30-02 Newtown Avenue Rezoning
Environmental Assessment Statement

CEQR # 20DCP090Q

Prepared for:
Lynest Associates, LLC.

Prepared by:
Philip Habib & Associates

December 9th, 2020

30-02 Newtown Avenue
Environmental Assessment Statement

TABLE OF CONTENTS

Environmental Assessment Statement

(EAS) Form

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 30-02 Newtown Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 20DCP090Q	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) 200282 ZMQ, N200283 ZRQ	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 Lynest Associates, LLC.		
NAME OF LEAD AGENCY CONTACT PERSON Olga Abinader, Director, EARD			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Jaclyn Calcagno Scarinci, Land Use Counsel		
ADDRESS 120 Broadway			ADDRESS 666 Fifth Avenue, 20th Floor		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10103
TELEPHONE 212-720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE 212-259-6416	EMAIL jaclyn.scarinci@akerman.com	

5. *Project Description*

The applicant, Lynest Associates LLC, is seeking approval of a zoning map amendment to rezone Block 595; Lots 19, 26, and 27, and a small portion of Lot 10 (the "Proposed Rezoning Area") from a C4-4A district to C4-4D and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to map the Proposed Rezoning Area as a Mandatory Inclusionary Housing Area. These two discretionary actions (the "proposed actions") are needed to facilitate the redevelopment of the applicant-owned project site at 30-02 Newtown Avenue (Queens Block 595; Lots 19, 26, and 27; the Projected Development Site) in the Astoria neighborhood of Queens Community District (CD) 1.

As described above, the Proposed Rezoning Area consists of Lots 19, 26, 27, and a small portion of Lot 10 (refer to Figure 1). The Proposed Rezoning Area measures approximately 15,825 sf and is located on the block bound by Newtown Avenue to the north, 31st Street to the east, 30th Avenue to the south, and 30th Street to the west. The 15,556 sf Projected Development Site is currently occupied by Finkelstein Inc., a tire repair and wholesale business, and includes three two-story commercial/automotive repair buildings. Only a small portion (approximately 269 sf) of Lot 10 would be rezoned under the proposed actions.

Approval of the Proposed Actions would facilitate the development of an approximately 138,470 gsf (111,822 zsf) mixed-use residential, commercial, and community facility development on the Projected Development Site (the "Proposed Development"), which would have a FAR of 7.19 maximizing the allowable development at the site. The Proposed Development would include approximately 102 DUs (including up to 31 affordable DUs pursuant to the MIH program), 8,400 gsf of ground floor retail space, and a 99-seat black box theater to be occupied by the Astoria Performing Arts Committee along with office space (5,696 gsf in the ground floor and cellar). The Proposed Development would include 30 parking spaces in an attended below-grade garage accessed via a ramp on 30th Street. For conservative analysis purposes, a different condition will be analyzed as a reasonable worst-case development scenario (RWCDS), the proposed development would include 14-stories with maximum building height 145 feet.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 01	STREET ADDRESS 30-02 Newtown Avenue

TAX BLOCK(S) AND LOT(S) Block 595; Lots 19, 26, 27, and part of 10 | ZIP CODE 11102

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Proposed Rezoning Area comprises the northern portion of the block bounded by Newtown Avenue to the north, 31st Street to the east, 30th Avenue to the south, and 30th Street to the west.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY C4-4A | ZONING SECTIONAL MAP NUMBER 9a

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

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

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

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

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

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 15,825 sf | Waterbody area (sq. ft) and type: 0 sf

Roads, buildings, and other paved surfaces (sq. ft.): 15,825 sf | Other, describe (sq. ft.): 0 sf

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): 138,470 gsf

NUMBER OF BUILDINGS: 1 | GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 138,470

HEIGHT OF EACH BUILDING (ft.): 145' | NUMBER OF STORIES OF EACH BUILDING: 14

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: 15,556 sf

The total square feet not owned or controlled by the applicant: 269 sf

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

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

AREA OF TEMPORARY DISTURBANCE: 15,556 sq. ft. (width x length) VOLUME OF DISTURBANCE: 155,560 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 15,556 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.)	111,302 gsf	8,400 gsf	5,696 gsf	
Type (*e.g.,* retail, office, school)	102 units	Retail	Theater space, box-office, office	

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 239 NUMBER OF ADDITIONAL WORKERS: 24

Provide a brief explanation of how these numbers were determined: The number of additional residents was determined based on the average household size of 2.34 for Queens Community District 1 (2010 Census). The number of additional workers assumes 1 worker per 333 sf of retail space, 1 worker per 25 DUs, and 35 workers for the theater space.

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

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

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2024

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18-22 months

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Construction would begin in 2022 following approval of the proposed actions and would be completed by 2024.

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

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

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See Attachment C		
(e) Is the project a large, publicly sponsored project?	☐	☒
o 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?	☐	☒
o If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of 200 or more residential units?	☐	☒
o Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
o Directly displace more than 500 residents?	☐	☒
o Directly displace more than 100 employees?	☐	☒
o Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o 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		
o **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)	☐	☒
o **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)	☐	☒
o **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)	☐	☒
o **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?	☒	☐
o 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?	☐	☒
o 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?	☐	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		

	YES	NO
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
o 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?	☐	☒
o 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?	☒	☐
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: Refer to Attachment B	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒

	YES	NO
(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): (102 DUs * 41 lbs) + (79 lbs * 25 retail employees) + (13 lbs* 35 theater employees) = 6,612 lb/week		
o 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): 126.7 MBtu Res * 111,302 gsf) + (216.3 MBtu Com * 8,400 gsf) + (250.7 MBtu Institutional * 5,696) = 17,346,871 MBtu		
(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:		
o 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.*	☐	☐
o 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?	☐	☐
o 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?	☒	☐
o 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 B	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(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		

	YES	NO
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. Refer to Attachment B		
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. Refer to Attachment B		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. Refer to Attachment B		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Philip Habib, P.E.	December 4th, 2020

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
Deputy Director, Environmental Assessment and Review Division	City Planning Commission
NAME	DATE
Stephanie Shellooe	December 11, 2020

SIGNATURE

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions are a Zoning Map Amendment to rezone the project area (Queens, Block 595, Lots 19, 26 and 27 and a portion of Lot 10) from a C4-4A district to a C4-4D and a Zoning Text Amendment to establish a Mandatory Inclusionary Housing area with MIH options 1 and 2 coterminous with the rezoning area in the Astoria neighborhood of Queens Community District 1. The project area includes approximately 15,825 square feet and comprises the northern portion of Queens Block 595 with frontage along 30th Street, Newtown Avenue, and 31st Street. The proposed actions would facilitate the development of a mixed use building containing approximately 102 residential units (up to 31 of which would be affordable pursuant to MIH), 8,400 gross square feet (gsf) of ground floor retail space, and approximately 5,696 gsf of community facility on the ground floor be occupied by the Astoria Performing Arts Committee for a 99-seat black box theatre along with office space. Zoning controls would also be modified on a portion of Lot 10 within the project area but given the small area affected by the proposed actions, Lot 10 is not expected to be redeveloped as a result of the proposed actions. The proposed actions are anticipated to introduce new commercial, community facility and residential uses to the project area that would be compatible with surrounding land uses, given the existing character of Newtown Avenue and the surrounding area, a mixed-use neighborhood developed with mid- to high-density buildings. Therefore, the change in land use and zoning would not constitute a significant adverse impact.

Open Space

A detailed analysis related to open space is included in the EAS. According to the 2014 CEQR Technical manual, a significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. The proposed actions would introduce approximately 239 new residents and 24 workers to the proposed rezoning area. The population introduced by the proposed actions would result in a 0.46 percent decrease in the study area's open space ratio, less than the 2014 CEQR Technical Manual impact threshold of one percent for areas considered under-served by open space. Therefore, the proposed actions would not result in significant adverse impacts to open space.

Shadows

A detailed analysis related to shadows in included in the EAS. According to the 2014 CEQR Technical Manual, an adverse shadow impact is considered to occur when the shadow from a proposed project falls upon a publicly accessible open space, a historic landscape, or other resource if the features that make the resource significant depend on sunlight, or if the shadow falls on an important natural feature and adversely affects its uses or threatens the survival of important vegetation. The proposed actions would result in a new 145-foot tall building that would introduce incremental shadows to a nearby open space resource, Athens Square. Incremental shadows would occur on three of the four analysis days during the early morning hours and would not extend past 10am. Incremental shadows would be limited to the eastern portion of the park. Athens Square would continue to receive adequate sunlight during the morning, afternoon and evening hours and would not affect vegetation or usability of the park. Therefore, the proposed actions would not result in significant adverse impacts related to shadows.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-593) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. This (E) designation supersedes the (E) designation (E-245) established as part of the Astoria Rezoning (CEQR No. 10DCP019Q). The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Stephanie Shellooe at 212-720-3328.

TITLE	LEAD AGENCY
Deputy 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	DATE
Stephanie Shellooe, AICP	December 11, 2020
SIGNATURE	

Project Name: 30-02 Newtown Ave Rezoning
CEQR # 20DCP090Q
SEQRA Classification: Unlisted

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE December 14, 2020
SIGNATURE	

Project Name: 30-02 Newtown Ave Rezoning
CEQR # 20DCP090Q
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 595, Lots 19, 26 and 27

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-593**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below. This (E) designation supersedes the (E) designation (E-245) established as part of the Astoria Rezoning (CEQR No. 10DCP019Q).

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

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Site 1** for hazardous materials would apply as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

Project Name: 30-02 Newtown Ave Rezoning
CEQR # 20DCP090Q
SEQRA Classification: Unlisted

Air Quality

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

> ***Projected Development Site 1:*** *Any new residential or community facility development and/or enlargement on the above-referenced property must ensure that the heating, ventilation, and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier or at least 118 feet above grade to avoid any 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/community facility uses must provide a closed-window condition with a minimum of 40 dBA window/wall attenuation on the facades facing 31st Street and the facades facing 30th Avenue within 100 feet of 31st Street and the facades facing Newtown Avenue within 50 feet of 31st Street and 31 dBA of attenuation of the facades facing Newtown Avenue beyond 50 feet of 31st Street and 28 dBA of attenuation of the facades facing 30th Street and the facades facing 30th Avenue beyond 100 feet of 31st Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

Figure 1
Project Location

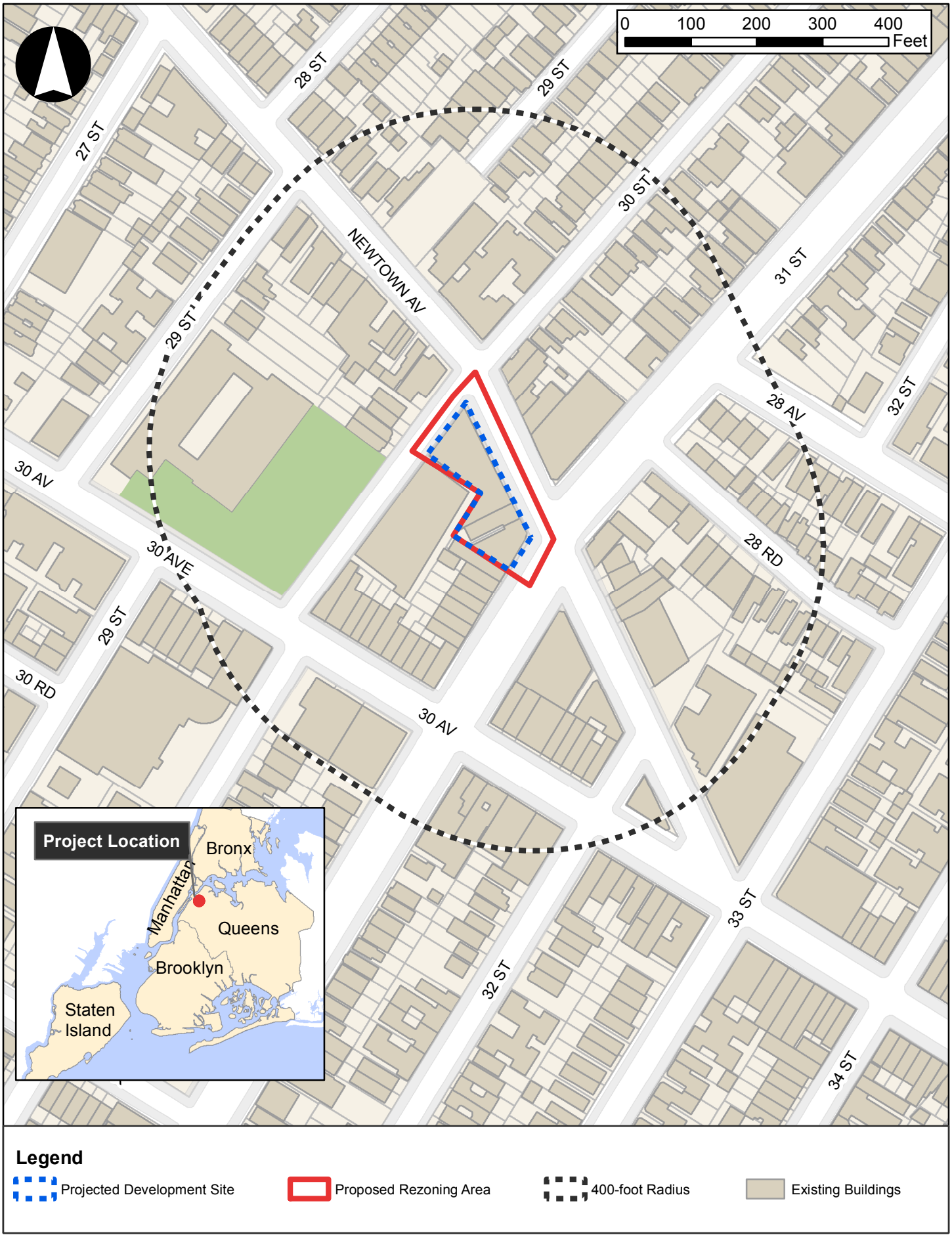


Figure 2
Land Use Map

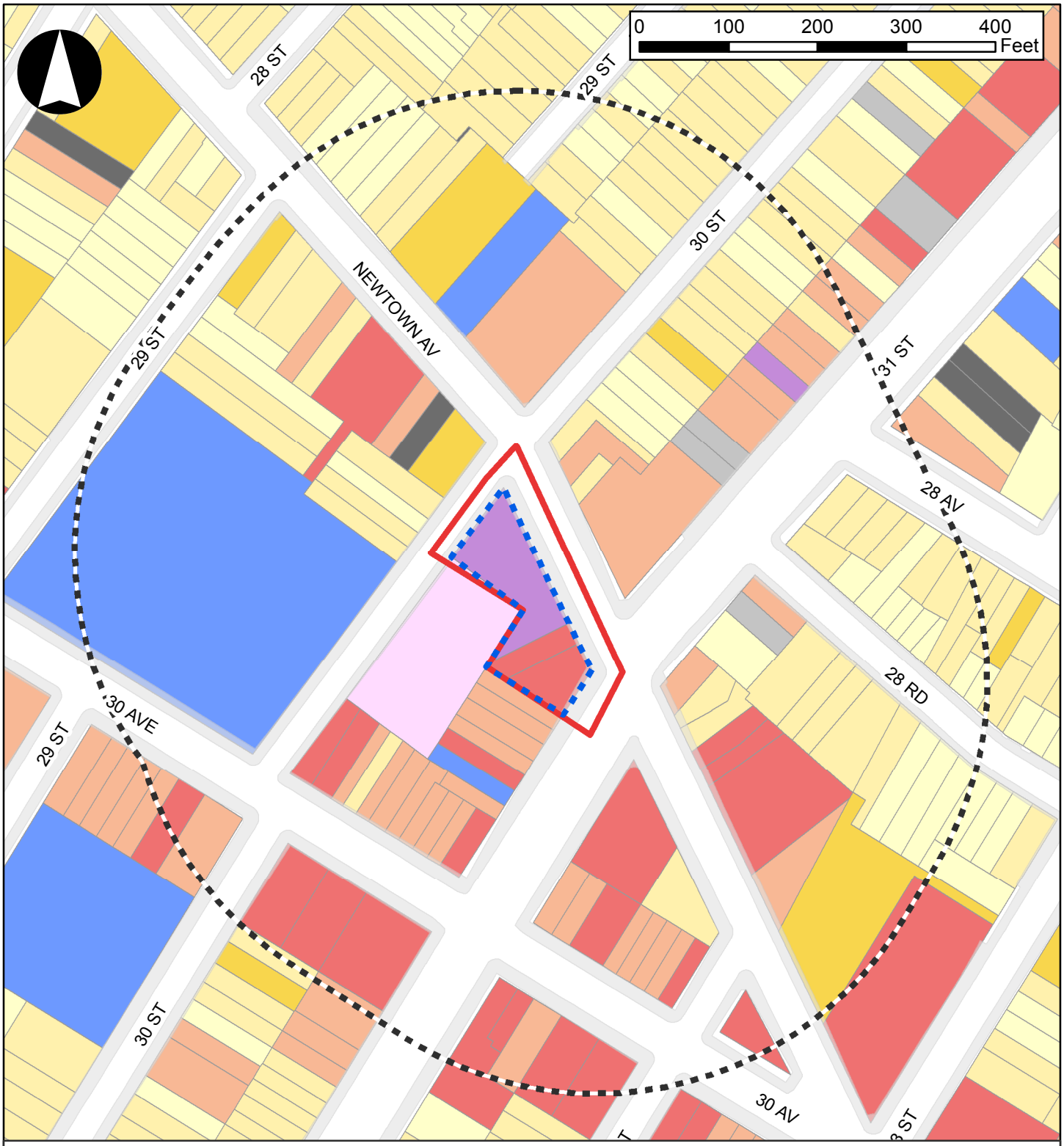
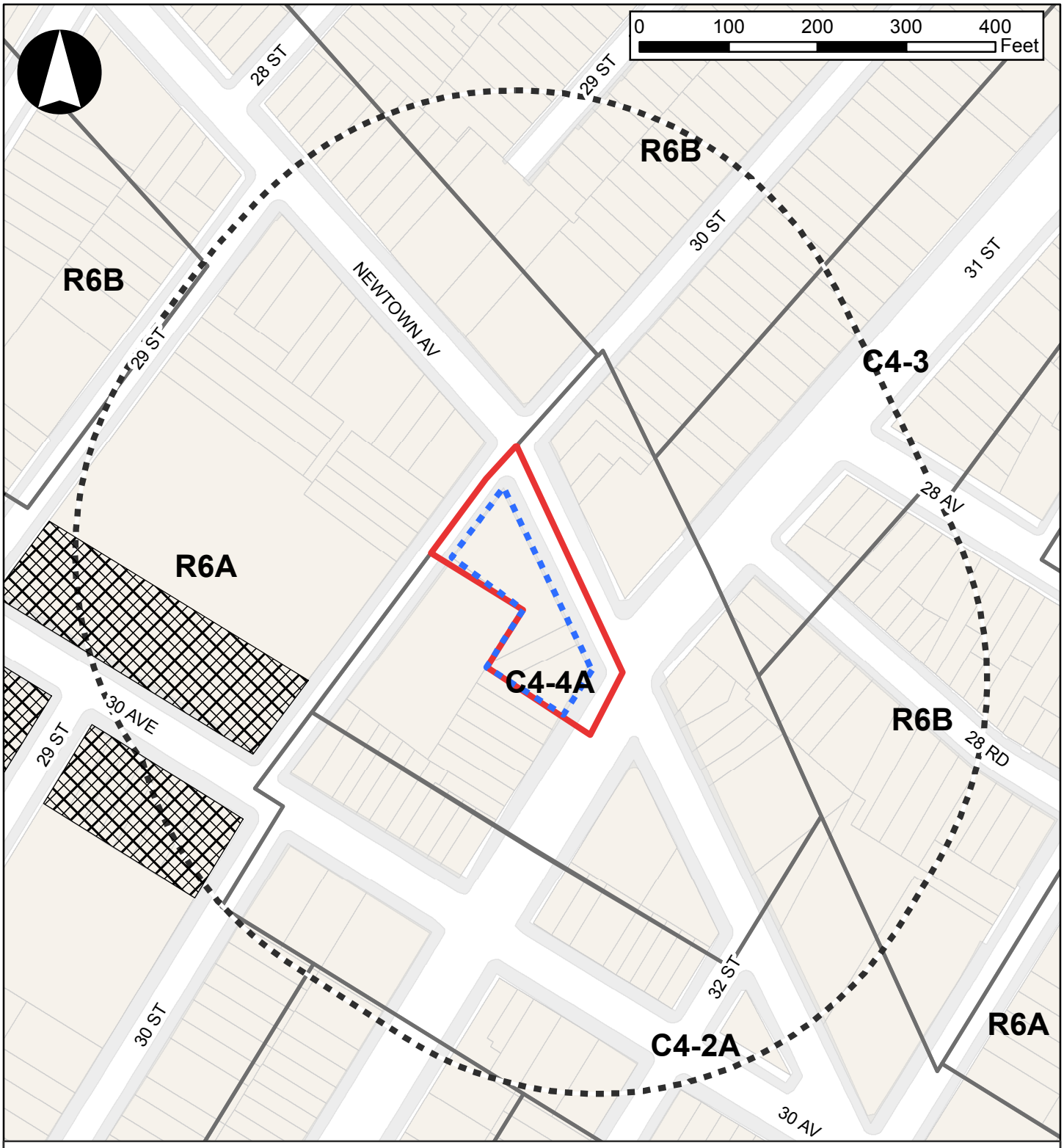


Figure 3
Existing Zoning Map



Legend

- C1-1
- C1-2
- C1-3
- C1-4
- C1-5
- C2-1

Commercial Overlay

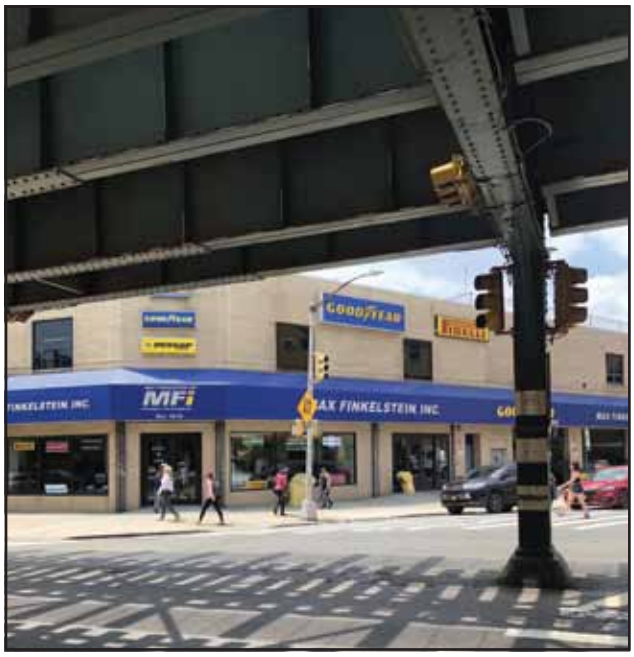
- C2-2
- C2-3
- C2-4
- C2-5

- Projected Development Site
- Proposed Rezoning Area
- 400-foot Radius
- Zoning District

30-02 Newtown Avenue Rezoning EAS

Figure 4
Tax Map

1. View of the Projected Development Site southwest corner of 31st Street and Newtown Ave. facing south.



2. View of the Projected Development Site from the northeast corner of 31st Street and Newtown Ave. facing southwest.

3. View of the Projected Development site from the northwest corner of 31st Street and Newtown Ave. facing south.

4. View of the Projected Development site from the southwest corner of 31st Street and Newtown Ave. facing north.

Attachment A

Project Description

I. INTRODUCTION

The Applicant, Lynest Associates LLC, is seeking the approval of two discretionary actions (the "proposed actions") to facilitate the development of an 11-story mixed-use residential, commercial, community facility building at 30-02 Newtown Avenue ("Proposed Development Site") in the Astoria neighborhood of Queens Community District (CD) 1. To facilitate this development, the Applicant is requesting a zoning map amendment to rezone a portion of Block 595, comprising Lots 19, 26, and 27, and part of Lot 10 (Proposed Rezoning Area"), from C4-4A to C4-4D, and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to designate the Proposed Rezoning Area as a Mandatory Inclusionary Housing (MIH) area (refer to **Figure A-1**). The Proposed Development would include 102 dwelling units (DUs), including up to 31 affordable DUs pursuant to the MIH program, 8,400 gsf of ground floor retail space, and a 99-seat black box theater to be occupied by the Astoria Performing Arts Committee along with office space (5,696 gsf on the ground floor and cellar). The Proposed Development would also include 30 accessory parking spaces in an attended below-grade garage that would be accessible via a new curb cut and ramp on 30th Street. The Proposed Development is expected to be constructed, occupied, and fully operational by 2024.

