoning conditions that would be incompatible with or adversely affect conditions in the surrounding area. Accordingly, the Proposed Actions would not result in significant adverse impacts to land use, zoning, or public policies.

SOCIOECONOMIC CONDITIONS

Socioeconomic impacts may occur when an action directly or indirectly changes population, housing stock, or economic activities in an area. In some cases, these changes could be substantial, but not significantly adverse. In other cases, these changes may be beneficial to some groups and adverse to others. The purpose of a socioeconomic assessment is to disclose potentially adverse changes that would be created by an action and identify whether they rise to the level of significance. A socioeconomic assessment should be conducted if a proposed action may be reasonably expected to create socioeconomic changes within the area affected by the action that would not be expected to occur without the action. The *CEQR Technical Manual* states that a residential development of 200 new dwelling units or less or a commercial development of 200,000 sf or less typically does not cause significant socioeconomic impacts. As the Proposed Actions would facilitate the construction of over 200 new DUs, a preliminary assessment is provided below.

The proposed project would not result in substantial direct displacement of any residential populations, businesses, or employees, nor would it significantly change existing or future land uses beyond the rezoning area or adversely affect the economic conditions of a specific industry. As detailed below and shown in Table B-2, the proposed development does not exceed the CEQR threshold of 500 displaced residents or 100 displaced employees.

The Proposed Actions would not facilitate new development that is markedly different from existing uses, development, and activities within the neighborhood. The Proposed Actions would introduce approximately 238 DUs (191 market-rate DUs and 47 affordable DUs), approximately 20,990 gsf of local retail space, and approximately 5,000 gsf of community facility space, which would be consistent with and complement existing uses in an area where a growing demand for housing and commercial space exists. Compared to No-Action conditions, these proposed uses would result in the incremental addition of approximately 541 residents and 20 workers to the area. As shown in Table A-4 of Attachment A, "Project Description," projected development would not exceed the CEQR threshold of 200,000 sf of commercial space.

Direct Residential Displacement

Residential units have been identified at one site, Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70). This development site has seven dwelling units spread between four buildings, including a multi-family walkup building (Lot 5) and two two-family buildings (Lots 3, 4). It is assumed for RWCDS analysis purposes that these units would remain in place under No-Action conditions and that under With-Action conditions they would be demolished and replaced with a new development. Assuming 100 percent occupancy and the average household size of 2.34 persons per household in Queens CD 1, the Proposed Actions could potentially result in the direct displacement of approximately 16 residents. As the seven units that could potentially be directly displaced account for approximately 0.1 percent of the approximately 6,882 DUs in the ½-mile study area and the number of residents would be significantly fewer than 500 residents, per *CEQR Technical Manual* guidance, the Proposed Actions would not result in significant adverse socioeconomics impacts with respect to direct residential displacement.

Direct Business Displacement

The potential for direct business displacement has been identified at both projected development sites. As shown in Table B-3, the two projected development sites are occupied by six businesses/organizations, including two food service establishments (Block 723, Lots 1, 8), a furniture and home furnishing store (Block 722, Lot 1), an educational support/tutoring company (Block 723, Lot 1), an automotive-related (service repair) shop (Block 723, Lot 8), and a religious organization (Block 723, Lot 8). It is assumed for RWCDS analysis purposes that these businesses would remain in place under No-Action conditions and that under With-Action conditions they would be displaced. Based on field visits and standard employment density ratios commonly used for CEQR analysis, it is estimated that these businesses employ a total of 77 workers. The businesses that could potentially be directly displaced as a result of the Proposed Actions do not provide products or services essential to the local economy that would no longer be available in the trade area due to the difficulty of either relocating or establishing a new, comparable business, nor are there any publicly adopted plans that call for the preservation of such businesses in this area of Astoria. Additionally, the number of potentially displaced workers would be fewer than 100 workers, the *CEQR Technical Manual* guidance threshold for additional assessment of potential impacts. Therefore, the Proposed Actions would not result in significant adverse socioeconomic impacts with respect to direct business displacement.

Table B-3
Estimates of Potential Direct Displacement of Private Businesses and Employment

Business Type	Number of Firms	Estimated Employees
Food Service	2	16
Furniture/Home Furnishing	1	18
Educational Support/Tutoring	1	4
Automotive Repair	1	10
Religious Organization	1	29
Total	**6**	**77**

Notes: Based on 3/14/2018 field visit and standard employment density ratios commonly used for CEQR analysis

Indirect Residential Displacement

Preliminary Assessment

Indirect residential displacement may result from substantial new development that is markedly different from existing uses and activity in an area and that causes increased property values in the area. Increased property values can lead to increased rents in non-regulated rental units, which can make it difficult for some existing residents to afford to stay in their apartments. The indirect residential displacement assessment aims to determine whether the proposed project would either introduce a trend or accelerate an existing trend of changing real estate market conditions that may have the potential to displace a vulnerable residential population and, as a result, substantially change the socioeconomic character of the neighborhood. This preliminary assessment follows the step-by-step preliminary assessment guidance described in Section 322.1 of the *CEQR Technical Manual.*

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

As shown in Figure B-1, the socioeconomic study area includes all census tracts with at least 50 percent of area within a half-mile radius of the rezoning area. The half-mile study area is generally bounded by 30th Avenue to the north, 56th/57th Street to the east, Skillman Avenue to the south, and 38th Street to the west. The socioeconomic study area includes the eastern edge of Long Island City, southeastern portion of Astoria, northern edge of Sunnyside Gardens, and the southwestern portion of Woodside. The study area is comprised of a mixture of land uses. The area to the south of the rezoning area along Northern Boulevard is predominantly commercial and mixed-use whereas the areas to the north are predominantly residential.

As shown in Table B-4, based on 2012-2016 ACS Five-Year estimates, the median household income in the study area is approximately $54,800 (in 2016 dollars), as compared to median household income of approximately $59,758 in Queens. New York City has an estimated median household income of approximately $55,191. Both Queens and New York City have experienced decreases in median household incomes since 2000.

Table B-4
Household Income Characteristics: 1999 and 2012-2016

	Median Household Income**		Percent Change	Mean Household Income		Percent Change
	1999*	2012-2016		1999*	2012-2016	
½-Mile Study Area	$58,793	$54,800[1]	N/A[2]	$70,024	$72,212[3]	N/A[2]
Queens	$63,147	$59,758	-5.4%	$80,539	$77,515	-3.7%
New York City	$56,978	$55,191	-3.1%	$87,052	$88,437	increase[4]

Notes: *Inflation adjusted 2016 dollars

** The median household income represents the mid-point of all household incomes in a study area, whereas the mean or average household income is calculated by dividing aggregate income by the total number of households in a study area.

[1] Based on the margin of error (MOE) for median household income within the study area (according to the 2012-2016 Five-Year ACS, MOE of $4,663), there is 90 percent probability that the median household income of the study area is between $50,137 to $59,463).

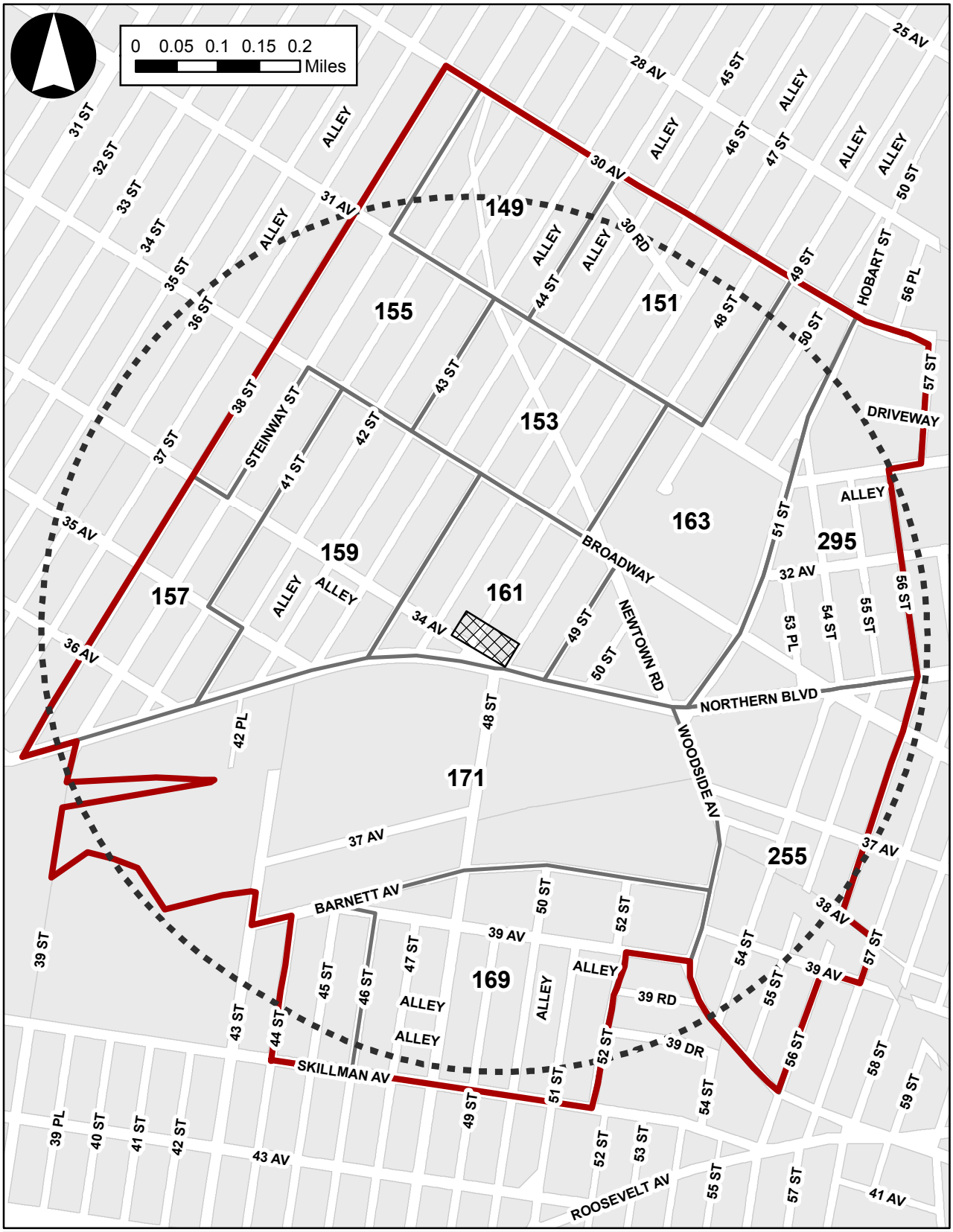
[2] The MOE of the difference between the 2000 Census and 2012-2016 Five-Year ACS Estimates for the study area is greater than the estimated difference. Therefore, a change cannot be reported with confidence.

[3] Based on the MOE for mean household income within the study area (according to the 2012-2016 Five-Year ACS, MOE of $2,313), there is 90 percent probability that the mean household income of the study area is between $69,899 to $74,525).

[4] The MOE of the difference between the 2000 Census and 2012-2016 Five-Year ACS Estimates for the study area is greater than one third of the estimated difference. Therefore, a percentage change cannot be estimated with confidence.

Source: US Census Bureau, 2000 Census, Summary File 3 and 2012-2016 Five-Year ACS Estimates

Figure B-1
Socioeconomic Study Area



Legend

Rezoning Area | 161 Census Tracts | 1/2-Mile Radius | Socioeconomic Study Area

Source: DoITT, DCP, US Census Bureau

As shown in Table B-4, the average household incomes for all geographies are higher than the respective median household incomes, indicating that each study area contains a population that is earning significantly more than the median household income. The mean household income in the study area is slightly lower than Queens, but is considerably lower than the mean household income for New York City. As shown in Table B-4, based on 2012-2016 Five-Year ACS estimates, the mean household income in the study area is approximately $72,212 (in 2016 dollars), as compared to mean household income of $77,515 in Queens and approximately $88,437 in New York City, respectively. Between 2000 and 2012-2016, the mean household income increased in New York City, whereas in Queens it declined.

Table B-5 illustrates the wide distribution of incomes in the study area. Approximately 20.6 percent of study area households earn less than $25,000 annually, a similar proportion to New York City as a whole (21.5 percent) but higher than Queens as a whole (16.1 percent). At the other end of the spectrum, approximately 6.5 percent of study area households earn $200,000 or more, compared to 5.8 percent of Queens households and 9.6 percent of New York City households.

Table B-5
Income Distribution: 2012-2016

	Total Households	Households Earning Less than $25,000		Households Earning $25,000 to $49,999		Households Earning $50,000 to $99,999		Households Earning $100,000 to $199,999		Households Earning $200,000 or more	
		#	%	#	%	#	%	#	%	#	%
½-Mile Study Area	6,882	1,416	20.6	1,595	23.2	1,951	28.3	1,475	21.4	445	6.5
Queens	525,378	84,434	16.1	113,909	21.7	165,391	31.5	130,914	24.9	30,730	5.8
New York City	1,870,015	402,495	21.5	389,131	20.8	501,644	26.9	397,119	21.2	179,626	9.6

Source: US Census Bureau, 2012-2016 Five-Year ACS Estimates

As shown in Table B-6, poverty levels in the study area were slightly higher than in the overall borough but less than New York City. In 2012-2016, the poverty rate in the study area was 14.9 percent, as compared to 14.6 percent in Queens and 20.3 percent in New York City, respectively. Between 1999 and 2012-2016, the study area experienced nearly a three percent point decrease in the percentage of persons below poverty level, whereas the percentage of persons below the poverty level remained constant in Queens and decreased by less than one percentage point in the City as a whole over the same time period.

Table B-6
Poverty Status: 1999 and 2012-2016

	Persons Below Poverty Level in 1999		Persons Below Poverty Level in 2012-2016	
	#	%	#	%
½-Mile Study Area	6,408	17.6	4,726	14.9
Queens	321,102	14.6	334,149	14.6
New York City	1,668,938	21.2	1,689,759	20.3

Source: US Census Bureau, 2000 Census, SF3 and 2012-2016 Five-Year ACS Estimates

In the 2022 future without the proposed project, it is anticipated that the current land use trends and general development patterns would continue. Table B-7 identifies 11 developments anticipated to occur within the socioeconomic study area by 2022 that would introduce residential uses (see Figure B-2). The largest planned development would be located at 34-11 Steinway Street, which would introduce 83 housing units when complete. All dwelling units are expected to be market-rate rental units.

Figure B-2

No-Action Residential Development



Legend

Rezoning Area | Socioeconomic Study Area | 1/2 Mile Radius | (1) No-Build Sites (refer to Table B-7)

Source: DoITT, DCP, US Census Bureau, DOB, YIMBYNews

Table B-7
No-Action Residential Development within the Half-Mile Study Area

Site No.[1]	Project Name/Address	Residential (DUs)	Community Facility (sf)
1	30-38 Steinway Street	8	0
2	47-12 Broadway	7	0
3	32-49 45th Street	1	0
4	44-14 Broadway	4	1,600
5	38-22 56th Street	2	0
6	39-22 56th Street	2	0
7	39-56 56th Street	3	0
8	34-11 Steinway Street	83	0
9	30-30 45th Street	4	0
10	30-49 38th Street	7	0
11	30-59 38th Street	3	0
Half-Mile Radius Total		**124 DUs**	**1,600**

Sources: DOB, YIMBY News
Notes: [1] Refer to Figure B-2

While the study area would only experience limited new residential development by 2022, the Long Island City Partnership estimates that there are over 2,620 residential units, 1,098,000 gsf of commercial space, and 622 hotel rooms currently under construction within one mile of the proposed rezoning area.[1] The majority of these units are expected to be market-rate condominium and rental units and are expected to result in increases to housing costs in the surrounding area.

In the future with the Proposed Actions, a portion of the rezoning area would be mapped as a Mandatory Inclusionary Housing (MIH) Area, which would set mandatory affordable housing requirements pursuant to the MIH program and require a share of new housing be permanently affordable. The production of affordable housing would be a condition of any residential development in the proposed rezoning area, and is expected to help preserve affordable housing in the area. There would be no expiration to the affordability requirement of housing units created through MIH, making these units a permanent reservoir of affordable housing in the area, a key policy to meet the *Housing New York* goal of fostering diverse livable communities.

The MIH program sets forth two primary options (Option 1 and Option 2) that are characterized by different affordability levels and promote a range of affordable development:

- Option 1 requires that 25 percent of residential floor area of a development be set aside for households earning up to 60 percent of the area median income (AMI) on average (approximately $50,100 for a family of two in 2018 dollars), with 10 percent of that number set aside for households earning up to 40 percent of AMI (approximately $33,400 for a family of two in 2018 dollars).

- Option 2 requires that 30 percent of residential floor area of a development be set aside for households earning up to 80 percent of the AMI on average (approximately $61,120 for a family of two in 2018).

For either MIH option above, none of the affordable units could be inhabited by residents with incomes exceeding 130 percent AMI (e.g., $108,550 for a family of two in 2018 dollars). Additionally, the City Council and City Planning Commission (CPC) could decide to apply a Workforce Option (Option 4) in

[1] https://longislandcityqueens.com/do-business/economic-development/development-lic/

conjunction with Option 2. The Workforce Option would set aside the affordable units for residents with incomes averaging 115 percent of AMI (e.g., $96,025 for a household of two in 2018 dollars) as well as require five percent of those units to be set aside for households earning up to 70 percent of AMI (e.g., $58,450 for a household of two in 2018 dollars) and 90 percent of AMI (e.g., $75,150 for a household of two in 2018 dollars).

The levels of affordability are based on percentages of AMI defined by the US Department of Housing and Urban Development (HUD) for the region (New York, NY HUD Metro Fair Market Area [FMA]); the 2018 income limits by family size for the New York City region are presented in Table B-8. These levels will change over time and their future levels cannot conclusively be established at this time.

Table B-8
2018 New York City Area Median Income (AMI)

Family Size	30% of AMI	40% of AMI	50% of AMI	60% of AMI	80% of AMI	100% of AMI	130% of AMI
1	$21,930	$29,240	$36,550	$43,860	$58,480	$73,100	$95,030
2	$25,050	$33,400	$41,750	$50,100	$66,800	$83,500	$108,550
3	$28,170	$37,560	$46,950	$56,340	$75,120	$93,900	$122,070
4	$31,290	$41,720	$52,150	$62,580	$83,440	$104,300	$135,590

Source: U.S. Department of Housing and Urban Development (HUD) and New York City Housing Development Corporation (HDC) http://www1.nyc.gov/site/hpd/renters/what-is-affordable-housing.page

Under the RWCDS in the future with the Proposed Actions, 231 DUs would be introduced to the rezoning area as compared to the No-Action condition. As shown in Table B-8, pursuant to the MIH program, a minimum of 20 percent of residential floor area (approximately 47 DUs) would be affordable for residents with incomes averaging 80 percent of AMI (approximately $66,800 for a family of two in 2018 dollars) according to HUD. Based on this, the average incomes anticipated for the new population that would qualify for affordable housing in the With-Action development is expected to be approximately $66,800 for a family of two, which is higher than the existing median household income ($54,800) and slightly lower than the average household income ($72,212) in the ½-mile study area (see Tables B-4 and B-8).

The remaining 191 DUs in the With-Action development would be provided at the market-rate. Table B-9 summarizes online apartment listings within the study area from streeteasy.com in May 2018. The average rents presented in the table were calculated based on listings of market-rate rental units in May 2018. As shown, average rents within the study area range from $1,700 for a studio to $3,200 for a four bedroom. HUD defines families who pay more than 30 percent of their income for housing as rent-burdened, assuming the 30 percent threshold is conservative for this analysis because it results in a higher assumed income for the proposed project's market-rate tenants. Assuming that the incoming market-rate renters would be spending 30 percent of their income on rent, households would need to earn approximately $68,000 annually to afford a studio, $75,000 annually to afford a one-bedroom, $95,000 annually to afford a two-bedroom, $114,000 annually to afford a three-bedroom, and $128,000 annually to afford a four-bedroom (see Table B-10).

Table B-9
2018 Average Asking Rents in the Study Area

	Studio	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom
Study Area (Portions of Long Island City, Astoria, Woodside, and Sunnyside)	$1,700	$1,875	$2,367	$2,845	$3,200

Notes: Streeteasy (http://streeteasy.com, accessed May 2018)

Table B-10
Imputed Household Income by Unit Type/Average Rental Rates

	Monthly Rent[1]	Estimated Monthly Income (Market-Rate Renters)	Estimated Yearly Income (Market-Rate Renters)
Studio	$1,700	$5,667	$68,000
1-bedroom	$1,875	$6,250	$75,000
2-bedroom	$2,367	$7,890	$95,000
3-bedroom	$2,845	$9,483	$114,000
4-bedroom	$3,200	$10,667	$128,000

Notes:
[1] Represents the average monthly market-rent based on May 2018 market listings
[2] Household incomes were imputed using HUD 30 percent guideline described above and rounded to nearly thousand dollars.
Sources: Rent researched using Streeteasy (http://streeteasy.com) accessed May 2018.

Although the AMI bands for the 47 permanently affordable housing units have not been finalized, based on the average household income of the study area ($72,212) and the imputed household incomes for the 191 market-rate units (ranging from $68,000 to $128,000), the overall residential population introduced as a result of the Proposed Actions would be expected to have a higher average household income than the existing study area population, irrespective of the levels of affordability. Based on *CEQR Technical Manual* guidance, if the expected average incomes of the new population would exceed the average incomes of the study area populations, Step 2 of the preliminary assessment should be conducted.

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

As shown in Table B-11, based on 2012-2016 Five-Year ACS data, the study area has an estimated population of 31,784. Since 2000, the study area population has decreased by more than 13 percent, whereas the populations of both Queens (3.6 percent) and New York City (5.7 percent) have increased between 2000 and 2012-2016.

Table B-11
Change to Study Area Population (2000, 2012-2016 ACS)

	2000 Census	2012-2016 ACS	Percent Change 2000 to 2012-2016
½-Mile Study Area	36,660	31,784[1]	-13.3%
Queens	2,229,379	2,310,011	3.6%
New York City	8,008,278	8,461,961	5.7%

Notes:
[1] Based on the MOE for total population within the study area (according to the 2012-2016 Five-Year ACS, MOE of 1,163 persons), there is 90 percent probability that the total population of the study area is between 30,621 to 32,947).
Source: US Census Bureau, 2000 Census, Summary File 3 and 2012-2016 Five-Year ACS Estimates

As described above, several development projects are anticipated in the No-Action condition. In the absence of the Proposed Actions, 124 residential dwelling units would be built within the study area by 2022. Assuming an average household size of 2.34 persons per household in Queens CD 1 and 100 percent occupancy rates, these planned development projects would add an estimated 290 residents to the ½-mile study area in the No-Action condition. The estimated study area population in the No-Action condition was calculated by adding the population from the planned development projects to the 2012-2016 study area population estimates. In total, in the No-Action condition, the study area population is expected to increase by 290 residents and will have a total population of 32,074.

The Proposed Actions would result in an incremental increase of 231 dwelling units within the study area. With an average household size of 2.34 persons per unit, the Proposed Actions would add approximately 541 residents to the study area. Table B-12 provides a comparison of this new population and its size relative to the population of the No-Action condition.

Table B-12
Incremental Population by 2022 under the Proposed Actions

	2022 Population Projection in the No-Action Condition	Number of Incremental Dwelling Units	Projected Population Increase from the With-Action Condition Dwelling Units	2022 Population Projection in the With-Action Condition	Percent Change from 2022 No-Action Condition
½-Mile Study Area	32,074	231	541	32,615	1.7%

By adding an incremental 541 residents to the study area, the Proposed Actions would increase the study area population by less than two percent, from 32,074 in the No-Action to 32,615 in the With-Action condition. Based on *CEQR Technical Manual* analysis guidance, a population increase of less than five percent in a study area typically is not large enough to affect real estate market conditions, and Step 3 of the preliminary assessment is not warranted. The new population introduced by the Proposed Actions would neither significantly alter the study area's demographics, nor alter market conditions in a manner that could lead to indirect residential displacement. Therefore, based on *CEQR Technical Manual* guidance, the Proposed Actions would not have the potential to result in significant adverse impacts due to indirect displacement and further assessment is not warranted.

COMMUNITY FACILITIES & SERVICES

The *CEQR Technical Manual* defines community facilities as public or publicly funded schools, libraries, child care centers, health care facilities, and fire and police protection. Potential direct or indirect effects of a proposed action can trigger the need for a preliminary assessment of community facilities. Direct effects occur if an action or project would "physically alter a community facility, whether by displacement or other physical change." Indirect effects occur if an action or project would add population to an area, which may potentially affect service delivery.

The Proposed Actions would result in the redevelopment of a predominantly commercial property and would not displace or physically alter any public schools, child care centers, or health care facilities, nor would they affect the physical operations of or access to and from any police or fire stations. Therefore, the Proposed Actions would not have any significant adverse direct impacts on existing community facilities or services.

As the Proposed Actions would facilitate a net increase of approximately 231 DUs to the area, it is likely that demand for existing services would increase. Therefore, in order to determine the potential for indirect impacts, an assessment based on CEQR thresholds has been provided in Attachment C, "Community Facilities." As discussed in Attachment C, "Community Facilities," the proposed project is not anticipated to result in significant adverse impacts on community facilities.

OPEN SPACE

Open space is defined as publicly or privately owned land that is publicly accessible and has been designated for leisure, play or sport, or conservation land set aside for protection and/or enhancement of the natural environment. An open space assessment may be necessary if a proposed action could

potentially have a direct or indirect effect on open space resources in the surrounding area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. According to the guidance established in the *CEQR Technical Manual*, a project that would add fewer than 200 residents or 500 employees, or a similar number of other users to an area that is not located within an underserved or well-served area, is typically not considered to have indirect effects on open space.

As shown in Table B-2 above, the proposed project would result in the incremental addition of an estimated 541 residents and 20 workers to the surrounding area. As such, an assessment of the proposed project's potential to affect open space and recreational facilities is required and has been provided in Attachment D, "Open Space." As discussed in the attachment, the proposed project is not anticipated to result in significant adverse impacts on open space resources.

SHADOWS

A shadow assessment considers actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight).

The Proposed Actions would facilitate the construction of two projected developments with maximum heights of approximately 145 feet (plus a 32-foot mechanical penthouse) and 55 feet (plus a 15-foot mechanical penthouse), respectively. As the rezoning area is located adjacent to Dwyer Square, a sunlight-sensitive open space resource, a shadow assessment is required and has been provided in Attachment F, "Shadows." As described in the attachment, the proposed project is not anticipated to result in significant adverse impacts on any sunlight-sensitive resources.

HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources are defined as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. These include properties that have been designated or are under consideration as New York City Landmarks or Scenic Landmarks, or are eligible for such designation; properties within New York City Historic Districts; properties listed on the State and/or National Register of Historic Places (S/NR); and National Historic Landmarks. An assessment of architectural and archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

According to CEQR guidance, impacts on historic resources are considered on those sites affected by a proposed action and in the area surrounding identified development sites. The historic resources study area is therefore defined as the area within a 400-foot radius of each projected development site. Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance compared to No-Action conditions.

In order to verify the presence of designated or eligible architectural resources in the surrounding area, a request letter was sent to LPC. In a letter dated 4/23/2018, LPC confirmed that neither of the projected development sites contain any architecturally or archaeologically significant resources (refer to Appendix

1). As there are no other historic resources within a 400-foot radius, the proposed project would not result in significant adverse impacts to architectural or archaeological resources and further analysis is not warranted.

URBAN DESIGN AND VISUAL RESOURCES

A preliminary analysis of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning, 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 Actions.

As described above, the Proposed Actions include zoning map and text amendments. As the Proposed Actions would allow changes beyond what is permitted under existing zoning, an assessment of the proposed project's potential to affect the pedestrian experience is required and has been provided in Attachment G, "Urban Design and Visual Resources." As described in the attachment, the proposed project is not anticipated to result in significant adverse impacts to urban design or visual resources.

HAZARDOUS MATERIALS

As detailed in the *CEQR Technical Manual*, the goal of a hazardous materials assessment is to determine whether a proposed action may increase the exposure of people or the environment to hazardous materials, and if so, whether this increased exposure would result in potential significant public health or environmental impacts. A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semivolatile organic compounds, methane, polychlorinated biphenyls and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the *CEQR Technical Manual*, the potential for significant 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.

An assessment was conducted in conformance with the American Society of Testing and Materials' (ASTM) International Standard Practice E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice). On January 11, 2018, ALC Environmental prepared a Phase I Environmental Site Assessment (ESA) for each of the projected development sites (refer to Appendix 2). The findings of the Phase I ESA's are summarized below.

Phase I Environmental Site Assessment for Projected Development Site 1

The Phase I ESA consisted of a site description and history, records review, site reconnaissance, interviews and user provided information, and other environmental conditions. The Phase I ESA revealed that prior uses on the site included various auto parts sales and repairs facilities, a laundry facility, and various commercial/retail tenants (i.e. restaurants, home furnishings, furniture store, etc.).

Based on the information gathered as a result of the Phase I ESA process, ALC Environmental identified the following Recognized Environmental Conditions (RECs) at Projected Development Site 1:

As per the historical sources reviewed (Fire Insurance maps and city directories), the existing single-story commercial building located on the northern section of Lot 8 previously operated as a commercial laundry facility ("Sunbeam Laundries Inc.'), between at least 1936 and 1970. It is unknown whether or not dry-cleaning activities were conducted at this former laundry corner of the building. The status of this gasoline tank is unknown; however, the tank was not depicted in the subsequent 1948 Sanborn map. This building was later connected to the existing tire and automotive repair building occupied by MIC Tire Pros, and was converted into an automotive repair facility, which was depicted in the 1977 through 2006 Sanborn maps. At the present time, this building is occupied by the New Day New Beginning Church.

Between at least 1945 and the early 1960s, the southern portion of Lot 8 was previously improved with gasoline filling stations (Republic Service Station Inc. and Sklenka Service Station) and automotive repair facilities. The most recent gasoline filling station and automotive repair facilities were demolished prior to 1961, and this section of the lot was redeveloped with existing single-story commercial building occupied by MIC Tire Pros, and the existing 2-story commercial building occupied by Sushi X and Metro Lighting & Furniture. Any potential impacts associated with the former gasoline service stations and automotive repair facilities were likely addressed during site redevelopment activities, however, the referenced single-story building has been occupied by automotive service facilities since its construction in the early 1960s. As previously stated, the automotive service facility building was previously connected to the northern building discussed above.

There are no reported releases, or known soil and/or groundwater contamination associated with the Subject Property. However, based on the: 1) likely generation of hazardous waste (i.e. spent oils, solvents, automobile fluids) associated with automobile repair activities, as well as the lack of hazardous waste disposal regulations prior to the 1970s; and 2) the unknown status of the gasoline tank depicted associated with the former commercial laundry facility, and lack of information pertaining to the exact types of operations conducted at this former laundry facility (i.e. dry cleaning), the historical laundry and automotive service activities associated with Lot 8 constitute a recognized environmental condition (REC).

Phase I Environmental Site Assessment for Projected Development Site 2

The Phase I ESA consisted of a site description and history, records review, site reconnaissance, interviews and user provided information, and other environmental conditions. The Phase I ESA revealed that prior uses on the site included various residential buildings, a parking lot, auto repair and auto showroom uses, and various commercial tenants (i.e. restaurants, home furnishings, travel company, etc.).

Based on the information gathered as a result of the Phase I ESA process, ALC Environmental identified the following Recognized Environmental Conditions (RECs) at Projected Development Site 2:

As per the historical sources and municipal records reviewed, the existing Building 2 located within Lot 70 (addressed 32-78 47th Street) was occupied by an automobile repair facility from as early as 1975 until at least 2006. Typical environmental hazards associated with automobile maintenance service include the generation of hazardous wastes in the form of spent oils, solvents, and auto fluids. Additionally, as per the historical city

directories reviewed, a woodworking facility (Niros Woodworking Inc.) operated at this site in 1983. Typical wastes associated with woodworking activities include spent solvents and adhesives, and chemicals used to treat wood.

There are no reported releases, or known soil and/or groundwater contamination associated with the Subject Property, however, there is a possibility that the subsurface media was impacted by improper disposal of hazardous waste associated with the former onsite automobile repairing and woodworking activities. Additionally, impacts associated with soil vapor intrusion from the former automobile maintenance operations cannot be ruled out. This constitutes a Recognized Environmental Condition (REC).

Phase II Environmental Site Assessments and (E) Designations

Given the continued use of the projected development sites, it is not feasible to conduct invasive drilling and sampling activities at this time. In place of conducting a Phase II ESA at this time, an (E) designation (E-509) would be placed on Projected Development Site 1 (Block 723, Lots 1, 8) and Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70), which would require site investigation prior to issuance of building permits. By placing an (E) designation on these sites, the potential for an adverse impact to human health and the environment resulting from the Proposed Actions would be avoided. Pursuant to Section 11-15 of the New York City Zoning Resolution, the New York City Office of Environmental Remediation would provide the regulatory oversight of the required environmental investigation and, if required, remediation. Building permits are not issued by the New York City Department of Buildings (DOB) without prior OER approval of the investigation and/or remediation.

The (E) designation would require the completion of a testing and sampling protocol and the approval of a remediation plan, where appropriate, to the satisfaction of OER. DOB will typically issue the foundation permits when OER approves the remedial action work plan – the remediation, if necessary, is typically performed concurrently with construction activities, pursuant to a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) approved by OER.

The (E) designation (E-509) text for Block 723, Lots 1, 8 and Block 722, Lots 1, 3, 4, 5, 70 related to hazardous materials is as follows:

TASK 1

Prior to construction or renovation involving subsurface disturbance, the applicant must submit to the New York City Office of Environmental Remediation (OER), for review and approval, a soil and groundwater testing protocol for the areas of proposed subsurface disturbance, 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 sample sites should be selected to adequately characterize the site, potential source of 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.

TASK 2

A written report with findings and a summary of the data must be submitted to OER after completion of the texting 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 the 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.

An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

All demolition or rehabilitation would be conducted in accordance with applicable requirements for disturbance, handling, and disposal of suspect lead-paint and asbestos-containing materials.

With the measures outlined above, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the proposed project.

TRANSPORTATION

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to traffic conditions and therefore require a detailed transportation analysis. The development densities shown in Table 16-1 of the *CEQR Technical Manual* generally result in fewer than 50 peak hour vehicle trips, 200 peak hour subway/rail or bus transit riders, and 200 peak hour pedestrian trips, where significant adverse impacts are considered unlikely. In Zone 2 (which include all areas within 0.25 miles of a subway station), the development thresholds are an increment of 200 residential units, 100,000 gsf of office space, 20,000 gsf of regional retail, 15,000 gsf of local retail, 20,000 gsf of restaurant uses, 25,000 gsf of community facility uses, or 85 off-street parking spaces.

According to the *CEQR Technical Manual*, if an action would result in development greater than one of the minimum development densities in Table 16-1, a Level 1 (Project Trip Generation) Screening Assessment should be prepared. Except in unusual circumstances, if a proposed action is projected to result in fewer than 50 peak hour vehicle trips, 200 peak hour subway/rail or bus transit riders, or 200 peak hour pedestrian trips, it is unlikely that further analysis would be necessary. If the trip generation screening thresholds are exceeded, a Level 2 (Project-Generated Trip Assignment) Screening Assessment should be prepared to determine if a proposed action would generate or divert 50 peak hour vehicle trips through any intersection, 200 peak hour subway trips through a single station, 50 peak hour bus trips on a single bus route in the peak direction, or 200 peak hour pedestrian trips through a single pedestrian

element. If any of these Level 2 screening thresholds are met or exceeded, a detailed analysis for the respective mode is required.

In the 2022 future without the Proposed Actions, it is assumed that the projected development sites would remain the same as under existing conditions with a combined total of 7 DUs, 6,338 gsf local retail uses, 9,800 gsf of community facility uses (house of worship), 9,875 gsf of light industrial uses, 8,418 gsf of auto repair uses, 5,122 gsf of vacant space, and 7 parking spaces. As the proposed project would introduce approximately 238 DUs, 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces, the incremental (net) change for transportation analysis is the addition of 231 DUs, 14,652 gsf of local retail uses, 5,000 gsf of community facility uses (medical office), and 94 parking spaces, and a loss of 9,800 gsf of community facility uses (house of worship), 9,875 gsf of light industrial space, and 5,122 gsf of vacant space. As the proposed project would introduce an incremental 231 DUs, it would exceed the residential threshold of 200 DUs identified in Table 16-1 for Zone 2 and a preliminary analysis of transportation is warranted.

Level 1 (Trip Generation) Screening Assessment

A travel demand forecast was prepared to determine if the proposed project would exceed the Level 1 Screening Assessment thresholds. Table B-13 shows the transportation planning factors used to forecast travel demand under the No-Action and With-Action conditions in the weekday AM, midday, and PM and Saturday midday peak hours, including trip generation rates, temporal and directional distributions, mode choice factors, and vehicle occupancy rates. As shown in Table B-13, planning factors are based on the *CEQR Technical Manual*, 2012-2016 American Community Survey (ACS) Means of Transportation to Work data for Queens Census Tracts 153, 159, 161, and 163, 2006-2010 ACS Means of Transportation at Work Place Table for Queens Census Tracts 153, 159, 161, and 163, the 2012 *Triangle Plaza Hub EAS*, data provided by the New York City Department of City Planning (DCP) for Queens local retail and medical office uses located in a Transit Zone, the 2016 *East New York Rezoning FEIS,* and the 2016 *25 Kent Avenue EAS*.

Table B-14 presents the person and vehicle trips expected to be generated under the No-Action and With-Action conditions, respectively, as well as the incremental number of trips generated as a result of the proposed project. The proposed project would generate an incremental total of approximately 264, 634, 466, and 492 person trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. Transportation demand by mode is discussed in detail below.

Traffic

As shown in Table B-14, the proposed project would generate an incremental total of approximately 26, 57, 33, and 50 vehicle trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. Per *CEQR Technical Manual* Level 1 (Trip Generation) Screening Assessment guidance, further traffic analysis is warranted as development facilitated by the proposed project would generate more than 50 vehicle trips.

Parking

The proposed project would introduce an incremental 94 spaces of off-street parking. As the proposed accessory parking spaces would comply with zoning requirements and a detailed traffic analysis is not

warranted, it is expected that the projected development sites would accommodate all action-generated parking demand and further assessment of parking conditions is not warranted.

Table B-13
Transportation Planning Factors

Land Use:	Residential	Local Retail	Community Facility	House of Worship	Light Industrial/ Manufacturing	Auto Repair
Size/Units:	231 DU	14,652 gsf	5,000 gsf	-9,800 gsf	-9,875 gsf	-8,418 gsf
Trip Generation:	(1)	(1)	(3)	(5)	(5)	(5)
Weekday	8.075	205	103.4	19.18	14.7	19.4
Saturday	9.600	240	62.1	21.83	2.2	19.4
	per DU	per 1,000 gsf	per 1,000 gsf	per 1,000 sf	per 1,000 sf	per 1,000 sf
Temporal Distribution:	(1)	(1)	(3)	(5)	(5)	(5)
AM	10.0%	3.0%	10.0%	7.9%	13.2%	13.2%
MD	5.0%	19.0%	13.0%	4.0%	11.0%	11.0%
PM	11.0%	10.0%	9.0%	7.2%	14.2%	14.2%
SatMD	8.0%	10.0%	16.0%	15.8%	10.7%	10.7%

	(2)	(3)		(3)	(5)	(6)		(5)
Modal Splits:	All Periods	Weekday	Sat	All Periods	All Periods	AM/PM/SAT	MD	All Periods
Auto	15.0%	11.0%	11.0%	30.0%	5.0%	55.0%	2.0%	85.0%
Taxi	1.0%	0.0%	0.0%	20.0%	1.0%	1.0%	1.0%	5.0%
Subway	68.0%	4.0%	4.0%	7.0%	3.0%	19.0%	7.0%	1.0%
Bus	8.0%	3.0%	3.0%	23.0%	6.0%	9.0%	7.0%	1.0%
Walk/Other	8.0%	82.0%	82.0%	20.0%	85.0%	16.0%	83.0%	8.0%
	100.0%	100.0%	100.0%	100.0%	100%	100.0%	100.0%	100.0%

	(3)		(5)		(5)		(5)		(7)		(5)	
In/Out Splits:	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	16.0%	84.0%	50%	50%	89%	11%	54%	46%	94%	6%	65%	35%
MD	50.0%	50.0%	50%	50%	51%	49%	50%	50%	39%	61%	50%	50%
PM	67.0%	33.0%	50%	50%	48%	52%	52%	48%	5%	95%	50%	50%
Sat MD	53.0%	47.0%	55%	45%	41%	59%	71%	29%	60%	40%	50%	50%

Vehicle Occupancy:	(2)	(3)	(3)	(5)	(7)	(5)
	All Periods	All Periods	All Periods	All Periods	All Periods	All Periods
Auto	1.18	1.50	1.60	1.65	1.14	1.30
Taxi	1.18	1.50	1.60	1.40	1.14	1.30
Truck Trip Generation:	(1)	(1)	(5)	(5)	(7)	(5)
Weekday	0.06	0.35	0.29	0.29	0.35	0.89
Saturday	0.02	0.04	0.29	0.29	0.04	0.89
	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
	(1)	(1)	(5)	(5)	(7)	(5)
AM	12.0%	8.0%	3.0%	9.6%	10.0%	14.0%
MD	9.0%	11.0%	11.0%	11.0%	11.0%	9.0%
PM	2.0%	2.0%	1.0%	1.0%	2.0%	1.0%
Sat MD	9.0%	11.0%	0.0%	0.0%	11.0%	0.0%

	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes:

1. 2014 *CEQR Technical Manual*
2. 2012-2016 American Community Survey (ACS) Means of Transportation to Work for Queens Census Tracts 153, 159, 161, 163.
3. Data provided by DCP for local retail and medical office uses located within the Queens Transit Zone
4. *Triangle Plaza Hub EAS*, 2012
5. *East New York Rezoning FEIS,* 2016
6. 2006-2010 American Community Survey (ACS) Means of Transportation at Work Place Table for Queens Census Tracts 153, 159, 161, 163
7. *25 Kent Avenue EAS,* 2016

Table B-14
Travel Demand Forecast

Land Use:		Residential		Local Retail		Community Facility		House of Worship		Light Industrial/ Manufacturing		Auto Repair		Total	
Size/Units:		231 DU		13,187 gsf		5,000 gsf		-9,800 gsf		-9,875 gsf		-8,418 gsf			
Peak Hour Person Trips:															
	AM	188		82		52		-16		-20		-22		264	
	MD	94		514		68		-8		-16		-18		634	
	PM	206		272		48		-14		-22		-24		466	
	Sat MD	178		318		50		-34		-2		-18		492	
Person Trips:															
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto	5	24	5	5	14	3	-4	-1	-10	-1	-12	-7	-2	23
	Taxi	0	2	0	0	9	1	-3	0	0	0	-1	0	5	3
	Subway	20	107	2	2	3	0	-1	0	-4	0	0	0	20	109
	Bus	2	13	1	1	11	1	-3	0	-2	0	0	0	9	15
	Walk/Other	2	13	33	33	9	1	-4	0	-3	0	-1	-1	36	46
	Total	29	159	41	41	46	6	-15	-1	-19	-1	-14	-8	68	196
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	Auto	7	7	28	28	10	10	-1	-1	-3	-5	-8	-8	33	31
	Taxi	0	0	0	0	7	7	-1	-1	0	0	0	0	6	6
	Subway	32	32	10	10	2	2	0	0	-1	-2	0	0	43	42
	Bus	4	4	8	8	8	8	-1	-1	-1	-1	0	0	18	18
	Walk/Other	4	4	211	211	8	7	-1	-1	-1	-2	-1	-1	220	218
	Total	47	47	257	257	35	34	-4	-4	-6	-10	-9	-9	320	315
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	Auto	21	10	15	15	7	7	-2	-2	-1	-6	-10	-10	30	14
	Taxi	1	1	0	0	5	5	-1	-1	0	-4	-1	-1	4	0
	Subway	94	47	5	5	2	2	0	-1	0	-1	0	0	101	52
	Bus	11	5	4	4	5	6	-2	-2	0	-5	0	0	18	8
	Walk/Other	11	5	112	112	5	5	-1	-1	0	-5	-1	-1	126	115
	Total	138	68	136	136	24	25	-6	-7	-1	-21	-12	-12	279	189
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	Auto	14	13	19	16	6	9	-4	-6	-1	0	-8	-8	26	24
	Taxi	1	1	0	0	4	6	-3	-4	0	0	0	0	2	3
	Subway	63	56	7	6	1	2	-1	-1	-1	-1	0	0	69	62
	Bus	8	7	5	4	5	7	-3	-5	0	0	0	0	15	13
	Walk/Other	8	7	143	118	3	6	-4	-5	0	0	-1	-1	149	125
	Total	94	84	174	144	19	30	-15	-21	-2	-1	-9	-9	261	227
Vehicle Trips :															
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto (Total)	4	20	3	3	9	2	-2	-1	-9	-1	-9	-5	-4	18
	Taxi	0	2	0	0	6	1	-2	0	0	0	-1	0	3	3
	Taxi Balanced	2	2	0	0	7	7	-2	-2	0	0	-1	-1	6	6
	Truck	1	1	0	0	0	0	0	0	0	0	-1	-1	0	0
	Total	7	23	3	3	16	9	-4	-3	-9	-1	-11	-7	2	24
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	Auto (Total)	6	6	19	19	6	6	-1	-1	-2	-3	-6	-6	22	21
	Taxi	0	0	0	0	4	4	-1	-1	0	0	0	0	3	3
	Taxi Balanced	0	0	0	0	8	8	-2	-2	0	0	0	0	6	6
	Truck	1	1	0	0	0	0	0	0	0	0	0	0	1	1
	Total	7	7	19	19	14	14	-3	-3	-2	-3	-6	-6	29	28
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	Auto (Total)	18	8	10	10	4	4	-1	-1	-1	-4	-8	-8	22	9
	Taxi	1	1	0	0	3	3	-1	-1	0	-3	-1	-1	2	-1
	Taxi Balanced	2	2	0	0	6	6	-2	-2	-3	-3	-2	-2	1	1
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	20	10	10	10	10	10	-3	-3	-4	-7	-10	-10	23	10
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	Auto (Total)	12	11	13	11	4	6	-2	-4	-1	0	-6	-6	20	22
	Taxi	1	1	0	0	3	4	-2	-3	0	0	0	0	2	5
	Taxi Balanced	2	2	0	0	7	7	-5	-5	0	0	0	0	4	4
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	14	13	13	11	11	13	-7	-9	-1	0	-6	-6	24	26

	Total Vehicle Trips		
	In	Out	Total
AM	2	24	26
MD	29	28	57
PM	23	10	33
Sat MD	24	26	50

Note: 10% linked-trip credit applied to local retail

Transit

As shown in Table B-14, the proposed project would generate an incremental total of approximately 129, 85, 153, and 131 subway trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. During the same peak periods, the number of incremental bus-only trips would total approximately 24, 36, 26, and 28. Per *CEQR Technical Manual* Level 1 Screening Assessment guidance, further transit analysis is not warranted as development facilitated by the Proposed Actions would not generate more than 200 transit-oriented trips in any peak hour.

