97-27 57th Ave Commercial Overlay

Environmental Assessment Statement

CEQR No. 22DCP144Q

ULURP No. 220250ZMQ

Prepared for:
SWDM 57 LLC

Prepared by:
AKRF, Inc.

May 2022

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* 97-27 57th Ave Commercial Overlay

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 22DCP144Q	BSA REFERENCE NUMBER (if applicable) BSA Cal. Nos. 549-61-BZ and 81-74-BZ (existing variance in effect)
ULURP REFERENCE NUMBER (if applicable) 220250ZMQ	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY New York City Department of City Planning			NAME OF APPLICANT SWDM 57 LLC		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director, Environmental Assessment and Review Division			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Jay A. Segal, Greenberg Traurig, LLP		
ADDRESS 120 Broadway			ADDRESS 200 Park Avenue		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10166
TELEPHONE 212.720.3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 212.801.9265	EMAIL segalj@gtlaw.com	

5. *Project Description*

The Applicant, SWDM 57 LLC, is seeking approval of a zoning map amendment (the "Proposed Action") subject to City Planning Commission (CPC) approval to facilitate the development of a 6-story, approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

The area directly affected by the Proposed Action consists of the entirety of Projected Development Site 1 (Block 1906, Lot 1), generally located on the north side of 57th Avenue between 97th Place to the west and 98th Street to the east (also referred to herein as the "Project Area" or "Rezoning Area"). Projected Development Site 1 totals approximately 34,178 square feet (sf) in area and is zoned R6A/C1-2 within 100 feet of 57th Avenue and R6B beyond 100 feet of 57th Avenue. Projected Development Site 1 is currently improved with a single-story, approximately 23,894 sf supermarket constructed pursuant to a Board of Standards and Appeals (BSA) variance (discussed further in Attachment A). The existing supermarket use includes a 21-space open parking lot on the eastern extent of the lot (see Figures 1-5).

The Proposed Action involves an amendment to Zoning Map 10b and 14a to map a C2-4 commercial overlay on Projected Development Site 1 (Block 1906, Lot 1). Specifically, the C2-4 overlay would extend 185 feet north of 57th Avenue on the west side of the blockfront and 160 feet north of 57th Avenue on the east side of the blockfront. The underlying R6A and R6B zoning district boundaries would remain unchanged.

Approval of the Proposed Action would facilitate the demolition of the existing supermarket on Projected Development Site 1 and the construction of the Proposed Development, a mixed-use building containing a larger, modernized supermarket on the ground floor and approximately 78 market rate rental apartments on floors 2 through 6. Refer to Attachment A, "Project Description and Screening Analyses," for additional information.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 4	STREET ADDRESS 97-27 57th Avenue
TAX BLOCK(S) AND LOT(S) 1906/1		ZIP CODE 11368

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS North side of 57th Avenue between 97th Place to the west and 98th Street to the east

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY	ZONING SECTIONAL MAP NUMBER
R6A/C1-2; R6B	14a and 10b

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

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

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☐ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION N/A - amendment of Zoning Maps 10b and 14a

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

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

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

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

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	☒ ZONING MAP	☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP	☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)	

☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 34,178 sf lot

Waterbody area (sq. ft) and type: n/a

Roads, buildings, and other paved surfaces (sq. ft.): 23,894 sf supermarket with 21-space acessory parking lot

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): 140,961

NUMBER OF BUILDINGS: 1

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 140,961

HEIGHT OF EACH BUILDING (ft.):

57th Avenue: Base height 54 feet; roof height 75 feet

97th Place: Base height 31 feet; roof height 31 feet

98th Street: Base height 42 feet; roof height 54 feet

NUMBER OF STORIES OF EACH BUILDING: 6

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: 34,178

The total square feet not owned or controlled by the applicant: n/a

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

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

AREA OF TEMPORARY DISTURBANCE: 34,178 sq. ft. (width x length)

VOLUME OF DISTURBANCE: 410,136 (assumes 12-foot cellar depth across site) cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 34,178 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.)	66,071	27,397 gsf		
Type (*e.g.,* retail, office, school)	78 units	supermarket		

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 267 NUMBER OF ADDITIONAL WORKERS: 13

Provide a brief explanation of how these numbers were determined:

Total Residents: 3.24 persons per household x 78 dwelling units = 253 (Source: DCP Community District Tabulation Area data for Queens Community District 4, based on 2020 U.S. Census data)
Total Workers: Increment of 13 over existing conditions (see explanation below)

Residential Workers: Based on 1 employee per 25 DUs = 3
Supermarket Workers: Supermarket employee increment (3 full-time/7-part time) based on information provided by the Applicant. The existing supermarket employs 40 full time workers and 43 part time workers. The new supermarket would employ 43 full time workers and 50 part time workers.

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: Absent approval of the Proposed Action, the existing approximately 23,894 sf supermarket would remain and the active BSA variance would continue to be extended.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2025

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: less than 24 months

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: ULURP approvals are anticipated in 2022. According to the Applicant, the construction period at Projected Development Site 1, including excavation and foundation activities, superstructure construction, and interior/exterior systems would not exceed 24 months and is considered to be short-term (i.e., less than 2 years) in accordance with the CEQR Technical Manual. Full occupancy is expected in 2025. See Attachment A for additional information on the construction schedule.

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

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

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 B.		
(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. See Attachment D.		
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: Several historic and current dry cleaners, as well as open spills in surrounding area (see Attachment G).	☒	☐
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	☐	☒

	YES	NO
involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?		
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): Residential: 41 lbs/week/household x 78 households = 3,198 lbs/week Supermarket/food store: 284 lbs/week/employee x 13 incremental employees = 3,692 lbs/week Total: 7,054 lbs/week		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): Residential: 126.7 MBtu/sf/year x 66,071 gsf = 8,371,196 MBtu/year Supermarket: 216.3 MBtu/sf/year x 32,530 gsf = 5,925,971 MBtu/year Total: 14,765,070 MBtu/year		
(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) See Attachment I.	☒	☐
(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	☒	☐

	YES	NO
rail line with a direct line of site to that rail line?		
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. See Attachment A.		
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. See Attachment A.		
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. See Attachment A.		

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
Aaron Werner, AICP - Technical Director, AKRF, Inc.	May 26, 2022

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:

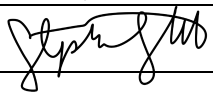
☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental 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
Director, Environmental Assessment and Review Division	City Planning Commission
NAME	**DATE**
Stephanie Shellooe, AICP	June 3, 2022

SIGNATURE 

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in this EAS. The applicant, SWDM 57 LLC, is seeking approval of a zoning map amendment to rezone Queens Block 1906, Lot 1 ("Projected Development Site 1") from R6A/C1-2 and R6B to R6A/C1-2 and R6B/C2-4 (the "Proposed Action"), in the Corona neighborhood of Queens, Community District 4. The proposed C2-4 overlay would facilitate the demolition of the existing supermarket on Projected Development Stie 1 and the construction of a 6-story, 140,961 gross square foot (gsf) mixed-use (commercial-residential) development comprising a larger, modernized supermarket on the ground floor, approximately 78 dwelling units on floors 2 through 6, and accessory parking spaces in the cellar level (the "Proposed Project"). The height of the proposed 6-story building would range between 75 and 100 feet. The Proposed Project would be consistent with and supportive of the surrounding land uses, which include a mix of predominately residential, commercial and community facility uses. The existing supermarket use would continue in the With Action condition, and the proposed residential use would be similar to the residential uses in the study area. The Proposed Project would not represent a significant increase in built scale as compared to the surrounding buildings, and the Proposed Action would not intro introduce zoning that would be incompatible with the surrounding zoning. In addition, the Proposed Action would be consistent with Citywide and neighborhood-specific public policies. The analysis concludes that no significant adverse impacts are anticipated for land use, zoning, and public policy, and no further analysis is warranted.

Open Space

A detailed analysis related to open space is included in this EAS. The Proposed Action would not have a direct effect on open space resources; however, it would result in an increase of 253 residents, exceeding the threshold for an indirect open space analysis for the study area's residential population. The analysis results indicate that the study area has an existing low open space ratio, and that the open space ratio would decrease by less than 1% (0.38%) as a result of the Proposed Action. While the study area would experience a decrease in the open space ratio, a number of qualitative factors would help to prevent an impact to open space resources, including proximity to Flushing Meadows-Corona Park, Park of the Americas, Corona Golf Playground, William F. Moore Park, Annadale Playground, Hoffman Park, and two community gardens. The Proposed Project would provide both indoor and outdoor active/passive recreation opportunities for building residents, which also would serve to satisfy some of the open space demand created by the new residents. Although the existing open space ratio is low, the decrease is below the 5% threshold for impacts to open space, and also less than a 1% decrease that would warrant a detailed analysis. Therefore, the analysis concludes that no significant adverse impacts to open space are anticipated, and no further analysis is required.

Urban Design and Visual Resources

A detailed analysis related to urban design and visual resources is included in this EAS. Project Development Site 1 would be redeveloped with a 6-story, 140,961 gsf mixed-use building comprising 27,397 gsf of supermarket use, 66,071 gsf of residential use (78 dwelling units), 43,800 gsf of parking, and 3,693 gsf of mechanical space. The supermarket (and loading area) would be located on the ground floor, with 25 accessory parking spaces in the cellar level; and 78 dwelling units would be located on floors 2 through 6, with 39 accessory parking spaces on the 2nd floor. Due to the split R6A/R6B zoning, the height of the proposed building would range between 75 and 100 feet. The proposed building would be compatible in terms of scale, height, and bulk with the urban design of the study area, which is primarily residential in character. In the With Action scenario, the existing supermarket and parking lot would be replaced by a new mixed-use building with a transparent ground floor built to the lot lines, which would not adversely affect the pedestrian experience. Illustrative renderings of the Proposed Project showing the base and maximum building heights demonstrate that potential development under the With Action scenario would remain compatible with the scale and character of other buildings within the surrounding area in the No Action scenario. The Proposed Action would not result in development that would obstruct or eliminate public views or affect view corridors or views of visual resources. Therefore, the analysis concludes that no significant adverse impacts are anticipated for urban design or visual resources, and no further analysis is warranted.

Air Quality, and Noise

An (E) designation (E-680) related to air quality, and noise would be established as part of the approval of the Proposed Action. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The air quality, and noise analyses conclude that with the (E) designation in place, the Proposed Action would not result in a significant adverse impact related to air quality, or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Stacey Barron at (212) 720-3419.

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE June 3, 2022
SIGNATURE	

Project Name: 97-27 57th Ave. Commercial Overlay
CEQR # 22DCP144Q
SEQRA Classification: Unlisted

TITLE Chair, City Planning Commission	
NAME Daniel R. Garodnick	DATE June 6, 2022
SIGNATURE	

Project Name: 97-27 57th Ave. Commercial Overlay
CEQR # 22DCP144Q
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 1906, Lot 1

(E) Designation Requirements

To ensure that the Proposed Action would not result in significant adverse impacts related to air quality, and noise an (E) designation (**E-680**) would be established as part of approval of the Proposed Action on **Projected Development Site 1** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1		X	X

Air Quality

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

Projected Development Site 1:

Central Heating and Hot Water System Design (Scenario A with one stack)

For a central heating and hot water system, any new residential and/or commercial development on Projected Development Site 1 (Block 1906, Lot 1) must utilize only natural gas in any fossil fuel-fired heating, ventilation, and air conditioning (HVAC) system and hot water equipment, and the HVAC system and hot water exhaust stack(s) must be located at the highest tier of the building, and located at least 78 feet above grade, to avoid potential significant adverse air quality impacts.

Separate Heating and Hot Water System Design (Scenario B with two stacks)

Residential Portion. *Any new development on Projected Development Site 1 (Block 1906, Lot 1) must utilize only natural gas in any fossil fuel-fired heating, ventilation, and air conditioning (HVAC) system and hot water equipment, and the HVAC system and hot water exhaust stack(s) must be located at the highest tier of the building, and located at least 78 feet above grade, to avoid potential significant adverse air quality impacts.*

Commercial Portion. *Any new development on Development Site (Block 1906, Lot 1) must utilize only natural gas in any fossil fuel-fired heating, ventilation, and air conditioning (HVAC) system and hot water equipment and be fitted with low NO_x burners (30 ppm), and the HVAC system and hot water exhaust stack(s) located at least 25 feet above grade, and be no further than 156 feet from the lot line facing 57th Avenue, to avoid potential significant adverse air quality impacts.*

Noise

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

Projected Development Site 1*:*

To ensure an acceptable interior noise environment, future residential and commercial development must provide a closed-window condition with a minimum building façade attenuation of 28 dBA on the southern façade in order to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

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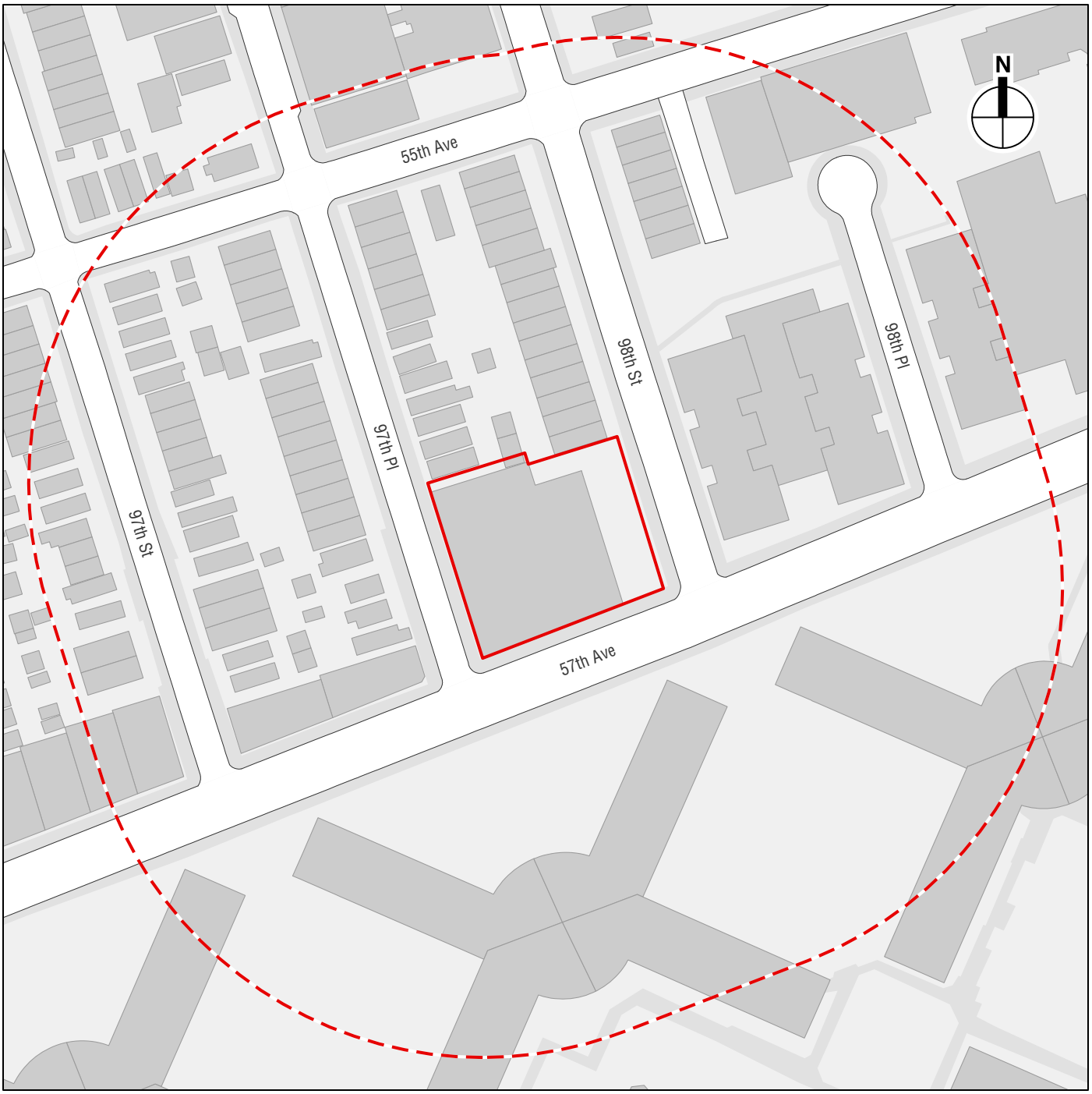


Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Study Area (400-foot perimeter)



Project Location

97-27 57TH AVENUE

Figure 1



Tax Map

97-27 57TH AVENUE

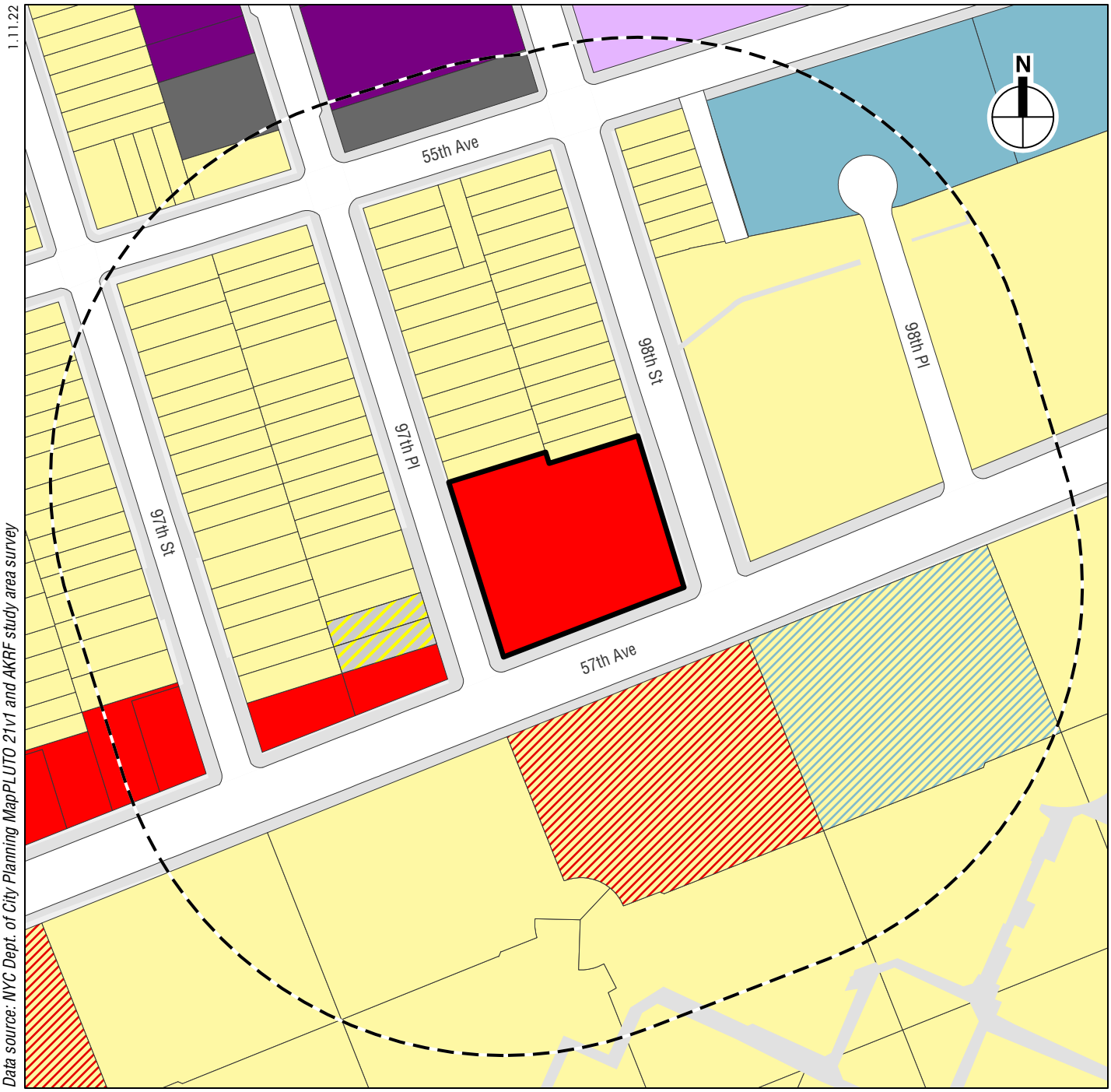
Figure 2



Existing and Proposed Zoning

97-27 57TH AVENUE

Figure 3



Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Study Area (400-foot perimeter)

0 200 FEET

Existing Land Uses

- *Commercial and Office Buildings*
- *Industrial and Manufacturing*
- *Parking Facilities*
- *Public Facilities and Institutions*
- *Residential*
- *Residential with Commercial Below*
- *Residential with Public Facilities and Institutions Below*
- *Transportation and Utility*
- *Under Construction*

Existing Land Use

97-27 57TH AVENUE

Figure 4

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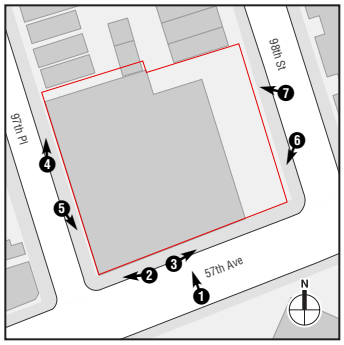



View of Projected Development Site 1 looking north from 57th Avenue **1**



View of Projected Development Site 1 looking northwest along 57th Avenue **2**

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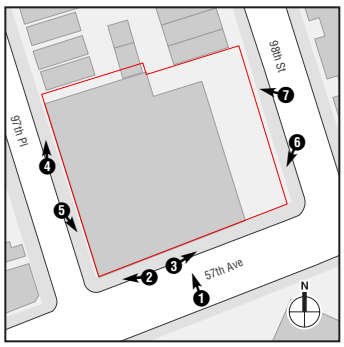



View of Projected Development Site 1 looking northeast along 57th Avenue **3**



View of Projected Development Site 1 looking northeast along 97th Place **4**

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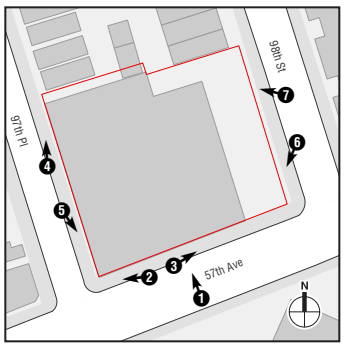




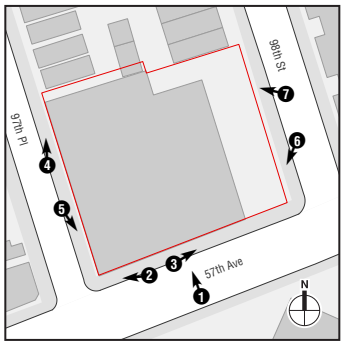
View of Projected Development Site 1 and Lefrak City apartments looking south along 97th Place **5**



View of Projected Development Site 1's parking lot looking west from 98th Street **6**

97-27 57TH AVENUE

Photographs
Figure 5c





View of Projected Development Site 1's parking lot looking northwest from 98th Street **7**

Attachment A: Project Description and Screening Analyses

A. INTRODUCTION

The Applicant, SWDM 57 LLC, is seeking approval of a zoning map amendment (the "Proposed Action") subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

B. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The area directly affected by the Proposed Action consists of Projected Development Site 1 (Block 1906, Lot 1), generally located on the north side of 57th Avenue between 97th Place to the west and 98th Street to the east (also referred to herein as the "Project Area" or "Rezoning Area"). Projected Development Site 1 totals approximately 34,178 square feet (sf) in area and is zoned R6A/C1-2 within 100 feet of 57th Avenue and R6B beyond 100 feet of 57th Avenue. Projected Development Site 1 is currently improved with a single-story, approximately 23,894 sf supermarket constructed pursuant to a Board of Standards and Appeals (BSA) variance (discussed further below). The existing supermarket use includes an unattended, 21-space at-grade parking lot on the eastern extent of the lot, accessible from 98th Street (see Figures 1-5[1] of the Environmental Assessment Statement [EAS] Short Form).

The Proposed Action involves the mapping of a C2-4 commercial overlay on the entirety of Projected Development Site 1, specifically within 185 feet of 57th Avenue on the west side of the blockfront and within 160 feet of 57th Avenue on the east side of the blockfront. The underlying R6A and R6B zoning district boundaries would remain unchanged.

Approval of the Proposed Action would facilitate the demolition of the existing supermarket on Projected Development Site 1 and the construction of the Proposed Development, which would include a larger, modernized supermarket totaling approximately 27,397 gsf which includes a first-floor loading area accessible from 98th Street. Approximately 25 parking spaces accessory to the supermarket use would be located in the cellar level, accessible from an 18-foot-wide curb cut and ramp down from 97th Place. The supermarket's loading area would be accessible from a 24-foot-wide curb cut along 98th Street. In addition, approximately 66,071 gsf of residential floor area (approximately 78 market rate rental apartments) would be constructed above the new supermarket, on floors 2 through 6. Approximately 39 parking spaces accessory to the residential

[1] As shown in Figure 1 of the EAS Short Form, a small segment of a garage on neighboring Lot 11 (north of Projected Development Site 1, fronting on 97th Place) encroaches onto Projected Development Site 1. Lot 11 is owned by an affiliate of the Applicant and the Applicant intends to demolish the encroachment prior to the start of construction of the Proposed Development.

use would be located on the 2nd floor, accessible from a 12-foot-wide curb cut and ramp up from 98th Street.

The Proposed Development would total approximately 140,961 gsf (27,397 gsf supermarket with loading, 66,071 gsf residential, 43,800 gsf parking, and 3,693 gsf mechanical).

Refer to **Figures A-1 through A-3** for a site plan, elevations, and renderings for the Proposed Development.

Due to the split R6A/R6B zoning on Projected Development Site 1 (proposed to remain unchanged), the massing of the Proposed Development results in varying base and roof heights along each frontage. Along the entirety of the 57th Avenue façade and the portion of 97th Place façade within 100 feet of 57th Avenue, the Proposed Development would have a base height of 54 feet and a roof height of 75 feet, pursuant to R6A/C2-4 requirements. The portion of the 97th Place façade located beyond 100 feet of 57th Avenue (within the R6B/C2-4 district) would have a base height of 31 feet and a roof height of 31 feet. Along the 98th Street frontage of Projected Development Site 1, the portion of the 98th Street façade within 100 feet of 57th Avenue would have a base height of 54 feet and a roof height of 75 feet, pursuant to the R6A/C2-4 requirements. The portion of the 98th Street façade located beyond 100 feet of 57th Avenue (within the R6B/C2-4 district) would have a base height of 42 feet and a roof height of 54 feet. Within 100 feet of 57th Avenue, the Proposed Development would reach a maximum height of 100 feet when accounting for the rooftop mechanical bulkhead.

C. PROPOSED ACTION

The following action is necessary to facilitate the Proposed Development:

- An amendment to Zoning Map 10b and 14a to map a C2-4 commercial overlay on Projected Development Site 1 (Block 1906, Lot 1). Specifically, the C2-4 overlay would extend 185 feet north of 57th Avenue on the west side of the blockfront and 160 feet north of 57th Avenue on the east side of the blockfront. The underlying R6A and R6B zoning district boundaries would remain unchanged (see EAS Short Form Figure 3).

The above-referenced action is subject to approval by the CPC pursuant to ULURP.

D. BACKGROUND / PURPOSE AND NEED

Projected Development Site 1 and has been under the BSA's jurisdiction since February 27, 1962, when the BSA granted a variance to permit construction of a single-story supermarket with accessory parking in a then R6 zoning district (no commercial overlay) for a term of 25 years (BSA Cal. Nos. 549-61-BZ and 81-74-BZ). After this initial approval, the BSA several times extended the term of the variance (the current term expires February 27, 2027) and allowed for some modifications to the building. Although Projected Development Site 1 has been rezoned since the initial variance, to its existing R6A/C1-2 and R6B zoning districts, the variance is still necessary for the portion of the supermarket located in the R6B district, in which commercial uses are not permitted. The BSA variance for the existing supermarket could be renounced upon approval of the Proposed Action and demolition of the existing supermarket. Once the existing building has been demolished, the Applicant would request a letter of no objection from the BSA seeking to relinquish the variance. The BSA would then provide a letter of no objection stating that the variance has been relinquished and is no longer in effect.