II. EXISTING CONDITIONS

Proposed Rezoning Area

The Proposed Rezoning Area (Block 595; Lots p/o 10, 19, 26, and 27) includes approximately 15,825 sf and comprises the northern portion of Queens Block 595 with frontage along 30th Street, Newtown Avenue, and 31st Street. The Proposed Rezoning Area is comprised of the applicant-owned Projected Development Site (Lots 19, 26, and 27) and the non-applicant-owned Lot 10.

The Projected Development Site (Block 595; Lots 19, 26, and 27) includes two corner lots and one through lot. Combined, the Projected Development Site has approximately 92' of frontage on 30th Street, 219' of frontage on Newtown Avenue, and 61' of frontage on 31st Street. The Projected Development Site has an area of approximately 15,556 sf and a total built floor area of 23,657 zsf (1.52 FAR). The underbuilt site is occupied by three two-story commercial/automotive buildings. The site is currently occupied by Max Finkelstein Inc., an automotive repair shop and tire wholesale shop.

A small portion of Lot 10, approximately 269 sf, is also within the Proposed Rezoning Area but is not under the control of the applicant. Lot 10 is currently occupied by a three-story, 55,836 gsf (2.54 FAR), 60-foot tall building utilized by Verizon as a telephone exchange building.

Surrounding Area (400-foot Radius)

Land Use

As shown in **Figure A-2**, the area surrounding the Projected Development Site predominantly includes residential and commercial uses. North of Newtown Avenue, the area includes of variety of residential uses ranging from one- and two-family detached buildings to larger multi-family elevator apartment buildings. Newtown Avenue, 31st Street, and 30th Avenue serve as the area's commercial corridors and are

Figure A-1
Project Location

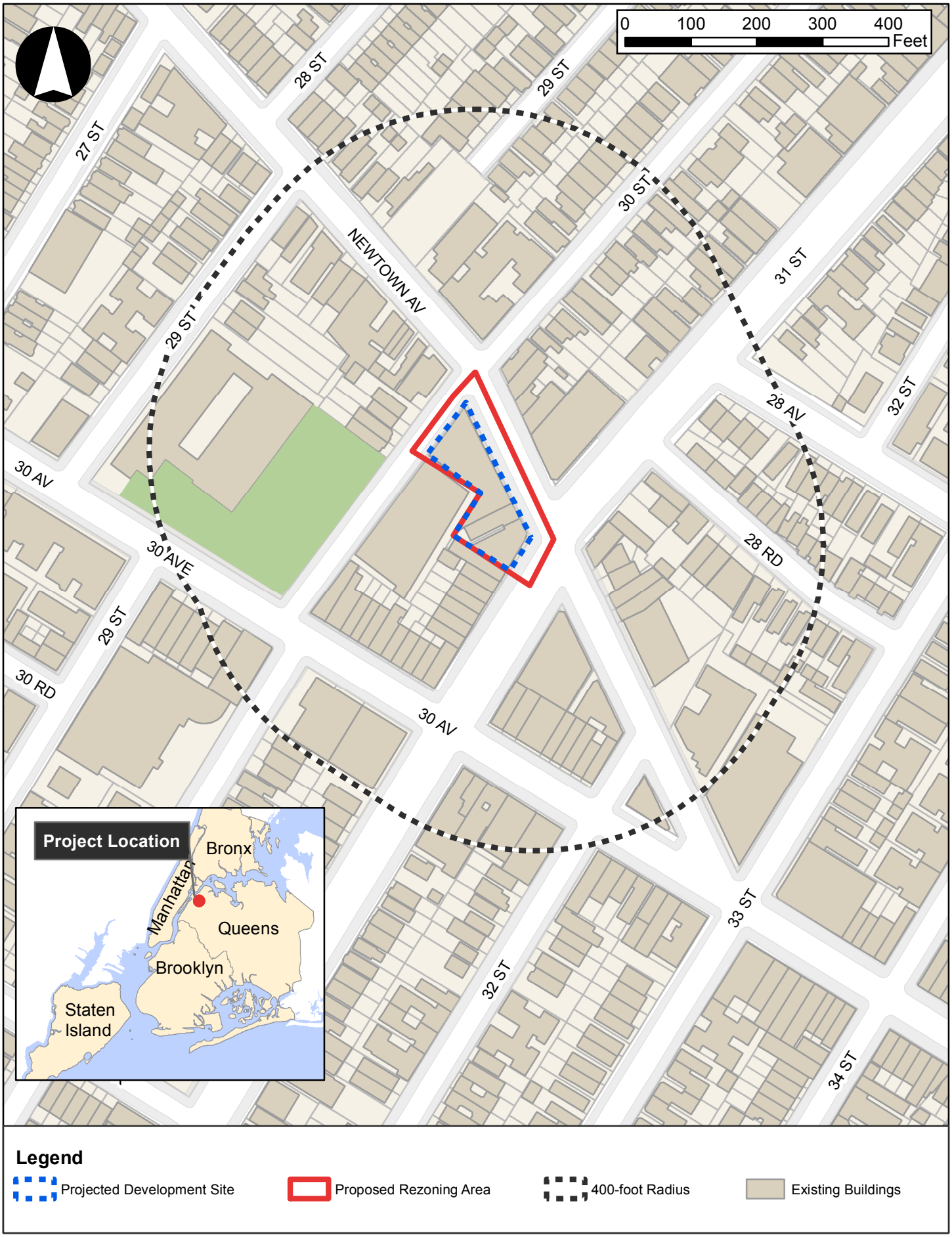
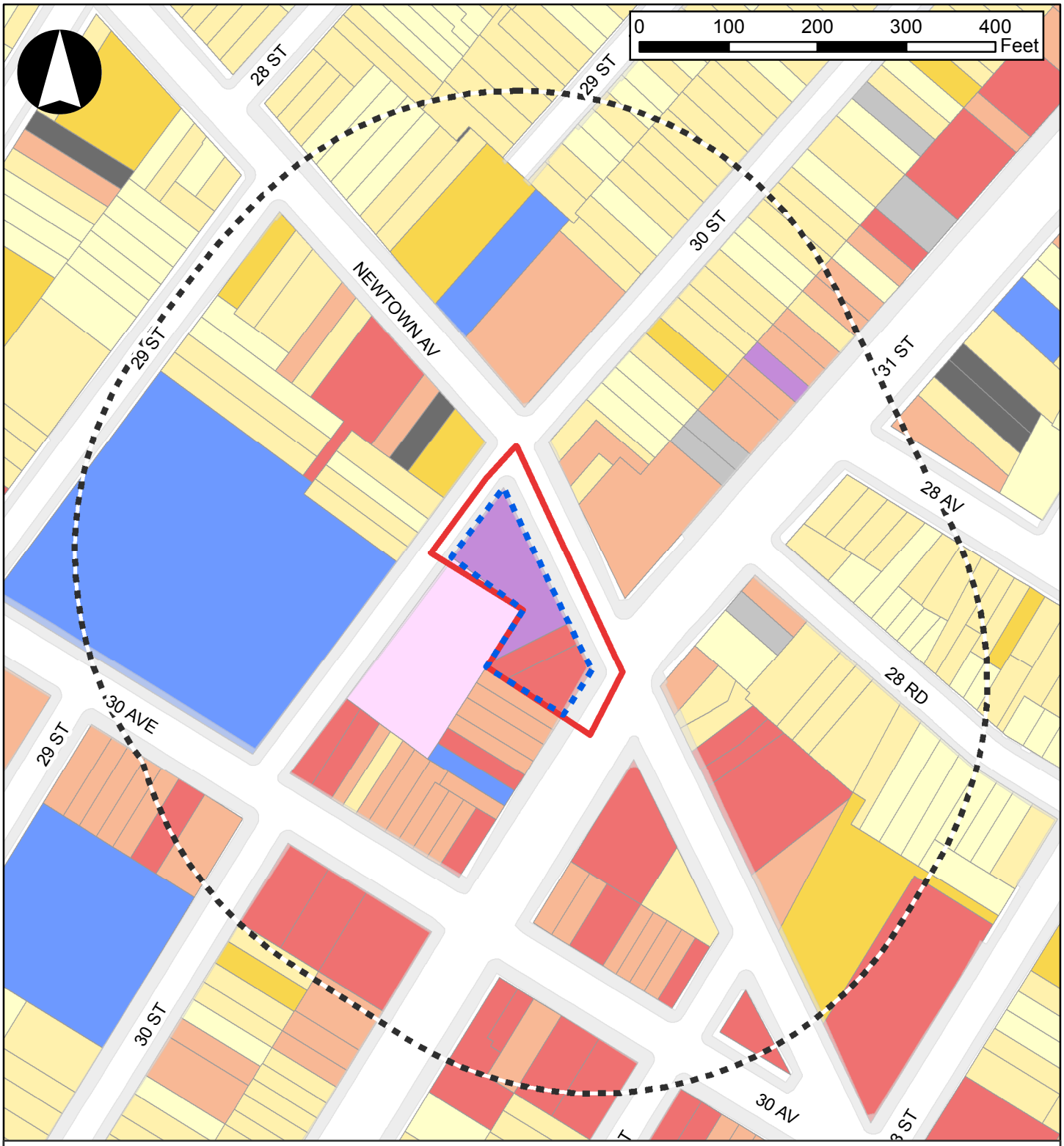


Figure A-2
Land Use Map



largely lined with commercial buildings and mixed-use residential and commercial buildings with ground floor retail uses.

The Proposed Rezoning is well-served by mass transit. The elevated MTA N and W trains run north-south along 31st Street adjacent to the Proposed Rezoning Area. The Q102 and Q18 buses run along 30th Avenue, just south of the Proposed Rezoning Area.

Zoning

As shown in **Figure A-3**, the Proposed Rezoning Area is currently zoned C4-4A and is within the Astoria Voluntary Inclusionary Housing area. C4-4A districts permit residential (Use Groups 1 and 2), community facility uses (Use Groups 3 and 4), and commercial uses (Use Groups 5-6, 8-10, and 12) up to a maximum FAR of 4.0. The maximum base height for developments in C4-4A districts is 65 feet. After setting back from the street wall, developments in C4-4A districts can rise to a maximum height of 80 feet (85 feet with a Qualifying Ground Floor). Accessory parking is required for 50% of all DUs.

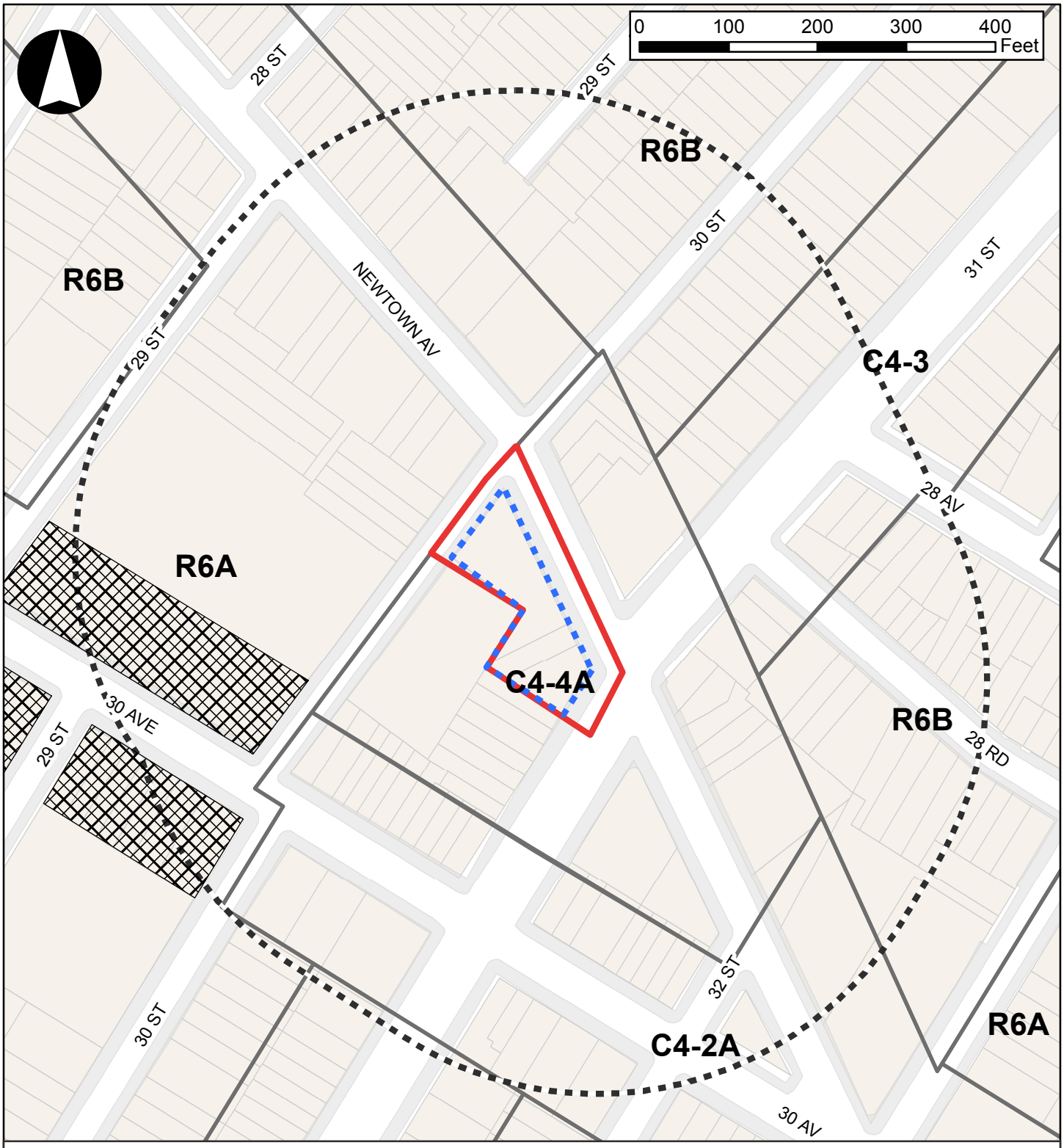
The Proposed Rezoning Area and much of the surrounding area were rezoned as part of the 2010 Astoria Rezoning (C100199ZMQ). The rezoning sought to preserve the existing scale and character of the Astoria neighborhood, while also allowing for modest increases in residential and commercial density in limited locations of all or portions of 238 blocks in Astoria. The Astoria Rezoning also established a Voluntary Inclusionary Housing area. As part of the Astoria Rezoning, the Projected Development Site was listed as a Projected Development Site. The Astoria Rezoning resulted in the placement of an (E)-designation for hazardous materials on the Projected Development Site (refer to **Attachment B, "Supplemental Screening"**).

As shown in **Figure A-3**, the area surrounding the Proposed Rezoning Area is mapped with contextual residential and regional commercial districts of varying densities, including R6B, R6A, C4-2A, and C4-3. R6B and R6A districts permit medium-density residential development. R6B districts are mapped along smaller side streets in the area, including 29th and 30th Streets and 28th Road, away from the higher density commercial corridors in the area. R6B districts are intended to promote small four- to five-story apartment buildings with a maximum FAR of 2.20. Accessory parking in R6B districts is required for 50 percent of all DUs. As shown in **Figure A-3**, an R6A district is mapped in the western portion of the study area along Newtown Avenue and 30th Avenue. The R6A district allows only residential uses and permits a maximum FAR of 3.60.

South of the Proposed Rezoning Area, along 30th Avenue, the area is zoned C4-2A. The C4-2A district is a contextual commercial district that has a R6A equivalent. The district permits the same uses as the existing C4-4A district described above. The C4-2A district permits a maximum residential FAR of 3.60 for inclusionary housing developments, and a maximum FAR of 3.0 for commercial and/or community facility uses. Off-street accessory parking spaces are required for 50 percent of all DUs and varies by commercial use.

Along 31st Street, north of the Proposed Rezoning Area is a C4-3 district. The C4-3 district is a non-contextual regional commercial district that permits the same uses as the previously described C4-4A district. The C4-3 permits a maximum residential FAR of 2.43, a maximum commercial FAR of 3.40, and a maximum community facility FAR of 4.80. The maximum building height in this district is governed by the sky exposure plane above a maximum base height of 60 feet. Off-street accessory parking spaces are required for 70 percent of all DUs. Parking requirements for commercial uses vary by the type of commercial use (refer to ZR 36-21).

Figure A-3
Existing Zoning Map



III. THE PROPOSED ACTIONS

The following discretionary approvals are requested from the CPC: (1) a zoning map amendment to rezone a portion of an existing C4-4A zoning district to a C4-4D zoning district; and a (2) zoning text amendment to Appendix F of the ZR to map a MIH area. These actions are described in greater detail below.

Zoning Map Amendment

The proposed C4-4D district would be bound to the northeast by the centerline of Newtown Avenue, to the west by the centerline of 30th Street, and to the east by the centerline of 31st Street. The southern district boundary, to a depth of 100 feet from 31st Street, would be approximately 185 feet north of the existing C4-2A boundary. To a depth of 94.02 feet from 30th Street, the southern boundary would be located approximately 210 feet from the C4-2A boundary. **Figure A-4** depicts the comparison between the existing and proposed rezoning.

The proposed C4-4D zoning district would continue to allow residential, commercial, and community facility uses. The proposed C4-4D district would increase the maximum allowable residential FAR from 4.6[1] to 7.2, increase the maximum allowable community facility FAR from 4.0 to 6.5, and decrease the maximum allowable commercial FAR from 4.0 to 3.4 FAR. The proposed C4-4D district would also allow for an additional six stories (60-feet) of maximum building height.