Pedestrians

As shown in Table B-14, the proposed project would generate an incremental total of approximately 82, 438, 241, and 274 walk-only trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. Incremental pedestrian trips (including walk-only and walk trips en route to/from subway and bus stops) would total approximately 235, 559, 420, and 433 in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. Per *CEQR Technical Manual* Level 1 Screening Assessment guidance, further pedestrian analysis is warranted as development facilitated by the Proposed Actions would generate more than 200 pedestrian trips in all peak hours.

Level 2 (Trip Generation) Screening Assessment

A Level 2 screening assessment involves the assignment of project-generated trips to the study area network 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.

Traffic

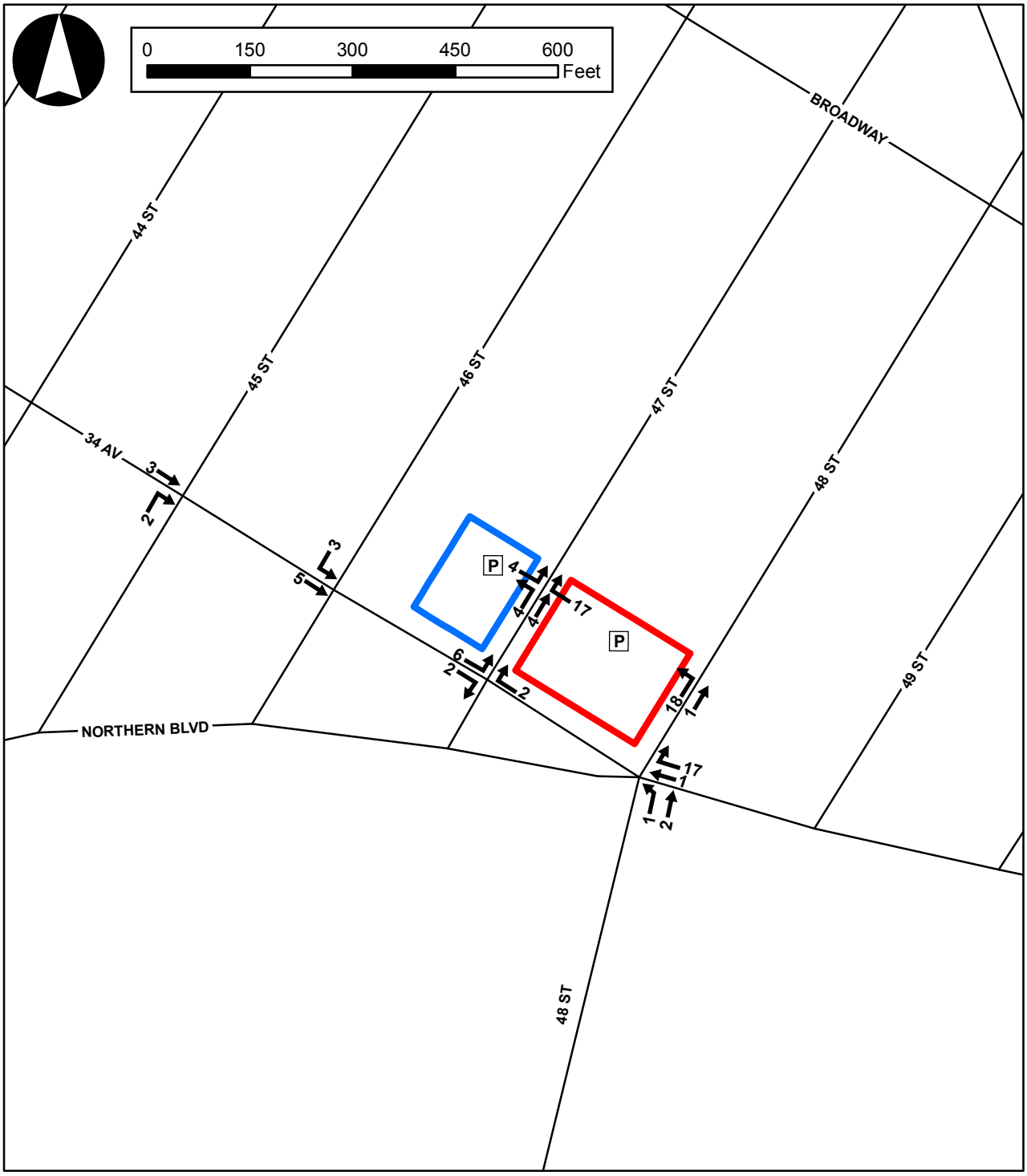
As shown in Table B-14, the proposed project would exceed 50 vehicle trips during the weekday midday and Saturday midday peak hours. As such, vehicle trips for the weekday and Saturday midday peak hours were assigned to the surrounding traffic network. All vehicle trips were assigned to on-site parking facilities, with the exception of taxis, which were assigned to the street frontages of the projected development sites. This can be considered a conservative approach as it concentrates traffic at intersections in proximity to the project area. As shown in Figures B-3 and B-4, no intersections would exceed the *CEQR Technical Manual* analysis threshold of 50 vehicle trips per hour during the weekday or Saturday midday peak hours when traffic volumes are highest, and no further analysis is required.

Pedestrians

As shown in Table B-14, the proposed project would exceed 200 pedestrian trips during the weekday AM, midday, and PM, and Saturday midday peak hours. As such, pedestrian trips for the weekday midday peak hour, the worst-case peak hour, were assigned to pedestrian elements (sidewalks, corners, and crosswalks) in proximity to the projected development sites and along corridors linking the sites to area transit facilities and services. As shown in Figure B-5, based on the assignments, project-generated pedestrian trips would be most concentrated along pedestrian elements located in the immediate vicinity of the project area along 34th Avenue. With the exception of the northeast and northwest corner areas of 34th Avenue and 47th Street (an unsignalized intersection that is not analyzed), no sidewalks, corners, or crosswalks would exceed the *CEQR Technical Manual* analysis threshold of 200 pedestrian trips per hour during the weekday midday peak hour when pedestrian volumes are highest. Therefore, no exceedances

Figure B-3

With-Action Weekday Midday Peak Hour Traffic Volumes



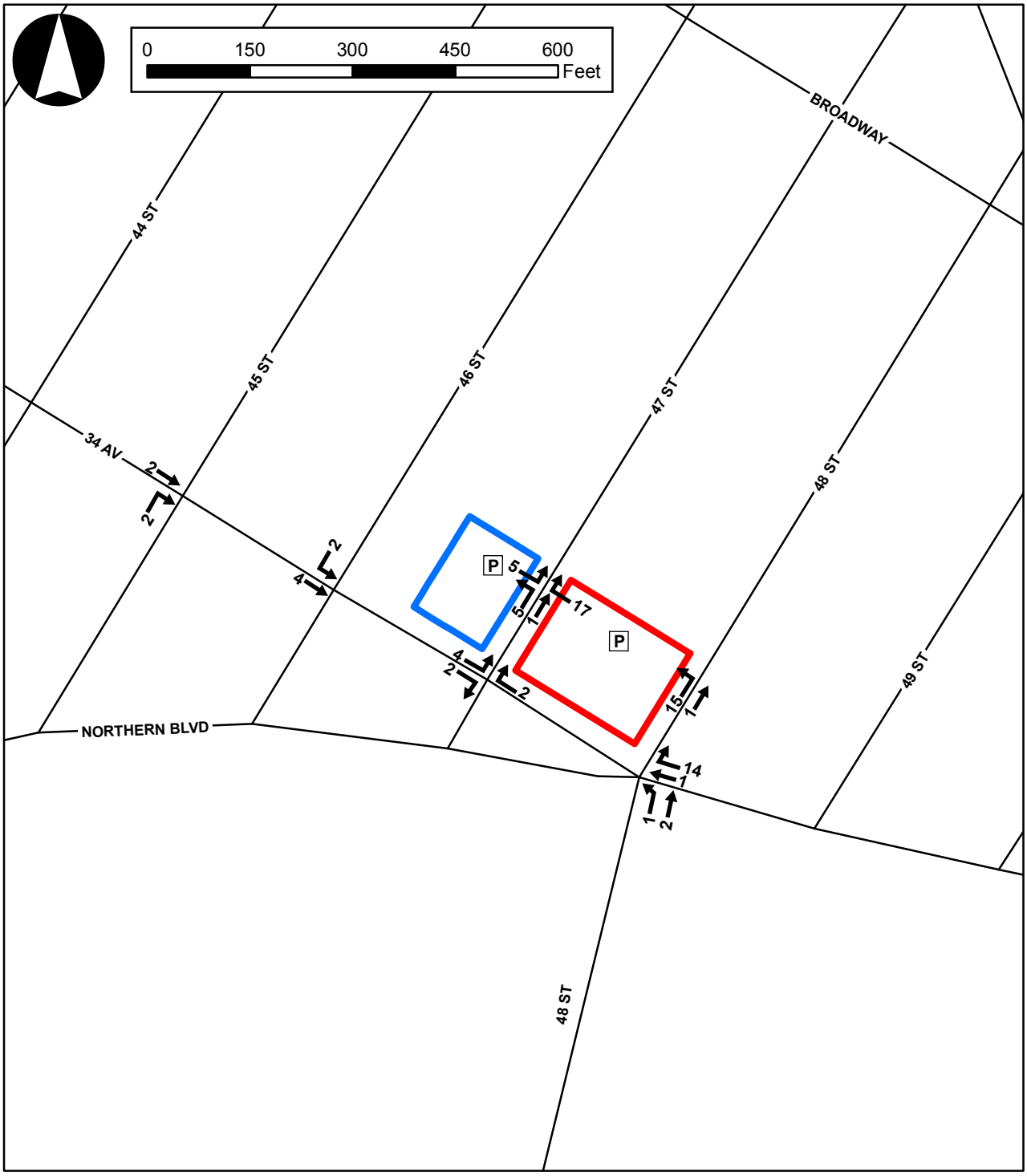
Legend

- Projected Development Site 1
- Projected Development Site 2
- Traffic Direction and Increment
- P Off-Street Parking

Source: DoITT

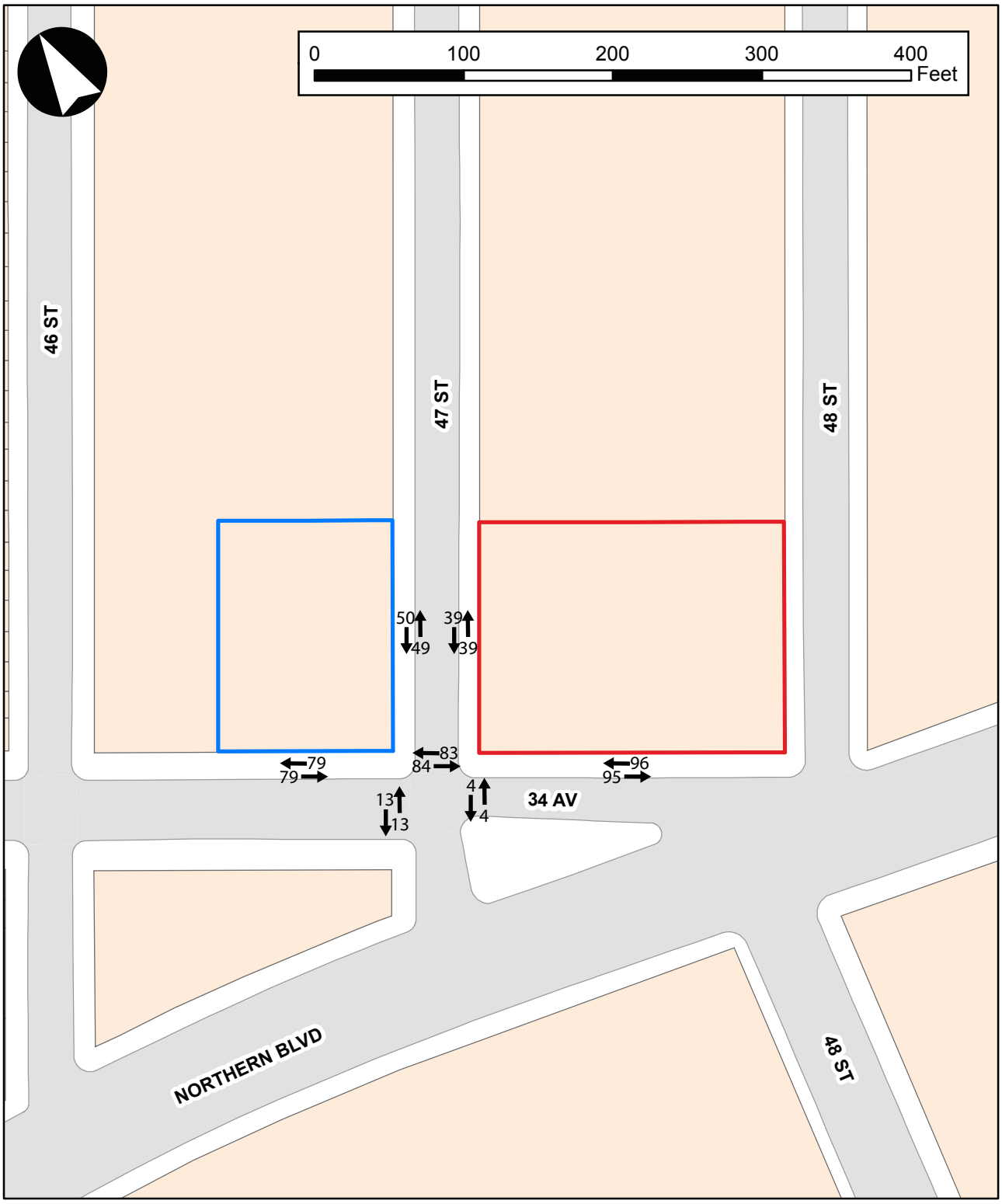
Figure B-4

With-Action Saturday Midday Peak Hour Traffic Volumes



Source: DoITT

Figure B-5
With-Action Weekday Midday Peak Hour Traffic Volumes



Legend

- Projected Development Site 1
- Projected Development Site 2
- Tax Blocks
- Pedestrian Direction and Increment

Source: DoITT, DCP

would occur during the weekday AM and PM or Saturday midday peak hours, and no further analysis is required.

AIR QUALITY

Mobile Sources

As stated in the *CEQR Technical Manual*, a project 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, or add new users near mobile sources. Localized increases in pollutant levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of a proposed project. According to the screening threshold criteria for this area of the City, if 170 or more project-generated vehicles pass through a signalized intersection in any given peak period or if a project would result in a substantial number of local or regional diesel vehicle trips, there is the potential for mobile air quality impacts and a detailed analysis is required.

As discussed above in "Transportation," the proposed project would result in fewer than 50 peak hour vehicle trips at any intersection and would fall well below the CEQR screening threshold of 170 peak hour auto trips at nearby intersections. As shown in Table B-14, the proposed project would result in a maximum of 57 peak hour vehicle trips, including 55 passenger cars and 2 trucks. Per Appendix B, "MOBILE6 Input Data Format Reference Tables" (Table 3, "Complete MOBILE6 Vehicle Classifications") of the *CEQR Technical Manual*, passenger cars are listed as light-duty gasoline vehicles. Given the proposed land uses (residential, retail), it is expected that all truck trips would be limited to medium-duty diesel delivery vehicles. Vehicle trips would be distributed across a number of high-capacity streets, including: 48th Street, a major collector; 34th Avenue, a minor arterial; and Northern Boulevard and Broadway, principal arterials.[2] As such, the proposed project would not result in a PM2.5 emission equivalent that exceeds the CEQR threshold of 12 to 23 heavy duty diesel vehicles (HDDV), depending on roadway type. Therefore, a quantified assessment of emissions from project-generated traffic is not warranted and no significant mobile source air quality impacts are expected as a result of the Proposed Actions.

Parking Garage Analysis

The proposed project is expected to include an approximately 77 space parking garage located below-grade at Projected Development Site 1 and an approximately 24 space parking garage located below-grade at Projected Development Site 2. The parking spaces are expected to primarily serve residential users. The entrance to the parking facility at Projected Development Site 1 would be located on 48th Street and the exit would be located on 47th Street. Drivers are expected to enter and exit the parking garage at Projected Development Site 2 from 47th Street. Per *CEQR Technical Manual* guidance, a parking garage air quality analysis is not warranted as neither development facilitated by the Proposed Actions would generate more than 85 parking spaces.

Stationary Sources

Actions can result in stationary source air quality impacts when they (1) create new stationary sources of pollutants such as emission stacks from industrial plants, hospitals, or other large institutional uses, or building's boiler stack(s) used for heating/hot water, ventilation, or air conditioning systems (HVAC) that

[2] New York State Department of Transportation, https://www.dot.ny.gov/gisapps/functional-class-maps

can affect surrounding uses; (2) introduce new sensitive receptors near existing (or planned future) emissions stacks that may adversely affect the new use; or (3) introduce potentially significant odors. No odors are associated with the proposed project. A preliminary HVAC source assessment has been provided below to determine if the proposed development or existing buildings would have the potential to affect one another.

Heat and Hot Water Systems

Pursuant to CEQR guidance, Figure 17-3 of the *CEQR Technical Manual* should be used to assess the potential effects of a building on existing land uses. If the source building (the projected developments) is taller than the receptor building or the distance between the two buildings falls below the applicable curve provided in Figure 17-3, a potential significant impact due to boiler stack emissions is unlikely and no further analysis is needed. If the distance between the source and receptor buildings is less than or equal to the threshold distance, further analysis is required.

Project-on-Existing Assessment

As shown in Table B-15 and Figure B-6, the floor area and height of each projected development site was used to determine the distance at which an impact to an existing receptor building may occur. As shown in the table, if any building of similar or greater height were identified within approximately 225 feet of Projected Development Site 1 or within 124 feet of Projected Development Site 2, further detailed analysis would be required. No existing buildings of similar or greater height were identified within a 400-foot radius of either projected development site. Furthermore, of the developments expected to be completed in the surrounding area by 2022, none were found to be located within 225 feet of Projected Development Site 1 or within 124 feet of Projected Development Site 2. Therefore, the HVAC systems of the projected developments are not expected to have a significant adverse impact on any existing or planned future buildings and a detailed analysis of project-on-existing impacts is not warranted.

Table B-15
HVAC Screening Assessment – Project-on-Existing

Site	Floor Area (GSF)	Building Height (Feet)	Distance at which an Impact May Occur (Feet)	Distance to Nearest Building of Similar or Greater Height (Feet)	Result
1	231,703	145	225	400+	Pass
2	65,322	55[1]	124	400+	Pass

Note: See Figure B-6
[1] The maximum permitted building height at Projected Development Site 2 would be 55 feet within the proposed rezoning area (pursuant to MIH regulations) and 50 feet outside the proposed rezoning area. It is assumed the HVAC stack would be located at the highest tier.

Project-on-Project Assessment

The same methodology was used to determine whether the HVAC system of the shorter projected development, Projected Development Site 2, could result in impacts at the taller projected development, Projected Development Site 1. As shown in Table B-16, the floor area and height of Projected Development Site 2 was used to determine the distance at which an impact to an existing receptor building may occur.

HVAC Screening Assessment - Project-on-Existing

CEQR TECHNICAL MANUAL FIGURE 17-3

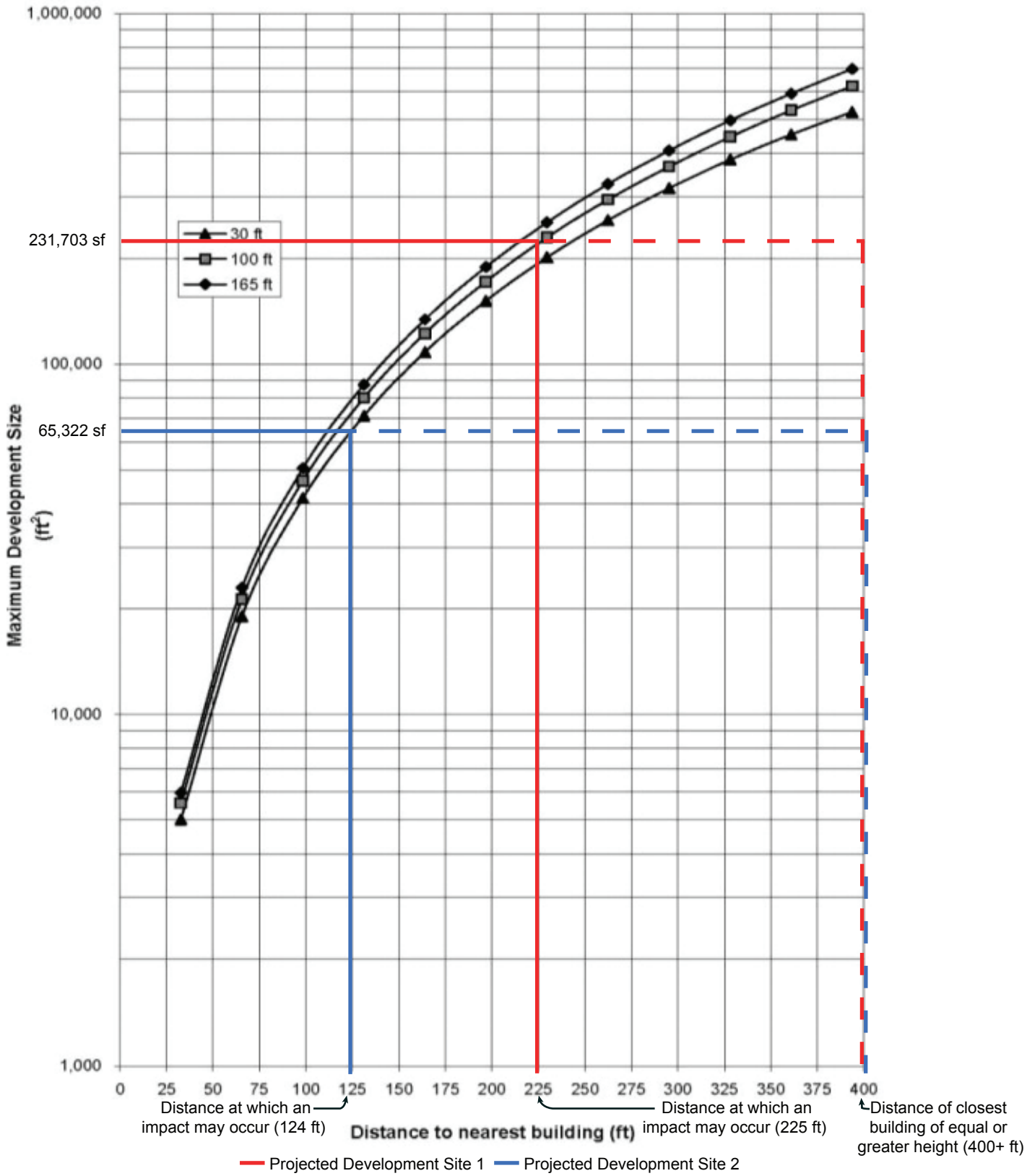


Table B-16
HVAC Screening Assessment – Project-on-Project

Site	Floor Area (GSF)	Building Height (Feet)	Distance at which an Impact May Occur (Feet)	Distance to Projected Development Site 1 (Feet)	Result
2	65,322	55	124	67[1]	Fail

Note: See Figure B-6
[1] The shortest distance between Projected Development Sites 1 and 2 is 57 feet. After including the 10-foot setback required by the NYC Building Code, the total distance is 67 feet.

As Projected Development Site 1 would be located within 124 feet of the Projected Development Site 2, further screening was performed using Figure 17-7 of the *CEQR Technical Manual.* As shown in Figure B-7, restricting Projected Development Site 2 to natural gas would ensure that any buildings of similar or greater height located beyond 62 feet would not be impacted. As the two projected developments are separated by 67 feet, beyond the distance at which an impact could result, the HVAC system of Projected Development Site 2 is not expected to have a significant adverse impact on Projected Development Site 1.

In order to preclude the potential for significant adverse stationary source (HVAC) impacts resulting from the proposed project, an (E) designation is required to specify the exclusive use of natural gas. Any future construction on Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70) would be required to comply with the following (E) designation (E-509):

> **Any new residential/commercial development or enlargement on the above-referenced property must ensure that heating and hot water (HVAC) systems utilize natural gas as the type of fuel exclusively, and ensure that the HVAC stack is located at the highest tier and at least 58 feet above grade to avoid any potential significant adverse air quality impacts.**

With these restrictions in place, the HVAC system of Projected Development Site 2 is not expected to have a significant adverse impact on Projected Development Site 1 and a detailed analysis of project-on-project impacts is not warranted.

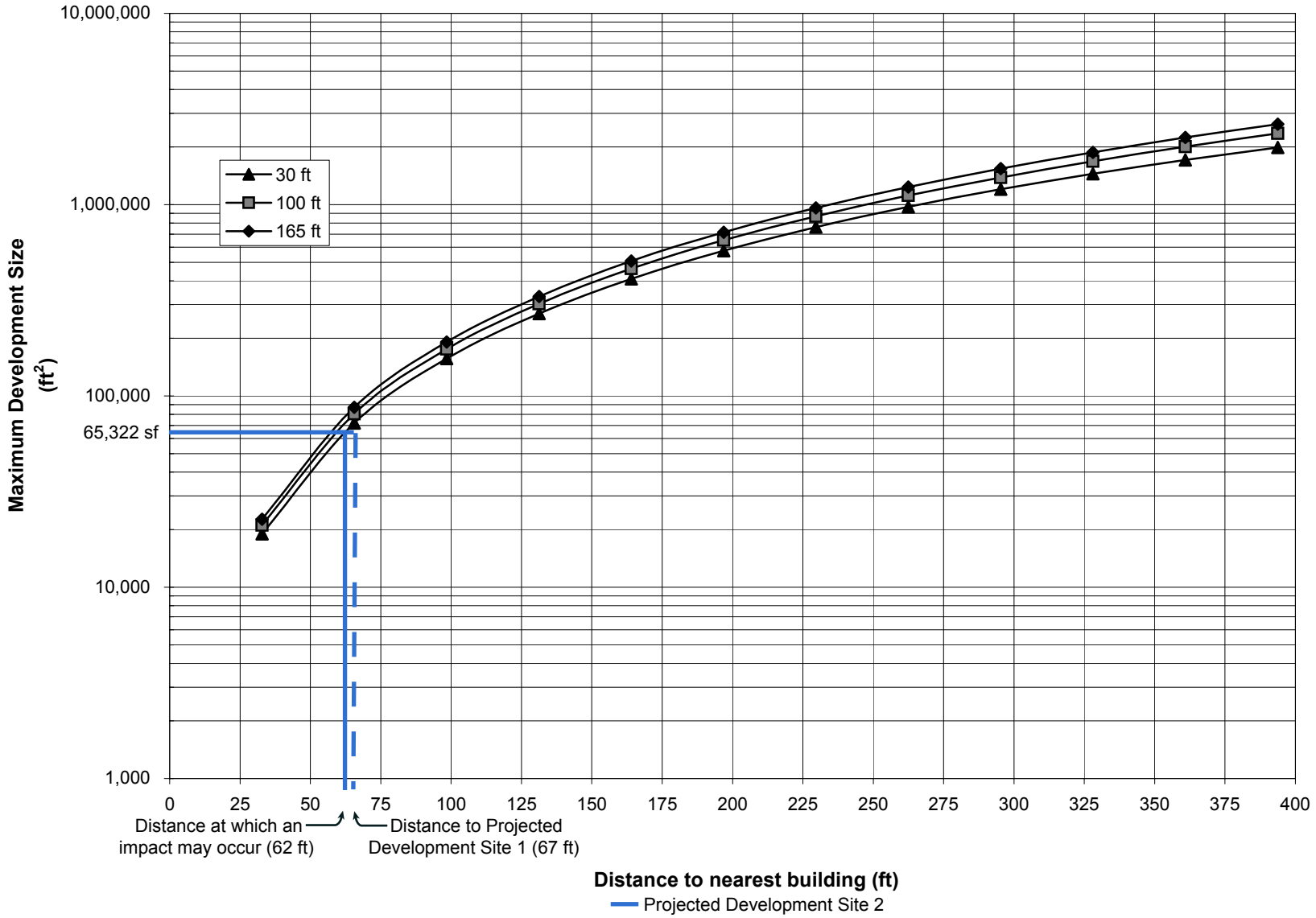
Industrial Sources

As the area surrounding the rezoning area contains manufacturing and/or industrial land uses, a preliminary assessment was performed to determine if any industrial source emissions exist within a 400-foot radius. A property record search of available DEP permits provided by DEP on 4/19/2018 did not identify any industrial sources of concern within a 400-foot radius (see Appendix 3). In addition, no existing major or large emission sources (power plants, cogeneration facilities, solid waste or medical incinerators, or asphalt and concrete plants) that may contribute to the pollutant concentration have been identified within 1,000 feet of the rezoning area. As no large emission sources have been identified, no existing land uses are expected to have a significant impact on the proposed development, and no further analysis is warranted.

NOISE

The purpose of a noise analysis is to determine both a proposed project's potential effects on sensitive noise receptors and the effects of ambient noise levels on new sensitive uses introduced by the proposed project. The principal types of noise sources affecting the New York City environment are mobile sources

FIGURE 17-7
NO_2 BOILER SCREEN
RESIDENTIAL DEVELOPMENT - NATURAL GAS



(primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building heating, ventilating, and air conditioning systems or above-grade subways) and construction noise. As the proposed project would generate new vehicular traffic, a preliminary assessment of noise is warranted.

Mobile Sources

According to the *CEQR Technical Manual*, a detailed mobile source analysis is generally performed if a proposed action would increase noise passenger car equivalent (Noise PCE) values by 100 percent or more. As discussed above in "Transportation," the proposed project would generate a maximum of 57 new vehicle trips during any peak hour and would not have the potential to double PCE values in this developed area of Queens. In order to confirm, a screening analysis has been provided in Attachment H, "Noise." As discussed in Attachment H, the proposed project would not result in significant mobile source noise impacts due to action-generated vehicular traffic.

Stationary Sources

According to the *CEQR Technical Manual*, a detailed stationary source analysis is generally performed if a proposed action would cause a substantial stationary source (i.e., unenclosed equipment for building ventilation purposes) to be operating within 1,500 feet of a receptor with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses.

The proposed project would not meet any of these criteria. It is expected that the rooftop mechanical equipment would be located within enclosed mechanical bulkheads or would be designed to meet all applicable noise regulations and to avoid producing levels that would result in any significant adverse noise impacts. The proposed project would also not be located in an area with high ambient noise levels resulting from stationary sources. Therefore, the proposed project would not result in any stationary source noise impacts and no further analysis is warranted.

Sensitive Receptor Analysis

According to the *CEQR Technical Manual*, a detailed noise analysis may be warranted if a proposed action would introduce a new noise-sensitive location in an area with high ambient noise levels. The proposed project would introduce two new residential buildings, which would be considered sensitive receptors. As these new receptors would be located adjacent to heavily trafficked roadways including Northern Boulevard, a detailed noise analysis is required and has been provided in Attachment H, "Noise." As discussed in the attachment, noise monitoring was conducted along street frontages of each projected development site. These measurements were used as a baseline for determining total noise levels in the future with the proposed project. As discussed in Attachment H, "Noise", composite window-wall attenuation would be required for portions of each projected development site in order to meet CEQR requirements and avoid a significant adverse noise impact.

CONSTRUCTION

Although temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. Determination of the significance of construction impacts and need for mitigation is generally based on the duration and magnitude of the

impacts. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, and air quality conditions.

As discussed in Attachment A, "Project Description," as existing tenants at Projected Development Site 1 have lease agreements running through 2020, no construction activity could begin until that time. Construction is expected to last for an approximate 18- to 24-month period with all components complete and fully operational by late 2022. As there are currently no plans for redevelopment at Projected Development Site 2, completion of any new building is not anticipated until early 2022, which accounts for completion of the ULURP process (approximately seven months), preparation of building designs and procurement of construction financing (approximately one to two years), and an approximately 18-month construction process beginning in mid-2021. With an anticipated construction period of 18- to 24-months total, construction of Projected Development Sites 1 and 2 would be classified as short-term for CEQR purposes.

Within the anticipated 18- to 24-month construction period, the potential for construction impacts is limited to specific phases including: demolition, excavation, foundation, and superstructure construction. The interior finishing, while lengthy in duration is generally less intensive in terms of construction impacts. As such, the period of concern during which the construction of the proposed project is likely to overlap is considered to be fewer than two years and any disruptions including construction related traffic, dust, noise, or mobile source emissions would be temporary.

In accordance with City laws and regulations, construction work at the projected development sites would generally begin at 7 AM on weekdays, with workers arriving to prepare work areas between 6 and 7 AM. Construction work activities would typically finish around 3:30 PM, but on some occasions, the workday could be extended depending upon the need to complete some specific tasks beyond normal work hours, such as completing the drilling of piles, finishing a concrete pour for a floor deck, or completing the bolting of a steel frame erected that day. The extended workday would generally last until about 6 PM and would not include all construction workers on-site, but just those involved in the specific tasks requiring additional work time. Occasionally, Saturday or overtime hours may be required to complete some time-sensitive tasks. Weekend work requires a permit from DOB and, in certain instances, approval of a noise mitigation plan from DEP under the City's Noise Code. The New York City Noise Control Code, as amended in December 2005 and effective July 1st, 2007, limits construction (absent special circumstances as described below) to weekdays between the hours of 7 AM and 6 PM and sets noise limits for certain specific pieces of construction equipment. Construction activities occurring after hours (weekdays between 6 PM and 7 AM or on weekends) may be permitted only to accommodate: (i) emergency conditions; (ii) public safety; (iii) construction projects by or on behalf of City agencies; (iv) construction activities with minimal noise impacts; and (v) undue hardship resulting from unique site characteristics, unforeseen conditions, scheduling conflicts, and/or financial considerations. In such cases, the number of workers and pieces of equipment in operation would be limited to those needed to complete the particular authorized task. Therefore, the level of activity for any weekend work would be less than a normal workday. The typical weekend workday would be on Saturday from 7 AM with worker arrival and site preparation to 5 PM for site cleanup.

Construction staging would primarily occur on the development sites, and construction is not expected to adversely affect surrounding land uses. As required by City regulations, sidewalk protection bridges and full height plywood barriers would be installed to protect the public right of way. Periodic lane and sidewalk closures likely would be required to facilitate material delivery, construction debris removal, and

related activities. Standard practices would be followed to ensure safe pedestrian and vehicular access to nearby buildings and along affected streets and sidewalks. During construction, access to all adjacent buildings, residences, and other uses would be maintained according to the regulations established by DOB. While the proposed project would result in temporary disruptions, these effects are not considered significant or adverse, and further detailed analysis is not warranted.

ATTACHMENT C
LAND USE, ZONING, AND PUBLIC POLICY

47-15 34th Avenue Rezoning EAS
Attachment C: Land Use, Zoning, and Public Policy

I. INTRODUCTION

Under 2014 *CEQR Technical Manual* guidance, a land use analysis evaluates the uses and development trends in the area that may be affected by a proposed project and determines whether that proposed project is compatible with those conditions or may affect them. Similarly, the analysis considers the proposed project's compliance with, and effect on, the area's zoning and other applicable public policies.

As discussed in Attachment A, "Project Description," the Reasonable Worst-Case Development Scenario (RWCDS) assumes that in the future with the Proposed Actions, projected development would result in a total of approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces. Construction is expected to be complete in 2022.

According to the *CEQR Technical Manual*, a land use and zoning analysis is warranted for projects involving a change in land use or zoning. As the Proposed Actions involve zoning map and text amendments and would result in new uses that are not currently permitted as-of-right, analysis 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. Both thresholds are applicable, as the Proposed Actions involve zoning map and text amendments that would result in changes in permitted use, density, and bulk in an area where land uses on other sites would change under No-Action conditions and the proposed project requires detailed analysis of the technical areas cited. As such, a detailed land use and zoning assessment is warranted.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the future with the Proposed Actions within the rezoning area or study area. The Proposed Actions would result in changes to land use and zoning within the rezoning area by allowing residential, commercial, and community facility uses that would not be permitted in the future without the Proposed Actions, as well as increases in permitted density and changes to bulk regulations.

The proposed project would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policies in the study area. The Proposed Actions would facilitate the construction of permanently affordable housing, which is consistent with City policies. The proposed R6B/C2-4 zoning district would be similar to neighboring blocks, but the proposed R7X/C2-4 zoning district would result in densities and building bulk outside the range of what is currently allowed in the study area. While the proposed R7X/C2-4 (MIH) zoning would permit a higher residential FAR than the R5 districts mapped in the surrounding area, this is in part due to the allowances of the MIH program and is consistent with the City's recently adopted MIH requirement for new rezonings to ensure the provision of permanently affordable low and moderate-

income housing. Additionally, the proposed C2-4 commercial overlay would extend pedestrian activity on 34th Avenue, allowing for retail continuity with the existing uses in the surrounding area, and would serve local residents. Therefore, the Proposed Actions would result in zoning that is appropriate for an area adjacent to both residential and commercial areas and would better integrate the rezoning area within the larger study area and neighborhood.

III. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions and determine whether or not 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 project's 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 rezoning area in the 2022 analysis year.

This attachment includes a detailed analysis that involves a thorough description of existing land uses within the directly affected area and the broader study area. Following the guidance of the *CEQR Technical Manual*, the detailed analysis describes existing and anticipated future conditions to a level necessary to understand the relationship of the proposed project to such conditions, assesses the nature of any changes on these conditions that would be created by the proposed project, 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 2018 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 of the City of New York were consulted to describe existing zoning districts in the study areas 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 outlined in the RWCDS, full build out of both projected development sites is expected to be complete in 2022. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2022. Future No-Action conditions account for land use and development projects, initiatives, and proposals that are expected to be completed by 2022.

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 the proposed project, 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. Land use, zoning, and public policy are addressed and analyzed for two geographical areas: (1) the rezoning area including the projected development sites; and (2) a study area. The study area identified for this analysis encompasses all areas within a 400-foot radius from the boundary of the rezoning area. As a result, the study area boundary encompasses and extends as far north as the midblock area between 34th Avenue and Broadway, south of Northern Boulevard, as far west as 45th Street, and as far east as the midblock area between 49th and 50th Streets (see Figure C-1).

IV. BACKGROUND AND DEVELOPMENT HISTORY

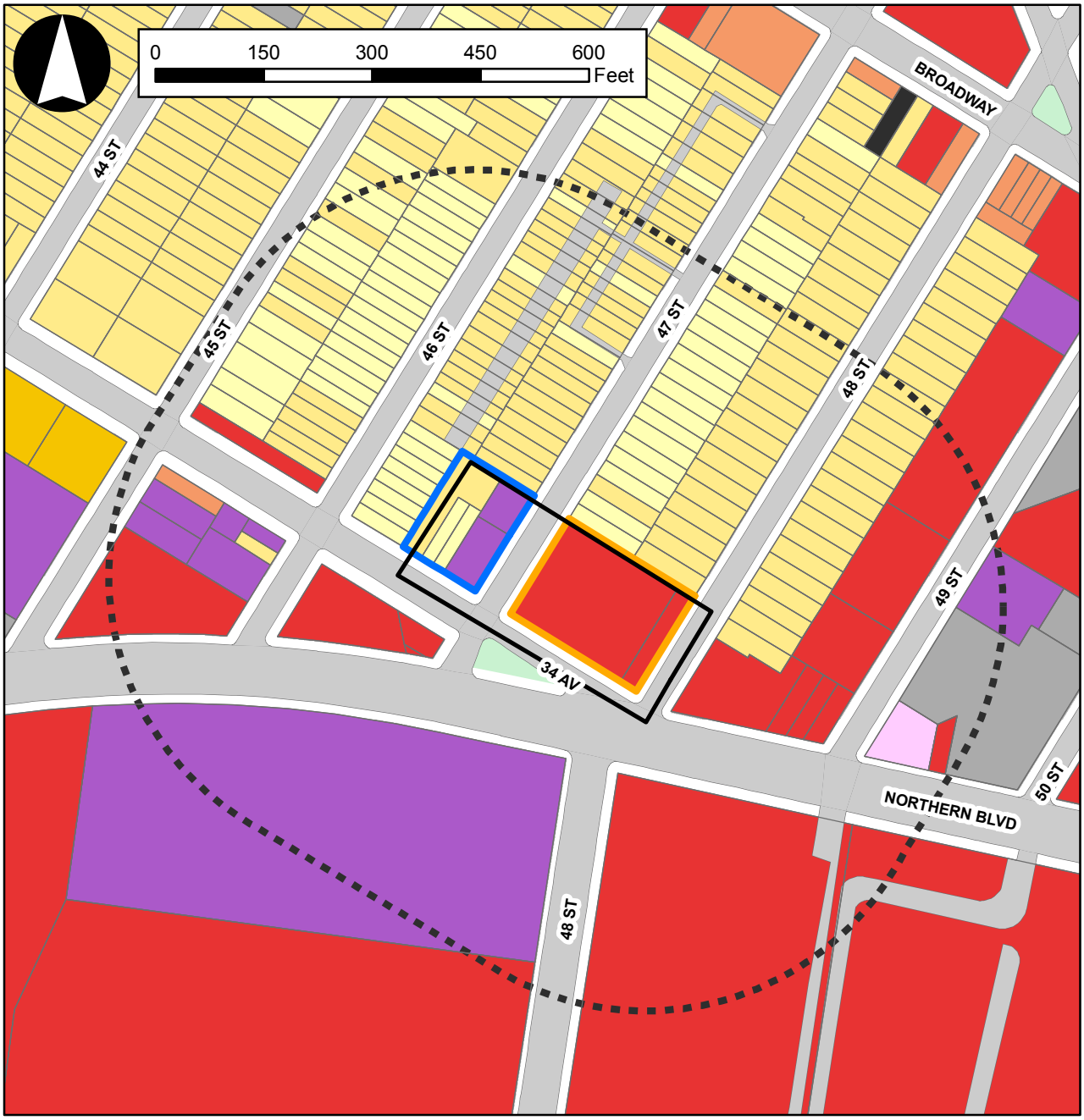
Until the mid-1800s the area that is now Astoria and Long Island City was primarily utilized for agricultural purposes. In 1861, the Long Island Railroad (LIRR) relocated their terminus from Brooklyn to Hunters Point. Over time new commercial businesses were opened in the area to accommodate the growing number of travelers visiting the area. Throughout the 1870's the construction of the street network in the area expanded significantly. The area's shift toward commercial and manufacturing uses continued into the early 20th century when in 1909 the Queensboro Bridge opened, connecting Long Island City and Manhattan. In the years that followed, elevated trains were extended into the area providing workers access to newly opened factories. Areas on the eastern edge of Astoria and Long Island City included residential uses to house nearby factory workers.