Projected Development Site 1 was mapped in an R6 zoning district in 1961 and was rezoned to the current R6A/C1-2 and R6B zoning districts under the 1989 Elmhurst-Corona Rezoning. The

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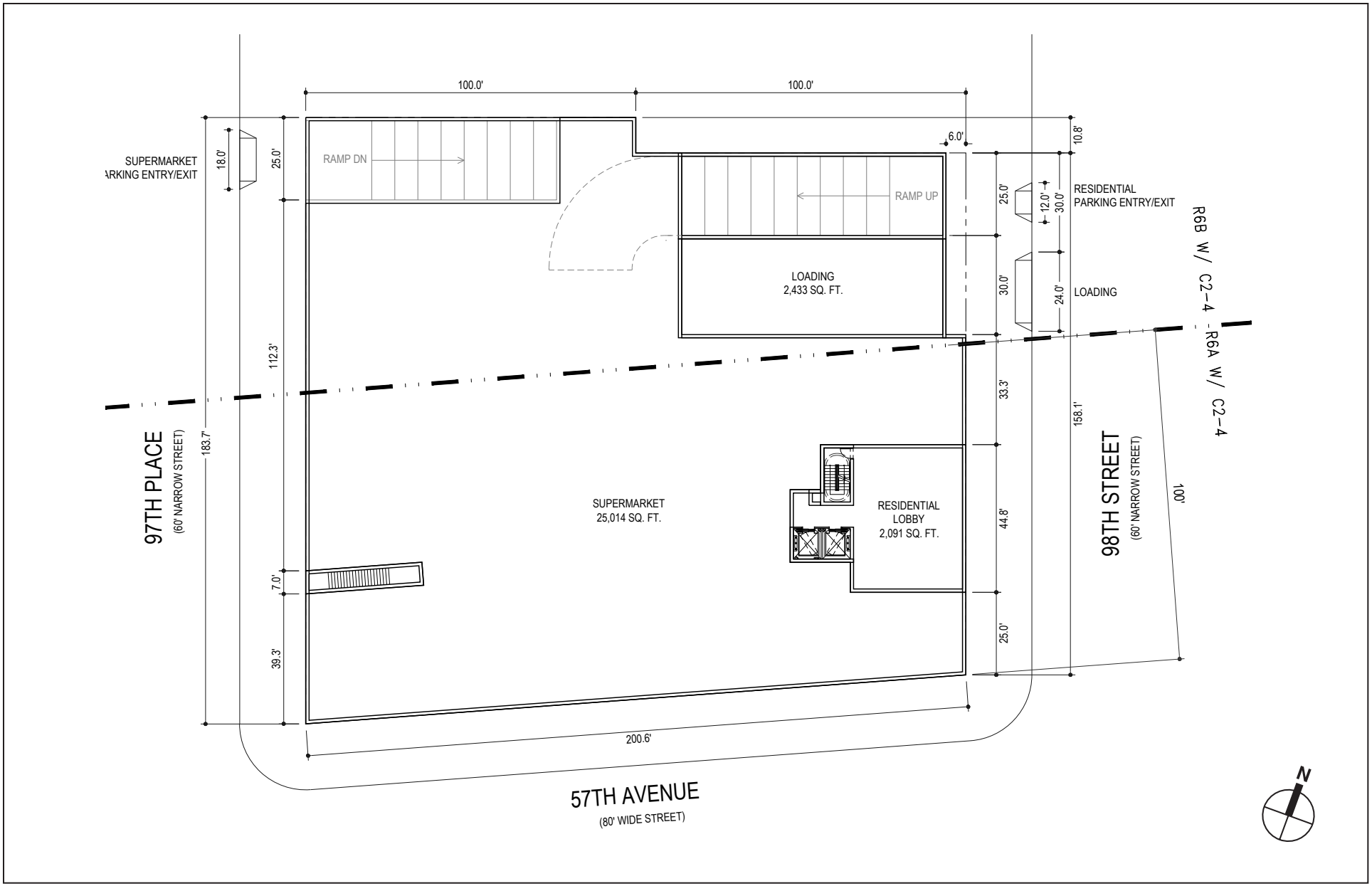


Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - Site Plan

97-27 57TH AVENUE

Figure A-1



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - 57th Avenue Elevation

97-27 57TH AVENUE

Figure A-2a



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Develoment - 97th Place Elevation



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - 98th Street Elevation

12.7.21



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - Rendering
(57th Avenue and 98th Street)

Figure A-3a

12.7.21



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - Rendering
(57th Avenue and 97th Place)

97-27 57TH AVENUE

Figure A-3b

overall intent of the 1989 rezoning was to recognize existing development densities, and to reduce the depth of and change certain commercial overlay districts. There have been no zoning map changes on Projected Development Site 1 or in the surrounding area since the 1989 rezoning.

The existing supermarket on Projected Development Site 1 is nearly 60 years old, and currently serves 17,000 customer visits each week from the surrounding neighborhood. The supermarket needs to be updated and expanded to effectively meet this demand. The Proposed Action would allow for construction of a larger, modernized supermarket in place of the existing supermarket and elimination of the existing BSA variance. The proposed C2-4 commercial overlay would allow the new supermarket's footprint to expand beyond 100 feet of 57th Avenue, onto the full site, and would reduce the supermarket's parking requirement from one space per 200 sf to one space per 1,000 sf.

The Proposed Action would allow the Applicant to renounce the existing BSA variance, which would free up the site for development with residential use pursuant to the underlying zoning districts that have existed since 1989. According to the Applicant, there are limited modern housing options in this area, along with overcrowding. Based on the 2019 American Community Survey 5-year estimates, the vacancy rate for Projected Development Site 1's zip code (11368) is 1.2 percent, compared to 3.4 percent for the City as a whole. The average household size for rental units is 3.95 compared to 2.48 for the City as a whole. The approximately 78 residential units provided by the Proposed Development would meet current demand and be supported by the surrounding area's established commercial and transit-oriented uses. The surrounding area is improved with a mix of residential, commercial and community facility uses. Junction Boulevard, Horace Harding Expressway and Queens Boulevard are the major thoroughfares in the surrounding area. Regional destination retail uses are concentrated along these major corridors, as well as along 57th Avenue and 99th Street. South of Projected Development Site 1 is Lefrak City, a 4,600-unit apartment complex located between Junction Boulevard to the west, 57th Avenue to the north, 99th Street to the east and the Long Island Expressway to the south. Lefrak City also includes approximately 720,500 sf of commercial floor area. Modes of transportation in the area include the M and R subway lines with two stations along Queens Boulevard and the Q38, QM10, QM11 and QM40 bus lines.

E. FRAMEWORK FOR ANALYSIS

This document has been prepared in accordance with the guidelines presented in the 2020[2] *City Environmental Quality Review (CEQR) Technical Manual.*

[2] The analyses presented in this EAS were generally conducted in accordance with the guidance outlined in the 2020 *CEQR Technical Manual*. On December 30, 2021, following completion and commencement of the lead agency's review of the EAS, a substantive update to the 2020 *CEQR Technical Manual* was released. By its terms, the 2021 *CEQR Technical Manual* is to be used as guidance for "any environmental review commenced on or after the date" of its release. With respect to impact reviews commenced prior to such date that have not been brought to completion with the issuance of a negative declaration, the lead agency is to consider whether it would be appropriate to supplement the impact analyses previously prepared, based on whether the 2021 CEQR methodologies could result in any new or potentially greater project-related impacts. The environmental review for the Proposed Action commenced prior to the issuance of the 2021 *CEQR Technical Manual*, but had not yet been completed. Based on a sensitivity analysis memorandum prepared by ARKF in January 2022 (include in **Appendix A**), the guidance of the 2021 *CEQR Technical Manual* would not alter the conclusions of the technical analyses already completed, and no significant adverse impacts would result from the Proposed Action.

The Proposed Development is expected to be completed and in operation by 2025, which is the build year or analysis year. For each technical area, the analysis includes a description of existing conditions and an assessment of conditions in the future with and without the Proposed Action by 2025.

EXISTING CONDITIONS

The analysis framework begins with an assessment of existing conditions on Projected Development Site 1 and surrounding neighborhood because these can be most directly measured and observed. The assessment of existing conditions does not represent the condition against which the Proposed Development is measured, but generally serves as a starting point for the projection of future conditions with and without the Proposed Action and analysis of project impacts.

Projected Development Site 1 totals approximately 34,178 square feet (sf) in area and is zoned R6A/C1-2 within 100 feet of 57th Avenue and R6B beyond 100 feet of 57th Avenue. Projected Development Site 1 is currently improved with a single-story, approximately 23,894 sf supermarket. The existing supermarket use includes an unattended, 21-space at-grade parking lot on the eastern extent of the lot, accessible from 98th Street

THE FUTURE WITHOUT THE PROPOSED ACTION

Absent approval of the Proposed Action, the existing condition of Projected Development Site 1 (supermarket and parking) would remain. As discussed above, Projected Development Site 1 has been under the BSA's jurisdiction since February 27, 1962 through a variance that was been extended several times. The current term of the variance expires February 27, 2027, which is beyond the 2025 build year assumed for the Proposed Action.

THE FUTURE WITH THE PROPOSED ACTION

With the Proposed Action, Projected Development Site 1 would be redeveloped with the Proposed Development, a mixed-use building containing a new and larger supermarket totaling approximately 27,397 gsf which includes a first-floor loading area accessible from 98th Street. Approximately 25 parking spaces accessory to the supermarket use would be located in the cellar level, accessible from an 18-foot-wide curb cut along 97th Place. The supermarket's loading area would be accessible from a 24-foot-wide curb cut along 98th Street. In addition, approximately 66,071 gsf of residential floor area (approximately 78 market rate rental apartments) would be constructed above the new supermarket, on floors 2 through 6. Approximately 39 parking spaces accessory to the residential use would be located on the 2nd floor, accessible from a 12-foot-wide curb cut along 98th Street.

The Proposed Development would total approximately 140,961 gsf (27,397 gsf supermarket with loading, 66,071 gsf residential, 43,800 gsf parking, 3,693 gsf mechanical). As described above, the Proposed Development would reach a maximum total height of 100 feet when accounting for the rooftop mechanical bulkhead proposed within 100 feet of 57th Avenue.

As indicated in **Table A-1**, the increment or difference between the No Action and With Action conditions for Projected Development Site 1, to be analyzed in the EAS, would be net increases of approximately 66,071 gsf of residential space (approximately 78 dwelling units), approximately 3,503 gsf of supermarket space, approximately 43 accessory parking spaces, and approximately 80 feet of maximum building height.

Table A-1
Reasonable Worst-Case Development Scenario (RWCDS) – Projected Development Site 1

Development Components	Existing / No Action Condition	Future With Action Condition (Proposed Development)	Increment
Residential (gsf)	0	66,071	+66,071
Dwelling Units (total)	0	78	+78
Supermarket (gsf)	23,894	27,397[1]	+3,503
Accessory Parking (spaces)	21[2]	64[2]	+43[2]
Maximum Building Height (ft)	20	100[3]	80

Notes:
[1] With Action commercial gsf is inclusive of proposed supermarket loading area.
[2] The eastern extent of Projected Development Site 1 includes an existing unattended 21-space parking lot at-grade that is accessible from 98th Street. The Applicant is proposing 25 unattended, enclosed accessory parking spaces for the Proposed Development's new supermarket (proposed on the cellar level) and 39 unattended, enclosed accessory parking spaces for the Proposed Development's residential uses (proposed on the 2nd floor).
[2] Maximum Building height of 100 feet includes rooftop mechanical bulkhead. The maximum height to the tallest portion of the roof would be approximately 75 feet along the entirety of the 57th Avenue frontage, and within 100 feet of 57th Avenue along the 97th Place and 98th Street frontages.
Sources:
SWDM 57 LLC; Hill West Architects; and AKRF, Inc.

F. ADDITIONAL TECHNICAL ANALYSES

All analyses were performed in accordance with the guidance contained in the *CEQR Technical Manual*. For environmental categories in which the EAS checklist does not indicate the need for further assessment, the Proposed Development would not have the potential to result in any significant adverse impacts, and no further analysis is necessary. For the environmental categories for which a "yes" box was checked, additional information is provided below or in the supplemental attachments to the EAS.

As discussed further below, the incremental differences in height, density, and residential unit count (i.e., development program) between the No Action and With Action conditions, presented in **Table A-1**, does not warrant additional analyses of socioeconomic conditions, community facilities and services, water and sewer infrastructure, solid waste and sanitation services, energy, or greenhouse gas emissions.

LAND USE, ZONING, AND PUBLIC POLICY

See Attachment B, "Land Use, Zoning, and Public Policy."

SOCIOECONOMIC CONDITIONS

According to the *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on specific industries. A socioeconomic assessment should be conducted if an action may reasonably be expected to create substantial socioeconomic changes in an area. This can occur if an action would directly displace a residential population, affect substantial numbers of businesses or employees, or eliminate a business or institution that is unusually important to the community. It can also

occur if an action would bring substantial new development that is markedly different from existing uses and activities in the neighborhood, and therefore would have the potential to lead to indirect displacement of businesses or residents from the area.

As detailed below, based on *CEQR Technical Manual* guidelines the Proposed Action does not have the potential to result in significant adverse impacts with respect to any of the six socioeconomic issues of concern.

DIRECT RESIDENTIAL AND BUSINESS DISPLACEMENT

The Proposed Action would not result in any direct residential displacement as Projected Development Site 1 currently contains no residential uses.

Pursuant to the *CEQR Technical Manual*, a socioeconomic assessment related to direct business displacement is appropriate when a proposed project would directly displace more than 100 employees. Projected Development Site 1 is currently occupied by an approximately 23,894 sf supermarket that, according to the Applicant, employs 83 workers (40 full-time and 43 part-time), which falls below the 100-employee threshold requiring further assessment.

According to the Applicant, the new supermarket included in the Proposed Development would employ a total of 93 workers (43 full-time and 50 part-time). The existing supermarket is operated by Bogopa Enterprises, a company that operates full-service supermarkets in the Tri-State area under the name "Food Bazaar."[3] While the existing supermarket would be temporarily displaced during construction of the Proposed Development, according to the Applicant the unionized supermarket employees will have an opportunity to work at the other stores in Bogopa's portfolio during construction of the Proposed Development, and an opportunity to resume working at the new supermarket once completed. This arrangement is consistent with other existing/proposed development projects involving the Applicant and Bogopa, including the proposed mixed-use development planned at current Food Bazaar site at 1100 Myrtle Avenue in Brooklyn[4]. In consideration of the above factors, no significant adverse impacts related to direct displacement are anticipated and no further analysis is required.

INDIRECT RESIDENTIAL DISPLACEMENT

The CEQR concern with respect to indirect residential displacement is whether a project may introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. According to the *CEQR Technical Manual*, indirect effects can occur if a project would introduce a substantial new use that is markedly different from existing uses, development, and activities within the neighborhood. The *CEQR Technical Manual* also suggests that residential development of 200 units or less would typically not result in significant socioeconomic impacts. The Proposed Action and associated RWCDS would result in an incremental increase of approximately 78 DUs. Therefore, further analysis is not necessary as the Proposed Action would not be expected to affect real estate market conditions.

INDIRECT BUSINESS DISPLACEMENT DUE TO INCREASED RENTS

The concern with respect to indirect business displacement due to increased rents is whether a project could lead to increases in property values, and thus rents, making it difficult for some businesses or

[3] https://www.foodbazaar.com/who-we-are/

[4] https://bklyner.com/11-story-mixed-use-development-coming-to-bed-stuy-grocery-site/

institutions to remain in the area. According to the *CEQR Technical Manual*, indirect effects can occur if a project would introduce a substantial new use that is markedly different from existing uses, development, and activities within the neighborhood. Commercial development of 200,000 sf or less would typically not result in socioeconomic impacts. The Proposed Action and associated RWCDS would result in a net increase in commercial development of 3,503 gsf. As such, a preliminary assessment of indirect business displacement due to increased rents is not warranted.

INDIRECT BUSINESS DISPLACEMENT DUE TO MARKET SATURATION

The concern with respect to indirect business displacement due to retail market saturation is whether a project would add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the study area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in potential for disinvestment on local retail streets. Projects resulting in less than 200,000 gsf of retail on a single development site would not typically result in socioeconomic impacts. The With Action condition includes a total of 27,397 gsf of commercial space, a net increase of 3,503 gsf over the existing condition. Based on *CEQR Technical Manual* guidelines, an assessment of potential indirect business displacement due to retail market saturation (i.e., competition) is not warranted.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

According to the *CEQR Technical Manual*, a significant adverse impact due to adverse effects on specific industries may occur if an action would quantifiably diminish the viability of a specific industry that has substantial economic value to the City's economy. The Project Area is currently vacant land. Therefore, the Proposed Action would not significantly affect business conditions in any industry or any category of business within or outside the study area.

As described in the indirect business displacement discussion above, the Proposed Action does not have the potential to result in significant indirect business displacement. Therefore, the Proposed Development would not indirectly substantially reduce employment or have an impact on the economic viability in any specific industry or category of business. As such, the Proposed Action would not result in significant adverse impacts due to adverse effects on specific industries.

COMMUNITY FACILITIES AND SERVICES

As recommended by the *CEQR Technical Manual*, a community facilities assessment is warranted if a project has the potential to result in either direct or indirect effects on community facilities. If a project 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. New population added to an area as a result of a project would use existing services, which may result in potential "indirect" effects on service delivery. Depending on the size, income characteristics, and age distribution of the new population, there may be potential effects on public schools, libraries, or early childhood programs.

DIRECT EFFECTS

The Proposed Development would not displace or otherwise directly affect any public schools, early childhood programs, libraries, health care facilities, or police and fire protection services. Therefore, an analysis of potential direct effects is not warranted.

INDIRECT EFFECTS

The *CEQR Technical Manual* provides thresholds for guidance in making an initial determination of whether a detailed analysis is necessary to determine potential for impacts due to indirect effects on community facilities. **Table A-2** lists those *CEQR Technical Manual* analysis thresholds for each community facility type. If a project exceeds the threshold for a specific facility type, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Action would exceed any of the *CEQR Technical Manual* thresholds.

Table A-2
Community Facilities – Preliminary Screening Analysis Criteria

Community Facility	Threshold For Detailed Analysis
Public schools	More than 50 elementary/intermediate school or 150 high school students
Libraries	Greater than 5 percent increase in ratio of DUs to libraries in borough
Health care facilities (outpatient)	Introduction of sizeable new neighborhood where none existed before[1]
Early childhood programs (publicly funded)	More than 20 eligible children based on number of low- and low/moderate-income DUs by borough
Fire protection	Introduction of sizeable new neighborhood where none existed before[1]
Police protection	Introduction of sizeable new neighborhood where none existed before[1]

Notes:
DU = dwelling unit
[1] The *CEQR Technical Manual* cites the Hunter's Point South project in Long Island City, Queens, as an example of a project that would introduce a sizeable new neighborhood where none existed before. That project was expected to introduce approximately 6,650 new DUs to the Hunter's Point South waterfront.
Source: 2020 *CEQR Technical Manual*

As described below, based on the RWCDS for the Proposed Action and the screening criteria in **Table A-2**, detailed analyses of indirect effects on public schools, libraries, early childhood programs, health care facilities, and police and fire services are not warranted.

Public Schools

The *CEQR Technical Manual* recommends conducting a detailed analysis of public schools if a proposed action would generate more than 50 elementary/intermediate school students and/or more than 150 high school students. The Proposed Action would introduce an increment of 78 new DUs. The *CEQR Technical Manual* includes student generation rates that are given at the Community School District (CSD) level. The multipliers For CSD 24 in Queens, within which Projected Development Site 1 is located, are as follows: 0.38 elementary, 0.13 intermediate, and 0.10 high school students per DU. Using these multipliers, the RWCDS for the Proposed Action would generate approximately 30 elementary school students, 10 intermediate school students, and 8 high school students. The Proposed Development would not exceed the 50-student threshold for elementary/intermediate schools or the 150-student threshold for high schools. Therefore, a detailed analysis of the Proposed Action's potential effect on public schools is not warranted.

Libraries

Potential impacts on libraries can result from an increased user population. According to the *CEQR Technical Manual*, a proposed action that results in a 5-percent increase in the average number of DUs served per branch—which is 663 DUs per branch in Queens—may cause the potential for a significant impact on library services and require further analysis. The Proposed Development would introduce 78 incremental DUs. Therefore, the Proposed Development does

not exceed this threshold, and a detailed analysis of the Proposed Action's potential effect on libraries is not warranted.

Early Childhood Programs

According to the *CEQR Technical Manual*, if a Proposed Project would add more than 20 children eligible for publicly funded early childhood programs, a detailed analysis is warranted. This threshold is based on the number of low-income and low/moderate-income DUs introduced by a proposed project. Since the Proposed Action would introduce 78 DUs, all proposed to be market-rate units, no further assessment of early childhood programs is warranted.

Health Care Facilities

Health care facilities include public, proprietary, and nonprofit facilities that accept government funds (usually in the form of Medicare and Medicaid reimbursements) and that are available to any member of the community. Examples of these types of facilities include hospitals, nursing homes, clinics, and other facilities providing outpatient health services.

According to the *CEQR Technical Manual*, if a Proposed Project would create a sizeable new neighborhood where none existed before, there may be increased demand on local public health care facilities, which may warrant further analysis of the potential for indirect impacts on outpatient health care facilities. The *CEQR Technical Manual* cites the Hunter's Point South project as an example of a project that would introduce a sizeable new neighborhood where none existed before. The Hunter's Point South project would introduce approximately 6,650 new DUs to the Hunter's Point South waterfront in Long Island City, Queens. The Proposed Development is located within the Corona neighborhood of Queens, which is an established residential neighborhood. The Proposed Action involves a site-specific rezoning and the Proposed Development would not result in the creation of a sizeable new neighborhood where none existed before. Therefore, a detailed analysis of indirect effects on health care facilities is not warranted.

Police and Fire Services

The *CEQR Technical Manual* recommends detailed analyses of impacts on police and fire service in cases where a proposed action has the potential to affect the physical operations of, or direct access to and from a precinct house or fire station, or where a proposed action would create a sizeable new neighborhood where none existed before. The Proposed Action would not result in these direct effects on either police or fire services as it does not affect the physical operations of a precinct house or fire station, nor would it create a sizeable new neighborhood where none existed before. Therefore, no further analysis of the potential for impacts on police and fire service is warranted.

OPEN SPACE

See Attachment C, "Open Space."

SHADOWS

See Attachment D, "Shadows."

HISTORIC AND CULTURAL RESOURCES

See Attachment E, "Historic and Cultural Resources."

URBAN DESIGN AND VISUAL RESOURCES

See Attachment F, "Urban Design and Visual Resources."

NATURAL RESOURCES

A natural resources assessment is conducted when a natural resource is present on or near a project site and when an action involves the disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface waterbodies and groundwater; wetland resources, including freshwater and tidal wetlands; upland resources, including beaches, dunes, and bluffs, thickets, grasslands, meadows and old fields, woodlands and forests, and gardens and other ornamental landscaping; and built resources, including piers and other waterfront structures. Projected Development Site 1 is currently developed with a supermarket. There are no significant natural resources on Projected Development Site 1, and the Proposed Development would not result in any significant adverse impacts on natural resources.

HAZARDOUS MATERIALS

See Attachment G, "Hazardous Materials."

WATER AND SEWER INFRASTRUCTURE

The Proposed Action would not result in an increase in the demand for water of more than 1 million gallons per day (gpd). In addition, the Proposed Action would not result in development exceeding the thresholds of analysis for sewer infrastructure. Projected Development Site 1 is located in an area served by a combined sewer system, and the incremental development expected with the Proposed Action would not exceed the applicable threshold for Queens (400 DUs and/or 150,000 sf of commercial space). The Proposed Action would therefore not result in any significant adverse impacts on water and sewer infrastructure.

SOLID WASTE AND SANITATION SERVICES

The *CEQR Technical Manual* specifies that few projects generate substantial amounts of solid waste (50 tons a week or more) that would result in a significant adverse impact. The Proposed Action would result in development that generates less than 50 tons a week. Therefore, no further analysis is required. The Proposed Action would not result in any significant adverse impacts to solid waste and sanitation services.

ENERGY

According to the *CEQR Technical Manual,* a detailed assessment of energy impacts would be limited to actions that could significantly affect the transmission or generation of energy or that generate significant consumption of energy. The Proposed Development would be served by available energy suppliers, and the Proposed Action is not expected to generate significant demand for energy. Therefore, no further analysis is required, and the Proposed Development would not result in significant adverse impacts to the consumption or supply of energy.

TRANSPORTATION

See Attachment H, "Transportation."

AIR QUALITY

See Attachment I, "Air Quality."

GREENHOUSE GAS EMISSIONS

Increased greenhouse gas (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in

temperature, and changes to precipitation levels. According to the *CEQR Technical Manual*, a GHG emissions assessment is typically included only for larger projects undergoing an Environmental Impact Statement (EIS), as well as certain cases when the project would undergo an EIS and would result in development of 350,000 sf or greater, is a City capital project, or includes large-scale power generation or has the potential to fundamentally change the City's solid waste management system. A GHG assessment has not been performed for the Proposed Action because it does not meet the criteria which would warrant assessment.

NOISE

See Attachment J, "Noise."

PUBLIC HEALTH

As described the EAS Attachments G, I, and J, analyses for hazardous materials, noise and stationary source air quality were completed. Through the implementation of a New York City Department of Environmental Protection (DEP)-approved Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP), and the mapping of an (E) Designation related to air quality and noise, measures to preclude impacts would be included as part of construction and/or operation of the Proposed Development. No unmitigated significant adverse impacts would occur with respect to hazardous materials, noise, and air quality. Therefore, a public health assessment is not warranted.

NEIGHBORHOOD CHARACTER

As defined in the *CEQR Technical Manual*, neighborhood character is considered to be an amalgam of the various elements that define a neighborhood's distinct personality. These elements may include a neighborhood's land use, urban design, visual resources, historic resources, socioeconomics, traffic, and/or noise. An assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in any of the technical areas listed above, or when a proposed project may have moderate effects on several of the elements that define a neighborhood's character. As discussed above and in the attachments to this EAS, the Proposed Development would not have significant adverse impacts to or result in any moderate effects in these technical areas related to neighborhood character.

CONSTRUCTION

As discussed below, the Proposed Development would not result in significant adverse construction impacts. The construction activities associated with the Proposed Development would be expected to result in conditions typical of construction sites in New York City. According to the Applicant, the overall construction duration for the Proposed Development is anticipated to be less than 24 months and is considered to be short-term (i.e., less than 2 years) in accordance with the *CEQR Technical Manual*. Specifically, construction of the Proposed Development would consist of the following primary construction stages, which may overlap at certain times: Demolition (Month 1 to Month 2; approximately 2 months); excavation and foundation (Month 3 to Month 11; approximately 9 months); superstructure construction (Month 10 to Month 13; approximately 4 months); exteriors (Month 12 to Month 18; approximately 7 months and concurrent with interiors); interiors (Month 12 to Month 24; approximately 13 months and concurrent with exteriors and overlaps with a portion of the superstructure construction).

During this time, construction activities for the Proposed Development would normally take place between 7:00 AM and 6:00 PM on weekdays, although the delivery or installation of certain critical equipment could occur on weekend days. The permitted hours of construction are regulated

by the New York City Department of Buildings (DOB) and apply to all areas of the City. The Proposed Development is not located in a Central Business District (CBD) but as is typical for construction projects in New York City, temporary curb-lane and/or sidewalk closures or narrowing may be required. Maintenance and Protection of Traffic (MPT) plans would be developed for such instances and the approval of these plans and implementation of the closures would be coordinated with the New York City Department of Transportation's (DOT) Office of Construction Mitigation and Coordination (OCMC). During construction of the Proposed Development, all necessary measures would be implemented to ensure adherence to the New York City Air Pollution Control Code to minimize construction-related air and dust emissions. In addition, construction noise is regulated by the requirements of the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and the New York City Department of Environmental Protection (DEP)'s Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28). These requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise.

Overall, the duration and severity of potential construction effects would be short-term and adverse effects associated with the proposed construction activities would be minimized through implementation of the measures described above. Accordingly, the Proposed Development would not result in significant adverse impacts during construction, and no further analysis is required. ✶

Attachment B: Land Use, Zoning, and Public Policy

A. INTRODUCTION

This attachment assesses the potential impacts of the Proposed Action on land use, zoning, and public policy, as compared with conditions in the future without the Proposed Action (the No Action condition). As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action involves a zoning map amendment subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

As described below, the assessment concludes that the Proposed Action would be compatible with existing land uses in the surrounding area and would not result in any significant adverse impacts to land use, zoning, or public policy.

B. METHODOLOGY

Projected Development Site 1 (also referred to herein as the "Project Area" or "Rezoning Area") is located in the Corona neighborhood of Queens, Community District 4. This analysis of land use, zoning, and public policy assesses the area within 400 feet of Projected Development Site 1, which is where the Proposed Action could reasonably be expected to cause potential effects, according to the 2020 *City Environmental Quality Review (CEQR) Technical Manual*. The land use, zoning, and public policy study area is generally bounded by 55th Avenue to the north, 98th Place to the east, the approximate midpoint of Block 1918 containing the Lefrak City apartments to the south, and 97th Street to the west (see **Figure B-1**).