Zoning Text Amendment

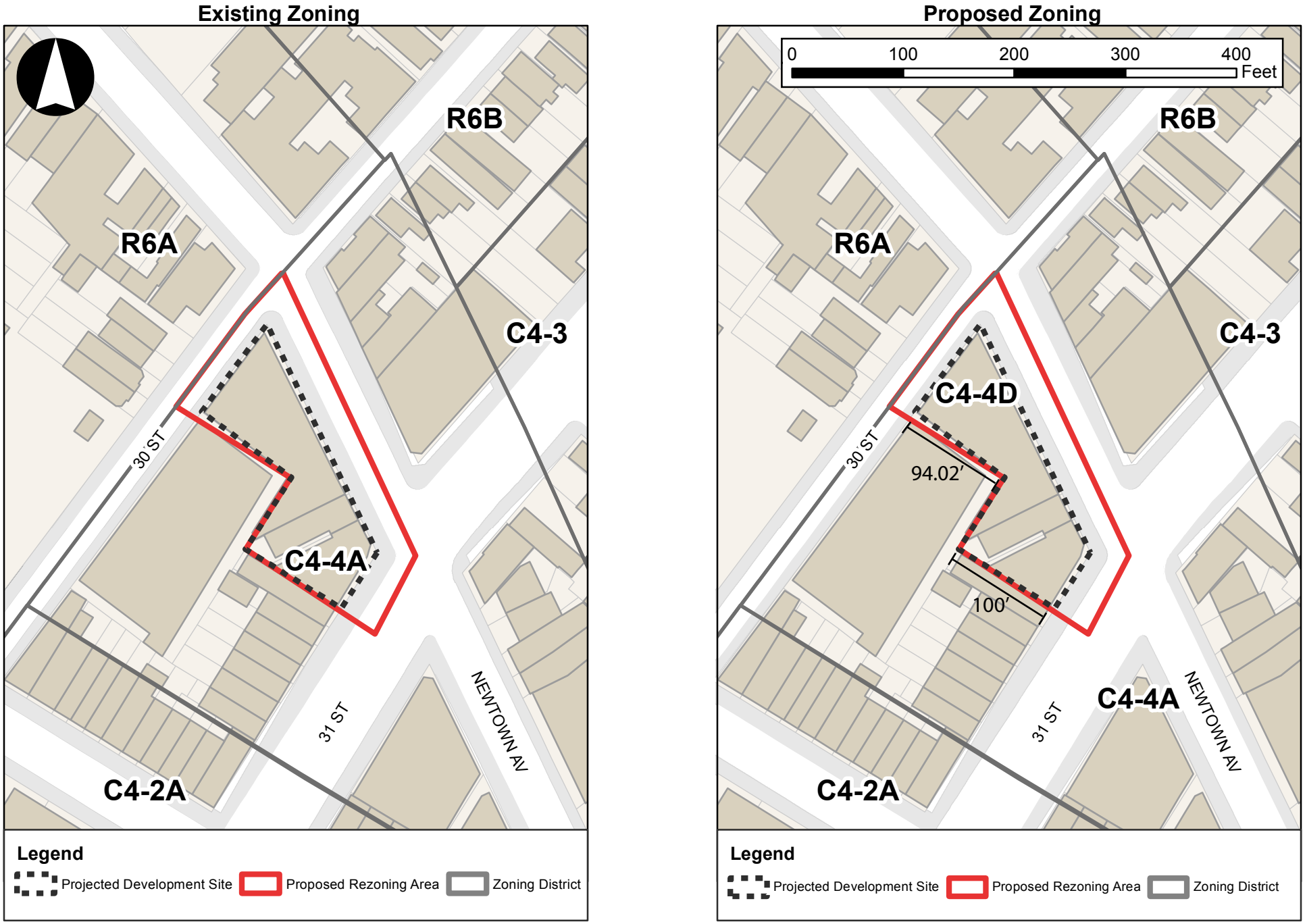
The zoning text amendment to Appendix F of the ZR is proposed to establish the proposed C4-4D district as a MIH area. The applicant is mapping Options 1 and 2 of the MIH program. Option 1 would require the construction of 20 percent of residential floor area at an average of 60 percent of the Area Median Income (AMI). Option 2 would require the construction of 30 percent of residential floor area at an average of 80 percent of the AMI. However, the City Planning Commission (CPC) and City Council determine the requirements applicable to each MIH-designated area during the Uniform Land Use Review Process (ULURP).

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The Proposed Actions would provide the flexibility needed to develop a larger supply of market-rate and affordable dwelling units than would be allowed under existing conditions and would therefore address both a recognized local need and city-wide need for new affordable housing. The proposed zoning map amendment, which would rezone the Proposed Rezoning Area from C4-4A to C4-4D, would increase the permitted residential FAR from 4.6 to 7.20 and the community facility FAR from 4.0 to 6.50, respectively, in the Proposed Rezoning Area, allowing for additional development of residential and community facility uses than could be provided under existing conditions. The proposed zoning map change would also decrease the permitted commercial FAR from 4.0 to 3.4.

The proposed zoning text amendment, which would designate the Proposed Rezoning Area as a Mandatory Inclusionary Housing (MIH) area, which would require the construction of permanently affordable

[1] The C4-4D zoning district permits a maximum residential FAR of 4.0. However, as the Projected Development Site is mapped within a Voluntary Inclusionary Housing (VIH) area, a development there can reach a maximum residential FAR of 4.6.


Existing Zoning
R6B
R6A
C4-3
C4-4A
C4-2A
30 ST
31 ST
NEWTOWN AV
Legend
Projected Development Site
Proposed Rezoning Area
Zoning District
Proposed Zoning
0
100
200
300
400
Feet
R6B
R6A
C4-3
C4-4D
94.02'
100'
C4-4A
C4-2A
30 ST
31 ST
NEWTOWN AV
Legend
Projected Development Site
Proposed Rezoning Area
Zoning District

residential units on the Applicant-owned and controlled Projected Development Site. Pursuant to the MIH program, at least 25 percent of the proposed residential units would be required to remain permanently affordable, ensuring that affordable housing remains a resource for the community in the future, even as neighborhood economic conditions may change. These required permanently affordable units at the site would help to address affordable housing goals set forth by the City in *Housing New York: A Five-Borough, Ten-Year Plan*. Additionally, the proposed zoning text amendment would be aligned with one of Community Board 1's identified most pressing issues of a need for additional affordable housing. The creation of new affordable housing supply at various income levels would help to alleviate the upward pressure on housing prices, and would contribute to housing affordability in the surrounding area and larger City. The proposed development would provide much needed high-quality housing, as well as shopping, community facility space, and new employment opportunities in Astoria, which has access to a range of public transportation options and has seen a marked increase in demand for affordable housing. The Proposed Actions are intended to facilitate a new mixed-use residential, commercial, and community facility building in the Astoria neighborhood of Queens. The Proposed Development would encourage new development along two wide streets near mass transit, provide new permanently affordable housing pursuant to the MIH program, and provide the Astoria Performing Arts Center (APAC) a permanent space for their programs.

V. DESCRIPTION OF THE PROPOSED DEVELOPMENT

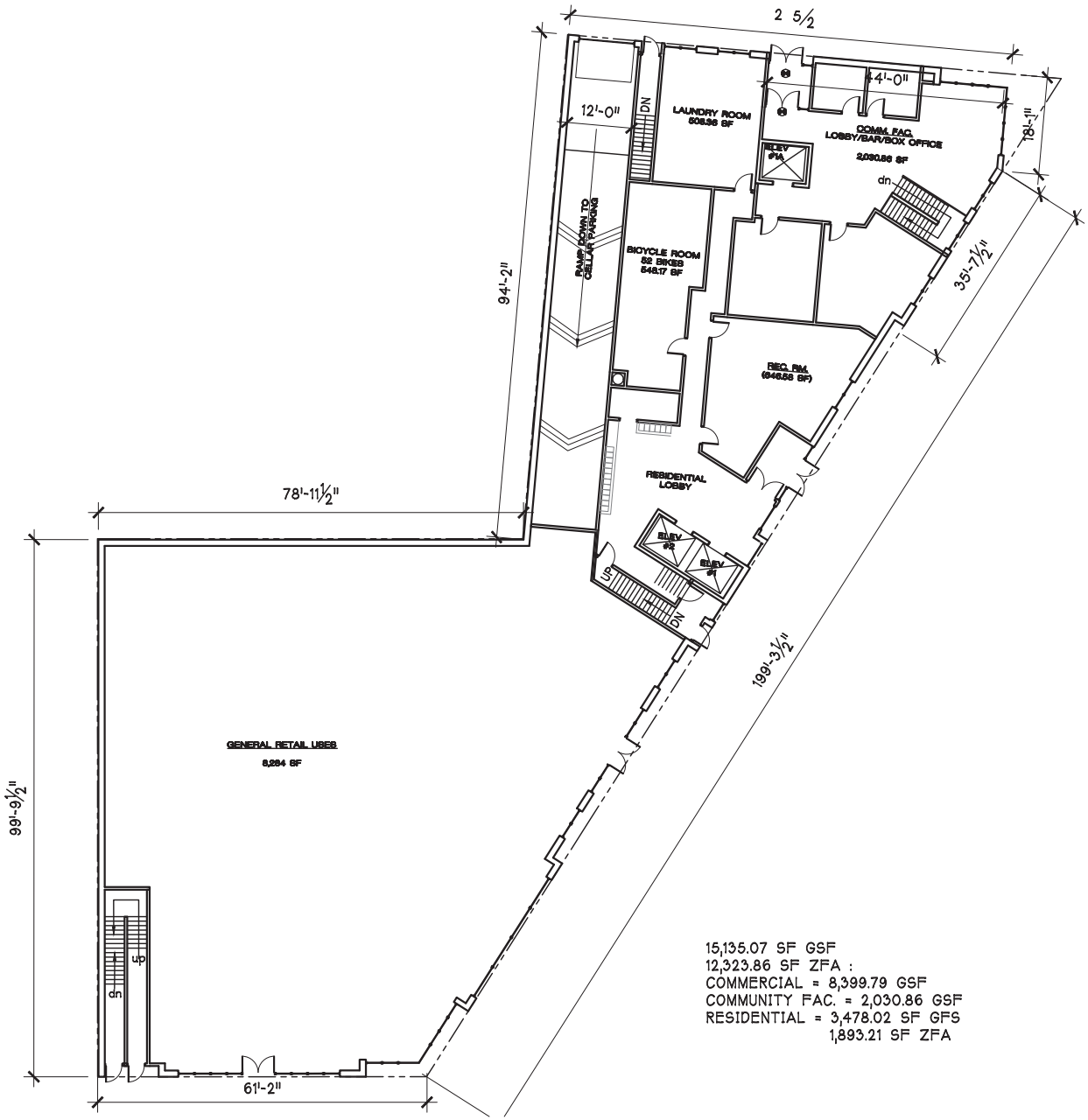
Approval of the Proposed Actions would allow for the development of a 11-story, 138,470 gsf (111,361 zsf) mixed-use residential, commercial, and community facility building. The Proposed Development's maximum height of 115-feet would be achieved along 31st Street along the elevated subway line. Closer to 30th Street and Newtown Avenue, towards lower density residential uses, the Proposed Development would reach a maximum height of 65 feet.

The Proposed Development would include approximately 102 residential dwelling units on Floors 2 through 11, approximately 8,400 gsf of ground floor local retail, and approximately 5,696 gsf of community facility on portions of the cellar and ground floor, which would be used by the Astoria Performing Arts Center (APAC), a not-for-profit organization. APAC's mission is to bring high quality theater to Astoria, Queens and to support local youth and senior citizens. The Proposed Development would provide a permanent home for APAC and would include a 99-seat black box theater. The Proposed Development would also include approximately 30 off-street accessory parking spaces for the residential uses within a below-grade attended garage on a portion of the cellar level.

The Proposed Development would include three separate entrances for each use. As shown in **Figure A-5**, the retail entrance would be located on 31st Street, the residential lobby would be located on Newtown Avenue, and the community facility entrance would be located on 30th Street. The accessory parking garage would be accessible from a new 15-foot wide curb cut and ramp entrance on 30th Street.

VI. ANALYSIS FRAMEWORK

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


2 5/2
44'-0"
12'-0"
DN
LAUNDRY ROOM
508.36 SF
COMM. FAC.
LOBBY/BAR/BOX OFFICE
2,030.86 SF
ELEV #1A
dn
78'-1"
94'-2"
RAMP DOWN TO CELLAR PARKING
BICYCLE ROOM
52 BIKES
548.17 SF
REC. RM.
(946.58 SF)
35'-7 1/2"
RESIDENTIAL
LOBBY
78'-11 1/2"
ELEV #2
ELEV #1
UP
DN
199'-3 1/2"
GENERAL RETAIL USES
8,284 SF
99'-9 1/2"
up
dn
61'-2"
15,135.07 SF GSF
12,323.86 SF ZFA :
COMMERCIAL = 8,399.79 GSF
COMMUNITY FAC. = 2,030.86 GSF
RESIDENTIAL = 3,478.02 SF GFS
1,893.21 SF ZFA

Analysis Year

Development of the Proposed Development on the Projected Development Site would occur in a single phase and would commence as soon as all necessary public approvals are granted. Construction is expected to last between 18 to 22 months. Completion of the Proposed Development accounts for the completion of the Uniform Land Use Review Procedure (ULURP) process (approximately seven months) and an 18- to 22- month construction process. Therefore, the RWCDS will use a 2024 Build year for analysis purposes. As the analysis framework assumes completion of the RWCDS by 2024, its environmental setting is not the current environment, but the future environment. The technical analyses assess current conditions and forecast these conditions to the expected 2024 Build year for the purposes of determining potential impacts. Each attachment of the EAS will provide a description of the "Existing Condition" and assessment of future conditions without the proposed actions (No-Action Scenario) and with the proposed actions (With-Action Scenario).

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the proposed actions, a RWCDS was established for both the future No-Action and With-Action conditions. The incremental difference between the No-Action and With-Action conditions will serve as the basis of the impact category analyses of the EAS. As described above, the proposed actions are intended to facilitate the development of a mixed-used residential, commercial, and community facility building.

Future without the Proposed Actions (No-Action Condition)

In the future without the Proposed Actions, the existing zoning would remain and the Applicant would not proceed with the Proposed Development. All existing buildings within the Proposed Rezoning Area would remain in their existing form and the projected development site would continue to be occupied by an automotive repair shop and tire wholesale business

Future with the Proposed Actions (With-Acton Condition)

In the 2024 future with the proposed actions, an approximately 138,470 gsf (111,361 zsf) mixed-use residential, commercial, and community facility building would be constructed on the applicant-owned Projected Development Site. The building would include 102 DUs (up to 31 of which would be permanently affordable through the MIH program), 8,400 gsf of ground floor retail space, and 5,468 gsf of space for the Astoria Performing Arts Center, which would accommodate a 99-seat black box theater. The Proposed Development would maximize the allowable 7.2 FAR in the proposed C4-4D zoning district. Although the applicant intends to build an 11-story building, the proposed C4-4D zoning would allow a maximum of 14 stories. Therefore, the EAS will conservatively assume a maximum height of 14-stories (145-feet) with a maximum base height of 105 feet for the shadows analysis for the purposes of conservative analysis.

Table A-2: Comparison of No-Action and With-Action Development Scenarios for the Projected Development Site

Use	**No-Action Scenario**	**With-Action Scenario**	**Increment – Scenario**
Residential	0 units (0) gsf)	102 units (101,302 gsf)	**102 units** **(+101,302 gsf)**
Commercial	27,206 gsf	8,400 gsf	**-18,806 gsf**
Community Facility	0 gsf	5,696 gsf	**+ 5,696 gsf**
Population/Employment[1]	**No-Action Scenario**	**With-Action Scenario**	**Increment – Scenario**
Residents	0 residents	239 residents	**+ 239 residents**
Workers	40 workers	64 workers	**+24 workers**

Notes:
[1] Assumed based on the average household size of Queens Community District 1 of 2.34 (2010 Census), as well as standard employee generation multipliers, including: one worker per 333 sf of retail space, one worker per 250 sf of office space, one worker per 25 DUs, one worker per 1,000 sf of auto service/repair, and 35 workers for the theater space provided by the Astoria Performing Arts Center.

VII. REQUIRED APPROVALS

The proposed actions are subject to the City's land use and environmental review processes, described below.

Uniform Land Use Review Procedure

The City's Uniform Land Use Review Procedure (ULURP), mandated by Sections 197-c and 201 of the City Charter, is a process specifically designed to allow public review at four levels: the Community Board, the Borough President, the CPC, and the City Council. The procedure sets time limits at each review, with a maximum period of approximately seven months.

The process begins with DCP certification that the land use application is complete. The application is then referred to the Community Board in which the project takes place (for the proposed project, Queens Community Board 1). The Community Board has up to 60 days to review the proposal, hold a public hearing, and adopt a resolution regarding the proposal. Next, the Borough President has up to 30 days to perform the same steps. The CPC then has up to 60 days, and, during that time, a ULURP public hearing is held. The CPC then forwards the application to the City Council. Following the Council's vote, the Mayor, at his discretion, may choose to veto the action. The City Council can override that veto.

Environmental Review

The proposed actions are subject to CEQR. CEQR is a process by which agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. The CEQR process requires City agencies to assess, disclose, and mitigate to the greatest extent practicable the significant environmental consequences of their decisions to fun, directly undertake, or approve a project. DCP, acting on behalf of the CPC, is the lead agency for the proposed actions.

Attachment B

Supplemental Screening

I. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the guidance and methodologies presented in the 2014 *City Environmental Quality Review ("CEQR") Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the proposed actions; to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, including Land Use, Zoning, and Public Policy; Open Space; Shadows; Urban Design and Visual Resources; Hazardous Materials; Air Quality; Noise; Transportation; Public Health; Neighborhood Character; and Construction supplemental screening assessments of these technical areas are provided in this attachment. The remaining technical areas detailed in the 2014 *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial *CEQR* thresholds and/or are unlikely to result in significant adverse impacts. These areas screened out from any further assessment include: Socioeconomic Conditions; Community Facilities; Historic and Cultural Resources; Natural Resources; Water and Sewer Infrastructure; Solid Waste and Sanitation Services; Energy; and Greenhouse Gas Emissions.

The supplemental screening assessments contained herein identified that additional analyses of Land Use, Zoning, and Public Policy, Open Space, Shadows, Urban Design and Visual Resources, Noise, and Transportation are required. These analyses are provided in **Attachments C, D, E, F, G, and H** respectively. Per the supplemental screening assessments provided in this attachment, more detailed analyses of the following technical areas are not required: Hazardous Materials; Air Quality; Public Health; Neighborhood Character; and Construction. **Table B-1** presents a summary of analysis screening information for the proposed actions.

As discussed in **Attachment A, "Project Description,"** the proposed actions include a zoning map and text amendment to rezone an existing C4-4A district to a C4-4D district. A Mandatory Inclusionary Housing (MIH) Area would be mapped over the proposed C4-4D district. For conservative analysis purposes, approval of the proposed actions would result in the development of a 14-story (145-foot-tall) mixed-use residential, commercial, and community facility building on the Projected Development Site in the Astoria neighborhood of Queens. The Proposed Development would include 102 DUs (including 31 affordable DUs pursuant to the MIH program), 8,400 gsf of ground floor retail space, and a 99-seat black box theater to be occupied by the Astoria Performing Arts Committee along with office space (5,696 gsf in the ground floor and cellar). The RWCDS would include 30 parking spaces in an attended below-grade garage accessed via a ramp on 30th Street. The RWCDS is expected to be constructed, occupied, and fully operational by 2024.

Table B-1: Summary of CEQR Technical Areas Screening

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

II. LAND USE, ZONING, AND PUBLIC POLICY

A detailed assessment of land use and zoning is appropriate if the proposed actions would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on the site or result in the loss of a particular use. As the proposed actions include zoning map and text amendments, a detailed land use, zoning, and public policy is warranted and is provided in **Attachment C, "Land Use, Zoning, and Public Policy."**

As presented in **Attachment C "Land Use, Zoning, and Public Policy,"** no significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the 2024 future with the proposed actions in the primary and secondary study areas. Compared to the future without the proposed actions, the proposed actions would introduce new commercial, community facility, and residential uses in the Proposed Rezoning Area that would be compatible with adjacent land uses. The proposed actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would the proposed actions generate land uses that would be incompatible with land use, zoning, or public policy in the secondary study area, or cause a substantial number of existing structures to become nonconforming. The proposed actions would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

III. OPEN SPACE

An assessment of impacts on open space is warranted if an action would directly affect an open space, or if it would increase the population by more than 50 residents or 125 workers in areas that are considered to be under-served by open space in the *CEQR Technical Manual*. The Proposed Rezoning Area is located within an area that is defined by the *CEQR Technical Manual* as underserved by open space. The construction of the RWCDS would not result in any direct displacement or alteration of existing public open space in the study area. As discussed in **Attachment A, "Project Description,"** the proposed actions and associated RWCDS are expected to add approximately 239 new residents and 24 workers to the Proposed Rezoning Area, as compared to the future No-Action Condition. The number of residents would exceed the CEQR threshold of 50 residents but would not exceed the CEQR threshold of 125 workers. Therefore, an analysis of open space is warranted and included in **Attachment D, "Open Space".**

As described in Attachment D, no significant adverse impacts are expected on open space as a result of the proposed actions. The population introduced by the proposed actions and associated RWCDS would result in a 0.46 percent decrease in the study area's open space ratio, less than the CEQR impact threshold of one percent for areas considered under-served by open space. In addition, the proposed actions would not result in any direct displacement or alteration of existing public open space in the study area. Therefore, the proposed actions would not result in any significant impacts related to open space.

IV. SHADOWS

A shadows assessment considers proposed actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For proposed actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the 2014 *CEQR Technical Manual*, some open spaces contain facilities that are not sunlight-sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation. As the proposed C4-4D MIH district permits a maximum building height of 145 feet with a qualifying ground floor, for conservative analysis purposes, the EAS assumes a With-Action building height of 145 feet for the Tier I and Tier II Screening.