The 1961 Zoning Resolution primarily permitted manufacturing uses in Long Island City, specifically in the western areas along the waterfront. In and around the proposed rezoning area in the eastern portion of Long Island City, medium density residential districts ranging from R4 to R7-1 were mapped. In 2001, in response to the departure of many of Long Island City's manufacturing firms, the Department of City Planning rezoned much of the area and mapped the Special Long Island City Mixed-Use District (LIC). The LIC Special District incorporated a variety of paired districts which permitted both residential and manufacturing uses. The 2001 rezoning permitted new uses and development at higher densities than was previously permitted as-of-right in Long Island City resulting in significant development. The Long Island City Partnership estimates that there are approximately 2,620 residential units, 1,098,000 gsf of commercial space, and 622 hotel rooms currently under construction in within one mile of the proposed rezoning area.[1]

Other notable zoning map amendments in the surrounding area have included the Steinway Street Rezoning (1998) and Broadway and 31st Street Rezoning (2000). The Steinway Street Rezoning changed zoning from R5, R5/C1-2, R5/C2-1, and M1-1 to R6B, R6B/C1-4, R6B/C2-4, and M1-1 on 14 blockfronts along Steinway Street and 34th Avenue to the west of the rezoning area. Similarly, the Broadway and 31st Street Rezoning rezoned R5 and R6 districts to R6B districts, replaced C1-2, C1-3, and C2-2 districts with C1-4 and C2-4 districts, and established new C1-4 and C2-4 districts on blockfronts not previously zoned for commercial use. These rezonings were intended to reflect existing land uses and building characteristics and provide consistent zoning designations along existing commercial corridors.

[1] https://longislandcityqueens.com/do-business/economic-development/development-lic/

Figure C-1
Study Area Land Uses



Legend

	Land Use	
Projected Development Site 1	One & Two Family Buildings	Transportation/Utility
Projected Development Site 2	Multi-Family Walkup Buildings	Public Facilities & Institutions
Rezoning Area	Multi-Family Elevator Buildings	Open Space
Study Area (400-foot radius)	Mixed Commercial/Residential Buildings	Parking Facilities
	Commercial/Office Buildings	Vacant Land
	Industrial/Manufacturing	All Others or No Data

Source: DoITT, DCP, PHA site visit (March, 2018)

V. EXISTING CONDITIONS

Land Use

Rezoning Area

Projected Development Site 1 (Block 723, Lots 1, 8) occupies a blockfront with frontage of approximately 153 feet along 47th Street to the west, approximately 200 feet along 34th Avenue to the south, and approximately 153 feet along 48th Street to the east. Both 47th and 48th Streets are considered narrow with widths of 60 feet, while 34th Avenue is considered a wide street with a width of 80 feet. The site is occupied by four buildings, including a one-story retail building on Lot 1, a two-story retail building on Lot 8, a one-story auto repair shop on Lot 8, and a one-story storefront church on Lot 8 (see Figure C-1). An approximately 5,122 gsf portion of the two-story retail building on Lot 8 is vacant. The site has an area of approximately 30,600 sf and a built floor area of approximately 29,678 gsf (FAR 0.97). The only unbuilt portion of Projected Development Site 1 is a small paved parking lot for the auto repair shop on the corner of 34th Avenue and 47th Street.

Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70) is located across 47th Street to the west of Projected Development Site 1. Lots 3, 4, and 5 are occupied by two-story attached homes with small driveways and backyards. Lot 1 is occupied by a one-story light industrial building and Lot 70 is occupied by a two-story light industrial building. The site has an area of approximately 17,901 sf and a built floor area of approximately 15,845 sf (FAR 0.88).

Study Area

The study area includes the area within an approximate 400-foot radius of the rezoning area. As shown in Table C-1, predominant land uses in the study area include residential, commercial, and industrial/manufacturing. These uses are not evenly distributed throughout the study area and the neighborhood character varies widely.

The areas to the south and east of the rezoning area along 49th Street and Northern Boulevard are characterized by commercial and industrial uses. Commercial uses predominantly include big box retail and auto dealerships. Industrial uses generally include warehouse and storage facilities. Commercial and industrial buildings range from one- to two-stories in height and are generally low-density, set on large lots surrounded by parking. Commercial lots range in size from approximately 12,518 sf (0.27 FAR) for an auto dealership to 300,077 sf (0.42 FAR) for big box retail. Industrial uses range from 10,489 sf (0.96 FAR) to 182,378 sf (0.69 FAR).

The area to the south and west of the rezoning area bounded by 34th Avenue and Northern Boulevard is defined by its mixed-use character. This three block area is comprised of various land uses including multi-family walkup residential, mixed commercial/residential, commercial, industrial, and open space. Residential uses are limited to a multi-family walkup building. Two high density, high lot coverage, six-story multi-family elevator buildings are located along 34th Avenue at 45th Street just beyond the study area. Commercial uses and building types present within the study area include an auto dealership and a two-story commercial building with ground-floor retail and offices above. Industrial buildings include warehouses and automotive repair/service uses and most are located on small lots (6,000 sf or less). Dwyer Square, an approximately 0.07-acre open space owned and maintained by the New York City

Department of Parks and Recreation (NYC Parks), is the only open space located within the study area. The square features a number of benches, trees, and a flagpole.

The mid-block areas to the north of the rezoning area along 45th, 46th, 47th, and 48th Streets are predominantly residential. Residential uses include multi-family walkup buildings and one- and two-family buildings set back from the street line. Residential buildings range from approximately two- to three-stories in height. Many buildings along 46th and 47th Streets are attached residential homes with enclosed garages and small backyards.

The area to the west of the rezoning area along 34th Avenue is also predominantly residential with some commercial uses located between 45th and 46th Streets. Residential uses include multi-family walkup buildings and one- and two-family buildings set back from the street line and ranging from approximately two- to three-stories in height. Local retail uses occupy narrow lots and commercial buildings are one-story in height.

In addition to 34th Avenue and Northern Boulevard, other major pedestrian and automotive thoroughfares in the surrounding area include Broadway to the north and Steinway Street to the west. These streets are predominantly commercial (ground-floor retail) but also provide public transportation access including the M and R subway lines at 46th Street Station and Steinway Street Station and the Q101 and Q104 NYCT bus lines.

Table C-1
Existing Land Uses within the 400-Foot Study Area

Land Use	No. of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	142	82%	326,053	15%	444,898	34%
One- & Two-Family Buildings	*59*	*34%*	*127,886*	*6%*	*127,950*	*10%*
Multi-Family Walkup Buildings	*83*	*48%*	*198,167*	*9%*	*316,948*	*24%*
Multi-Family Elevator Buildings	*0*	*0%*	*0*	*0%*	*0*	*0%*
Mixed Commercial/Residential Buildings	1	1%	2,000	1%	3,200	1%
Commercial/Office Buildings	19	10%	1,485,773	71%	686,065	51%
Industrial/Manufacturing	9	5%	217,264	10%	170,082	13%
Transportation/Utility	1	1%	5,237	1%	2,016	1%
Public Facilities & Institutions	0	0%	0	0%	0	0%
Open Space	0	0%	0	0%	0	0%
Parking Facilities	1	1%	36,705	2%	0	0%
Vacant Land	0	0%	0	0%	0	0%
Total	**173**	**100%**	**2,073,032**	**100%**	**1,306,261**	**100%**

Source: NYC Department of City Planning (PLUTO 2018v1)

Zoning

Rezoning Area

As shown in Figure C-2, the rezoning area is located across several zoning districts including R5, R6B, and C8-1. Per ZR § 77-11, as the majority of Projected Development Site 1 is located within a C8-1 zoning district and the district boundary is within 25 feet of the tax lot line, C8-1 regulations apply to the entire site. However, Projected Development Site 2 is located on the border of three zoning districts (R5, R6B, C8-1) and zoning regulations for each district must be applied separately for each portion of the site. A summary of zoning regulations for each district is provided below.

R5

R5 districts are non-contextual and are intended for neighborhoods with an assortment of housing types. R5 districts provide a transition between medium and low density areas. R5 districts allow for low-density residential (Use Groups 1 and 2) and community facility uses (Use Groups 3 and 4). R5 districts permit a maximum FAR of 1.25 for residential uses and 2.0 FAR for community facility uses. Commercial and industrial/manufacturing uses are not permitted. Building height is limited to a maximum of 40 feet and front yards must be a minimum of 10 feet deep. Off-street parking in R5 districts is required for 85 percent of dwelling units.

R6B

R6B districts are contextual districts designed to reflect the character and scale of old rowhouse neighborhoods. R6B districts allow for medium-density residential (Use Groups 1 and 2) and community facility uses (Use Groups 3 and 4). Buildings in R6B districts are subject to Quality Housing bulk regulations and have a permitted maximum FAR of 2.0 (2.2 FAR with Mandatory Inclusionary Housing [MIH] floor area bonus, where applicable) on zoning lots containing residences. Industrial and manufacturing uses are not permitted. A maximum base height of 40 feet (45 feet with a qualifying ground floor) and maximum building height of 50 feet (55 feet with a qualifying ground floor) are permitted under R6B regulations. Off-street parking is required for 50 percent of dwelling units and 25 percent of income restricted housing units.

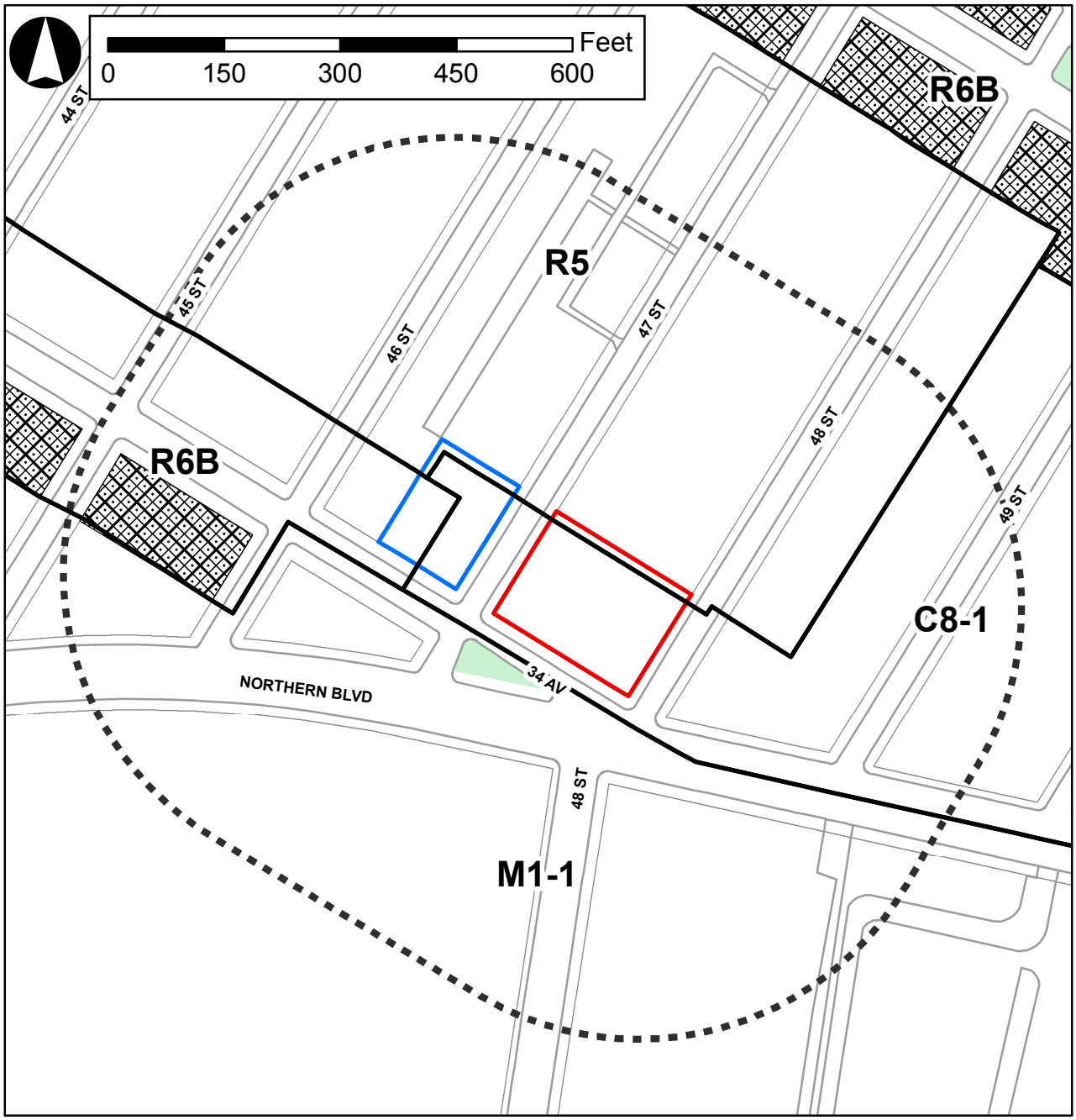
C8-1

C8 districts, which bridge commercial and manufacturing uses, provide for automotive and other heavy commercial services that often require large amounts of land. C8-1 districts are general service districts that allow for commercial (Use Groups 5 through 14), community facility (Use Group 4), and semi-industrial uses (Use Group 16). C8-1 districts permit a maximum FAR of 1.0 for commercial uses and 2.4 FAR for community facility uses. Residential uses are not permitted in C8-1 districts and building height is controlled by the sky exposure plane, which beings 30 feet above the street line. Off-street parking is required at a rate of 1 space per 300 sf for local retail and service uses (Parking Requirement Category B).

Study Area

The scale and density of the area tends to reflect underlying zoning. A variety of zoning districts are located within the surrounding area including R5, R6B, C8-1, and M1-1. As shown in Figure C-2, R5 and R6B residential zoning districts are mapped in residential mid-block areas to the north, west, and east of the proposed rezoning area. The rezoning area is located on the eastern edge of R6B and R6B/C2-4 districts

Figure C-2
Study Area Zoning



Legend

- Projected Development Site 1
- Projected Development Site 2
- Zoning Districts
- C2-4 Overlay
- 400-Foot Radius

Source: DoITT, DCP

that run west along 34th Avenue and the western edge of a C8-1 zoning district that runs east along Northern Boulevard and north along 49th Street.

M1-1 zoning is mapped to the south of the rezoning area along Northern Boulevard. M1 districts are designed for areas with light industries, wholesale services, and storage facilities. M1-1 zoning permits low-density development and generally serves as a buffer between heavier industrial/manufacturing zones and adjacent residential or commercial districts. Off-street parking is required at a rate of 1 space per 300 sf (Parking Requirement Category B).

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.

Besides zoning, other public policies and guidelines applicable to portions of the rezoning area and study area include the Food Retail Expansion to Support Health (FRESH), *Housing New York 2.0*, and the *Statement of Community District Needs and Community Board Budget Requests* for Queens Community District 1. Additionally, while there are not specific initiatives and goals in PlaNYC and OneNYC that relate to the rezoning area and study area, they are citywide initiatives that would be applicable to the proposed project and are, therefore, included in this analysis. All of these are discussed below.

Rezoning Area and Study Area

Most areas of the rezoning area and study area are eligible for the FRESH Program and all areas are covered by Community District 1's *Statement of Community District Needs and Community Board Budget Requests* (Fiscal Year 2019). In addition, the City's sustainability policies, as articulated in OneNYC and PlaNYC, are also applicable to the rezoning area and study area.

FRESH

The FRESH program provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in communities that lack full-line grocery stores throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator. Stores that benefit from the program must fall within designated FRESH-eligible areas. Stores that benefit from the FRESH program must also meet the following criteria:

a. Provide a minimum of 6,000 sf of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption, and utilization;

b. Provide at least 50 percent of a general line of food products intended for home preparation, consumption, and utilization;

c. Provide at least 30 percent of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish, and frozen foods; and

d. Provide at least 500 sf of retail space for fresh produce.

To facilitate and encourage FRESH food stores in the designated neighborhoods, one additional sf of residential floor area is permitted in a mixed-use building for every sf provided for a FRESH food store up to a maximum of 20,000 sf.

The rezoning area and all portions of the study area east of 45th Street are located within a designated FRESH-eligible area, where zoning and discretionary tax incentives are available.

Statement of District Needs and Community Board Budget Requests for Queens CD 1

Community Boards issue an annual *Statement of Community District Needs and Community Board Budget Requests* and submit the document to the City, as required by the City Charter. These documents can play an important role in consultations of community boards with agencies, elected officials, and other key stakeholders on a broad range of local planning and budget priorities. These tools also provide a valuable public resource for neighborhood planning and research purposes and are used by a wide audience seeking information about New York City's diverse communities.

The most recent *Statement of District Needs* by CD 1 for Fiscal Year 2019 identifies the three most pressing issues facing the community district as affordable housing, police-community relations, and public transportation. Specific concerns related to these issues include: the need for the legalization of illegal apartment conversions that meet all safety regulations to help reduce the demand for affordable housing; increases in night life have had a negative effect on the quality of life in the neighborhood and existing regulations need to be enforced; the MARCH Program (Multi Agency Response to Club Hotspots) must be continued; serious concerns regarding the elimination of parking spaces, particularly in commercial areas; and the mass transportation system requires significant service upgrades.

PlaNYC/OneNYC

In 2011, the Mayor's Office of Long Term Planning and Sustainability released an update to *PlaNYC: A Greener, Greater New York*. PlaNYC represents a comprehensive and integrated approach to planning for New York City's future. It includes policies to address three key challenges that the City faces over the next twenty years: population growth; aging infrastructure; and global climate change. In the 2011 update, elements of the plan were organized into ten categories—housing and neighborhoods, parks and public space, brownfields, waterways, water supply, transportation, energy, air quality, solid waste, and climate change—with corresponding goals and initiatives for each category. As stated in the *CEQR Technical Manual*, a project is generally considered consistent with PlaNYC's goals if it includes one or more of the following elements:

- Land Use: pursue transit-oriented development; preserve and upgrade current housing; promote walkable destinations for retail and other services; reclaim underutilized waterfronts; adapt outdated buildings to new uses; develop underused areas to knit neighborhoods together; deck over rail yards, rail lines, and highways; extend the Inclusionary Housing Program in a manner consistent with such policy; preserve existing affordable housing; and redevelop brownfields.

- Open Space: complete underdeveloped destination parks; provide more multi-purpose fields; install new lighting at fields; create or enhance public plazas; plant trees and other vegetation; upgrade flagship parks; convert landfills into parkland; increase opportunities for water-based recreation; and conserve natural areas.

- Water Quality: expand and improve wastewater treatment plants; protect and restore wetlands, aquatic systems, and ecological habitats; expand and optimize the sewer network; build high level storm sewers; expand the amount of green, permeable surfaces across the City; expand the Bluebelt system; use "green" infrastructure to manage stormwater; be consistent with the Sustainable Stormwater Management Plan; build systems for on-site management of stormwater runoff; incorporate planting and stormwater management within parking lots; build green roofs; protect wetlands; use water-efficient fixtures; and adopt a water conservation program.

- Transportation: promote transit-oriented development; promote cycling and other sustainable modes of transportation; improve ferry services; make bicycling safer and more convenient; enhance pedestrian access and safety; facilitate and improve freight movement; maintain and improve roads and bridges; manage roads more efficiently; increase capacity of mass transit; improve and expand bus service; improve local commuter rail service; and improve access to existing transit.

- Air Quality: promote mass transit; use alternative fuel vehicles; install anti-idling technology; use retrofitted diesel trucks; use biodiesel in vehicles and in heating oil; use ultra-low sulfur diesel and retrofitted construction vehicles; use cleaner-burning heating fuels; and plant street trees and other vegetation.

- Energy: exceed the energy code; improve energy efficiency in historic buildings; use energy efficient appliances, fixtures, and building systems; participate in peak load management systems, including smart metering; repower or replace inefficient and costly in-City power plants; build distributed generation power units; expand the natural gas infrastructure; use renewable energy; use natural gas; install solar panels; use digester gas for sewage treatments plants; use energy from solid waste; and reinforce the electrical grid.

- Natural Resources: plant street trees and other vegetation; protect wetlands; create open space; minimize or capture stormwater runoff; and redevelop brownfields.

- Solid Waste: promote waste prevention opportunities; increase the reuse of materials; improve the convenience and ease of recycling; create opportunities to recover organic material; identify additional markets for recycled materials; reduce the impact of the waste systems on communities; and remove toxic materials from the general waste system.

In April 2015, *One New York: The Plan for a Strong and Just City* (OneNYC) was released by the de Blasio administration, building upon the sustainability goals established by PlaNYC. Sustainability and resiliency remain the core goals of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth, aging infrastructure, and global climate change, OneNYC

brings new attention to additional concerns. OneNYC includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives, with additional goals and new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

Goals of the plan are to make New York City:

- A Growing, Thriving City by fostering industry expansion and cultivation, promoting job growth, creating and preserving affordable housing, supporting the development of vibrant neighborhoods, increasing investment in job training, expanding high-speed wireless networks, and investing in infrastructure.

- A Just and Equitable City by raising the minimum wage, expanding early childhood education, improving health outcomes, making streets safer, and improving access to government services.

- A Sustainable City by reducing greenhouse gas emissions, diverting organics from landfills to attain Zero Waste, remediating contaminated land, and improving access to parks.

- A Resilient City by making buildings more energy efficient, making infrastructure more adaptable and resilient, and strengthening coastal defenses.

As the *CEQR Technical Manual* has yet to be updated to address the approach of OneNYC, the PlaNYC sustainability assessment, as described below, will continue to be utilized on large publicly-sponsored projects.

Housing New York 2.0

In 2014, the de Blasio administration released *Housing New York: A Five-Borough, Ten-Year Plan Housing Plan* (Housing New York), a plan to build or preserve 200,000 affordable residential units. Building on the foundation laid by *Housing New York*, in 2017 the de Blasio administration released *Housing New York 2.0*, a new plan intending to complete the initial goal of 200,000 affordable homes two years ahead of schedule by 2022, and generate an additional 100,000 homes over the following four years. To achieve this goal, the plan aims to prioritize construction of residences for seniors, create new programs and modernize existing ones to encourage homeownership, develop neighborhood-based anti-displacement strategies, promote innovation in new construction methods, activate underutilized sites for new housing, create new partnerships and draw on resources from the State, and protect and expand federal resources for affordable housing. The plan details the key policies and programs for implementation.

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

Land Use

In the 2022 future without the Proposed Actions, no changes to land use are anticipated within either the rezoning area or study area. Without approval of the Proposed Actions, Projected Development Sites 1 and 2 would not be redeveloped and all land uses would remain the same as under existing conditions.

No new development projects anticipated to be completed by 2022 have been identified within the study area.

Zoning

DCP is proposing a zoning text amendment to establish a new Special Permit under the jurisdiction of the City Planning Commission (CPC) for new hotels, motels, tourist cabins and boatels in M1 light manufacturing districts citywide. A Special Permit is a discretionary action by the CPC, subject to ULURP, which may modify use regulations if certain conditions specified in the Zoning Resolution are met. If passed, the proposed zoning text amendment could potentially affect M1 districts within the study area. No other zoning map or text amendments are currently pending that would affect properties located within the study area under 2022 No-Action conditions.

Public Policy

There are no changes related to public policies and their effects on the rezoning area and study area are anticipated to remain the same as under existing conditions.

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

As discussed in Attachment A, "Project Description," in the future with the Proposed Actions, the applicant would demolish the existing structures on Projected Development Site 1 and construct a new, 14-story (145-foot tall), approximately 231,703 gsf mixed-use building consisting of approximately 201 DUs (161 market-rate, 40 affordable), 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 77 accessory parking spaces. The RWCDS assumes that Projected Development Site 2 would be redeveloped pursuant to R6B/C2-4 zoning regulations with a 65,322 gsf four-story mixed-use building comprised of approximately 37 DUs (30 market-rate, 7 affordable), 12,000 gsf of local retail, and 24 parking spaces. In total, projected development would result in approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces.

Land Use

Rezoning Area

In the future with the Proposed Actions, the rezoning of C8-1, R5, and R6B districts to R7X/C2-4 and R6B/C2-4 would allow new residential and non-residential uses (commercial and community facility) to be developed as-of-right and located side-by-side or within the same building. Residential uses (Use Groups 1 and 2) and community facility uses (Use Group 3), which are not permitted by the existing C8-1 zoning, would be permitted. This would allow for the development of all residential housing types as well as community facilities such as schools, libraries, museums, and nursing homes. Other community facility uses in Use Group 4 and commercial uses in Use Group 5 through 9 and 14 currently permitted in C8-1 zoning would continue to be allowed. However, commercial uses in Use Groups 10 through 13 (large retail establishments, custom manufacturing activities, entertainment facilities that draw large numbers of people, open amusement uses) and general services in Use Group 16 (automotive and semi-industrial uses) would no longer be permitted. The mapping of a C2-4 overlay within the existing R6B district would allow for the development of new commercial uses (Use Groups 5 through 9). As described above, the projected development sites are located on the edges of both residential and commercial areas. The

proposed project would expand residential offerings in the area with the introduction of approximately 238 DUs (191 market-rate, 47 affordable) and would provide local retail and community facility uses that would be consistent with uses in the surrounding area and along the 34th Avenue corridor.

Assessment

The proposed project would not result in significant adverse impacts to land use within the rezoning area. The new land uses permitted by the Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses and the anticipated mix of uses at Projected Development Sites 1 and 2 would remain similar to existing conditions and would be consistent with uses in the surrounding area, which predominantly include residential and commercial uses. The rezoning area is well-situated to accommodate higher density development due to its location along major corridors in close proximity to public transportation. The rezoning area is located at the intersection of two wide streets, 34th Avenue and Northern Boulevard, and is within a Transit Zone in close proximity to the E, M, and R subway lines that run along Steinway Street and Broadway and numerous New York City Transit (NYCT) bus lines, including the Q18, Q66, Q101, and Q104. Furthermore, the proposed land use changes would be considered beneficial in terms of achieving the citywide goal to increase the amount of permanently affordable housing outlined in *Housing New York 2.0* as well as neighborhood goals expressed in the *Statement of Community District Needs and Community Board Budget Requests* for Fiscal Year 2019.

Study Area

Assessment

The proposed project would have no direct effect on land uses in the study area and would not result in significant adverse land use impacts. As noted above, the study area is primarily comprised of a mixture of uses including residential, commercial, and industrial/manufacturing uses, and the proposed project would not introduce new land uses that would be incompatible with these existing uses and future conditions. Given the rezoning area's location adjacent to both residential and commercial areas, it is the applicant's opinion that the new mixed-use developments on Projected Development Sites 1 and 2 would connect the residential neighborhood to the north with the commercial corridors of 34th Avenue and Northern Boulevard to the south. Therefore, the Proposed Actions are not expected to result in significant adverse land use impacts in the study area.

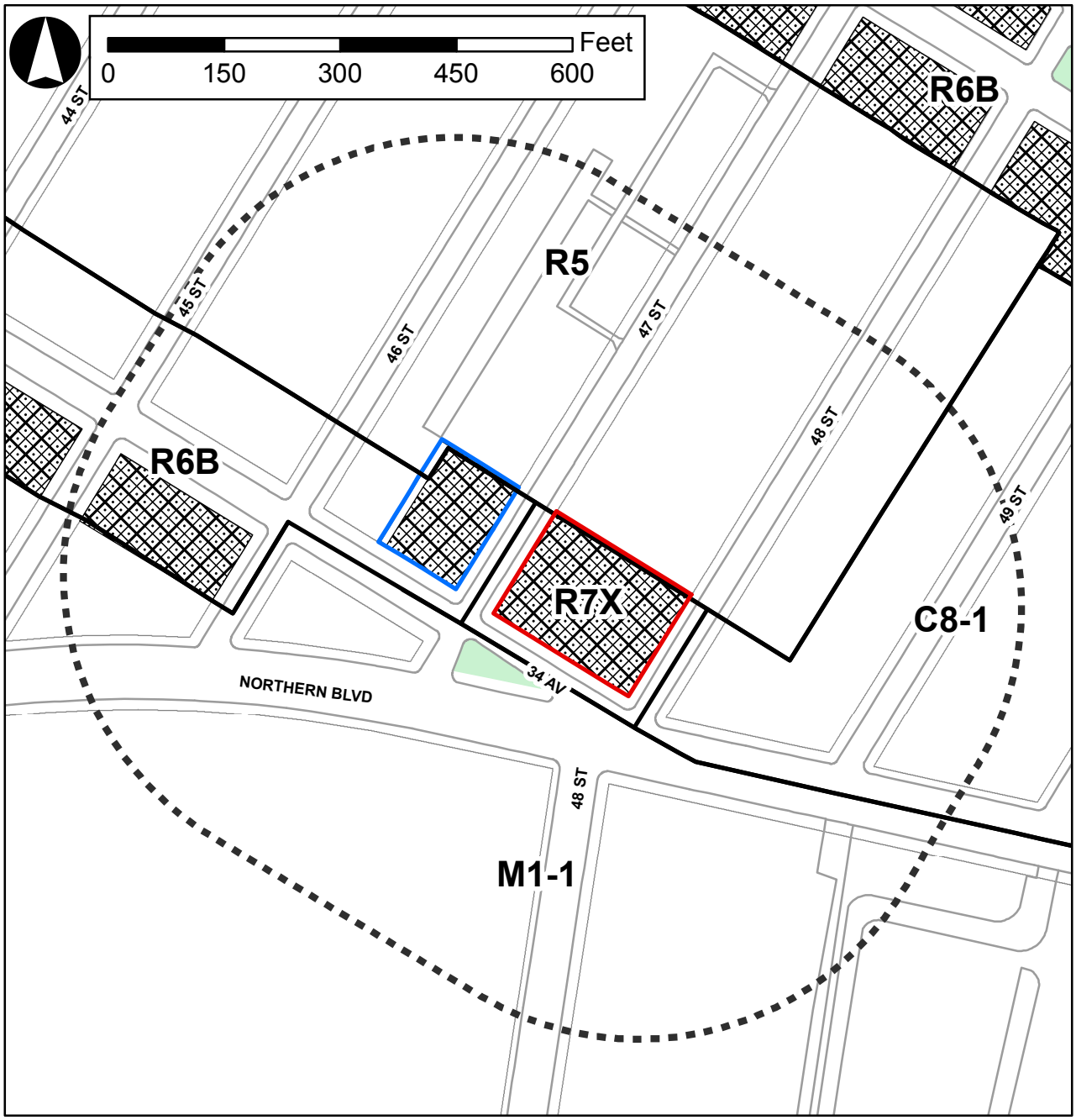
Zoning

As discussed in Attachment A, "Project Description," the proposed project involves zoning map and text amendments.

Zoning Map Amendment

The proposed R7X/C2-4 district would be mapped to a depth of 150 feet from 34th Avenue; the easternmost boundary would be located on the centerline of 48th Street, and the westernmost boundary would be located on the centerline of 47th Street. The proposed zoning map amendment would also extend the R6B zoning district on Block 722 eastward to the centerline of 47th Street and map a C2-4 overlay (see Figure C-3). The proposed R6B/C2-4 district would be mapped to a depth of 150 feet from 34th Avenue east of the Block 722 centerline. As the northern tax lot boundary for Lots 1 and 8 on Block 723 and Lots 5 and 70 on Block 722 extends approximately 153 feet from 34th Avenue, an approximately 3-foot section of these lots would remain zoned R5. Additionally, west of the Block 722 centerline, an

Figure C-3
Proposed Zoning



Legend

- Projected Development Site 1
- Projected Development Site 2
- Zoning Districts
- C2-4 Overlay
- 400-Foot Radius

Source: DoITT, DCP

approximately 17-foot-wide portion of Lot 5 within 100 feet of 34th Avenue would remain zoned R6B while the western portion beyond 100 feet of 34th Avenue would remain zoned R5. As described above, the rezoning of C8-1, R5, and R6B districts to R7X/C2-4 and R6B/C2-4 would allow new residential and non-residential uses (commercial and community facility) to be developed as-of-right. As shown in Table C-3, the Proposed Actions would also allow for increases in the overall permitted density and changes to bulk regulations within the rezoning area, compared to existing/No-Action conditions.

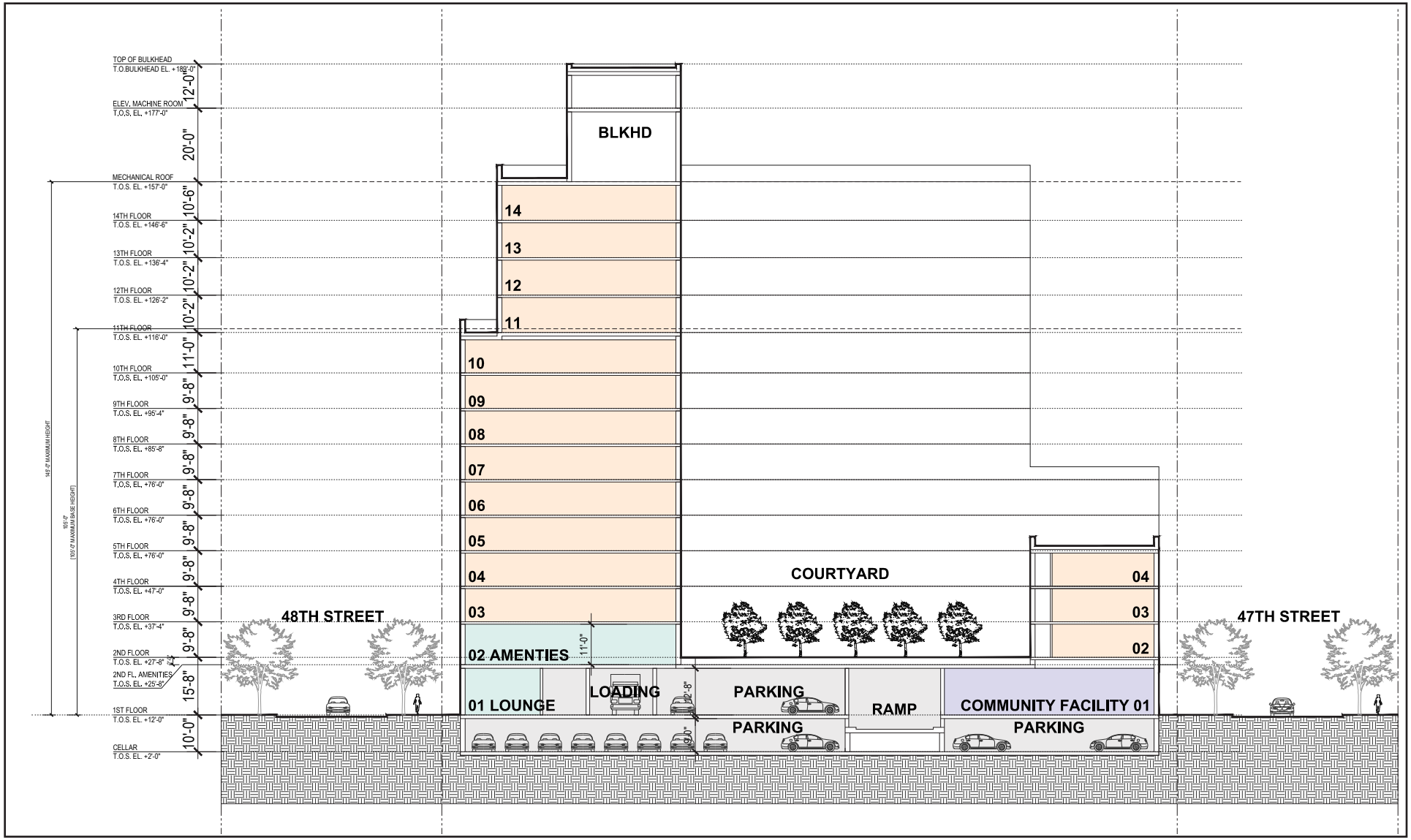
Table C-3
Comparison of Existing (C8-1) and Proposed Zoning Districts

	EXISTING	PROPOSED	
	C8-1	R7X/C2-4 (MIH)[2]	R6B/C2-4 (MIH)[2]
Use Groups:	4-14, 16	1-9, 14	1-9, 14
Max. Floor Area Ratio (FAR):			
- Residential	N/A (not permitted)	6.0	2.2
- Community Facility	2.4	5.0	2.0
- Commercial	1.0	2.0	2.0
- Manufacturing	N/A (not permitted)	N/A (not permitted)	N/A (not permitted)
Building Height:			
- Streetwall max. height	30'	105'	45'
- Initial setback distance	20' narrow street, 15' wide street	15' narrow street, 10' wide street	15' narrow street, 10' wide street
- Max. building height	Sky exposure plane ratio of 1:1	145'	55'
Required Accessory Parking:			
- Residential	N/A	50% of DUs above 80% AMI[1]	50% of DUs above 80% AMI[1]
- General Comm. Facility	Varies by use	Varies by use	Varies by use
- General Retail or Service	Varies by use	Varies by use	Varies by use
- Manufacturing	N/A	N/A	N/A

Source: *New York City Zoning Resolution*
Note: [1] No parking required for housing meeting MIH standards in the Transit Zone; the rezoning area is in the Transit Zone.
[2] A portion of the rezoning area would be a mapped MIH Area and any future development on Projected Development Sites 1 and 2 would occur pursuant to MIH zoning regulations.

Within the proposed rezoning area, overall permitted densities would increase under R7X/C2-4 (MIH) zoning to 6.0, 2.0, and 5.0 for residential, commercial, and community facility uses, respectively. In contrast, C8-1 allows maximum permitted FARs of 1.0 and 2.4 for commercial and community facility uses, respectively, and residential uses are not allowed. R7X is a contextual zoning district and development is subject to the bulk regulations of the Quality Housing Program in order to encourage development consistent with the character of the surrounding area. Per ZR § 23-664, R7X (MIH) districts permit a maximum base height of 105 feet before a required setback of 10 feet on a wide street and 15 feet on a narrow street. A maximum building height of 145 feet is permitted (see Figure C-4). Due to the rezoning area's location within a Transit Zone, no accessory parking spaces would be required for affordable housing units earning 80 percent of area median income (AMI) or less. Accessory parking for local retail and community facility uses would vary depending on the type of use, floor area, and/or number of employees.

Permitted densities would also increase for C8-1 districts rezoned to R6B/C2-4 (MIH). In contrast to C8-1, which allows maximum permitted FARs of 1.0 and 2.4 for commercial and community facility uses, respectively, R6B/C2-4 (MIH) zoning would allow maximum permitted FARs of 2.2, 2.0, and 2.0 for residential, commercial, and community facility uses, respectively. R6B is a contextual zoning district and development is subject to the bulk regulations of the Quality Housing Program in order to encourage development consistent with the character of the surrounding area. Per ZR § 23-662, R6B (MIH) districts permit a maximum base height of 45 feet before a required setback of 10 feet on a wide street and 15



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feet on a narrow street. A maximum building height of 55 feet is permitted. Due to the rezoning area's location within a Transit Zone, no accessory parking spaces would be required for affordable housing units earning 80 percent of AMI or less. Accessory parking for local retail and community facility uses would vary depending on the type of use, floor area, and/or number of employees. Table C-3 provides a comparison of existing and proposed zoning districts.

Zoning Text Amendment

A zoning text amendment to Appendix F of the *Zoning Resolution of the City of New York* (ZR) is proposed in order to establish a portion of the rezoning area as an MIH Area (see Appendix 4). Under MIH, a share of new housing is required to be permanently affordable when land use actions create significant new housing potential, either as part of a City land use proposal or a private land use application. As discussed in Attachment A, "Project Description," the RWCDS assumes that 20 percent of residential floor area would be dedicated to permanently affordable housing. While the applicant is seeking compliance with Option 2 of the MIH program, which would require the construction of 30 percent of residential floor area at an average of 80 percent of AMI with no more than three income bands, the CPC and ultimately the City Council determine the requirements applicable to each MIH-designated area during ULURP.

Rezoning Area

Assessment

The Proposed Actions would not result in significant adverse zoning impacts in the rezoning area.

The Proposed Actions would result in zoning changes that would facilitate the redevelopment of two projected development sites with higher density mixed-use development, including affordable housing, local retail, and community facility uses. The increase in density within the rezoning area would be appropriate due to its location on a major corridor in close proximity to public transportation. The rezoning area is located at the intersection of two wide streets, 34th Street and Northern Boulevard, that can support the R7X envelope. Additionally, the rezoning area is within a Transit Zone in close proximity to the E, M, and R subway lines that run along Steinway Street and Broadway and numerous NYCT bus lines, including the Q18, Q66, Q101, and Q104.

Moreover, the proposed R6B/C2-4 zoning district is consistent with the existing R6B district mapped along 34th Street and R6B/C2-4 mapped on the south side of 34th Avenue between 44th and 46th Streets. Changing the C8-1 zoning district to R6B/C2-4 would allow new contextual, mixed-use development subject to the provision of affordable housing under the MIH program. The C2-4 permits a range of local retail and services uses that relate to the existing patterns along 34th Avenue and provide new opportunities for businesses. The Proposed Actions would not create structures that would be incompatible with the underlying zoning, nor would they cause a substantial number of existing structures to become non-complying.

Furthermore, the proposed zoning text amendment would establish a portion of the rezoning area as an MIH Area and would provide the regulatory framework for achieving the project goal of increasing permanently affordable housing. The Proposed Actions would be consistent with both citywide goals outlined in *Housing New York 2.0* and the goals of CD 1 outlined in the 2019 Statement of Needs to create new affordable housing.

Study Area

Assessment

The Proposed Actions would not result in significant adverse zoning impacts in the study area.

The proposed zoning map amendment would introduce R7X/C2-4 and R6B/C2-4 districts to the rezoning area. The proposed R6B/C2-4 zoning district would be similar to neighboring blocks, but the proposed R7X/C2-4 zoning district would result in densities and building bulk outside the range of what is currently allowed in the study area. While the proposed R7X/C2-4 (MIH) zoning would permit a higher residential FAR than the R5 districts mapped in the surrounding area, this is in part due to the allowances of the MIH program and is consistent with the City's recently adopted MIH requirement for new rezonings to ensure the provision of permanently affordable low and moderate-income housing. Additionally, the proposed C2-4 commercial overlay would extend pedestrian activity on 34th Avenue, allowing for retail continuity with the existing uses in the surrounding area, and would serve local residents. Therefore, the Proposed Actions would result in zoning that is appropriate for an area adjacent to both residential and commercial areas and would allow the rezoning area to become better integrated into the area.

Public Policy

As noted above, the proposed zoning text amendment designating a portion of the rezoning area as an MIH Area would establish a requirement for affordable housing in any new residential development. Depending on which alternative/option is selected, the share of total units that must be affordable and the levels of affordability vary.

Rezoning Area and Study Area

Assessment

The Proposed Actions would not result in any significant adverse public policy impacts to the rezoning area or study area.

FRESH

Although the proposed project does not include an application for a certification for a FRESH designated grocery store, the proposed project's R7X/C2-4 (MIH) and R6B/C2-4 (MIH) zoning would allow for an as-of-right FRESH grocery store. As such, the proposed project would not alter or conflict with the objectives of the FRESH program, and no significant adverse impacts would result.

Statement of District Needs and Community Board Budget Requests for Queens CD 1

The proposed project is consistent with the Statement of District Needs in that it addresses pressing issues and priorities identified by CD 1. Specifically, the proposed project would provide approximately 47 affordable housing units in close proximity to public transportation and would provide off-street parking for the new residents.

PlaNYC/OneNYC

The proposed project is consistent with the goals of PlaNYC/OneNYC, as it would create affordable housing and contribute to the economic and community development of Astoria and Queens.

- Land Use: The proposed project would be consistent with PlaNYC/OneNYC's land use goals. The proposed project would provide a mix of residential, retail, and community facility uses that would help create a livable community, providing new local retail and community facility uses within walking distance of area residents. The proposed project would also knit together the surrounding residential and commercial areas. In addition, the MIH designation and inclusion of approximately 47 affordable housing units would be consistent with affordability goals.

- Open Space: The proposed project would include an approximately 6,113 sf private courtyard, helping to reduce demand at existing open spaces in the surrounding area. In addition, as required by the Zoning Resolution, and in the interest of creating an attractive and active streetscape, one street tree would be provided for every 25 feet of newly developed street frontage, as per ZR § 33-03 and 26-41. Furthermore, as described in Attachment E, ''Open Space,'' the proposed project is not expected to significantly worsen open space conditions. Therefore, the proposed project would be consistent with PlaNYC/OneNYC's open space goals.