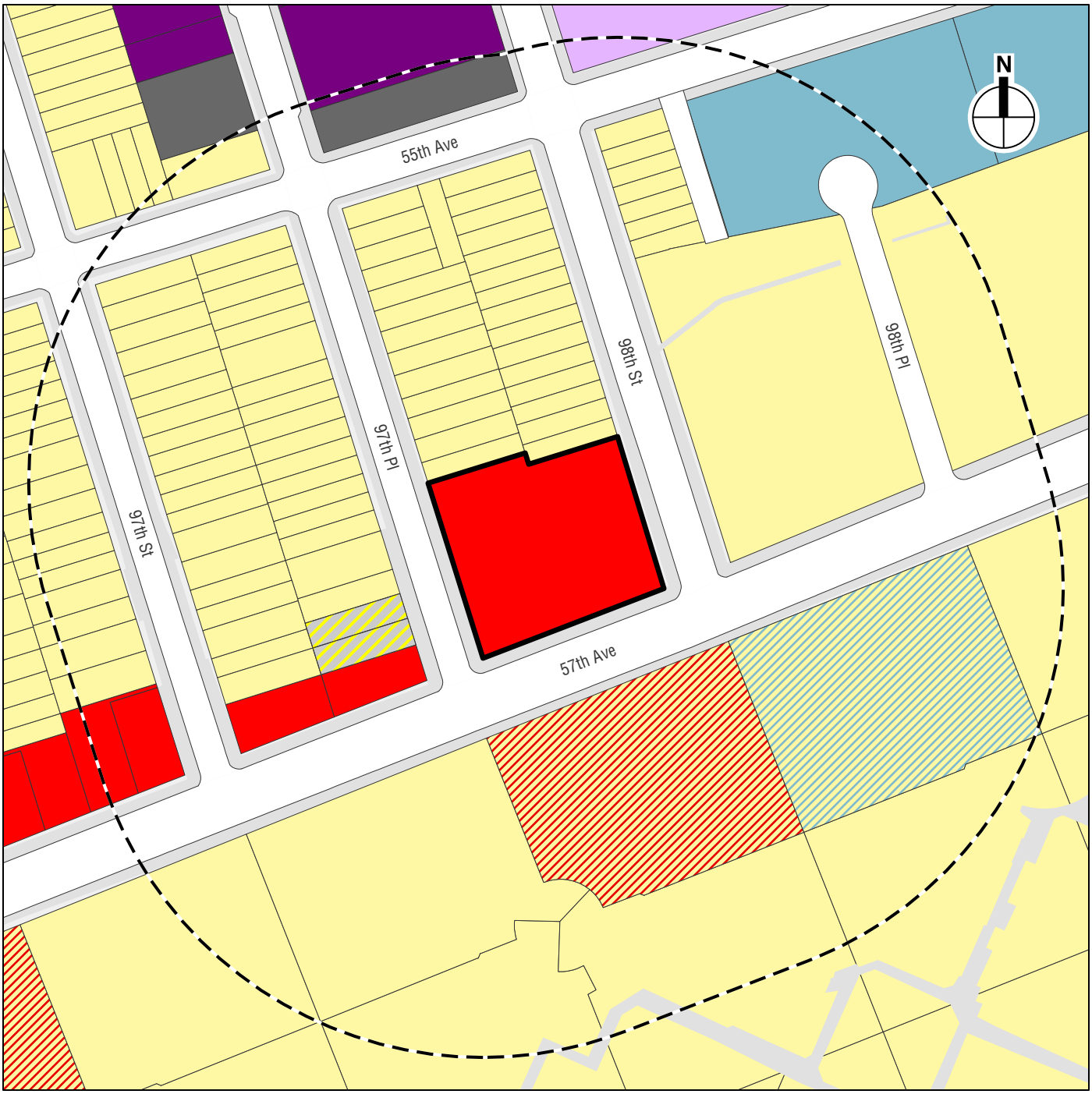
The analysis begins by considering existing conditions in the study area in terms of land use, zoning, and public policy. The analysis then considers land use, zoning, and public policy in the No Action condition in the 2025 analysis year by identifying developments and potential policy changes expected to occur within that timeframe. Probable impacts of the Proposed Action are then identified by comparing conditions expected in the future with the Proposed Action (the With Action condition) to those in the No Action condition.

C. EXISTING CONDITIONS

LAND USE

PROJECTED DEVELOPMENT SITE 1

Projected Development Site 1 totals approximately 34,178 square feet (sf) in area and is currently improved with a single-story, approximately 23,894 sf supermarket. The existing supermarket use



Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Study Area (400-foot perimeter)

0 200 FEET

Existing Land Uses

- *Commercial and Office Buildings*
- *Industrial and Manufacturing*
- *Parking Facilities*
- *Public Facilities and Institutions*
- *Residential*
- *Residential with Commercial Below*
- *Residential with Public Facilities and Institutions Below*
- *Transportation and Utility*
- *Under Construction*

Existing Land Use

97-27 57TH AVENUE

Figure B-1

includes an unattended, 21-space at-grade parking lot on the eastern extent of the lot, accessible from 98th Street.

STUDY AREA

As described below, land uses within the study area are predominately residential, but also include commercial, community facility/institutional, transportation and parking uses.

The remainder of Block 1906 to the north of Projected Development Site 1 is entirely residential, containing a mix of two- to three-story residential buildings varying in size from single family homes to two- and three-family walkup buildings. The northern extent of the study area contains small portions of the land uses found immediately north of 55th Avenue in this location, consisting of a residential lot, a lot used for parking/storage for industrial uses found just beyond the study area boundary, and a portion of a large parcel containing a Consolidated Edison electrical substation.

The two blocks located immediately west of Projected Development Site 1, between 57th and 55th avenues (Blocks 1905 and 1904), are predominately residential with similar residential building types as those found on the Project Area block. As discussed further below, two lots near the southeast corner of Block 1905 (55-44 and 55-40 97th Place) and directly west of Projected Development Site 1 are currently under construction to facilitate approximately 20 new residential units. Commercial uses including neighborhood convenience retail stores, restaurants, nail salons, dry cleaners, laundromats, and pharmacies are found along the southern (57th Avenue) frontages of both Block 1905 and 1904.

The two blocks directly to the east and across 98th Street from Projected Development Site 1 within the study area (Blocks 1907 and 1908) contain residential and community facility uses. Residential uses consist of four- to seven-story walkup and elevator multifamily buildings, and the St. Paul the Apostle Roman Catholic Church is the community facility use located on the south side of 55th Avenue east of 98th Street.

The southern extent of the 400-foot study area (across 57th Avenue) encompasses the LeFrak City apartment complex on Block 1908. LeFrak City was originally constructed in 1962–1971 and consists of 20 16-story residential towers containing approximately 4,600 apartments, along with internal parking lots, plazas, pedestrian pathways, and open space/recreational uses for residents of the complex. Two Lefrak City buildings just south of Projected Development Site 1 include ground floor commercial and community facility uses, including medical offices and the Lefrak City branch of the Queens Public Library system. Other LeFrak City buildings beyond the boundaries of the 400-foot study area also include ground floor commercial and community facility uses.

Projected Development Site 1 is well served by public transit. Prominent transportation routes in the area include Junction Boulevard, 57th Avenue, and 99th Street. The E/M/R subway service Woodhaven Boulevard station is approximately 3 ½ blocks to the west. Nearby bus routes include the Q88, Q38, and Q72.

ZONING

PROJECTED DEVELOPMENT SITE 1

The existing zoning of Projected Development Site 1 is R6A/C1-2 within 100 feet of 57th Avenue and R6B beyond 100 feet of 57th Avenue (see **Figure B-2**). Projected Development Site 1 has been under the jurisdiction of the New York City Board of Standards and Appeals (BSA) since February 27, 1962, when the BSA granted a variance to permit construction of a single-story supermarket with accessory parking in a then R6 zoning district (no commercial overlay) for a term of 25 years (BSA Cal. Nos. 549-61-BZ and 81-74-BZ). After this initial approval, the BSA several times extended the term of the variance (the current term expires February 27, 2027) and allowed for some modifications to the building. Although Projected Development Site 1 has been rezoned since the initial variance, to its existing R6A/C1-2 and R6B zoning districts, the variance is still necessary for the portion of the supermarket located in the R6B district, in which commercial uses are not permitted. As discussed further below, the Proposed Action would eliminate the need for the variance and would allow for reconstruction and expansion of the supermarket.

Projected Development Site 1 was mapped in an R6 zoning district in 1961 and was rezoned to the current R6A/C1-2 and R6B zoning districts under the 1989 Elmhurst-Corona Rezoning. The overall intent of the 1989 rezoning was to recognize existing development densities, and to reduce the depth of and change certain commercial overlay districts. There have been no zoning map changes on Projected Development Site 1 or in the surrounding area since the 1989 rezoning.

STUDY AREA

In addition to Projected Development Site 1, the stretch of 57th Avenue west of the Development and within the study area is also zoned R6A with a C1-2 commercial overlay. R6A districts are R6 medium-density residential districts in which contextual Quality Housing bulk regulations are mandatory, facilitating buildings with high lot coverage and continuous streetwalls. Under R6A zoning, the maximum FAR for both residential and community facility uses is 3.0 and buildings may occupy up to 65 percent of an interior lot or 100 percent of a corner lot. Parking is required for 50 percent of DUs and 25 percent of income restricted housing units. C1-2 commercial overlays typically extend to a depth of 100 to 200 feet along corridors. In mixed-use buildings, those with both residential and commercial uses, commercial uses are limited to one to two floors and must always be located below the residential use. When mapped in R6-R10 districts, the maximum commercial FAR in a C1-2 overlay is 2.0; and when mapped in R1-R5 districts, the maximum commercial FAR is 1.0.

The remainder of the Project Area block (Block 1906) is zoned R6B. R6B districts are medium-density districts often zoned in traditional row house areas. Like R6A and R7A districts, in R6B districts Quality Housing bulk regulations are mandatory so as to preserve the scale and streetscape of these the areas in which they are zoned. Under R6B zoning, the maximum FAR for both residential and community facility uses is 2.0 and buildings may occupy up to 60 percent of an interior lot or 100 percent of a corner lot. The minimum base height before building setback is 30 feet and the maximum base height before setback is 40 feet (or 45 feet with a qualifying ground floor). Buildings may rise to a maximum of 50 feet (or 55 feet with a qualifying ground floor) and parking is required for 50 percent of DUs and 25 percent of income restricted housing units.

The eastern extent of the study area is zoned R7B. R7B districts are contextual districts that generally produce six-to seven-story apartment buildings. R7B districts permit buildings of up to



Existing and Proposed Zoning

97-27 57TH AVENUE

Figure B-2

75 feet in height, with a street minimum and maximum base height between 40 and 60 feet. The maximum residential and community facility FAR is 3.0. Commercial overlays mapped in these districts have a maximum FAR of 2.0.

The LeFrak City complex in the southern extent of the study area is zoned R6. R6 districts are medium-density residential districts that permit a wide variety of housing types. Buildings in R6 districts can be developed in accordance with either height factor or Quality Housing regulations. Standard height factor regulations produce small multifamily buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street and surrounded by open space and on-site parking. The FAR in R6 districts ranges from 0.78 (for a single-story building) to 2.43 at a typical height of 13 stories. There are no height limits for height factor buildings although they must be set within a sky exposure plane, which begins at a height of 60 feet above the street line and then slopes inward over the zoning lot. Off-street parking is generally required for 70 percent of a building's market-rate DUs, and may be further modified in certain areas, such as within the Transit Zone,[1] the Manhattan Core, or for lots less than 10,000 sf.

Blocks west of Projected Development Site 1 within the study area are zoned R5. R5 districts are low-density residential districts permitting three- to four-story attached homes and small apartment buildings. A maximum FAR of 1.25 (1.8 FAR for contextual) is permitted and building heights may reach a maximum of 40 feet. Parking is required for 85 percent of dwelling units (42.5 percent of affordable units). When combined with a C1-3 commercial overlay, local commercial uses are permitted at an FAR of 1.0, and parking is required at a rate of one space per 400 sf.

An M1-1 district is mapped at the northernmost extent of the study area, north of 55th Avenue. M1-1 districts are manufacturing zoning districts that typically include light industrial uses that meet M1 performance standards; heavy industrial activities are not permitted in M1 districts, nor are residential uses except by special permit. Certain commercial and community facility uses are also permitted in M1 districts, primarily Use Group 4 ambulatory care facilities and houses of worship. The FAR for manufacturing and commercial uses in an M1-1 district is 1.0 and the FAR for permitted community facility uses is 2.4. Building bulk in M1-1 districts is controlled by a sky exposure plane. No parking is required for most permitted uses in the M1-1 district.

[1] The Transit Zone includes areas of the City beyond the Manhattan Core within ½-mile of a subway station where auto ownership rates are among the lowest in the City.

Table B-1
Existing Zoning Districts in the Study Area

Zoning District	Uses/Zone Type	Maximum FAR[1,2]
Residential Districts		
R5	Low-density residential district	1.25 R, 2.0 CF
R6	General residential district, medium-density apartment houses, ranging between 3 and 12 stories	0.78 to 2.43 R, 3.0 QH, 4.8 CF
R6B	Contextual residential district, medium-density apartment houses, ranging between 3 and 12 stories	2.0 R, 2.0 CF
R7B	Contextual residential district, medium-density apartment houses, typically 6 to 14 stories	3.0 R, 3.0 CF
Commercial Overlay Districts		
C1-2	Commercial overlay mapped within residential districts along streets that serve local retail needs	1.0 C (w/in R1-R5); 2.0 C (w/in R6-R10) R & CF: same as underlying R district
Manufacturing Districts		
M1-1	Light manufacturing, high performance standards	1.0 M, 1.0 C, 2.4 CF

Notes:
[1] Floor area ratio (FAR) is a measure of density establishing the amount of development allowed in proportion to the base lot area. For example, a lot of 10,000 square feet with a FAR of 1 has an allowable building area of 10,000 square feet. The same lot with an FAR of 10 has an allowable building area of 100,000 square feet.
[2] CF=Community Facility, R=Residential, QH=Quality Housing, C=Commercial, M = Manufacturing.
Source: New York City Zoning Resolution.

PUBLIC POLICY

PLANYC/ONENYC

In April 2007, the Mayor's Office of Long-Term Planning and Sustainability released PlaNYC: A Greener, Greater New York (PlaNYC). Since that time, updates to PlaNYC have been issued that build upon the goals set forth in 2007 and provide new objectives and strategies. In 2015, One New York: The Plan for a Strong and Just City (OneNYC) was released by the Mayor's Office of Sustainability and the Mayor's Office of Recovery and Resiliency. OneNYC builds upon the sustainability goals established by PlaNYC and focuses on growth, equity, sustainability, and resiliency. Goals outlined in the report include those related to housing (ensuring access to affordable, high-quality housing) and thriving neighborhoods (ensuring that neighborhoods will be well-served).

FOOD RETAIL EXPANSION TO SUPPORT HEALTH (FRESH) PROGRAM

The FRESH program promotes the establishment and expansion of grocery stores in underserved communities through financial and zoning incentives for developers. These incentives include tax reductions, sales tax exemptions, additional development rights, and reductions in required parking. The Project Area/Development Site is located in an area designated under the FRESH program as eligible for both zoning and discretionary tax incentives.

D. THE FUTURE WITHOUT THE PROPOSED ACTION

LAND USE

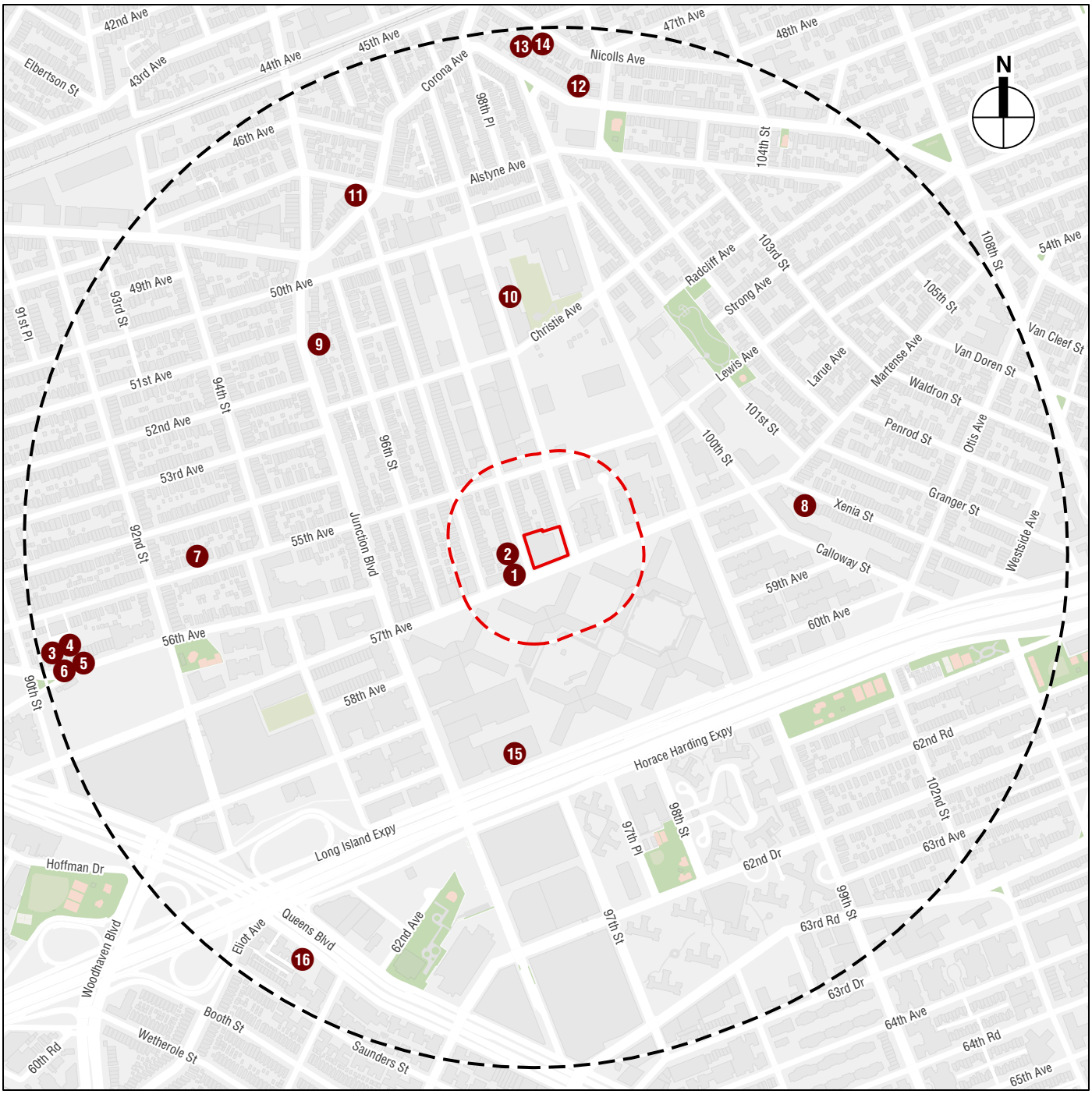
PROJECTED DEVELOPMENT SITE 1

Absent approval of the Proposed Action, the existing condition of Projected Development Site 1 (supermarket and parking) would remain. As discussed above, Projected Development Site 1 has been under the BSA's jurisdiction since February 27, 1962 through a variance that was been extended several times. The current term of the variance expires February 27, 2027, which is beyond the 2025 build year assumed for the Proposed Action.

STUDY AREA

Within the 400-foot land use study area, there are two known development projects that are currently anticipated to be completed by 2025. Two lots to the west of Projected Development Site 1 (directly across 97th Place) at 55-44 and 55-40 97th Place are currently under construction to facilitate approximately 20 new residential units (see **Figure B-3** and **Table B-2)**.

It should be noted that as part of Attachment C, "Open Space," CEQR requires the identification of known residential development projects expected to occur in the No Action condition for a ½-mile residential study area. **Table B-2** also includes those 14 additional residential developments assumed to be completed by 2025.



Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Study Area (400-foot perimeter)

Study Area (1/2-mile perimeter)

1 *No Build Project*

0 1,000 FEET

No Build Projects

97-27 57TH AVENUE

Figure B-3

Table B-2
No Build Projects (within 400 ft. and ½-mile)

Fig Ref.[1]	Project Name/Address	Program
Land Use Study Area (400-foot Radius)		
1	55-44 97th Place	10 DUs
2	55-40 97th Place	10 DUs
400-foot to ½ Mile Radius[2]		
3	90-13 56th Avenue	7 DUs
4	90-15 56th Avenue	6 DUs
5	90-17 56th Avenue	6 DUs
6	90-19 56th Avenue	7 DUs
7	92-27 55th Avenue	2 DUs
8	57-14 Xenia Avenue	4 DUs
9	51-05 Junction Boulevard	5 DUs
10	50-51 98th Street	105,560 sf school
11	96-47 Corona Avenue	3 DUs
12	99-21 Corona Avenue	7 DUs
13	101-36 Nicolls Avenue	3 DUs
14	101-34 Nicolls Avenue	3 DUs
15	96-05 Horace Harding Expressway	7,100 sf senior center
16	92-54 Queens Boulevard	35 DUs; 2,884 sf retail; 2,013 sf community facility
TOTAL		**88 DUs; 2,884 sf retail; 114,673 sf community facility**

Notes:
Planned projects are assumed for purposes of this analysis to be complete by the analysis year of 2025.
[1] See **Figure B-3**.
[2] Refer to Attachment C, "Open Space" for future population projection for the open space study area and quantitative analysis of open space adequacy.
Sources:
NYC Department of City Planning; NYC Department of Buildings; NYC Department of Housing Preservation and Development; newyorkyimby.com; AKRF, Inc., field survey, May 2021;

ZONING AND PUBLIC POLICY

No changes to zoning or public policy applicable to Projected Development Site 1 or study area are expected in the No Action condition by 2025.

E. THE FUTURE WITH THE PROPOSED ACTION

LAND USE

PROJECTED DEVELOPMENT SITE 1

In the With Action condition, the existing supermarket on Projected Development Site 1 would be demolished and the Applicant would construct the Proposed Development, which would include a larger, modernized supermarket totaling approximately 27,397 gsf which includes a first-floor loading area accessible from 98th Street and parking/back-of-house uses within the proposed cellar level. Approximately 25 parking spaces accessory to the supermarket use would be located in the cellar level, accessible from an 18-foot-wide curb cut and ramp down from 97th Place. The supermarket's loading area would be accessible from a 24-foot-wide curb cut along 98th Street. In addition, approximately 66,071 gsf of residential floor area (approximately 78 market rate rental apartments) would be constructed above the new supermarket, on floors 2 through 6. Approximately 39 parking spaces accessory to the residential use would be located on the 2nd floor, accessible from a 12-foot-wide curb cut and ramp up from 98th Street.

The Proposed Development would total approximately 140,961 gsf (27,397 gsf supermarket with loading, 66,071 gsf residential, 43,800 gsf parking, and 3,693 gsf mechanical).

Due to the split R6A/R6B zoning on Projected Development Site 1 (proposed to remain unchanged), the massing of the Proposed Development results in varying base and roof heights along each frontage. Along the entirety of the 57th Avenue façade and the portion of 97th Place façade within 100 feet of 57th Avenue, the Proposed Development would have a base height of 54 feet and a roof height of 75 feet, pursuant to R6A/C2-4 requirements. The portion of the 97th Place façade located beyond 100 feet of 57th Avenue (within the R6B/C2-4 district) would have a base height of 31 feet and a roof height of 31 feet. Along the 98th Street frontage of Projected Development Site 1, the portion of the 98th Street façade within 100 feet of 57th Avenue would have a base height of 54 feet and a roof height of 75 feet, pursuant to the R6A/C2-4 requirements. The portion of the 98th Street façade located beyond 100 feet of 57th Avenue (within the R6B/C2-4 district) would have a base height of 42 feet and a roof height of 54 feet. Within 100 feet of 57th Avenue, the Proposed Development would reach a maximum height of 100 feet when accounting for the rooftop mechanical bulkhead.

The increment or difference between the No Action and With Action conditions for Projected Development Site 1, as analyzed in the EAS, are net increases of approximately 66,071 gsf of residential space (approximately 78 dwelling units), approximately 3,503 gsf of supermarket space, approximately 43 accessory parking spaces, and approximately 80 feet of maximum building height.

STUDY AREA

The Proposed Actions would not result in any land use changes in the study area outside of Projected Development Site 1. The study area would continue to have a mix of predominately residential, commercial and community facility uses, and the Proposed Development would be consistent with these surrounding land uses. The existing supermarket use on Projected Development Site 1 would continue in the With Action condition. The proposed residential uses above the supermarket would be similar to the residential uses in the study area, which vary between 16-story elevator apartment buildings and smaller scale single family homes and multifamily walkups. Overall, the Proposed Development would be compatible with and supportive of land uses in the surrounding area and would not result in significant adverse land use impacts.

ZONING

Under the With Action condition, Zoning Maps 10b and 14a would be amended to include a C2-4 commercial overlay mapped on the entirety of Projected Development Site 1, specifically within 185 feet of 57th Avenue on the west side of the blockfront and within 160 feet of 57th Avenue on the east side of the blockfront. As described above, the existing zoning of Projected Development Site 1 is R6A/C1-2 within 100 feet of 57th Avenue and R6B beyond 100 feet of 57th Avenue. Under the With Action condition, Projected Development Site 1's commercial overlay would change from C1-2 to C2-4 and increase in size, but the underlying R6A and R6B zoning district boundaries would remain unchanged (see **Figure B-2**).

C2-4 commercial overlays are mapped within mixed use corridors in residential districts, typically along streets that serve local retail needs, allowing commercial uses. Typically, these overlays extend to a depth of 100 to 200 feet from such corridors. In mixed use buildings, those with both residential and commercial uses, commercial uses are limited to one to two floors and must always

be located below the residential use. When mapped in R6A and R6B districts, the maximum commercial FAR is 2.0.

The Proposed Development maximizes FAR, maximum base/building heights and provides accessory parking required under the R6A/C2-4 and R6B/C2-4 zoning sought through the Proposed Action. Projected Development Site 1 is split between an R6B district and an R6A district and is located outside the Manhattan Core. The R6B district covers approximately 41.3 percent of Projected Development Site 1 (14,123 sf) and the R6A district covers approximately 58.7 percent of Projected Development Site 1 (20,055 sf). The maximum allowable residential FAR is 2.0 in the R6B district and 3.0 in the R6A district. The maximum allowable commercial FAR in a C2-4 overlay is 2.0. Based on the lot coverages and FAR for the R6A and R6B districts outlined above, the maximum permitted zoning floor area (ZFA) is 28,246 zoning square feet (zsf) for the R6B portion and 60,165 zsf for the R6A portion (total of 88,411 zsf permitted). The R6A district is mapped on the portion of Projected Development Site 1 fronting on 57th Avenue, a wide street, and allows the higher residential FAR. Therefore, pursuant to ZR 77-22(a), the maximum residential floor area permitted on the R6A portion of Projected Development Site 1 may be increased by 20 percent, so long as the floor area on the R6B portion of Projected Development Site 1 is decreased by the same amount. The Applicant has designed the Proposed Development in accordance with these provisions of the Zoning Resolution, and the total ZFA for the Proposed Development is capped at the maximum allowed 88,411 zsf.

There are no additional sites other than Projected Development Site 1 that would be redeveloped as a result of the Proposed Action within the study area. As described above, the Proposed Development, which would be facilitated by the proposed Zoning Map Amendment, would be consistent with the study area's mix of residential, commercial and community facility uses. The existing supermarket use on Projected Development Site 1 would continue in the With Action condition. The proposed residential uses above the supermarket would be similar to the residential uses in the study area, which vary between 16-story elevator apartment buildings and smaller scale single family homes and multifamily walkups. The Proposed Development would not represent a significant increase in built scale as compared to the surrounding buildings. Overall, the Proposed Action would be consistent with existing zoning in the study area and would not result in any significant adverse zoning impacts.

PUBLIC POLICY

The Proposed Action would be consistent with Citywide and neighborhood-specific public policies. In particular, the Proposed Development would contribute to the goals of *ONENYC* by providing a mix of uses including high quality housing, and a new and expanded supermarket that will draw new residents and employees to the area.

As noted above, Projected Development Site 1 is located in an area designated under the FRESH program as eligible for both zoning and discretionary tax incentives. Although the Applicant is not seeking a certification under the FRESH program, the existing supermarket on Projected Development Site 1 would be replaced with a new and expanded supermarket in the future with the Proposed Actions. Therefore, the Proposed Action would continue to provide New Yorkers access to fresh foods, which is consistent with the goals of the FRESH program.

The Proposed Action would not affect other public policies applicable to Projected Development Site 1 and study area and would not result in any significant adverse impacts to public policy. ✶

Attachment C: Open Space

A. INTRODUCTION

This attachment assesses the potential impacts of the Proposed Action on open space resources. Open space is defined in the 2020 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, sport, or serves to protect and enhance the natural environment. An open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a public open space, or an indirect effect, such as when an increase in population could overtax the capacity of an area's open spaces.

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action involves a zoning map amendment subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1) in the Corona neighborhood of Queens, Community District 4.

The Proposed Action would result in an increase to the area's residential population in the With Action scenario (an increment of 253 residents compared to the No Action scenario), which would create new demands for open space in the area. Therefore, in accordance with *CEQR Technical Manual* guidelines, an open space assessment was conducted to determine whether the Proposed Action would result in significant adverse open space impacts. The analysis inventories the condition and use of open spaces within a ½-mile radius of Projected Development Site 1 and addresses potential impacts on open space facilities quantitatively. As described below, the analysis concludes that the Proposed Action would not result in any significant open space impacts.

B. METHODOLOGY

DIRECT EFFECTS

According to the *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or results in increased noise or air pollutant emissions, odor, or shadows that would affect the usefulness of a public open space, whether on a permanent or temporary basis. The Proposed Action would not displace any open space, cause a change in open space use, nor would it result in shadows or increased air emissions on an open space. As a result, a direct effects analysis is not warranted and is not discussed further.

INDIRECT EFFECTS

Following the methodology of the *CEQR Technical Manual*, indirect open space effects may occur when a proposed action would add enough population, either residents or non-residents, to noticeably diminish the ability of an area's open space to serve the future population.

The Development Site is located in an area defined by the *CEQR Technical Manual* as neither well served nor underserved by open space. For new projects in these areas, an assessment of indirect effects is conducted when a project would introduce 200 or more residents or 500 or more workers to an area.

The Proposed Action would result in an increment of 78 DUs on Projected Development Site 1 and introduce an estimated 253 residents to the surrounding area.[1] The Proposed Action would introduce fewer than 500 workers to the area. Therefore, this assessment focuses on the anticipated residential population's effect on open space ratios. The purpose of a preliminary assessment is to clarify the degree to which an action would affect open space and the need for further analysis. If the assessment indicates the need for further analysis, a detailed analysis of open space should be performed.