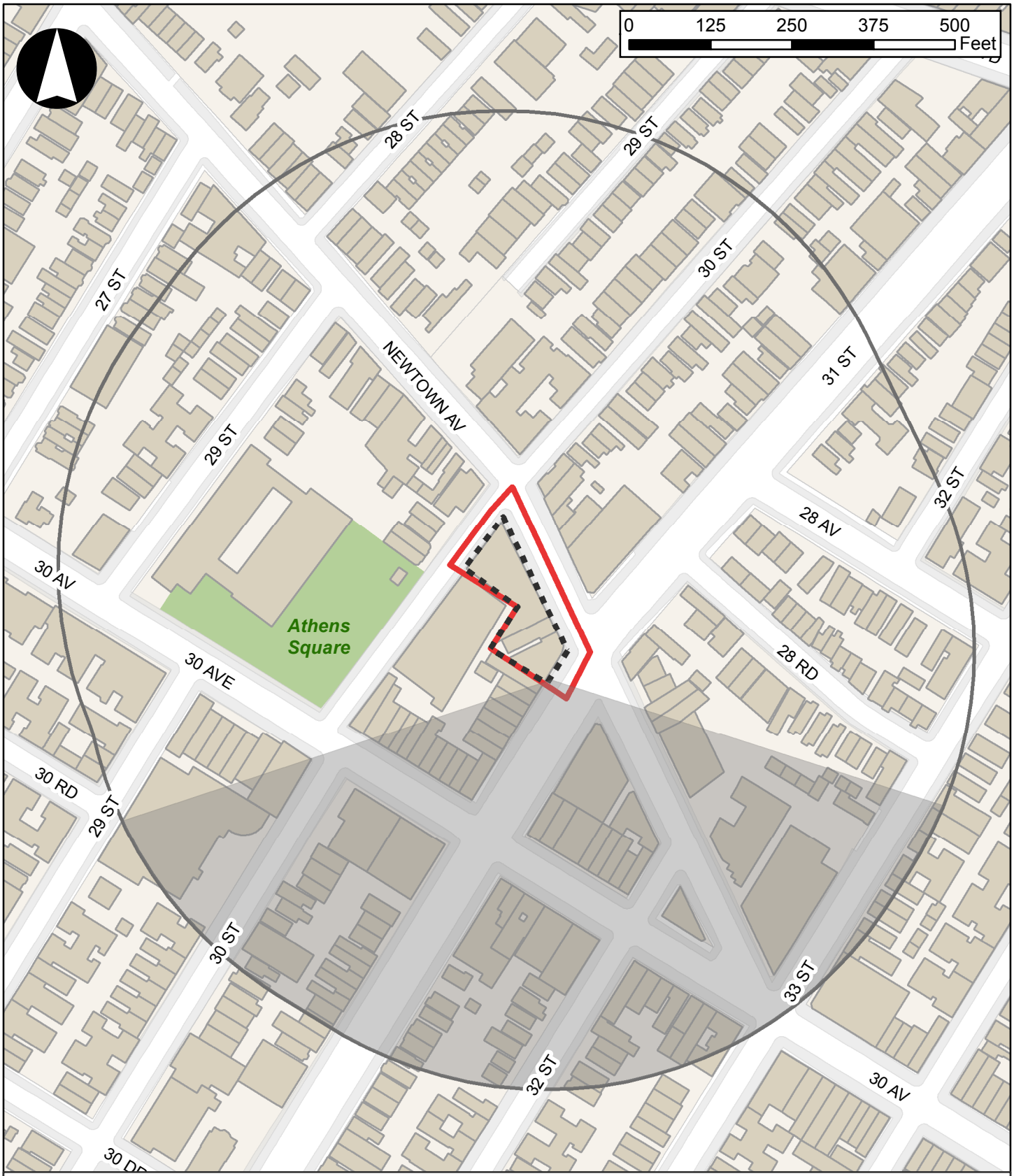
Tier I and II Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City – except for periods close to dawn or dusk – is 4.3 times its height and occurs on December 21 (the winter solstice). Therefore, the maximum shadow that could be cast by the RWCDS With-Action building, with a maximum building height (including mechanical bulkhead) of approximately 160 feet, would be approximately 688 feet in length, as shown in **Figure B-1**.

The *CEQR Technical Manual* defines sunlight-sensitive resources of concern as those resources that depend on sunlight, or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Sunlight-sensitive resources of concern include:

Figure B-1

Shadows Tier I and Tier II Assessment



- *Public open space.* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. The sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such as activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychrome [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of a landscape; and structural 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, wetland resources, upland resources, and significant, sensitive, or designated resources, such as coastal fish and wildlife habitats.

As shown in **Figure B-1**, there is one publicly accessible sunlight-sensitive open space (Athens Square) within the RWCDS's maximum shadow radius (688 feet from the property line). As such, a detailed analysis of shadows is warranted and included in **Attachment E, "Shadows."**

As discussed in greater detail in **Attachment E, "Shadows,"** the proposed actions and associated 145-foot tall (160-feet including mechanical bulkhead) RWCDS would not result in any significant adverse shadows impacts to the nearby Athens Square open space resource. Incremental shadows generated by the RWCDS would occur on three of the four analysis days during the early morning hours near the onset of the analysis day, and would be limited to the early morning hours and would not extend past 10 AM. On each of these analysis days, new incremental shadows would be limited to the eastern portion of the park that contains trees, open seating areas, and a basketball court. Athens Square would continue to receive adequate sunlight during the morning, afternoon, and evening hours, and as such, the proposed actions and associated RWCDS would not have significant adverse effects on any vegetation or adversely affect the usability/enjoyment of Athens Square

V. URBAN DESIGN AND VISUAL RESOURCES

An area's urban design components and visual resources together define the look and character of the neighborhood. The urban design characteristics of the neighborhood encompass the various components of buildings and streets in the area, including building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include private residences or places of business.

An analysis of urban design and visual resources is appropriate if a proposed action would (a) result in buildings that have substantially different height, bulk, form, setbacks, size, scale, use, or arrangement than exists in an area; (b) change block form, demap an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements; or (c) would result in above-ground development in an area that includes significant visual resources.

As the proposed actions include zoning map and text amendments that would change the permitted bulk allowed in the Proposed Rezoning Area, an urban design analysis is required and is provided in **Attachment F, "Urban Design and Visual Resources."** As discussed therein, the proposed actions and subsequent development, while resulting in a notable change in the urban design of the study area, would not result in a significant adverse impact on the area's urban design and visual resources, as defined by the *CEQR Technical Manual*. Under the RWCDS, the proposed actions would facilitate the construction of a new 14-story, 145-foot tall building comprised of 102 DUs, 8,400 gsf of retail space, and 5,696 gsf of community facility space on the applicant-owned Projected Development Site. The With-Action building would not alter any views of visual resources within either the Proposed Rezoning Area or surrounding study area. Therefore, the proposed actions would not result in significant adverse impacts on urban design and visual resources.

VI. HAZARDOUS MATERIALS

As defined in the 2014 *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi volatile organic compounds, methane, polychlorinated biphenyls and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the 2014 *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: (a) hazardous materials exist on a site, and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

(E) Designations

As a result of the 2010 *Astoria Rezoning*, an E-designation for hazardous materials was placed on the Projected Development Site (Block 595, Lots 19, 26, and 27).

The hazardous materials (E) designation is an institutional control that can be placed on a site as a result of the CEQR review of a zoning map or zoning text amendment or action pursuant to the Zoning Resolution. It provides a mechanism to ensure that testing for and mitigation and/or remediation of hazardous materials, if necessary, are completed prior to, or as part of, future development of an affected site, thereby eliminating the potential for hazardous materials impacts. The New York City Office of Environmental Remediation (OER) provides the regulatory oversight of the environmental investigation and remediation during any

development process. Building permits would not be issued for the development by the New York City Department of Buildings (DOB) without prior OER approval of the investigation and/or remediation pursuant to the provisions of Section 11-15 of the Zoning Resolution of the City of New York (Environmental Requirements). The DOB will typically issue the foundation permits when OER approves the remedial action work plan – the actual remediation is usually done concurrently with the construction. Engineering controls may also be incorporated into the development to eliminate exposure risks for future occupants.

The (E) designation text related to hazardous materials from the 2010 Astoria Rezoning for Block 595, Lots 19, 26, and 27 is as follows:

Task 1

The fee owner(s) of the lot(s) restricted by this (E) designation will be required to prepare a scope of work for any soil, gas, or groundwater sampling and testing needed to determine if contamination exists, the extent of the contamination, and to what extent remediation may be required. The scope of work will include all relevant supporting documentation, including site plans and sampling locations. This scope of work will be submitted to DEP for review and approval prior to implementation. It will be reviewed to ensure that an adequate number of samples will be collected and that appropriate parameters are selected for laboratory analysis.

No sampling program may begin until written approval of a work plan and sampling protocol is received from DEP. The number and location of sample sites should be selected to adequately characterize the type and extent of the contamination, and the condition of the remainder of the site. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for choosing sampling sites and performing sampling will be provided by DEP upon request.

Task 2

A written report with findings and a summary of the data must be presented to DEP after completion of the testing phase and laboratory analysis for review and approval. After receiving such test results, a determination will be provided by DEP if the results indicate remediation is necessary.

If DEP determines that no remediation is necessary, written notice shall be given by DEP.

If remediation is necessary according to test results, a proposed remediation plan must be submitted to DEP for review and approval. The fee owner(s) of the lot(s) restricted by this (E) designation must perform such remediation as determined necessary by DEP. After completing the remediation, the fee owner(s) of the lot(s) restricted by this (E) designation should provide proof that the work has been satisfactorily been completed.

A DEP-approved construction-related health and safety plan would be implemented during excavation and construction activities to protect workers and the community from potential significant adverse impacts associated with contamination soil and/or groundwater. This Plan would be submitted to DEP for review and approval prior to implementation.

As part of the noise analysis discussed below, a new (E)-designation (E-593) would be placed on the Projected Development Site. This new (E)-designation would supersede the previous (E-245), though the hazardous materials requirements of (E-245) would be incorporated into (E-593).

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) was prepared for the Projected Development Site by ALC Environmental Inc. (ALC), in May 2019. The Phase I ESA is summarized below. The conclusions and findings for the assessment are included in Appendix II.

The Phase I ESA was conducted in conformance with ASTM Standard E1527-13 at the Projected Development Site 1 (30-02 Newtown Avenue). The Phase I ESA found several recognized environmental conditions (REC) associated with the Projected Development Site (refer to Appendix II). The Projected Development Site at one point contained two gasoline underground storage tanks (UST). As there is no record of tank closures or removals from the site, the Phase I identifies thisa REC. Additionally, the buildings on the Projected Development Site in 1967 contained an elevator. This elevator equipment likely utilized PCB-containing hydraulic fuel. Based on the lack of information regarding the decommissioning of the elevator, the former presence of the elevator constitutes a REC. Refer to Appendix II for the full executive summary prepared by ALC.

Given that the Phase I ESA identified several RECs, ALC recommended that a site specific Phase II ESI Work Plan is warranted. If the Phase II Report indicates that remedial efforts are required, a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) will be prepared and submitted to NYC Department of Environmental Protection (DEP) for review and approval.

With the requirements of the (E) designation to be met before any new development could occur there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined in the (E) designation would preclude the potential for significant adverse hazardous materials impacts from proposed action. Prior to development the applicant will comply with the requirements of the (E) designation and coordinate with OER. Therefore, no further analysis is required at this time.

VII. TRANSPORTATION

The objective of the transportation analysis is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists, and vehicles), on- and off-street parking, or goods movement.

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to traffic conditions and therefore require a detailed traffic analysis. As shown in Table 16-1 of the *CEQR Technical Manual*, actions with a single or multiple land use(s) that would result in fewer than fifty peak hour vehicle trips are generally unlikely to cause significant adverse impacts. As the proposed development would exceed the Level 1 screening threshold, a detailed transportation analysis was prepared, which is included in **Attachment G, "Transportation."**

As presented in **Attachment G**, the proposed actions would generate additional transit and pedestrian trips in the surrounding area. As incremental project-generated vehicle and transit trips would not exceed *City Environmental Quality Review* (CEQR) *Technical Manual* analysis thresholds, a detailed analysis of traffic

and transit conditions is not provided in this EAS. Because the incremental increase in pedestrian trips would exceed the CEQR threshold, a detailed analysis of operating conditions is provided for one sidewalk adjacent to the Projected Development Site on 31st Street between Newtown and 30th Avenue. As this sidewalk is expected to operate at level of service (LOS) A under the 2024 With-Action condition, the proposed actions are not expected to result in significant adverse pedestrian impacts.

VIII. AIR QUALITY

According to the guidance provided in the 2014 *CEQR Technical Manual*, air quality analyses are conducted in order to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the 2014 *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts. Per the EAS Form, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out in accordance with 2014 *CEQR Technical Manual* assessment screening thresholds.

Stationary Sources

Heating and Hot Water Systems

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

A preliminary stationary source screening analysis, using Figure 17-3 of the *CEQR Technical Manual* was conducted to identify if a detailed stationary source analysis is warranted, and if the proposed actions would result in any significant adverse impacts on air quality. As discussed in **Attachment A, "Project Description**," the Proposed Development would have a maximum building height of 115 feet. A survey of existing residential land uses and other sensitive receptor sites within 400 feet of the Projected Development Site was conducted through field observation and use of the New York City Open Accessible Space Information System (OASIS) mapping network system. The closest existing or planned building of similar or greater height Proposed Project's HVAC stack (approximately 115 feet or taller) that could be affected by HVAC emissions generated by the Proposed Project is the 10-story (120-foot-tall) mixed-use building located at 31-21 Newtown Avenue, approximately 195 feet southeast of the Proposed Rezoning Area.

As seen in **Figure B-2**, the Proposed Development's total floor area and distance from buildings of a similar or greater height indicates that the proposed actions would not have any significant impact on air quality. Emissions from the proposed building would fall below the applicable curve and would therefore not result in any adverse air quality impacts. In addition, no operable windows from the Proposed Development would be above the HVAC stack. As such, no further analysis of HVAC emissions from the proposed actions is warranted.

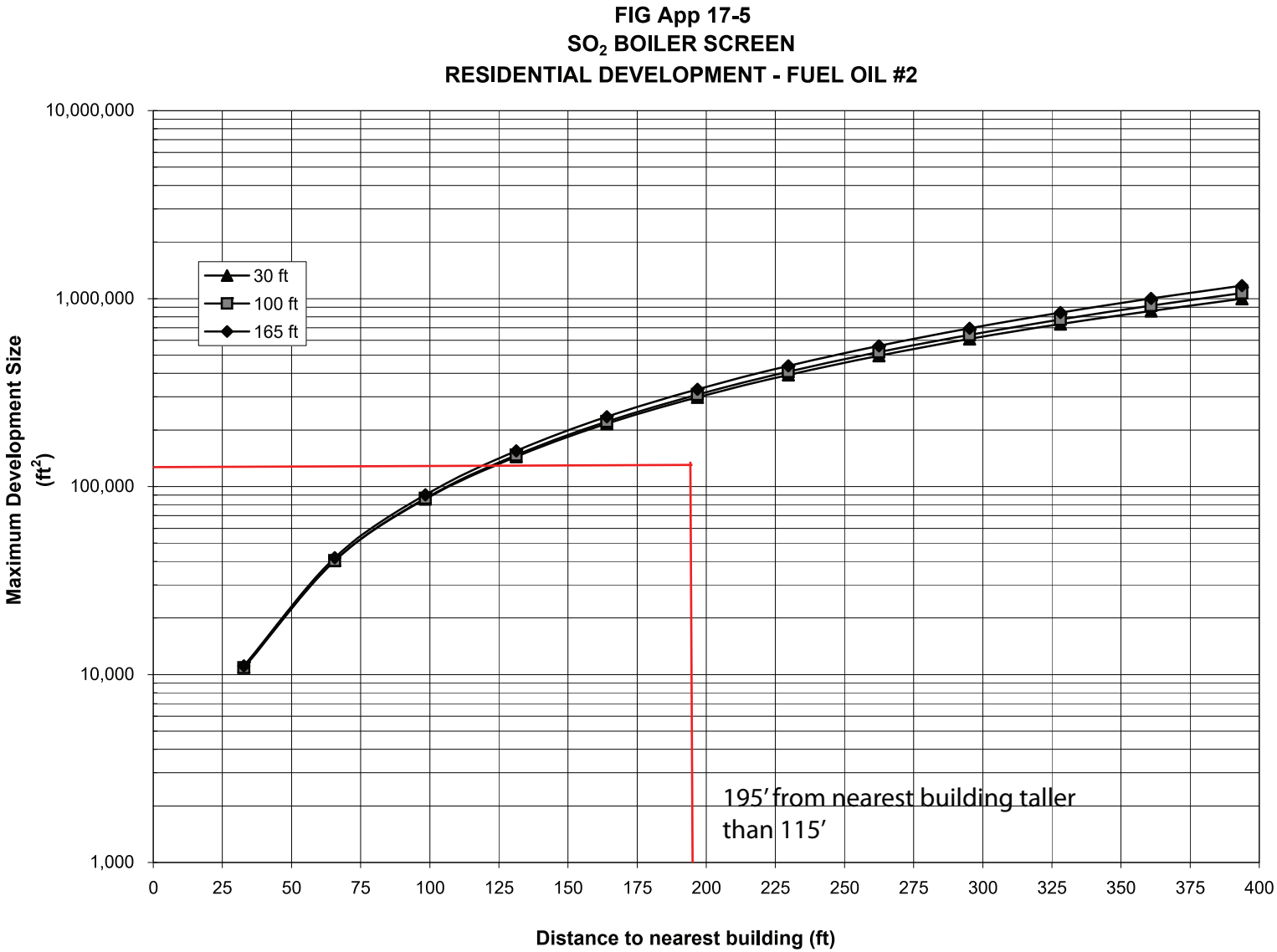


FIG App 17-5
SO2 BOILER SCREEN
RESIDENTIAL DEVELOPMENT - FUEL OIL #2
10,000,000
1,000,000
100,000
10,000
1,000
Maximum Development Size (ft2)
30 ft
100 ft
165 ft
195' from nearest building taller than 115'
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
400
Distance to nearest building (ft)

To ensure an HVAC impact does not occur to any surrounding buildings an (E)-designation would be placed on the Development Site restricting the location of the HVAC stack's height. The (E)-designation would read as follows:

> **Block: 595; Lots: 19, 26, and 27**
>
> Any new residential, commercial and community facility development and/or enlargement on the above-referenced property must ensure the heating, ventilating, and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier or at least 118 feet above the grade to avoid any potential significant adverse air quality impacts.

Mobile Sources

Compared to the No-Action condition, the proposed actions would not add any new traffic volumes to the roadway network, therefore, further analysis of air quality mobile sources from action-generated vehicle trips screened out in accordance with 2014 CEQR Technical Manual assessment screening thresholds.

Industrial Sources

To assess air quality impacts on the Proposed Project associated with emission from nearby industrial sources, an investigation of industrial sources was conducted. Initially, land use maps were reviewed to identify potential sources of emissions from manufacturing/industrial or transportation/utility operations. A review of land uses within 400 feet of the Proposed Rezoning Area determined that there are five properties containing manufacturing, parking facilities, or utility uses. After identifying properties containing manufacturing or other industrial uses within 400 feet of the Proposed Development Site the New York City Department of Environmental Protection (DEP)'s CATS Online Permitting System was utilized to determine whether there are any active industrial permits within 400 feet of the Proposed Rezoning Area. According to the CATS Online Permitting System, there are no active industrial permits within a 400-foot radius of the Proposed Rezoning Area. Therefore, no further analysis is warranted.

Large/Major Sources

Per CEQR, projects may result in stationary source air quality impacts when they are within 1000 feet of Major or Large emission sources including, but not limited to, solid waste or medical waste incinerators, cogeneration facilities, asphalt and concrete plants, or power generating plants. As none of these uses are located within 1,000 feet of the Proposed Rezoning Area, no further analysis is necessary.

Parking Facilities

As stated in the *CEQR Technical Manual*, projects that would result in parking facilities may require a microscale air quality analysis. As the With-Action development's below-grade parking facility would include only 30 parking spaces, the new parking garage would not result in a significant adverse impact to air quality.

IX. NOISE

As the proposed actions would introduce new sensitive uses on the Projected Development Site and new development within 1,500 feet of an elevated railway, a detailed noise analysis was conducted in compliance with *CEQR Technical Manual* guidance to determine whether traffic generated by the proposed actions and RWCDS would have the potential to result in significant noise impacts and determine the level of building attenuation necessary to ensure that the future development's interior noise levels satisfy applicable interior noise criteria of 45 dBA or less for residential and community facility uses.

As discussed in **Attachment H, "Noise,"** the proposed actions would not result in significant adverse impacts related to noise. However, due to the existing noise created by the elevated railway, attenuation would be required through the placement of an E-Designation on the Projected Development Site. Based on these maximum predicted With-Action noise levels, attenuation of 40.0 dBA on the site's 31st Street frontage and for facades facing Newtown Avenue within 50 feet of 31st Street and the facades facing 30th Avenue within 100 feet of 31st Street, 31.0 dBA of attenuation on any façade facing Newtown Avenue beyond 50 feet of Newtown Avenue, and 28.0 dBA of attenuation on facades facing 30th Street and the facades facing 30th Avenue beyond 100 feet of 31st Street is needed to maintain interior noise levels of 45 dBA or lower for the proposed development's residential and community facility uses. (refer to **Attachment H, "Noise"**).

X. PUBLIC HEALTH

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

According to the guidance of the *CEQR Technical Manual*, a public health assessment may be warranted if a project results in (a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; (b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect groundwater to be used as a source of drinking water; (c) solid waste management practices that could attract vermin and result in an increase in pest populations; (d) potential significant adverse impacts to sensitive receptors from noise and odors; (e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts; (f) exceedances of accepted federal, state, or local standards; or (g) other actions that might exceed the preceding thresholds but might, nonetheless, result in significant health concerns.

As detailed in analyses provided in this EAS, the proposed development would not result in significant adverse impacts in the areas of air quality, water quality, hazardous materials, or noise. Therefore, the proposed actions do not have the potential to result in significant adverse public health impacts, and no further assessment is warranted.

XI. NEIGHBORHOOD CHARACTER

A supplemental screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted in accordance with *CEQR Technical Manual* methodology, because the proposed actions and

associated RWCDS required analyses of Land Use, Zoning, and Public Policy, Open Space, Shadows, Urban Design and Visual Resources, and Noise.