- Water Quality: The proposed project would have to comply with all applicable regulations regarding the implementation of low-flow, water efficient fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007 and the U.S. Environmental Protection Agency's (EPA's) WaterSense Program. Therefore, the proposed project is generally consistent with PlaNYC/OneNYC's water quality goals.

- Transportation: The proposed project would support PlaNYC/OneNYC's transportation goals by facilitating transit-oriented development in an area in close proximity to public transportation. Varied retail offerings and a mix of uses are a key part of livable communities, providing destinations within walking distance and reducing the need for vehicle trips and travel outside of the neighborhood. In addition, as described in Attachment B, "Supplemental Screening," the proposed project is not expected to significantly worsen pedestrian and vehicular safety conditions. Therefore, the proposed project would be consistent with PlaNYC/OneNYC's transportation goals.

- Air Quality: The proposed project would meet PlaNYC/OneNYC's air quality goals by promoting the use of mass transit through encouraging development in close proximity to existing public transportation. In addition, as discussed above, one street tree would be provided for every 25 feet of newly developed street frontage, in conformance with ZR § 33-03 and 26-41.

- Energy: As with all new development in New York City, the proposed project would be required to meet the green building practices established in the 2010 update to the New York City Building Code as part of the Greener, Greater Buildings Law. The updated Building Code requires energy audits and benchmarking for larger buildings. Therefore, the proposed project would be consistent with PlaNYC/OneNYC's energy goals.

- Natural Resources: The proposed project would facilitate the redevelopment of sites currently developed with a variety of land uses. As such, the proposed project would not use a greenfield site where natural resources are present. As with all new developments in New York City, the projected development sites would be required to ensure a maximum stormwater release rate of 0.25 cubic feet per second (cfs) or ten percent of the allowable flow from their respective sites pursuant to the 2012 amendment to Title 15, Chapter 31 of the Rules of the City of New York (RCNY), the existing rules governing house and site connections to the City's sewer system. In addition, as discussed above, one street tree would be provided for every 25 feet of newly developed street frontage within the rezoning area, in conformance with ZR § 33-03 and 26-41. As such, the proposed project is consistent with PlaNYC/OneNYC's natural resources goals.

- Solid Waste: The proposed project would not result in any significant adverse impacts to the City's solid waste system. As with all properties in New York City, the projected development sites would be subject to mandatory recycling requirements. As such, the proposed project would be consistent with PlaNYC/OneNYC's solid waste management goals.

Housing New York 2.0

The proposed project is consistent with the *Housing New York 2.0* plan and would result in approximately 47 new affordable housing units. Depending on which MIH option is selected, approximately 25 to 30 percent of the residential units would be permanently affordable to specified income bands. Therefore, the proposed project would be supportive of this key public policy goal.

ATTACHMENT D
COMMUNITY FACILITIES

47-15 34th Avenue Rezoning EAS
Attachment D: Community Facilities & Services

I. INTRODUCTION

This attachment examines the potential effects of the Proposed Actions and associated Reasonable Worst-Case Development Scenario (RWCDS) on community facilities in and around the proposed rezoning area. The 2014 *CEQR Technical Manual* defines community facilities as public or publicly funded facilities, including schools, health care, child care, libraries, and fire and police protection services. CEQR methodology focuses on direct impacts on community facilities and services, and on indirect effects caused by increased demand for community facilities and services generated by increases in population.

As discussed in Attachment A, "Project Description," the RWCDS assumes that in the future with the Proposed Actions, projected development would result in a total of approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces. Construction is expected to be complete in 2022.

The following analysis of community facilities and services was conducted in accordance with *CEQR Technical Manual* guidance, utilizing the latest data and guidance from agencies such as the New York City Department of Education (DOE), the New York City School Construction Authority (SCA), and the New York City Department of City Planning (DCP).

II. PRINCIPAL CONCLUSIONS

Direct Effects

The Proposed Actions would not displace or otherwise directly affect any public schools, child care centers, libraries, health care facilities, or police and fire protection services facilities.

Indirect Effects

Pursuant to *CEQR Technical Manual* guidance, a detailed analysis of potential indirect impacts on public elementary and intermediate schools was conducted for the Proposed Actions. Based on the *CEQR Technical Manual* screening methodology, detailed analyses of high schools, publicly funded child care facilities, libraries, outpatient health care facilities, and police and fire protection services are not warranted for the Proposed Actions.

As discussed in the following analysis, the Proposed Actions would not result in significant adverse impacts on public elementary or intermediate schools. As defined in the *CEQR Technical Manual*, a significant adverse school impact may occur if a proposed action would result in both of the following conditions: (1) a utilization rate of the elementary or intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and (2) an increase of five percentage points or more in the collective utilization rate between the No-Action and With-Action conditions.

The proposed rezoning area falls within the boundaries of New York City Community School District (CSD) 30, Sub-district 2. The 231 incremental DUs anticipated as a result of the Proposed Actions would generate approximately 65 elementary school students and approximately 28 intermediate school students. Based on a detailed analysis of public elementary schools, under the RWCDS, the elementary utilization rate of CSD 30, Sub-district 2 would increase by 1.0 percentage points as compared to the No-Action condition, increasing from 123.8 to 124.8 percent. The detailed analysis of public intermediate schools showed that the intermediate utilization rate of CSD 30, Sub-district 2 would increase by 1.8 percentage points under the RWCDS as compared to the No-Action condition, increasing from 132.5 to 134.4 percent. As these rates are below the threshold of five percentage points in the collective utilization rate between the No-Action and With-Action conditions detailed in the *CEQR Technical Manual*, no significant adverse impacts on public elementary or intermediate schools would occur as a result of the Proposed Actions.

III. PRELIMINARY SCREENING

The purpose of the preliminary screening is to determine whether a community facilities assessment is required. As recommended by the *CEQR Technical Manual*, a community facilities assessment is warranted if a proposed action has the potential to result in either direct or indirect effects on community facilities. If a proposed action would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the service delivery of the facility and the potential effect that the physical change may have on that service delivery. In addition, under CEQR, "temporary direct" effects are considered when a temporary closing of a community facility is required. Temporary closing of a community facility may occur due to construction in that location, among other reasons. New population added to an area as a result of a proposed action would use existing services, which may result in potential "indirect" effects on service delivery. Depending on the size, income characteristics, and age distribution of the new population, there may be effects on public schools, libraries, or child care centers.

Direct Effects

The Proposed Actions would not directly displace or otherwise directly affect any public schools, child care centers, libraries, health care facilities, or police and fire protection services facilities.

Indirect Effects

The *CEQR Technical Manual* includes thresholds that provide guidance in making an initial determination of whether a detailed analysis is necessary to determine potential impacts. Table D-1 lists those *CEQR Technical Manual* thresholds for each community facility analysis area. If a proposed action exceeds the threshold for a specific facility, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Actions and associated RWCDS would exceed established *CEQR Technical Manual* thresholds warranting further analysis. Based on that screening, the Proposed Actions trigger a detailed analysis for public elementary and intermediate schools.

Table D-1
Preliminary Screening Analysis Criteria

Community Facility	Threshold for Detailed Analysis
Public Schools	50 or more elementary/intermediate school students or 150 or more high school students
Libraries	More than five percent increase in ratio of residential units to library branches
Health Care Facilities (Outpatient)	Introduction of a sizeable new neighborhood
Child Care Centers (Publicly Funded)	More than 20 eligible children under age six based on the number of low- to moderate-income units
Fire Protection	Introduction of a sizeable new neighborhood
Police Protection	Introduction of a sizeable new neighborhood

Source: *CEQR Technical Manual.*

Public Schools

The *CEQR Technical Manual* recommends conducting a detailed analysis of public schools if a proposed action would generate 50 or more elementary/intermediate school students and/or 150 or more high school students. Based on the RWCDS net increment of 231 residential units (compared to No-Action conditions) and the CEQR student generation rates for Queens (0.28 elementary school students per unit, 0.12 intermediate school students per unit, and 0.14 high school students per unit), the Proposed Actions would generate approximately 65 elementary school students and 28 intermediate school students. Therefore, a detailed analysis of the Proposed Actions' effects on elementary and intermediate schools is warranted and is provided below. The Proposed Actions would introduce approximately 32 high school students, which is below the CEQR threshold of 150. As such, no further analysis of indirect impacts on high schools is warranted for the Proposed Actions.

Libraries

Potential impacts on libraries can result from an increased user population. According to the *CEQR Technical Manual*, a proposed action that generates a five percent increase in the average number of residential units served per branch (equivalent to a 622-unit increase in Queens) may cause significant adverse impacts on library services and require further analysis. The RWCDS associated with the Proposed Actions is expected to result in a net increase of 231 DUs over the No-Action condition. Therefore, the Proposed Actions would not exceed this threshold, and no further analysis of indirect impacts on libraries is warranted.

Child Care Services

According to the *CEQR Technical Manual*, if a proposed action would add 20 or more children under age six eligible for child care, a detailed analysis of its impact on publicly funded child care facilities is warranted. This threshold is based on the number of low-income and low- to moderate-income units generated by a proposed action (equivalent to approximately 139 units in Queens). As described previously, the RWCDS associated with the Proposed Actions is expected to add a net 231 DUs, of which 47 would be affordable units, over the No-Action condition. The Proposed Actions would yield approximately 7 children under age six eligible for publicly funded child care, and as such, no further analysis is warranted.

Police, Fire, and Health Care Services

The *CEQR Technical Manual* recommends a detailed analysis of indirect impacts on police, fire, and health care services in cases where a proposed action would create a sizeable new neighborhood where none existed before. As discussed above, the Proposed Actions and associated RWCDS would result in a net increment of 231 DUs, 6,234 gsf of commercial space, and a net loss of 4,800 gsf of community facility space and 9,875 gsf of light industrial space compared to No-Action conditions. Therefore, the Proposed Actions would not create a sizeable new neighborhood, and further analysis of police, fire, and health care services is not warranted.

IV. INDIRECT EFFECTS ON PUBLIC SCHOOLS

Methodology

This analysis assesses the potential effects of the Proposed Actions on public elementary and intermediate schools serving the proposed rezoning area. According to the guidance presented in the *CEQR Technical Manual*, CEQR analyzes potential impacts only on public schools operated by the DOE[1]; private and parochial schools within the study area are not included in the analysis of schools presented in this chapter.

The demand for community facilities and services is directly related to the type and size of the new population generated by the development resulting from the Proposed Actions. As outlined in Attachment A, "Project Description," the RWCDS would result in a net increment of 231 residential units, compared to the No-Action condition. Based on the multipliers presented in Table 6-1a of the *CEQR Technical Manual*, the RWCDS associated with the Proposed Actions would result in a net increase of approximately 65 elementary school students and approximately 28 intermediate school students compared to No-Action conditions. According to *CEQR Technical Manual* guidance, this level of development would trigger a detailed analysis of elementary and intermediate level schools.

Following the methodologies in the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools is the community school district's "sub-district" ("region," or "school planning zone") in which the project is located. As indicated in Figure D-1, the proposed rezoning area falls within the boundaries of New York City Community School District (CSD) 30, Sub-district 2. A schools analysis presents the most recent capacity, enrollment, and utilization rates for elementary and intermediate schools in the respective study areas. Future conditions for the No-Action are then predicted based on enrollment projections and proposed development projects[2]; the future utilization rate for school facilities is calculated by adding the estimated enrollment from proposed residential developments in the schools study area to DOE's projected enrollment and then comparing that number with projected school capacity. DOE's most recent enrollment projections (SF Projections 2016-2025) are posted on the SCA's website.[3] In addition, any new school projects identified in the DOE 2015-2019 Five-Year Capital Plan (and/or subsequent amendments) are included if construction has begun. According to the *CEQR Technical Manual*, some schools may be included in the analysis if they are in the DOE Five-Year Capital

[1] Pursuant to CEQR guidance, the schools analysis does not consider charter schools.
[2] School Construction Authority, Projected New Housing Starts for the 2015-2019 Capital Plan.
[3] Enrollment projections 2016 to 2025 New York City Public Schools by Statistical Forecasting were used: http://www.nycsca.org.

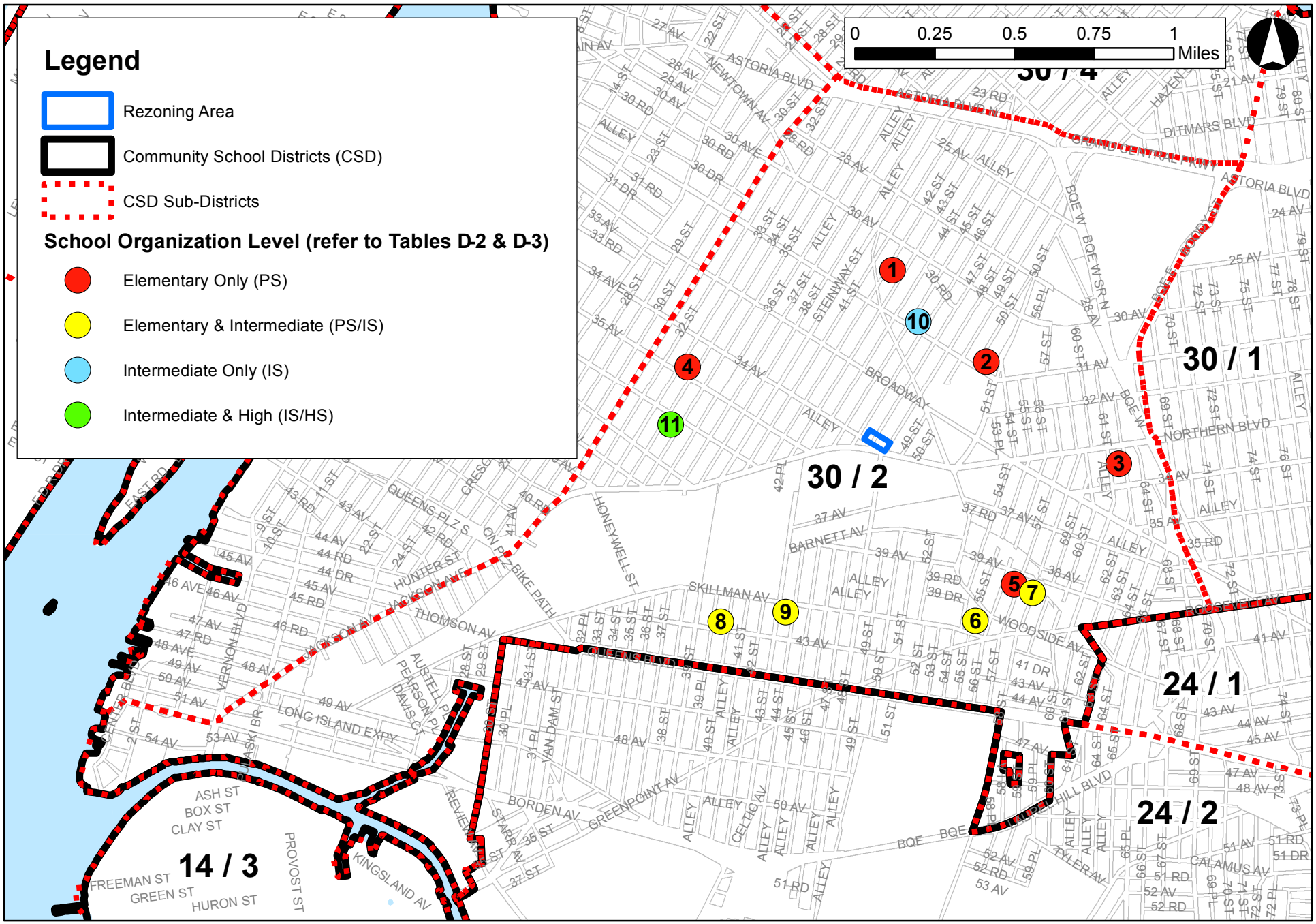


Figure D-1
Study Area Elementary & Intermediate Schools

Plan but are not yet under construction if the lead agency, in consultation with the SCA, concurs that it is appropriate.

To determine With-Action school utilization rates, the net elementary and intermediate school population generated by the Proposed Actions was added to the future CSD sub-district PS/IS population. The effect of the new students introduced by the Proposed Actions under the RWCDS on the capacity of schools within the respective study areas is then evaluated. According to the *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in: (1) a utilization rate of the elementary and/or intermediate schools that is equal to or greater than 100 percent in the future With-Action condition; and (2) an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions.

Existing Conditions

As described above, elementary and intermediate schools in New York City are located in geographically defined school districts. As shown in Figure D-1, the proposed rezoning area is located within the boundaries of CSD 30, Sub-district 2. Analyzed study area elementary and intermediate schools are defined by one of four categories: elementary (PS) schools, which serve grades Pre-K through 5; intermediate (IS) schools, which serve grades 6 through 8; secondary schools, which serve grades 6 through 12; and K-8 schools, which serve grades Pre-K through 8. For utilization analysis purposes, the elementary/PS components of PS/IS and K-8 schools have been combined, and the intermediate/IS components of PS/IS and IS/HS schools have been combined. Tables D-2 and D-3 provide the existing enrollment, capacity, and utilization rates for elementary and intermediate schools in CSD 30, Sub-district 2.

Table D-2
CSD 30, Sub-district 2 Elementary School Enrollment, Capacity, & Utilization – Existing Conditions

Map No.[1]	School Name	Address	Org. Level	Enrollment	Target Capacity[2]	Available Seats	Utilization
1	PS 070 – Q	30-45 42nd Street	PS	931	1,268	337	73.4%
2	PS 151 Mary D. Carter	50-05 31st Avenue	PS	419	467	48	89.7%
3	PS 152 Gwendoline N. Alleyne School	33-52 62nd Street	PS	1,205	998	-207	120.7%
4	PS 166 Henry Gradstein	33-09 35th Avenue	PS	1,159	1,094	-65	105.9%
5	The Woodside Community School (Q361)	39-07 57th Street	PS	194	106	-88	183.0%
6/7	PS 11 Kathryn Phelan	54-25 Skillman Avenue & 39-07 57th Street	PS/IS[3]	957 [4]	790	-167	121.1%
8/9	PS 150 – Q	40-01 43rd Avenue & 41-12 44th Street	PS/IS[3]	1,045 [5]	1,071 [5]	26	97.6%
CSD 30, Sub-district 2 Elementary School Totals:				***5,910***	***5,794***	***-116***	***102.0%***

Notes:
[1] Refer to Figure D-1.
[2] Target capacity sets a goal of a reduced class size of 20 for grades K-3 and 28 for grades 4-5, and is used by the DOE for capital planning purposes.
[3] PS component based on information supplied to DCP by the SCA.
[4] Includes temporary school enrollment.
[5] Includes annex enrollment and capacity.
Source: DOE, *Enrollment – Capacity – Utilization Report, 2016-2017 School Year.*

Elementary Schools

As shown in Figure D-1, there are seven schools serving elementary students within CSD 30, Sub-district 2. As indicated in Table D-2, CSD 30, Sub-district 2 elementary schools have an existing utilization rate of

approximately 102 percent with a shortfall of 116 seats. PS 151 Mary D. Carter at 50-05 31st Avenue is the zoned elementary school for the proposed rezoning area (#2 in Figure D-1).

Intermediate Schools

As shown in Figure D-1, there are four intermediate schools within CSD 30, Sub-district 2. As indicated in Table D-3, within CSD 30, Sub-district 2 intermediate schools have an existing utilization rate of approximately 85.2 percent with 214 available seats. IS 010 Horace Greeley at 45-11 31st Avenue is the zoned intermediate school for the proposed rezoning area (#10 in Figure D-1).

Table D-3
CSD 30, Sub-district 2 Intermediate School Enrollment, Capacity, & Utilization – Existing Conditions

Map No.[1]	School Name	Address	Org. Level	Enrollment	Target Capacity[2]	Available Seats	Utilization
6/7	PS 11 Kathryn Phelan	54-25 Skillman Avenue & 39-07 57th Street	PS/IS[3]	165 [4]	136	-29	121.3%
8/9	PS 150 – Q	40-01 43rd Avenue & 41-12 44th Street	PS/IS[3]	93	95	2	97.9%
10	IS 010 Horace Greeley	45-11 31st Avenue	IS	754	1,047	293	72.0%
11	Baccalaureate School for Global Education (Q580)	34-12 36th Avenue	IS/HS[3]	219	167	-52	131.1%
CSD 30, Sub-district 2 Intermediate School Totals:				***1,231***	***1,445***	***214***	***85.2%***

Notes:
[1] Refer to Figure D-1.
[2] Target capacity sets a goal of a reduced class size of 20 for grades 6-8, and is used by the DOE for capital planning purposes.
[3] IS component based on information supplied by DCP.
[4] Includes mini-school enrollment.
[5] Includes annex enrollment and capacity.
Source: DOE, *Enrollment – Capacity – Utilization Report, 2016-2017 School Year.*

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

In the future without the Proposed Actions, future utilization of public elementary and intermediate schools serving the proposed rezoning area and surrounding study areas would be affected by changes in enrollment, mainly due to aging of the existing student body and new arrivals born in the area or moving to it, as well as changes in capacity, or number of available seats, in the study area schools.

Enrollment Projections

As noted above, the SCA provides future enrollment projections by district for up to 10 years. The latest available enrollment projections for 2022 have been used in this analysis to project No-Action student enrollment. These enrollment projections focus on the natural growth of the City's student population and other population changes that do not account for demographic fluctuations or new residential development planned in the area (i.e., No-Action projects). The SCA has also provided data on the number of new elementary and intermediate students expected from new housing (No-Action projects) in Sub-district 2 of CSD 30 based on their capital planning work, presented in Table D-4. As shown in Table D-4, No-Action developments are anticipated to add 2,002 elementary and intermediate school students to CSD 30, Sub-district 2 by 2022.

Table D-4
Estimated Elementary & Intermediate School Enrollment – No-Action Condition

Study Area	School Level	Projected 2022 Enrollment[1]	Students Introduced by No-Action Residential Development[2]	Total No-Action Enrollment
CSD 30, Sub-district 2	Elementary	6,626	1,109	7,735
	Intermediate	1,127	893	2,020

Sources:
[1] *Enrollment Projections 2016 to 2025, New York City Public Schools* by Statistical Forecasting.
[2] School Construction Authority, Projected New Housing Starts for the 2015-2019 Capital Plan.

Projected Capacity Changes

As outlined in the *CEQR Technical Manual,* No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted "Significant Changes in School Utilization" and the DOE's 2015-2019 Five-Year Capital Plan. Based on information presented in the latest (February 2018) Five-Year Capital Plan Proposed Amendment and proposals for Significant Changes in School Utilization that have been adopted by the Panel for Education Policy (PEP), there is one known planned capacity change in CSD 30, Sub-district 2 that would be completed before the Proposed Action's 2022 analysis year. DOE has temporarily re-sited and co-located[4] several grades of PS 11 Kathryn Phelan at 39-07 57th Street (as shown in Tables D-2 and D-3 above) in order to remove PS 11's mini-building and construct a permanent addition at 54-25 Skillman Avenue. When completed in the 2017-2018 academic year, the addition will have a capacity of 856 seats: 322 seats to replace those temporarily located at 39-07 57th Street and 534 new seats.[5] It is assumed that the 534 new seats at PS 11 Kathryn Phelan would include 455 elementary and 79 intermediate seats, per the DOE's 2016-2017 breakdown for the school (85.29 percent PS and 14.71 percent IS).

Additionally, it should be noted that there is one intermediate school slated for development in CSD 30, Sub-district 2 after the Proposed Action's 2022 build year. Per the most recent Five-Year Capital Plan Proposed Amendment, an 725-seat intermediate school at 38-04 48th Street is anticipated to finish in June 2023. The completion of this school would eventually increase the capacity of intermediate schools in CSD 30, Sub-district 2.

Elementary Schools

In the 2022 future without the Proposed Actions, CSD 30, Sub-district 2 elementary school enrollment is expected to increase from 5,910 to 7,735 students, and capacity is expected to increase from 5,794 to 7,433 seats. As a result, the utilization rate is anticipated to increase from 102 percent to 123.8 percent, with a deficit of 1,486 seats (refer to Table D-5).

[4] A "re-siting" means students attend classes in a different building than the one students have attended in previous years, and a "co-location" means that two or more school organizations are located in the same building and may share common spaces like auditoriums, gymnasiums, libraries, and cafeterias.
[5] "Educational Impact Statement: The Proposed Temporary Re-Siting and Co-Location of a Portion of PS 11 Kathryn Phelan with PS 171 Peter G. Van Alst in Building Q171 for the 2014-2015 School Year, and the Proposed Temporary Re-Siting and Co-Location of a Portion of PS 11 Kathryn Phelan with 30QTBD in New Building Q339 for the 2015-2016 and 2016-2017 School Years." NYC DOE (December 6, 2013)

Table D-5
Estimated Elementary and Intermediate School Enrollment, Capacity, & Utilization – No-Action Condition

Study Area	School Level	Enrollment[1]	Capacity	Available Seats	Utilization
CSD 30, Sub-district 2	Elementary	7,735	6,249	-1,486	123.8%
	Intermediate	2,020	1,524	-496	132.5%

Note:
[1] Refer to Table D-4.

Intermediate Schools

In the 2022 future without the Proposed Actions, CSD 30, Sub-district 2 intermediate school enrollment is expected to increase from 1,231 to 2,020 students, and capacity is expected to increase from 1,445 to 1,524 seats. As a result, the utilization rate is anticipated to increase from 85.2 percent to 132.5 percent, with a deficit of 496 seats (refer to Table D-5).

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

For analysis purposes, it is assumed that the RWCDS associated with the Proposed Actions would introduce 231 additional DUs to the proposed rezoning area, compared to No-Action conditions. Based on the *CEQR Technical Manual* student generation rates, the Proposed Actions would generate 65 elementary school students and 28 intermediate school students. No elementary, intermediate, or high school capacity changes would occur as a result of the Proposed Actions.

Elementary Schools

In the future with the Proposed Actions, CSD 30, Sub-district 2 elementary schools would continue to operate overcapacity, as under No-Action conditions (refer to Table D-6). CSD 30, Sub-district 2 elementary schools would increase from a No-Action utilization rate of 123.8 percent to 124.8 percent in the With-Action condition, with a deficit of 1,551 seats.

Table D-6
Estimated Elementary and Intermediate School Enrollment, Capacity, & Utilization – With-Action Condition

Study Area	School Level	Projected 2022 No-Action Enrollment[1]	Students Introduced by the Proposed Actions	Total With-Action Enrollment	Capacity	Available Seats	Utilization	Change in Utilization from No-Action Condition
CSD 30, Sub-district 2	Elementary	7,735	65	7,800	6,249	-1,551	124.8%	+1.0%
	Intermediate	2,020	28	2,048	1,524	-524	134.4%	+1.8%

As noted above, a significant adverse impact may occur if a proposed action would result in both of the following conditions: (1) a utilization rate of the elementary schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and (2) an increase of five percentage points or more in the collective utilization rate between the No-Action and With-Action conditions. The utilization rate of elementary schools between No-Action and With-Action conditions would increase 1.0 percent as a result of the Proposed Actions, and as such, no significant adverse impacts would occur.

Intermediate Schools

In the future with the Proposed Actions, CSD 30, Sub-district 2 intermediate schools would continue to operate overcapacity, as under No-Action conditions (refer to Table D-6). CSD 30, Sub-district 2 intermediate schools would increase from a No-Action utilization rate of 132.5 percent to 134.4 percent in the With-Action condition, with a deficit of 524 seats.

The utilization rate of intermediate schools between No-Action and With-Action conditions would increase 1.8 percent as a result of the Proposed Actions, and as such, no significant adverse impacts would occur.

ATTACHMENT E
OPEN SPACE

47-15 34th Avenue Rezoning EAS
Attachment E: Open Space

I. INTRODUCTION

An open space assessment may be necessary if a proposed action could potentially have a direct or indirect effect on open space resources in the surrounding area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed development would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. According to the guidance established in the 2014 *CEQR Technical Manual*, if a project site is located neither in an area considered underserved or well-served by open space, an analysis of indirect effects on open space is warranted if a proposed action would add more than 200 residents or 500 employees. The proposed rezoning area is located in an area considered to be neither well-served nor underserved by open space, as defined in the *CEQR Technical Manual*.

As discussed in Attachment A, "Project Description," the Reasonable Worst-Case Development Scenario (RWCDS) assumes the development of Projected Development Sites 1 and 2 would result in a net increase of approximately 231 DUs, 6,234 gsf of commercial space, and a net loss of 4,800 gsf of community facility space, and 9,875 gsf of light industrial space. As the proposed project would introduce an incremental 541 residents, an assessment was conducted to determine whether the proposed project would significantly reduce the amount of open space available for the area's residential population.[1] However, as the proposed project would introduce an incremental 20 workers, it would not exceed the 500 employee CEQR screening threshold for nonresidential users, and this attachment does not provide an assessment of the effect of the new worker population on open space. However, the open space needs of the new worker population within the defined residential study area are accounted for, as discussed further below.

II. PRINCIPAL CONCLUSIONS

Based on the methodology set forth in the *CEQR Technical Manual*, the analysis finds that the proposed project would not result in a significant adverse impact on the City's open space resources.

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently overburden existing facilities or further exacerbate deficiency in open space. The proposed project would not have a direct impact on open space resources in the study area. The proposed project would not result in the physical loss of existing public open space resources, and would not result in any significant adverse shadow, air, noise, or other environmental impacts that would affect the usefulness of any study area open space. As the proposed project is expected to introduce 541 residents and 20 workers under the RWCDS, a detailed open space analysis for a residential (1/2-mile) study area

[1] Estimate based on Queens CD 1 average of approximately 2.34 persons per household (U.S. Census Bureau, 2010 Census).

was conducted, pursuant to the *CEQR Technical Manual*. The detailed analysis determined that the proposed project would not result in any significant adverse impacts to open space.

Under existing conditions, the residential study area does not meet the *CEQR Technical Manual* goals for total (2.5 acres per 1,000 residents), active (2.0 acres per 1,000 residents), or passive (0.50 acres per 1,000 residents) open space per resident. The *CEQR Technical Manual* indicates that a decrease in the open space ratio of five percent or more is generally considered significant. For areas that are extremely lacking in open space, a decrease of as little as one percent may be considered significant. An open space impact assessment also considers qualitative factors.

In the future with the proposed project, the total, active, and passive open space ratios would remain below the City's goal per 1,000 residents. The total residential study area open space ratio would decline by 1.87 percent from 0.107 to 0.105 acres per 1,000 residents; the active residential study area open space ratio would decline by 2.37 percent from 0.070 to 0.068 acres per 1,000 residents; and the passive residential study area open space ratio would decrease by 2.7 percent from 0.037 to 0.036 acres per 1,000 residents. Although there would continue to be a shortage of public open space in the study area, the increase in demand from the proposed project would not result in significant reductions in open space ratios (defined as five percent or more per *CEQR Technical Manual*) compared to the No-Action condition and would not overburden existing open space resources or further exacerbate a deficiency in open space. Therefore, the proposed project would not result in significant adverse impacts to open space.

III. METHODOLOGY

The analysis of open space resources has been conducted in accordance with the guidance established in the *CEQR Technical Manual*. 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. This quantitative measure is then used to assess the changes in the adequacy of open space resources by the analysis year of 2022, both without and with the proposed project. In addition, qualitative factors are considered in making an assessment of the proposed project's effects on open space resources.

Open Space Study Area

In accordance with the guidance established in the *CEQR Technical Manual,* 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. Residents are assumed to walk up to a 1/2-mile distance to reach passive and active neighborhood open spaces. Workers typically use passive open spaces that are closer to their jobs; therefore, it is assumed that workers will travel up to a 1/4-mile distance to passive open spaces.

As the worker population resulting from the proposed project would not exceed the CEQR threshold for analysis (500 employees or more), a non-residential (worker) analysis was not warranted. However, because the new residential population resulting from the proposed project would exceed 200 residents a residential analysis is required. The *CEQR Technical Manual* states that the residential open space study area be comprised of all census tracts that have at least 50 percent of their area located within a 1/2-mile of the proposed rezoning area. Due to the size of census tracts in the 1/2-mile radius of the rezoning area, strict adherence to this guideline would result in demographics that are not representative of the geographical areas that typically define a reasonable walking distance that residents and workers would

travel to reach open space and recreational areas. As shown in Figure E-1, Census Tract 171 would not be included in the study area under adherence to the *CEQR Technical Manual* guidance. Residents and workers in this area would not be accounted for without modification to the study area boundary. Therefore, the study area boundary was adjusted to accommodate those census blocks in Census Tract 171 that have 50 percent or more of their area located within a 1/2-mile of the rezoning area. The residential study area is shown in Figure E-1 and is bound to the north by 30th Avenue, to the east by 56th/57th Street, to the south by Skillman Avenue, and to the west by 38th Street. The residential study area includes Census Tracts 149, 151, 153, 155, 157, 159, 161, 163, 169, 255, 295, and census blocks 1000, 1001, 1002, 1010, 1011, 1012, 1013, 1013, 1015, 1016, 1017, 1019 within Census Tract 171.

Analysis Framework

Direct Effects Analysis

According to the *CEQR Technical Manual*, a project would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As there are no publicly accessible open spaces within the proposed rezoning area, the proposed project would not have any direct effects and no further analysis is warranted. Additionally, as detailed in other attachments of this EAS, the proposed project would not result in the imposition of noise, air pollutant emissions, odors, or significant new shadows on public open spaces that may alter usability.

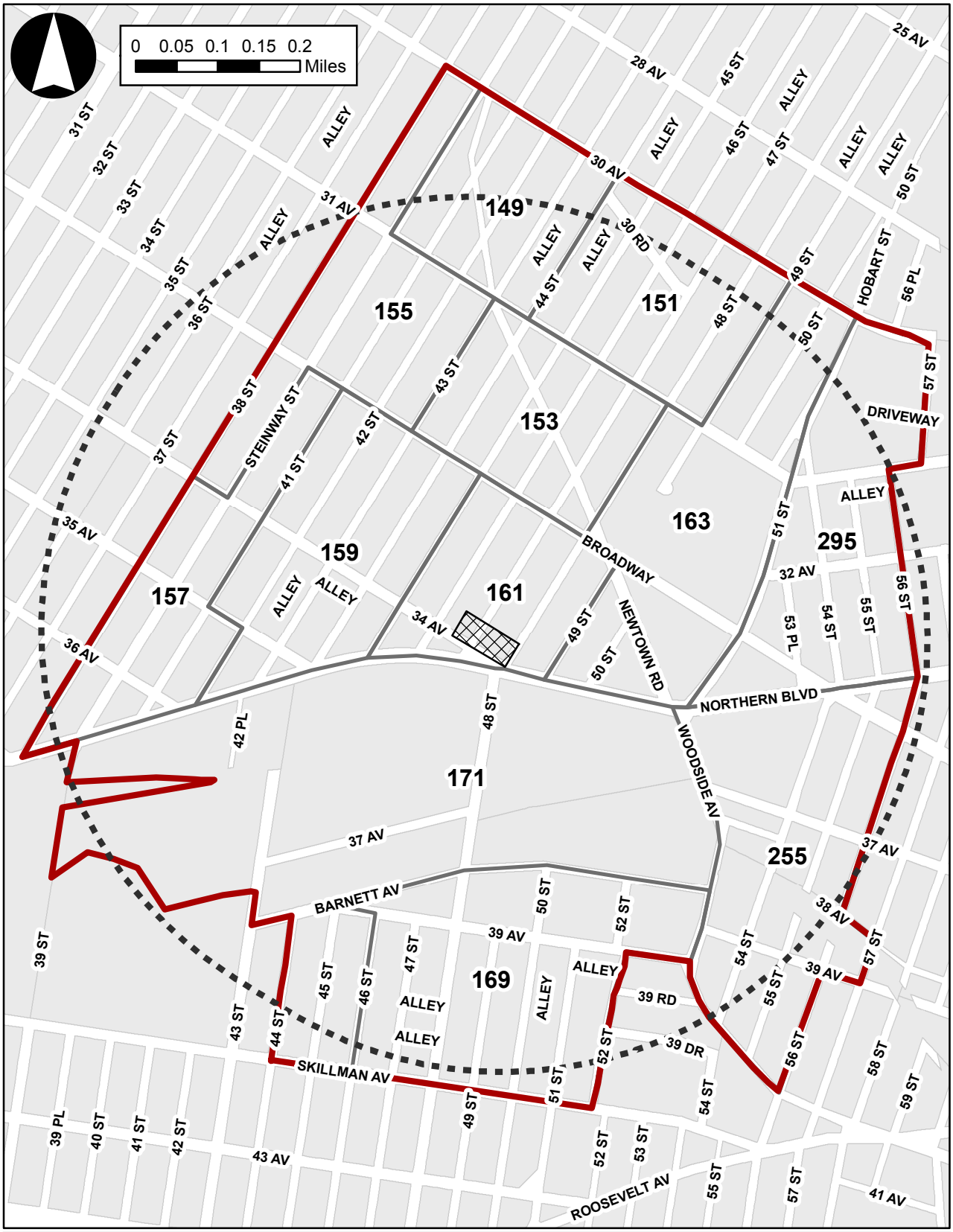
Indirect Effects Analysis

Indirect effects occur to an area's open spaces when a proposed action 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 population. The *CEQR Technical Manual* methodology suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate, but also recognizes that for projects that introduce a large population in an area that is underserved by open space, it may be clear that a full, detailed analysis should be conducted. The rezoning area is located within neither a well-served nor underserved area as identified in the *CEQR Technical Manual*.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidance. 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 open space users: residents and workers. To determine the number of residents and workers in the study area, 2006-2010 and 2012-2016 American Community Survey (ACS) data have been compiled for census tracts comprising the open space study area.

Figure E-1
Open Space Study Area



Legend

Rezoning Area | 161 Census Tracts | 1/2-Mile Radius | Open Space Study Area

Source: DoITT, DCP, US Census Bureau

- 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 certain guidance.
    - As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces and is consequently used by the City as an optimal benchmark for residential populations in large-scale plans and proposals. 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).
    - Local open space ratios vary widely, and the median ratio at the citywide Community District level is 1.5 acres of open space per 1,000 residents.

- An evaluation of qualitative factors affecting open space use.

- A final determination of the adequacy of open space in the open space study area.

IV. EXISTING CONDITIONS

Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, 2012-2016 5-Year ACS Estimates Census data were compiled for the census tracts comprising the 1/2-mile study area. As mentioned above and shown in Figure E-1, the open space study area is comprised of all or portions of twelve census tracts. As shown in Table E-1 below, Census data indicates the study area has a total residential population of approximately 31,784 people. Based on 2006-2010 5-Year ACS Estimates data compiled by Census Transportation Planning Products, the existing worker population for the residential open space study area is estimated at approximately 13,646 workers.

As shown in Table E-1, within the residential study area, the total population (residents plus workers) is estimated to be 45,430. Although this analysis conservatively assumes that residents and daytime users are separate populations, as noted earlier, it is possible that some of the residents live near their workplace or work from home. As a result, there is likely to be some double-counting of the daily user population in the study area, resulting in a more conservative analysis.

Within a given area, the age distribution of a population affects the way open space resources are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool-aged children. Children ages five through nine also use traditional playgrounds as well as grassy and hard-surfaced open spaces, which are used for activities such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized forms of recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults

also gather with families for picnicking, ad hoc active sports such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

Table E-1
Existing Open Space Study Area Residential Population

Census Tract	Residential Population	Non-Residential Population (Worker) Population	Total
149	2,228	575	2,803
151	2,435	845	3,280
153	2,029	245	2,274
155	2,499	2,090	4,589
157	1,508	2,050	3,558
159	3,932	865	4,797
161	2,556	670	3,226
163	3,788	1,045	4,833
169	5,779	865	6,644
171[1]	0	2,781	2,781
255	1,471	1,195	2,666
295	3,559	420	3,979
Total	**31,784**	**13,646**	**45,430**

Source: U.S. Census Bureau, ACS 2012-2016 Five-Year Estimates, ACS 2006-2010 Five-Year Estimates. Special Tabulation: Census Transportation Planning Products (CTPP).
Notes: [1] Non-residential (worker) population for partial census tracts calculated based on percentage of tract's built non-residential square footage within the study area boundary. Approximately 38.5% of Census Tract 171's non-residential square footage falls within the residential study area.

Therefore, the residential population of the study area was also broken down by age group. As shown in Table E-2, people between the ages of 20 and 64 make up the majority (approximately 69.6 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 11.5 percent of the entire residential population, and persons 65 years and over account for approximately 14.7 percent of the residential study area population.

The median age for the population within the individual census tracts of the residential study area ranges from a low of 33.0 years (Census Tract 155) to a high of 45.7 years (Census Tract 163). This data suggests a need for facilities geared towards the recreational needs of adults, as well as children and teenagers, as the study area exhibits a high percentage of residents in both the 20 to 64 and 0 to 19 age brackets.

Inventory of Open Space Resources in the Study Area

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 general public on a regular basis, and is therefore only considered qualitatively. Public open spaces that do not contain seating are also excluded from the quantitative assessment, in accordance with *CEQR Technical Manual* methodology. Field surveys

and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

Table E-2
Existing Open Space Study Area Residential Population Characteristics

Census Tract	Residential Population													
	Total Population	Age Distribution												Median Age
		Under 5		5 - 9		10-14		15 - 19		20 - 64		65+		
		#	%	#	%	#	%	#	%	#	%	#	%	
149	2,228	73	3.3%	30	1.3%	171	7.7%	40	1.8%	1,634	73.3%	280	12.6%	34.3
151	2,435	59	2.4%	3	0.1%	52	2.1%	49	2.0%	1,947	80.0%	325	13.3%	33.4
153	2,029	62	3.1%	50	2.5%	43	2.1%	90	4.4%	1,534	75.6%	250	12.3%	33.9
155	2,499	164	6.6%	34	1.4%	39	1.6%	76	3.0%	1,953	78.2%	233	9.3%	33.0
157	1,508	95	6.3%	51	3.4%	57	3.8%	88	5.8%	1,113	73.8%	104	6.9%	33.7
159	3,932	137	3.5%	206	5.2%	163	4.1%	85	2.2%	2,759	70.2%	582	14.8%	35.7
161	2,556	82	3.2%	176	6.9%	154	6.0%	137	5.4%	1,747	68.3%	260	10.2%	33.2
163	3,788	161	4.3%	107	2.8%	233	6.2%	64	1.7%	2,308	60.9%	915	24.2%	45.7
169	5,779	309	5.3%	325	5.6%	195	3.4%	263	4.6%	3,846	66.6%	841	14.6%	39.6
171	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	N/A
255	1,471	84	5.7%	72	4.9%	74	5.0%	49	3.3%	913	62.1%	279	19.0%	34.3
295	3,559	131	3.7%	185	5.2%	133	3.7%	157	4.4%	2,356	66.2%	597	16.8%	41.7
Total	**31,784**	**1,357**	4.3%	**1,239**	**3.9%**	**1,314**	**4.1%**	**1,098**	**3.5%**	**22,110**	**69.6%**	**4,666**	**14.7%**	

Source: 2012-2016 ACS 5-Year Estimates.

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 November of 2017, the New York City Department of Park and Recreation's (NYC Parks) website, the New York City Open Accessible Space Information System (OASIS) database, and other secondary sources of information.

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

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon, which is considered the weekday peak utilization period according to the *CEQR Technical Manual*. If a facility seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. Table E-3 identifies the address,

ownership, features, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. Figure E-2 maps their location in the study area.

Open Space Resources

As shown in Table E-3, there are five publicly-accessible open space resources within the study area included in the quantitative analysis. In addition, one private open space resource has been identified within the study area, but has been excluded from the quantitative analysis in accordance with *CEQR Technical Manual* methodology.

The study area contains a total of approximately 3.42 acres of publicly accessible open space, approximately 64 percent of which (2.23 acres) comprises active open space and approximately 36 percent of which (1.18 acres) comprises passive open space (refer to Table E-3).

The largest open space resource in the study area is the 2.58-acre Astoria Heights Playground, located between 45th and 46th Street south of 30th Road. The playground includes amenities such as fitness equipment, handball courts, spray showers, and bathrooms. The park also includes a playground at the northern end of the site. Currently, this playground is under construction. It is not known when construction will be completed.

The next largest open space resources in the residential study area are Sean's Place and Playground Thirty-Five. Sean's Place, a 0.56-acre playground is a primarily active open space utilized by children and adults who use the passive seating areas to supervise activity. Playground Thirty Five is a 0.22-acre playground intended for use by children with other passive seating areas for adults.

Assessment of Open Space Adequacy

The following analysis of the adequacy of open space resources within the residential study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents, as well as the ratio of passive open space per 1,000 combined residents and workers.