The open space assessment analyzes how a project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, if a proposed project would reduce an open space ratio and consequently result in overburdening existing facilities, or if it would substantially exacerbate an existing deficiency in open space, it may result in a significant impact on open space resources. In general, if the assessment shows that a study area's open space ratio falls below the City guidelines of 2.0 acres of active open space and 0.5 acres of passive open space per 1,000 residents; and a proposed action would result in a decrease in the ratio of more than 5 percent, it could be considered a substantial change warranting a more detailed analysis. However, in areas where the ratio is closer to 2.5 acres per 1,000 residents, a greater percentage of change (more than 5 percent) may be tolerated. Conversely, in areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant.

In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts, when warranted. These include the availability of nearby destination resources and the beneficial effects of new open space resources provided by the project.

STUDY AREA

The *CEQR Technical Manual* recommends establishing study area boundaries as the first step in an open space analysis. Residents are assumed to travel up to ½-mile to use open space and recreation areas. Therefore, as recommended in the *CEQR Technical Manual*, a ½-mile residential study area is used to analyze the project's effects on open space.

Consistent with CEQR methodologies, the study area was adjusted to include all census tracts that fall at least 50 percent within a ½-mile radius around Projected Development Site 1. **Figure C-1** shows all census tracts included in the residential study area.

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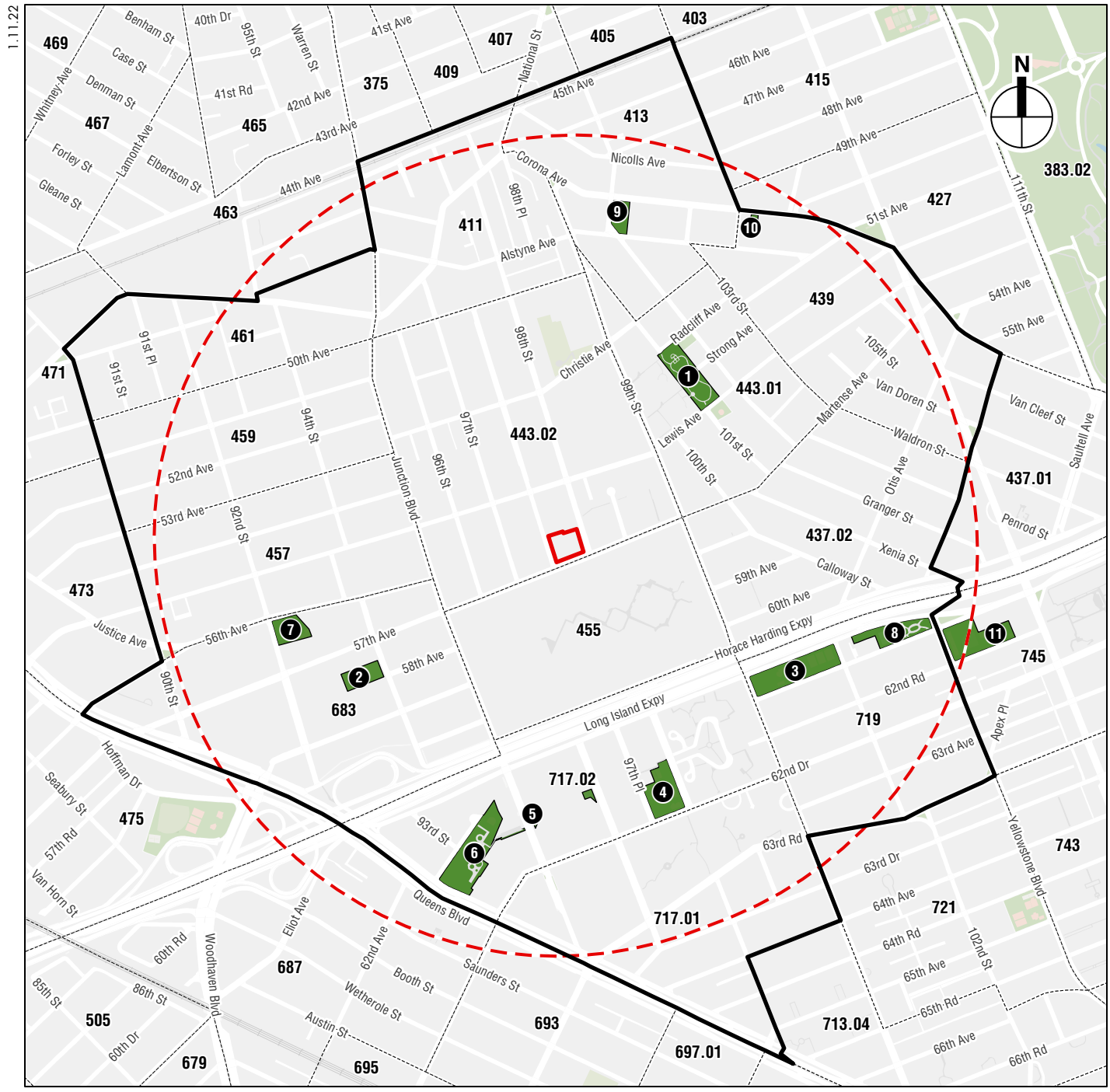
[1] An average household size of 3.24 persons per household for Queens Community District 4 was applied to the analyzed number of units for the Proposed Action. Source: DCP Community District Tabulation Area data for Queens Community District 4, based on 2020 U.S. Census data.



Open Space Study Area and Resources

97-27 57TH AVENUE

Figure C-1

OPEN SPACE USER POPULATIONS

Existing Conditions

Data were compiled from the 2018 ACS 5-Year Estimates for the census tracts in the residential study area to determine the number of residents within the study area—66,367 residents.

The Future without the Proposed Action

As shown in Table B-2 of Attachment B, "Land Use, Zoning, and Public Policy," there are 10 new developments anticipated to be completed within the ½- mile open space study area by 2025. These projects will introduce a mix of residential, neighborhood retail, and community facility uses. An estimated 88 residential DUs are planned. The residential population in the No Action scenario was estimated by applying the average household size of 3.24 persons per household for Queens Community District 4 to the 88 new DUs planned in the study area. These planned DUs would result in an estimated total of 285 new residents in the study area in the future without the Proposed Action.

The Future with the Proposed Action

In the With Action Scenario, the Proposed Action would introduce an increment of approximately 78 DUs to Projected Development Site 1. Therefore, using the average household size of 3.24, the Proposed Action would be expected to introduce approximately 253 residents to the study area.

INVENTORY OF OPEN SPACE RESOURCES

All publicly accessible open spaces and recreational facilities located within the study area were inventoried using information from the New York City Department of Parks and Recreation (NYC Parks) and field visits conducted in May of 2021.

The *CEQR Technical Manual* defines public open space as open space that is regularly open to the public during designated daily periods. Open spaces that do not fit this definition because they are not available to the public on a regular basis or are available only to a limited set of users are considered private open space and are not included in the quantitative open space analysis.

The character, condition, and use of the publicly accessible open spaces and recreational facilities within the study area were recorded during field visits. Active and passive amenities were noted at each open space. Active facilities are intended for vigorous activities, such as jogging, field sports, and children's active play. Such facilities might include basketball and handball courts, jogging paths, ball fields, and playground equipment. Passive facilities encourage such activities as strolling, reading, sunbathing, and people watching. Passive open spaces are characterized by picnic areas, walking paths, or gardens. Certain areas, such as lawns or public esplanades, can serve as both active and passive open spaces.

The analysis also accounts for new open space within the study area that will be created in the No Action scenario.

ADEQUACY OF OPEN SPACE RESOURCES

The following guidelines for residential populations are used for the open space analysis:

- A citywide median open space ratio of 1.50 acres per 1,000 residents. In New York City, local open space ratios vary widely, and the median ratio at the Community District level is 1.5 acres of open space per 1,000 residents.

- An open space planning goal established for the City of 2.5 acres per 1,000 residents—2.0 acres of active and 0.50 acres of passive open space per 1,000 residents—for large scale plans and proposals.

However, these goals are often not feasible for many areas of the City, and they are not considered an impact threshold. Rather, they are used as benchmarks to represent how well an area is served by its open space resources.

C. OPEN SPACE ASSESSMENT

An assessment of open space consists of calculating total population, tallying the open space acreage within the area, and comparing the OSRs for the No Action and With Action scenarios.

EXISTING CONDITIONS

STUDY AREA POPULATION

Based on 2018 ACS 5-Year data, the ½-mile open space study area has a population of approximately 66,367 residents (see **Table C-1**).

Table C-1
Existing Residential Population – 2018 ACS 5-Year

Census Tract	Residential Population
411	3,902
413	4,867
437.02	6,493
439	3,834
443.01	3,751
443.02	4,317
455	14,918
457	3,058
459	3,485
461	2,535
683	4,091
717.01	5,026
717.02	3,803
719	2,287
Total	**66,367**

Source: U.S. Census Bureau, 2018 ACS 5-Year

STUDY AREA OPEN SPACE INVENTORY

There are 11 publicly accessible open spaces located within the study area (see **Figure C-1 and Table C-2**).

Table C-2
Inventory of Publicly Accessible Open Space in the Residential Study Area

Map No.[1]	Name	Location	Owner/ Agency	Amenities	Total Acres	Active		Passive		Condition	Utilization
						Acres	%	Acres	%		
1	Louis Simeone Park	Strong Avenue and 102nd Street	NYC Parks	Playground, fitness equipment, walking path, lawn, seating areas	1.78	1.60	90%	0.18	10%	Excellent	High
2	P.S. 721 John F. Kennedy Jr. School Playground	57th Avenue and 94th Street	NYC Parks/DOE	Running track, basketball courts, exercise equipment, seating areas	0.72	0.72	100%	0.00	0%	Good	High
3	Real Good Playground	99th Street and Horace Harding Expressway South	NYC Parks	Playground, spray showers, basketball courts, restrooms, benches	1.60	1.60	100%	0.00	0%	Good	Moderate
4[2]	Horace Harding Playground	62nd Drive between 97th Place and 98th Street	NYC Parks	Playground, spray showers, basketball courts, multipurpose paved court, restrooms, benches	1.30	1.30	100%	0.00	0%	Good	Moderate
5	61-01 Junction Boulevard POPS	East side of Junction Boulevard south of Horace Harding Expresway; west side of 97th Street south of Horace Harding Expressway	Private	Pedestrian plaza/seating areas	0.64	0.00	0%	0.64	100%	Good	High
6[3]	Lost Battalion Hall Recreation Center and Park	Queens Boulevard between 62nd Avenue and 62nd Road	NYC Parks	Indoor gymnasium, indoor boxing ring, indoor fitness center, indoor media lab, indoor senior center, indoor preschool facility, playground, spray showers, walking path, seating	2.41	1.92	80%	0.49	20%	Good	High
7	Newtown Playground	56th Avenue and 92nd Street	NYC Parks	Playground, spray shower, basketball court, restrooms, lawn, seating	0.70	0.35	50%	0.35	50%	Good	High
8	Barrier Playground	62nd Avenue and Yellowstone Boulevard	NYC Parks	Basketball and handball courts, seating areas	0.87	0.44	50%	0.43	50%	Fair	Moderate
9	Josephine Caminiti Playground	102nd Street between Corona Avenue and Alstyne Avenue	NYC Parks	Playground, spray shower, restrooms	0.40	0.40	100%	0.00	0%	Fair	Moderate
10	Corona Health Sanctuary	Corona Avenue and 104th Street	NYC Parks	Playground, seating	0.10	0.10	100%	0.00	0%	Fair	Low
11[4]	Playground Sixty-Two LXII	Yellowstone Boulevard between 62nd Avenue and 62nd Road	NYC Parks/DOE	Playground, spray shower, basketball courts, multipurpose paved court, restrooms	1.48	1.48	100%	0.00	0%	Fair	Moderate
Totals	**N/A**	**N/A**	**N/A**	**N/A**	**12**	**9.91**	**N/A**	**1.66**	**N/A**	**N/A**	**N/A**

Notes:
[1] See **Figure C-1** for a map of open space resources.
[2,3,4] Capital improvements are proposed for these resources, which are expected to be completed by the Proposed Action's 2025 build year.
Sources: NYC Parks; Field Surveys, May 2021; MapPLUTO

The two largest open spaces in the study area are Louis Simeone Park and Lost Battalion Hall Recreation Center (which also includes a park). The recently renovated Louis Simeone Park is a large (1.78-acre) park at Strong Avenue and 102nd Street featuring play equipment, children's spray shower, a central sloping lawn with an accessible walking path around the perimeter, and two adult fitness areas. Lost Battalion Hall Recreation Center, located on Queens Boulevard between 62nd Avenue and 62nd Road, contains indoor amenities including a gymnasium, boxing ring, fitness center, media lab, senior center, and preschool facility. Behind the recreation center, spanning the block between Queens Boulevard and Junction Boulevard, is a park with walking paths, seating areas, and children's play equipment. The total size of the park (excluding the floor area of the recreation center) is approximately 2.41 acres. Capital improvements are proposed for the recreation center which are expected to be completed by the 2025 build year for the Proposed Action.

The P.S. 721 John F. Kennedy Jr. School Playground is a 0.72-acre playground located at 57th Avenue and 94th Street. Open to the public during non-school hours through the Schoolyards to Playgrounds program, this playground provides a running track, basketball courts, fitness equipment and seating areas.

Three actively programmed parks ranging in size from 0.87-1.60 acres are found within close proximity to one another in the southern extent of the study area, south of Horace Harding Expressway/I-495. These include Real Good Playground (1.60 acres), Barrier Playground (0.87 acres), and Playground Sixty-Two LXII (1.48 acres). Real Good Playground, named after the construction company which developed the area in 1920, is located at 99th Street and Horace Harding Expressway South and contain play equipment, a spray shower for children, as well as three sets of basketball courts. Barrier Playground, two blocks east of Real Good Playground on the north side of 62nd Avenue at Yellowstone Boulevard, contains basketball and handball courts and a landscaped seating area. Playground Sixty-Two LXII is immediately southeast of Barrier Playground and composed of two fenced sections with facilities that benefit the community and students of P.S. 220. One section holds a swing set and other play equipment with safety surfacing. The other is an open asphalt playground with basketball courts and a baseball diamond with dugout benches. Capital improvements are proposed for Playground Sixty-Two which are expected to be completed by the 2025 build year for the Proposed Action.

ADEQUACY OF OPEN SPACES

Quantitative Assessment

The residential study area has a total of approximately 12 acres of open space. With an estimated population of 66,367 residents, the residential study area has a total open space ratio of 0.181 acres per 1,000 residents (see **Table C-3**). This is below the City's goal of 2.5 total acres of open space per 1,000 residents and the citywide community district median of 1.5 acres per 1,000 residents.

Table C-3
Adequacy of Open Space Resources: Existing Conditions

Residential Population	Open Space Acreage			Open Space Ratios per 1,000 People			City Open Space Guidelines		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
66,367	12.00	9.91	2.09	0.181	0.149	0.031	2.50	2.00	0.50

The study area's active open space ratio is 0.149 acres per 1,000 residents, which is below the City's planning guideline of 2.0 acres per 1,000 residents. The study area's current residential passive open space ratio is 0.031 acres per 1,000 residents, which is below the City's benchmark of 0.5 acres of passive space per 1,000 residents.

Qualitative Considerations

As shown in **Table C-2**, the residential study area open spaces include a variety of actively programmed open spaces. The quantified deficiency of open space resources within the residential study area is partially ameliorated by several factors. Additional public open spaces are located just outside of the study area. While residents on or near Projected Development Site 1 are unlikely to make use of these open spaces, they are within ½-mile of much of the study area, and residents located towards the edges of the study area would be likely to utilize them. These open spaces include Flushing Meadows-Corona Park (described further below), Park of the Americas, Corona Golf Playground, William F. Moore Park, Annadale Playground, and Hoffman Park. With the exception of Flushing Meadows-Corona Park, these parks are similar in size to and feature many of the same amenities as those detailed in **Table C-2**.

Flushing Meadows-Corona Park, totaling 898 acres and accessible approximately two blocks east of the study area boundary, is Queens' largest park and one of the largest in New York City. Given the significant size of Flushing Meadows-Corona Park, the precise breakdown of active versus passive open space is unknown. Recreational resources within Flushing Meadows-Corona Park include tennis courts, soccer fields, sitting areas, and other active and passive resources, including the Al Oerter Recreation Center, a 20,000 square foot recreation center that opened in 2007 and includes an indoor track, racquetball and basketball courts, as well as cardiovascular and strength equipment, in addition to afterschool, teen, and senior programmatic activities.

Additional open space within the study area is contained within the boundaries of the Lefrak City apartment complex on Block 1908 (just south of Projected Development Site 1). Lefrak City contains several 16-story multifamily elevator buildings with internal parking lots, plazas, pedestrian pathways, and open space/recreational facilities. The open space/recreational facilities include passive seating areas, open lawns, several tennis and basketball courts, playgrounds, and an outdoor swimming pool. These facilities are excluded from the quantitative analysis because they are for the sole use of Lefrak City residents and not open to the public. Lefrak City is entirely within census tract 455, which contains approximately 14,918 residents and approximately 22 percent of the open space study area population (see **Table C-1**). Lefrak City residents take advantage of the on-site amenities, reducing demand on the public open spaces in the study area listed above.

There are also two community gardens within the study area that have not been incorporated into the quantitative assessment in order to provide a conservative analysis. Containing a total of 0.42 acres of passive open space, these community gardens may be used by residents within the study area (see **Table C-4**) and are generally programed with exclusively passive recreational features, and may contain amenities such as seating, planted areas, grills, and tables. Public access to community gardens is not uniform and the duration and timing of public access varies from garden to garden. Generally, public hours for several days of the week are posted at the entrance to the community garden. While community gardens may be open to the public outside of these posted hours, they are generally locked and inaccessible. The gardens are owned by either NYC Parks (through the Greenthumb program) or the New York Restoration Project (NYRP).

Table C-4
Community Gardens in the Study Area

Name	Location	Owner/ Agency	Total Acres
Sparrow's Nest Community Garden	101st Street and Lewis Avenue	NYC Parks	0.27
Corona Taxpayers Association Community Garden	Radcliffe Avenue and 102nd Street	NYC Parks	0.15
		Total	**0.42**

Source:
https://greenthumb.nycgovparks.org/

THE FUTURE WITHOUT THE PROPOSED ACTION

STUDY AREA POPULATION

In the No Action scenario, the study area will continue to experience residential and commercial development. As noted in Attachment B, "Land Use, Zoning, and Public Policy," there are 16 projects within the ½-mile residential study area that are expected to be completed by 2025. These 16 known development projects will add an estimated total of 88 DUs resulting in approximately 285 new residents in the study area. Altogether, when combined with the 66,367 residents within the study area, the study area population is expected to increase to 66,652 in the No Action scenario.

STUDY AREA OPEN SPACES

In the No Action scenario, no changes to the open space resources within the ½-mile study area are expected by 2025.

ADEQUACY OF OPEN SPACES

Quantitative Analysis

In the No Action scenario, the increase in residents and increase in open space will decrease the total open space ratio from 0.181 acres per 1,000 residents under existing conditions to 0.180 acres per 1,000 residents. The total open space ratio will remain below the City's goal of 2.5 total acres per 1,000 residents as well as the City's median of 1.5 acres per 1,000 residents (see **Table C-5**). The active and passive open space ratios will also remain below the City's benchmark of 2.0 acres of active open space and above the benchmark of 0.5 acres of passive open space per 1,000 residents.

Table C-5
Adequacy of Open Space Resources: No Action Scenario

Residential Population	Open Space Acreage			Open Space Ratios per 1,000 People			City Open Space Guidelines		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
66,652	12.00	9.91	2.09	0.180	0.149	0.031	2.50	2.00	0.50

Qualitative Assessment

In the No Action condition, three open space resources within the ½-mile study area are expected to undergo improvements/redesigns as part of NYC Parks' capital funding process.[2] These resources reside in the southern half of the study area and include Lost Battalion Hall Recreation Center, Horace Harding Playground and Playground 62 LXII. It is unknown at this time if these resources would increase in size or acreage. Therefore, for conservative analysis purposes, they are only mentioned qualitatively as part of this assessment.

In addition, community gardens that were not analyzed in the quantitative assessment would continue to be available to residents for use within the open space study area.

THE FUTURE WITH THE PROPOSED ACTION

STUDY AREA POPULATION

The Proposed Action would result in an incremental increase of approximately 78 DUs in the With Action scenario, resulting in an addition of 253 residents to the study area for a total residential population of 66,905.

STUDY AREA OPEN SPACES

The Proposed Action would not result in any changes to the amount of open space within the ½-mile study area. The total open space acreage would remain 12 acres of active and passive space.

ADEQUACY OF OPEN SPACES

Quantitative Assessment

In the With Action scenario, the total and active ratios in the study area would remain below City guideline levels. The passive ratio would remain below City guideline levels. As shown in **Table C-6**, the total open space ratio would decrease to 0.179 acres per 1,000 residents, which is below the citywide median open space ratio of 1.5 and above the City's planning goal of 2.5 acres per 1,000 residents. The active open space ratio would decrease to 0.148 acres per 1,000 residents, still below the City's guideline of 2.0 acres of active open space per 1,000 residents. The passive open space ratio would decrease to 0.031 acres per 1,000 residents, remaining below the City's guideline of 0.5 acres of passive open space per 1,000 residents.

Table C-6
Adequacy of Open Space Resources:
With Action Scenario

Residential Population	Open Space Acreage			Open Space Ratios per 1,000 People			City Open Space Guidelines		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
66,905	12.00	9.91	2.09	0.179	0.148	0.031	2.50	2.00	0.50

[2] https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/6328
https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/9840
https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/7265

Qualitative Considerations

Similar to the No Action condition, the three open space resources within the ½-mile study area described above are expected to undergo improvements/redesigns as part of NYC Parks' capital funding process. It is unknown at this time if these resources would increase in size or acreage. Therefore, for conservative analysis purposes, they are only discussed qualitatively as part of this assessment.

In addition, community gardens that were not analyzed in the quantitative assessment would continue to be available to residents for use within the open space study area.

As discussed above, Flushing Meadows-Corona Park, the 898-acre park located approximately two blocks east of the study area, is one of the flagship parks in the NYC Parks' inventory and draws residents from throughout the City. Residents of the Proposed Development could utilize the park's active open space amenities and recreational facilities that are just beyond the residential study area boundary and thus were not included in the quantitative analysis. As described above, these include soccer fields and tennis courts, open fields that could be used for both passive and active use, and the Al Oerter Recreation Center. The western access points for Flushing Meadows-Corona Park are located approximately 0.8 miles from Projected Development Site 1, and estimated travel times to this park from Projected Development Site 1 are approximately 15 minutes on foot and approximately 7 minutes by car.

Lastly, the Proposed Development itself would provide both indoor and outdoor active/passive recreation opportunities for building residents. While the programming of these spaces is not yet finalized, they include a proposed roof deck (approximately 5,000 sf) as well as a proposed indoor recreation space (approximately 2,000 sf), both located on the building's 2nd floor. These residential amenities would further offset some of the recreational demand introduced by the new residents.

IMPACT SIGNIFICANCE AND CONCLUSIONS

Following the 2020 *CEQR Technical Manual* guidance, Projected Development Site 1 is located in an area that is categorized as neither underserved nor well served in terms of open space. As noted above and summarized in **Table C-7,** the total, active, and passive open space ratios in the study area (acreage per 1,000 people) would continue to remain below the City's guidelines in the With Action scenario. When accounting for the conservatively estimated future residential population of 253 for the Proposed Development in the With Action condition, the total open space ratio would decrease by 0.38 percent (to 0.179 acres per 1,000 residents), the active open space ratio would decrease by 0.38 percent (to 0.148 acres per 1,000 residents), and the passive open space ratio would decrease by 0.38 percent (to 0.031 acres per 1,000 residents). As discussed above, if the results of the preliminary assessment show that a study area's open space ratio falls below the City guidelines of 2.0 acres of active open space and 0.5 acres of passive open space per 1,000 residents; and a proposed action would result in a decrease in the ratio of more than 5 percent, it could be considered a substantial change warranting a more detailed analysis. However, in areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant. Since the study area experiences total, active, and passive open space ratios that fall far below the City's guidelines, the 1 percent threshold was applied to this analysis.

Although the study area experiences open space ratios far below the City's guidelines and the Proposed Action would result in a decrease in the total, active, and passive open space ratios from

the No Action condition, these decreases would not approach or exceed the 1 percent threshold for a decrease in open space that would warrant a detailed open space analysis.

Overall, the Proposed Action would not result in significant adverse impacts on open space resources in the study area.

Table C-7
Open Space Ratios Summary:
With Action Scenario

Ratio	City Guideline	Open Space Ratios			Percent Change (No Action to With Action)
		Existing Conditions	No Action Scenario	With Action Scenario	
Residential (½-Mile) Study Area					
Total/Residents	2.50	0.181	0.180	0.179	-0.38%
Active/Residents	2.00	0.149	0.149	0.148	-0.38%
Passive/Residents	0.50	0.031	0.031	0.031	-0.38%
Note: Open space ratios in acres per 1,000 residents.					

✶

Attachment D: Shadows

A. INTRODUCTION

This attachment considers the potential for the Proposed Development to cast new shadows on sunlight sensitive resources, which include publicly accessible parks and other open spaces, sunlight-dependent features of historic resources, and natural resources that depend on sunlight. Following the guidelines of the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, a shadow study is required if a proposed project would result in structures 50 feet or more in height, or of any height if a project site is located adjacent to, or across the street from, a sunlight-sensitive resource. As described in Attachment A, "Project Description," the maximum building height for the Proposed Development would be up to approximately 100 feet, including the rooftop mechanical bulkhead. Consequently, a shadow study was conducted.

The analysis concluded that shadow from the Proposed Development would not be long enough to reach any sunlight-sensitive resources.

B. DEFINITIONS AND METHODOLOGY

This analysis has been prepared in accordance with New York City CEQR procedures and follows the guidelines of the *CEQR Technical Manual*.

DEFINITIONS

Incremental shadow is the additional, or new, shadow that a structure resulting from a proposed project would cast on a sunlight-sensitive resource.

Sunlight-sensitive resources are those that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Such resources generally include the following:

- *Public open space* such as parks, beaches, playgrounds, plazas, schoolyards (if open to the public during non-school hours), greenways, and landscaped medians with seating. Planted areas within unused portions of roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources.
- *Features of architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features need be considered, as opposed to the entire resource. Such sunlight-sensitive features might include the following: design elements that depend on the contrast between light and dark (e.g., recessed balconies, arcades, deep window reveals); elaborate, highly carved ornamentation; stained glass windows; historic landscapes and scenic landmarks; and features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as a 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.

Non-sunlight-sensitive resources include the following, for the purposes of CEQR:

- *City streets and sidewalks* (except Greenstreets);
- *Private open space* (e.g., front and back yards, stoops, vacant lots, and any private, non-publicly accessible open space); and
- *Project-generated open space* cannot experience a significant adverse shadow impact from the project, according to CEQR, because without the project the open space would not exist. However, a discussion of how shadows would affect the new space may be warranted.

A significant adverse shadow impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources. Each case must be considered on its own merits based on the extent and duration of new shadow and an analysis of the resource's sensitivity to reduced sunlight, and seasonal conditions.

METHODOLOGY

Following the guidelines of the *CEQR Technical Manual*, a preliminary screening assessment must first be conducted to ascertain whether a project's shadow could reach any sunlight-sensitive resources at any time of year. The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the proposed building representing the longest shadow that could be cast. If there are sunlight-sensitive resources within this radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project shadow by accounting for the fact that shadows can never be cast between a certain range of angles south of the project site due to the path of the sun through the sky at the latitude of New York City.

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 project shadow by looking at specific representative days in each season 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. 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 results of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text.