The proposed actions and RWCDS would not adversely affect any component of the surrounding area's neighborhood character. The proposed actions would facilitate the development of a mixed-use residential, commercial, and community facility building which would introduce affordable housing as well as neighborhood services. According to the applicant, the proposed actions would support citywide goals, by creating expanded opportunities for new development, in particular new affordable housing development. The use and bulk would match existing developments in the surrounding neighborhood. As discussed above, and in further detail in **Attachment C, "Land Use, Zoning, and Public Policy," Attachment D, "Open Space," Attachment E, "Shadows," Attachment F, "Urban Design & Visual Resources," Attachment G, "Transportation,",** and **Attachment H, "Noise,"** the proposed actions are not expected to result in any significant adverse impact for the five technical areas related to neighborhood character. Therefore, the proposed actions would not result in a significant adverse impact to neighborhood character and further analysis is not warranted.

XII. CONSTRUCTION

Although temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. Determination of the significance of the construction impacts and the need for mitigation is generally based on the duration and magnitude of the impacts. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, and/or air quality conditions.

As indicated on the EAS Form, construction of the With-Action development is expected to occur over a 18-22-month period, with construction beginning in 2022 and completed in 2024. With an anticipated construction period of 18- to 22-months total, construction of the Projected Development Site would be classified as short-term for CEQR purposes. Most construction activity would occur Monday through Friday, although delivery and installation of certain equipment could occur on weekend days. Hours of construction are regulated by the New York City Department of Buildings (DOB) and apply in all areas of the City. In accordance with those regulations, almost all work would occur between 7 AM and 6 PM on weekdays, although some workers would arrive and begin to prepare work areas before 7 AM. Occasionally, Saturday or overtime hours could be required to complete time-sensitive tasks. Weekend work would require a permit from the DOB and, in certain instances, approval of a noise mitigation plan from DEP under the New York City Noise Code.

Construction activities may result in short-term disruption of both traffic and pedestrian movements in the vicinity of the Projected Development Site. This would occur primarily due to the potential temporary loss of curbside lanes from the staging of equipment and movement of materials to and from the Projected Development Site. Most construction traffic would take place outside the AM and PM traffic peak hours in the vicinity of the Projected Development Site due to typical construction hours. Additionally, construction may at times result in temporary closings of sidewalks adjacent to the Projected Development Site in order to accommodate construction vehicles, equipment, and supplies. The construction site would be surrounded by construction fencing and barriers as required by DOB, which would limit the effects of construction on nearby land uses. While it is possible that some sidewalks immediately adjacent to the construction site would be closed to accommodate heavy loading areas for at least several months of the construction period for the site, detailed Maintenance and Protection of traffic (MPT) plans for the construction site would be required and would need to be submitted for approval to the New York City Department of Transportation

(DOT)'s Office of Construction Mitigation and Coordination (OCMC), the entity that insures critical arteries are not interrupted, especially in peak travel periods.

Noise associated with construction would be limited to typical construction activities and would be subject to compliance with the New York City Noise Code and the United States Environmental Protection Agency (EPA) noise emission standards for construction equipment. These controls and the temporary nature of construction activity would assure that there would be no significant adverse noise impacts associated with construction activity.

While the proposed actions would result in construction that would result in temporary disruption in some of the surrounding area, including noise, dust, and traffic associated with the delivery of materials and arrival of workers in the Proposed Rezoning Area, the incremental effects of construction, if any, would be negligible. Therefore, no impacts from construction are expected as a result of the proposed actions.

Attachment C

Land Use, Zoning, and Public Policy

I. INTRODUCTION

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

As discussed in **Attachment A, "Project Description,"** the Reasonable Worst-Case Development Scenario (RWCDS) assumes that in the future with the Proposed Actions, the applicant-owned Projected Development Site would be improved with an approximately 138,470 gross square foot (gsf) mixed-use residential, commercial, and community facility building with 14-stories above grade and a single cellar level. The RWCDS would include approximately 102 dwelling units (DUs; up to 31 of which would be permanently affordable under the proposed MIH Program), 8,400 gsf of ground floor retail space, and a 99-seat black box theater in addition to office and programming space on portions of the ground floor and cellar level for the Astoria Performing Arts Center (approximately 5,696 gsf). The RWCDS would also include 30 attended parking spaces in a below-grade garage that would be accessible from a ramp on 30th Street.

A detailed assessment of land use and zoning is appropriate if a proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on the site or result in the loss of a particular use. As the Proposed Actions involve a zoning map change and a text amendment, a detailed assessment of land use, zoning, and public policy is warranted and is provided in this attachment.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the future with the Proposed Actions within the Proposed Rezoning Area or study area. The Proposed Actions would result in changes to land use and zoning within the Proposed Rezoning Area by allowing additional residential and community facility uses at a density and bulk that would not be permitted in the future without the Proposed Actions. The maximum allowable commercial use would decrease from 4.0 to 3.4 FAR.

The Proposed Actions and associated RWCDS would not directly displace any land uses so as to adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with land uses, zoning, or public policies in the study area. The proposed C4-4D zoning district would permit uses found within and around the Proposed Rezoning Area and would not result in densities and building bulk outside the range of what is currently found in the study area. While the proposed C4-4D (MIH) zoning would permit a higher residential FAR than the districts mapped in the surrounding area, this is in part due to the allowances of the MIH program and is consistent with the City's recently adopted MIH requirement for new rezonings to ensure the provision of permanently affordable low and moderate-income housing. Additionally, the requested rezoning is consistent with the City's policy of increasing density in areas well served by public transportation.

The proposed zoning map and text amendments would create additional zoning capacity in a transit-accessible area to support new housing creation and increase the number of affordable housing units available in New York City. While the proposed C4-4D (MIH) district would permit development at a density greater than permitted under existing or No-Action conditions, the Rezoning Area's location along two wide streets (31st Street and Newtown Avenue) with excellent public transit service provided by the N and W subway lines, is well-suited for additional development.

III. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions and determine whether or not they would result in any significant adverse impacts on land use, zoning, or public policy. The analysis methodology is based on the guidance of the *CEQR Technical Manual* and examines the Proposed Actions and associated RWCDS's consistency with land use patterns and development trends, zoning regulations, and other applicable public policies.

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

Existing land uses were identified through review of a combination of sources including field surveys and secondary sources, as well as the City's Primary Land Use Tax Lot Output (PLUTO™) data files for 2018 and websites, such as New York City's Zoning and Land Use Map (ZoLa, https://zola.planning.nyc.gov) and NYCityMap (http://gis.nyc.gov/doitt/nycitymap/). New York City Zoning Maps and the Zoning Resolution of the City of New York were consulted to describe existing zoning districts in the study areas and provided the basis for the zoning evaluation of the future No-Action and future With-Action conditions. Relevant public documents including documents recognized by the New York City Department of City Planning (DCP) and other City agencies, were utilized to describe existing public policies pertaining to the study areas.

Analysis Year

As discussed in **Attachment A, "Project Description,"** development on the Projected Development Site as a result of the Proposed Actions is expected to be completed in 2024. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2024. Future No-Action conditions account for land use and development projects, initiatives, and proposals that are expected to be completed by 2024.

Study Area Definition

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning, and public policy is related to the type and size of the proposed project, as well as the location and context of the area that could be affected. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. Land use, zoning, and public policy are addressed and analyzed for two geographical areas: (1) the Proposed Rezoning Area including the Projected Development Site; and (2) a study area. The study area identified for this analysis encompasses all areas within a 400-foot radius from the boundary of the Proposed Rezoning Area. As shown in **Figure C-**1, the study area boundary encompasses and extends as far north as the midblock of 29th and 30th Streets between Newtown Avenue and Astoria Boulevard, as far east as the midblock between 31st and 33rd Streets, as far south as the area approximately 100 feet south of 30th Avenue, and the area as

far west as 28th Street.

IV. EXISTING CONDITIONS

Land Use

Proposed Rezoning Area

As described in **Attachment A, "Project Description,"** the Proposed Rezoning Area includes approximately 15,825 sf, and comprises portions of four privately-owned tax lots on Block 595, including the applicant-owned Lots 19, 26, and 27, which encompass the Projected Development Site and a small sliver of the non-applicant-owned Lot 10.

The Projected Development Site (Block 595; Lots 19, 26, and 27) occupies two corner lots and a through lot with frontage on three streets, 92 feet of frontage on 30th Street, 220 feet of frontage on Newtown Avenue, and 61 feet of frontage on 31st Street. The Projected Development Site has an area of approximately 15,388 sf and a built floor area of approximately 27,206 gsf (FAR 1.78). The Projected Development Site consists of three interconnected two-story commercial buildings. These buildings are comprised of a warehouse, tire repair shop, and retail/wholesale distribution of tires, as well as offices on the second floor.

Study Area

The study area includes the area within a 400-foot radius of the Proposed Rezoning Area. As shown in Table C-1, predominant land uses in the study area include residential, commercial, mixed-use residential and commercial, and public facilities and institutions.

North of Newtown Avenue, the area is characterized by residential and mixed-used residential and commercial buildings. As shown in **Figure C-1**, single- and two-family residences and multi-family elevator buildings are largely concentrated along 28th Road and 30th Street. Mixed-use residential and commercial buildings are located on the western side of 31st Street. These smaller residential buildings generally range in height between two and four stories. Along Newtown Avenue, buildings are primarily commercial though there are some residential buildings along the periphery of the study area (refer to **Figure C-1**). Buildings in this area range in height between four and ten stories. The area south of Newtown Avenue is populated by two- to three-story commercial and mixed-used residential and commercial buildings.

Commercial uses predominantly include office buildings, medical offices, banks, supermarkets etc. Mixed-use residential and commercial buildings commonly include ground-floor retail uses. Public facilities and institutions in the area are limited to P.S. 17 located on 29th Street in the southwest corner of the study area.

Figure C-1
Land Use Map

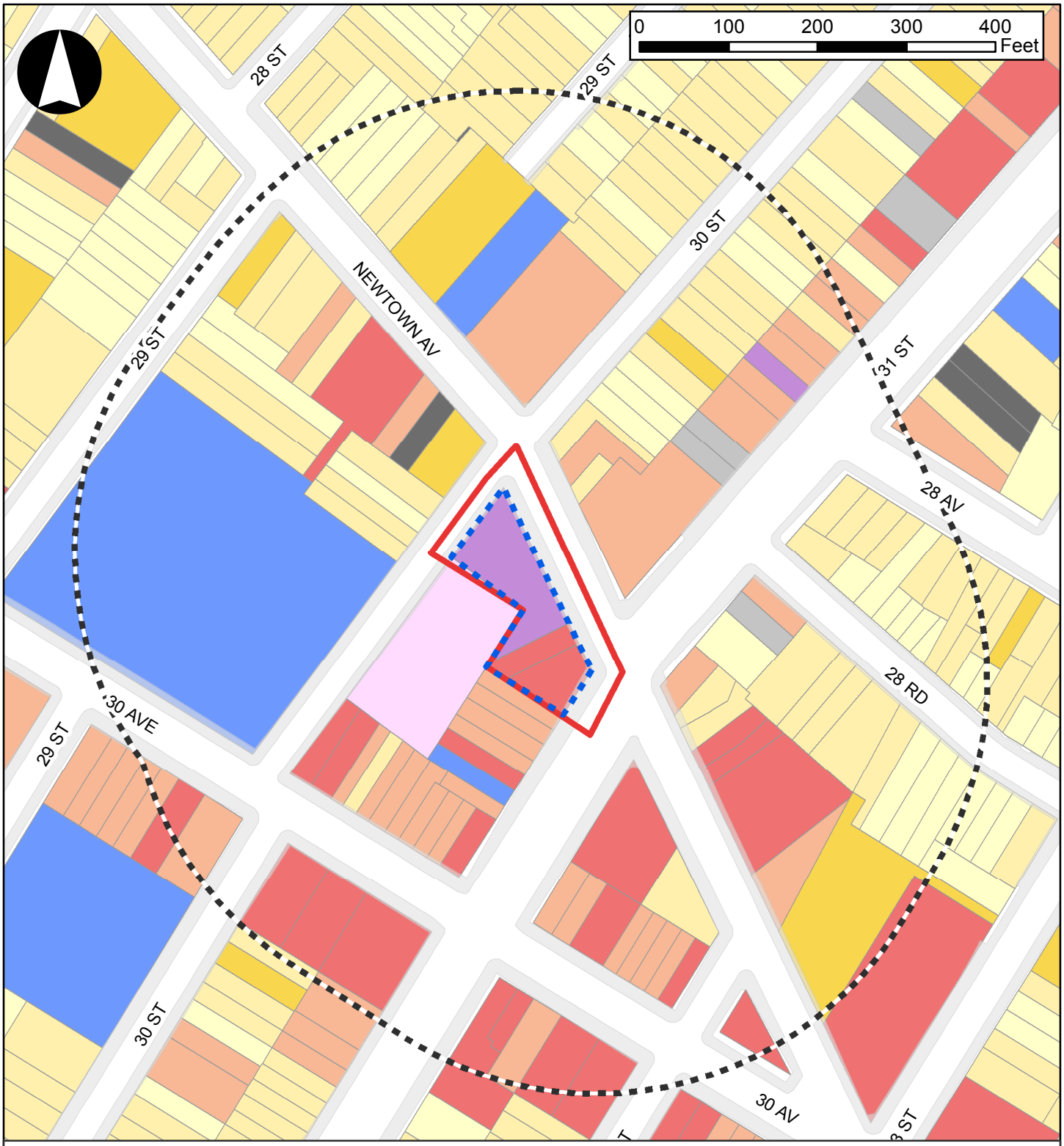


Table C-1: Existing Land Uses within the 400-Foot Study Area

Land Use	No. of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	93	56.0%	278,179	44.1%	459,325	38.9%
One- & Two-Family Buildings	30	18.1%	72,832	11.6%	57,219	4.8%
Multi-Family Walkup Buildings	57	34.3%	161,674	25.7%	254,016	21.5%
Multi-Family Elevator Buildings	6	3.6%	43,673	6.9%	148,090	12.5%
Mixed Commercial/Residential Buildings	39	23.5%	108,513	17.2%	352,954	29.9%
Commercial/Office Buildings	23	13.9%	118,068	18.7%	241,854	20.5%
Industrial/Manufacturing	2	1.2%	10,655	1.7%	19,885	1.7%
Transportation/Utility	1	0.6%	0	0.0%	0	0.0%
Public Facilities & Institutions	3	1.8%	106,925	17.0%	101,200	8.6%
Open Space	0	0.0%	0	0.0%	0	0.0%
Parking Facilities	3	1.8%	5,625	0.9%	500	0.0%
Vacant Land	2	1.2%	2,227	0.4%	6,388	0.5%
Total	**166**	**100%**	**630,192**	**100%**	**1,182,106**	**100%**

Source: NYC Department of City Planning (PLUTO 2018v2.1)

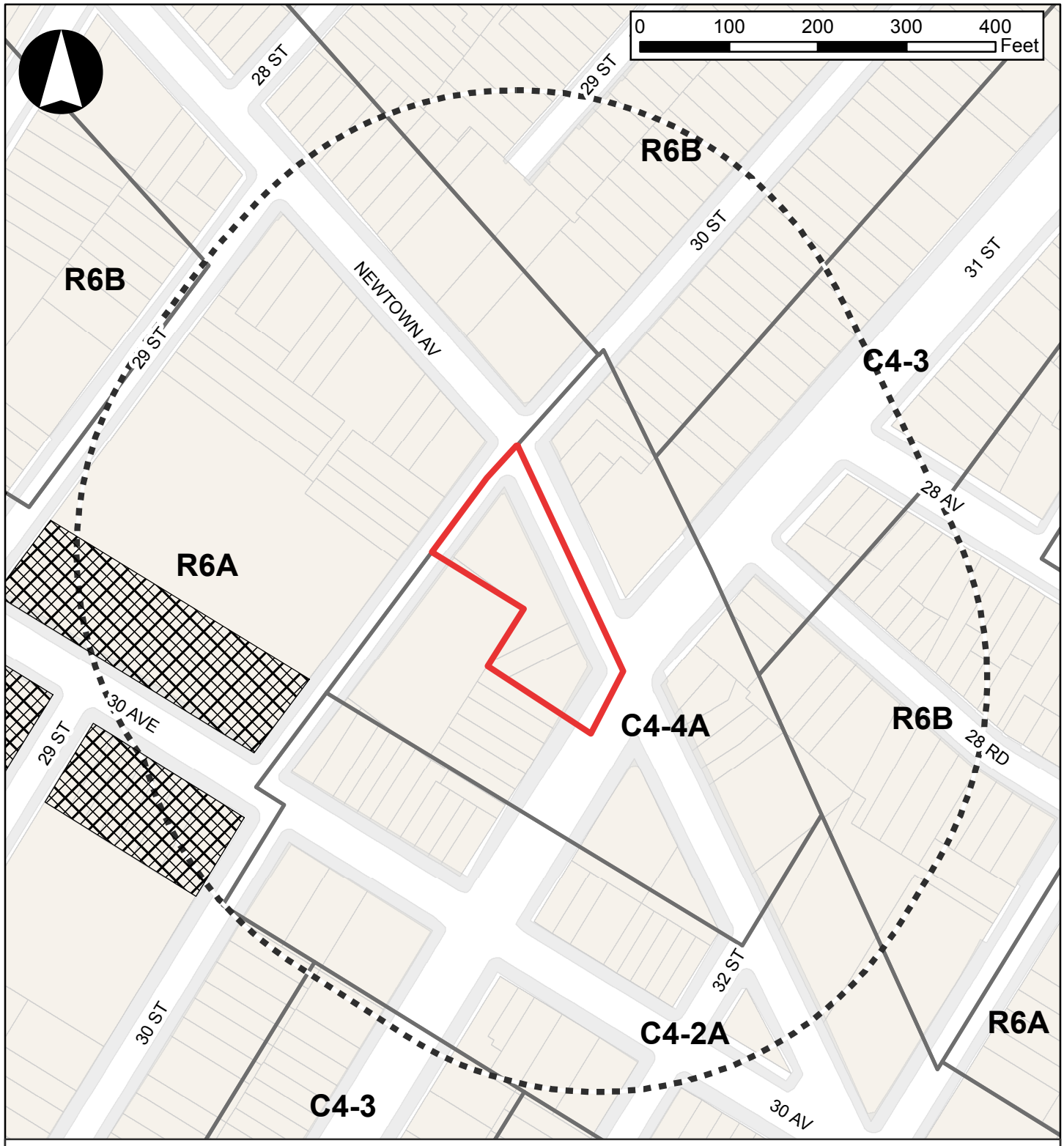
As shown in Table C-1, residential uses are the most common land use throughout the study area and constitute the highest percentage of tax lots, lot area, and building area. Commercial buildings and public facilities and institutions make up the next largest share of floor area in the study area, respectively. The study area also includes no publically accessible open space.

Zoning

Proposed Rezoning Area

As shown in **Figure C-2**, the Proposed Rezoning Area is located in a C4-4A contextual zoning district within a voluntary Inclusionary Housing (IH) district. C4 districts are generally mapped in regional centers located outside of central business districts where specialty and department stores, theatres and office uses that serve a larger region than the immediate area. The C4-4A district permits residential (Use Groups 1 and 2), community facility uses (Use Groups 3 and 4), and commercial uses (Use Groups 5, 6, 8-10, and 12). The C4-4A permits a maximum FAR of 4. for residential developments that include affordable housing pursuant to the voluntary Inclusionary Housing (IH) program, and 4.0 FAR for community facility and commercial uses. The height and setback regulations for residential and community facility developments in the C4-4A district mirror the regulations for R7A districts. For developments that include housing pursuant to the IH program, the maximum base height in the C4-4A district is 75 feet with a qualifying ground floor. The maximum height allowed in the C4-4A district is 95 feet (9 stories) with a qualifying ground floor. Off-street accessory parking is required for 50 percent of dwelling units (DUs) in the C4-4A district. Required parking for commercial uses varies by use, but is typically not required.

Figure C-2
Zoning Map



Legend

- Proposed Rezoning Area
- 400-foot Radius
- Zoning District

Commercial Overlay

- C1-1
- C1-2
- C1-3
- C1-4
- C1-5
- C2-1
- C2-2
- C2-3
- C2-4
- C2-5

Study Area

The scale and density of the study area's buildings tends to reflect the underlying zoning. A variety of zoning districts are located within the surrounding area and include R6B, R6A, C4-2A, and C4-3. Both the R6B and R6A districts permit medium-density residential development. The R6B districts are mapped along smaller side streets in the area including 29th and 30th Streets and 28th Road, away from the higher density commercial corridors in the area. The R6B district is intended to promote small four- to five-story apartment buildings and preserve the scale and harmonious streetscape of neighborhoods. Residential (Use Groups 1 and 2) and community facility uses (Use Groups 3 and 4) are permitted in the R6B district to a maximum FAR of 2.00. Quality Housing regulations are required within the R6B district. Parking in the R6B district is required for 50 percent of all DUs. As shown in **Figure C-2**, an R6A district is mapped in the western portion of the study area along Newtown Avenue and 30th Avenue. The R6A district allows residential (Use Groups 1 and 2) and community facility uses (Use Groups 3 and 4) uses and permits a maximum FAR of 3.00

South of the Proposed Rezoning Area, along 30th Avenue, the area is zoned C4-2A. The C4-2A district is a contextual commercial district that has a R6A equivalent. The district permits the same uses as the existing C4-4A district described above. The C4-2A district permits a maximum residential FAR of 3.00, a maximum FAR of 3.0 for commercial uses, and 3.0 for community facility uses. Off-street accessory parking spaces are required for 50 percent of all DUs and varies by commercial use.