Quantitative Assessment

With a total of 3.42 acres of open space, of which approximately 1.18 acres are for passive use and approximately 2.23 acres are for active use, and a total residential population of 32,213, the residential study area has an overall open space ratio of 0.108 acres per 1,000 residents (see Table E-4). This is less than the City's planning goal of 2.5 acres of combined active and passive open space per 1,000 residents. The study area's residential passive and active open space ratios are 0.037 acres and 0.070 acres per 1,000 residents, respectively. Both the passive open space ratio and the active open space ratio are below the applicable City open space guidance. As shown in Table E-4, the passive open space ratio of 0.037 is below the applicable City open space goal for passive open space (0.50 acres of passive open space per 1,000 people). Additionally, the active open space ratio of 0.070 acres per 1,000 people is below the *CEQR Technical Manual* goal of 2.0 acres of active open space per 1,000 residents. As such, there is an existing shortfall of passive and active open space in the residential study area.

Figure E-2

Open Space Resources



Legend

- Rezoning Area
- 1/2 Mile Radius
- Open Space Study Area
- 1 — Open Space Resources included in Quantitative Analysis*
- A — Open Space Resources Not Included in Quantitative Analysis*

Source: DoITT, DCP

*Refer to Table E-3

Table E-3
Inventory of Existing Open Space and Recreational Resources in Study Area

Map No.	Name	Location	Owner/Agency	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Included in Quantitative Analysis												
1	Dwyer Square	Northern Boulevard, 34th Avenue between 47th and 48th Street	NYC Parks	Benches, trees	Seniors, Adults	24 Hours	0.07	0	0	100	0.07	Good, Moderate
2	Strippoli Square	Intersection of 31st Avenue and 54th Street	NYC Parks	Benches, plantings, trees	Seniors, Adults	24 Hours	0.19	0	0	100	0.19	Excellent, Low
3	Astoria Heights Playground	30th Road between 45th and 46th Street	NYC Parks/DOE	Playgrounds, Fitness Equipment, Handball Courts, Spray Showers	Teenagers, Children	6AM - Dusk	2.38	65	1.55	35	0.83	Good, Moderate
4	Sean's Place	38th Street between 31st Avenue and Broadway	NYC Parks	Handball Courts, Playgrounds, Spray Showers	Adults, Children	6AM – 9PM	0.56	85	0.48	15	0.07	Good, Moderate
5	Playground Thirty Five	35th Avenue between Steinway Street and 41st Street	NYC Parks	Playgrounds	Adults, Children	6AM-9PM	0.22	90	0.20	10	0.02	Good, Moderate
						Total:	**3.42**	**65%**	**2.23**	**35%**	**1.18**	
Open Space Resources Not Included in Quantitative Analysis												
A	Sunnyside Gardens Park	39th Avenue and 50th Street	Privately owned by Sunnyside Gardens Park	Basketball Courts, Baseball Field, Playgrounds, Tennis Courts, Sprinklers, Gardens	Adults, Teenagers, Children	10AM - Sunset	3.5	70	2.45	30	1.05	Excellent, Heavy
						Total:	**3.5**	**70**	**2.45**	**30**	**1.05**	

Sources: NYC OASIS, NYC Parks, November 2017 field visits.
Notes:
[1]Refer to Figure E-2.
NYC Parks = New York City Department of Parks and Recreation; DOE = New York City Department of Education;

When the employees who work within the residential study area are added to the population, the passive open space ratio is lower. As described earlier, workers typically use passive open space during the workday, so the passive open space ratio is the relevant ratio for consideration. With a combined worker and residential population of 45,430, the combined passive open space ratio in the residential study area is 0.026 acres per 1,000 users, which is below the recommended weighted average guideline ratio of 0.39 acres per 1,000 residents and workers.

Table E-4
Adequacy of Open Space Resources: Existing Conditions

	Population	Open Space Acreage			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	31,784	3.42	1.18	2.23	0.108	0.036	0.070	2.50	0.50	2.00
Combined Workers & Residents	45,430				N/A	0.026	N/A	N/A	0.39[1]	N/A

Notes:
[1] Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

Qualitative Assessment

Although the residential study area contains a mixture of recreational facilities, with approximately 65 percent dedicated to active uses and 35 percent dedicated to passive use, the open space ratios per 1,000 residents still fall well below the guideline goal of 2.5 acres per 1,000 residents and the citywide median of 1.5 acres per 1,000 residents.

The deficiency of open space resources within the residential study area is partially ameliorated by several factors. As shown in Table E-3, the residential study area open spaces include a wide variety of actively programmed open spaces appropriate for the range of residential user groups present within the study area. In addition, all open space resources are in good or excellent condition with moderate utilization rates. Furthermore, it is possible that some residents and workers in the study area would elect to utilize other open spaces resources in the surrounding area, including Sunnyside Gardens Park, a private 3.5 acre open space with membership available to those living in zones shown in Figure E-3, as well as two additional open spaces, Windmuller Park and Doughboy Plaza, located within the ½-mile radius of the rezoning area but beyond the study area boundary. Windmuller Park, a 3.01-acre park, includes amenities like basketball/handball courts, playgrounds, running tracks, Wi-Fi hotspots, outdoor pools, and fitness equipment. Windmuller Park is located on the southeastern border of the study area at the intersection of 39th Road and 54th Street. Adjacent to Windmuller Park is Doughboy Plaza, a 1.71-acre area primarily containing passive uses like walkways, open lawns, and benches. Together these two parks, roughly 1/2-mile from the proposed project, offer an additional 4.72 acres of open space for area residents that is not considered in the quantitative analysis.

Moreover, as noted above, the quantitative analysis is conservative in scope as it assumes that residents and daytime users (workers) are separate populations, whereas it is possible that some of the residents live near their workplace or work from home, resulting in some double-counting of the daily user population in the study area.

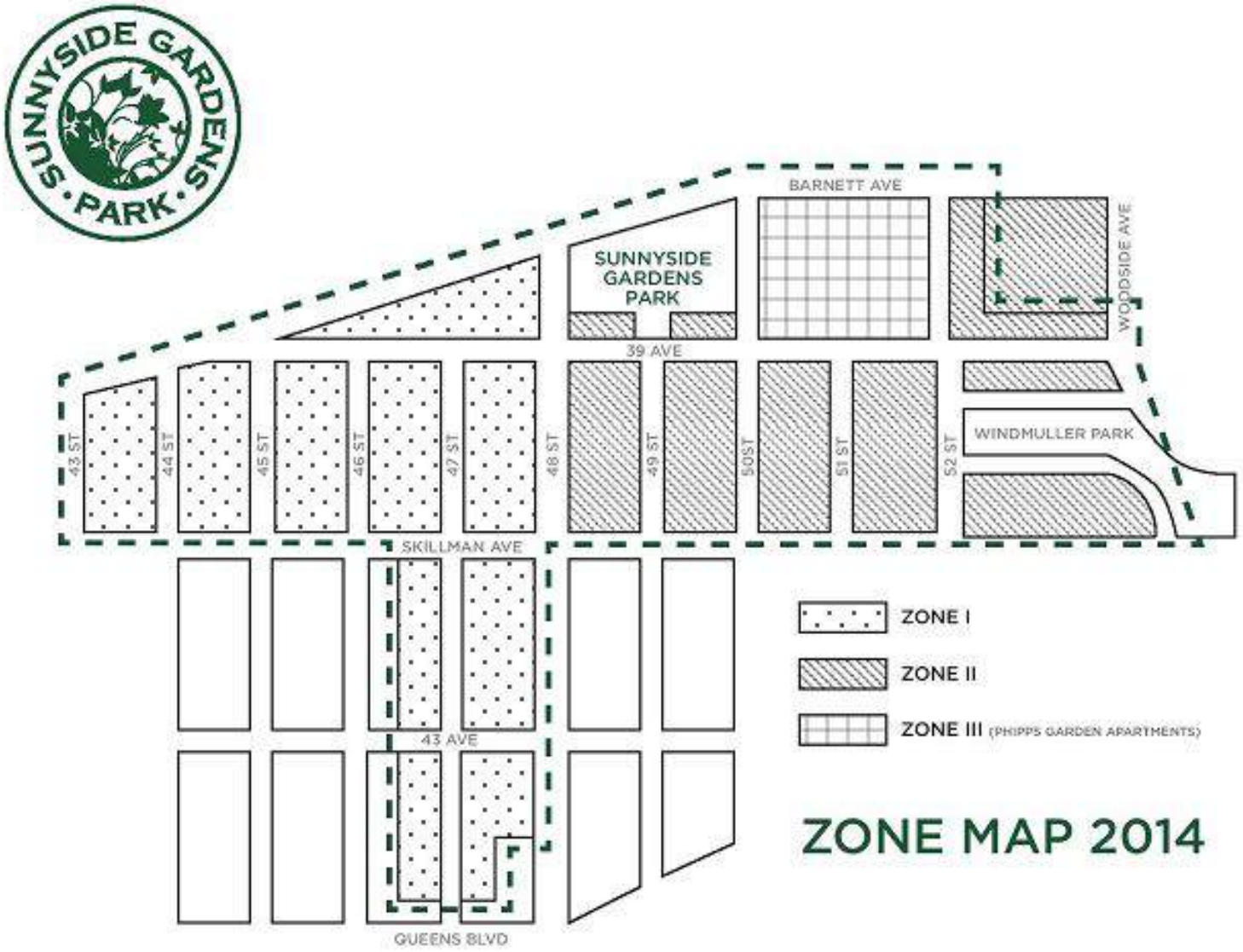


Figure E-3
Sunnyside Gardens Park Membership Zone

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

Study Area Population

In the 2022 future without the proposed project, 12 developments that are currently being planned or are under construction are expected to be completed in the open space study area (shown in Table E-5 and Figure E-4). These No-Action developments are expected to introduce a total of approximately 290 residents and 172 employees to the 1/2-mile radius by 2022. Under No-Action conditions the rezoning area is expected to remain as currently built under existing conditions and no changes to residential or employee populations are expected.

Table E-5
No-Action Developments Planned for Completion by 2022 within a ½-Mile Radius

Map No.	Address	Development Program	Estimated Build Year
1	30-38 Steinway Street	8 DUs	2018
2	47-12 Broadway	7 DUs	2018
3	32-49 45th Street	1 DU	2017
4	44-14 Broadway	4 DUs, 1,600 sf community facility	2018
5	38-22 56th Street	2 DUs	2017
6	39-22 56th Street	2 DUs	2018
7	39-56 56th Street	3 DUs	2018
8	34-11 Steinway Street	83 DUs	2018
9	30-30 45th Street	4 DUs	2019
10	30-49 38th Street	7 DUs	2018
11	30-59 38th Street	3 DUs	2019
12	36-20 Steinway Street	289 room hotel, 18,000 sf retail	2018

Source: New York City Department of Buildings, YIMBYNews, The Real Deal, NY Curbed
See Figure E-4

Table E-6
No-Action Open Space Study Area Population

	Existing Population	Additional Population as a Result of No-Action Developments	Future No-Action Population
Residents	31,784	290	32,074
Combined Residents and workers	45,430	462	45,892

Open Space Resources

At this time no planned alterations to the study area open spaces are expected by the 2022 analysis year. The 1/2-mile study area will continue to be served by the 3.42-acres of open space.

Assessment of Open Space Adequacy

In the future No-Action condition, the additional population introduced to the ½-mile study area would increase the demand on the area's open spaces. With the anticipated No-Action development, the residential study area will continue to be underserved by passive and active open spaces in comparison to the City's guidance. As indicated in Table E-7, the No-Action total, passive, and active open space ratios per 1,000 residents are expected to remain at 0.107, 0.037, and 0.070, respectively. The No-Action

Figure E-4
No-Build Sites



Legend

- (1) No-Build Sites (refer to Table E-5)
- Rezoning Area
- Open Space Study Area
- Open Space
- 1/2 Mile Radius

Source: DoITT, DCP, DOB, YIMBYNews

residential open space ratios for total, passive, and active open space would be less than the City's guideline ratio of 2.5 acres of open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents.

The combined passive open space ratio in the ½-mile study area is also expected to remain unchanged at 0.026 acres per 1,000 combined residents and workers, which is below the calculated recommended weighted ratio of 0.39.

Table E-7
Adequacy of Open Space Resources: No-Action Condition

	Population	Open Space Acreage			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	32,074	3.42	1.18	2.23	0.107	0.037	0.070	2.50	0.50	2.00
Combined Workers & Residents	45,892				N/A	0.026	N/A	N/A	0.390[1]	N/A

Notes:
[1] Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

The ratios for total, passive, and active open space within the residential study area would remain below the City's guidance in the future without the proposed project. As under existing conditions, there are a number of additional open space resources in the surrounding area that could be accessed by residents that are not included in the quantitative analysis including Sunnyside Gardens Park, Windmuller Park, and Doughboy Plaza. These resources represent a considerable amount of accessible active and passive open space for the residential population.

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

In the future with the proposed project, projected development would result in a total of approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces.

Study Area Population

In total, the proposed project would result in an incremental increase of 557 residents and 20 workers compared to No-Action conditions. As indicated in Table E-8, the ½-mile study area's residential population is expected to increase to 32,631, and the ½-mile study area's combined worker and residential population is expected to increase to 46,469.

Table E-8
No-Action Open Space Study Area Population

	No-Action Population	Additional Population as a Result of the Proposed Project	Future With-Action Population
Residents	32,074	557	32,631
Combined Residents and workers	45,892	577	46,469

Direct Effects

No publicly-accessible open space is currently located on the project site. Therefore, the proposed project would not result in the physical loss of publicly-accessible open space. In addition, as discussed in other attachments of this EAS, the proposed project would not cause increased shadows, noise, or air pollutant emissions that would affect the usefulness of any study area open space, whether on a permanent or temporary basis. Furthermore, the proposed project would not change the use of a publicly-accessible open space so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no significant adverse direct effects on open space would occur as a result of the proposed project.

Indirect Effects

Under With-Action conditions, total open space ratios in the residential (½-mile) study area would decrease, from 0.107 in the No-Action condition to 0.105 acres per 1,000 residents in the With-Action (see Table E-9). The passive and active open space ratios would also decrease slightly compared to No-Action conditions, from 0.037 and 0.070 to 0.036 and 0.068 acres per 1,000 residents, respectively, which would continue to be below the City's guidance ratios of 0.50 acres of passive open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents. The passive open space ratio for combined residential and worker populations would decrease slightly from 0.026 to 0.025 acres per 1,000 users under With-Action conditions and would remain below the calculated guidance ratio of 0.40.

Table E-9
Adequacy of Open Space Resources: With-Action Condition

	Population	Open Space Acreage[1]			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	32,631	3.42	1.18	2.23	0.105	0.036	0.068	2.50	0.50	2.00
Combined Workers & Residents	46,469				N/A	0.025	N/A	N/A	0.40[1]	N/A

Notes:
[1] Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

In the future with the proposed project, ratios of open space would continue to be lower than the measure of open space adequacy and the CEQR planning guidance for total, passive, and active open spaces. The population to be generated by the proposed project is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific groups.

It should also be noted that, while the amounts of total and active open space resources in the residential study area are, and would continue to be, deficient in comparison to City guidance, the residential study area open spaces tend to have moderate utilization levels, and most are in good condition (refer to Table E-3).

In addition, the availability of high quality open space resources located in close proximity to the rezoning area including Sunnyside Gardens Park, Windmuller Park, and Doughboy Plaza, could help to partially

offset this quantitative deficit. These resources represent a considerable amount of accessible active and passive open space for the residential population.

Determining Impact Significance

A significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction as little as one percent may be considered significant, depending on the area of the City. These reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. Table E-10 expresses the percentage change from No-Action to With-Action conditions for the residential study area.

Table E-10
Open Space Ratios Summary (Residential Study Area)

Type of Open Space	CEQR Technical Manual Open Space Guideline	Open Space Ratios per 1,000			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Total	2.5	0.108	0.107	0.105	-1.87%
Passive	0.5	0.037	0.037	0.036	-2.70%
Active	2.0	0.070	0.070	0.068	-2.37%

With respect to the reductions in open space within the residential study area, the total, active, and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, 2.0 acres, and 0.5 acres per 1,000 residents, respectively, in the future with the proposed project. The total residential study area open space ratio would decline by 1.87 percent to 0.105 acres per 1,000 residents; the active residential study area open space ratio would decline by 2.70 percent to 0.036 acres per 1,000 residents; and the passive residential study area open space ratio would decrease 2.37 percent to 0.068 acres per 1,000 residents.

Although there would continue to be a shortage of public open space in the study area, the increase in demand from the proposed project would not result in significant reductions in open space ratios (defined as five percent or more per *CEQR Technical Manual*) compared to the No-Action condition and would not overburden existing open space resources or further exacerbate a deficiency in open space. Additionally, there are a number of other local open spaces located in the surrounding area that could be accessed by some residents of the study area, including the privately-owned Sunnyside Gardens Park (3.5 acres), Windmuller Park (3.01 acre), and Doughboy Plaza (1.71 acre). In total, these three open space resources would add approximately 8.22 acres of open space for the residential population.

Moreover, the population to be generated by the proposed project is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific user groups. The proposed project would not result in the physical loss of existing public open space resources, and would not result in any adverse shadow, air, noise, or other environmental impacts that would affect the usefulness of any study area open space. Therefore, the proposed project would not result in significant adverse impacts to open space.

ATTACHMENT F
SHADOWS

47-15 34th Avenue Rezoning EAS
Attachment F: Shadows

I. INTRODUCTION

This chapter assesses the potential for the two projected developments identified in the 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 2014 *CEQR Technical Manual*, a shadows assessment is required if a proposed action 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 E, "Open Space," the proposed rezoning area is located adjacent to Dwyer Square, a public open space maintained by the New York City Department of Parks and Recreation (NYC Parks), and the proposed project would result in new development of greater than 50 feet in height compared to No-Action conditions. As such, a detailed shadows analysis was prepared to determine the potential for projected development to result in significant adverse impacts on Dwyer Square or any other sunlight-sensitive resources in the surrounding area.

II. PRINCIPAL CONCLUSIONS

The proposed project would result in incremental shadow coverage on one resource, Dwyer Square. Project-generated shadows would not affect the utilization or enjoyment of this sunlight-sensitive resource and all vegetation would continue to receive a minimum of four to six hours of direct sunlight throughout the growing season. Therefore, the Proposed Actions are not expected to result in significant adverse shadows impacts at any sunlight-sensitive resources.

III. METHODOLOGY

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

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

- *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. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. 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 surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

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

In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern are 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 21st vernal equinox (or the September 21st autumnal equinox, which is approximately the same), the June 21st summer solstice,

and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6th or August 6th (which are approximately the same). For the cold- weather months, the December 21st winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive historic and natural resources.

The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

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

- *Vegetation:* a substantial reduction in sunlight available to sunlight-sensitive features of the resource to less than the minimum time necessary for its survival (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 time necessary for its survival).

- *Historic and cultural resources:* a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.

- *Open space utilization:* a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected time periods.

- *For any sunlight-sensitive feature of a resource:* complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

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

IV. 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 shadow radius for Projected Development Site 1 (761 feet) and Projected Development Site 2 (301 feet) were determined using each building's maximum height (177 feet and 70 feet, respectively) including bulkhead and rooftop mechanical equipment (Tier 1 Assessment). Within this longest shadow study area, there is one potentially sunlight-sensitive open space resource. Therefore, further screening was warranted in order to determine whether this resource could be affected by project-generated shadows.

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 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 can receive shade from the projected developments.

Figure F-1 provides a base map illustrating the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from southernmost portion of the southernmost projected development site). Based on the Tier 2 screening, Dwyer Square is the only sunlight-sensitive resource that could potentially receive shadows as a result of proposed project. Given the location of Dwyer Square, the open space could not possibly be shaded by Projected Development Site 2. Therefore, the remainder of this assessment focuses on the potential shadow coverage that could result from Projected Development Site 1 only.

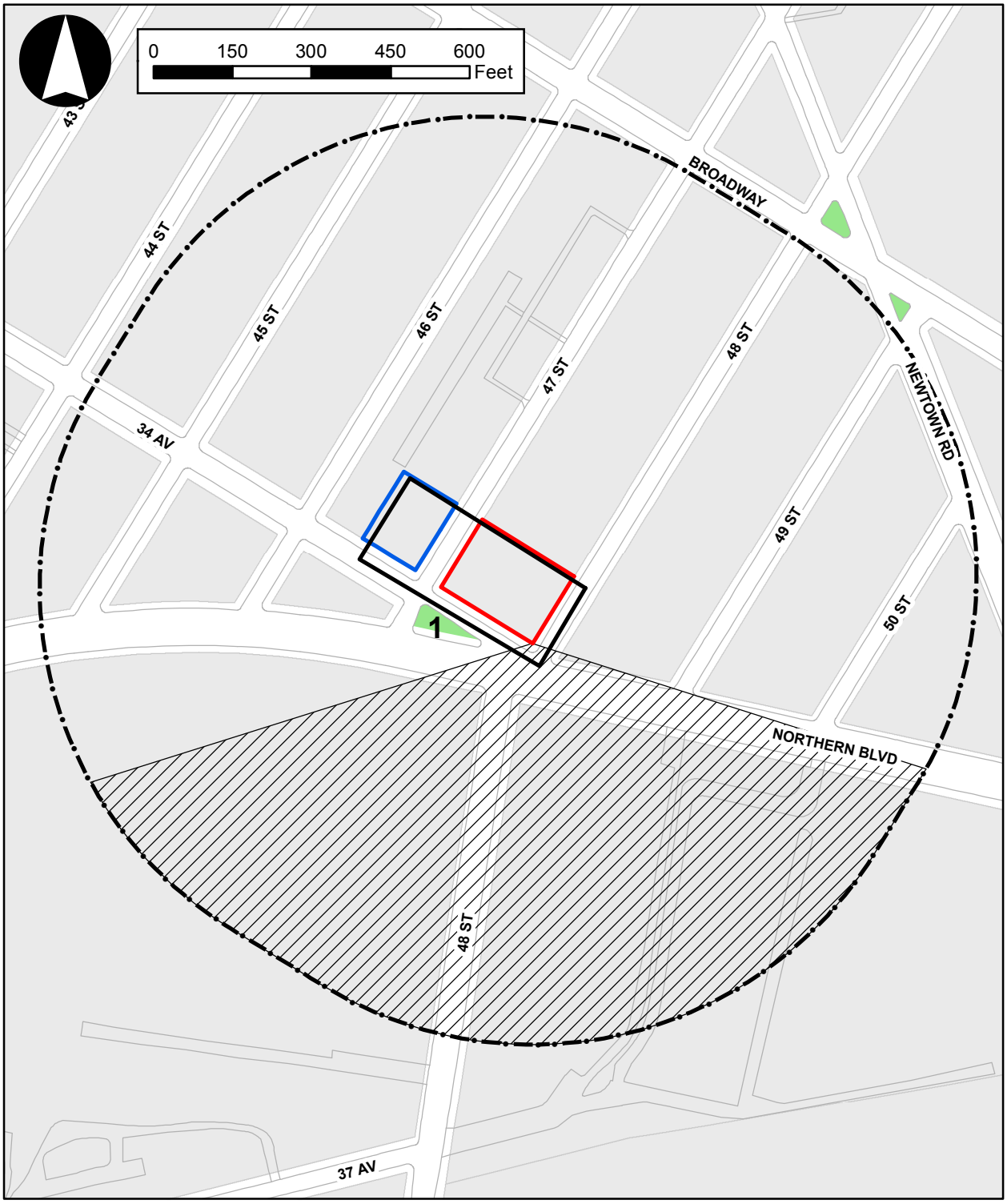
Tier 3 Screening Assessment

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 can 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 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.

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

Figure F-1

Tier I and II Shadow Assessment

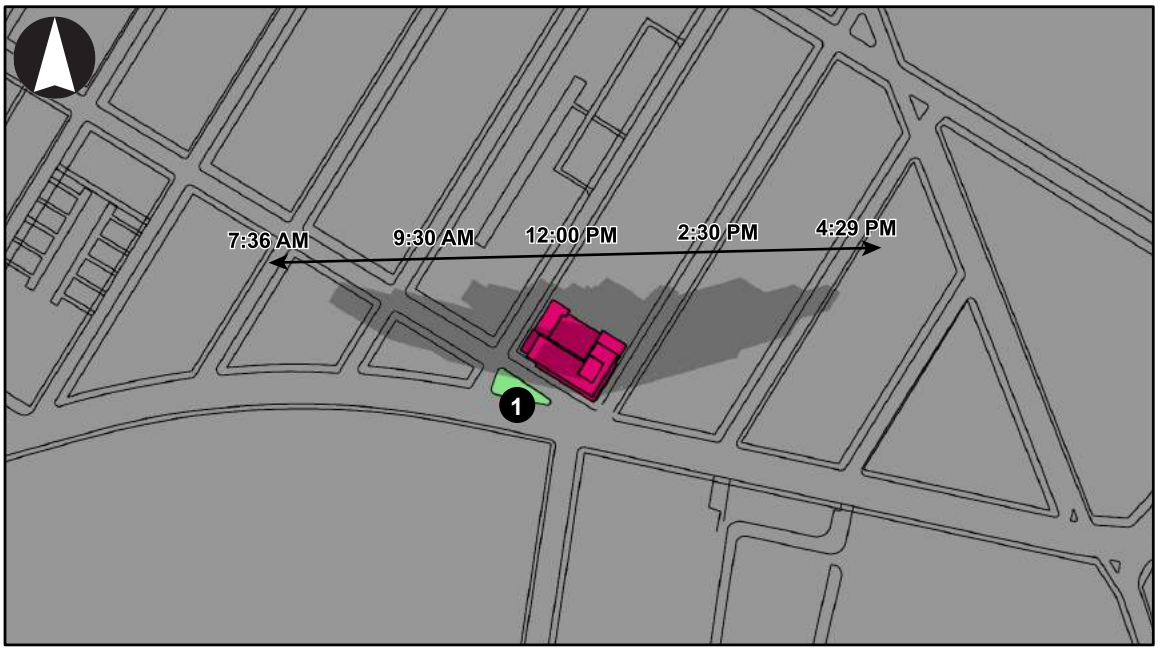


Legend

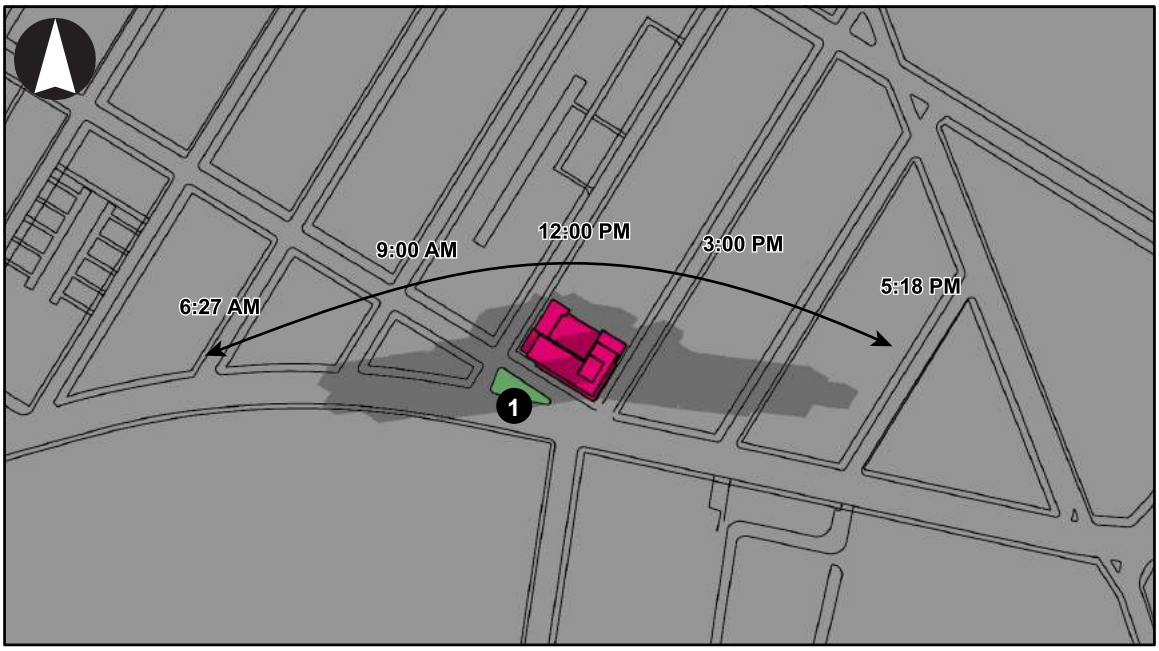
- Proposed Rezoning Area
- Projected Development Site 1
- Projected Development Site 2
- Tier 1: Longest Shadow Study Area
- Tier 2: Area to the south that could never be shaded
- 1 Open Space Resource
- Existing Buildings

Source: DoITT, DCP
*Refer to Table E-3

Figure F-2a
Tier 3 Screening



MARCH 21/SEPTEMBER 21

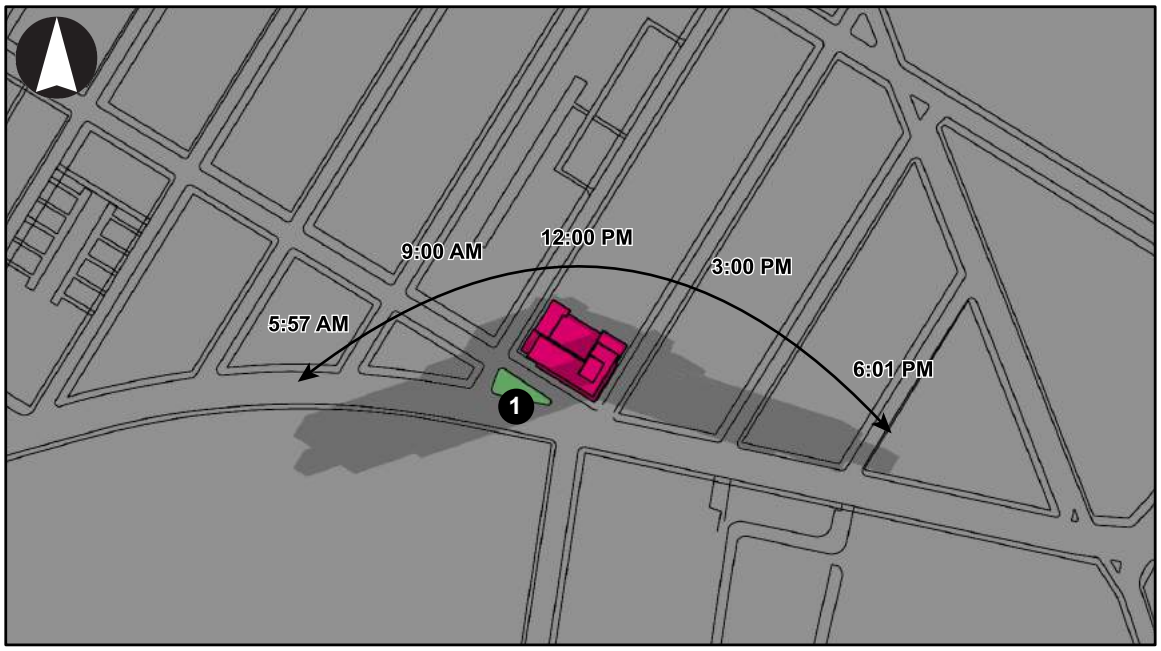


MAY 6/AUGUST 6

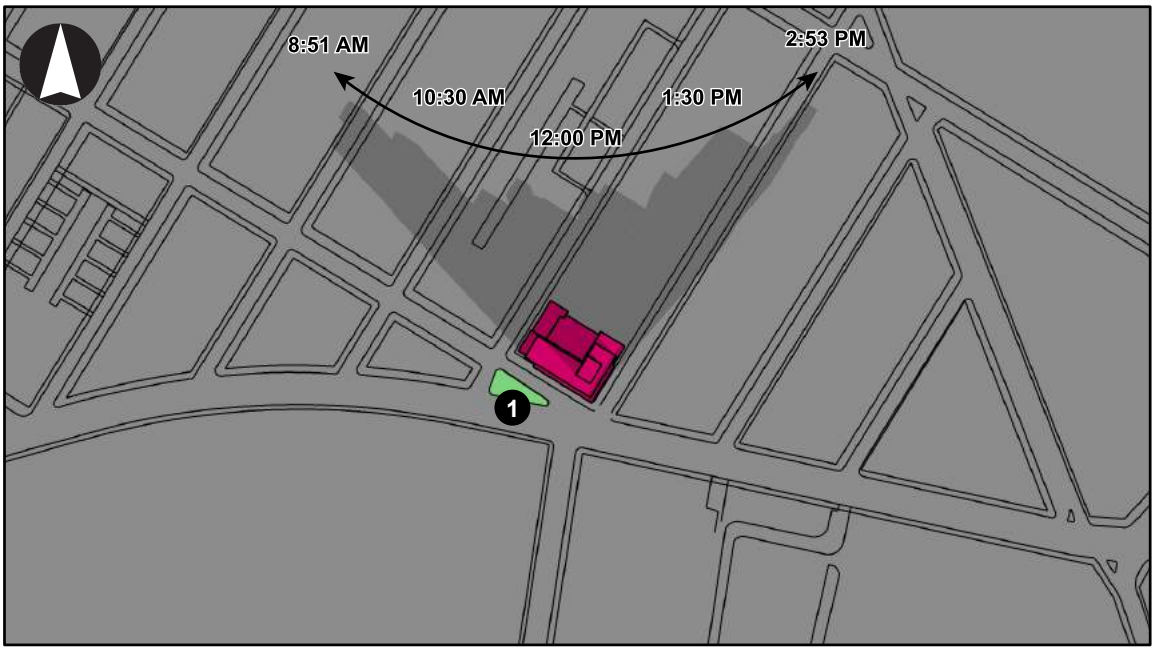
Projected Development Site 1 **1** **Open Space** **Incremental Shadow**

Note: Resources keyed to Table F-1

Figure F-2b
Tier 3 Screening



JUNE 21



DECEMBER 21

Projected Development Site 1 | **1 Open Space** | **Incremental Shadow**

Note: Resources keyed to Table F-1

As shown in Figure F-2, Dwyer Square could receive project-generated shadows on the March 21/September 21, May 6/August 6, and June 21 analysis days. No incremental shadows could reach the open space on the December 21 analysis day. As this open space is capable of receiving project-generated shadows, further analysis is warranted and a detailed analysis has been provided below.

V. DETAILED ASSESSMENT

Resources of Concern

Dwyer Square

Dwyer Square is an approximately 0.07-acre triangular open space located to the southwest of Projected Development Site 1. The open space is bounded by 34th Avenue to the north, 47th Street to the west, and Northern Boulevard to the south. The open is open 24 hours a day and features benches and trees. It is owned and operated by the New York City Department of Parks and Recreation (NYC Parks).

Shadows Analysis

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

As shown in Table F-1, project-generated shadows would result in increases in shadow coverage on the March 21/September 21, May 6/August 6, and June 21 representative analysis days; increases in shadow coverage would not occur on the December 21 representative analysis day. Figures F-3 through F-5, provided at the end of this attachment, show representative shadow views of Dwyer Square on March 21/September 21, May 6/August 6, and June 21.

Table F-1
Duration of Shadows on Sunlight Sensitive Resources (Increment Compared to No-Action)

Resource	Analysis Day	March 21/Sept. 21	May 6/August 6	June 21	December 21
		7:36 AM – 4:29 PM	6:27 AM – 5:18 PM	5:57 AM – 6:01 PM	8:51 AM – 2:53 PM
Dwyer Square	Shadow enter-exit time	7:36 – 7:57 AM	6:27 – 8:28 AM	5:57 – 8:45 AM	-
	Incremental shadow duration	21 minutes	2 hours, 1 minute	2 hours, 48 minutes	-

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

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

March 21/September 21

On March 21/September 21 the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City, and September 21, which has the same shadow patterns as March 21, is also within the growing season. On the March 21/September 21 analysis day, incremental shadows from the proposed project would reach Dwyer Square.

Projected Development Site 1 would cast incremental shadows on Dwyer Square from approximately 7:36 AM to 7:57 AM, for a duration of approximately 21 minutes. After 7:57 AM the open space would not experience any incremental shadow coverage as a result of the proposed project. As indicated in Figure F-3, at 7:36 AM incremental shadows would reach a small northern portion of Dwyer Square where trees are located before quickly moving across the open space to the northeast. By 7:50 AM, incremental shadows would be hardly discernable and would only affect paved portions of the open space. After 7:57 AM, the open space would receive direct sunlight throughout the remainder of the morning and afternoon periods.

May 6/August 6

On May 6/August 6 the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. On the midpoint between the equinoxes and the solstices, incremental shadows from the proposed project would reach Dwyer Square.

Projected Development Site 1 would cast incremental shadows on Dwyer Square from approximately 6:27 AM to 8:28 AM, for a duration of approximately 2 hours and 1 minute. After 8:28 AM the open space would not experience any incremental shadow coverage as a result of the proposed project. As indicated in Figure F-4, at 6:30 AM incremental shadows would cover the majority of Dwyer Square, affecting trees and benches. By 7:30 AM shadow coverage would decrease slightly, moving in a northeasterly direction across the open space, and some benches and trees would receive direct sunlight. By 8:15 AM, incremental shadow coverage would be limited to a small northwestern portion of the open space before exiting at 8:28 AM. After 8:28 AM, the open space would receive direct sunlight throughout the remainder of the morning and afternoon periods.

June 21

On June 21 the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On June 21, the summer solstice, which is the day of the year with the longest period of daylight, the sun is most directly overhead and shadows are generally the shortest. On this representative analysis day, the proposed project would cast incremental shadows on Dwyer Square.

Projected Development Site 1 would cast incremental shadows on Dwyer Square from approximately 5:57 AM to 8:45 AM, for a duration of approximately 2 hours and 48 minutes. From 5:57 to 7:12 AM (1 hour 15 minutes) incremental shadows would result in a complete loss of sunlight at the open space. After 8:45 AM the open space would not experience any incremental shadow coverage as a result of the proposed project. As indicated in Figure F-5, at 6:00 AM the open space would be completely covered in incremental shadows. By 7:30 AM, incremental shadow coverage would decrease slightly but all trees and benches would remain shaded. By 8:30 AM incremental shadow coverage would be limited to a small

northern portion and most trees and benches would receive direct sunlight. After 8:45 AM, the open space would receive direct sunlight throughout the remainder of the morning and afternoon periods.

Assessment

A shadow impact occurs when the incremental shadow from a proposed project falls on a sunlight sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant or not depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs.

For open spaces, the uses and features of the space indicate its sensitivity to shadows. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. Therefore, this sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by a loss of sunlight during the growing season; 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. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, 4 to 6 hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Consequently, the assessment of an open space's sensitivity to increased shadow focuses on identifying the existing conditions of its facilities, plantings, and uses, and the sunlight requirements for each.

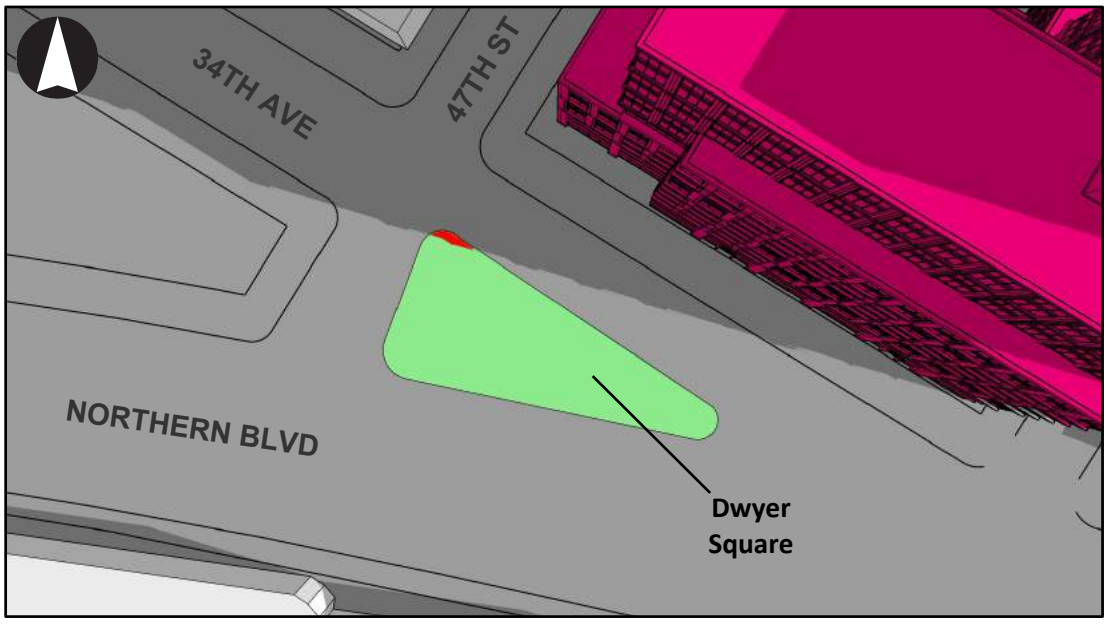
Dwyer Square

Dwyer Square would experience incremental shadow coverage on three representative analysis days ranging from 21 minutes on March 21/September 21 to 2 hours and 48 minutes on June 21 (see Table F-1). On all days, incremental shadows would generally be limited to small portions of the open space containing trees and benches during the early morning hours (see Figures F-3 through F-5). On all three representative analysis days, incremental shadow coverage would be greatest during the early morning shortly after sunrise. From 5:57 to 7:12 AM (1 hour 15 minutes) on June 21, incremental shadows would result in a complete loss of sunlight at the open space. While seating areas would be temporarily affected, incremental shadows during the summer months when temperatures are warmer would not significantly affect the usability of the open space. Additionally, incremental shadows on all days would exit the open space by 8:45 AM, before the primary hours of utilization and enjoyment, and all benches would receive direct sunlight throughout the morning and afternoon periods. Furthermore, the open space would continue to receive adequate direct sunlight (at least the four to six hour minimum specified in the *CEQR Technical Manual*) and vegetation would not be affected. Therefore, as the extent and duration of the incremental shadows would not significantly alter the public's use of the open space or threaten the viability of vegetation within this open space, incremental shadows from the proposed project on Dwyer Square would not be considered a significant adverse impact.