C. PRELIMINARY SCREENING ASSESSMENT

A base map was developed using Geographic Information Systems (GIS)[1] showing the location of Projected Development Site 1 and the surrounding street layout (see **Figure D-1**). Mapped databases of parks and other public open spaces, City, state, and national historic resources, and

[1] Software: Esri ArcGIS Pro 2.7

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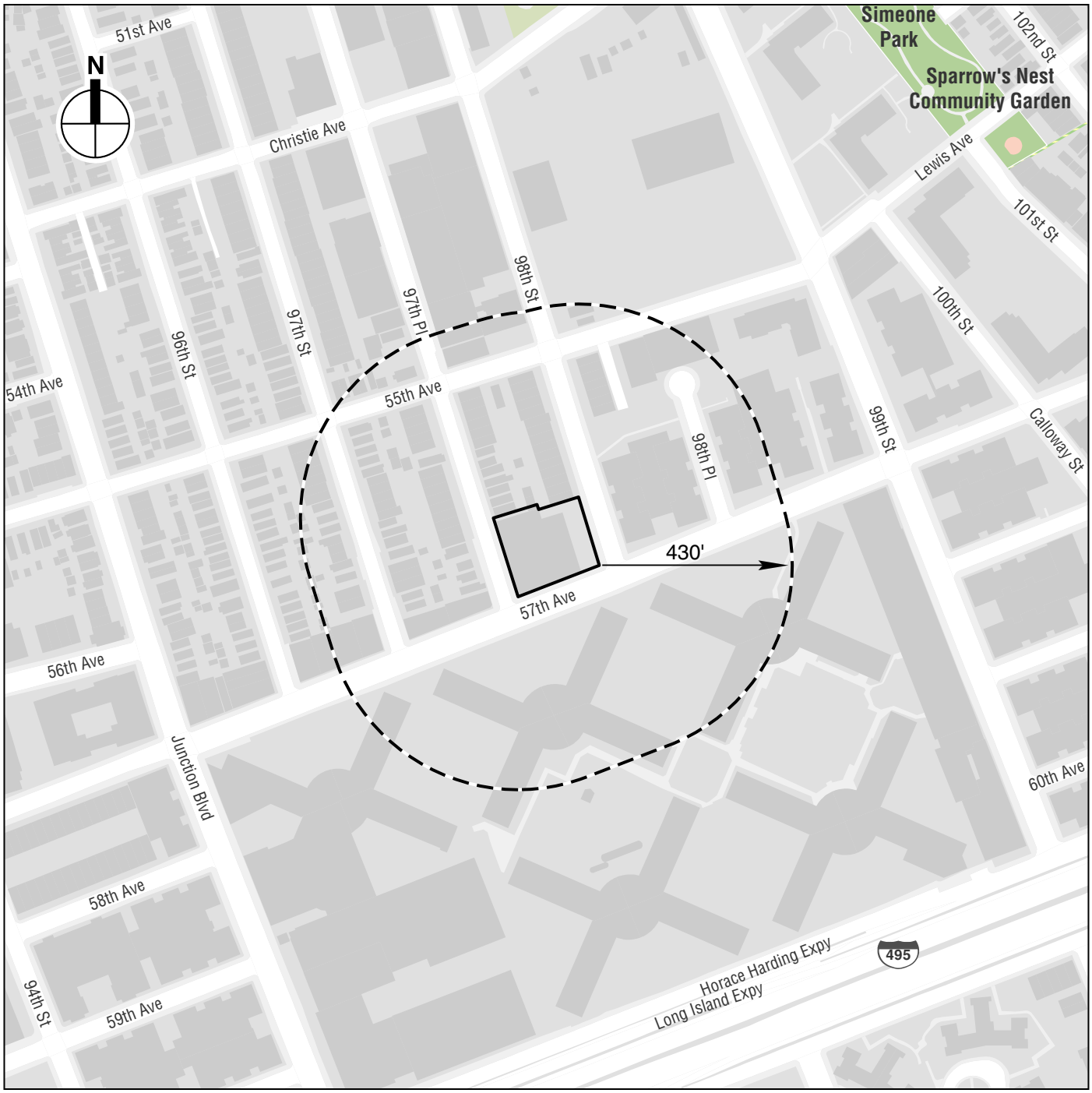

Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Tier 1: Longest Shadow Study Area Perimeter (radius = 4.3 x max. building height)

0 500 FEET

Tier 1 Assessment

97-27 57TH AVENUE

Figure D-1

natural resources were added to the map.[2] In coordination with the open space and historic and cultural resources assessments presented in other sections of this EAS, potential sunlight-sensitive resources were identified.

TIER 1 SCREENING ASSESSMENT

For the Tier 1 assessment, the longest shadow that the proposed addition could cast is calculated, and, using this length as the radius, a perimeter is drawn around the proposed addition's footprint. Anything outside this perimeter representing the longest possible shadow could never be affected by project generated shadow, while anything inside the perimeter needs additional assessment.

According to the *CEQR Technical Manual*, the longest shadow that a structure can cast at the latitude of New York City occurs on December 21, the winter solstice, at the start of the analysis day (90 minutes after sunrise) and is equal to 4.3 times the height of the structure.

Therefore, at a maximum height of 100 feet including rooftop mechanical bulkhead, the Proposed Development could cast a shadow up to 430 feet in length (100 x 4.3). Using this length as the radius, a perimeter was drawn around Projected Development Site 1(see **Figure D-1**).

The Tier 1 assessment showed that no parks or public open spaces, no historic resources with sunlight-dependent features, and no natural resources were located within the longest shadow study area, and therefore no further assessment was required.

D. CONCLUSION

The assessment concluded that project-generated shadow would not reach any sunlight-sensitive resources and would therefore not cause any adverse shadow impacts. ✷

[2] Data: City, State, and Federal agencies including New York City Parks Department; New York City Department of Information Technology and Telecommunications (DoITT), New York City Department of City Planning, New York City Landmarks Preservation Commission, New York City Department of Transportation, New York State Office of Parks, Recreation, and Historic Preservation, New York State Dept. of Environmental Conservation (NYSDEC), U.S. Fish and Wildlife Service, and others; supplemented by Nearmap hi-resolution imagery, and AKRF site visits.

A. INTRODUCTION

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action involves a zoning map amendment subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

This attachment assesses the potential impacts of the Proposed Action on historic and cultural resources. According to the *City Environmental Quality Review (CEQR) Technical Manual* guidelines, a historic resources assessment is needed if there is the potential for a project to affect either archaeological or architectural resources.

As described below, this assessment concludes that the Proposed Action would not result in significant adverse impacts to historic and cultural resources

B. METHODOLOGY

Historic and cultural resources include both archaeological and architectural resources. The study area for archeological resources is Projected Development Site 1 itself, where disturbance from excavation and construction can be anticipated. In comments dated August 20, 2021, the New York City Landmarks Preservation Commission (LPC) determined that Projected Development Site 1 has no archaeological significance (see **Appendix A**). Therefore, this analysis focuses on standing structures only.

Study areas for architectural resources are determined based on the area of potential effect for construction period impacts, as well as the larger area in which there may be visual or contextual impacts. Following the guidelines in the *CEQR Technical Manual*, the study area for the Proposed Actions is defined as the area within an approximately 400-foot radius of Projected Development Site 1 (see **Figure E-1**). The types of architectural resources that may be located in the study area include: National Historic Landmarks (NHLs); State and National Register (S/NR)-listed or S/NR-eligible properties or properties contained within a S/NR-listed or S/NR-eligible historic district, and properties recommended by the New York State Board for listing on the S/NR; and New York City Landmarks (NYCLs), Interior Landmarks, Scenic Landmarks, and New York City Historic Districts (NYCHDs) and properties pending such designation. As noted below, none of these types of resources are found in the study area. In addition, a survey of the study area was conducted to identify any previously undesignated properties that appear to meet S/NR or NYCL eligibility criteria ("potential architectural resources").

Impacts on architectural resources can include both direct physical impacts and indirect impacts. Direct impacts include demolition or alteration of a resource or damage from construction-period vibration (i.e., from construction blasting or pile driving) and additional damage from adjacent construction that could occur from falling objects, subsidence, collapse, or damage from

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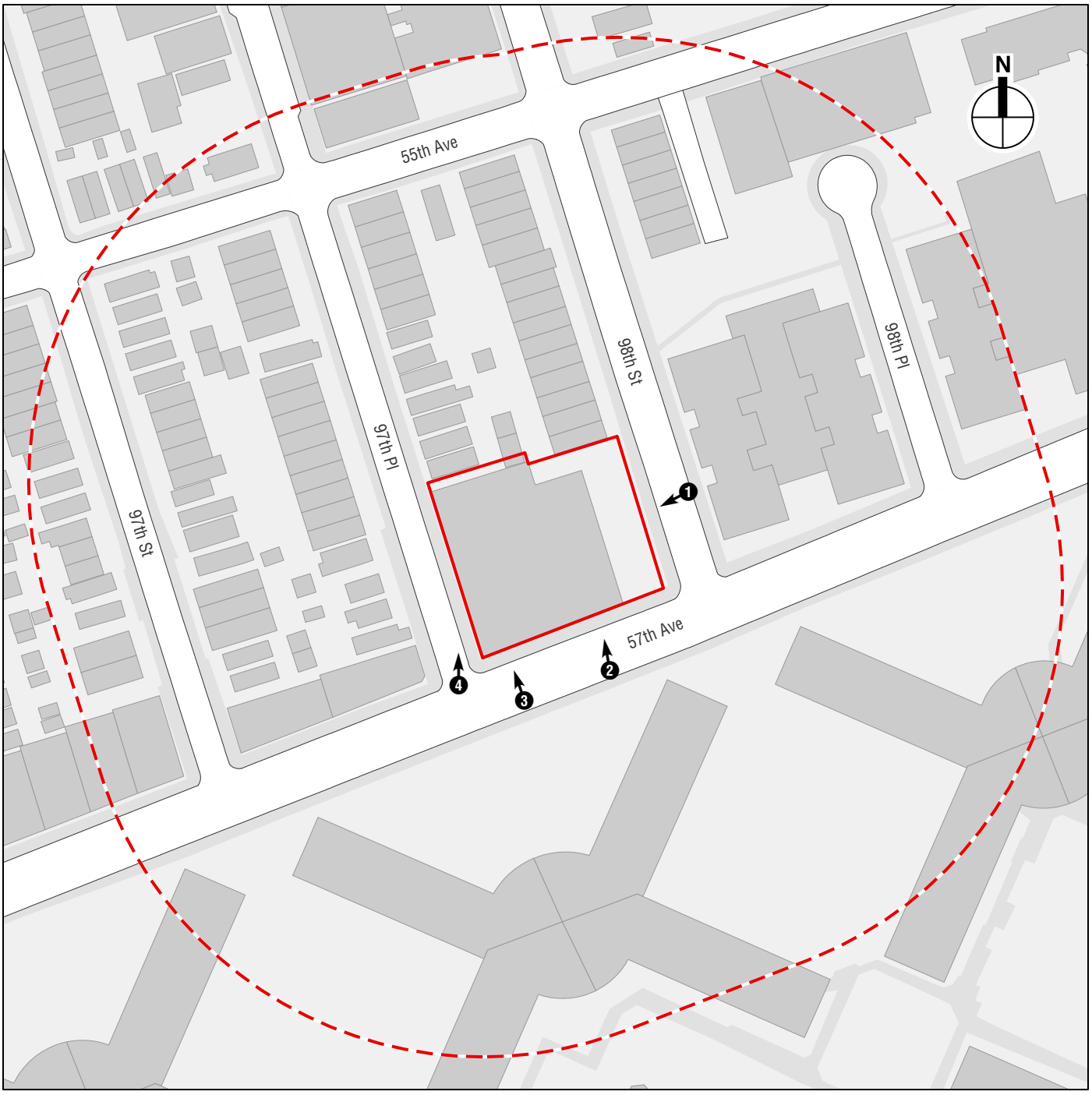

Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Study Area (400-foot perimeter)

Photograph View Direction and Reference Number

0 200 FEET

Historic and Cultural Resources
Project Location

97-27 57TH AVENUE

Figure E-1

construction machinery. Adjacent construction is defined as any construction activity that would occur within 90 feet of an architectural resource, as defined in the New York City Department of Buildings (DOB)'s *Technical Policy and Procedure Notice (TPPN) #10/88.*[1]

Indirect impacts on architectural resources are contextual or visual impacts that could result from project construction or operation. As described in the *CEQR Technical Manual*, indirect impacts could result from blocking significant public views of a resource; isolating a resource from its setting or relationship to the streetscape; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance (e.g., a house of worship with stained-glass windows).

C. EXISTING CONDITIONS

ARCHITECTURAL RESOURCES

DEVELOPMENT SITE

There are no known or potential architectural resources located on Projected Development Site 1, which occupies the southern end of a block bounded by 97th Place to the west, 55th Avenue to the north, 98th Street to the east, and 57th Avenue to the south (see **Figure E-1**). Projected Development Site 1 contains a one-story supermarket constructed in 1963 and subsequently altered through the removal of original ashlar stone cladding (see views 1 to 4 on **Figures E-2 and E-3**). This building does not appear to meet S/NR or NYCL eligibility criteria.

STUDY AREA

There are no known or potential architectural resources in the study area.[2]

D. THE FUTURE WITHOUT THE PROPOSED ACTION

PROJECTED DEVELOPMENT SITE 1

Absent the Proposed Action, it is assumed that the existing condition of Projected Development Site 1 (supermarket and parking) would remain.

STUDY AREA

As described in Attachment B, "Land Use, Zoning, and Public Policy," two developments have been identified within the 400-foot study area that are planned for completion by the 2025 build year. Two lots to the west of Projected Development Site 1 (directly across 97th Place) at 55-44 and 55-40 97th Place are currently under construction to facilitate approximately 20 new residential units.

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[1] *TPPN #10/88* was issued by DOB on June 6, 1988, to supplement Building Code regulations with regard to historic structures. *TPPN #10/88* outlines procedures for the avoidance of damage to historic structures that are listed on the NR or NYCLs resulting from adjacent construction, defined as construction within a lateral distance of 90 feet from the historic resource.

[2] Two potential architectural resources were identified in the study area: LeFrak City (which is bounded by 57th Avenue to the north, 99th Street to the east, Horace Harding Expressway/the Long Island Expressway (I-495) to the south, and Junction Boulevard to the west) and two Quonset huts at 53-41 and 53-53 97th Place. In a comment letter dated December 3, 2021, LPC stated that it had found no historic or cultural resources on Projected Development Site 1 or in the study area (see **Appendix A**).



Projected Development Site 1, view west on 98th Street showing the primary entrance and surface parking **1**



Projected Development Site 1, view north on 57th Avenue showing the south façade **2**

Historic and Cultural Resources
Projected Development Site 1

1.11.22



Projected Development Site 1, view north on 57th Avenue showing the west end of the south façade **3**



Projected Development Site 1, northeast on 97th Place showing the west façade **4**

Historic and Cultural Resources
Projected Development Site 1

97-27 57TH AVENUE

Figure E-3

E. THE FUTURE WITH THE PROPOSED ACTION

ARCHITECTURAL RESOURCES

PROJECTED DEVELOPMENT SITE 1

As described in Attachment A, "Project Description and Screening Analyses," with the Proposed Action, Projected Development Site 1 would be redeveloped with a mixed-use building containing residential and commercial uses with accessory parking. This building would rise to a maximum roof height of approximately 75 feet (6 stories) along 57th Avenue (with a bulkhead set back from the street and at a height of 100 feet). The building would rise approximately 31 feet (2 stories) along the majority of the 97th Place frontage and approximately 54 feet (3 to 4 stories) along the majority of the 98th Street frontage. As there are no known or potential architectural resources on Projected Development Site 1, the Proposed Action would not result in any adverse impacts to architectural resources on Projected Development Site 1.

STUDY AREA

There are no known or potential architectural resources in the study area. Therefore, the Proposed Action would have no direct or indirect impacts on such resources.

✷

Attachment F: Urban Design and Visual Resources

A. INTRODUCTION

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action involves a zoning map amendment subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

This attachment considers the potential for the Proposed Action to affect the urban design and visual resources of Projected Development Site 1 and the surrounding study area, which is defined in accordance with the *CEQR Technical Manual Guidelines* as the area within 400 feet of Projected Development Site 1.

PRINCIPAL CONCLUSIONS

URBAN DESIGN

It is not expected that the Proposed Action would result in adverse impacts on the urban design of the study area.

The Proposed Development would have beneficial effects on the pedestrian experience by redeveloping the existing one-story supermarket and parking lot with a new mixed-use building with a transparent ground floor built to the lot lines. The supermarket and residential uses would be compatible with the character of the study area. While the Proposed Development would have curb cuts for loading and parking garage access on both 98th Street and 97th Place, those features would not result in adverse urban design impacts, as the existing supermarket has curb cuts on 98th Street and 57th Avenue, and the majority of residential buildings in the study have curb cuts for driveways.

The proposed six-story building would be compatible in terms of scale, height, and bulk with the urban design of the study area, which includes detached two-story houses, rows of attached two- and three-story apartment buildings, free-standing seven-story apartment buildings, and the 17-story towers of LeFrak City. While the Proposed Development's massing with setbacks and recesses would be unique in the study area, it would not result in an adverse effect on urban design, as the Proposed Development would create streetwalls with active ground-floors, in contrast with the existing residential buildings that are set back from the street behind enclosed driveways, front yards, and landscaped areas.

VISUAL RESOURCES

The study area does not include any visual resources. Therefore, the Proposed Development would not result in significant adverse impacts on visual resources.

B. METHODOLOGY

As defined in the *CEQR Technical Manual*, urban design is 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. Based on the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning.

The proposed zoning map amendment would result in physical alterations beyond that allowed by existing zoning. Therefore, the Proposed Action would meet the threshold for a preliminary assessment of urban design and visual resources.

The *CEQR Technical Manual* guidelines state that if the preliminary assessment shows that changes to the pedestrian environment are sufficiently significant to require greater explanation and further study, then a detailed analysis is appropriate. Examples include projects that would potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings. Detailed analyses also are generally appropriate for areawide rezonings that include an increase in permitted floor area or changes in height and setback requirements, general large-scale developments, or projects that would result in substantial changes to the built environment of a historic district or components of a historic building that contribute to the resource's historic significance. Conditions that merit consideration for further analysis of visual resources include when the project partially or totally blocks a view corridor or a natural or built visual resource and that resource is rare in the area or considered a defining feature of the neighborhood; or when the project changes urban design features so that the context of a natural or built visual resource is altered (i.e., if the project alters the street grid so that the approach to the resource changes; if the project changes the scale of surrounding buildings so that the context changes; or if the project removes lawns or other open areas that serve as a setting for the resource).

The Proposed Action would facilitate the development of a six-story mixed-use building in an area that contains the large LeFrak City residential development and would, therefore, not be expected to meet the above-referenced thresholds for a detailed assessment of urban design and visual resources. The preliminary analysis is provided below.

C. EXISTING CONDITIONS

PROJECTED DEVELOPMENT SITE 1

URBAN DESIGN

The 34,178-square-foot (sf) Projected Development Site 1 occupies the southern end of the block bounded by 55th Avenue on the north, 98th Street on the east, 57th Street on the south, and 97th Place on the west, and it has a frontage of approximately 198 feet on 57th Avenue, 150 feet on 98th Street, and 173 feet on 97th Place (see **Figure F-1**). A one-story, approximately 23,894-sf supermarket occupies the site, and it is set back approximately 48 feet from 98th Street behind a paved parking lot with 21 spaces. The supermarket entrance is at the corner of 98th Street and 57th Avenue, and that section of the east façade is a glazed storefront beneath an awning. The remainder of the east façade is windowless and faced in stucco. The south (57th Avenue) and west (97th Place) façades are also windowless and faced in stucco, although a section of the south

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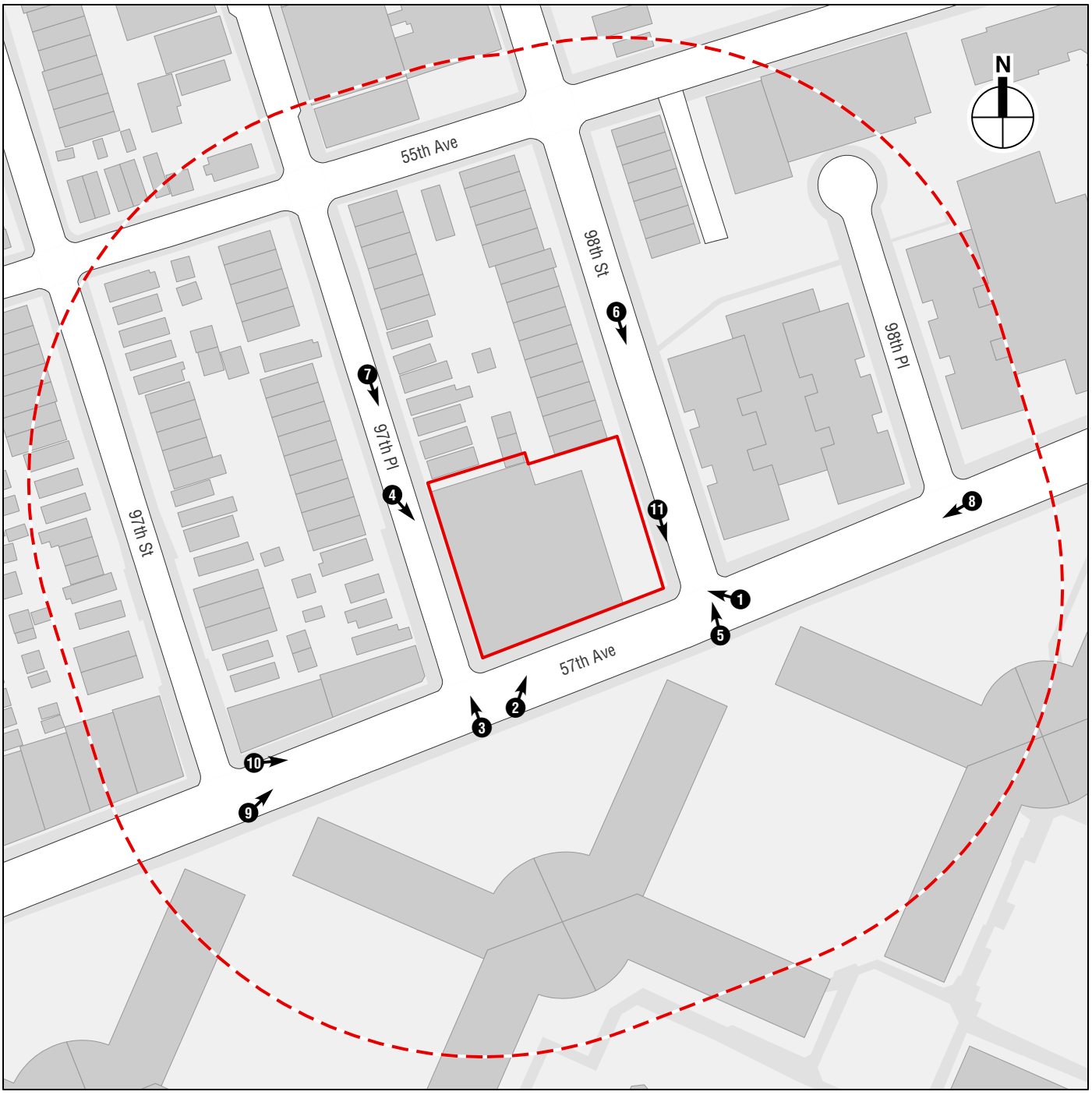

Projected Development Site 1 (coterminous with Project Area/Rezoning Area)

Study Area (400-foot perimeter)

Photograph View Direction and Reference Number

0 200 FEET

Urban Design and Visual Resources
Project Location

97-27 57TH AVENUE

Figure F-1

façade has stone cladding. A mural depicting produce is painted on the south façade, and there is a sign below the roof parapet. A tall metal fence encloses the parking lot along the 98th Street frontage, and there are parking lot entrances with curb cuts on both 98th Street and 57th Avenue. A paved loading and refuse storage area is located at the northeast side of the building. At the southeast corner of the parking lot facing the sidewalk is a one-story shed containing receptacles for recycling. See **Figures F-2 and F-3** for photographs of Projected Development Site 1.

VISUAL RESOURCES

The non-descript supermarket on Projected Development Site 1 is not considered to be a visual resource.

Views from the 57th Avenue sidewalk adjacent to Projected Development Site 1 continue for long distances to the east and west with no prominent points of interest. The tall buildings of LeFrak City line the south side of that view corridor. Views north on the 98th Street and 97th Place sidewalks adjacent to Projected Development Site 1 continue for long distances lined by low-rise, mostly residential buildings. Views south on sidewalks streets are short, terminating at LeFrak City on the south side of 57th Avenue.

STUDY AREA

The mixed commercial and residential study area is located in Corona, Queens and includes a portion of the large LeFrak City residential development. The discussion below focuses first on the area's urban design—its basic layout and structures—and then describes its visual resources. See **Figures F-2 through F-7** for photographs of the study area.

URBAN DESIGN

Streets

The streets in the study area are largely laid out in a grid pattern, which creates regularly shaped blocks in the central, western, and northern portions of the study area. However, the street grid does not extend south of 57th Avenue where LeFrak City occupies a superblock bounded by 57th Avenue, Horace Harding Expressway/Long Island Expressway, 99th Street, and Junction Boulevard. In addition, east of Projected Development Site 1, 98th Place ends at a cul-de-sac between 57th and 55th Avenues.

57th Avenue extends northeast-southwest and is the main street in the study area. It has a travel lane in each direction, parking lanes, a separated bike lane on the south side of the avenue, and bus stops on the north side of the avenue. 55th Avenue is narrow and one-way westbound, and it has a shared bike lane and a parking lane on the north side of the avenue. 98th Street is narrow and provides two-way travel without delineated travel lanes. 97th Street is narrow and one-way northbound. Both streets have street parking. 98th Place runs northwest from 57th Avenue ending in a cul-de-sac before it reaches 55th Avenue.

Street trees proliferate throughout the study area, but there are none along the 98th Street frontage of the project block. In the study area, street furniture includes lampposts and traffic lights, parking regulation signs, glass and metal bus shelters, fire hydrants, garbage cans, mailboxes, and electrical utility poles and transmission lines. Multiple types of fencing are found throughout the study area—tall chain link fencing enclosing industrial lots on the north side of 55th Avenue and low chain link fencing or more decorative metal fencing enclosing front yards, driveways, and ornamental planted areas. Low brick walls also surround some properties.

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View northwest at 57th Avenue and 98th Street **1**



View northeast at 57th Avenue and 97th Place **2**

Urban Design and Visual Resources
Projected Development Site 1

97-27 57TH AVENUE

Figure F-2



View north on 97th Place from 57th Avenue **3**



View south on 97th Place **4**

Urban Design and Visual Resources
Projected Development Site 1



View north on 98th Street from 57th Avenue **5**



View south on 98th Street **6**

Urban Design and Visual Resources Study Area

Figure F-4



View south on 97th Place **7**



View west on 57th Avenue from 98th Place **8**

Urban Design and Visual Resources
Study Area
Figure F-5



View northeast on 57th Avenue from 97th Street **9**



View southeast on 57th Avenue from 97th Street **10**

Urban Design and Visual Resources
Study Area
Figure F-6



View south on 98th Street **11**

Urban Design and Visual Resources
Study Area
Figure F-7

Buildings

The study area is developed with one-story commercial buildings, two-story detached row houses, three-story attached row houses and apartment buildings, six-story walk-up apartment buildings, and the 17-story buildings of the 20-building LeFrak City residential development. In addition, there is a church at the end of the 98th Place cul-de-sac.

The remainder of the project block to the north of Projected Development Site 1 is developed with two- to three-story residential buildings. The west side of 98th Street contains an attached row of nine three-story brick buildings with sloped roofs at 55-30 through 55-14 98th Street and an attached row of six three-story brick buildings with flat roofs and dormer windows at 55-12 through 55-02 98th Street (see **Figure F-4**). Both groups of buildings are set well back from the street behind paved driveways with the five northernmost buildings set farther back than the rest. Each building of the group at 55-30 through 55-14 98th Street is two bays wide, with one bay containing the ground-floor entrance and balconies on the upper two floors and one bay containing a ground-floor garage with windows above. The balcony bays of adjoining buildings are paired, and brick parapets on the roof mark the party walls. Metal fences divide the adjoining driveways. Each building of the group at 55-12 through 55-02 98th Street is also two bays wide, but these buildings do not have garages, nor do they have balconies. The east side of 97th Place contains seven detached single-family houses from 55-31 to 55-17 97th Place and an attached row of six three-story brick buildings (see view 7 of **Figure F-5**). Each of the single-family houses is set back from the street behind a small, enclosed yard. These yards exhibit a mix of plantings, paving, and fence types. Each of the houses is clad in siding and has some form of hipped roof. The house at 55-17 97th Street also has a dormer window, and it along with the adjacent house at 55-19 have extended first floors with hipped roofs. Set back from the street behind paved driveways, the three-story brick buildings at the north end of the block are two bays wide, and they have garages, wide balconies at the second floor, and sloped roofs. Metal fences separate the driveways, some of which are also enclosed at the sidewalk. Some of the buildings also have plantings within the driveway areas.

The block immediately west of Projected Development Site 1 is developed with one-story commercial buildings on 57th Avenue and a mix of two-story detached single-family houses and two- and three-story attached residential buildings (see view 3 of **Figure F-3**, view 7 of **Figure F-5**, and view 9 of **Figure F-6**). In addition, two lots near the southeast corner of the block, across 97th Place from Projected Development Site 1, are currently under construction with two six-story residential buildings. Single-story commercial buildings occupy the north side of 57th Avenue between 97th Place and 97th Street. These buildings are characterized by mostly metal and glass storefronts and a mix of awnings and applied signage (see view 9 of **Figure F-6**). With the exception of three two-story detached houses at 55-38, 55-34, and 55-12 97th Place, the west side of the 97th Place between 57th and 55th Avenues contains three-story attached brick residential buildings. All of these buildings are set back from the street. The houses are set back behind small front yards while the attached buildings are set back behind paved driveways, some of which also contain planted areas. Each of the houses also has a side driveway that leads to a garage in the rear of the property. A mix of fence types enclose these driveways and yard areas. The houses have a mix of hipped and gable roofs. The houses at 55-38 and 55-12 97th Place have extended first floors, and the first floor of 55-38 97th Place is raised above the street and accessed by a stoop. The attached buildings have ground-floor garages, balconies across the second floors, and sloped roofs. The east side of 97th Street contains a mix of two-story detached houses and two- and three-story attached brick residential buildings. All are set back from the street and similar in appearance

to the residential buildings described above along 97th Place and the west side of 98th Street. A few of the detached houses have raised first floors with stoops.