Along 31st Street, north of the Proposed Rezoning Area is a C4-3 district. The C4-3 district is a non-contextual district that permits the same uses as the previously described C4-4A district. The C4-3 permits a maximum residential FAR of 2.43, a maximum commercial FAR of 3.40, and a maximum community facility FAR of 4.80. The maximum building height in this district is governed by the sky exposure plane above a maximum base height of 60 feet. Off-street accessory parking spaces are required for 70 percent of all DUs. Parking requirements for commercial uses vary by the type of commercial use (refer to ZR 36-21).

The Proposed Rezoning Area, secondary study area, and surrounding area were all rezoned in 2010 as part of the larger 238-block Astoria Rezoning (C100199ZMQ). The rezoning was intended to preserve the existing scale and character of the area while allowing for a modest increase in residential and commercial density in specific areas. The areas surrounding the elevated N/W allowed for greater commercial and residential density.

Public Policy

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

The Proposed Rezoning Area and the larger study area are not located in an urban renewal area, a designated Industrial Business Zone (IBZ), a Business Improvement District (BID), a designated historic district, the City's designated coastal zone, or within an area defined by an adopted 197-a plan. In addition to zoning, other public policies and guidelines applicable to portions of the Proposed Rezoning Area and study area include the Mayor's PlaNYC/OneNYC . While there are not specific initiatives and goals in any of these plans that relate to the Proposed Rezoning Area and study area, they are citywide initiatives that would be applicable to the Proposed Actions and are, therefore, included in this analysis.

PlaNYC/OneNYC

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

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

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

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

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

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

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

use digester gas for sewage treatments plants; use energy from solid waste; and reinforce the electrical grid.

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

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

In April 2015, *One New York: The Plan for a Strong and Just City* (OneNYC) was released by the de Blasio administration, building upon the sustainability goals established by PlaNYC. Sustainability and resiliency remain the core goals of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth, aging infrastructure, and global climate change, OneNYC brings new attention to additional concerns. OneNYC includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives, with additional goals and new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

Goals of the plan are to make New York City:

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

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

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

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

Housing New York 2.0

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

partnerships and draw on resources from the State, and protect and expand federal resources for affordable housing. The plan details the key policies and programs for implementation.

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

Land Use

Proposed Rezoning Area

In the 2024 future without the Proposed Actions, the Projected Development Site is expected to remain the same as under existing conditions.

Study Area

In the surrounding study area, there are three developments that are expected to be completed by the 2024 build year within a 400-foot radius of the Proposed Rezoning Area. As shown in Table C-2, these three developments would add approximately 82 new DUs to the study area by the 2024 build year. Each of these projects are being constructed pursuant to existing zoning. At 31-25 Newtown Avenue, a seven-story mixed-use residential and commercial building would add approximately 1,000 gsf of commercial area and 20 DUs. At 31-10 28th Road, a six-story residential building is expected to add 18 DUs. Finally, at 29-19 Newtown Avenue, an eight-story residential building is expected to add 44 DUs (refer to **Figure C-3**).

Table C-2: Study Area No-Action Developments

Map No.	Address	Use	Development Size (gsf)	# of Residential Units
1	31-25 Newtown Avenue	Mixed-use Residential & Commercial	23,200 gsf	20
2	31-10 28th Road	Residential	19,805 gsf	18
3	29-19 Newtown Avenue	Residential	78,652 gsf	44

Notes: Refer to **Figure C-3**

Zoning and Public Policy

No changes to zoning or public policy in the study area are anticipated in the future with the Proposed Actions.

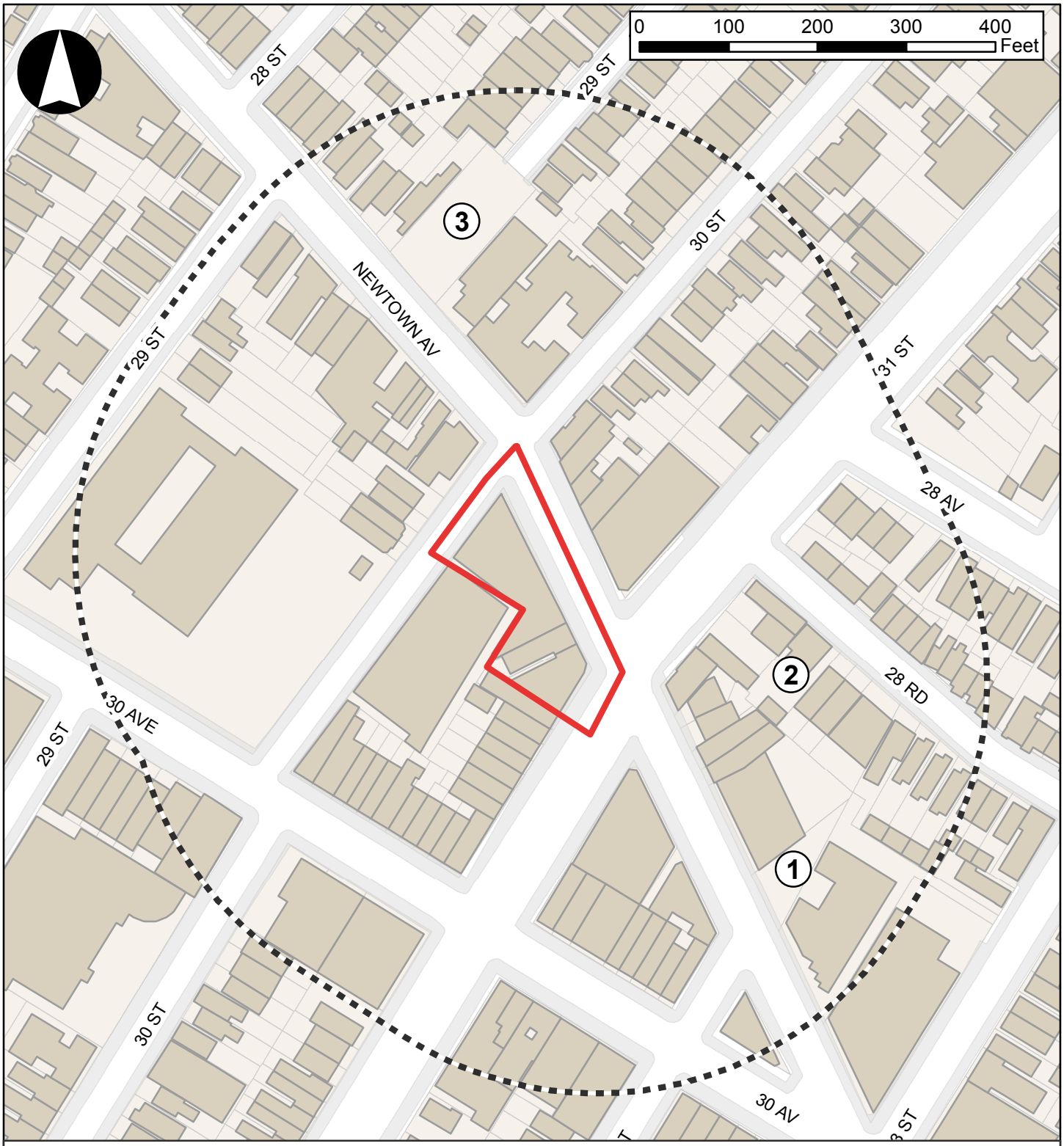
VII. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Under the Proposed Actions and associated RWCDS, the Projected Development Site would be redeveloped with a new, 14-story (145-foot-tall), approximately 138,470 gsf mixed-used residential and commercial building. The RWCDS would include approximately 102 DUs (up to 31 of which would be affordable pursuant to the MIH program), 8,400 gsf of ground floor retail space, and 5,696 gsf of community theatre space for the Astoria Performing Arts Center.

Land Use

In the future with the Proposed Actions, the rezoning of the C4-4A district to C4-4D would allow residential and community facility uses at a greater density than under existing conditions. The proposed C4-4D

Figure C-3
No-Build Developments



Legend

Proposed Rezoning Area

400-foot Radius

(1) No-Build Developments (refer to Table C-2)

zoning district would also continue to permit commercial uses, but at a slightly reduced density compared to the existing conditions (refer to Table C-3 below for a comparison between the two districts).

As described above, the Proposed Rezoning Area is located along a corridor that supports a mix of land uses, including mixed residential and commercial, local retail, commercial office uses, and public facilities and institutions with low-rise residential uses on nearby side streets. The Proposed Actions and RWCDS would facilitate the development of new residential DUs, commercial retail space, and a permanent home for the Astoria Performing Arts Center, a local non-profit that offers free community programs, summer camps for children, seniors etc. The Projected Development Site occupies a prominent location at the intersection of two wide streets (31st Street and Newtown Avenue) and is adjacent to the elevated N and W subway lines extending above 31st Street, which have a station one block to the southwest.

Assessment

The Proposed Actions and associated RWCDS would not result in significant adverse impacts to land use within the Proposed Rezoning Area. The new land uses introduced by the Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses. The Proposed Rezoning Area is in close proximity to public transportation and, therefore, well-situated to handle new development of this scale.

The Proposed Actions would have no direct effect on land uses in the study area and would not result in significant adverse land use impacts. As noted above, the study area is primarily comprised of a mixture of uses including residential, commercial uses, and public facilities and institutions, and the Proposed Actions would not introduce new land uses that would be incompatible with these existing uses and future conditions. The RWCDS would not introduce new land uses to the study area that were not previously allowed under existing zoning. Therefore, the Proposed Actions are not expected to result in significant adverse land use impacts in the study area.

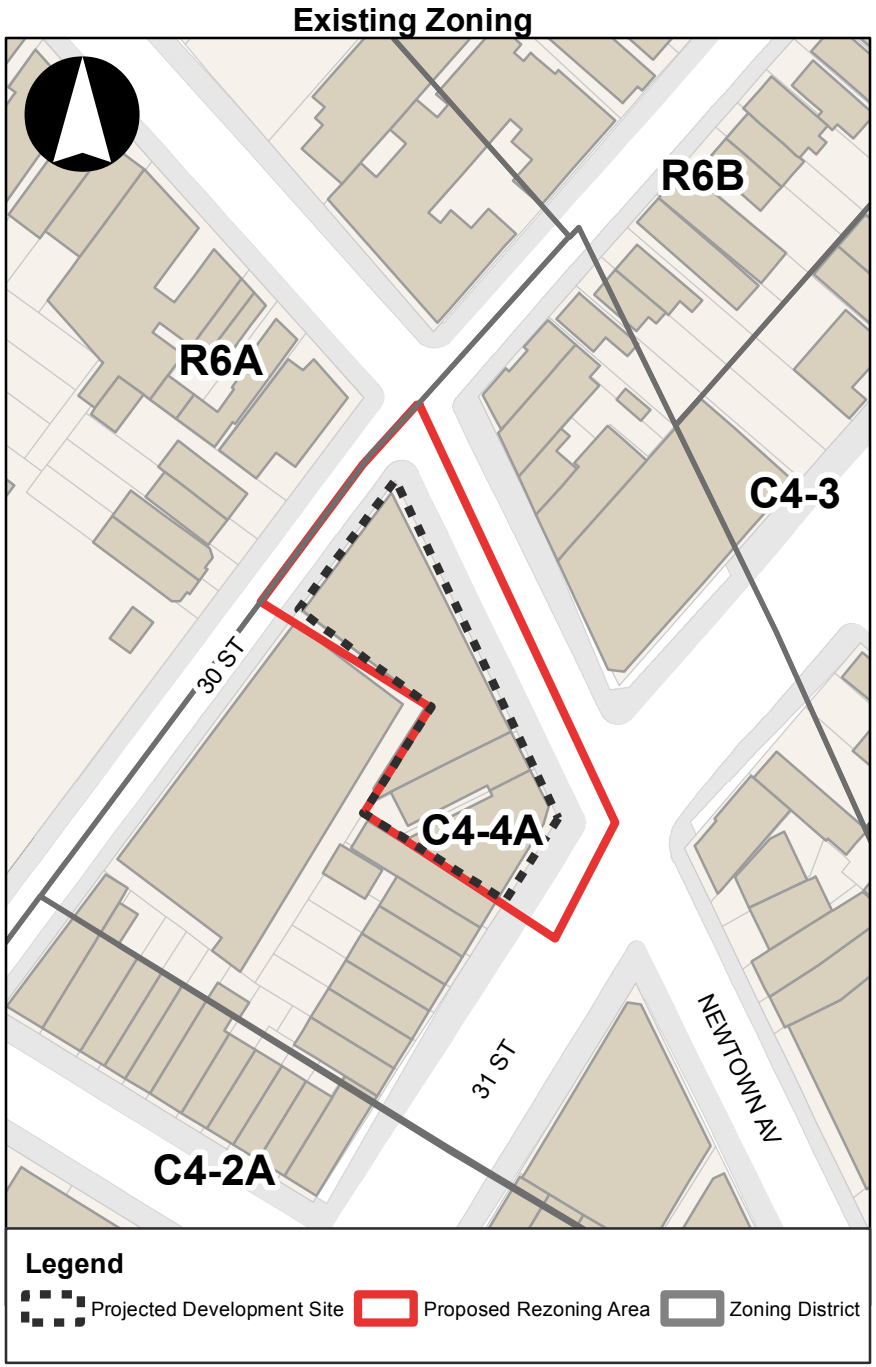
Zoning

As discussed in **Attachment A, "Project Description,"** the Proposed Actions involve zoning map and text amendments.

Zoning Map Amendment

The proposed C4-4D zoning district boundary would be bound to the northeast by the centerline of Newtown Avenue, to the west by the Centerline of 30th Street, and to the east by the centerline of 31st Street. The southern district boundary would be mapped to a depth of 100 feet from 31st Street, would be approximately 185 feet north of the existing C4-2A boundary. To a depth of 94.02 feet from 30th Street the southern boundary would be located approximately 210 feet from the C4-2A boundary (refer to **Figure C-4**). As described below, the rezoning of the C4-4A district to C4-4D would also allow for increases in the overall permitted density and changes to bulk regulations for commercial and residential uses along Newtown Avenue.

Overall permitted densities would increase under C4-4D (MIH) zoning to 7.20 FAR for residential, 6.50 for community facility uses, and decrease to 3.40 for commercial uses. Under No-Action conditions, the C4-4A district allows a maximum permitted FAR of 4.0 for residential, commercial, and community facility uses. The C4-4D district is a contextual zoning district that permits a maximum base height of 105 feet before requiring a 15-foot setback from any narrow street (30th Street and Newtown Avenue) and a 10-foot setback from any wide street (31st Street). A maximum building height of 140 feet is permitted (145 feet



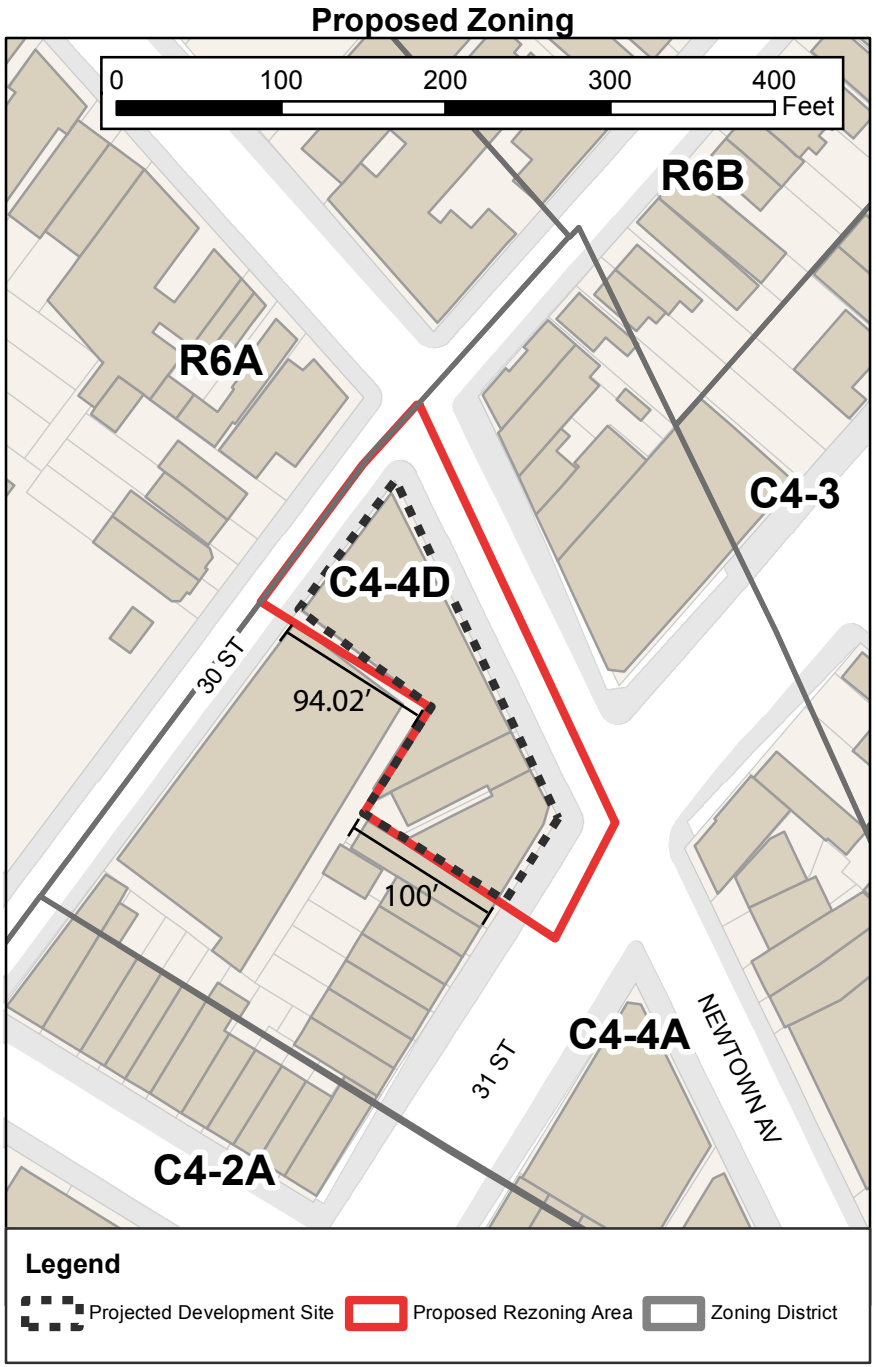


Figure C-4
Existing & Proposed Zoning

for building with a qualifying ground floor) for buildings that incorporate housing through the MIH program.

Table C-3
Comparison of Existing and Proposed Zoning Districts

	EXISTING	PROPOSED
	C4-4A, IH	C4-4D: MIH
Use Groups:	1-6, 8-10, 12	1-6, 8-10, 12
Max. Floor Area Ratio (FAR):	4.0 (up to 4.6 with affordable)	7.20
- Residential	4.0	6.50
- Community Facility	4.0	3.40
- Commercial	N/A (not permitted)	N/A (not permitted)
- Manufacturing		
Building Height:	65’	105’
- Streetwall max. height	15’ narrow street, 10’ wide street	15’ narrow street, 10’ wide street
- Initial setback distance	90’ (95’ with qualifying ground floor)	140’ (145’ with qualifying ground floor)
- Max. building height		
Required Accessory Parking:	50% of DUs*	40% of DUs*
- Residential	None required	1 per 1,000 sf
- General Comm. Facility	None required	1 per 1,000 sf
- General Retail or Service	N/A	N/A
- Manufacturing		

Source: *New York City Zoning Resolution*
*The parking is required for DUs meeting the standards of the MIH program in the Transit Zone. The Proposed Rezoning Area is located within the Transit Zone.

Zoning Text Amendment

A zoning text amendment to Appendix F of the *Zoning Resolution of the City of New York* (ZR) is proposed in order to establish the Proposed Rezoning Area as an MIH area. Under MIH, a share of new housing is required to be permanently affordable when land use actions create significant new housing potential, either as part of a City land use proposal or a private land use application. As discussed previously, under the With-Action Scenario, up to 31 permanently affordable DUs would be created through the MIH Program at the Projected Development Site.

Assessment

The Proposed Actions would not result in significant adverse zoning impacts in the Proposed Rezoning Area. The proposed zoning map and text amendment would create additional zoning capacity in a transit-accessible area to support new housing creation and increase the number of affordable housing units available in Astoria and greater New York City. While the proposed C4-4D (MIH) district would permit development at a density greater than permitted under existing or No-Action conditions, the Rezoning Area’s location along two streets (31st Street and Newtown Avenue) with excellent public transit service provided by the N and W subway lines, is well-suited for additional development.

The Proposed Actions would result in zoning changes that would facilitate the development of the Projected Development Site with a 14-story mixed-use residential and commercial building The Proposed Actions would not create structures that would be incompatible with the underlying zoning, nor would they cause a substantial number of existing structures to become non-complying. The residential, commercial, and

community facility uses generated by the Proposed Actions would be consistent with nearby uses in the surrounding area.

Public Policy

Rezoning Area and Study Area

Assessment

The Proposed Actions would not result in any significant adverse public policy impacts to the Proposed Rezoning Area or study area. Therefore, further analysis related to public policy is not warranted.

PLANYC/ONENYC

The development resulting from the Proposed Actions is consistent with the goals of PlaNYC/OneNYC, as it would contribute to the economic and community development of Astoria. The With-Action Development would provide new residential, commercial, and community facility space that would help create a livable community, providing destinations within walking distance for area residents and reducing vehicle trips. The Proposed Actions would support PlaNYC/OneNYC's transportation goals by facilitating transit-oriented development in an area in close proximity to public transportation. A mix of uses are a key part of livable communities, providing destinations within walking distance and reducing the need for vehicle trips and travel outside of the neighborhood. In addition, the development on the Projected Development Site is not expected to significantly worsen pedestrian and vehicular safety conditions. Therefore, the Proposed Actions would be consistent with PlaNYC/OneNYC's transportation goals.