Figure F-3
Dwyer Square
Incremental Shadows on March 21/September 21



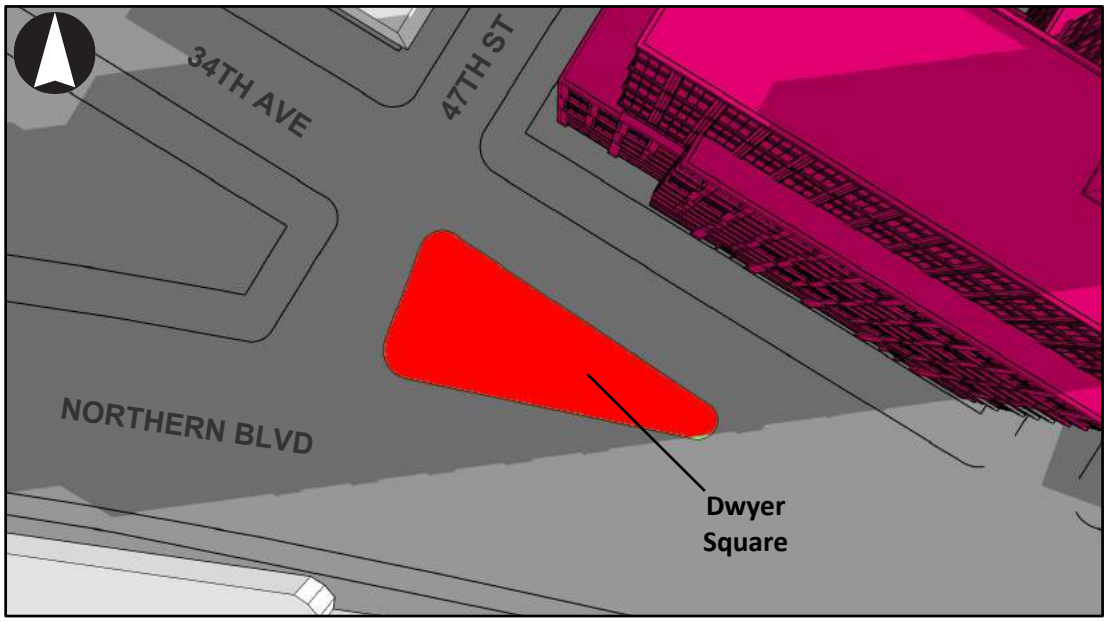
7:36 AM



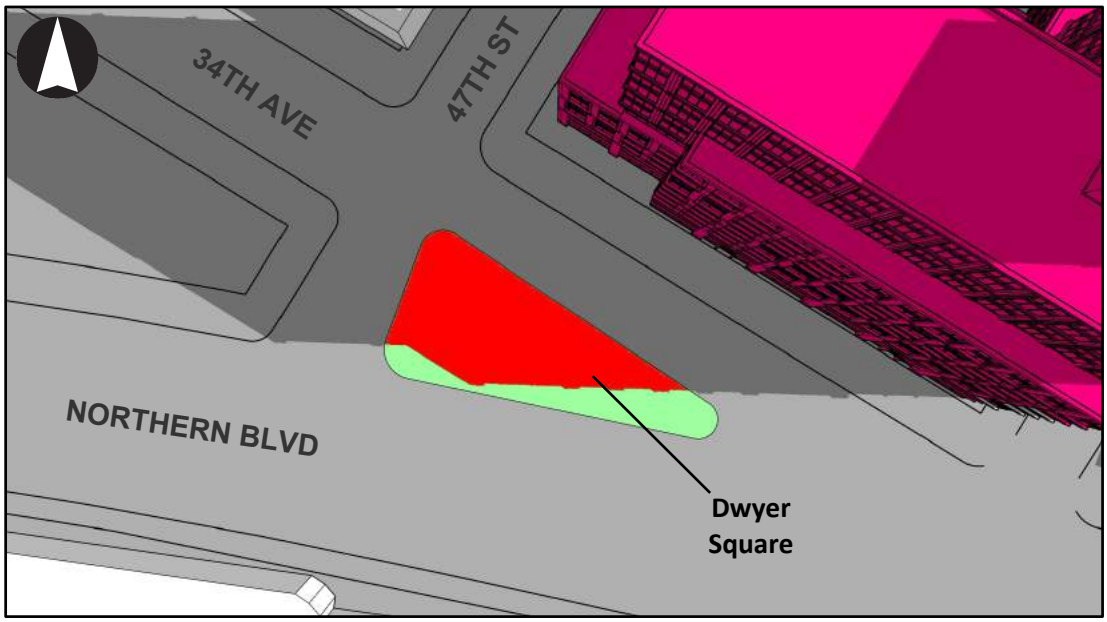
7:50 AM

Projected Development Site 1 **Open Space** **Incremental Shadow**

Figure F-4a
Dwyer Square
Incremental Shadows on May 6/August 6



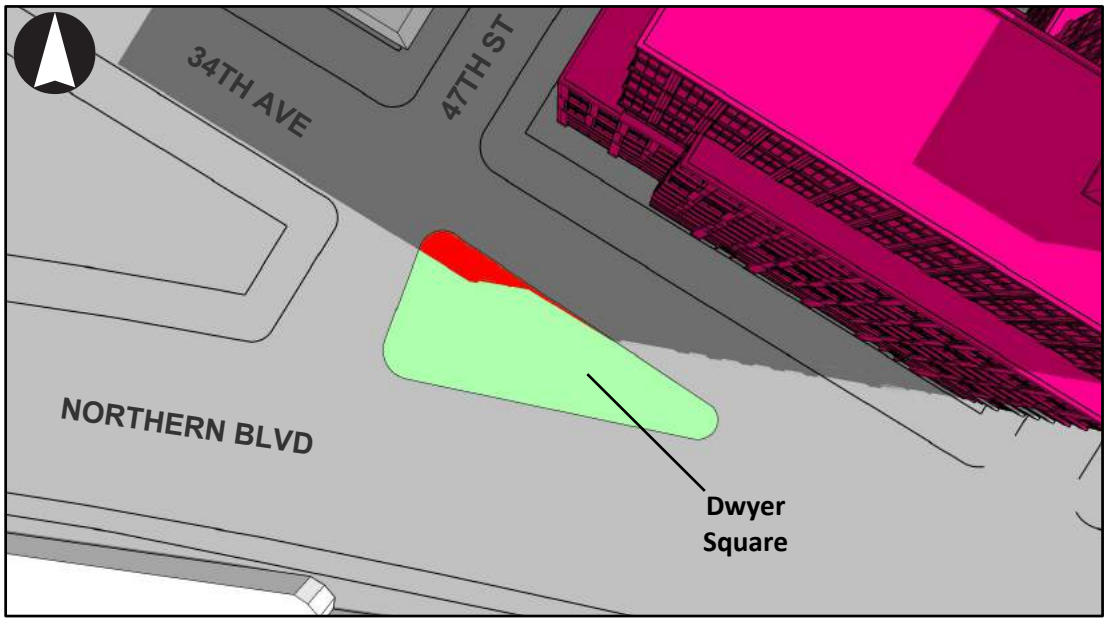
6:30 AM



7:30 AM

Projected Development Site 1 **Open Space** **Incremental Shadow**

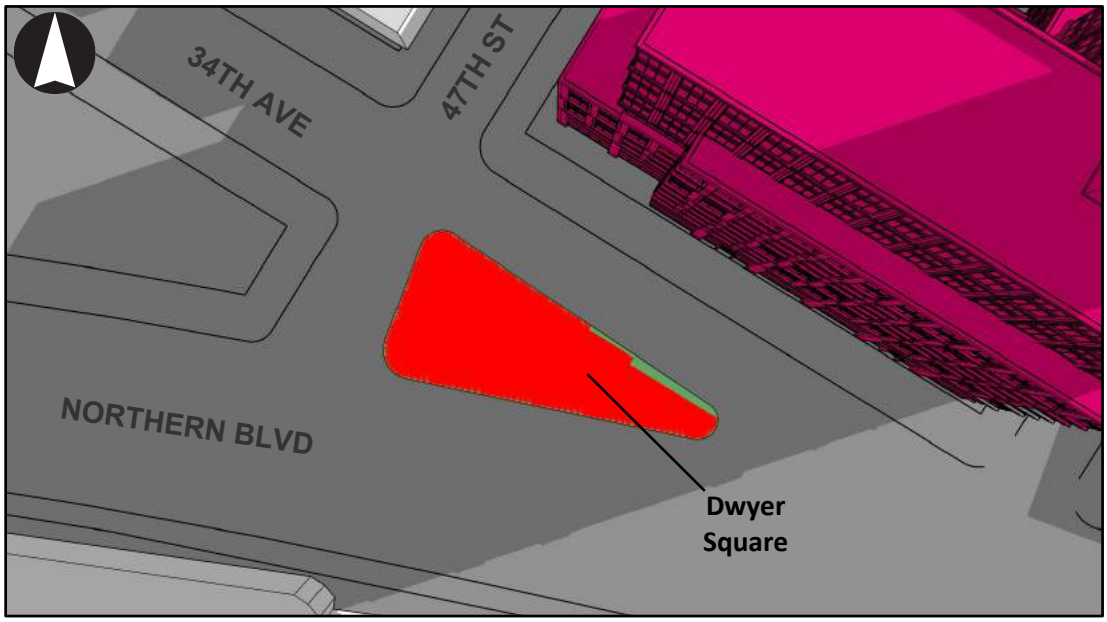
Figure F-4b
Dwyer Square
Incremental Shadows on May 6/August 6



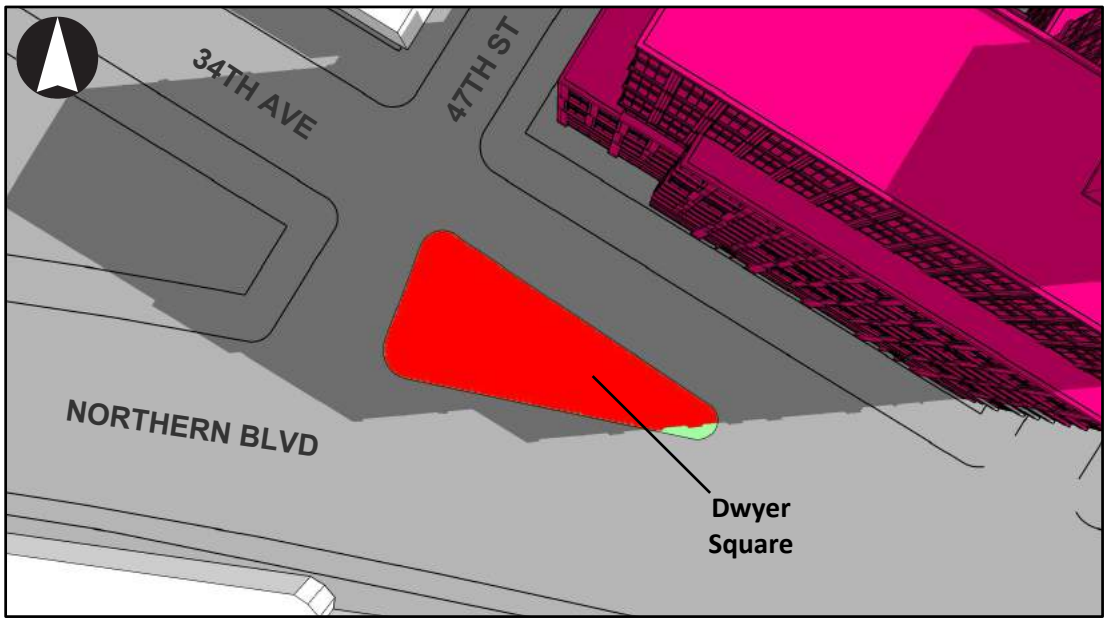
8:15 AM

Projected Development Site 1 **Open Space** **Incremental Shadow**

Figure F-5a
Dwyer Square
Incremental Shadows on June 21



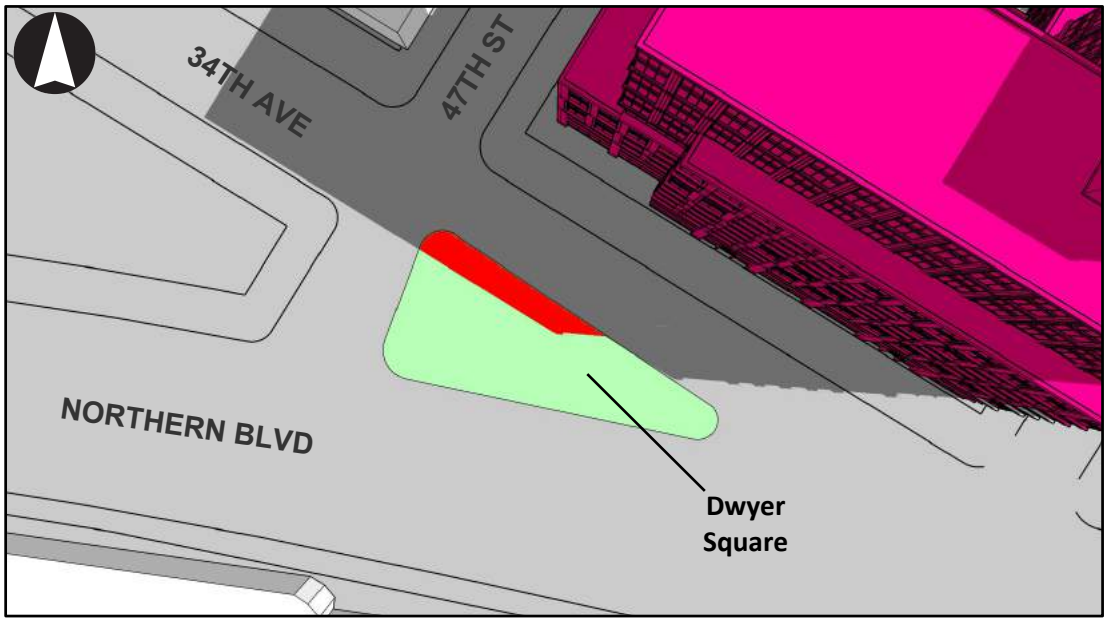
6:00 AM



7:30 AM

Projected Development Site 1 **Open Space** **Incremental Shadow**

Figure F-5b
Dwyer Square
Incremental Shadows on June 21



8:30 AM

Projected Development Site 1 **Open Space** **Incremental Shadow**

ATTACHMENT G
URBAN DESIGN AND VISUAL RESOURCES

47-15 34th Avenue Rezoning EAS
Attachment G: Urban Design and Visual Resources

I. INTRODUCTION

This attachment considers the potential for the proposed project to result in significant adverse impacts on urban design and visual resources. According to the 2014 *CEQR Technical Manual*, urban design is defined as the totality of components that may affect a pedestrian's experience of public space. These components include streets, buildings, visual resources, open spaces, natural resources, and wind. An urban design assessment considers whether and how a project may change the experience of a pedestrian in a given area. *CEQR Technical Manual* guidance recommends the preparation of a preliminary assessment of urban design and visual resources, followed by a detailed analysis, as warranted, based on the conclusions of the preliminary assessment. The analysis provided below addresses urban design characteristics and visual resources for existing conditions, the future without the Proposed Actions (the No-Action condition), and the future with the Proposed Actions (the With-Action condition).

II. PRINCIPAL CONCLUSIONS

As described below, the Proposed Actions would not result in significant adverse impacts to urban design or visual resources within the rezoning area, or in the 400-foot study area. Projected developments facilitated by the Proposed Actions would be built within existing blocks, and would not entail any changes to topography, street patterns, street hierarchy, block shapes, or natural features. Projected development would be built in accordance with bulk requirements under the proposed R7X/C2-4 and R6B/C2-4 zoning districts and would incorporate a variety of building heights and tiered massings to provide a contextual transition from the rezoning area to the low-rise residential area to the north. Projected developments would not negatively alter views in the study area from adjacent publicly-accessible locations and would not obstruct any view corridors of significant visual resources. As such, the Proposed Actions would not result in significant adverse impacts to urban design and visual resources, but are expected to complement and improve the urban design of the area.

III. METHODOLOGY

The *CEQR Technical Manual* indicates that there is no need to conduct an urban design analysis if a proposed project would be constructed within the existing zoning envelope and would not result in physical changes beyond the bulk and form permitted "as-of-right." As the Proposed Actions include a zoning map amendment, a preliminary assessment of urban design is provided below.

An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include views from private residences or places of business. An assessment of visual resources is provided below.

In accordance with the *CEQR Technical Manual,* the analysis in this attachment considers the effects of the proposed project on the following elements that collectively form an area's urban design:

- *Street Pattern and Streetscape:* The arrangement and orientation of streets define location, flow of activity, and street views and create blocks on which buildings and open spaces are arranged. Other elements, including sidewalks, plantings, street lights, 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:* For the purpose of urban design, open space includes public and private areas that do not include structures, including parks and other landscaped areas, cemeteries, and parking lots.

- *Natural Features:* Natural features include vegetation and geologic and aquatic features that are natural to the area.

- *View Corridors and Visual Resources:* Visual resources include significant natural or built features, including important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings.

The *CEQR Technical Manual* recommends an analysis of pedestrian wind conditions for projects that would result in the construction of multiple, tall buildings at or in close proximity to waterfront sites, which may result in an exacerbation of wind conditions due to "channelization" or "downwash" effects that may affect pedestrian safety. Factors to be considered in determining whether such a study should be conducted include: whether the location is exposed to high wind conditions, such as along west- and northwest-facing waterfronts; the size of the project; the number of proposed buildings to be constructed; the size and orientation of the buildings that are proposed to be constructed; and the site plan and surrounding pedestrian context of the project. As the proposed project is not located in the vicinity of the waterfront and would not result in the construction of multiple, tall buildings, a study of wind conditions and their effect on pedestrian level of safety is not warranted.

Study Area

According to the *CEQR Technical Manual*, the study area for urban design is the area where the project may influence land use patterns and the built environment and is generally consistent with the land use analysis study area. For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. The land use study area may serve as the initial basis for analysis. However, in many cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of this area, as is often the case with waterfront sites or sites within or near historic districts.

Consistent with the analysis of land use, zoning, and public policy, the study area for urban design analysis consists of both the rezoning area including the projected development sites and a study area, which has been identified as the area within a 400-foot radius of the rezoning area. The study area extends as far

north as the midblock area between 34th Avenue and Broadway, as far east as 49th Street, as far south as the midblock area of 48th Street between Northern Boulevard and 37th Avenue, and as far west as 45th Street (see Figure G-1).

As stated in the *CEQR Technical Manual*, for visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. For the purpose of this analysis, prominent visual resources (both within and outside of the urban design study area) that are visible from the rezoning area and study area were identified. The primary view sheds of these visual resources that would be affected by construction of the proposed project were the focus of the visual resources analysis.

The following analysis is based on field visits, photographs, aerial views, and other graphic images of the development site and surrounding study area. Zoning calculations, including floor area calculations, building heights, and lot coverage information are also provided for the development sites and, where applicable, the study area.

IV. PRELIMINARY ASSESSMENT

Existing Conditions

Urban Design

Rezoning Area

Street Pattern and Streetscape

To the south, the rezoning area is bounded by 34th Avenue, an 80-foot wide street that runs in an east-west direction. 34th Avenue has one travel lane in each direction as well as a shared bike lane in each direction. Parking is permitted on both sides of the street.

To the west, the rezoning area is bounded by the centerline of Block 722 and the nearby 46th Street, a 60-foot narrow street that runs in a north-south direction. 46th Street has one travel lane in the southbound direction and parking is permitted on both sides of the street.

To the east, the rezoning area is bounded by 48th Street, a 60-foot narrow street that runs in a north-south direction. 48th Street has one travel lane in the northbound direction and parking is permitted on both sides of the street.

The rezoning area is bisected by 47th Street, a 60-foot narrow street that runs in a north-south direction. 47th Street has one travel lane in the northbound direction and parking is permitted on both sides of the street.

As shown in Figure G-2, sidewalks within the rezoning area vary in width. Sidewalks along 34th Avenue range from approximately 30 feet wide at the corner of 48th Street to 10 feet wide along the auto repair shop's frontage (Projected Development Site 1). Along the rezoning area's side streets, sidewalks range from approximately 12 to 15 feet in width. Sidewalks lining the rezoning area are generally limited to a small number of streetscape elements including streetlights, parking signage, and fire hydrants. Additional

Figure G-1
Urban Design Study Area and Photo Location Map



Legend

- Projected Development Site 1
- Projected Development Site 2
- Rezoning Area
- 400-Foot Study Area
- Photo Location

Source: DoITT, DCP



1.) Looking north at Projected Development Site 1 from the intersection of 48th Street and Northern Boulevard



2.) Looking southwest at Projected Development Site 1 (Lot 1) from 48th Street



3.) Looking east along the 34th Avenue frontage of Projected Development Site 1



4.) Looking west along 34th Avenue frontage of Projected Development Site 1



5.) Looking north at Projected Development Site 1 (Lot 8) from across 34th Avenue



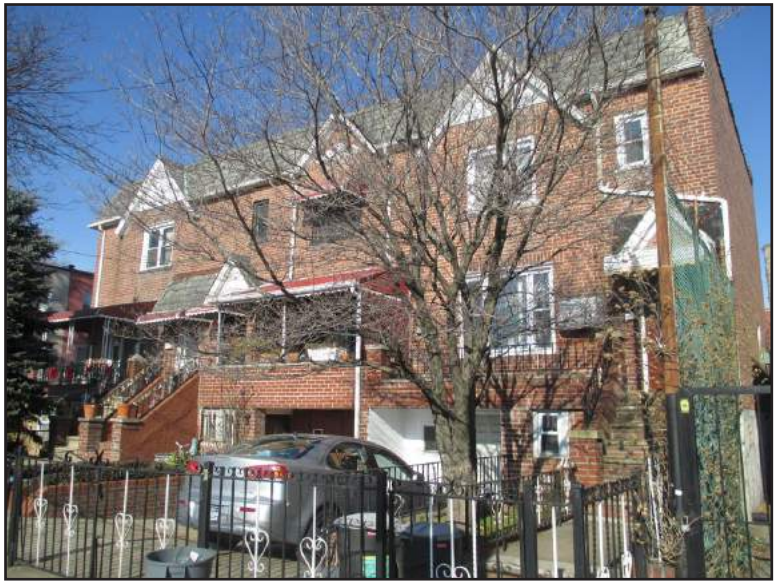
6.) Looking southeast from 47th Street at Projected Development Site 1 (Lot 8)



7.) Looking west at Projected Development Site 2 (Lots 1, 70) from 47th Street



8.) Looking east along 34th Avenue frontage of Projected Development Site 2



9.) Looking north at Projected Development Site 2 (Lots 3, 4, 5) along 34th Avenue



10.) Looking north along 46th Street

streetscape elements found on sidewalks lining Projected Development Site 2 and the western portion of the rezoning area include trees and utility poles. Curb cuts are prevalent throughout the rezoning area and are found at all buildings with the exception of the two retail buildings and storefront church on Projected Development Site 1.

Buildings

As shown in Figure G-2, Projected Development Site 1 (Block 723, Lots 1, 8) is occupied by four low-rise, high lot coverage buildings, including a one-story (16-foot) approximately 3,804 sf retail building with an approximately 40' x 20' rooftop billboard on Lot 1, a two-story (20-foot) approximately 7,656 sf retail building on Lot 8, a one-story (18-foot) approximately 8,418 sf auto repair shop on Lot 8, and a one-story (18-foot) approximately 9,800 sf storefront church on Lot 8. In total, the site has a built floor area of approximately 29,678 sf (0.97 FAR). While these buildings have been built at or near the streetline along 47th and 48th Streets, setbacks along 34th Avenue vary, resulting in an uneven streetwall. Contributing to the uneven appearance is the one-story auto repair shop on the corner of 34th Avenue, which is set back approximately 35 feet in order to accommodate a small paved parking lot. The adjacent two-story commercial building has small recesses where pedestrian entrances are located, further adding to the streetwall's uneven character. Façade treatments on all buildings are similar with either brick or stucco, but façade composition varies widely between building types. The retail storefronts along 34th Avenue are developed with large display windows whereas the auto repair shop is developed with opaque windows and large garage doors. The 47th Street frontage of the development site is predominantly windowless but a painted mural spans an approximately 65-foot stretch of the wall.

Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70) is occupied by five low-rise buildings, including three two-story (27-foot) attached homes on Lots 3, 4, and 5, a one-story (23-foot) light industrial building on Lot 1, and a two-story (23-foot) light industrial building on Lot 70 (see Figure G-2). In total, the site has a built floor area of approximately 19,080 sf (1.06 FAR). The site's residential buildings have low lot coverage, with backyards and setbacks of approximately 25 feet from the street line that accommodate small sunken driveways. The residential buildings are similarly styled with stoops, front porches, red brick facades, and wrought iron railings. The light industrial buildings on Lots 1 and 70 are built at or near the streetline, but have small side yards that create gaps in the streetwall along both 34th Avenue and 47th Street. The light industrial buildings are built of brick with blank walls and large shutter delivery doors on the ground-floor and windows on the floor above.

Natural Features and Open Space

There are no notable natural features within the rezoning area and the topography of the area is generally flat. There are no publicly accessible open space resources within the rezoning area and open space is limited to the front and backyards of private residences.

Study Area

Street Pattern and Streetscape

The street plan in the study area is characterized by an interrupted grid pattern. While the majority of streets run in a north-south direction, Northern Boulevard cuts diagonally across the street grid in an east-west direction, resulting in a number of irregular intersections and irregularly shaped parcels of land. Many north-south streets are 60-feet (narrow street) and serve one-way traffic, including 45th, 46th, 47th,

48th, and 49th Streets. 48th Street south of Northern Boulevard is an approximately 80-foot (wide street) that serves two-way traffic and has a shared bike lane in each direction.

While the streetscape of the study area's residential streets is generally limited to trees, lampposts, fire hydrants, parking signage, and utility poles, a number of additional elements can be found along the study area's main thoroughfares, including a LinkNYC kiosk, fire alarm boxes, mailboxes, trash receptacles, and a bus shelter. Street trees are most prevalent along the residential side streets north of 34th Avenue. Sidewalk conditions in the surrounding area vary by block. There are a number of auto related businesses in the study area and it is not uncommon for automobiles to be parked on the sidewalk (see Figure G-3).

Buildings

As shown in Figure G-4, the study area supports a variety of building types and land uses. Many buildings in the study area have a built FAR of 2.0 or less, with some buildings reaching upwards of 4.6 FAR (see Figure G-5). Land uses in the study area are primarily residential, accounting for approximately 82 percent of total tax lots, approximately 15 percent of total tax lot area, and approximately 34 percent of total building area. Residential uses are generally located to the north, east, and west of the rezoning area. Residential buildings are generally two or three-stories in height, have low lot coverage, and are set back from the street line with small front yards. Many residential buildings along 45th, 46th, and 47th Streets are semi-detached one- and two-family or multi-family buildings that share common driveways leading to garages or shared parking lots in the rear yard (see Figure G-4). Residential buildings along 48th Street are predominantly multi-family apartments set at or near the street line that do not possess driveways or parking on-site.

Commercial uses are also common in the study area and account for approximately 10 percent of total tax lots, approximately 71 percent of total tax lot area, and approximately 51 percent of total building area. Commercial uses are generally located to the west and south of the rezoning area. Commercial uses in the surrounding area are generally limited to local retail, big box retail, and automotive uses such as repair shops and dealerships. Local retail uses are generally located within buildings set at or near the street line on narrow lots. Big box retail and auto dealerships are set on large lots surrounded by parking. Commercial uses are generally located on a building's ground-floor with residential uses located above, or within stand-alone buildings. Big box retailers and auto dealerships generally range from 1-story to 2-stories in height (see Figure G-6).

Natural Features and Open Space

There are no notable natural features within the rezoning area and the topography of the area is generally flat. Dwyer Square is the only publicly accessible open space located within the study area. Dwyer Square is an approximately 0.07-acre open space owned and maintained by the New York City Department of Parks and Recreation (NYC Parks). The open space features a number of benches, trees, and a flagpole (see Figure G-7).

Visual Resources

Rezoning Area

No visual resources are located within the rezoning area. However, two visual resources can be seen from the rezoning area, including the Manhattan skyline and Dwyer Square. As shown in Figure G-7, glimpses



11.) View looking north on 48th Street between Broadway and Northern Boulevard



12.) View looking east on Northern Boulevard near 48th Street



13.) Looking north along 49th Street near Northern Boulevard



14.) Looking east along 34th Avenue between 45th and 46th Streets



15.) View looking west on Northern Boulevard near 46th Street under temporary construction conditions



16.) Looking south on 45th Street between 34th Avenue and Northern Boulevard



17.) Looking north along 47th Street between Broadway and 34th Avenue



18.) Looking south along 47th Street between Broadway and 34th Avenue



19.) Looking southeast at a 2-story shopping center on Northern Boulevard at 48th Street



20.) Looking southwest at an apartment building located on the corner of 34th Avenue and 45th Street



21.) Semi-detatched residential buildings with common drive-ways on 45th Street between Broadway and 34th Avenue



22.) Attached apartment buildings on 48th Street between Broadway and Northern Boulevard



23.) Looking north at a one-story car dealership on Northern Boulevard near 48th Street



24.) Looking west at a two-story building on 48th Street south of Northern Boulevard

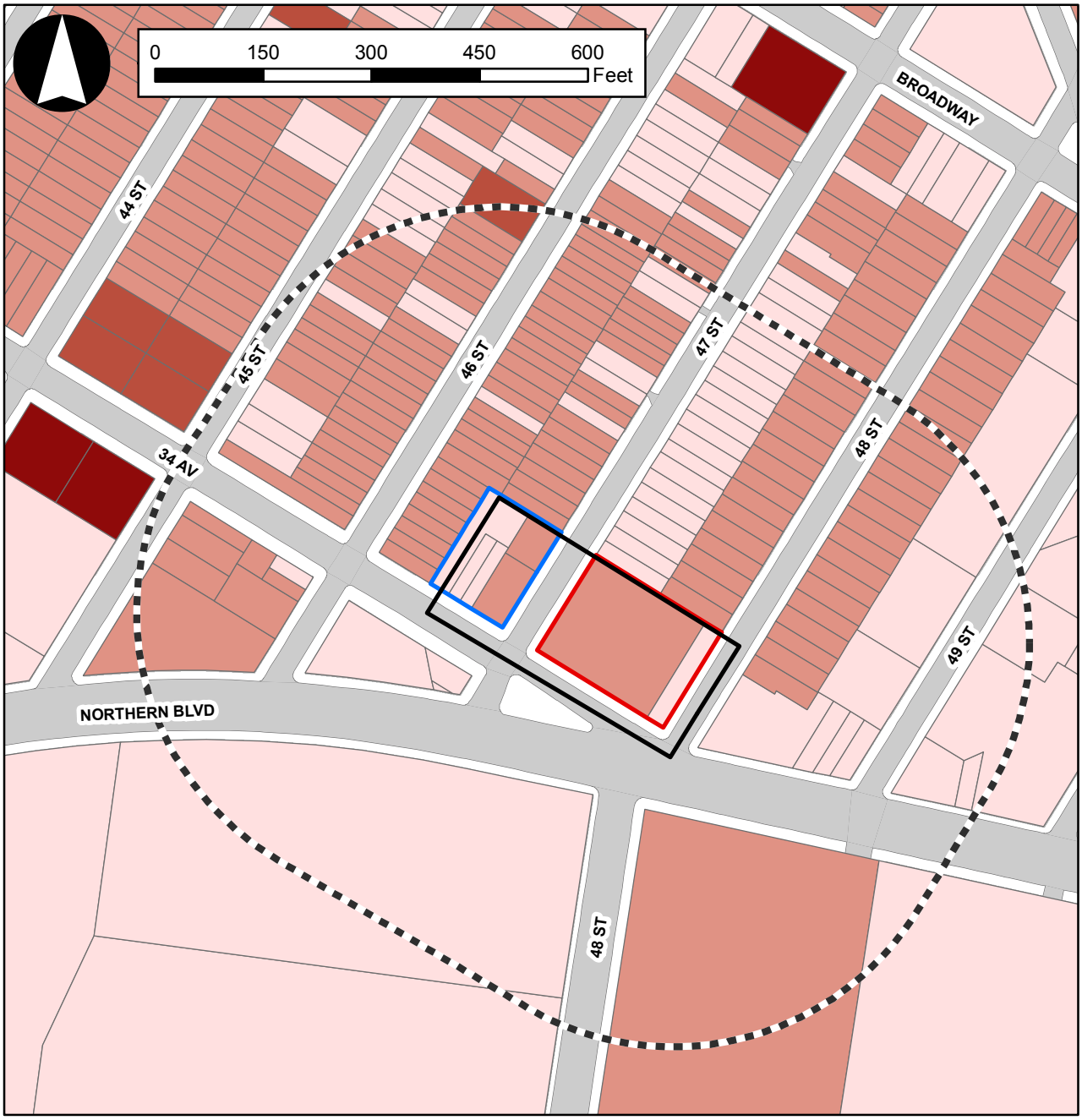


25.) Looking west at a four-story apartment building on 46th Street between Broadway and 34th Avenue



26.) Looking west at a one-story auto repair facility on 45th Street between 34th Avenue and Northern Boulevard

Figure G-5
Built FAR

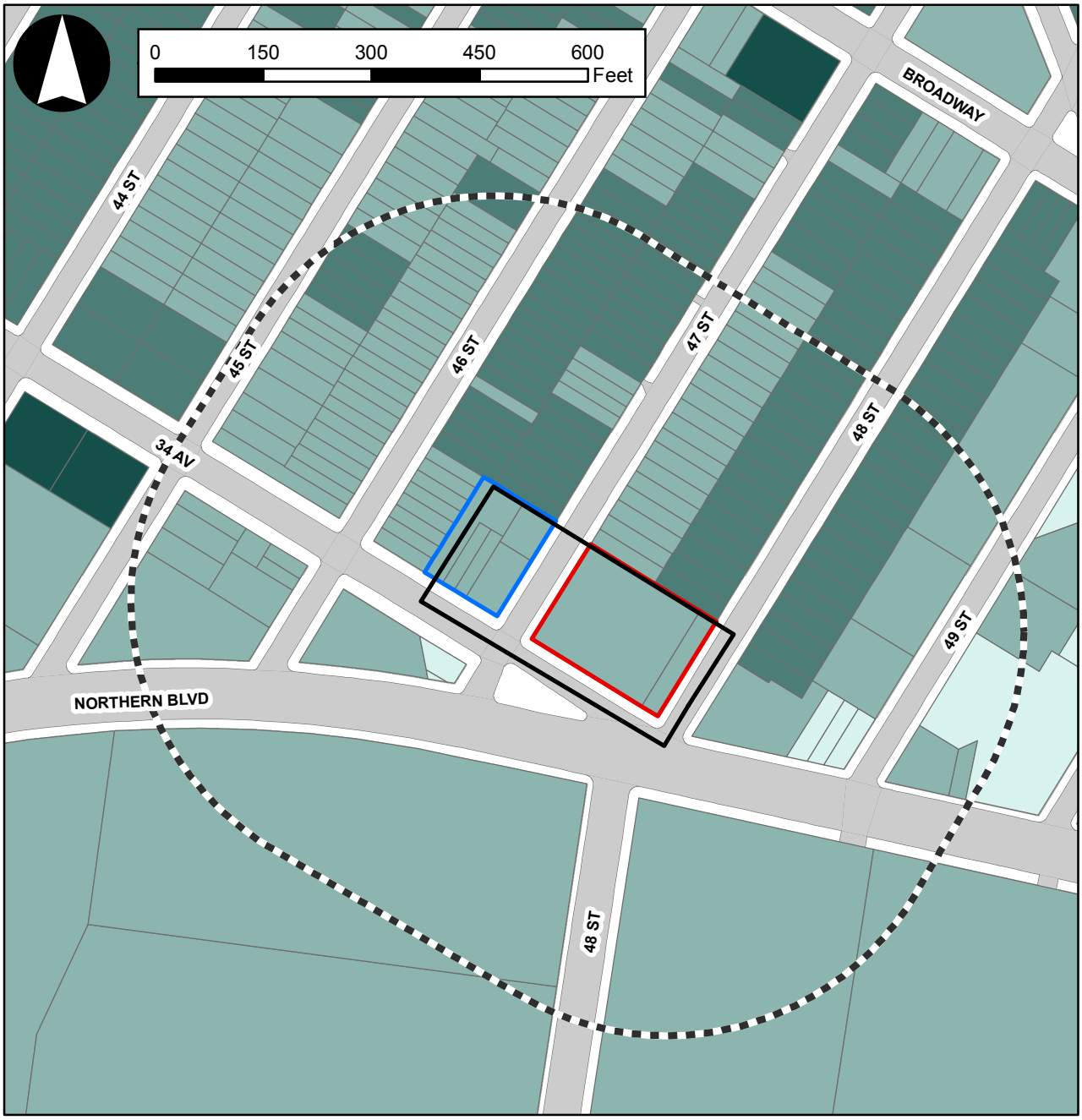


Legend

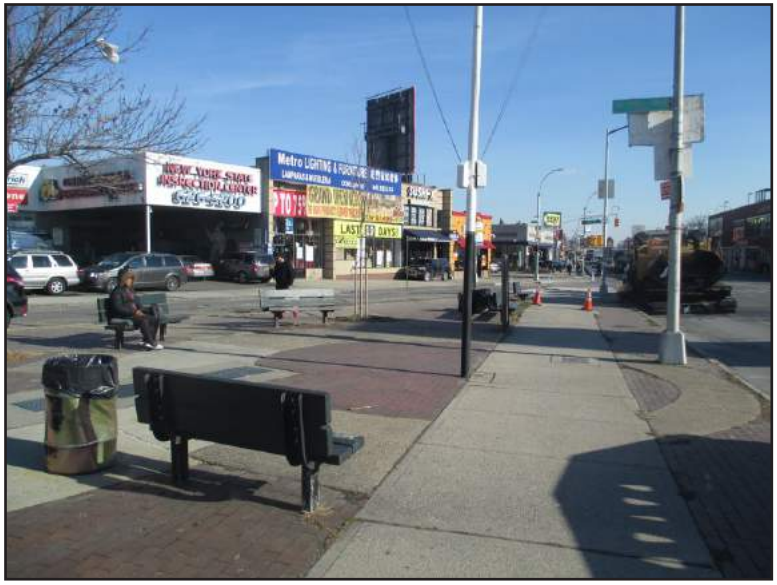
	Built FAR
Projected Development Site 1	< 1
Projected Development Site 2	1 - 2.5
Rezoning Area	2.5 - 4
Study Area (400-foot radius)	> 4

Source: DoITT, DCP

Figure G-6
Building Heights



Source: DoITT, DCP



27.) View of Dwyer Square looking east from 47th Street



28.) View of Dwyer Square looking west from the intersection of 34th Avenue and Northern Boulevard



29.) View of the Manhattan skyline looking west from Northern Boulevard near 48th Street

of the midtown Manhattan skyline are visible from the southeast corner of the rezoning area, which is partially obstructed by trees, streetlights, lampposts, and signage for businesses along Northern Boulevard. Dwyer Square, located across 34th Avenue, is also visible from most frontages of the rezoning area.

Study Area

As there are no significant natural or built resources located within the study area, no visual resources have been identified. The midtown Manhattan skyline is the only visual resource that can be seen from the study area. Views of the skyline are predominantly limited to locations along Northern Boulevard and are partially obstructed by trees, streetlights, lampposts, and business signage.

Future Without the Proposed Actions (No-Action Condition)

Urban Design

Rezoning Area

It is anticipated that in the future without the Proposed Actions, there would be no changes to the rezoning area and all existing buildings would remain. Therefore, in the future without the Proposed Actions, the existing buildings' footprints, heights, and total floor areas within the rezoning area would remain unchanged, compared to existing conditions.

Study Area

Street Pattern and Streetscape

In the No-Action condition, street patterns in the study area would not change. The existing interrupted grid pattern and street directions would remain the same. There are no known streetscape improvement plans in the study area.

Buildings

In the No-Action condition, buildings in the study area would not change. No new development projects anticipated to be completed by 2022 have been identified within the secondary study area.

Natural Features and Open Space

In the No-Action condition, there would be no changes to natural features or open space within the rezoning area.

Visual Resources

In the No-Action condition, no new visual resources would be introduced to the rezoning area or study area and views of existing visual resources from the rezoning area and study area would not be altered. Therefore, in the future without the Proposed Actions, view corridors and visual resources would remain similar to existing conditions.

Future With the Proposed Actions (With-Action Condition)

Urban Design

Rezoning Area

The Proposed Actions would change the development potential of sites within the rezoning area, and would allow for increases in the overall permitted density and changes to bulk regulations within the rezoning area, compared to existing/No-Action conditions.

As described in Attachment C, "Land Use, Zoning, and Public Policy," overall permitted densities would increase under R7X/C2-4 (MIH) zoning to 6.0, 2.0, and 5.0 for residential, commercial, and community facility uses, respectively. R7X is a contextual zoning district subject to Quality Housing bulk regulations. Per ZR 23-664, R7X (MIH) districts permit a maximum base height of 105 feet before a required setback of 10 feet on a wide street and 15 feet on a narrow street. A maximum building height of 145 feet is permitted.

Permitted densities would also increase for C8-1 districts rezoned to R6B/C2-4 (MIH). In contrast to C8-1, which allows maximum permitted FARs of 1.0 and 2.4 for commercial and community facility uses, respectively, R6B/C2-4 (MIH) zoning would allow maximum permitted FARs of 2.2, 2.0, and 2.0 for residential, commercial, and community facility uses, respectively. R6B is a contextual zoning district subject to Quality Housing bulk regulations. Per ZR 23-662, R6B (MIH) districts permit a maximum base height of 45 feet before a required setback of 10 feet on a wide street and 15 feet on a narrow street. A maximum building height of 55 feet is permitted.

Street Pattern and Streetscape

Construction of Projected Development Sites 1 and 2 would result in changes to vehicular access to each site from the adjacent streets. Parking for Projected Development Site 1 would be provided on-site and the entrance to the proposed parking garage would be located on 48th Street. At this time, it is expected that vehicles would enter the parking garage using a new curb cut located approximately 140 feet north of 34th Avenue and would exit the garage using a new curb cut on 47th Street. It is anticipated that parking for Projected Development Site 2 would be provided on-site and the garage entrance/exit would be located along the site's 47th Street frontage.

Sidewalk conditions within the rezoning area are expected to improve as a result of development facilitated by the Proposed Actions. Along 34th Avenue, Projected Development Site 1 would be set at or near the street line with the exception of a 10-foot setback near 47th Street where the auto repair shop is currently located. This would result in an expansion of the sidewalk by approximately 20 feet (30 feet wide in total). Streetscape conditions would be further improved by an overall reduction in the number of curb cuts (elimination of one curb cut at Projected Development Site 1 and two curb cuts at Projected Development Site 2) and the addition of new street trees in 25-foot intervals along the frontages of the projected developments, as required for new developments in New York City. Existing street trees throughout the rezoning area would remain.

Buildings

The Proposed Actions would facilitate the construction of two new buildings within the rezoning area. A description of each new building is provided below.

Projected Development Site 1 would have approximately 231,703 gsf of floor area (6.0 FAR) and would be comprised of a mix of uses including residential, local retail, community facility, and parking. The development would have a high lot coverage (62.2 percent) and a rectangular footprint set at or near the street line along 34th Avenue with the exception of a 10-foot setback near 47th Street. The building would be set back approximately 5 feet along the 47th Street frontage and 6 feet along the 48th Street frontage (see Figure G-8). Local retail space, community facility space, residential amenity space, and parking would be located on the ground-floor and each tenant would have direct access to the street. Local retail uses would have frontage along 34th Avenue while community facility uses would be located along 47th Street. The 48th Street frontage would be occupied by the residential lobby. Above the ground floor, the building would be constructed in a "U" shape surrounding an approximately 6,113 sf (0.14 acre) central courtyard. Residential uses would be located above on floors 2 through 14 and would have a typical floorplate size of approximately 19,029 sf. The residential floors on the northern portion of the site would rise to a maximum height of 45 feet before stepping up to a height of 65 feet and rising to a final height of 145 feet (plus a 32-foot mechanical penthouse)(14 stories) on the southern portion of the site along 34th Avenue (see Figures G-9a and G-9b). Figures G-10a through G-10d provide illustrative renderings of Projected Development Site 1.

The RWCDS assumes that Projected Development Site 2 would have approximately 47,398 gsf of floor area (2.2 FAR) and would be comprised of residential uses with retail and parking uses located on the ground-floor. The development would have a high lot coverage (70.0 percent) and a square footprint set at the street line on both the 34th Avenue and 47th Street frontages (see Figure G-11). Local retail space, residential amenity space, and some parking would be located on the ground-floor. Local retail uses are expected to have frontage along 47th Street and 34th Avenue. The residential lobby would be located on the 47th Street frontage. Residential uses would be located above on floors 2 through 4 and would have a typical floorplate size of approximately 17,924 sf. At a height of 45 feet the fourth floor of the building would set back 10 feet from 34th Avenue (a wide street) and 15 feet from 47th Street (a narrow street), before rising to a final height of 55 feet (plus a 15-foot mechanical penthouse)(4 stories). The tallest portion of the building would be located on the southern portion of the site along 34th Avenue (see Figure G-12).