The portion of the block to the east of Projected Development Site 1 that is located within the study area contains three seven-story brick apartment buildings, an attached row of three-story brick apartment buildings, and a church. Located along 57th Avenue, the three seven-story apartment buildings are part of a complex of five buildings. They are set back from the street behind narrow planted areas enclosed by low brick walls, and the buildings have mostly rectangular footprints set perpendicular to the avenue with their long, primary façades fronting 98th Street and 98th Place (see view 8 of **Figure F-5** and view 9 of **Figure F-6**). Further, they have unadorned brick façades with two light courts on each long façade. A one-story brick wing connects the two buildings located between 98th Street and 98th Place, and this building is set back from 57th Avenue behind a paved driveway and loading area. On the north side of these buildings is an enclosed lawn area and basketball court. The row of three-story attached brick apartment buildings at 55-15 through 55-01 98th Street are set back from the street behind paved driveways. These buildings have flat roofs, recessed ground floors, and paired bays with recessed balconies on the upper floors that alternate with paired bays of fenestrated brick walls. St. Paul the Apostle Roman Catholic Church is located on the south side of 55th Avenue but its primary façade faces the 98th Place cul-de-sac. The church is a one-story modernist stone building with peaked and sloped roofs and a tall campanile. On the east side of the church is a one-story brick and glass school building. A paved driveway separates the church from the adjacent buildings at 55-15 through 55-01 98th Street, and there is a paved entrance plaza to the church off the cul-de-sac.

The southern portion of the study area includes a small section of LeFrak City (see view 6 of **Figure F-4**, view 8 of **Figure F-5**, view 10 of **Figure F-6**, and **Figure F-7**). The large apartment development contains approximately 4,600 apartments in 20 17-story towers on a 40-acre superblock bounded by 57th Avenue to the north, 99th Street to the east, Horace Harding Expressway/the Long Island Expressway to the south, and Junction Boulevard to the west. The towers are interspersed across the site with parking lots, plazas, pedestrian pathways, and lawns and recreational spaces for residents of the complex. The towers are arranged in groups of four, with each group connected by a one-story circular entrance hub; this plan creates building groups with approximately X-shaped footprints. Along 57th Avenue, the building groups are arranged with the towers set at an angle to the street. The towers rise for their full height without setbacks, and the long façades are minimally articulated with bays of recessed balconies located toward the corners. The narrow, end façades are plainly designed as fenestrated brick walls. On 57th Avenue, the central hub of each tower is set far back from the street behind a parking lot and drop-off area accessed by a curved driveway with sidewalks and two connections to the avenue. Landscaping is located along the sidewalk between the two curb cuts of each driveway, and enclosed flower beds are located around the base of each building. At 97th and 98th Streets, there are driveways to below-grade parking garages located between the tower groups. Parking is also located on the garage roofs. The two tower groups located across the avenue from Projected Development Site 1 have ground-floor commercial and community facility uses that include medical offices and the Lefrak City branch of the Queens Public Library system.

Natural Features and Open Space

Other than street trees and vegetation in residential front yards and ornamental planting beds, there are no natural resources in the study area. Open spaces include the private gardens and recreational spaces within LeFrak City and along its frontage on 57th Avenue.

VISUAL RESOURCES

There are no visual resources in the study area.

D. THE FUTURE WITHOUT THE PROPOSED ACTION

PROJECTED DEVELOPMENT SITE 1

Absent approval of the Proposed Action, the supermarket and associated parking lot on Projected Development Site 1 would remain in their existing condition.

STUDY AREA

Within the 400-foot study area, there are two known development projects expected to be completed by 2025. Two lots to the west of Projected Development Site 1 directly across 97th Place at 55-44 and 55-40 97th Place are currently under construction to facilitate approximately 20 new residential units. These new buildings will be approximately six stories tall.

E. THE FUTURE WITH THE PROPOSED ACTION

PROJECTED DEVELOPMENT SITE 1

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action is the mapping of a C2-4 commercial overlay on the entirety of Projected Development Site 1, specifically within 185 feet of 57th Avenue on the west side of the blockfront and within 160 feet of 57th Avenue on the east side of the blockfront. The underlying R6A and R6B zoning district boundaries would remain unchanged.

Due to the split R6A/R6B zoning on Projected Development Site 1, the Proposed Action would result in the massing of the Proposed Development with varying base and roof heights along each frontage. Along the entirety of the 57th Avenue façade and the portion of 97th Place façade within 100 feet of 57th Avenue, the Proposed Development would have a base height of 54 feet and a roof height of 75 feet, pursuant to R6A/C2-4 requirements. The portion of the 97th Place façade located beyond 100 feet of 57th Avenue (within the R6B/C2-4 district) would have a base height of 31 feet and a roof height of 31 feet. Along the 98th Street frontage of Projected Development Site 1, the portion of the 98th Street façade within 100 feet of 57th Avenue would have a base height of 54 feet and a roof height of 75 feet, pursuant to the R6A/C2-4 requirements. The portion of the 98th Street façade located beyond 100 feet of 57th Avenue (within the R6B/C2-4 district) would have a base height of 42 feet and a roof height of 54 feet. Within 100 feet of 57th Avenue, the Proposed Development would reach a maximum height of 100 feet when accounting for the rooftop mechanical bulkhead. See **Figures F-8 through F-13** for illustrative renderings of the Proposed Development showing the proposed base and maximum building heights.

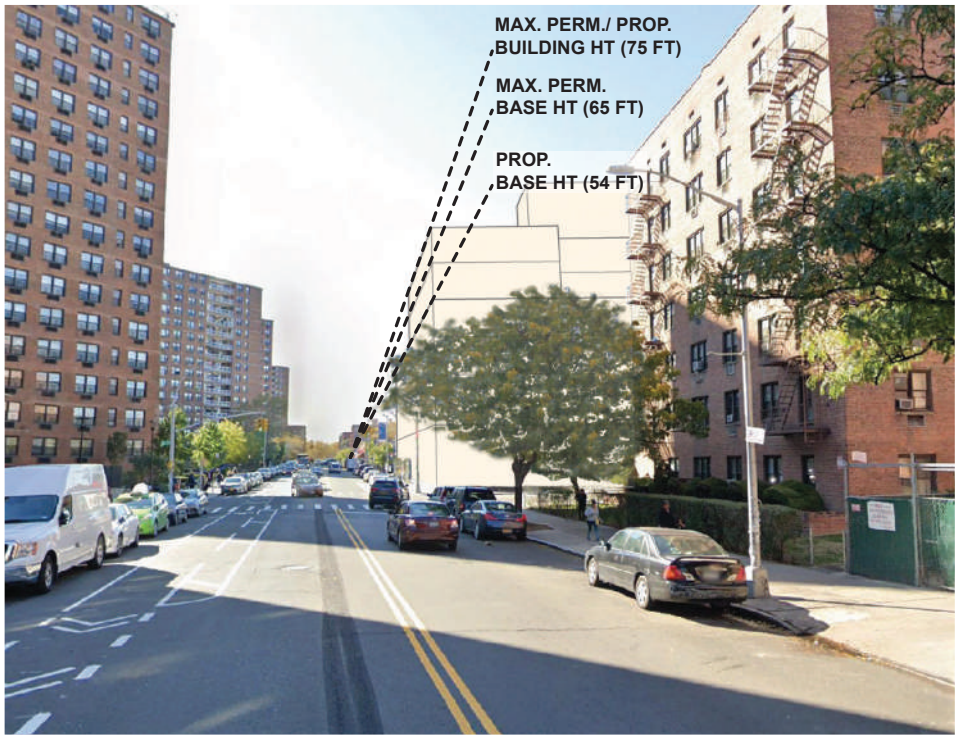
URBAN DESIGN

In the With Action condition, the existing supermarket on Projected Development Site 1 would be demolished, and the Applicant would construct an approximately 140,961-gsf six-story mixed-use building. The building footprint would fill the site, and the building would be massed with setbacks and recesses above the base. (See Figure A-1 for the proposed site plan and Figures A-2 and A-3 for elevations and renderings of the Proposed Development.) Along 57th Avenue, the building would rise to a maximum roof height of approximately 75 feet (six stories) and 100 feet

No Action Scenario



With Action Scenario



Source: Hill West Architects

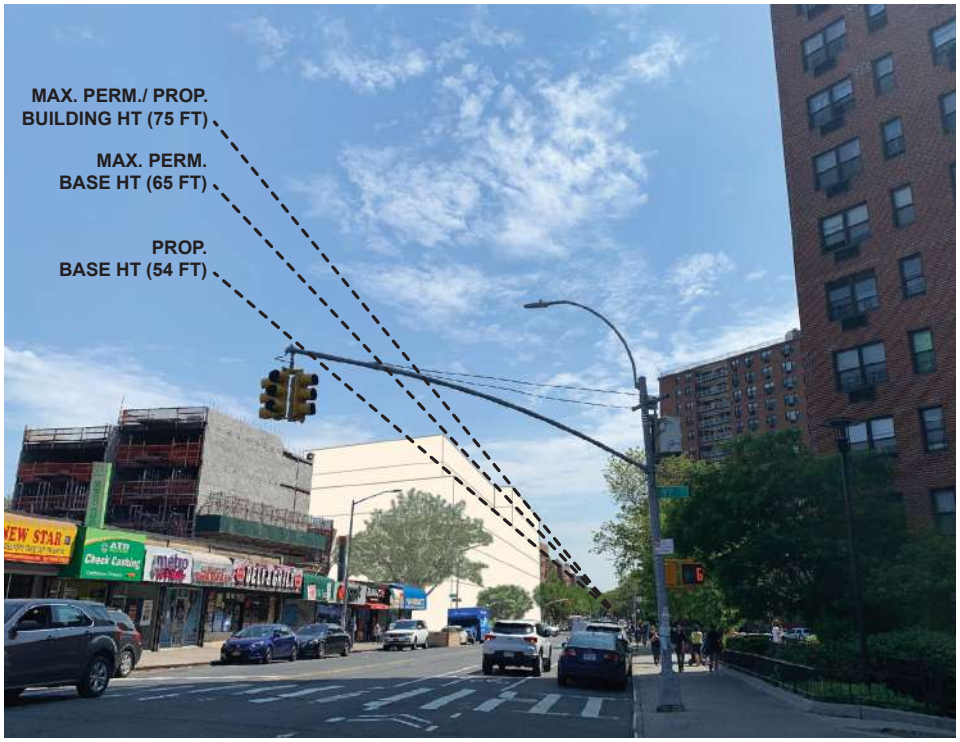
NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Illustrative Rendering – View west on 57th Avenue

No Action Scenario



With Action Scenario



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Illustrative Rendering – View east on 57th Avenue

No Action Scenario



With Action Scenario



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Illustrative Rendering – View south on 97th Place

No Action Scenario



With Action Scenario



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Illustrative Rendering – View north on 97th Place

No Action Scenario



With Action Scenario



Source: Hill West Architects

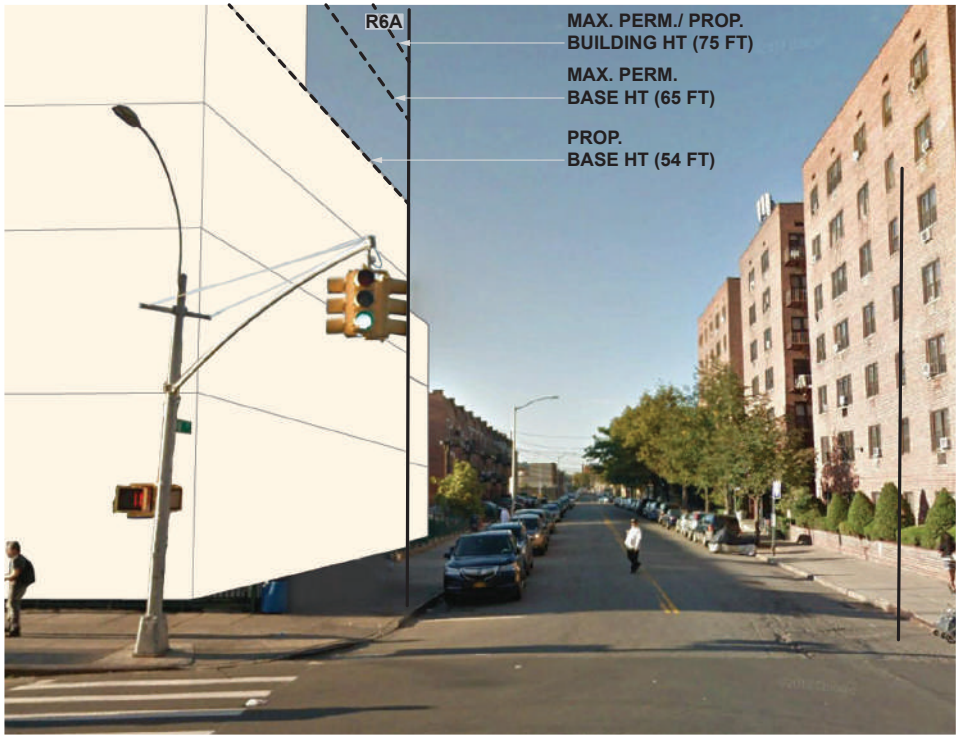
NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Illustrative Rendering – View south on 98th Street

No Action Scenario



With Action Scenario



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Illustrative Rendering – View north on 98th Street

12.6.21



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - Rendering
(57th Avenue and 98th Street)

97-27 57TH AVENUE

Figure F-14a

12.6.21



Source: Hill West Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Development - Rendering
(57th Avenue and 97th Place)

97-27 57TH AVENUE

Figure F-14b

to the top of the bulkhead, which would be set back from the street. The building would rise approximately 31 feet (two stories) along the majority of the 97th Place frontage and approximately 54 feet (three to four stories) along the majority of the 98th Street frontage. At the northwest corner of the building, there would be a setback above the 31-foot-tall base to transition the building to the scale of the adjacent detached houses. A new supermarket would occupy the ground floor, which would have large sections of glazed façades framed by brick piers on each street frontage. The upper floors would be faced in brick and articulated with recessed, square windows of varying size. The residential lobby would be located on 98th Street toward 57th Avenue, and at the northeast corner, there would be a loading dock for the supermarket and an entrance ramp for the residential parking area located on the second floor of the building. The loading dock would have a 24-foot-wide curb cut, and the residential parking entrance would have a 12-foot-wide curb cut. Approximately 25 parking spaces accessory to the supermarket use would be located in the cellar level, accessible from an 18-foot-wide curb cut and ramp down from 97th Place.

VISUAL RESOURCES

The Proposed Action would not affect visual resources on Projected Development Site 1, as the existing supermarket is not considered to be a visual resource.

STUDY AREA

URBAN DESIGN

It is not expected that the Proposed Action would result in adverse impacts on the urban design of the study area.

The proposed building on Projected Development Site 1 would have beneficial effects on the pedestrian experience by replacing the existing supermarket and parking lot with a new mixed-use building with a transparent ground floor built to the lot lines. The new building would contain a larger supermarket, and the proposed upper floor residential uses would be compatible with the primarily residential character of the study area. While the Proposed Development would have curb cuts for loading and parking garage access on both 98th Street and 97th Place, those features would not result in adverse urban design impacts, as the existing supermarket has curb cuts on 98th Street and 57th Avenue, and the majority of residential buildings in the study have curb cuts for driveways.

The proposed six-story building would be compatible in terms of scale, height, and bulk with the urban design of the study area, which includes detached two-story houses, rows of attached two- and three-story apartment buildings, free-standing seven-story apartment buildings, and the 17-story towers of LeFrak City. Further, as noted above, two six-story residential buildings will have been constructed across 97th Place from Projected Development Site 1 in the No Action condition. While the Proposed Development's massing with setbacks and recesses would be unique in the study area, it would not result in an adverse effect on urban design, as the Proposed Development would create streetwalls with active ground-floors, in contrast with the existing residential buildings that are set back from the street behind enclosed driveways, front yards, and landscaped areas. Further, the massing would transition the height and scale of the building down from 57th Avenue to the residential buildings north of Projected Development Site 1. The brick façades of the Proposed Development would be in keeping with the character of the study area where the majority of residential buildings are faced in brick.

VISUAL RESOURCES

As described above, the study area does not include any visual resources. Therefore, the Proposed Development would not result in significant adverse impacts on visual resources.

Constructed on an existing block and built to the lot lines, with upper floor setbacks, the Proposed Development would not block the view corridors along 98th Street, 97th Place, or 57th Avenue. It would be visible in those view corridors as part of the study area mix of low-rise residential buildings on 98th Street and 97th Place and the tall towers of LeFrak City along 57th Avenue.

In summary, the Proposed Action would not result in significant adverse impacts to urban design and visual resources. ✷

Attachment G: Hazardous Materials

A. INTRODUCTION

This attachment presents the findings of the hazardous materials assessment and assesses potential areas of concern that could pose a hazard to workers, the community, and/or the environment as a result of the Proposed Action. As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action would result in the construction of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

PRINCIPAL CONCLUSIONS

The Proposed Action would not result in significant adverse impacts related to hazardous materials. Based on the assessment (outlined below), the potential for significant adverse impacts related to hazardous materials resulting from the Proposed Action would be precluded through compliance with existing regulatory requirements and the Department of Environmental Protection (NYCDEP)–approved Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP).

METHODOLOGY

As described in Chapter 12, "Hazardous Materials," of the 2020 *CEQR Technical Manual*, the purpose of a hazardous materials assessment is to determine whether a proposed action could lead to potential increased human exposure to hazardous materials and whether the increased exposure could lead to significant public health or environmental impacts. The potential for hazardous material conditions was evaluated based on a September 2021 Phase I Environmental Site Assessment (ESA) and a February 2022 Phase II Subsurface Investigation prepared by AKRF, Inc. (AKRF) for Projected Development Site 1.

B. EXISTING CONDITIONS

TOPOGRAPHY AND SUBSURFACE CONDITIONS

Based on U.S. Geological Survey mapping, Projected Development Site 1 is approximately 25 feet above mean sea level (with topography sloping slightly down toward the south) and bedrock is expected to be encountered at approximately 200 to 225 feet below grade. Groundwater is expected to be first encountered at approximately 15 to 25 feet below grade and anticipated to flow in a southerly or southeasterly direction toward Meadow Lake in Flushing Meadows Corona Park, approximately one mile to the southeast. Groundwater in this portion of Queens is not used as a source of potable water.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

The Phase I ESA was conducted in September 2021 in accordance with the American Society of Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E1527-13). The Phase I ESA included a review of available records; a property reconnaissance; interviews with a property representative; a review of prior reports; a review of historical fire insurance maps; and an evaluation of regulatory database listings for Projected Development Site 1 and neighboring properties. The Phase I ESA identified the following Recognized Environmental Conditions (RECs), i.e., "*the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property*":

- The regulatory databases, historical city directories, historical fire insurance maps, and the reconnaissance of the property identified several historical and current dry cleaners in the surrounding area, including:
  - Mandarin Laundry, located approximately 180 feet east of Projected Development Site 1, was listed in the City Directory. Potential dry-cleaning chemicals, such as tetrachloroethylene (PCE), could have been used in association with possible former dry cleaning operations.
  - Florence Cleaners, located approximately 420 feet west of Projected Development Site 1, was listed in the Resource Conservation and Recovery Information System (RCRIS) database as a small quantity generator (SQG) of chromium, lead, PCE, trichlorethylene, and spent halogenated solvents. The review also identified six registered dry cleaners and two EDR Historic Cleaners within 960 feet of Projected Development Site 1.
  - Undocumented releases at these facilities have the potential to have affected the subsurface of Projected Development Site 1.
- The NY SPILLS database identified several spills in the surrounding area, including releases of transformer oils and petroleum fuel oils, with six spills identified within 290 feet of Projected Development Site 1. These spills have some potential to have affected the subsurface at the Property.

The Phase I ESA also identified additional non-REC environmental concerns, including the potential presence of asbestos-containing materials (ACM), lead-based paint (LBP), and/or polychlorinated biphenyls (PCBs) in building components, and the potential presence of historical fill, buried demolition debris and unknown buried tanks, and potential unknown contamination from adjoining properties. Additionally, the Phase I ESA identified chemical storage on Projected Development Site 1, which consisted of one 55-gallon drum containing Vaporene 9402, one 55-gallon drum containing hydrogen peroxide, and small quantities of chemicals and cleaning products (including refrigeration oils, detergents, and pre-packaged commercial chemicals).

SUBSURFACE (PHASE II) INVESTIGATION

A Phase II Subsurface Investigation (aka Phase II Investigation) Workplan was developed for Projected Development Site 1 by AKRF in December 2021. The Phase II Workplan proposed the advancement seven soil borings, three temporary groundwater monitoring wells, four soil vapor probes and one outdoor ambient air monitor. The Phase II Workplan was submitted to NYCDEP for review and approval prior to commencement of the investigation. In a letter dated January 20, 2022, NYCDEP approved the Phase II Workplan (See **Appendix A**).

Results of the investigation are summarized as follows:

A Phase II Subsurface Investigation (aka Phase II Investigation) was completed at Projected Development Site 1 by AKRF in February 2022 which consisted of a geophysical survey; the advancement of seven soil borings with continuous sample collection and laboratory analysis of 14 soil samples; installation of three temporary groundwater monitoring wells with collection and laboratory analysis of three groundwater samples; and installation of four temporary soil vapor points with collection and laboratory analysis of four soil vapor samples and one ambient air sample. Results of the investigation are summarized as follows:

- Surface materials consisted of asphalt of varying thickness between 2 and 5 inches and concrete of varying thickness between 2 inches and 10 inches. Soil beneath the Site consisted of fill material (including sand, silt, and gravel) to approximately 4 to 8 feet below ground surface (bgs), underlain by sand, silt and gravel, to at least the termination of each boring (up to 15 feet bgs). A geotechnical investigation conducted by GEODesign, Inc. P.C. in November 2020 identified fill material at the Site to depths between 10 and 15 feet bgs. Bedrock was not encountered during this investigation. No elevated photoionization detector (PID) readings (or other visual or olfactory evidence of contamination) were noted in the borings.
- Groundwater was observed from the soil borings between approximately 6 and 7 feet bgs, while the depth to water was measured from the temporary monitoring wells between approximately 7 and 8 feet bgs.
- No helium was detected during purging of the soil vapor samples, verifying an adequate seal. PID readings in purged soil vapor were non-detect.
- Soil sample analytical results were compared to 6 NYCRR Part 375 Soil Cleanup Objectives for Restricted – Residential Use (RRSCOs). Unrestricted Use Soil Cleanup Objectives (UUSCOs) were also included in relation to potential soil handling/disposal requirements and to assess potential remediation scenarios in the context of a regulatory program.
- Groundwater analytical results were compared to NYSDEC *Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*. It should be noted that the Class GA standards were developed assuming use of groundwater as a drinking water source; a scenario that does not and will not occur at the Site.
- Results from the three soil vapor samples were conservatively compared to indoor air criteria developed for residential settings published in the 2006 *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, specifically to NYSDOH Air Guideline Values (AGVs), including updates to the AGVs for: PCE in September 2013; trichloroethene (TCE) in August 2015; and Soil/Indoor Air Decision Matrix Values in May 2017.

The soil analytical results are summarized as follows:

- Twelve volatile organic compounds (VOCs) were detected in one or more samples, with concentrations ranging up to 0.17 milligrams per kilogram (mg/kg) (acetone in SB-01_0-2_20220210). Of these detections, only acetone was detected above its UUSCOs, but below its RRSCOs, in four soil samples; however, acetone is a common laboratory contaminant. Therefore, these exceedances are likely not indicative of actual Site conditions. VOC detections in all other samples were below their respective UUSCOs and RRSCOs.
- Twenty-seven SVOCs were detected in 12 of the 14 samples ranging up to 4.1 mg/kg (fluoranthene in SB-06_0-2_20220213). Four SVOCs [benzo(a)anthracene (maximum 1.7 mg/kg), benzo(a)pyrene (maximum 1.7 mg/kg), benzo(b)fluoranthene (maximum 2.1 mg/kg),

and indeno(1,2,3-c,d)pyrene (maximum 1.3 mg/kg)] were detected above their respective UUSCOs and RRSCOs in up to three soil samples. One SVOC [chrysene (maximum 1.7 mg/kg)] was detected above its UUSCOs, but below its RRSCOs in two soil samples (SB-04_0-2_20220213 and SB-06_0-2_20220213). The SVOC detections were generally polycyclic aromatic hydrocarbons (PAHs), which are a class of compounds found in some petroleum products, coal ash, and in other combustion products commonly found in fill material.

- Three metals [barium (maximum 440 mg/kg), copper (maximum 702 mg/kg), and mercury (maximum 2 mg/kg)] were detected above their respective UUSCOs and RRSCOs in up to three soil samples. Five metals [cadmium (maximum 3 mg/kg), lead (maximum 294 mg/kg), nickel (maximum 37.8 mg/kg), silver (maximum 5 mg/kg), and zinc (maximum 676 mg/kg)] were detected above their respective UUSCOs but below their respective RRSCOs in up to eight soil samples.
- Polychlorinated biphenyls (PCBs) were not detected above laboratory reporting limits in any of the soil samples.
- Three pesticides (P,P'-DDD, P,P'-DDE, and P,P'-DDT) were detected at concentrations ranging up to 0.14 mg/kg, above their respective UUSCOs but below their respective RRSCOs, in soil sample SB-04_0-2_20220213. Pesticides were not detected above the laboratory reporting limits in any other soil samples.
- The soil detections were attributed to historical fill materials observed in the borings rather than an on-site release.

The groundwater analytical results are summarized as follows:

- Five VOCs were detected in the three groundwater samples. Only Chlorobenzene was detected in sample TW-02_20220210 at a concentration of 12 micrograms per liter (µg/L), above its Class GA standard of 5 µg/L. All other results were either below the Class GA standards or below the laboratory reporting limits.
- One SVOC, acenaphthene, was detected at an estimated concentration of 1.9 µg/L in sample TW-02_20220210, which is below its Class GA standard of 20 µg/L. All other results were below the laboratory reporting limits.
- The same four metals were detected above their respective Class GA standards for total (unfiltered) metals and dissolved (filtered) metals throughout all three groundwater samples. Metal concentrations in the unfiltered samples may be elevated and attributed to suspended soil particles entrained within the groundwater samples, where concentrations from the dissolve samples best represent the groundwater quality. Dissolved iron was detected at concentrations of 14,500 and 19,500 micrograms per liter (µg/L), above its Class GA standard of 300 µg/L in samples TW-01_20220210 and TW-02_20220210, respectively. Dissolved lead was detected at a concentration of 37 µg/L, above its Class GA standard of 25 µg/L in sample TW-02_20220210. Dissolved manganese and sodium were detected at concentrations ranging from 522 to 2,410 µg/L and 42,700 to 425,000 µg/L, above their Class GA standards of 300 µg/L and 20,000 µg/L, respectively, in all three groundwater samples. These metals are likely naturally occurring or representative of regional conditions and their presence does not represent a concern.
- No PCBs were detected above laboratory reporting limits in the groundwater samples.
- No pesticides were detected above laboratory reporting limits in the groundwater samples.

The soil vapor analytical results are summarized as follows:

- Chlorinated VOCs (CVOCs), PCE and TCE, were detected at maximum concentrations of 26 µg/m^3 and 40 µg/m^3, respectively, in soil vapor sample SV-04_20220214. Petroleum compounds, including n-heptane and toluene, were detected at maximum concentrations of 120 µg/m^3 (SV-02_20220214) and 110 µg/m^3 (SV-04_20220214), respectively.
- Analytical results for the ambient air sample (AA-01) collected from the adjacent sidewalk along 97th Place identified 17 VOCs, with concentrations ranging up to 9.4 µg/m3 (acetone).

The CVOCs and petroleum compounds detected in the soil vapor samples were found at relatively low concentrations but were not detected in the soil and groundwater samples. When combined with Site/area history, the soil vapor detections appear most likely to be attributable to background conditions. The petroleum compounds detected in soil vapor are likely associated with off-site petroleum sources. The CVOCs detected in soil vapor are likely associated with historical dry cleaner operations at nearby off-site properties.

C. THE FUTURE WITHOUT THE PROPOSED ACTION

Absent the Proposed Action, it is assumed the existing commercial building would remain at Projected Development Site 1.

D. THE FUTURE WITH THE PROPOSED ACTION

In the future with the Proposed Action, Projected Development Site 1—Block 1906, Lot 1—would be redeveloped with a new approximately 140,961 gsf mixed-use building containing residential and commercial uses with accessory parking. This would entail excavation for the construction of the new building foundations, utility connections, grading, etc. Excavation could disturb any such hazardous materials and increase pathways for human or environmental exposure.

To avoid the potential for significant adverse impacts, a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) have been prepared for Projected Development Site that would be implemented during the subsurface disturbance associated with the Proposed Development. The Phase II Investigation, RAP, and CHASP were reviewed and approved by NYCDEP on May 26, 2022 (see **Appendix A**).

The RAP and CHASP address requirements for items such as soil disposal and transportation; soil stockpiling; dust control; community air monitoring; groundwater management; and contingency measures if additional petroleum storage tanks or other contamination should be unexpectedly encountered during construction. The RAP also includes the installation of a vapor barrier beneath the proposed building slab, below and around any elevator pits, and outside of the sub-grade foundation sidewalls.

The RAP assumes that the Site will be covered with concrete foundation slabs for the Proposed Development, except for a small approximately 300 sf portion along 98th Street where the building would be set back from the sidewalk six feet for access to the loading area and the 2nd floor parking area. This area is assumed to be covered with a concrete roadway. As specified in the RAP, any imported soil required for backfill must meet the RRSCOs and would be tested at the source facility and analyzed for 6 NYCRR Part 375 VOCs, SVOCs, pesticides, PCBs, and metals. A report will be prepared and submitted to NYCDEP for review and approval of the proposed clean fill/soil prior to importation to the Site.