Housing New York 2.0

The proposed project is consistent with the *Housing New York 2.0* plan and would result in approximately 31 new affordable housing units. Depending on which MIH option is selected, approximately 25 to 30 percent of the residential units would be permanently affordable to specified income bands. Therefore, the proposed project would be supportive of this key public policy goal.

Attachment D

Open Space

I. INTRODUCTION

This attachment assesses the potential impacts of the proposed actions and associated reasonable worst case development scenario (RWCDS) on open space resources. Open space is defined in the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. An open space assessment may be necessary if a proposed action(s) could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed development would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. According to the guidance of the *City Environmental Quality Review* (CEQR) *Technical Manual,* as the project area (i.e., Proposed Rezoning Area) is located in an area of the City considered underserved by open space, an action or project that would add more than 50 residents or 125 employees, or a similar number of other users, is considered to have the potential for indirect effects on open space.

As discussed in **Attachment A, "Project Description,"** the proposed actions would facilitate the construction of a mixed-use development including approximately 102 residential dwelling units (DUs), 8,400 gsf of ground floor retail space, and a 99-seat black box theater to be occupied by the Astoria Performing Arts Committee along with office space (5,696 gsf in the ground floor and cellar) as a RWCDS. The RWCDS would result in a net increase of 239 residents and 24 workers to the Proposed Rezoning Area. As the estimated number of new residents is expected to exceed the CEQR threshold of 50 residents to an area considered underserved by open space, a detailed open space assessment was conducted, focusing on the needs of the study area's residential population. A quantitative assessment was conducted to determine whether the proposed actions would significantly reduce the amount of open space available for the area's residential population.

II. PRINCIPAL CONCLUSIONS

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently overburden existing facilities or further exacerbate deficiency in open space. The *CEQR Technical Manual* also states that "if the area exhibits a low open space ratio indicating a shortfall of open space, even a small decrease in the ratio as a result of the action may cause an adverse effect." A five percent or greater decrease in the open space ratio is considered to be "substantial" and a decrease of less than one percent is generally considered to be insignificant unless open space resources are extremely limited. The open space study area analyzed in this attachment is located in an area that is considered underserved by open space as defined in the *CEQR Technical Manual Appendix: Open Space Maps*.

As discussed in this attachment, the detailed open space assessment shows that the proposed actions and associated RWCDS would decrease the open space ratio by 0.46 percent in the residential study area, which would be below the CEQR impact threshold of one percent for areas considered underserved by open space. Open space demand generated by the proposed actions is not expected to significantly exacerbate the No-Action deficiency of open space in the study area, and the population added as a result of the RWCDS would not noticeably affect utilization of the area's open spaces. As such, no significant adverse indirect

impacts to open space would occur as a result of the proposed actions. In addition, as there are no publicly accessible open spaces within the Proposed Rezoning Area, the proposed actions would not have any direct effects on publicly accessible open space and no further analysis is warranted. Furthermore, the proposed actions would not result in the imposition of noise, air pollutant emissions, odors, or significant new shadows on public open spaces that may alter usability. Therefore, the proposed actions would not result in a significant adverse open space impact per *CEQR Technical Manual* guidance.

III. METHODOLOGY

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

In accordance with the guidance provided in the *CEQR Technical Manual*, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a worker population. As the Proposed Rezoning Area is located in an area considered underserved by open space and the RWCDS is expected to generate more than 50 residents, but less than 125 workers as a result of the proposed actions, a half-mile radius is the appropriate study area boundary.

In New York City, local open space ratios vary widely, and the median ratio at the Citywide Community District level is 1.5 acres of open space per 1,000 residents. Typically, for the assessment of indirect effects, citywide local norms have been calculated for comparison and analysis. As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces, and is consequently used as an optimal benchmark for residential populations in large-scale plans and proposals. Ideally, this would comprise 0.50 acres of passive open space and 2.0 acres of active open space per 1,000 residents.

Open Space Study Area

Pursuant to *CEQR Technical Manual* guidance, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half mile radius of the Proposed Rezoning Area and all open space resources within it that are publicly accessible.

As shown in **Figure D-1**, the residential ½-mile open space study area includes the following census tracts in their entirety: Queens census tracts 61, 63, 65.01, 65.02, 69, 71, 73, 75, 79, 83, 95, 125, and 143. The open space study area extends as far north as 24th Avenue, as far east as 44th Street, as far south as Broadway, and as far west as 8th Street.

Analysis Framework

Direct Effects Analysis

According to the *CEQR Technical Manual*, a project would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space;

Figure D-1
Open Space Study Area

changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As there are no publicly accessible open spaces within the Proposed Rezoning Area, the proposed actions would not have any direct effects and no further analysis is warranted. Additionally, the proposed actions would not result in the imposition of noise, air pollutant emissions, odors, or significant new shadows on public open spaces that may alter usability.

Indirect Effects Analysis

Indirect effects occur to an area's open spaces when a proposed action would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future population. The *CEQR Technical Manual* methodology suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate, but also recognizes that for projects that introduce a large population in an area that is underserved by open space, it may be clear that a full detailed analysis should be conducted. The Proposed Rezoning Area is located within an underserved area as identified in the *CEQR Technical Manual*, and therefore, a detailed open space analysis is provided.

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

- Characteristics of the existing and future (2024) residential users. To determine the number of residents in the study area, 2013-2017 ACS data from the U.S. Census Bureau has been compiled for census tracts comprising the open space study area. The 2024 No-Action residential population was calculated in consideration of anticipated background growth and planned and anticipated study area residential developments. The residential population introduced on as a result of the proposed actions was estimated based on the average household size of Queens Community District 1 (2.34 persons per household) per the 2010 Census.
- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- A quantitative assessment of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with certain guidelines.
    - As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces and is consequently used by the City as an optimal benchmark for residential populations in large-scale plans and proposals. Ideally, this would be comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
    - Local open space ratios vary widely, and the median ratio at the citywide community district level is 1.5 acres of open space per 1,000 residents.
- An evaluation of qualitative factors affecting open space use.
- A final determination of the adequacy of open space in the residential open space study area.

Impact Assessment

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

The quantitative assessment considers how a proposed project would change the open space ratios in the study area. The *CEQR Technical Manual* indicates that a significant adverse impact may result if a proposed project would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents, or where there would be a direct displacement or alteration of existing open space within the study area that has a significant adverse effect on existing users. In areas that are extremely lacking in open space, a reduction as small as one percent may be considered significant, depending on the area of the City. Furthermore, in areas that are well-served by open space, a greater change in the open space ratio may be tolerated.

The qualitative assessment supplements the quantitative assessment and considers nearby destination open space resources, the connectivity of open space, the effects of new open space provided by the proposed project, a comparison of projected open space ratios with City guidance, and open spaces created by the proposed project not available to the general public. It is recognized that the City's planning goals are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks indicating how well an area is served by open space.

IV. EXISTING CONDITIONS

Demographic Characteristics of the Study Area

As shown in Table D-1 below, 2013-2017 Five-Year American Community Survey (ACS) data indicates the study area has a total residential population of 49,616 people.

Table D-1
Existing Open Space Study Area Residential Population

Census Tract	Residential Population
61	5,750
63	5,340
65.01	3,472
65.02	3,764
69	4,380
71	3,539
73	4,330
75	4,252
79	3,376
83	2,935
95	2,521
125	1,883
143	4,074
Total	**49,616**

Source: U.S. Census Bureau, ACS 2013-2017 Five-Year Estimates

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

As shown in Table D-2, people between the ages of 20 and 64 make up the majority (approximately 76 percent) of the study area's residential population. Children and teenagers (0 to 19 years old) account for approximately 13 percent of the study area residential population, and persons 65 years and over account for roughly 11 percent of the residential study area population.

The median age for the population within the individual census tracts of the residential study area ranges from a low of 31.7 years (Census Tract 63) to a high of 36.7 years (Census Tract 75). This data suggests a need for facilities geared towards the recreational needs of adults, as well as children and teenagers, as the study area exhibits a high percentage of residents in the 20 to 64 age brackets.

Table D-2: Existing Open Space Study Area Residential Population Characteristics

Census Tracts	Residential Population												
	Total Population	Age Distribution											Median Age
		Under 5		5 - 9		10 - 14		15 - 19		20 - 64		65+	
		#	%	#	%	#	%	#	%	#	%	#	%	
61	5,750	190	3.3%	138	2.4%	140	2.4%	70	1.2%	4,379	76.2%	833	14.5%	35.9
63	5,340	300	5.6%	101	1.9%	109	2.0%	76	1.4%	4,160	77.9%	594	11.1%	31.7
65.01	3,472	148	4.3%	63	1.8%	45	1.3%	109	3.1%	2,856	82.3%	251	7.2%	32.1
65.02	3,764	68	1.8%	82	2.2%	106	2.8%	160	4.3%	3,100	82.4%	248	6.6%	32.5
69	4,380	157	3.6%	222	5.1%	60	1.4%	140	3.2%	3,035	69.3%	766	17.5%	35.9
71	3,539	79	2.2%	44	1.2%	51	1.4%	45	1.3%	2,919	82.5%	401	11.3%	32.3
73	4,330	154	3.6%	21	0.5%	247	5.7%	73	1.7%	3,188	73.6%	647	14.9%	34.7
75	4,252	146	3.4%	159	3.7%	92	2.2%	157	3.7%	3,090	72.7%	608	14.3%	36.7
79	3,376	269	8.0%	69	2.0%	154	4.6%	245	7.3%	2,272	67.3%	367	10.9%	35.2
83	2,935	138	4.7%	96	3.3%	266	9.1%	128	4.4%	2,164	73.7%	143	4.9%	31.9
95	2,521	166	6.6%	172	6.8%	76	3.0%	68	2.7%	1,672	66.3%	367	14.6%	33.6
125	1,883	79	4.2%	20	1.1%	27	1.4%	38	2.0%	1,565	83.1%	154	8.2%	34.4
143	4,074	145	3.6%	204	5.0%	154	3.8%	156	3.8%	3,071	75.4%	344	8.4%	34.5
Total	**49,616**	**2,039**	**4.1%**	**1,391**	**2.8%**	**1,527**	**3.1%**	**1,465**	**3.0%**	**37,471**	**75.5%**	**5,723**	**11.5%**	-

Source: *2013-2017 ACS 5-Year Estimates.*

Inventory of Open Space Resources in the Study Area

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidance, whereas private open space is not accessible to the general public on a regular basis, and is therefore only considered qualitatively. Public open spaces that do not contain seating are also excluded from the quantitative assessment, in accordance with *CEQR Technical Manual* methodology. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

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

Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this

analysis was gathered through field inventories conducted July of 2019, the New York City Department of Park and Recreation's (NYC Parks) website, the New York City Open Accessible Space Information System (OASIS) database, and other secondary sources of information.

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

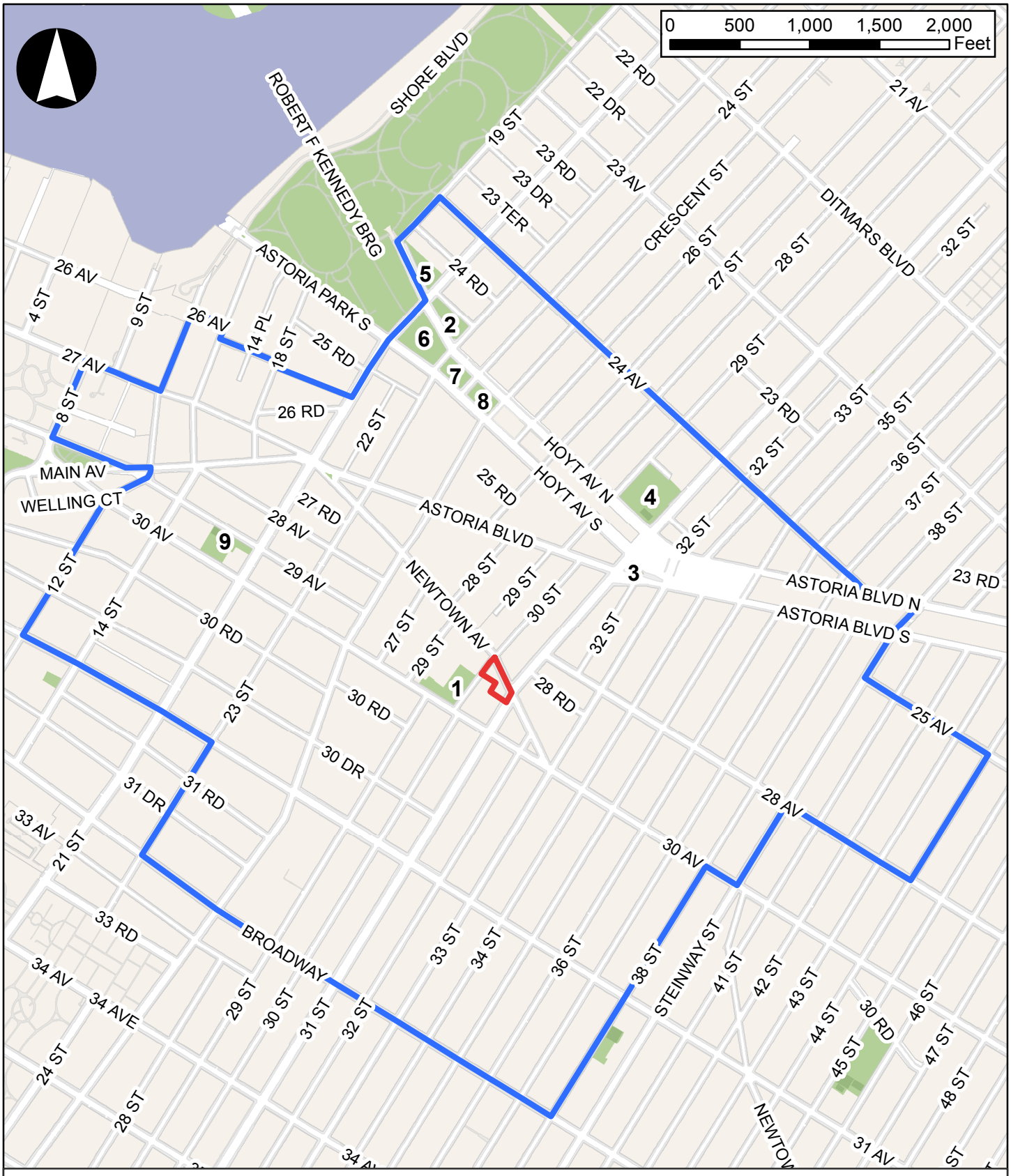
Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon, which is considered the weekday peak utilization period according to the *CEQR Technical Manual*. If a facility seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. Field visits were conducted in July 2019, when the utilization of open space is generally higher than in colder months. Table D-3, "Inventory of Existing Open Space and Recreational Facilities in Study Area," identifies the address, ownership, features, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure D-2** maps their location in the study area.

Open Space Resources

As shown in Table D-3, there are nine publicly-accessible open space resources within the residential study area included in the quantitative analysis. The study area contains a total of approximately 8.35 acres of publicly accessible open space, approximately 86 percent of which (7.16 acres) comprises active open space and approximately 14 percent of which (1.19 acres) comprises passive open space (refer to Table D-3).

As shown in **Figure D-2**, open space resources are generally clustered in the northeastern portion of the open space study area near Hoyt Avenue. The largest open space resource in the residential ½-mile study area is the 2.20-acre Hoyt Playground, located at the intersection of Hoyt Avenue North and 31st Street. The space includes benches, basketball courts, handball courts, playgrounds, and an asphalt paved area. Other open spaces in the study area generally vary in size between 0.5 – 1.3 acres and are generally geared towards active open space programming (refer to Table D-3).

Figure D-2
Open Space Resources



Legend

- Proposed Rezoning Area
- Open Space Study Area
- 1 — Open Space Resources Assessed in the Quantitative Analysis (refer to Table F-4)

Table D-3: Inventory of Open Space and Recreational Resources in the Study Area

Map No.	Name	Location	Owner/Agency	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Included in Quantitative Analysis												
1	Athens Square	30th Street and 30th Avenue	DOE/ NYC Parks	Benches, Playgrounds, Basketball Court, Spray Showers	Children, Teenagers, Adults, Seniors	6 AM – 9 PM	0.93	85%	0.79	15%	0.14	Excellent & Moderate
2	Chappetto Square	Hoyt Avenue North and 23rd Street	NYC Parks	Benches, Asphalt paved area	Children, Teenagers, Adults	6 AM – 9 PM	1.23	95%	1.17	5%	0.06	Good / Low
3	Columbus Square	Astoria Boulevard and Hoyt Avenue South	NYC Parks	Benches	Adults, Seniors	24/7	0.10	0%	0.00	100%	0.10	Good / Low
4	Hoyt Playground	Hoyt Avenue North and 31st Street	NYC Parks	Benches, Basketball Courts, Handball Courts, Playgrounds, Asphalt paved area, Spray Showers	Children, Teenagers, Adults, Seniors	6 AM – 9 PM	2.20	80%	1.76	20%	0.44	Good / High
5	Sitting Area	Hoyt Avenue North and 21st Street	NYC Parks	Benches, Paved asphalt area	Children, Teenagers, Adults	24/7	1.16	90%	1.04	10%	0.12	Good/ Low
6	Triborough Bridge Playground B	Hoyt Avenue South and 21st Street	NYC Parks	Playgrounds, Fitness Equipment, Spray Showers	Children, Teenagers, Adults, Seniors	6 AM – 9 PM	1.23	85%	1.04	15%	0.18	Good / Moderate
7	Triborough Bridge Playground C	Hoyt Avenue South between 23rd and 24th Streets	NYC Parks	Dog Area, Basketball Courts	Children, Adults	6 AM – 9 PM	0.46	50%	0.23	50%	0.23	Good / Moderate
8	Triborough Bridge Playground D	Hoyt Avenue South between 24th and Crescent Streets	NYC Parks	Playground, Handball Courts	Children, Teenagers, Adults	6 AM – 9 PM	0.46	90%	0.41	10%	0.05	Good / Moderate
9	Triborough Bridge Playground E	Hoyt Avenue South, between 26th Street and Crescent Streets	NYC Parks	Playground	Children, Teenagers, Adults	6 AM - 9 PM	0,46	90%	0.41	10%	0.05	Good / Moderate
10	Van Alst Playground	30th Avenue between 14th and 21st Streets	DOE/NYC Parks	Playground, Handball Courts	Children, Teenagers, Adults	6 AM – 9 PM	1.03	90%	0.93	10%	0.10	Good / High
						Total:	**9.26**	**86%**	**7.98**	**14%**	**1.28**	

Sources: NYC OASIS, NYC Parks, July 2019 field visits.
Notes: [1]Refer to Figure D-2

Assessment of Open Space Adequacy

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

Quantitative Assessment

With a total of 9.26 acres of open space, of which approximately 1.28 acres are for passive use and approximately 7.98 acres are for active use, and a total residential population of 49,616, the residential study area has an overall open space ratio of 0.187 acres per 1,000 residents (see Table D-4). This is less than the City's planning goal of 2.5 acres of combined active and passive open space per 1,000 residents. The study area's residential passive and active open space ratios are 0.026 acres and 0.161 acres per 1,000 residents, respectively. Both the passive open space ratio and the active open space ratio are below the applicable City open space guidelines. As shown in Table D-4, the passive open space ratio of 0.026 is below the applicable City open space goal for passive open space (0.50 acres of passive open space per 1,000 people). Additionally, the active open space ratio of 0.161 acres per 1,000 people is below the *CEQR Technical Manual* goal of 2.0 acres of active open space per 1,000 residents. As such, there is an existing shortfall of total, passive, and active open space in the open space study area.

Table D-4: Adequacy of Open Space Resources in the Study Area: Existing Conditions

	Population	Open Space Acreage			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	49,616	9.26	1.28	7.98	0.187	0.026	0.161	2.50	0.50	2.00

Qualitative Assessment

The deficiency of open space resources within the residential study area is partially ameliorated by several factors. First, as shown in Table D-3, all existing open space resources in the residential study area are considered to be in good or excellent condition. Typical utilization rates of these resources are low to moderate. Second, there are also two additional open spaces not included in the quantitative analysis that offer active and passive open space for residents of the open space study area, both of which are located within a ½-mile radius of the Proposed Rezoning Area, but are not within the residential ½-mile study area. These additional resources include Astoria Park and Sean's Place. Astoria Park is a 59.96-acre destination park located on 19th Street between Astoria Park South and Ditmars Boulevard along the East River waterfront that serves a regional area. The park includes bocce courts, dog-friendly areas, fitness equipment, running tracks, playgrounds, a skate park, spray showers, tennis courts, and the largest outdoor public pool in the city. Astoria Park is an approximately 13-minute walk from the Projected Development Site. Active uses including tennis courts, a running track, and other passive open space areas are located closest to the Projected Development Site. Though the open space study area lacks an abundance of small to medium size open space resources, the programming and amount of open space offered at Astoria Park offers significant open space for residents of the open space study area.

The second open space not included in the quantitative analysis but located within ½-mile of the Proposed Rezoning Area is Sean's Place located on 38th Street between 31st Avenue and Broadway. The 0.58-acre park includes handball courts, basketball courts, benches, and a playground. Together these two open space resources, approximately a ½-mile from the Proposed Rezoning Area, offer an additional 60.54-acres of open space for area residents that is not considered in the quantitative analysis, but is easily accessible to area residents.