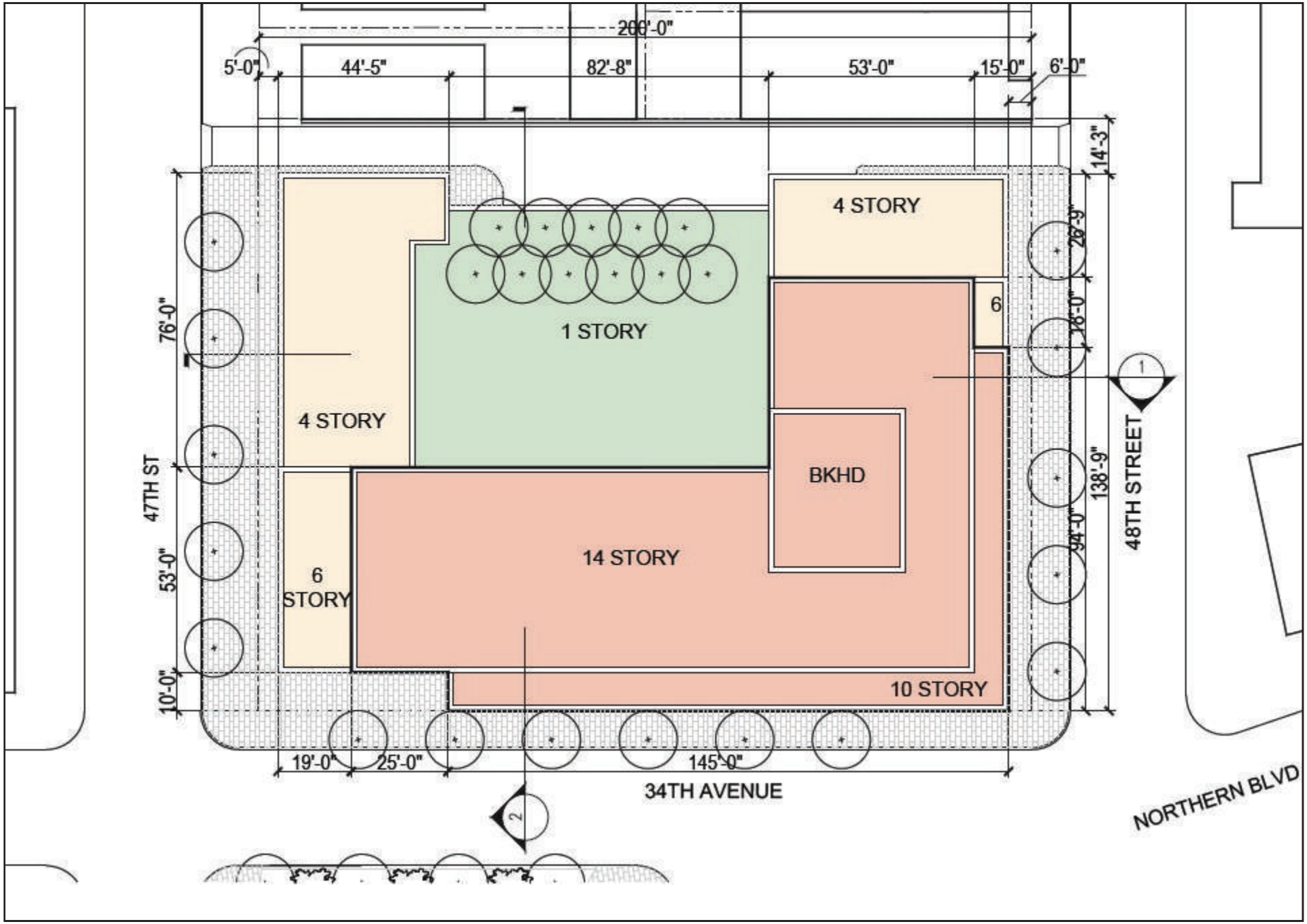
Natural Resources and Open Space

No notable natural features or topography changes would be introduced to the rezoning area in the future with the Proposed Actions.

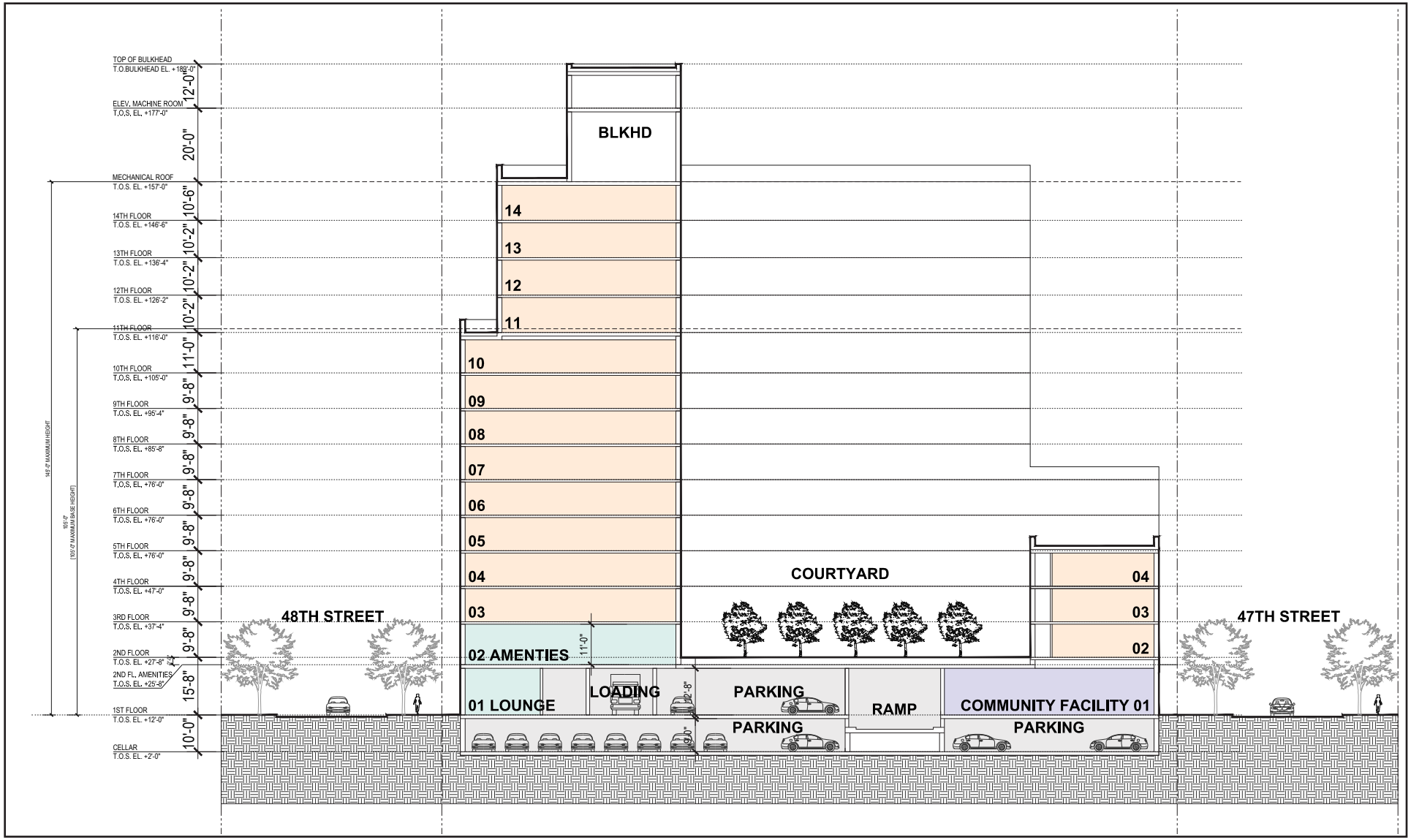
Study Area

Street Pattern and Streetscape

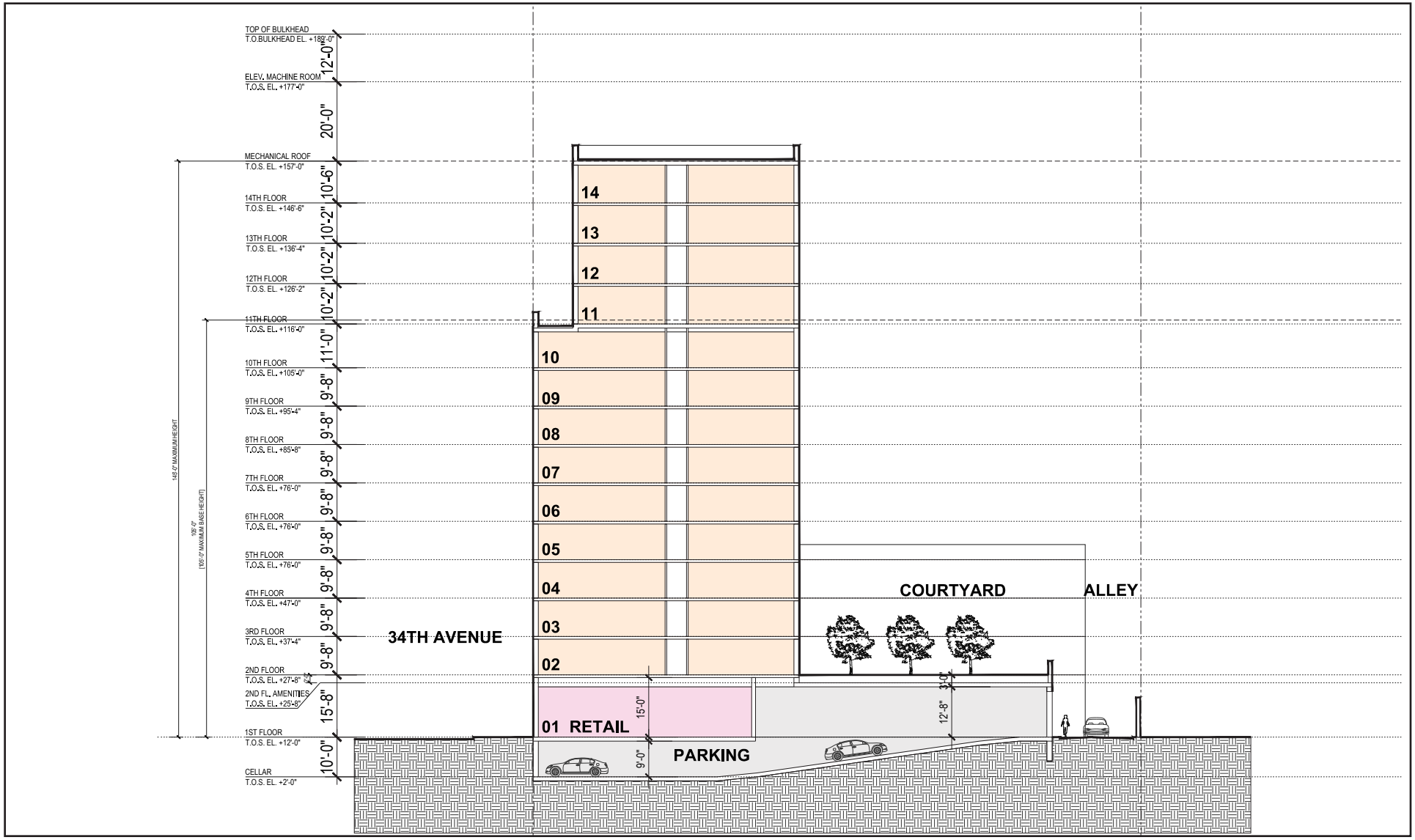
The Proposed Actions would not result in changes to street patterns in the study area. The existing interrupted grid pattern and street directions would remain the same. The proposed streetscape improvements on sidewalks and streets immediately adjacent to the rezoning area would be consistent with the streetscapes throughout the study area. In addition, streetscape improvements and ground-floor



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Figure G-9b
Zoning Section - Projected Development Site 1 Looking West



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Figure G-10a
Illustrative View of Projected Development Site 1 from Northern Boulevard



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Figure G-10b
Illustrative View of Projected Development Site 1 from 48th Street



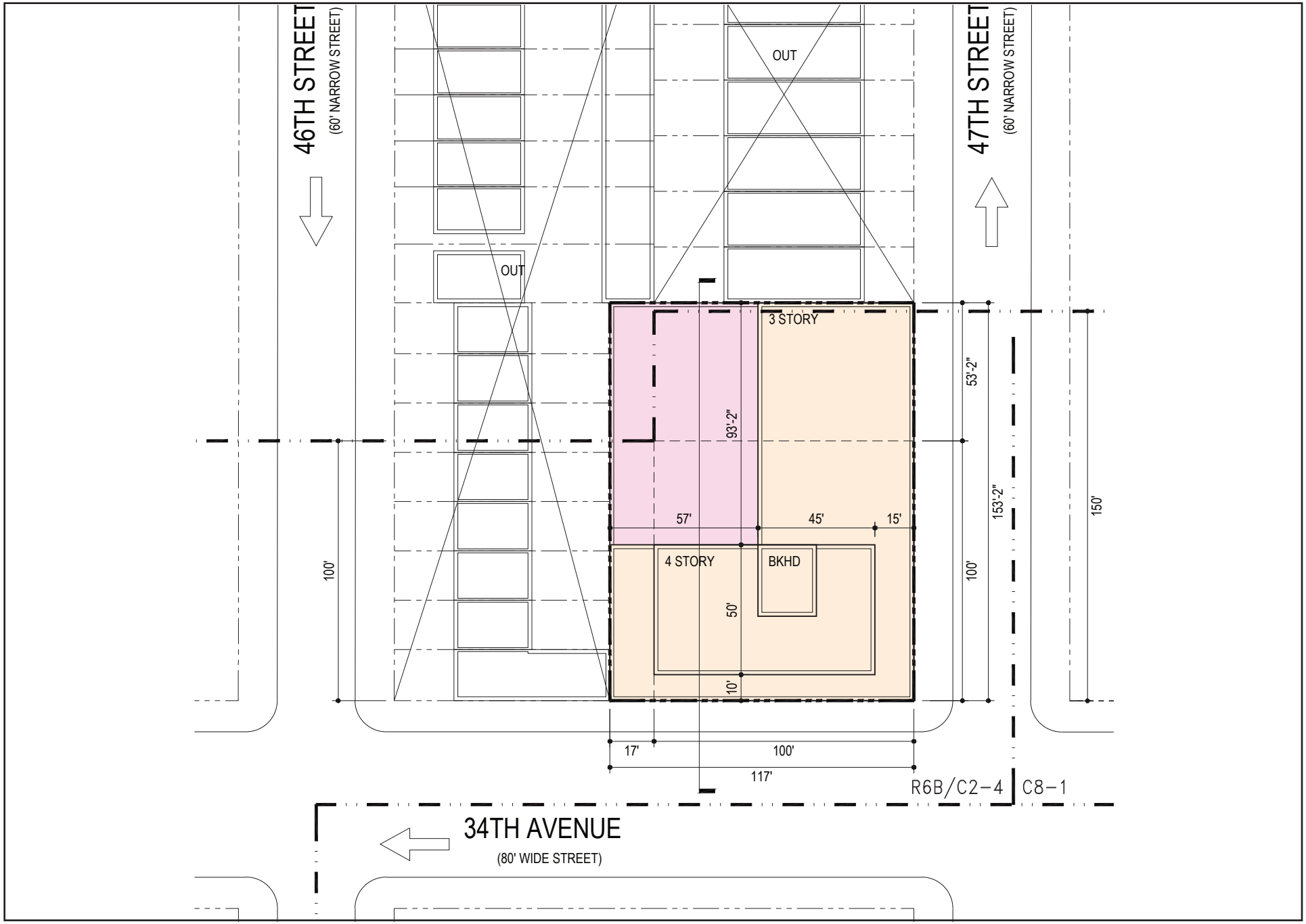
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Figure G-10c
Illustrative View of Projected Development Site 1 from 47th Street

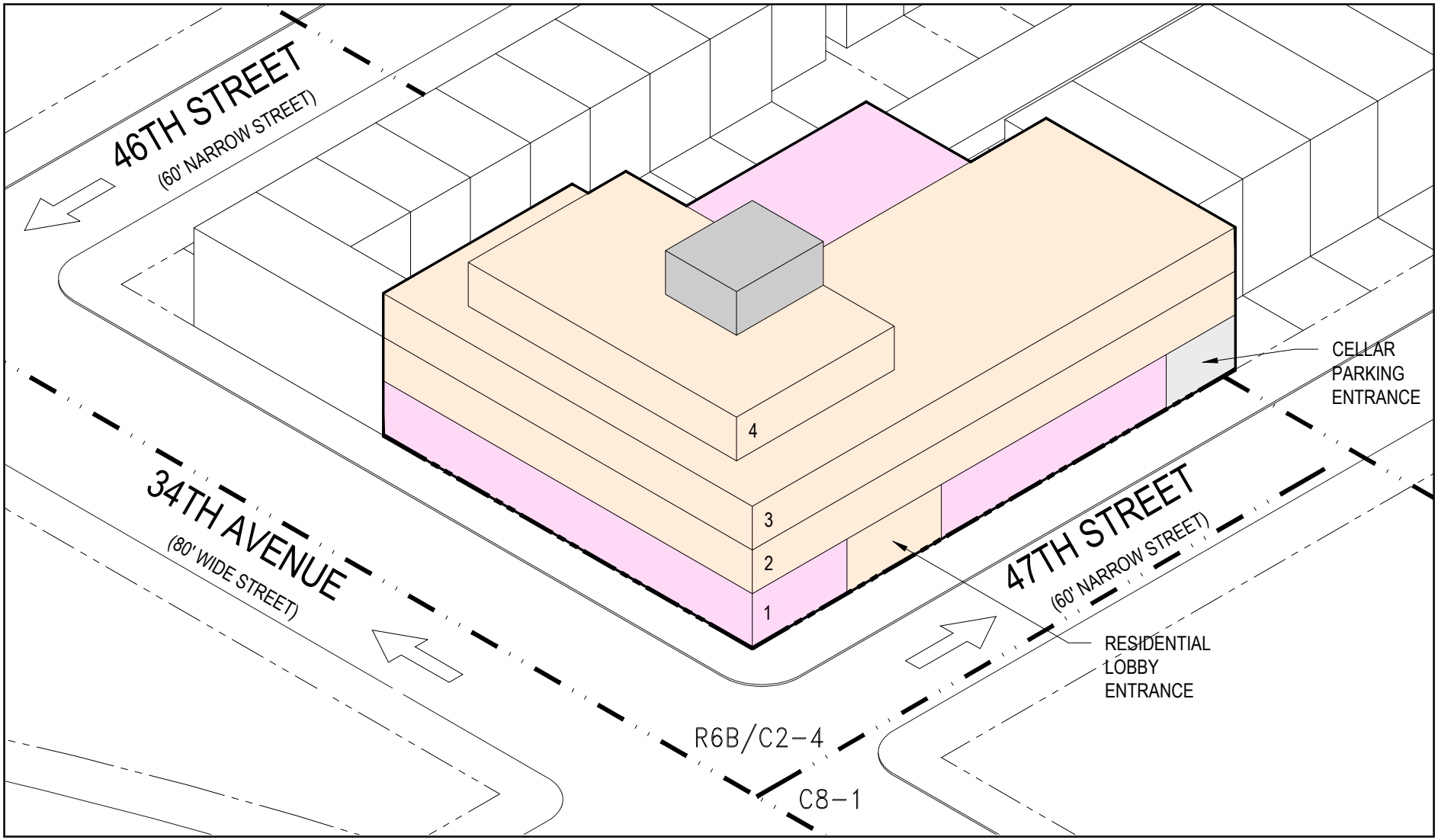


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Figure G-10d
Illustrative View of Projected Development Site 1 from 34th Avenue and 48th Street



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Figure G-12
Illustrative Massing of Projected Development Site 2

local retail and community facility uses would enhance the pedestrian realm, making the surrounding area more attractive and inviting.

Buildings

Projected Development Sites 1 and 2 would each incorporate a variety of building heights and tiered massings to provide a contextual transition from the rezoning area to the surrounding area. The shortest portions of each building would be located along the northern edge of each site, while the tallest portion of each building would be concentrated along the main thoroughfares of 34th Avenue and Northern Boulevard, helping to mark the transition from the low-rise residential character of the area to the north.

The ground-floor level of the projected developments would be built at or near the street line on all frontages, thereby introducing a consistent streetwall from the perspective of a pedestrian, which would be consistent with other buildings along 34th Avenue and in the surrounding area. Figures G-13a through G-13c provide illustrative comparisons of future conditions in the study area with and without the Proposed Actions.

Natural Features and Open Space

In the future without the Proposed Actions, there would be no changes to natural features or open space within the rezoning area.

Visual Resources

Rezoning Area

While the Proposed Actions would facilitate new development that would result in the demolition of existing buildings, projected developments would be high lot coverage and would not result in any new visual corridors or pedestrian connections. The Proposed Actions would also not eliminate any existing views from the rezoning area.

Study Area

The visual character of the study area would be altered by the projected developments, as building heights would be more noticeable in the surrounding area than that of existing buildings. The new buildings would be constructed within tax lot boundaries and would not result in encroachment of any existing visual corridors along public streets in the study area.

Existing views from within the study area of the midtown Manhattan skyline would not be affected by the Proposed Actions.

Assessment

Rezoning Area

The projected developments would activate closed-off sites with new ground-floor retail, knitting together the surrounding residential and commercial areas. The projected developments would be set at

No-Action/With-Action Comparison - Looking south from 47th Street



No-Action



With-Action

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No-Action/With-Action Comparison - Looking northeast from Northern Blvd.



No-Action



With-Action

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No-Action/With-Action Comparison - Looking northwest from Northern Boulevard



No-Action



With-Action

FOR ILLUSTRATIVE PURPOSES ONLY

or near the street line and would be programmed with active ground floor uses. This would create an attractive condition and add pedestrian activity and amenities to the sidewalks within the rezoning area.

The tallest portions of Projected Development Sites 1 and 2 would be located on the southern edge of each site along the main thoroughfares of 34th Avenue and Northern Boulevard, helping to mark the transition from the low-rise residential character of the area to the north. The projected developments would incorporate a variety of building heights and a tiered massing to provide a contextual transition from the rezoning area to the surrounding area. Overall, the Proposed Actions would not result in any negative effects on the urban design characteristics of the rezoning area and therefore would result in no significant adverse urban design and visual resources impacts within the rezoning area.

Study Area

The Proposed Actions would result in an improved streetscape consistent with the surrounding study area. The Proposed Actions would also align with a number of local and citywide goals, including the construction of new affordable housing, and the placement of higher density residential buildings in close proximity to public transit.

Overall, the Proposed Actions would facilitate the redevelopment of sites with new, more active land uses that would be consistent with uses in the surrounding area. In addition, the projected developments would not block any significant visual resources from pedestrian vantage points. As such, these changes are not anticipated to be significantly adverse as no view of important visual resources would be obstructed. Therefore, the Proposed Actions would not have any significant adverse impacts on visual resources.

ATTACHMENT H
NOISE

47-15 34th Avenue Rezoning EAS
Attachment H: Noise

I. INTRODUCTION

As discussed in Attachment B, "Supplemental Screening," the Proposed Actions would change traffic patterns and volumes in the general vicinity of the rezoning area. As local vehicular traffic is a major source of ambient noise in the area, this could lead to changes in the ambient noise levels. According to the 2014 *CEQR Technical Manual*, if existing noise passenger car equivalent (PCE) values are increased by 100 percent or more due to a proposed action (which is equivalent to an increase of 3.0 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 the Proposed Actions 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 *CEQR Technical Manual* guidelines and has two components:

1. A screening analysis to determine whether traffic generated by the Proposed Actions would have the potential to result in significant adverse noise impacts on existing sensitive receptors;

2. An analysis to determine the level of building attenuation necessary to ensure that interior noise levels for the projected developments 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. PRINCIPAL CONCLUSIONS

Noise from the increased traffic volumes generated by projected development would not cause significant adverse noise impacts as the relative increase in noise levels would fall below the applicable *CEQR Technical Manual* significant adverse impact threshold (3.0 dBA).

Based on the calculated With-Action L_{10} noise levels, the following composite window/wall attenuations were determined for future residential/community facility uses as well as commercial uses within the proposed rezoning area:

- A minimum of 31 dBA composite window/wall attenuation is required for residential/community facility uses on the southern frontage (34th Avenue) of Projected Development Site 1 (Block 723, Lots 1, 8), as well as a portion of Projected Development Site 1's eastern frontage (48th Street) and western frontage (47th Street) at a depth of 50 feet from 34th Avenue. The required composite window/wall attenuation for commercial uses would be 5 dBA less.

- No special attenuation measures beyond standard construction practices would be required for residential/community facility uses and commercial uses on any other frontages within the proposed rezoning area.

The composite window/wall noise attenuations described above would be required through the assignment of an (E) designation (E-509). With implementation of the attenuation levels outlined above and described in Table H-7, projected developments would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the Proposed Actions would not result in any significant adverse impacts related to noise attenuation.

III. 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 ten 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 three dBA. At three dBA, the change will be readily noticeable.

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 ten 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 one, ten, 50, 90, and x percent of the time, respectively.

Table H-1
Common Noise Levels

Sound Source	Noise Level (dBA)
Military jet, air raid siren	130
Amplified rock music	110
Jet takeoff at 500 meters	100
Freight train at 30 meters	95
Train horn at 30 meters	90
Heavy truck at 15 meters	80–90
Busy city street, loud shout	80
Busy traffic intersection	70–80
Highway traffic at 15 meters, train	70
Predominantly industrial area	60
Light car traffic at 15 meters, city or commercial areas, or residential areas close to industry	50–60
Background noise in an office	50
Suburban areas with medium-density transportation	40–50
Public library	40
Soft whisper at 5 meters	30
Threshold of hearing	0

Note: A ten dBA increase in level appears to double the loudness, and a ten dBA decrease halves the apparent loudness.
Source: Cowan, James P. *Handbook of Environmental Acoustics,* Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

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 project, 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 *CEQR Technical Manual* for vehicular traffic and is used to provide an indication of highest expected sound levels. The one-hour L_{10} is the noise descriptor used in the *CEQR Technical Manual* noise exposure guidelines for city environmental impact review classification. The L_{dn} is the noise descriptor used in the *HUD Noise Guidebook* and sets exterior noise standards for housing construction projects receiving federal funds. As the proposed project is not anticipated to include federal sources of funding in the future, only the required attenuation levels to meet CEQR noise guidelines are provided in this chapter.

IV. 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.

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]		$L_{10} \leq 55$ dBA	---------- Ldn ≤ 60 dBA ----------						
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA	---------- 60 < Ldn ≤ 65 dBA ----------	$65 < L_{10} \leq 80$ dBA	(1) 65 < Ldn ≤ 70 dBA, (II) 70 ≤ Ldn	$L_{10} > 80$ dBA	---------- Ldn ≤ 75 dBA ----------
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		$65 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10PM)	
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 not increase the ambient noise level by three dBA or more.
[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
[2] Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.
[3] One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

New York CEQR Technical Manual Noise Standards

The *CEQR Technical Manual* sets external noise exposure standards, which are shown in Table H-2 above. Noise exposure is classified into four categories based on the L_{10}: Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable. The *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.

The *CEQR Technical Manual* also defines attenuation requirements for buildings based on exterior noise levels (see Table H-3). 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 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
Noise level with proposed development	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Attenuation[A]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)^{B}$ dB(A)

Source: DEP; 2014 *CEQR Technical Manual*, Table 19-3.
Notes:
[A] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5.0 dB(A) less in each category. All the above categories require a closed window situation and, hence, an alternate means of ventilation.
[B] Required attenuation values increase by 1.0 dB(A) increments for L_{10} values greater than 80 dBA.

V. 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 *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 project (the No-Action condition) and with the proposed project (the With-Action condition). Vehicular traffic volumes are converted into noise PCE values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of 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 3.0 dBA.

For the purpose of this analysis, during the noise recording, vehicles were counted and classified. To calculate the 2022 No-Action PCE values , an annual background growth rate of 0.5 percent for years one through five was applied to the counted PCE values.[1] To calculate the 2022 With-Action PCE values, the number of incremental trips generated by the proposed project was added to the No-Action PCE values. To calculate the 2022 With-Action PCE values, a trip generation (refer to Attachment B, "Supplemental Screening") was prepared based on the incremental (net) change in dwelling units (231 DUs), local retail uses (an increase of approximately 14,652 gsf), community facility (medical office) uses (an increase of approximately 5,000 gsf), community facility (house of worship) uses (a loss of approximately 9,800 gsf), and light industrial uses (a loss of approximately 9,875 gsf). The trip generation was prepared using existing modal split data for census tracts in the vicinity of the rezoning area.[2] The total incremental vehicles generated per hour (in and out trips combined) by the proposed project were estimated at 26 for the AM peak hour, 57 for the midday peak hour, and 33 for the PM peak hour. For the purposes of trip assignment, it was conservatively assumed that all project-generated trips would be analyzed along all three thoroughfares: 34th Avenue, 48th Street, and 47th Street.

Building Attenuation Analysis Procedure

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

- Noise-sensitive receptor locations that have the greatest potential for being adversely affected by action-generated noise in the 2022 analysis 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 future street frontages of the proposed rezoning area;

- Existing noise levels were determined through field measurements of ambient noise adjacent to the proposed rezoning area;

[1] Calculation according to Table 16-4 in the *CEQR Technical Manual.*
[2] 2012-2016 American Community Survey (ACS) Means of Transportation to Work for Queens Census Tracts 153, 159, 161, 163.

- Future (2022) noise levels without the Proposed Actions were predicted using the PCE-based proportionality equation (per *CEQR Technical Manual* guidelines) for all locations where local traffic is the dominant source of noise;

- Future (2022) noise levels with the Proposed Actions were predicted using the PCE-based proportionality equation (per *CEQR Technical Manual* guidelines) based on the proposed project's trip generation estimates;

- Future (2022) noise levels with the Proposed Actions were compared with future noise levels without the Proposed Actions to determine, by applying *CEQR Technical Manual* impact criteria, whether the Proposed Actions have the potential to result in a significant adverse impact;

- Noise levels were determined at exterior building façades in the proposed rezoning area; and

- In compliance with CEQR requirements to determine an acceptable interior space noise environment, façade-based composite window/wall attenuation specifications for the proposed project were estimated based on future projected maximum exterior noise exposure at the proposed rezoning area; CEQR requirements are based on the maximum L_{10} values.

VI. EXISTING NOISE LEVELS

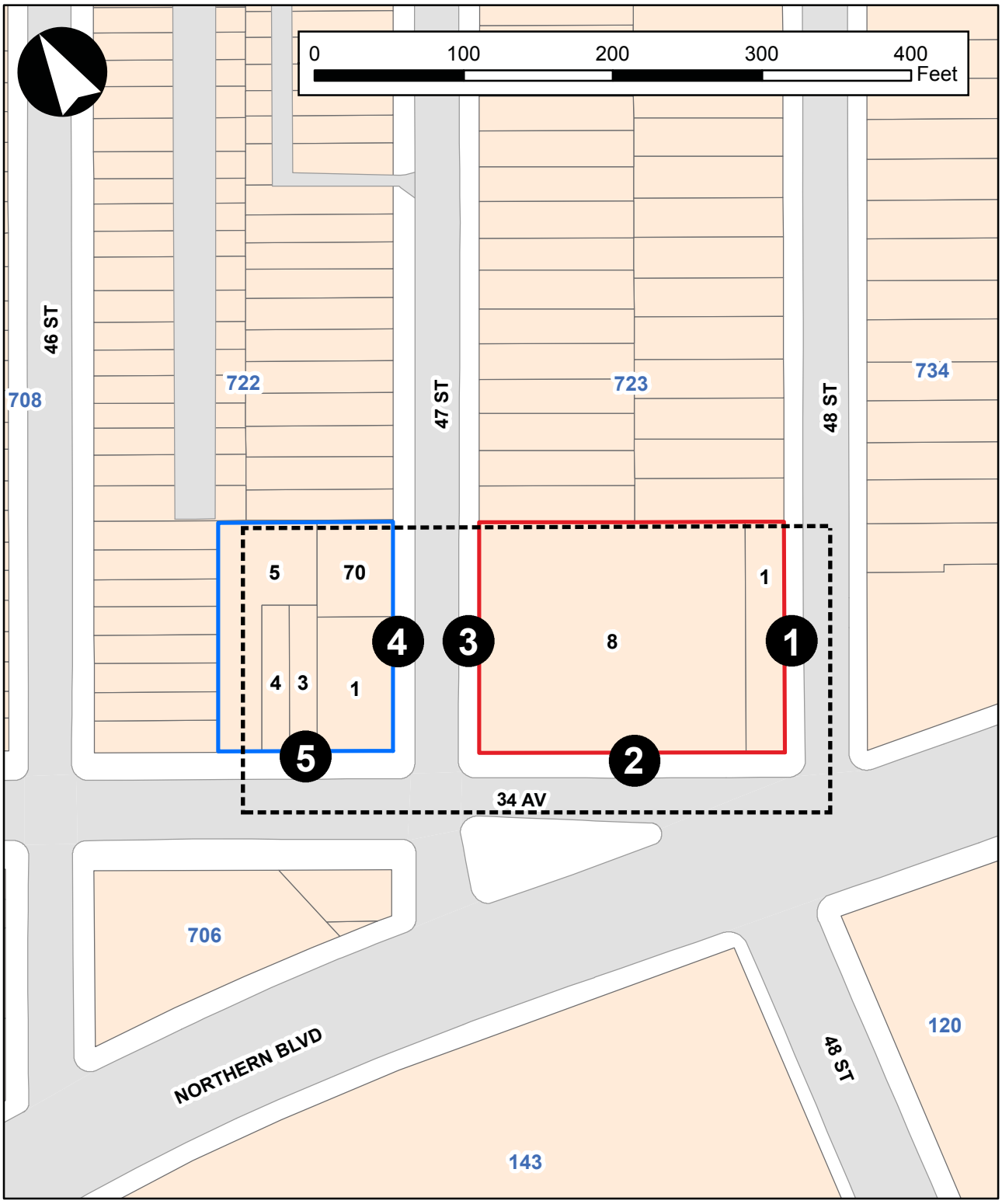
According to the RWCDS, two projected development sites have been identified within the proposed rezoning area and no other development is anticipated. Projected Development Site 1 (Block 723, Lots 1, 8) is located on the southernmost portion of the block with frontage on three streets, including approximately 153 feet along 47th Street to the west, approximately 200 feet along 34th Avenue to the south, and approximately 153 feet along 48th Street to the east (see Figure H-1). The approximately 30,600 sf development site contains four buildings, including a one-story retail building on Lot 1, a two-story retail building on Lot 8, a one-story auto repair shop on Lot 8, and a one-story storefront church on Lot 8.

As shown in Figure H-1, Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70) is located across 47th Street to the west of the applicant-owned development site. The approximately 17,901 sf site is occupied by a variety of building types including a one-story light industrial building on Lot 1, two-story attached homes on Lots 3, 4, 5, and a two-story light industrial building on Lot 70.

Noise Monitoring Locations

As traffic along 34th Avenue, Northern Boulevard, 48th Street, and 47th Street is the dominant source of noise in the vicinity of the proposed rezoning area, the noise receptor locations were selected based upon the assumption that the future developments within the proposed rezoning area would be built to their respective lot lines. As such, existing noise levels in the proposed rezoning area were measured at five locations along 34th Avenue, 48th Street, and 47th Street. These locations are shown in Figure H-1 described below:

Figure H-1
Noise Monitor Locations



Legend

- Projected Development Site 1
- Projected Development Site 2
- Proposed Rezoning Area
- Noise Monitor Locations
- Tax Lots
- 723 Tax Blocks

Source: DoITT, DCP

- Receptor Location 1 – Future eastern frontage of applicant-owned development site (48th Street); approximate midpoint of frontage (approximately 75 feet north of 34th Avenue/Northern Boulevard);

- Receptor Location 2 – Future southern frontage of applicant-owned development site (34th Avenue); approximate midpoint of frontage (approximately 100 feet west of 48th Street);

- Receptor Location 3 – Future western frontage of applicant-owned development site (47th Street); approximate midpoint of frontage (approximately 75 feet north of 34th Avenue);

- Receptor Location 4 – Future eastern frontage of proposed rezoning area on Block 722 (47th Street); approximate midpoint of frontage (approximately 75 feet north of 34th Avenue);

- Receptor Location 5 – future southern frontage of proposed rezoning area on Block 722 (34th Avenue); approximate midpoint of frontage (approximately 100 feet west of 47th Street).

At all receptor locations, 20-minute spot noise measurements were performed during the weekday AM (8:00 – 9:00 AM), midday (12:00 – 1:00 PM), and PM (5:00 – 6:00 PM) peak periods. The noise monitoring occurred on Wednesday, November 29, 2017 and Thursday, November 30, 2017. The weather was clear and in the mid-50s°F on November 29, 2017, with a wind speed average of eleven miles per hour, while it was mostly cloudy and in the high-40s°F on November 30, 2017, with a wind speed average of eight miles per hour. Additionally, vehicle classification counts were conducted during the 20-minute 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 three 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 (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 Noise Receptor Locations

Measured Noise Levels

Noise monitoring results for Receptor Locations 1 through 5 are summarized in Table H-4. Traffic was the dominant noise source and the values shown reflect the level of vehicular activity on the respective thoroughfares adjacent to the rezoning area. Vehicular traffic volumes were counted during the noise recording for each peak period and converted into hourly PCE values.[3]

As shown in Table H-4, the results of the monitoring indicated that noise levels are generally highest during the weekday AM and midday peak periods. The highest L_{10} noise levels were observed at Receptor Location 2, measuring 74.75 dBA in the weekday PM peak period. Existing L_{10} noise levels at Receptor Location 1 ranged from 66.46 dBA to 68.01 dBA, placing it in the "Marginally Acceptable" CEQR Noise Exposure category. Existing L_{10} noise levels at Receptor Location 2 ranged from 73.37 dBA to 74.75 dBA, placing it in the "Marginally Unacceptable (II)" CEQR Noise Exposure category. Existing L_{10} noise levels at Receptor Location 3 ranged from 63.68 dBA to 63.72 dBA, placing it in the "Acceptable" CEQR Noise Exposure category. Existing L_{10} noise levels at Receptor Location 4 ranged from 64.88 dBA to 67.07 dBA, placing it in the "Marginally Acceptable" CEQR Noise Exposure category. Existing L_{10} noise levels at Receptor Location 5 ranged from 65.56 dBA to 68.31 dBA, also placing it in the "Marginally Acceptable" CEQR Noise Exposure category.

Table H-4
Existing Noise Levels (dBA)

Receptor[1]	Measurement Location	Time	L_{eq}	L_1	L_{10}[2]	L_{50}	L_{90}	CEQR Noise Exposure Category[3]
1	48th Street (west side of street)	AM	65.41	73.74	67.86	63.86	58.65	Marginally Acceptable
		MD	65.63	75.30	**68.01**	62.96	58.08	
		PM	63.69	73.34	66.46	60.66	55.88	
2	34th Avenue (between 47th Street and 48th Street)	AM	71.26	79.30	73.56	69.94	66.37	Marginally Unacceptable (II)
		MD	70.17	79.11	73.37	67.53	61.46	
		PM	74.75	79.93	**74.75**	66.20	61.12	
3	47th Street (east side of street)	AM	61.21	68.37	63.68	60.04	56.14	Acceptable
		MD	61.95	71.50	**63.72**	59.76	55.84	
		PM	62.21	72.94	63.68	59.03	54.99	
4	47th Street (west side of street)	AM	64.15	72.84	**67.07**	61.77	59.40	Marginally Acceptable
		MD	62.99	73.21	64.88	57.10	53.32	
		PM	62.94	71.97	65.65	59.91	56.24	
5	34th Avenue (between 46th Street and 47th Street)	AM	67.52	75.80	**68.31**	65.11	62.25	Marginally Acceptable
		MD	63.22	71.77	65.56	61.65	57.84	
		PM	63.58	72.56	66.00	61.36	58.11	

Notes:
[1] Receptor locations shown in Figure H-1.
[2] The highest measured noise level at each receptor is indicated in **bold.**
[3] For consistency purposes, the CEQR noise exposure categories for existing, No-Action, and With-Action conditions are based on the residential noise exposure guidelines; reflects the worst-case peak hour noise levels.

[3] As vehicular traffic along 34th Avenue and Northern Boulevard was the dominant noise source at Receptor Location 2, vehicular traffic volumes along both thoroughfares were counted and converted into hourly PCE values in order to more accurately reflect the relatively high ambient noise levels at Receptor Location 2.

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

Mobile Source Noise Screening Analysis

In the 2022 future without the Proposed Actions (the No-Action condition), traffic patterns and volumes are expected to differ slightly from existing conditions. As vehicle noise emissions on adjacent roadways are the dominant source of noise at Receptor Locations 1 through 5, the change in traffic patterns is expected to affect the levels of ambient noise at those locations. Pursuant to CEQR guidelines, as no major developments are anticipated in the immediate vicinity (400-foot radius) of the proposed rezoning area by the 2022 analysis year, future No-Action traffic volumes were estimated by applying an annual background growth rate to the vehicle volumes counted during monitoring. Per Table 16-4 of the *CEQR Technical Manual,* a 0.5 percent annual background growth rate was applied to years one through five. Using the noise prediction methodology described in Section E above, future noise levels in the No-Action condition were calculated for the three analysis periods for the 2022 analysis year. Table H-5 shows the measured existing noise levels and calculated future No-Action condition noise levels at the receptor locations.

Table H-5
2022 No-Action Condition Noise Levels and PCE Values (dBA)

Noise Receptor Location[1]	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change in L_{eq}[2]	No-Action L_{10}[3]	CEQR Noise Exposure Category
1	AM	111.0	113.8	65.41	65.52	0.11	67.97	Marginally Acceptable
	MD	306.0	313.7	65.63	65.74	0.11	**68.12**	
	PM	192.0	196.8	63.69	63.80	0.11	66.57	
2	AM	6012.0	6,163.8	71.26	71.37	0.11	73.67	Marginally Unacceptable (II)
	MD	4776.0	4,896.6	70.17	70.28	0.11	73.48	
	PM	3819.0	3,915.4	74.75	74.86	0.11	**74.86**	
3	AM	69.0	70.7	61.21	61.32	0.11	63.79	Acceptable
	MD	105.0	107.7	61.95	62.06	0.11	**63.83**	
	PM	276.0	283.0	62.21	62.32	0.11	63.79	
4	AM	117.0	120.0	64.15	64.26	0.11	**67.18**	Marginally Acceptable
	MD	132.0	135.3	62.99	63.10	0.11	64.99	
	PM	183.0	187.6	62.94	63.05	0.11	65.76	
5	AM	612.0	627.5	67.52	67.63	0.11	**68.42**	Marginally Acceptable
	MD	723.0	741.3	63.22	63.33	0.11	65.67	
	PM	555.0	569.0	63.58	63.69	0.11	66.11	

[1] Receptor locations shown in Figure H-1.
[2] No-Action L_{eq} – Existing L_{eq}.
[3] The highest No-Action noise level at each receptor is indicated in **bold.**

Comparing future No-Action noise levels with existing noise levels, the increases in L_{eq} noise levels would be minimal, with all five receptor locations experiencing a 0.11 dBA increase from existing to future No-Action noise levels during all three analysis peak periods. According to *CEQR Technical Manual* guidelines, increases of less than 3.0 dBA would be barely perceptible. The projected No-Action L_{10} noise levels at Receptor Location 1 would range from 66.57 dBA to 68.12 dBA and would remain in the "Marginally Acceptable" CEQR Noise Exposure category, as under existing conditions; projected L_{10} noise levels at Receptor Location 2 would range from 73.48 dBA to 74.86 dBA and would remain in the "Marginally Unacceptable (II)" CEQR Noise Exposure category; projected L_{10} noise levels at Receptor Location 3 would range from 63.79 dBA to 63.83 dBA and would remain in the "Acceptable" CEQR Noise Exposure category; project L_{10} noise levels at Receptor Location 4 would range from 64.99 dBA to 67.18 dBA and would remain

in the "Marginally Acceptable" CEQR Noise Exposure category; and projected L_{10} noise levels at Receptor Location 5 would range from 65.67 dBA to 68.42 dBA and would also remain in the "Marginally Acceptable" CEQR Noise Exposure category.

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

In the future with the Proposed Actions (With-Action condition), projected development would result in a total of approximately 238 DUs (191 market-rate, 47 affordable), 20,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces.

Mobile Source Noise Screening Analysis

Using the methodology described in Section V, future noise levels in the With-Action condition were calculated for the three analysis periods for the 2022 analysis year, which are presented in Table H-6. As presented in the table, after accounting for additional traffic introduced by the Proposed Actions, the maximum projected L_{10} noise level in the With-Action condition would be 74.89 dBA during the PM weekday peak period at Receptor Location 2. Therefore, the highest noise level would remain in the "Marginally Unacceptable (II)" CEQR Noise Exposure category. The maximum projected L_{10} noise levels in the With-Action condition at Receptor Locations 1, 4, and 5 would be 69.12 dBA, 68.03 dBA, and 68.59 dBA, respectively, and thus, would each remain in the "Marginally Acceptable" CEQR Noise Exposure category, as under existing conditions. The maximum projected L_{10} noise levels in the With-Action condition at Receptor Location 3 would be 66.26 dBA, thus placing it in the "Marginally Acceptable" CEQR Noise Exposure category.