Upon completion of all NYCDEP-approved remedial requirements, as outlined in the RAP, a P.E.-certified Remedial Closure Report will be submitted to NYCDEP. This report will demonstrate that all remedial activities have been properly implemented.

E. CONCLUSIONS

With the measures outlined above included as part of the Proposed Action, no significant adverse impacts related to hazardous materials would be anticipated to occur.

✷

Attachment H: Transportation

A. INTRODUCTION

This attachment examines the potential effects of the Proposed Action on transportation systems. The Applicant, SWDM 57 LLC, is seeking approval of a zoning map amendment (the "Proposed Action") subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

The area directly affected by the Proposed Action consists of Projected Development Site 1 (Block 1906, Lot 1), generally located on the north side of 57th Avenue between 97th Place to the west and 98th Street to the east (also referred to herein as the "Project Area" or "Rezoning Area"). Projected Development Site 1 totals approximately 34,178 square feet (sf) in area and is zoned R6A/C1-2 within 100 feet of 57th Avenue and R6B beyond 100 feet of 57th Avenue. Projected Development Site 1 is currently improved with a single-story, approximately 23,894 gsf supermarket. The existing supermarket use includes an unattended, 21-space at-grade parking lot on the eastern extent of the lot, with entry from 57th Avenue and exit onto 98th Street.

Under the No Action condition, the existing approximately 23,894 gsf supermarket and 21-space at-grade parking lot would remain on Projected Development Site 1.

Under the With Action condition, Projected Development Site 1 would be redeveloped with the Proposed Development—a mixed-use building containing a larger, and modernized supermarket totaling approximately 27,397 gsf which includes a first-floor loading area accessible from a 24-foot-wide curb cut along 98th Street. Approximately 25 parking spaces accessory to the supermarket would be located in the cellar level, accessible from an 18-foot-wide curb cut and ramp down from 97th Place. In addition, approximately 78 market rate rental apartments would be constructed above the new supermarket. Approximately 39 parking spaces accessory to the residential dwelling units (DUs) would be located on the 2nd floor, accessible from a 12-foot-wide curb cut and ramp up from 98th Street.

Table H-1 summarizes the program differences between the No Action and With Action conditions for Projected Development Site 1.

Table H-1
Comparison of No Action and With Action Conditions

Development Components	Existing / No Action Condition	Future With Action Condition (Proposed Development)	Increment
Residential (DUs)	0	78	+78
Supermarket (gsf)	23,894	27,397[1]	+3,503
Accessory Parking (spaces)	21[2]	64[2]	+43[2]

Notes:
[1] With action commercial gsf is inclusive of proposed supermarket loading area.
[2] The eastern extent of Projected Development Site 1 includes an existing unattended 21-space at-grade parking lot. The Applicant is proposing 25 unattended, enclosed accessory parking spaces for the Proposed Development's new supermarket (proposed on the cellar level) and 39 unattended, enclosed accessory parking spaces for the Proposed Development's residential uses (proposed on the 2nd floor).
Sources:
SWDM 57 LLC; Hill West Architects; and AKRF, Inc.

The travel demand projections and screening assessments in this chapter have been conducted pursuant to the methodologies outlined in the 2020 *City Environmental Quality Review (CEQR) Technical Manual*.

B. TRANSPORTATION SCREENING ASSESSMENTS

The *CEQR Technical Manual* recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis (Level 1) to estimate the volume of person and vehicle trips attributable to the proposed project. If the proposed project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the incremental trips at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the proposed project would result in 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station or at any given line, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, parking, and vehicular and pedestrian safety.

LEVEL 1 SCREENING ASSESSMENT

Trip generation factors for the Proposed Development are based on information from the *CEQR Technical Manual*, U.S. Census Data, and other previously approved EISs, as summarized in **Table H-2**.

RESIDENTIAL

The daily person trip rate and temporal distribution for the residential component are from the *CEQR Technical Manual*. The directional distribution and taxi vehicle occupancy are from the 2014 *Astoria Cove FEIS*. The modal splits and auto vehicle occupancy are from the U.S. Census American Community Survey (ACS) 2015-2019 Journey-to-Work (JTW) estimates for Queens census tracts 411, 437.02, 443.01, 443.02, 455, 457, 459, 461, and 683. The daily delivery trip rate and temporal and directional distributions are from the *CEQR Technical Manual*.

SUPERMARKET

The daily person trip rate and temporal distribution for the supermarket component are from the *CEQR Technical Manual*. The directional distribution is from the 2014 *Astoria Cove FEIS*. The modal splits and auto and taxi vehicle occupancies are from the 2011 *Admirals Row Plaza FEIS*. The daily delivery trip rate and temporal and directional distributions are from the 2014 *Astoria Cove FEIS*.

Table H-2
Travel Demand Assumptions

Use	Residential				Supermarket			
Total Daily Person Trip	(1) Weekday 8.075 Trips / DU			Saturday 9.600	(1) Weekday 175.00 Trips / KSF			Saturday 231.00
Trip Linkage	0%			0%	0%			0%
Net Daily Person trip	Weekday 8.075 Trips / DU			Saturday 9.600	Weekday 175.00 Trips / KSF			Saturday 231.00
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Temporal	(1)				(1)			
	10.0%	5.0%	11.0%	8.0%	5.0%	6.0%	10.0%	9.0%
Direction	(2)				(2)			
In	20%	51%	65%	50%	57%	50%	52%	52%
Out	80%	49%	35%	50%	43%	50%	48%	48%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)				(4)			
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Auto	22.0%	22.0%	22.0%	22.0%	36.0%	36.0%	36.0%	40.0%
Taxi	2.0%	2.0%	2.0%	2.0%	1.0%	1.0%	1.0%	1.0%
Subway	52.0%	52.0%	52.0%	52.0%	13.0%	13.0%	13.0%	10.0%
Bus	12.0%	12.0%	12.0%	12.0%	27.0%	27.0%	27.0%	22.0%
Walk	12.0%	12.0%	12.0%	12.0%	23.0%	23.0%	23.0%	27.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2)(3)				(4)			
	Weekday			Saturday	Weekday			Saturday
Auto	1.09			1.09	2.00			2.00
Taxi	1.40			1.40	2.00			2.00
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / DU			Saturday 0.02	(2) Weekday 0.35 Delivery Trips / KSF			Saturday 0.04
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Delivery Temporal	(1)				(2)			
	12.0%	9.0%	2.0%	9.0%	8.0%	11.0%	2.0%	4.0%
Delivery Direction	(1)				(2)			
In	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Sources:
(1) 2020 *CEQR Technical Manual*
(2) *Astoria Cove FEIS* (2014)
(3) U.S. Census American Community Survey (ACS) 2015-2019 Journey-to-Work (JTW) Data for Queens Census tracts 411, 437.02, 443.01, 443.02, 455, 457, 459, 461, and 683
(4) *Admirals Row Plaza FEIS* (2011)

TRAVEL DEMAND PROJECTION SUMMARY

As summarized in **Table H-3**, under the No Action condition, the existing supermarket would generate 208, 250, 417, and 496 person trips during the weekday AM, midday, PM, and Saturday

peak hours, respectively. Approximately 42, 50, 79, and 106 vehicle trips would be generated during the same respective peak hours.

Table H-3
Trip Generation Summary: No Action

Program	Peak Hour	In/Out	Person Trip						Vehicle Trip			
			Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Supermarket 23,894 GSF	AM	In	43	1	15	32	27	118	22	2	0	24
		Out	32	1	12	24	21	90	16	2	0	18
		Total	75	2	27	56	48	208	38	4	0	42
	Midday	In	45	1	16	34	29	125	23	2	0	25
		Out	45	1	16	34	29	125	23	2	0	25
		Total	90	2	32	68	58	250	46	4	0	50
	PM	In	78	2	28	59	50	217	39	2	0	41
		Out	72	2	26	54	46	200	36	2	0	38
		Total	150	4	54	113	96	417	75	4	0	79
	Saturday	In	103	3	26	57	70	259	52	3	0	55
		Out	95	2	24	52	64	237	48	3	0	51
		Total	198	5	50	109	134	496	100	6	0	106
Total	AM	In	43	1	15	32	27	118	22	2	0	24
		Out	32	1	12	24	21	90	16	2	0	18
		Total	75	2	27	56	48	208	38	4	0	42
	Midday	In	45	1	16	34	29	125	23	2	0	25
		Out	45	1	16	34	29	125	23	2	0	25
		Total	90	2	32	68	58	250	46	4	0	50
	PM	In	78	2	28	59	50	217	39	2	0	41
		Out	72	2	26	54	46	200	36	2	0	38
		Total	150	4	54	113	96	417	75	4	0	79
	Saturday	In	103	3	26	57	70	259	52	3	0	55
		Out	95	2	24	52	64	237	48	3	0	51
		Total	198	5	50	109	134	496	100	6	0	106

As summarized in **Table H-4**, under the With Action condition, the Proposed Development would generate 303, 319, 546, and 633 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 63, 65, 107, and 138 vehicle trips would be generated during the same respective peak hours.

Table H-4
Trip Generation Summary: With Action

Program	Peak Hour	In/Out	Person Trip						Vehicle Trip			
			Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Residential **78 DU**	AM	In	3	0	7	2	2	14	3	1	0	4
		Out	11	1	26	6	6	50	10	1	0	11
		Total	14	1	33	8	8	64	13	2	0	15
	Midday	In	4	0	8	2	2	16	4	0	0	4
		Out	3	0	8	2	2	15	3	0	0	3
		Total	7	0	16	4	4	31	7	0	0	7
	PM	In	10	1	23	5	5	44	9	1	0	10
		Out	5	0	13	3	3	24	5	1	0	6
		Total	15	1	36	8	8	68	14	2	0	16
	Saturday	In	7	1	16	4	4	32	6	2	0	8
		Out	7	1	16	4	4	32	6	2	0	8
		Total	14	2	32	8	8	64	12	4	0	16
Supermarket **27,397 GSF**	AM	In	49	1	18	37	31	136	25	2	0	27
		Out	37	1	13	28	24	103	19	2	0	21
		Total	86	2	31	65	55	239	44	4	0	48
	Midday	In	52	1	19	39	33	144	26	2	1	29
		Out	52	1	19	39	33	144	26	2	1	29
		Total	104	2	38	78	66	288	52	4	2	58
	PM	In	90	2	32	67	57	248	45	2	0	47
		Out	83	2	30	62	53	230	42	2	0	44
		Total	173	4	62	129	110	478	87	4	0	91
	Saturday	In	118	3	30	65	80	296	59	4	0	63
		Out	109	3	27	60	74	273	55	4	0	59
		Total	227	6	57	125	154	569	114	8	0	122
Total	AM	In	52	1	25	39	33	150	28	3	0	31
		Out	48	2	39	34	30	153	29	3	0	32
		Total	100	3	64	73	63	303	57	6	0	63
	Midday	In	56	1	27	41	35	160	30	2	1	33
		Out	55	1	27	41	35	159	29	2	1	32
		Total	111	2	54	82	70	319	59	4	2	65
	PM	In	100	3	55	72	62	292	54	3	0	57
		Out	88	2	43	65	56	254	47	3	0	50
		Total	188	5	98	137	118	546	101	6	0	107
	Saturday	In	125	4	46	69	84	328	65	6	0	71
		Out	116	4	43	64	78	305	61	6	0	67
		Total	241	8	89	133	162	633	126	12	0	138

The incremental trips between the No Action and With Action conditions are shown in **Table H-5**.

Table H-5
Trip Generation Summary: Net Increments

Peak Hour	In/Out	Person Trip						Vehicle Trip			
		Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	9	0	10	7	6	32	6	1	0	7
	Out	16	1	27	10	9	63	13	1	0	14
	Total	25	1	37	17	15	95	19	2	0	21
Midday	In	11	0	11	7	6	35	7	0	1	8
	Out	10	0	11	7	6	34	6	0	1	7
	Total	21	0	22	14	12	69	13	0	2	15
PM	In	22	1	27	13	12	75	15	1	0	16
	Out	16	0	17	11	10	54	11	1	0	12
	Total	38	1	44	24	22	129	26	2	0	28
Saturday	In	22	1	20	12	14	69	13	3	0	16
	Out	21	2	19	12	14	68	13	3	0	16
	Total	43	3	39	24	28	137	26	6	0	32

TRAFFIC

As shown in **Table H-5**, the Proposed Development would generate 21, 15, 28, and 32 incremental vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. The incremental vehicle trips are below the *CEQR Technical Manual* analysis threshold of 50 peak hour vehicle trips. Therefore, a detailed traffic analysis is not warranted and the Proposed Development would not result in any significant adverse traffic impacts.

PARKING

For parking, because a detailed traffic analysis has been determined to be unwarranted, an assessment of the Proposed Development's demand on the area's parking resources is also unwarranted. Furthermore, as described above, the Proposed Development would provide up to 64 on-site parking spaces to accommodate some, if not all, of the parking demand generated by the proposed uses.

TRANSIT

As detailed in **Table H-5**, the incremental transit trips generated by the Proposed Development would be 37, 22, 44, and 39 person trips by subway, and 17, 14, 24, and 24 person trips by bus during the weekday AM, midday, PM, and Saturday peak hours, respectively. The incremental subway trips are below the *CEQR Technical Manual* analysis threshold of 200 peak hour subway trips. Therefore, a detailed analysis of subway facilities is not warranted and the Proposed Development is not expected to result in any significant adverse subway impacts. The incremental bus trips would be dispersed onto the area's multiple local bus routes such that trip-making for any local bus route would not exceed the *CEQR Technical Manual* analysis threshold of 50 or more peak hour bus riders in a single direction. Therefore, a detailed bus line-haul analysis is also not warranted and the Proposed Development is not expected to result in any significant adverse bus line-haul impacts.

PEDESTRIANS

Incremental person trips generated by the Proposed Development would traverse the pedestrian elements surrounding the Development Site. As shown in **Table H-5**, the incremental pedestrian trips generated by the Proposed Development would be 95, 69, 129, and 137 person trips during the weekday AM, midday, PM, and Saturday peak hours. The incremental pedestrian trips are below the *CEQR Technical Manual* analysis threshold of 200 peak hour person trips. Therefore,

a detailed pedestrian analysis is not warranted and the Proposed Development is not expected to result in any significant adverse pedestrian impacts.

C. CONCLUSION

There would be no potential for traffic, parking, transit, or pedestrian impacts as a result of the Proposed Development. Therefore, the Proposed Development would not have any significant adverse impacts on transportation. ✷

A. INTRODUCTION

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action would result in the construction of a mixed-use building containing approximately 140,961 gross square feet (gsf) of residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4. The potential for air quality impacts associated with the Proposed Development is assessed in this attachment.

The maximum projected hourly incremental traffic volumes generated by the Proposed Development would not exceed the carbon monoxide (CO) screening threshold defined in the 2020 *City Environmental Quality Review (CEQR) Technical Manual* (170 peak hour vehicle trips at an intersection in the study area). The incremental traffic volumes would also not exceed the particulate matter (PM emission screening threshold discussed in Chapter 17, Sections 210 and 311, of the *CEQR Technical Manual*. Therefore, no mobile source analysis was required.

Since the Proposed Development would include fossil fuel-fired heating and water systems, a stationary source analysis was conducted to evaluate the potential impact from these sources on air quality.

The Proposed Development is located within 400 feet of a manufacturing zoned district. Therefore, the potential for emissions from existing nearby industrial facilities to impact air quality at the Proposed Development was assessed. In addition to emissions from the Proposed Development's stationary sources, the potential for emissions from existing large or major sources to impact the Proposed Development was assessed.

B. METHODOLOGY FOR PREDICTING POLLUTANT CONCENTRATIONS

HEATING AND HOT WATER SYSTEMS

The Proposed Development was assumed to include natural gas-fired heating and hot water systems. Therefore, a stationary source analysis was conducted to evaluate potential future pollutant concentrations from pollutant emissions from the heating and hot water systems.

AERMOD ANALYSIS

AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources and source types. AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain, including updated treatment of the boundary layer theory and understanding of

turbulence and dispersion, and includes handling of the plume interaction with terrain. AERMOD is EPA's preferred regulatory stationary source model.

AERMOD calculates pollutant concentrations from simulated sources (e.g., exhaust stacks) based on hourly meteorological data and surface characteristics and has the capability to calculate pollutant concentrations at locations where the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures. The analysis of potential impacts from exhaust stacks assumed stack tip downwash, urban dispersion and surface roughness length, and elimination of calms.

AERMOD incorporates the Plume Rise Model Enhancements (PRIME) downwash algorithm, which is designed to predict concentrations in the "cavity region" (i.e., the area around a structure which under certain conditions may affect an exhaust plume, causing a portion of the plume to become entrained in a recirculation region). AERMOD also uses the Building Profile Input Program for PRIME (BPIPPRM) to provide a detailed analysis of downwash influences on a direction-specific basis. BPIPPRM determines the projected building dimensions for modeling with the building downwash algorithm enabled. The modeling of plume downwash accounts for all obstructions within a radius equal to five obstruction heights of the stack.

The analysis was prepared both with and without downwash in order to assess the worst-case impacts at elevated locations close to the height of the source, which would occur without downwash, as well as the worst-case impacts at lower elevations and ground level, which would occur with downwash, consistent with the *CEQR Technical Manual* guidance.

Potential 1-hour average and annual NO_2 concentrations, added to representative background concentrations in the area, were compared with the National Ambient Air Quality Standard (NAAQS). Potential 24-hour and annual average incremental concentrations of $PM_{2.5}$ were compared with the $PM_{2.5}$ *de minimis* criteria defined in the *CEQR Technical Manual*.

For the analysis of the 1-hour average NO_2 concentration from the building's heating and hot water systems, AERMOD's Plume Volume Molar Ratio Method (PVMRM) module was used to analyze chemical transformation within the model. PVMRM incorporates hourly background ozone concentrations to estimate NO_x transformation within the source plume. The model applied ozone concentrations measured in 2015–2019 at the nearest available New York State Department of Environmental Conservation (NYSDEC) ozone monitoring station—the Queens College monitoring station in Queens. An initial NO_2 to NO_x ratio of 10 percent and 20 percent at the source exhaust stack was assumed for boilers and cogeneration systems, respectively, which is considered representative.

Five years of surface meteorological data collected at LaGuardia Airport (2015–2019) and concurrent upper air data collected at Brookhaven, New York were used in the analysis. The years 2015–2019 were selected to match the years analyzed for background concentrations.

EMISSION RATES AND STACK PARAMETERS

The Proposed Development would utilize fossil-fuel fired heating and hot water systems. Therefore, annual emission rates for heating and hot water systems were calculated based on fuel consumption estimates, using energy intensity estimates based on type of development and size of the building (140,961 gsf) as recommended in the *CEQR Technical Manual*, and applying

emission factors for natural gas-fired boilers.[1] Annual NO_2 concentrations from heating and hot water sources were estimated using a NO_2 to NO_x ratio of 0.75.[2] $PM_{2.5}$ emissions include both the filterable and condensable components. The short-term emission rates (24-hour and shorter) were calculated by scaling the annual emissions to account for a 100-day heating season.

Two separate scenarios for exhausting emissions of heating and hot water equipment were modeled. Scenario A conservatively assumed a central heating and hot water system to serve both residential and commercial portions of the Proposed Development. The heating and hot water systems were assumed to vent to a single stack located three feet above the sixth floor roof of the building at a height of approximately 78 feet above grade. Scenario B assumes the commercial heating and hot water systems vent to a single stack located nine feet above the 1st floor roof at a height of approximately 25 feet above grade, while the residential heating and hot water systems vent to a separate stack located at the same location and height as Scenario A.

To calculate exhaust velocities, the fuel consumption of the Proposed Development was multiplied by EPA's fuel factor for natural gas,[3] providing the exhaust flow rate at standard temperature; the flow rate was then corrected for the exhaust temperature, and exhaust velocity was calculated based on the stack diameter. Assumptions for stack diameter and exhaust temperature for the proposed systems were obtained from a survey of boiler exhaust data provided by New York City Department of Environmental Protection (DEP).[4]

The emission rates and exhaust stack parameters used in the modeling analyses are presented in **Table I-1**.

Table I-1
Heating and Hot Water Systems
Exhaust Stack Parameters and Emission Rates

Stack Parameter	Scenario A	Residential Stack	Commercial Stack
Stack Height (feet)	78	78	25
Stack Diameter (feet)(1)	1.97	1.97	1
Exhaust Velocity (feet/second)(1)	3.84	3.09	2.82
Exhaust Temperature (degrees Fahrenheit)(1)	307.8	307.8	307.8
Emission Rate (grams/second)			
NO_2 (1-hour average)	0.0328	0.0264	0.0023
NO_2 (Annual average)	0.0090	0.0072	0.0006
$PM_{2.5}$ (24-hour average)	0.0025	0.0020	0.0005
$PM_{2.5}$ (Annual average)	0.0007	0.0006	0.0001

Note:
(1) Stack parameter assumptions were obtained from a survey of boiler exhaust data provided by DEP.

[1] EPA. *Compilation of Air Pollutant Emission Factors AP-42*. 5th Ed., V. I, Ch. 1.4. September, 1998.

[2] EPA. *Guideline on Air Quality Models* 40 CFR part 51 Appendix W, Section 5.2.4.

[3] EPA. *Standards of Performance for New Stationary Sources.* 40 CFR Chapter I Subchapter C Part 60. Appendix A-7, Table 19-2. 2013.

[4] DEP. *Boiler Database.* August 11, 2017.

BACKGROUND CONCENTRATIONS

To estimate the maximum expected pollutant concentration at a given location (receptor), the predicted impacts must be added to a background value that accounts for existing pollutant concentrations from other sources that are not directly accounted for in the model (see **Table I-2**). For the 1-hour average NO_2 concentration at a given receptor, the modeled concentration from the source was added to corresponding background concentration of 103.8 µg/m^3. This background level represents the 3-year average (2017–2019) of the annual 98th percentile of the daily highest one-hour average NO_2 concentrations (this is the statistical form of the standard) monitored at the nearest NYSDEC background monitoring station—Queens College, Queens. Note that the maximum modeled concentration would not necessarily coincide with the maximum background concentrations, and, therefore, this approach results in a conservatively high estimate. The annual NO_2 background is based on the maximum annual average value measured over the most recent three years for which data is available (2017–2019), 28.7 µg/m^3.

For the AERMOD analysis, total 1-hour NO_2 concentrations were refined following a more detailed approach (EPA "Tier 3"). The methodology used to determine the total 1-hour NO_2 concentrations from the facility was based on adding the monitored background to modeled concentrations, as follows: hourly modeled concentrations from the emission sources were first added to the seasonal hourly background monitored concentrations; then the highest combined daily 1-hour NO_2 concentration was determined at each location and the 98th percentile daily 1-hour maximum concentration for each modeled year was calculated within the AERMOD model; finally the 98th percentile concentrations were averaged over the five years modeled.

Note that the latest version of AERMOD (Version 21112) has been identified as producing an error when using Tier 3 PVMRM module for NO_x to NO_2 conversion. The seasonal hourly background concentrations of NO_2 are added twice to the modeled concentrations, resulting in excessively high modeled concentrations. EPA has recommended to input background concentrations of NO_2 that are one-half of the actual background concentrations. This approach was also confirmed in a communication with NYSDEC.[5] Therefore, per EPA and NYSDEC recommendations, the seasonal hourly background concentrations provided by NYSDEC were divided by a factor of two for the AERMOD model input.

$PM_{2.5}$ impacts are assessed on an incremental basis and compared with the $PM_{2.5}$ *de minimis* criteria. The $PM_{2.5}$ 24-hour average background concentration based on the 98th percentile concentration, averaged over the years 2017–2019 was used to establish the *de minimis* value of 8.5 µg/m^3. $PM_{2.5}$ annual average impacts are assessed on an incremental basis and compared to the $PM_{2.5}$ *de minimis* criteria without considering the annual background. Therefore, the annual $PM_{2.5}$ background is not presented in the table.

For all background concentrations, the most recent year that is available is 2020; however, due to the COVID-19 pandemic, concentrations monitored during this period are not considered to be representative of normal background concentrations. Therefore, the years 2017–2019 were used to represent background concentrations.

[5] Per email communication with John Kent, NYSDEC Division of Air Resources, June 16, 2021.

Table I-2
Maximum Background Pollutant Concentrations

Pollutant	Average Period	Location	Concentration (µg/m³)	NAAQS (µg/m³)
NO_2	1-hour	Queens College, Queens	103.8	188
	Annual	Queens College, Queens	28.7	100
$PM_{2.5}$	24-hour	Queens College, Queens	18.1	35
Source: New York State Air Quality Report Ambient Air Monitoring System, NYSDEC, 2017–2019.				

RECEPTOR PLACEMENT

Receptors (locations at which concentrations are projected) generally include operable windows in residential or other buildings, air intakes, and publicly accessible open space locations, as applicable. The nearest building of similar or greater height is located at a distance of 87 feet from the Proposed Development. Other, more distant buildings were also modeled.

Discrete receptors were modeled along existing building façades to represent potentially sensitive locations such as operable windows and intake vents. Rows of receptors at the same elevation were spaced at intervals of 10 meters along the modeled buildings. Receptors were placed at multiple elevations (beginning at a height of six feet, then again at 15 feet, repeated at every 15 feet until the maximum height of the building was reached). Receptors were also placed at sidewalk locations every 10 meters at a pedestrian elevation of six feet.

Due to the shorter release height of the commercial stack in Scenario B, additional receptors were analyzed on the Proposed Development. An additional fine receptor grid was included above the second-floor garage of the Proposed Development to identify potential concentrations at publicly accessible rooftop locations. Building façade receptors were also placed on each of the four residential levels (floors 3 through 6) spaced at intervals of 10 feet to represent operable windows and air intakes of the Proposed Development. Receptors located on the Proposed Development were analyzed for the commercial stack only under this scenario, since the residential stack was analyzed on the upper roof of the Proposed Development and would not contribute to pollutant levels on the lower levels of the building.

INDUSTRIAL SOURCES

Nearby industrial facilities were examined to identify any potential for significant adverse impacts on future residents of the Proposed Development from air toxics. All industrial and manufacturing uses within 400 feet of Projected Development Site 1 ("industrial source study area") were considered for inclusion in the air quality impact analysis.

Land use maps and aerial photographs were reviewed to identify potential sources of emissions from manufacturing/industrial operations. A search of federal, state, and city permit data within the study area was conducted using DEP's Clean Air Tracking System (CATS) database[6] and EPA's Envirofacts database.[7] Next, a field survey of uses within 400 feet of Projected Development Site 1 was conducted on May 21, 2021 to determine the operating status of permitted industries, and identify any potential industrial sites not included in the permit databases.

[6] DEP. *Clean Air Tracking System database*. https://a826-web01.nyc.gov/DEP.BoilerInformationExt. Accessed May 13, 2021.

[7] EPA. *Envirofacts Data Warehouse*. https://www3.epa.gov/enviro/. Accessed *May 13, 2021*.

No permitted activities were identified based on the permit search and no sources of emissions were identified in the land use review and field survey. Therefore, no significant impacts on the Proposed Development are anticipated from industrial source emissions.

ADDITIONAL SOURCES

The *CEQR Technical Manual* requires an analysis of projects that may result in a significant adverse impact due to certain types of new uses located near a "large" or "major" emissions source. Major sources are defined as those located at facilities that have a Title V or Prevention of Significant Deterioration air permit, while large sources are defined as those located at facilities that require a State Facility Permit. To assess the potential effects of these existing sources on the Proposed Development, a review of existing permitted facilities was conducted. Sources of information reviewed included the NYSDEC Title V and State Facility Permit websites. The review of major- and large-sources permits[8] found no such facilities within 1,000 feet of Projected Development Site 1. Therefore, no analysis is required, and no significant adverse impacts would occur on the Proposed Development from major or large stationary sources of emissions.

C. PROBABLE IMPACTS OF THE PROPOSED DEVELOPMENT

HEATING AND HOT WATER SYSTEMS

AERMOD ANALYSIS

The results of the AERMOD analysis for NO_2 and $PM_{2.5}$ are presented in **Table I-3** for both scenarios A and B. As shown, there are no exceedances of the NO_2 1-hour NAAQS. In addition, the maximum predicted incremental concentrations of $PM_{2.5}$ are not predicted to exceed the CEQR *de minimis* criteria. Overall, based on the analysis presented, the Proposed Development's heating and hot water system would not result in any significant adverse air quality impacts.

[8] NYSDEC. *Access to DEC Air Permits*. https://www.dec.ny.gov/chemical/8569.html. Accessed May 13, 2021.

Table II-3
Maximum Modeled Pollutant Concentrations (µg/m^3)

Exhaust Scenario	Pollutant	Averaging Period	Maximum Modeled Concentration[(1)]	Background Concentration	Total Concentration	Criterion
A	NO_2	1-hour	127.49[(2)]	N/A	127.49	188[(3)]
		Annual	2.55[(4)]	28.69	31.24	100[(3)]
	$PM_{2.5}$	24-hour	6.29	N/A	N/A	8.5[(5)]
		Annual	0.20	N/A	N/A	0.3[(6)]
B	NO_2	1-hour	150.41[(2)]	N/A	150.41	188[(3)]
		Annual	1.73[(4)]	28.69	30.42	100[(3)]
	$PM_{2.5}$	24-hour	8.4	N/A	N/A	8.5[(5)]
		Annual	0.22	N/A	N/A	0.3[(6)]

Notes:
N/A – Not Applicable
(1) Multiple stack locations were modeled for each scenario. The maximum modeled concentration reflects the highest concentration of all stack locations for each pollutant.
(2) The 1-hour NO_2 concentration presented represents the maximum of the total 98th percentile 1-hour NO_2 concentration predicted at any receptor using seasonal-hourly background concentrations.
(3) NAAQS.
(4) Annual NO_2 impacts were estimated using a NO_2/NO_x ratio of 0.75.
(5) $PM_{2.5}$ *de minimis* criteria—24-hour average, not to exceed more than half the difference between the background concentration and the 24-hour standard of 35 µg/m^3.
(6) $PM_{2.5}$ *de minimis* criteria—annual.

To ensure that there is no potential for significant adverse impacts of $PM_{2.5}$ or NO_2 from the Proposed Development's heating and hot water system emissions, certain restrictions would be required for Projected Development Site 1 (Block 1906, Lot 1) through an Air Quality (E) Designation [E-680] that would be mapped on the property in connection with the proposed zoning map amendment. These restrictions were determined based on the analysis results presented in **Table I-3** and would avoid the potential for significant air quality impacts from stationary sources based on the conservative assumptions used in the analysis.

The restrictions through [E-680] are as follows:

Central Heating and Hot Water System Design (Scenario A with one stack)

For a central heating and hot water system, any new residential and/or commercial development on Projected Development Site 1 (Block 1906, Lot 1) must utilize only natural gas in any fossil fuel-fired heating, ventilation, and air conditioning (HVAC) system and hot water equipment, and the HVAC system and hot water exhaust stack(s) must be located at the highest tier of the building, and located at least 78 feet above grade, to avoid potential significant adverse air quality impacts.

Separate Heating and Hot Water System Design (Scenario B with two stacks)

Residential Portion. Any new development on Projected Development Site 1 (Block 1906, Lot 1) must utilize only natural gas in any fossil fuel-fired heating, ventilation, and air conditioning (HVAC) system and hot water equipment, and the HVAC system and hot water exhaust stack(s) must be located at the highest tier of the building, and located at least 78 feet above grade, to avoid potential significant adverse air quality impacts.

Commercial Portion. Any new development on Development Site (Block 1906, Lot 1) must utilize only natural gas in any fossil fuel-fired heating, ventilation, and air conditioning

(HVAC) system and hot water equipment and be fitted with low NO_x burners (30 ppm), and the HVAC system and hot water exhaust stack(s) located at least 25 feet above grade, and be no further than 156 feet from the lot line facing 57th Avenue, to avoid potential significant adverse air quality impacts. ✷

A. INTRODUCTION

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Action involves a zoning map amendment subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 140,961 gross square foot (gsf) mixed-use building containing residential and commercial uses with accessory parking (the "Proposed Development") at 97-27 57th Avenue (Block 1906, Lot 1 – "Projected Development Site 1") in the Corona neighborhood of Queens, Community District 4.

This attachment assesses the potential for the Proposed Action to result in significant adverse noise impacts. The analysis determines whether the Proposed Action would result in increases in noise levels that could have a significant adverse impact on nearby sensitive receptors and also considers the effect of existing noise levels on the Proposed Development that could result from the Proposed Action.

Projected Development Site 1 is bounded by existing residences to the north, 98th Street to the east, 57th Avenue to the south, and 97th Place to the west. The Proposed Development would include a larger, modernized supermarket which includes a first-floor loading area accessible from 98th Street and parking/back-of-house uses within the proposed cellar level. In addition, residential units would be constructed above the new supermarket, on floors 2 through 6.

The Proposed Action would not generate traffic volumes that have the potential to cause a significant noise impact (i.e., it would not result in a doubling of noise passenger car equivalents [Noise PCEs]), which is necessary to cause a perceptible increase in noise levels. However, ambient noise levels adjacent to Projected Development Site 1 also must be examined to address any noise attenuation requirements, as found in the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, for interior noise levels.

B. ACOUSTICAL FUNDAMENTALS

Sound is a fluctuation in air pressure. Sound pressure levels 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 1 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 J-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 levels continue to increase

In considering these values, it is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the background noise in an office, at 50 dBA, is perceived as twice as loud as a library at 40 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 5 dBA, the change will be readily noticeable.

Table J-1
Noise Levels of Common Sources

Sound Source	SPL (dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60–70
Typical Suburban Area	50–60
Quiet Suburban Area at Night	40–50
Typical Rural Area at Night	30–40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Source: 2020 *CEQR Technical Manual*	

NOISE DESCRIPTORS USED IN IMPACT ASSESSMENT

Because the sound pressure level 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., 1 hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by 10 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 Action, the L_{eq} descriptor has been selected as the noise descriptor to be used in this noise impact evaluation. The 1-hour L_{10} is the noise descriptor used in the *CEQR*

Technical Manual noise exposure guidelines to determine the required attenuation values to achieve acceptable interior noise levels.

C. NOISE STANDARDS AND CRITERIA

NEW YORK *CEQR TECHNICAL MANUAL* NOISE STANDARDS

The *CEQR Technical Manual* sets external noise exposure standards; these standards are shown in **Table J-2**. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.

Table J-2
Noise Exposure Guidelines For Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA		**NA**	NA	NA	NA	NA	NA
Hospital, nursing home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
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	
School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, outpatient public health facility		Same as Residential Day (7 AM–10 PM)	Ldn ≤ 60 dBA	Same as Residential Day (7 AM–10 PM)	60 < Ldn ≤ 65 dBA	Same as Residential Day (7 AM–10 PM)	(i) 65 < Ldn ≤ 70 dBA, (II) 70 ≤ Ldn	Same as Residential Day (7 AM–10 PM)	Ldn ≤ 75 dBA
Commercial or office		Same as Residential Day (7 AM–10 PM)		Same as Residential Day (7 AM–10 PM)		Same as Residential Day (7 AM–10 PM)		Same as Residential Day (7 AM–10 PM)	
Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

Notes:
(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more; (ii) *CEQR Technical Manual* noise criteria for train noise are similar to the above aircraft noise standards: the noise category for train noise is found by taking the L_{dn} value for such train noise to be an L^{Y}_{dn} (L_{dn} contour) value.

Table Notes:
[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
[2] Tracts of land where serenity and quiet are extraordinarily important and serve an important public need, and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.
[3] One may use 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).
Source: New York City Department of Environmental Protection (adopted policy 1983).

The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level (see **Table J-3**). Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential or community facility uses and 50 dBA or lower for commercial office uses, and are determined based on exterior noise levels.

Table J-3
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Actions	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[A]	(I) 28 dBA	(II) 31 dBA	(III) 33 dBA	(IV) 35 dBA	$36 + (L_{10} - 80)$[B] dBA

Notes:
[A] The above composite window-wall attenuation values are for residential dwellings and community facility uses. Commercial office spaces would be 5 dBA 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 dBA increments for L_{10} values greater than 80 dBA.
Source: New York City Department of Environmental Protection.

D. EXISTING NOISE LEVELS

NOISE MONITORING

Existing noise levels at Projected Development Site 1 were measured at three locations. The noise receptor sites are shown in **Figure J-1** and described below in **Table J-4.**

Table J-4
Noise Receptor Locations

Noise Receptor	Location	Duration
1	97th Place between 55th and 57th Avenues	20 minutes
2	57th Avenue between 97th Place and 98th Street	20 minutes
3	98th Street between 55th and 57th Avenues	20 minutes

At the receptor sites, the existing noise levels were measured for 20-minute periods during the three weekday peak periods: AM (7:00 AM–9:00 AM), midday (12:00 PM–2:00 PM), and PM (4:00 PM–6:00 PM). Measurements were conducted on June 3, 2021.

EQUIPMENT USED DURING NOISE MONITORING

Measurements were performed using a Brüel & Kjær Sound Level Meter (SLM) Type 2270, a Brüel & Kjær 1/2-inch microphone Type 4189, and a Brüel & Kjær Sound Level Calibrator Type 4231. The SLM has a valid laboratory calibration within 1 year, as is standard practice. The Brüel & Kjær SLM is a Class 1 instrument according to ANSI Standard S1.4-1983 (R2006). The microphone was mounted on a tripod at a height of approximately 5 feet above the ground and was mounted at least approximately five feet away from any large reflecting surfaces. The SLM was calibrated before and after readings with a Brüel & Kjær Type 4231 Sound Level Calibrator using the appropriate adaptor. Measurements were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, L_{90}, and 1/3 octave band levels. A



Noise Measurement Locations

97-27 57TH AVENUE

Figure J-1

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.

NOISE MEASUREMENT RESULTS

The results of the measurements of existing noise levels are summarized in **Table J-5**.

Table J-5
Measured Existing Noise Levels (in dBA)

Receptor	Measurement Location	Time	L_{eq}	L_1	L_{10}	L_{50}	L_{90}
1	97th Place between 55th and 57th Avenues	AM	63.1	74.5	63.9	60.4	59.3
		MD	59.2	64.7	60.2	58.5	57.8
		PM	63.4	71.0	66.2	61.6	59.7
2	57th Avenue between 97th Place and 98th Street	AM	68.3	79.9	71.1	63.3	57.4
		MD	65.4	76.3	67.9	60.8	55.3
		PM	66.9	77.9	67.1	60.8	56.9
3	98th Street between 55th and 57th Avenues	AM	64.0	73.7	67.5	60.4	56.5
		MD	63.6	74.9	65.1	58.6	54.8
		PM	61.7	71.8	65.8	57.4	54.9

Note: Field measurements were performed by AKRF, Inc. on June 3, 2021

At all the receptor sites, vehicular traffic on the adjacent roadways was the dominant noise source. In terms of the CEQR criteria, the existing noise levels at receptors 1 and 3 are categorized as "marginally acceptable," and noise levels measured at receptor 2 are categorized as "marginally unacceptable."

E. NOISE ATTENUATION MEASURES

As shown in **Table J-3**, the New York City *CEQR Technical Manual* has set noise attenuation quantities for buildings based on exterior noise levels to maintain acceptable interior noise levels. The acceptable interior noise level thresholds for the noise analysis are 45 dBA or lower for residential and community facility uses and 50 dBA for commercial uses.

The minimum façade noise attenuation ratings have been established based on existing noise levels at the project site. **Table J-6** outlines the required façade attenuation values for the Proposed Development.

Table J-6
Façade Attenuation Requirements (in dBA)

Façade(s)	Governing Noise Receptor(s)	Maximum L_{10}	Required Attenuation[1,2]
West	1	66.2	N/A
South	2	71.1	28
East	3	67.5	N/A
North	1, 3	67.5	N/A

Note:
[1] The composite window-wall attenuation values are for residential and community facility uses. Commercial office spaces and meeting rooms require 5 dBA less attenuation. Storage, corridor, stairwells, lobbies, and other spaces with non-noise-sensitive uses would not require any specific level of attenuation.
[2] "N/A" indicates that the highest calculated L_{10} is below 70 dBA. The *CEQR Technical Manual* does not specify minimum attenuation guidance for exterior L_{10} values below this level.

To require attenuation at Projected Development Site 1 , an (E) Designation for noise [E-680] would be mapped in connection with the proposed zoning map amendment, specifying the appropriate amount of window/wall attenuation for any new development. The text of [E-680] would be as follows:

Projected Development Site 1 (Block 1906, Lot 1)

To ensure an acceptable interior noise environment, future residential and commercial development must provide a closed-window condition with a minimum building façade attenuation of 28 dBA on the southern façade in order to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Normally, a building façade is composed of the wall, glazing, and any vents or louvers for HVAC systems in various ratios of area. The Proposed Development would be designed to provide composite window/wall attenuation greater than or equal to the attenuation requirements listed in **Table J-6**.

By adhering to the (E) Designation described above, the building to be developed as a result of the Proposed Action would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L_{10} for residential or community facility uses and 50 dBA L_{10} for commercial uses.

The noise (E) Designation would require a review by the New York City Office of Environmental Remediation (NYCOER) in advance of obtaining a building permit for the Proposed Development to ensure that the building façade would provide sufficient attenuation to result in acceptable interior noise levels. As part of the NYCOER review, the Applicant can propose to conduct a new noise survey at Projected Development Site 1 to measure exterior noise levels in order to refine the façade attenuation requirements.

F. MECHANICAL EQUIPMENT

It is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Action would not result in any significant adverse noise impacts related to building mechanical equipment. ✷

APPENDIX A
AGENCY 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: 77DCP874Q (DEPARTMENT OF CITY PLANNING)
Project:
Address: 97-27 57 AVENUE BBL: 4019060001
Date Received: 12/3/2021

[X**] No architectural significance**

[X**] No archaeological significance**

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

Comments:

REVISED OF THIS DATE.

LPC is in receipt of the EAS dated 9/22/21, and has found no historic or cultural resources on the project site and the study area. There is no need for a Construction Protection Plan for any historic or cultural resource.

Gina Santucci 12/3/2021

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 35808_FSO_GS_12032021.docx

Environmental Protection

Rohit T. Aggarwala
Commissioner

Angela Licata
Deputy Commissioner
Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
alicata@dep.nyc.gov

May 26, 2022

Stacey Barron
Associate Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 97-27 57th Avenue Commercial Overlay
Block 1906, Lot 1
CEQR # 22DCP144Q

Dear Ms. Barron:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the May 2022 Remedial Action Plan (RAP) and the May 2022 Construction Health and Safety Plan (CHASP) prepared by AKRF, Inc., on behalf of SWDM 57 LLC, (applicant), for the above referenced project located between 97th Place and 98th Street in the Corona neighborhood of Queens Community District 4. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to map a C2-4 overlay on Block 1906, Lot 1. The proposed action would facilitate the redevelopment of the project site with a new 6-story 140,961 gross square feet (gsf), mixed-use building which would include a larger, modernized supermarket totaling approximately 27,397 gsf, 66,071 gsf of residential space, 43,800 gsf of parking space and 3,693 gsf of mechanical space. Approximately 25 parking spaces accessory to the supermarket use would be located in the cellar level. It should be noted that the applicant-owned project site is currently developed with a one-story commercial building which houses an active Food Bazaar Supermarket.

The May 2022 RAP proposes proper handling, transportation and disposal of excavated materials from the site in accordance with applicable federal, state and local regulations; dust control procedures; air monitoring procedures; stockpiling of excavated soils on polyethylene sheeting and covered with appropriately anchored polyethylene sheeting; implementation of storm-water pollution prevention measures; all found underground storage tanks will be properly removed and closed in accordance with applicable federal, state and local regulations; dewatering, if necessary, conducted in accordance with applicable permits; as well as the installation of a vapor barrier system as part of the new foundation beneath the building slab, below and around any elevator pits, and outside of the sub-grade foundation sidewalls consisting of the Grace Preprufe 300R (46 mils) beneath the partial cellar slabs, the Florprufe 120 (21 mils) for the slab-on-grade level, the Grace Bituthene 160R (32 mils) up the sidewalls to grade, the Grace Bituthene 4000 (60 mils) on double-formed walls

and the Grace Bituthene liquid membrane to seal holes in the membrane and around penetrations. The partial cellars of the proposed building will be open to the outside air or ventilated in accordance with the New York City Building Code/New York City Mechanical Code. It should be noted that the Site will be covered with concrete foundation slabs for the new building, except for a small approximate 300 square foot portion along 98th Street where the building would be set back from the sidewalk 6 feet for access to the loading area and the 2nd floor parking area. This area is assumed to be covered with a concrete roadway. The May 2022 CHASP addresses worker and community health and safety during redevelopment.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

DEP finds the May 2022 RAP and CHASP for the proposed project acceptable. DCP should instruct the applicant that at the completion of the project, a Professional Engineer (P.E.) certified Remedial Closure Report should be submitted for DEP review and approval for the proposed project. The P.E. certified Remedial Closure Report should indicate that all remedial requirements have been properly implemented (i.e., transportation/disposal manifests for removal and disposal of soil in accordance with applicable local, state, and federal laws and regulations; capping the site with concrete foundation slabs/concrete roadway; installation of vapor barrier system; ventilation of the partial cellars of the proposed building, etc.).

Future correspondence and submittals related to this project should include the following CEQR # **22DCP144Q**. 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
S. Shellooe – DCP

Environmental Protection

Vincent Sapienza, P.E.
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January 20, 2022

Stacey Barron
Associate Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, New York 10271

Re: 97-27 57th Avenue
Block 1906, Lot 1
CEQR # 77DCP874Q

Dear Ms. Barron:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the December 2021 Subsurface Investigation Work Plan (Phase II Work Plan) and the December 2021 Health and Safety Plan (HASP) prepared by AKRF, Inc., on behalf of SWDM 57 LLC, (applicant), for the above referenced project located between 97th Place and 98th Street in the Corona neighborhood of Queens Community District 4. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to map a C2-4 overlay on Block 1906, Lot 1. The proposed action would facilitate the redevelopment of the project site with a new 6-story 140,961 gross square feet (gsf), mixed-use building containing 27,397 gsf of commercial space, 66,071 gsf of residential space, 43,800 gsf of parking space and 3,693 gsf of mechanical space. It should be noted that the applicant-owned project site is currently developed with a one-story commercial building which houses an active Food Bazaar Supermarket.

The December 2021 Phase II Work Plan proposes to install seven soil borings (SB-01 through SB-07), three temporary groundwater monitoring wells (TW-01, TW-02 and TW-03), four soil vapor probes (SV-01 through SV-04) and one outdoor ambient air monitor (AA-01) at the project site. Soil borings SB-04, SB-06, and SB-07 will be advanced to a depth of approximately 15 feet below grade surface (bgs), while boring SB-05 will be advanced to a depth of approximately 5 feet bgs, consistent with the assumed redevelopment excavation depth. Borings SB-01, SB-02 and SB-03 will be advanced deeper to facilitate the installation of the temporary groundwater sampling wells. Soil boring SB-01, SB-02, and SB-05 will be advanced in the current asphalt-paved parking lot and loading zone on the eastern/northeastern portion of the site, boring SB-03 will be advanced in the sidewalk at the corner of 57th Avenue and 97th Place and SB-04, SB-06, and SB-07 will be advanced within the current building. Two soil samples will be collected from each boring; one sample will be collected from the upper 2-foot interval below any existing pavement or building slab and the second sample from the 2-foot interval at the bottom of the proposed maximum proposed excavation depth (approximately 5 or 15 feet bgs depending on the location) or just above the water table, if shallower. If there is evidence of contamination (e.g., staining, odors, and elevated photoionization detector readings), a third sample will be collected from the interval showing the highest potential for contamination. Soil and groundwater samples will be collected and analyzed for Target Compound List (TCL)

volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260, TCL semi-volatile organic compounds (SVOCs) via EPA Method 8270, TCL pesticides via EPA Method 8081, polychlorinated biphenyls (PCBs) via EPA Method 8082 and Target Analyte List metals via EPA Methods 6000/7000 series (filtered and unfiltered for groundwater samples). Four soil vapor samples and one outdoor ambient air sample will also be collected and analyzed for VOCs via EPA Method TO-15.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

Phase II Work Plan

- DCP should inform the applicant that as per the updated *City Environmental Quality Review Technical Manual* (2021 Edition), a minimum of two soil samples should be collected from each test boring/probe. One shallow soil sample should be collected from the upper two feet of soil (typically the 0-2 feet bgs interval). A second soil sample should be collected from the two foot interval below the proposed maximum excavation depth(s). If groundwater or bedrock is encountered at a shallower depth than the proposed maximum excavation depth during borehole advancement, the subsurface soil sample should be collected from the two foot interval above the groundwater interface or bedrock. Soil borings must be screened for evidence of gross contamination (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using accepted field instruments). Where screening indicates contamination at an intermediate interval(s) in a soil boring, i.e. between 2 feet bgs and the proposed maximum excavation depth, an additional soil sample(s) should be collected for analysis. If groundwater is encountered in a test boring/probe within five feet of surface grade, only one sample per boring may be warranted as long as adequate upgradient and downgradient groundwater samples are collected. Soil samples collected should be discrete (grab) samples.

HASP

- DCP should instruct the applicant that as a standard requirement, the HASP should include VOCs, SVOCs, pesticides, PCBs, and heavy metals (specifically arsenic, lead, and mercury) as potential chemicals of concern. All associated information fact sheets or safety data sheets for these potential chemicals of concern that have not been included in Appendix A should be included (e.g., pesticides, PCBs, etc.).

DEP finds the December 2021 Phase II Work Plan and HASP for the proposed investigation acceptable, as long as the aforementioned information is incorporated into the Phase II Work Plan and HASP. DCP should inform the applicant that upon completion of the investigation activities, the applicant should submit a detailed Phase II report for DEP review and approval. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data and conclusions, comparison of soil, groundwater, and soil vapor analytical results (i.e., NYSDEC 6 NYCRR Part 375, NYSDEC Water Quality Regulations, and New York State Department of Health's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York), updated site plans depicting sample locations, boring logs, and remedial recommendations, if warranted.

Future correspondence and submittals related to this project should include the following CEQR # **77DCP874Q**. If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estesen
C. Scantlebury
M. Wimbish
S. Shellooe – DCP

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Memorandum

To:	Stacey Barron, AICP, Associate Project Manager Department of City Planning - Environmental Assessment & Review Division (EARD)
From:	Aaron Werner, AICP (AKRF)
Date:	January 13, 2022
Re:	97-27 57th Avenue Commercial Overlay (77DCP874Q) 2021 CEQR Technical Manual Updates – Sensitivity Analysis
cc:	Patrick Taylor, Harley Braun (SWDM 57 LLC) Allie Curreria (Greenberg Traurig, LLP)

AKRF Inc. (AKRF) submitted a draft Environmental Assessment Statement (EAS) and Transportation Demand Factors (TDF) memo for the above-referenced application to the Department of City Planning's Environmental Assessment and Review Division (EARD) on September 22, 2021 (through the online Applicant Portal). Since that time, comments have been provided to AKRF as follows:

- November 11, 2021 (via email): Comments received from the Department of Environmental Protection (DEP) requesting a Phase II workplan (subsequently submitted by AKRF on December 28, 2021);
- December 1, 2021 (via email): Editorial comments on the September 2021 draft EAS were provided by EARD, including an architectural and archaeological signoff memorandum from the Landmarks Preservation Commission (LPC) dated October 22, 2021;
- December 3, 2021 (via email): EARD provided an updated LPC signoff clarifying that a Construction Protection Plan (CPP) would not be required for any nearby known or potential resource;
- January 5, 2022 (via email): EARD provided technical and editorial comments on the Air Quality and Noise attachments of the September 2021 draft EAS.
- January 10, 2022 (via email): EARD provided comments from the Department of Parks and Recreation (DPR) on the Shadows (no comments) and Open Space attachments of the draft EAS. As part of the same correspondence EARD also requested a sensitivity analysis and hard look at the project to confirm that no new or different impacts would occur based on the 2021 update to the *CEQR Technical Manual,* as well as a request for a footnote in the EAS (in an appropriate place, such as one of the project description sections) that acknowledges the 2021 update and documents the sensitivity analysis/hard look.

AKRF has reviewed the recently released 2021 *CEQR Technical Manual* and is submitting this memorandum to summarize whether or not the updated guidance would potentially affect the analyses currently under review. As outlined below, the updated guidance would not alter the analysis methodology or findings currently presented in the EAS.

In addition, as requested by EARD, the final EAS could include a footnote similar to what is included below, within the Project Description attachment. The footnote would explain how the analysis follows prior *CEQR Technical Manual* guidelines, but acknowledges that a hard look was taken at the new guidance:

> *"The analyses presented in this EAS were generally conducted in accordance with the guidance outlined in the 2020 New York City Environmental Quality Review (CEQR) Technical Manual. On December 30, 2021, following completion and commencement of the lead agency's review of the EAS, a substantive update to the 2020 CEQR Technical Manual was released. By its terms, the 2021 CEQR Technical Manual is to be used as guidance for "any environmental review commenced on or after the date" of its release. With respect to impact reviews commenced prior to such date that have not been brought to completion with the issuance of a negative declaration, the lead agency is to consider whether it would be appropriate to supplement the impact analyses previously prepared, based on whether the 2021 CEQR methodologies could result in any new or potentially greater project-related impacts. The environmental review for the Proposed Action commenced prior to the issuance of the 2021 CEQR Technical Manual, but had not yet been completed. Based on a sensitivity analysis memorandum prepared by ARKF in January 2022, the guidance of the 2021 CEQR Technical Manual would not alter the conclusions of the technical analyses already completed, and no significant adverse impacts would result from the Proposed Action."*

Note: the summaries below address only technical areas where the *2021 CEQR Technical Manual* updates may have a substantive effect on the analysis; other updates in the guidance are generally textual, e.g., terminology, and/or are not relevant to the EAS based on previously completed screenings that would not change.

OPEN SPACE

- The updated guidelines in the 2021 *CEQR Technical Manual* removed the underserved and well-served criteria from the preliminary screening threshold. The preliminary screening threshold is now 200 residents or 500 non-residents. In addition, if any portion of a project area is within a "gap area," a detailed assessment may be warranted. The Proposed Development is expected to generate approximately 253 new residents, and the Project Area is within a "gap area." Regardless of the "gap area" being identified, a detailed analysis was already conducted for the September 2021 draft EAS due to the 253 projected residents.
- The updated guidelines have also changed the indirect effects impact thresholds. For example, in areas with a very low total, active, and passive open space ratio (OSR) under existing, No-Action and With-Action conditions, a change in OSR between the No-Action and With-Action conditions of 1 percent or more may be considered significant. Although this area exhibits very low OSRs under each scenario, the analysis in the September 2021 draft EAS found that the Proposed Development would result in a decrease in total, active, and passive OSR of approximately 0.38 percent, which falls below the 1 percent impact threshold under both the old and new guidance.
- In addition, on January 10, 2022, DPR provided comments to EARD on the analysis contained in the September 2021 draft EAS (quoted below). These suggested revisions are being made to the Open Space attachment of the EAS and will be provided to EARD for review through a separate transmittal. The impact significant portion of the analysis will now compare to a 1 percent change, which would not alter the conclusions.

- *DPR: "We agree no impact based on percent change but the analysis should compare to a 1% change not a 5% change. The OSR would be considered very low for the study area. Since the percent change is below 1% there should not be an impact."*
- *DPR: "If the project is including any type of recreational features, a roof deck, a gym, benches in a courtyard, it should be discussed in the Open Space assessment "Qualitative Considerations" section as a way to offset some of the recreational demand of the new residents. The Qualitative Considerations section should also cite the travel time to get to Flushing Meadows-Corona Park from the project site."*

- Based on the above, as well as the revisions already underway to address DPR feedback, the new guidance would not alter the finding that the Proposed Development would not result in a significant adverse open space impact.

TRANSPORTATION

- The daily trip rates and temporal and directional distributions were reviewed and considered for the Proposed Development's residential and supermarket land uses based on the 2021 CEQR Technical Manual. The incremental trips generated by the Proposed Development would still be below analysis thresholds warranting further analysis.
  - Incremental vehicle trips would be 20, 23, 29, and 36 (compared to 21, 15, 28, and 32 as noted in the September 2021 draft TDF memo) during the weekday AM, midday, PM, and Saturday peak hours.
  - Incremental subway trips would be 36, 27, 40, and 41 (compared to 37, 22, 44, and 39 as noted in the September 2021 draft TDF memo) during the same respective peak hours.
  - Incremental bus trips would be 18, 21, 30, and 29 (compared to 17, 14, 24, and 24 as noted in the September 2021 draft TDF memo) during the same respective peak hours.
  - Incremental person trips would be 97, 98, 145, and 160 (compared to 95, 69, 129 and 137 as noted in the September 2021 draft TDF memo) during the same respective peak hours.
- The Proposed Development would not generate any ferry trips to warrant further analysis.
- Therefore, as with the September 2021 draft TDF memo, when applying the updated 2021 *CEQR Technical Manual* trip generation assumptions, the incremental trips generated by the Proposed Development would continue to be below CEQR analysis thresholds warranting further analysis and the Proposed Development is not expected to result in any significant adverse transportation impacts.

AIR QUALITY (STATIONARY SOURCES)

- Since the Proposed Development would continue to screen-out for mobile sources under the 2021 *CEQR Technical Manual* guidance, the Proposed Development would only trigger analyses for stationary and industrial sources. Since the methodology to be followed for stationary and industrial sources remains consistent under the 2021 *CEQR Technical Manual*, no new or additional analysis is required.
- It should be noted that on January 5, 2022, EARD provided editorial and technical comments on the Air Quality attachment from the September 2021 draft EAS. The comments received required revisions to Scenario B of the AERMOD model, in the form of additional receptors for the residential floors above the commercial use (Floors 3-6). The updated Air Quality attachment and backup will be provided to EARD for further review through a separate transmittal. The maximum concentrations did not change as a result of the revisions.

NOISE

- The Noise chapter of the 2021 *CEQR Technical Manual* was updated to distinguish the impact of aircraft and train noise on the required attenuation values to achieve acceptable interior noise levels. The Proposed Development does not have a direct line of sight to a rail line and is not within the area of influence of aircraft noise (i.e., within a 65 dBA DNL contour of any airport). Consequently, neither aircraft nor train noise will influence the façade attenuation requirements or change any of the conclusions from the Noise attachment of the September 2021 draft EAS.
- It should be noted that on January 5, 2022, EARD provided editorial comments on the Noise attachment from the September 2021 draft EAS. These have been addressed and an updated Noise attachment will be provided to EARD for further review through a separate transmittal. ✷