Table H-6
2022 No-Action and With-Action Condition Noise Levels and PCE Values (dBA)

Noise Receptor Location[1]	Time	No-Action PCEs	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change in L_{eq}[2]	With-Action L_{10}[3]	CEQR Noise Exposure Category
1	AM	113.8	139.8	65.52	66.41	0.89	68.86	Marginally Acceptable
	MD	313.7	394.7	65.74	66.74	1.00	**69.12**	
	PM	196.8	229.8	63.80	64.47	0.67	67.24	
2	AM	6,163.8	6,189.8	71.37	71.39	0.02	73.69	Marginally Unacceptable (II)
	MD	4,896.6	4,977.6	70.28	70.35	0.07	73.55	
	PM	3,915.4	3,948.4	74.86	74.89	0.04	**74.89**	
3	AM	70.7	96.7	61.32	62.68	1.36	65.15	Marginally Acceptable
	MD	107.7	188.7	62.06	64.49	2.44	**66.26**	
	PM	283.0	316.0	62.32	62.80	0.48	64.27	
4	AM	120.0	146.0	64.26	65.11	0.85	**68.03**	Marginally Acceptable
	MD	135.3	216.3	63.10	65.11	2.04	67.03	
	PM	187.6	220.6	63.05	63.75	0.70	66.46	
5	AM	627.5	653.5	67.63	67.80	0.18	**68.59**	Marginally Acceptable
	MD	741.3	822.3	63.33	63.78	0.45	66.12	
	PM	569.0	602.0	63.69	63.93	0.24	66.35	

[1] Receptor locations shown in Figure H-1.
[2] With-Action L_{eq} – No-Action L_{eq}.
[3] The highest With-Action noise level at each receptor is indicated in **bold.**

Furthermore, comparing the future With-Action noise levels with No-Action noise levels, increases in L_{eq} noise levels would vary at the five receptor locations, ranging from 0.02 to 2.44 dBA. However, increases

of these magnitudes would not be perceptible as they are less than 3.0 dBA, and based upon CEQR impact criteria would not be significant. As the noise levels at all receptor locations would experience changes of less than 3.0 dBA in all peak hours, the overall changes to noise levels as a result of the Proposed Actions would not result in any significant adverse impacts.

IX. NOISE ATTENUATION REQUIREMENTS

As shown in Table H-3, the *CEQR Technical Manual* has noise attenuation guidance for buildings based on exterior noise levels. Recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for retail and office uses, and are determined based on exterior L_{10} noise levels. Results of the building attenuation analysis are summarized in Table H-7 and Figure H-2.

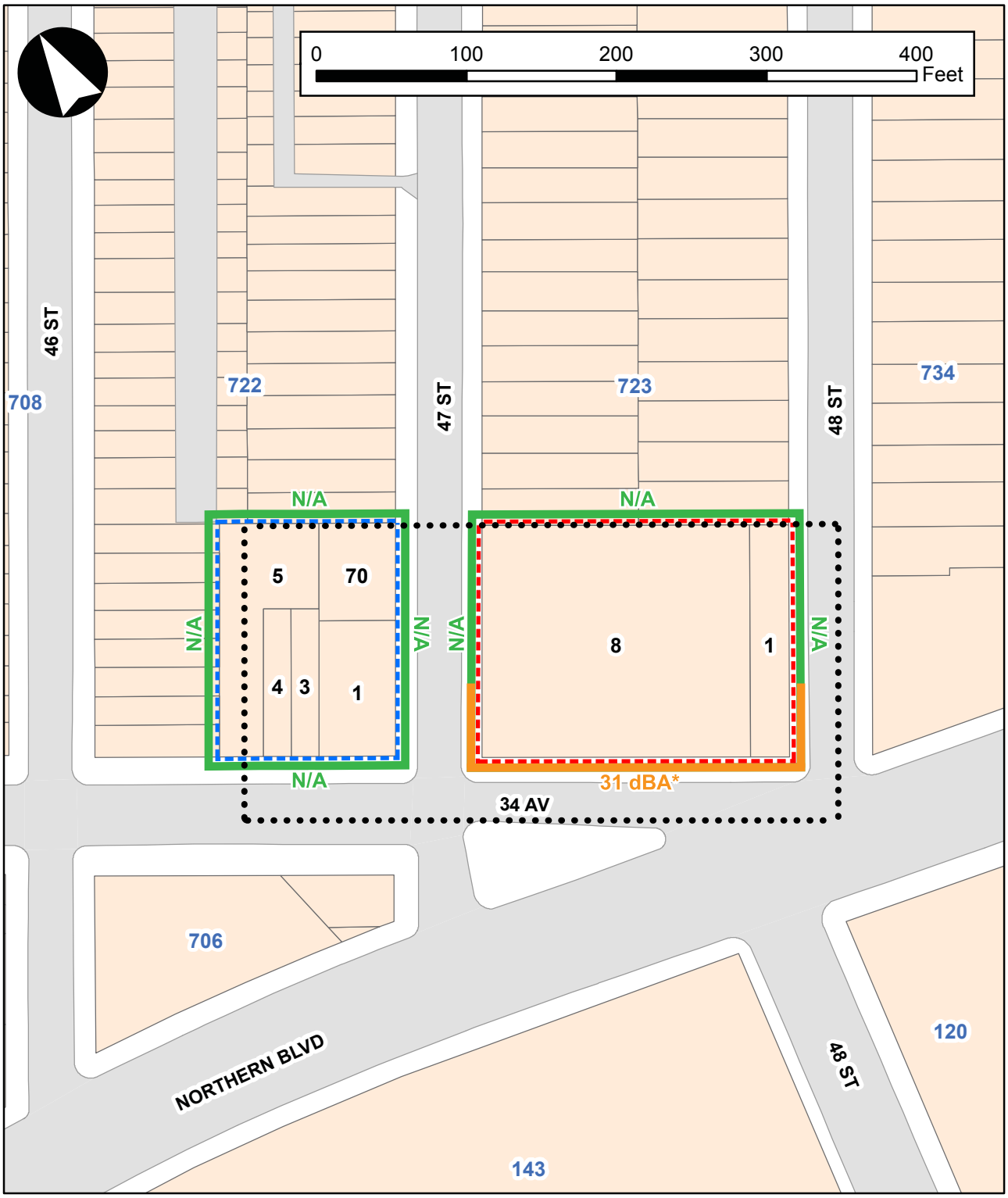
Table H-7
Required Attenuation Values for the Applicant-Owned Development Site and Proposed Rezoning Area under CEQR Criteria

Site	Facade	Associated Receptor Location[1]	Maximum With-Action L_{10} (in dBA)	CEQR Noise Exposure Category	CEQR Minimum Required Attenuation (in dBA)[2]
Projected Development Site 1 (Block 723, Lots 1, 8)	Northern (Broadway)	1	69.12	Marginally Acceptable	N/A
	Southern (34th Avenue)	2	74.89	Marginally Unacceptable (II)	31
	Eastern (48th Street > 50 ft from 34th Avenue)	1	69.12	Marginally Acceptable	N/A
	Eastern (48th Street ≤ 50 ft from 34th Avenue)	2	74.89	Marginally Unacceptable (II)	31
	Western (47th Street > 50 ft from 34th Avenue)	3	66.26	Marginally Acceptable	N/A
	Western (47th Street ≤ 50 ft from 34th Avenue)	2	74.89	Marginally Unacceptable (II)	31
Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, 70)	Northern (Broadway)	4	68.03	Marginally Acceptable	N/A
	Southern (34th Avenue)	5	68.59	Marginally Acceptable	N/A
	Eastern (47th Street)	4	68.03	Marginally Acceptable	N/A
	Western (48th Street)	5	68.59	Marginally Acceptable	N/A

Notes:
[1] Receptor locations shown in Figure H-1; necessary attenuation levels shown in Figure H-2.
[2] The above composite window-wall attenuation values are for residential/community facility uses. Commercial office and retail uses would be 5.0 dBA less in each category. All the above categories require a closed window situation and an alternate means of ventilation.

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 HVAC systems in various ratios of area. Since the proposed project would most likely be of masonry construction, which typically provides a high level of sound attenuation, the attenuation requirements for CEQR purposes apply primarily to the windows,

Figure H-2
Noise Attenuation Requirements



Legend

- Projected Development Site 1
- Projected Development Site 2
- Proposed Rezoning Area
- Attenuation Requirements for Residential/Community Facility Uses (Refer to Table H-7)

*Attenuation requirements for commercial and office use would be **5 dBA** less

Source: DoITT, DCP

but may also represent a composite window/wall attenuation value. 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. NYCDEP uses the OITC when identifying the required sound attenuation for a façade.

Based on predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, maximum With-Action L_{10} noise levels at Receptor Locations 1, 3, 4, and 5 would be less than 70 dBA and would remain in the "Marginally Acceptable" CEQR Noise Exposure category, and, as noted above, would not require special noise attenuation measures beyond standard construction practices for residential or community facility uses on any of Projected Development Site 2's eastern and southern frontages in order to achieve the required residential or community facility interior noise level of 45 dBA (refer to Figure H-2). Likewise, any future commercial uses would also not require any special noise attenuation measure beyond standard construction practices on Projected Development Site 1's eastern and western frontages or Projected Development Site 2's eastern and southern frontages in order to achieve the required commercial interior noise level of 50 dBA or lower. Additionally, as Projected Development Site 1's northern façade and Projected Development Site 2's northern and western facades face the interior of the block and would be partially shielded by existing adjacent buildings from traffic noise, noise attenuation measures above standard construction practices would not be required for residential/community facility or commercial uses at these frontages (refer to Figure H-2).

As maximum With-Action L_{10} noise levels at Receptor Location 2 would be 74.89 dBA, a minimum 31 dBA of composite window/wall attenuation would be required for residential/community facility uses on the southern (34th Avenue) frontage of Projected Development Site 1, as well as a portion of Projected Development Site 1's eastern frontage (48th Street) and western frontage (47th Street) at a depth of 50 feet from 34th Avenue, in order to achieve the required residential interior noise level of 45 dBA or lower (refer to Figure H-2). Future commercial uses on the southern frontage of Projected Development Site 1 would be required to provide an attenuation rating of 5 dBA less than the residential requirement.

(E) Designation

The composite window/wall noise attenuation described above would be required through the assignment of an (E) designation for noise to Projected Development Site 1 (Block 723, Lots 1, 8) in conjunction with the proposed rezoning. With the implementation of this composite window/wall noise attenuation, no significant adverse noise impacts would occur as a result of the Proposed Actions.

The text of the (E) designation (E-509) is as follows:

> **Block 723, Lots 1, 8 (Projected Development Site 1)**
>
> **To ensure an acceptable interior noise environment, building façades must provide minimum composite building façade attenuation as shown in Table H-7 of the *47-15 34th Avenue Rezoning EAS* in order to ensure an interior L_{10} noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial uses. To maintain a closed-window condition in these areas, an alternate means of ventilation that brings outside air into the buildings without degrading the acoustical performance of the building façade(s) must also be provided**.

With implementation of the attenuation levels outlined above and described in Table H-7, the proposed project would provide sufficient attenuation to achieve *CEQR Technical Manual* interior noise level guidelines of 45 dBA for residential/community facility uses and 50 dBA for commercial and office uses on the projected development sites. Therefore, the Proposed Actions and associated RWCDS would not result in any significant adverse noise impacts.

X. OTHER NOISE CONCERNS

Mechanical Equipment

The Proposed Actions would not include 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 or would be enclosed on the roof of the structures, and should be designed to meet all applicable noise regulations and requirements. Therefore, the Proposed Actions would not result in any significant increase in ambient noise levels in the vicinity of the applicant-owned development site, the proposed rezoning area, or the surrounding study area.

Train Noise

An initial train noise impact screening analysis could 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. Though the rezoning area is within approximately 1,000 feet of an existing rail line (an elevated portion of the Long Island Rail Road) and has a direct line of sight to a rail activity, it was determined through field research and noise monitoring that train noise was not the dominant noise source at both the proposed rezoning are and projected development sites. As such, no initial train noise impact screening analysis is warranted.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would be located within one mile of an existing flight path, or cause aircraft to fly through existing or new flight paths over or within one mile of a receptor. Since the rezoning area is not within one mile of an existing flight path, no initial aircraft noise impact screening analysis is warranted.

APPENDIX 1
LPC CORRESPONDENCE

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
Project: 34TH AVE EAS
Date received: 4/18/2018

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 32-78 48 Street, BBL: 4007230001
2) ADDRESS: 47-15 34 Avenue, BBL: 4007230008
3) ADDRESS: 32-86 47 Street, BBL: 4007220001
4) ADDRESS: 46-15 34 Avenue, BBL: 4007220003
5) ADDRESS: 46-11 34 Avenue, BBL: 4007220004
6) ADDRESS: 46-09 34 Avenue, BBL: 4007220005
7) ADDRESS: 32-78 47 Street, BBL: 4007220070



4/23/2018

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33275_FSO_DNP_04232018.doc

APPENDIX 2
PHASE I ESA EXECUTIVE SUMMARIES

Identify

Evaluate

PHASE I ENVIRONMENTAL SITE ASSESSMENT



Block 723
Lots 1, 3, 4, 5, 70, 106, 107, 109, 110, 112, and 211
Astoria, NY 11103

Prepared by:

ALC Environmental
121 West 27th Street, Suite 402
New York, NY 10001

Prepared for:

Philip Habib & Associates
102 Madison Avenue, 11th Floor
New York, NY 10016

January 11, 2018

Solve

Execute

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 located 32-78 and 32-86 47th Street, 46-09, 46-11, and 46-15 34th Avenue, and 32-83 – 32-93 46th Street, Astoria, NY 11103 (collectively referred to as the "Subject Property"). The Subject Property consists of eleven (11) adjacent lots comprising nine 2-story residential buildings, one 2-story commercial building and a split level 1-and 2-story mixed-use commercial and residential building. This assessment was limited to exterior observations, as no access was provided to the subject buildings. Below is a description of the subject lots:

Address	Block	Lot	Area	Description of Structures
32-86 47th Street	722	1	0.101 acres	One 2-story commercial building
46-15 34th Avenue	722	3	0.043 acres	One 2-story two-family home
46-11 34th Avenue	722	4	0.043 acres	One 2-story two-family home
46-09 34th Avenue	722	5	0.150 acres	One 2-story two-family home and garage
32-78 47th Street	722	70	0.074 acres	One split level 1-and 2-story mixed-use commercial and residential building.
32-93 46th Street	722	106	0.036 acres	One 2-story two-family home
32-91 46th Street	722	107	0.036 acres	One 2-story two-family home
32-89 46th Street	722	109	0.036 acres	One 2-story two-family home
32-87 46th Street	722	110	0.036 acres	One 2-story two-family home
32-83 46th Street	722	112	0.036 acres	One 2-story two-family home
32-85 46th Street	722	211	0.036 acres	One 2-story two-family home

The subject parcels span from 46th Street to 47th Street and are located between Broadway to the north to 34th Avenue to the south.

The objective of this assessment was to evaluate past and current environmental conditions at the Subject Property and to identify any potential areas of environmental concern or recognized environmental conditions that could affect the property's environmental integrity. This Phase I ESA was performed in general conformance with the scope and limitations of the ASTM International Practice E1527-13.

On December 14, 2017, ALC's Project Manager, Sanchita Basu Mallick, conducted a site reconnaissance at the Subject Property. The information included in this report was gathered from state and municipal offices and officials, the environmental database search, and from the site inspection.

The Subject Property is located in the Astoria section of the NYC Borough of Queens. The general vicinity of the property consists of multi-family residential buildings, a used automobile dealer, a church, an automobile repair and maintenance facility, and a barber shop. The current adjoining property uses do not appear to pose an environmental risk to the Subject Property. Below is a summary of the Phase I ESA findings:

	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	✓			5.1
Physical Setting Records	✓			6.2
HISTORICAL USE INFORMATION				
Subject Property	✓			5.4
Adjoining Properties	✓			5.4
Surrounding Areas	✓			5.4
GENERAL SITE SETTING				
Current Use(s) of the Subject Property	✓			3.4
Current Use(s) of Adjoining Properties	✓			3.6
Current or Past Use of the Surrounding Area	✓			5.4
Surficial & Subsurface Physical Conditions			✓	5.4
INTERIOR & EXTERIOR OBSERVATIONS				
Lead-Based Paint	✓			6.3.1
Asbestos Containing Materials	✓			6.3.2
Hazardous Substance & Petroleum Products	✓			6.3.3
Storage Tanks	✓			6.3.4
Solid Waste	✓			6.3.5

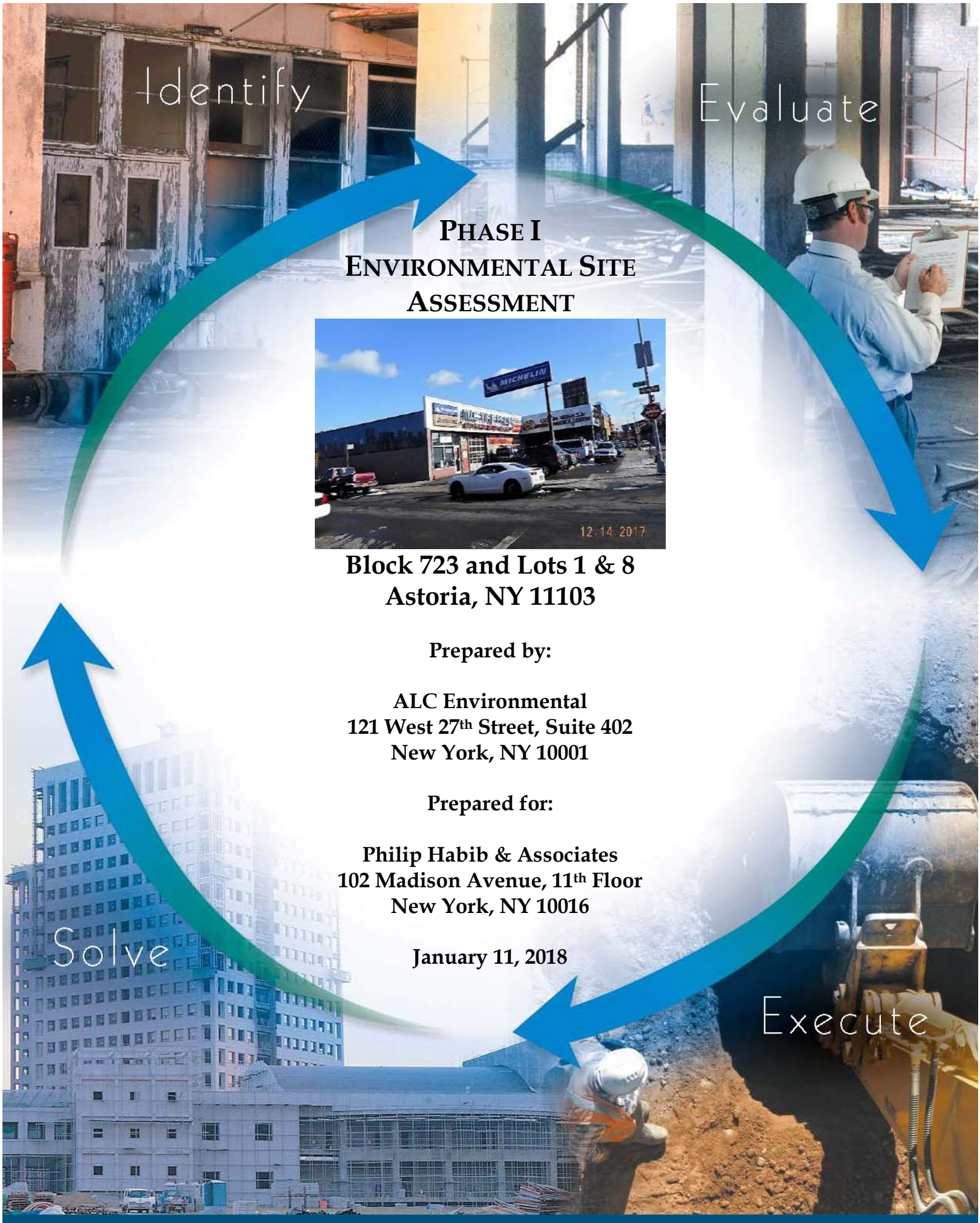
	Acceptable	Corrective Action	Further Investigation	Reference Section
INTERIOR & EXTERIOR OBSERVATIONS				
Odors	✓			**6.3.6**
Hazardous Waste	✓			**6.3.6**
Vapor Encroachment			✓	**6.3.7**
Polychlorinated Biphenyls (PCBs)	✓			**6.3.8**
Wastewater	✓			**6.3.9**
Wetlands	✓			**6.3.10**
Radon	✓			**6.3.11**
Air Emissions	✓			**6.3.12**
Stressed Vegetation	✓			**6.3.13**
Heating/Cooling	✓			**6.3.14**
Stains or Corrosion	✓			**6.3.15**
Drains & Sumps	✓			**6.3.16**
Mold	✓			**6.3.17**

Please note ALC was not provided access to the interior of subject buildings. Findings are based on exterior observations, and regulatory and historical records reviewed.

SUMMARY OF CURRENT RECOGNIZED ENVIRONMENTAL CONDITIONS

- As per the historical sources and municipal records reviewed, the existing Building 2 located within Lot 70 (addressed 32-78 47th Street) was occupied by an automobile repair facility from as early as 1975 until at least 2006. Typical environmental hazards associated with automobile maintenance service include the generation of hazardous wastes in the form of spent oils, solvents and auto fluids. Additionally, as per the historical city directories reviewed, a woodworking facility (Niros Woodworking Inc.) operated at this site in 1983. Typical wastes associated with woodworking activities include spent solvents and adhesives, and chemicals used to treat wood.

  There are no reported releases, or known soil and/or groundwater contamination associated with the Subject Property, however, there is a possibility that the subsurface media was impacted by improper disposal of hazardous waste associated with the former onsite automobile repairing and woodworking activities. Additionally, impacts associated with soil vapor intrusion from the former automobile maintenance operations cannot be ruled out. This constitutes a Recognized Environmental Condition (REC).



PHASE I ENVIRONMENTAL SITE ASSESSMENT

Block 723 and Lots 1 & 8
Astoria, NY 11103

Prepared by:

ALC Environmental
121 West 27th Street, Suite 402
New York, NY 10001

Prepared for:

Philip Habib & Associates
102 Madison Avenue, 11th Floor
New York, NY 10016

January 11, 2018

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 located at 32-78 48th Street, Astoria, NY 11103 and 47-15 34th Avenue, Astoria, NY 11103 (collectively referred to as the "Subject Property"). The Subject Property consists of two adjacent lots comprising three single-story commercial buildings and one 2-story multi-tenant commercial building. Below is a description of the subject lots:

Address	Block	Lot	Area	Description of Structures
32-78 48th Street	723	1	0.088 acres	One 2-unit single-story commercial building occupied by Kumon Math & Reading Center of Astoria, and Kumon Math & Reading Center of Astoria
47-15 34th Avenue	723	8	0.61 acres	Two single-story commercial buildings occupied by the New Day New Beginning Church and MIC Tire Pros; and one 2-story two-unit commercial building occupied by Sushi X and Metro Lighting & Furniture

The subject parcels span from 47th Street to 48th Street and are located between Broadway to the north to 34th Avenue to the south.

The objective of this assessment was to evaluate past and current environmental conditions at the Subject Property and to identify any potential areas of environmental concern or recognized environmental conditions that could affect the property's environmental integrity. This Phase I ESA was performed in general conformance with the scope and limitations of the ASTM International Practice E1527-13.

On December 14, 2017, ALC's Project Manager, Sanchita Basu Mallick, conducted a site reconnaissance at the Subject Property. The information included in this report was gathered from state and municipal offices and officials, the environmental database search, and from the site inspection.

The Subject Property is located in the Astoria section of the NYC Borough of Queens. The general vicinity of the property consists of multi-family residential buildings, a used automobile dealer, and a large multi-tenant commercial building comprised of retail stores, restaurants, and a supermarket. . The current adjoining property uses do not appear to pose an environmental risk to the Subject Property. Below is a summary of the Phase I ESA findings:

	Acceptable	Corrective Action	Further Investigation	Reference Section
USER PROVIDED INFORMATION				
Environmental Cleanup Liens	✓			**4.2**

	Acceptable	Corrective Action	Further Investigation	Reference Section
USER PROVIDED INFORMATION				
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	✓			5.1
Physical Setting Records	✓			6.2
HISTORICAL USE INFORMATION				
Subject Property			✓	5.4
Adjoining Properties			✓	5.4
Surrounding Areas	✓			5.4
GENERAL SITE SETTING				
Current Use(s) of the Subject Property			✓	3.4
Current Use(s) of Adjoining Properties	✓			3.6
Current or Past Use of the Surrounding Area	✓			5.4
Surficial & Subsurface Physical Conditions			✓	5.4
INTERIOR & EXTERIOR OBSERVATIONS				
Lead-Based Paint	✓			6.3.1
Asbestos Containing Materials	✓			6.3.2
Hazardous Substance & Petroleum Products	✓			6.3.3
Storage Tanks			✓	6.3.4
Solid Waste	✓			6.3.5
Odors	✓			6.3.6
Hazardous Waste	✓			6.3.6

	Acceptable	Corrective Action	Further Investigation	Reference Section
INTERIOR & EXTERIOR OBSERVATIONS				
Vapor Encroachment			✓	**6.3.7**
Polychlorinated Biphenyls (PCBs)	✓			**6.3.8**
Wastewater	✓			**6.3.9**
Wetlands	✓			**6.3.10**
Radon	✓			**6.3.11**
Air Emissions	✓			**6.312**
Stressed Vegetation	✓			**6.313**
Heating/Cooling	✓			**6.3.14**
Stains or Corrosion	✓			**6.3.15**
Drains & Sumps	✓			**6.3.16**
Mold	✓			**6.3.17**

SUMMARY OF CURRENT RECOGNIZED ENVIRONMENTAL CONDITIONS

- As per the historical sources reviewed (Fire Insurance maps and city directories), the existing single-story commercial building located on the northern section of Lot 8 previously operated as a commercial laundry facility ('Sunbeam Laundries Inc.'), between at least 1936 and 1970. It is unknown whether or not dry-cleaning activities were conducted at this former laundry facility. The 1936 Fire Insurance (Sanborn) map depicts a gasoline tank in the southeastern corner of the building. The status of this gasoline tank is unknown; however, the tank was not depicted in the subsequent 1948 Sanborn map. This building was later connected to the existing tire and automotive repair building occupied by MIC Tire Pros, and was converted into an automotive repair facility, which was depicted in the 1977 through 2006 Sanborn maps. At the present time, this building is occupied by the New Day New Beginning Church.

  Between at least 1945 and the early 1960s, the southern portion of Lot 8 was previously improved with gasoline filling stations (Republic Service Station Inc. and Sklenka Service Station) and automotive repair facilities. The most recent gasoline filling station and automotive repair facilities were demolished prior to 1961, and this section of the lot was redeveloped with existing single-story commercial building occupied by MIC Tire Pros, and the existing 2-story commercial building occupied by Sushi X and Metro Lighting & Furniture. Any potential impacts associated with the former gasoline service stations and automotive repair facilities were likely addressed during site redevelopment activities, however, the referenced single-story building has been occupied by automotive service facilities since its construction in the early1960s. As previously stated, the automotive service facility building was previously connected to the northern building discussed above.

There are no reported releases, or known soil and/or groundwater contamination associated with the Subject Property. However, based on the 1) likely generation of hazardous waste (i.e. spent oils, solvents, automobile fluids) associated with automobile repair activities, as well as the lack of hazardous waste disposal regulations prior to the 1970s; and 2) the unknown status of the gasoline tank depicted associated with the former commercial laundry facility, and lack of information pertaining to the exact types of operations conducted at this former laundry facility (i.e. dry cleaning), the historical laundry and automotive service activities associated with Lot 8 constitute a recognized environmental condition (REC).

APPENDIX 3
DEP CORRESPONDENCE

NYC Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

August 29, 2018

Matthew Katz
Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 34th Avenue and Northern Boulevard Rezoning
Block 723, Lots 1 and 8
Block 722, Lots 1, 3, 4, 5, 70, 106, 107, 109, 110, 112, and 211
CEQR # 19DCP003Q

Dear Mr. Katz:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the February 2018 Environmental Assessment Statement prepared by Philip Habib & Associates and the January 2018 Phase I Environmental Site Assessments (Phase I) prepared by ALC Environmental, on behalf of Ashley Young LLC and John Young Associates (applicant) for the above referenced project. It is our understanding that the applicant is seeking two discretionary actions from the New York City Department of City Planning (DCP) in order to facilitate the redevelopment of the applicant-owned project site at 47-15 34th Avenue (Block 723, Lots 1 and 8) in the Long Island City neighborhood Queens Community District 1. These actions include: (1) a zoning map amendment to rezone a C8-1 district to R7X/C2-4 and to extend an existing R6B zoning district eastward to 47th Street and map a C2-4 overlay; and (2) zoning text amendments to Appendix F of the New York City Zoning Resolution to map the rezoning area as a Mandatory Inclusionary Housing area. The proposed rezoning area consists of the southern portions of Block 723 and 722. Projected Development Site 1 is comprised of Block 723, Lots 1 and 8 and the remaining rezoning area is comprised of all or portions of Block 722, Lots 1, 3, 4, 5, 70, 106, 107, 109, 110, 112, and 211. In total, the proposed rezoning area comprises approximately 57,840 square feet (sf) of lot area bounded by 46th Street to the west, 34th Avenue to the south, 48th Street to the east, and, to the north, a line approximately 150 feet north of, and parallel to 34th Avenue. The Reasonable Worst-Case Development Scenario (RWCDS) identified two projected development sites for consideration in this environmental assessment. Under future RWCDS conditions at Projected Development Site 1, the applicant would demolish all existing structures on Lots 1 and 8 and construct a 14-story, approximately 231,703 gross square foot (gsf) mixed-use building consisting of approximately 201 dwelling units, 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and approximately 77 accessory parking spaces. A second

projected development site, Projected Development Site 2 (Block 722, Lots 1, 3, 4, 5, and 70) would be redeveloped pursuant to R6B/C2-4 zoning regulations. Projected Development Site 2 would be comprised of approximately 47,398 gsf with approximately 32,587 gsf, and 10,000 gsf of local retail. In total, projected development would result in approximately 236 dwelling units, 18,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 101 parking spaces.

Block 723, Lots 1 and 8

The January 2018 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including a commercial laundry facility, a tire repair facility, automotive repair facilities, a church, gasoline filling stations, auto parts sales facilities, auto body repairing facilities, an educational enrichment center, restaurants, a furniture and home furnishings store, residential buildings, a used car dealer, a supermarket, an office and warehouse, a steel manufacturing company, a shopping mall, a commercial garage, etc. Regulatory databases identified 13 spills within 1/8 mile; 11 underground storage tank sites and 20 aboveground storage tank sites within 1/4 mile; and 31 leaking storage tank sites and 2 brownfield sites within 1/2 mile of the project site.

Block 722, Lots 1, 3, 4, 5, 70, 106, 107, 109, 110, 112, and 211

The January 2018 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including residential buildings, houses, automobile repair facilities, a woodworking facility, a diner, a parking lot, an automobile showroom, travel companies, a food store, commercial tenants, a medical office, a home furnishing and custom window treatment designer, a religious institution, a used car dealer, a barber shop, dry cleaning facilities, a gasoline service station, an automotive transmission repair shop, etc. Regulatory databases identified 18 spills within 1/8 mile; 11 underground storage tank sites and 20 aboveground storage tank sites within 1/4 mile; and 27 leaking storage tank sites and 2 brownfield sites within 1/2 mile of the project site.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

Projected Development Site 1: Block 723, Lots 1 and 8 (Sites under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for Block 723, Lot 8. Since Projected Development Site 1 is also comprised of Block 723, Lot 1, DEP recommends that an (E) designation for hazardous materials should be also placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for Block 723, Lot 1. The (E) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Projected Development Site 2: Block 722, Lots 1, 3, 4, 5, and 70 (Sites not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for Block 722, Lot 70. Since Projected Development Site 2 is also comprised of Block 722, Lots 1, 3, 4, and 5, DEP recommends that an (E) designation for hazardous materials should be also placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for Block 722, Lots 1, 3, 4, and 5. The (E) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Future correspondence and submittals related to this project should include the following CEQR # **19DCP003Q**. If you have any questions, you may contact me at (718) 595-4358.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
M. Wimbish
R. Dobruskin – DCP
O. Abinader – DCP
M. Bertini – OER

Subject: RE: Industrial Source Permit Request - 34th Avenue Queens
From: "Cofield, Brenda" <BCofield@dep.nyc.gov>
Date: 4/19/2018 1:47 PM
To: Michael Curley <mcurley@phaeng.com>
CC: "Liang, Kit Y." <KLiang@dep.nyc.gov>, "Narvaez, Angel" <AngelN@dep.nyc.gov>

Hi Mike,

Below, please find my finding regarding the search you requested.

BLOCK	LOT	ADDRESS	BOILER INSTALLATION NUMBERS	EQUIPMENT
47-15 34th Avenue, Queens, NY 11103				
734	47	32-32 49 Street	**Cancelled** - CA28678 & CA204687	
735	19	32-49 49 Street	No Record	
143	1	Known to DEP as 49-00 Northern Boulevard	CA1036-95 - Expiration 4/17/19	4 Boilers - Registration I
		47-00 Northern Boulevard	CA0868-95 **Expired 4/3/16**	1 Boiler - Registration I
		Known to DEP as 47-02 Northern Boulevard	CB709505 **Expired 3/2/15**	1 Boiler - Registration I
705	1	45-01 Northeren Boulevard	CA122991 **Expired 11/20/01**	1 Boiler - Registration II
			Cancelled - CA021872	
705	24	34-08 46 Street	No Record	
722	70	32-78 47 Street	No Record	

DEP do not show any industrial permits issued at these addresses. As you can see, some of the addresses you have were filed with us under a different address; however, the block and lot numbers are the same.

Brenda

From: Michael Curley <mcurley@phaeng.com>
Sent: Tuesday, April 17, 2018 12:44 PM
To: Cofield, Brenda <BCofield@dep.nyc.gov>
Cc: Liang, Kit Y. <KLiang@dep.nyc.gov>; Narvaez, Angel <AngelN@dep.nyc.gov>
Subject: Industrial Source Permit Request - 34th Avenue Queens

Hi Brenda,

Sending along another permit request...our office is preparing the EAS for a proposed residential building at 47-15 34th Avenue in Queens (Block 723, Lots 1, 8). I've attached a list of all industrial/manufacturing buildings within 400 feet of the project site and their permit status as shown on the DEP CATS database. Could you please confirm whether any of these sites posses air contaminant permits, a certificate to operate permit, or a state facility permit?

Thank you in advance,

Mike

--
Michael Curley, AICP
Philip Habib & Associates
102 Madison Avenue, 11th Floor
New York, NY 10016
p. 212.929.5656 x236
f. 212.929.5605
www.phaeng.com

APPENDIX 4
MANDATORY INCLUSIONARY HOUSING AREA
ZONING MAP

47-15 34th Avenue
Community District 1, Queens
10/8/18
Zoning Map 9b

Matter underlined is new, to be added;
Matter ~~struck out~~ is to be deleted;
Matter within # # is defined in Section 12-10;
* * * indicates where unchanged text appears in the Zoning Resolution

* * *

APPENDIX F
Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas

* * *

Queens

* * *

Queens Community District 1

* * *

Map 6 - [date of adoption]



Mandatory Inclusionary Housing Area *(see Section 23-154(d)(3))*

Area 4 — [date of adoption] — MIH Program Option 2

* * *

APPENDIX 5
TECHNICAL MEMORANDUM 001

TECHNICAL MEMORANDUM 001
47-15 34TH AVENUE EAS
CEQR No. 19DCP003Q

April 2, 2019

I. INTRODUCTION

The applicant, Ashley Young LLC and John Young Associates, is seeking approval for two discretionary actions (collectively the "Proposed Actions") in order to facilitate the redevelopment of the applicant-owned site at 47-15 34th Avenue (Block 723, Lots 1, 8) in the Astoria neighborhood of Queens Community District 1. The Environmental Assessment Statement (EAS) for the Proposed Actions (CEQR No. 19DCP003Q) was accepted as complete and a Negative Declaration was issued on November 13, 2018 by the New York City Department of City Planning (DCP) acting on behalf of the City Planning Commission (CPC) as lead agency. A public hearing for the EAS was held on February 27, 2019.

Following the publication of the EAS, modifications to the proposed zoning map amendment (180530ZMQ) have been identified as under consideration by the CPC (the "Potential CPC Modifications"). These modifications are detailed in Section II below.

This technical memorandum examines whether the Potential CPC Modifications would result in any new or different significant adverse environmental impacts not already identified in the 2018 EAS. As set forth below, this technical memorandum concludes that the Proposed Actions with the Potential CPC Modifications would not result in any new or different significant adverse impacts not already identified in the EAS.

II. DESCRIPTION OF THE POTENTIAL CPC MODIFICATIONS

The Potential CPC Modifications consist of changes to the proposed zoning map amendment and include the creation of an R7D/C2-4 district along 34th Avenue and Northern Boulevard (Block 723, p/o Lots 1, 8). Under the current Proposed Actions, an R7X/C2-4 district would be mapped to a depth of 150 feet from 34th Avenue with the easternmost boundary located on the centerline of 48th Street and the westernmost boundary located on the centerline of 47th Street.

In response to the community's concerns about height and density at the project site, the CPC was asked to reconsider the proposed rezoning for this property. Under the Potential CPC Modifications, the currently proposed R7X/C2-4 zoning district would be replaced with R7D/C2-4. This would lower the maximum permitted building height and density of the property in response to the community's concerns while allowing the applicant to develop a similar mix of land uses as contemplated under the Proposed Actions.

III. ANALYSIS FRAMEWORK

Pursuant to the Reasonable Worst-Case Development Scenario (RWCDS) analyzed for the Proposed Actions, the 2018 EAS did not identify any significant adverse impacts.

Under the Proposed Actions, a portion of 34th Avenue (Block 723) would be rezoned from C8-1 to R7D/C2-4. Under the Potential CPC Modifications, Lots 1 and 8, located on the 34th Avenue blockfront between 47th and 48th Streets would instead be mapped with an R7D/C2-4 district at a depth of 150 feet, which would permit residential uses at a maximum FAR of 5.6, community facility uses at a maximum FAR of 4.2, and commercial uses at a maximum FAR of 2.0 (see Table 1).

Table 1
Comparison of Existing (C8-1), Proposed (R7X/C2-4), and Potential (R7D/C2-4) Zoning Districts

	EXISTING	CURRENTLY PROPOSED IN EAS	POTENTIAL CPC MODIFICATIONS
	C8-1	R7X/C2-4 (MIH)	R7D/C2-4 (MIH)
Use Groups:	4-14, 16	1-9, 14	1-9, 14
Max. Floor Area Ratio (FAR):			
- Residential	N/A (not permitted)	6.0	5.6
- Community Facility	2.4	5.0	4.2
- Commercial	1.0	2.0	2.0
- Manufacturing	N/A (not permitted)	N/A (not permitted)	N/A (not permitted)
Building Height:			
- Streetwall max. height	30'	105'	95'
- Initial setback distance	20' narrow street, 15' wide street	15' narrow street, 10' wide street	15' narrow street, 10' wide street
- Max. building height	Sky exposure plane ratio of 1:1	145'	115'
Required Accessory Parking:			
- Residential	N/A	50% of DUs above 80% AMI[1]	50% of DUs above 80% AMI[1]
- General Comm. Facility	Varies by use	Varies by use	Varies by use
- General Retail or Service	Varies by use	Varies by use	Varies by use
- Manufacturing	N/A	N/A	N/A

Source: *New York City Zoning Resolution*
Note: [1] No parking required for housing meeting MIH standards in the Transit Zone; the rezoning area is in the Transit Zone.

In the 2018 EAS, the area that would be rezoned to R7D/C2-4 under the Potential CPC Modifications is identified as Projected Development Site 1. The site has a total lot area of approximately 30,600 sf and is applicant-owned. As noted above, the R7D/C2-4 district proposed as part of the Potential CPC Modifications would allow the applicant to develop a similar mix of land uses as contemplated under the Proposed Actions. Similar to the currently proposed development, it is expected that under the Potential CPC Modifications Projected Development Site 1 would be built to the maximum floor area permitted under R7D/C2-4 zoning (5.6 FAR).

For environmental analysis purposes, this Technical Memorandum will compare the program analyzed for Projected Development Site 1 in the 2018 EAS with future conditions under the Potential CPC Modifications. Table 2 provides a comparison of the development program currently proposed in the EAS and the development program under the Potential CPC Modifications.

As shown in Table 2, under the Potential CPC Modifications, Projected Development Site 1 would include a total of approximately 185 DUs (148 market-rate, 37 affordable), 8,990 gsf of local retail uses, 5,000 gsf of community facility uses, and 77 parking spaces. Compared to the currently proposed development program analyzed in the 2018 EAS, the Potential CPC Modifications would result in a reduction of approximately 16 DUs (13 market-rate, 3 affordable). There would be no change to the amount of commercial or community facility floor area provided as a result of the Potential CPC Modifications.

Table 2
Comparison of Projected Development Site 1 – Proposed in EAS vs. Potential CPC Modifications

Use	CURRENTLY PROPOSED IN EAS	POTENTIAL CPC MODIFICATIONS	NET DIFFERENCE
Residential (Total)	201 DUs (185,566 gsf)	185 DUs (171,038 gsf)	**-16 DUs (14,528 gsf)**
Market-Rate[1]	161 DUs	148 DUs	**-13 DUs**
Affordable[1]	40 DUs	37 DUs	**-3 DUs**
Commercial	8,990 gsf	8,990 gsf	**No change**
Community Facility	5,000 gsf	5,000 gsf	**No change**
Parking	77 spaces	77 spaces	**No change**
Population/Employment[2]	**CURRENTLY PROPOSED IN EAS**	**POTENTIAL CPC MODIFICATIONS**	**NET DIFFERENCE**
Residents	470 residents	433 residents	**-37 residents**
Workers	50 workers	49 workers	**-1 worker**

Notes: [1] The number of dwelling units reflects an average unit size of 925 sf
[2] Assumes 2.34 persons per DU (based on 2010 U.S. Census data for Queens Community District 1), 1 worker per 25 DUs, 3 workers per 1,000 sf of commercial, and 3 workers per 1,000 sf of community facility.

Table 2 also provides an estimate of the number of residents and workers anticipated on Projected Development Site 1. As shown in the table, under the Potential CPC Modifications, Projected Development Site 1 would generate a total of approximately 433 residents and 49 workers, a reduction of approximately 37 residents and 1 worker compared to the Potential CPC Modifications.

As the currently proposed development program is greater than the development program under the Potential CPC Modifications, the RWCDS analyzed in the 2018 EAS is a more conservative basis for the density related impact categories (e.g., community facilities, open space, and transportation). For site specific impacts related to hazardous materials and noise, the same (E) designation requirements identified for Projected Development Site 1 would be warranted under the Potential CPC Modifications to eliminate potential impacts associated with those issues if the site were to be redeveloped for residential use. For technical analyses reliant on building bulk and height, such as shadows and urban design and visual resources, the RWCDS analyzed in the EAS would have higher maximum building and streetwall heights and would represent the worst case scenario. There would be no other observable changes to the pedestrian experience, compared to the RWCDS analyzed in the EAS, as the Potential CPC Modifications would not result in changes to required setbacks at street level, the ground-floor plan, or the location of curb cuts or building entrances. Therefore, the assessment focuses on the technical areas with the greatest potential for new impacts as a result of the Potential CPC Modifications.

IV. ASSESSMENT OF POTENTIAL IMPACTS

As described below, the Potential CPC Modifications at Projected Development Site 1 would not alter the conclusions for the environmental areas examined in the 2018 EAS. The Potential CPC Modifications would not result in any significant adverse impacts beyond those disclosed in the EAS. Nor have any circumstances changed since publication of the EAS, such as proposed background developments, that would create the potential for additional significant impacts as a result of Proposed Actions that were not previously identified.

Air Quality

The 2018 EAS concluded that no significant adverse air quality impacts would occur as a result of new development on Projected Development Site 1. As the Potential CPC Modifications would result in a decrease in building height and floor area, compared to the building analyzed in the EAS, the RWCDS

program analyzed in the EAS would represent the worst case scenario for the mobile source air quality assessment.

As the Potential CPC Modifications would result in a decrease in building height, a revised stationary source screening has been prepared. The Potential CPC Modifications would result in a building with an overall height of approximately 115 feet and floor area of approximately 185,028 gsf. As shown in Table 3 and Figure 1, the height and floor area of Projected Development Site 1 under the Potential CPC Modifications was used to determine the distance at which an impact to an existing receptor building may occur. As shown in the table, if any building of similar or greater height were identified within approximately 195 feet of Projected Development Site 1, further detailed analysis would be required. No existing buildings of similar or greater height were identified within a 400-foot radius of Projected Development Site 1. Furthermore, of the developments expected to be completed in the surrounding area by 2022, none were found to be located within 400 feet of Projected Development Site 1. Therefore, the HVAC system of Projected Development Site 1 under the Potential CPC Modifications would not have a significant adverse stationary source air quality impact on any existing or planned future buildings and a detailed analysis of project-on-existing impacts is not warranted. Therefore, the Potential CPC Modifications would not alter the conclusions of the EAS.

Table 3
HVAC Screening Assessment – Project-on-Existing

Site	Floor Area (GSF)	Building Height (Feet)	Distance at which an Impact May Occur (Feet)	Distance to Nearest Building of Similar or Greater Height (Feet)	Result
1	185,028	115	202	400+	Pass

Note: See Figure 1

CEQR TECHNICAL MANUAL FIGURE 17-3