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

Study Area Population

In the 2024 future without the proposed actions, 46 developments that are currently being planned or are under construction are expected to be completed in the residential open space study area (shown in Table D-5). These No-Action developments are expected to introduce a total of approximately 1,753 residents[1] (749 DUs) to the residential open space study area by 2024 (refer to Table D-6). Under the No-Action Condition, the Proposed Rezoning Area is to remain the same as under existing conditions.

Table D-5: Anticipated No-Action Developments in the Study Area

Address	Proposed Use	# of DUs
31-16 38 STREET	RESIDENTIAL: APARTMENT HOUSES	9
30-54 38TH STREET	RESIDENTIAL: APARTMENT HOUSES	10
31-31 30 STREET	RESIDENTIAL: APARTMENT HOUSES	6
31-31 30 STREET	RESIDENTIAL: APARTMENT HOUSES	6
31-41 29TH STREET	RESIDENTIAL: APARTMENT HOUSES	10
30-79 31 STREET	RESIDENTIAL: APARTMENT HOUSES	9
25-82 43 STREET	RESIDENTIAL: APARTMENT HOUSES	8
30-67 31ST STREET	RESIDENTIAL: APARTMENT HOUSES	10
30-63 31 STREET	RESIDENTIAL: APARTMENT HOUSES	23
23-43 31 ROAD	RESIDENTIAL: APARTMENT HOUSES	25
23-16 31ST AVENUE	RESIDENTIAL: APARTMENT HOUSES	26
36-08 28 AVE	RESIDENTIAL: APARTMENT HOUSES	22
25-53 38TH STREET	RESIDENTIAL: APARTMENT HOUSES	21
30-57 CRESCENT STREET	RESIDENTIAL: APARTMENT HOUSES	10
31-25 NEWTOWN AVENUE	RESIDENTIAL: APARTMENT HOUSES	20
25-34 STEINWAY STREET	RESIDENTIAL: APARTMENT HOUSES	10
31-10 28TH ROAD	RESIDENTIAL: APARTMENT HOUSES	18
14-53 31 AVE.	RESIDENTIAL: APARTMENT HOUSES	45
14-45 31 AVENUE	RESIDENTIAL: APARTMENT HOUSES	18
14-33 31 AVE	RESIDENTIAL: APARTMENT HOUSES	56
25-40 36TH STREET	RESIDENTIAL: APARTMENT HOUSES	10
14-11 31 AVENUE	RESIDENTIAL: APARTMENT HOUSES	10
23-23 30TH ROAD	RESIDENTIAL: APARTMENT HOUSES	16
24-38 STEINWAY STREET	RESIDENTIAL: HOTELS, DORMITORIES	38
25-83 31 STREET	RESIDENTIAL: APARTMENT HOUSES	14
30-17 23RD STREET	RESIDENTIAL: APARTMENT HOUSES	6
25-15 36 STREET	RESIDENTIAL: APARTMENT HOUSES	7
30-86 14 STREET	RESIDENTIAL APT HOUSE	7
29-19 NEWTOWN AVE	RESIDENTIAL: APARTMENT HOUSES	44
27-34 27 STREET	RESIDENTIAL: APARTMENT HOUSES	7
27-21 27TH STREET	RESIDENTIAL: APARTMENT HOUSES	8
27-15 27 ST.	RESIDENTIAL: APARTMENT HOUSES	10
25-40 31ST STREET	RESIDENTIAL: APARTMENT HOUSES	16
26-33 28TH STREET	RESIDENTIAL: APARTMENT HOUSES	8
30-26 14 STREET	RESIDENTIAL: APARTMENT HOUSES	7
30-18 14 STREET	RESIDENTIAL: APARTMENT HOUSES	10
27-04 ASTORIA BOULEVARD	RESIDENTIAL: APARTMENT HOUSES	10
28-16 21ST STREET	RESIDENTIAL: APARTMENT HOUSES	50
27-15 ASTORIA BLVD	RESIDENTIAL: APARTMENT HOUSES	20
27-13 21 ST	RESIDENTIAL: APARTMENT HOUSES	52
25-32 22 ST	RESIDENTIAL: APARTMENT HOUSES	3
26-26 18 STREET	RESIDENTIAL: APARTMENT HOUSES	7
25-30 22 ST	RESIDENTIAL: APARTMENT HOUSES	3
26-20 14TH PLACE	RESIDENTIAL: APARTMENT HOUSES	12
14-25 27TH AVENUE	RESIDENTIAL: APARTMENT HOUSES	12
	Total:	**749**

Source: New York YIMBY, The Real Deal, DOB
*Refer to Figure C-4 and Table C-3 in Attachment C, "Land Use, Zoning, & Public Policy."

[1] The number of additional residents was calculated by multiplying the number of new dwelling units in the open space study area by the average household size of Queens Community District 1 as calculated in the 2010 Census (2.39 persons per household).

Table D-6: No-Action Residential Population in the Study Area

	Existing Population	Additional Population as a Result of No-Action Developments (listed in Table D-5)	Future No-Action Population
Residents	49,616	1,753	51,369

Note: Additional population was determined using the average household size of 2.34 in Queens Community District 1 (2010 Census)

Open Space Resources

There are no planned alterations to the study area open spaces anticipated by the 2024 analysis year. The residential open space study area will continue to be served by the existing 8.35 acres of open space.

Quantitative Assessment of Open Space Adequacy

In the future No-Action condition, the additional population introduced to the residential open space study area would increase the demand on the area's open spaces. With the anticipated No-Action development, the residential study area would continue to be underserved by passive and active open spaces in comparison to the City's guidance. As indicated in Table D-7, the No-Action total, passive, and active open space ratios per 1,000 residents are expected to decline to 0.180, 0.025, and 0.155, respectively. The No-Action residential open space ratios for total, passive, and active open space would continue to be less than the City's guideline ratio of 2.5 acres of open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents and the citywide median of 1.5 acres per 1,000 residents.

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

	Estimated No-Action Population	Open Space Acreage			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	51,369	9.26	1.28	7.98	0.180	0.025	0.155	2.50	0.50	2.00

Qualitative Assessment

The ratios for total, passive, and active open space within the residential study area would remain below the City's guidelines in the future without the proposed actions. As under existing conditions, there are two additional open space resources within ½-mile of the Proposed Rezoning Area that could be accessed by residents that are not included in the quantitative analysis including Astoria Park and Sean's Place which are described above. These resources represent an additional 60.54-acres of open space accessible for the study area's residents.

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

In the future with the proposed actions, the Projected Development Site would be redeveloped with a 138,470 gross square foot (gsf) mixed-used residential, commercial, and community facility building. The RWCDS associated with the proposed actions would include 102 DUs, 8,400 gsf of ground floor retail

space, and a 99-seat black box theater and office space (5,696 gsf). The RWCDS is expected to introduce an additional 239 residents and 24 workers[2] to the Proposed Rezoning Area.

Study Area Population

The RWCDS would result in an incremental increase of 239 residents compared to No-Action conditions. As indicated in Table D-8, the ½-mile study area's residential population is expected to increase to 51,608 in the With-Action condition.

Table D-8: With-Action Residential Population in the Study Area

	No-Action Population	Additional Population as a Result of the RWCDS	Future With-Action Population
Residents	51,369	239	51,608

Note: Additional population introduced as a result of the proposed actions was determined using the average household size of 2.34 in Queens Community District 1 (2010 Census)

Direct Effects

No publicly-accessible open space is located in the Proposed Rezoning Area. Therefore, the proposed actions would not result in the physical loss of publicly-accessible open space. In addition, the RWCDS would not cause significant shadows, noise, or air pollutant emissions that would adversely affect the any of the study area open spaces, whether on a permanent or temporary basis (refer to **Attachment E, "Shadows, and Attachment G, "Noise"**). Furthermore, approval of the proposed actions would not change the use of any publicly-accessible open space so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no significant adverse direct effects on open space would occur as a result of the proposed actions and further analysis is not warranted.

Indirect Effects

Quantitative Assessment

Under With-Action conditions, total open space ratios in the residential (½-mile) study area would decrease, from 0.163 in the No-Action condition to 0.1179 acres per 1,000 residents in the With-Action (see Table D-9). The passive and active open space ratios would also decrease slightly compared to No-Action conditions, to 0.0249 and 0.1546 per 1,000 residents, respectively, which would continue to be below the City's guidance ratios of 0.50 acres of passive open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents.

[2] The number of additional residents was calculated by multiplying the number of new dwelling units in the open space study area by the average household size of Queens Community District 1 as calculated in the 2010 Census (2.39 persons per household). The number of additional workers on-site was determined by assuming one worker per 333 sf of retail space, one worker per 25 dwelling units, one worker per 1,000 sf of auto service/repair, and 35 workers for the theater space.

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

	Population	Open Space Acreage			Open Space Ratios per 1,000 People			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	51,608	9.26	1.28	7.98	0.179	0.0249	0.1546	2.50	0.50	2.00

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

Qualitative Assessment

It should also be noted that, while the amounts of total and active open space resources in the residential study area are, and would continue to be, deficient in comparison to City guidelines, the residential study area open spaces tend to have moderate utilization levels, and are in excellent condition (refer to Table D-3). As discussed above, the half-mile radius from the Proposed Rezoning Area also includes two additional open space resources that were not included in the quantitative analysis due to CEQR methodology. These open spaces include Astoria Park and Sean's Place which are described above. Astoria Park is a 59.96-acre regional park within a 13-minute walk of the Projected Development Site. These resources represent an additional 60.54-acres of open space accessible for the study area's residents.

Determining Impact Significance

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

Table D-10: Open Space Ratios Summary

Type of Open Space	CEQR Technical Manual Open Space Guideline	Open Space Ratios per 1,000			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Total	2.5	0.1866	0.1803	0.1794	-0.46%
Active	2.0	0.1608	0.1553	0.1546	-0.46%
Passive	0.5	0.0258	0.0250	0.0249	-0.46%

With respect to the reductions in open space ratios within the residential study area, the total, active, and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, 2.0 acres, and 0.5 acres per 1,000 residents, respectively, in the future with the proposed actions. The total residential study area open space ratio would decline by 0.46 percent to 0.1794 acres per 1,000 residents; the active residential study area open space ratio would decline by 0.46 percent to 0.1546 acres per 1,000 residents; and the passive residential study area open space ratio would decrease 0.46 percent to 0.0249 acres per 1,000 residents.

Although there would continue to be a shortage of public open space in the study area, the increase in demand from the proposed actions would not result in significant reductions in open space ratios (defined as one percent or more in areas considered underserved by open space per *CEQR Technical Manual*) compared to the No-Action condition and would not overburden existing open space resources or further exacerbate a deficiency in open space. Additionally, there are a number of other open spaces located in a ½-mile from the Proposed Rezoning Area that could be accessed by some residents of the study area, including Astoria Park and Sean's Place.

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

Attachment E

Shadows

I. INTRODUCTION

According to the 2014 *CEQR Technical Manual*, an adverse shadows impact is considered to occur when an incremental shadow from a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource, or threatens the viability of vegetation or other resources. Pursuant to CEQR guidance, sunlight-sensitive resources of concern are those resources that depend on sunlight, or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Sunlight-sensitive resources can include publicly accessible open spaces, architectural resources, natural resources, and Greenstreets. In general, shadows on city streets, sidewalks, buildings, or project-generated open spaces are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

According to the *CEQR Technical Manual*, a shadows assessment is required only if a proposed action would result in structures (or additions to existing structures) of 50 feet or more and/or be located adjacent to, or across the street from, a sunlight-sensitive resource. As described in **Attachment A, "Project Description,"** the proposed actions would facilitate the development of a new building on Newtown Avenue in Queens, with a maximum height of approximately 145 feet. Therefore, a shadows analysis was prepared to determine the potential for the proposed actions and associated RWCDS to result in significant adverse impacts on sunlight-sensitive resources.

II. PRINCIPAL CONCLUSIONS

The proposed actions would not result in significant adverse shadows impacts. While the proposed actions and associated RWCDS would cast incremental shadows on a portion of Athens Square, the detailed shadows analysis determined that the duration and coverage of the incremental shadows on Athens Square would not be significant or adverse. Project-generated incremental shadows would occur on three of the four analysis days during the early morning hours near the onset of the analysis day and would last for approximately two hours and 22 minutes on March 21/ September 21, two hours and 37 minutes on May 6/August 6, and 3 hours and 10 minutes on June 21. On each of these analysis days, new incremental shadows would be limited to the eastern portion of the park that contains trees, open seating areas, and a basketball court. Athens Square would not receive incremental shadows past 9:58 AM on any analysis day (refer to Table E-1). Additionally, the park would continue to receive adequate sunlight during the morning, afternoon, and evening hours, and as such, the proposed actions and associated RWCDS would not have significant adverse effects on any vegetation or adversely affect the usability/enjoyment of Athens Square. Therefore, incremental shadows that would result from the proposed actions and associated RWCDS are not anticipated to adversely affect the utilization or enjoyment of Athens Square or result in any significant adverse impact.

III. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic

resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

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

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.

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

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

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow resulting from the project. In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area,

the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold-weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive historic and natural resources. The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

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

- *Vegetation:* a substantial reduction in sunlight available to sunlight-sensitive features of the resource to less than the minimum time necessary for its survival (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).

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

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

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

In general, a significant adverse shadows impact occurs when the incremental shadows added by a proposed building fall on a sunlight-sensitive resource and substantially reduce or completely eliminate direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other natural resources.

IV. PRELIMINARY SCREENING

Tier 1 Screening Assessment

According to the 2*014 CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height and occurs on December 21 (the winter solstice). The height of the RWCDS building was used to determine the longest shadow study area (Tier 1

Assessment). Within this longest shadow study area, there is one sunlight sensitive resource: Athens Square (refer to **Figure E-1**). Therefore, further screening is warranted in order to determine whether this resource would be affected by project-generated shadows.

Tier 2 Screening Assessment

Due to the path of the sun across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening are located within portions of the longest shadow study area that can receive shade from the proposed building.

As presented in **Figure E-1**, portions of Athens Square would fall within the maximum shadow radius. Based on the Tier 2 Screening Assessment, it cannot be ruled out that the proposed actions would cast shadows on these locations.

Tier 3 Screening Assessment

According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed project can reach a sunlight-sensitive resource, thereby warranting a detailed shadows analysis. The Tier 3 screening assessment is used to determine if shadows resulting from a proposed project can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

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

Figures E-2a and **E-2b** illustrate the range of project-generated shadows that could occur in the absence of existing buildings on the four representative analysis days. The Tier 3 analysis shows that Athens Square would receive project-generated shadows. Therefore, a detailed shadow analysis is required to determine the extent and duration of project-generated incremental shadows on this open space resource.

V. DETAILED ANALYSIS OF SHADOW IMPACTS

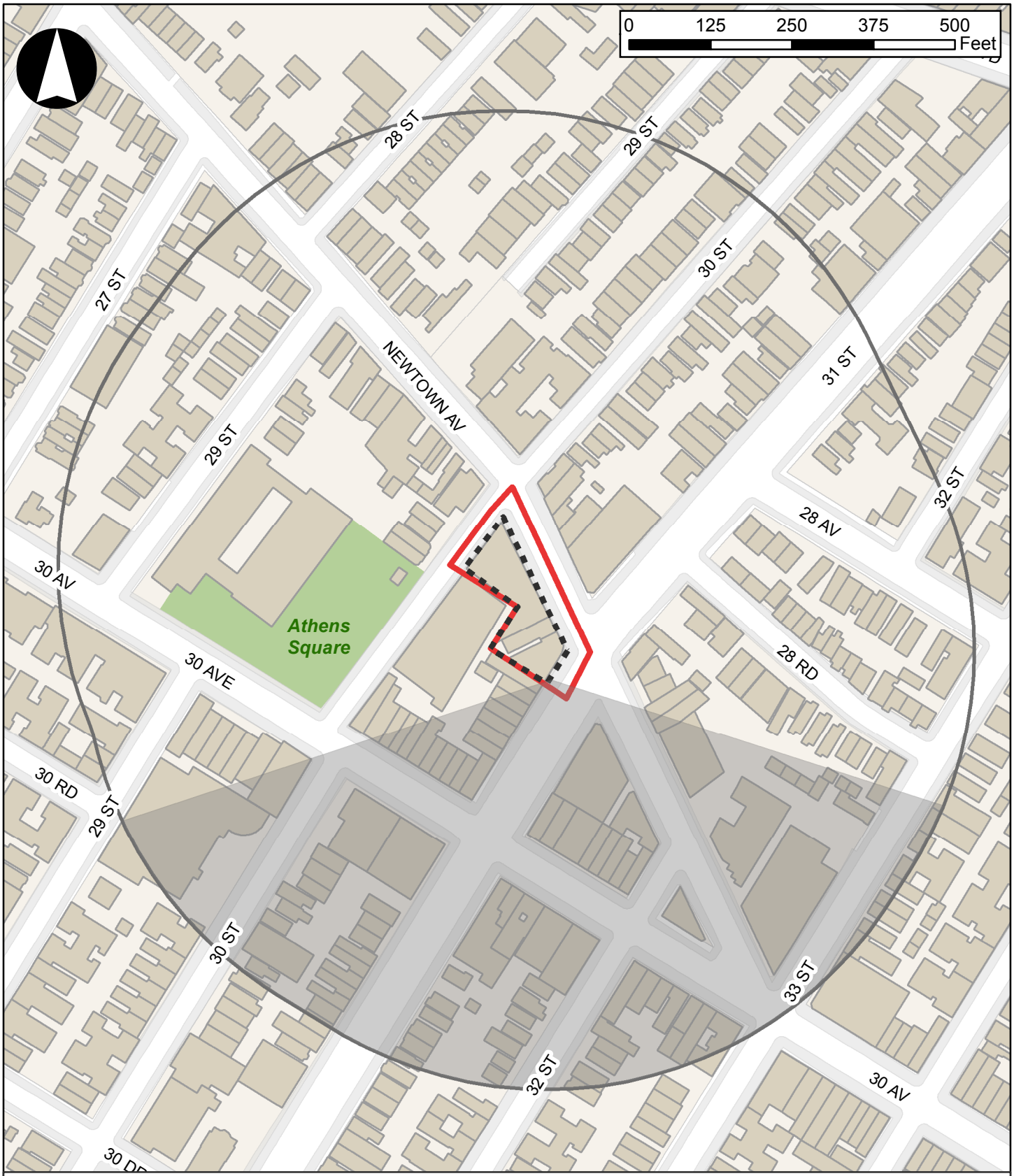
Resources of Concern

Athens Square

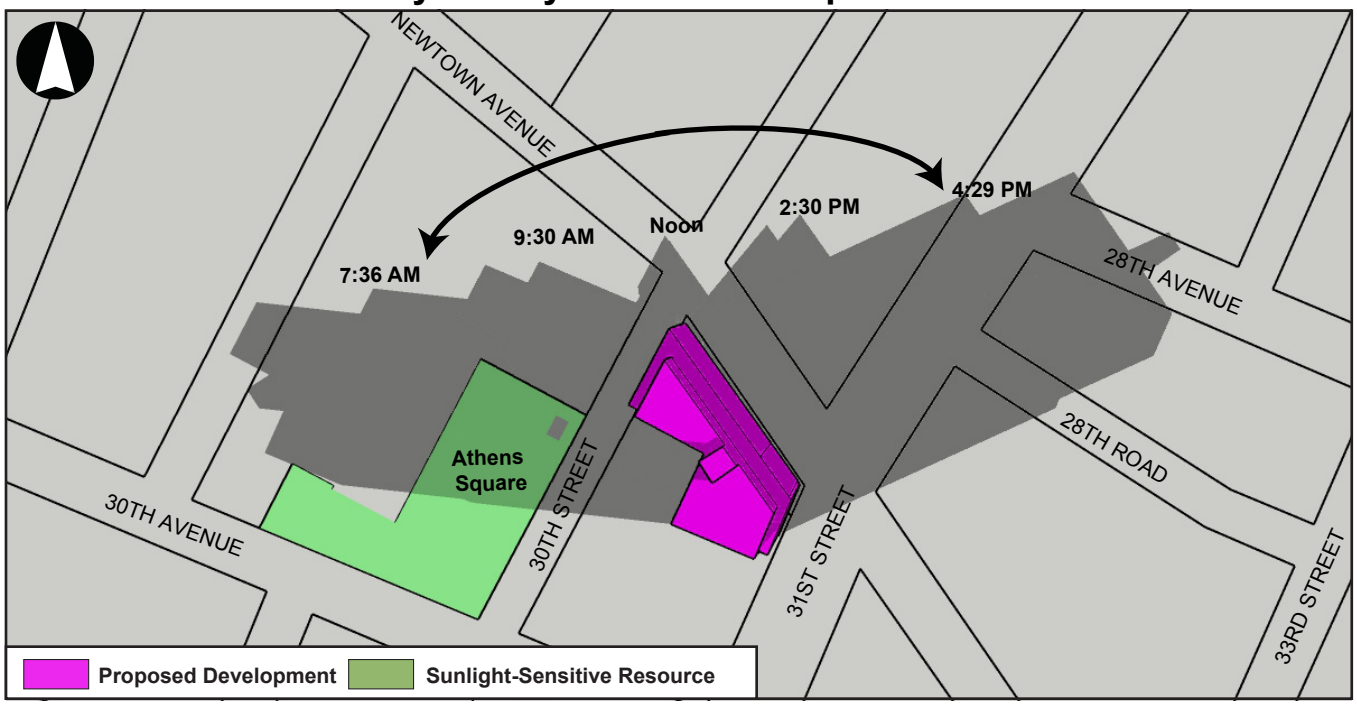
As shown in **Figure E-2**, the proposed actions and associated RWCDS have the potential to result in new project-generated shadows on Athens Square. Athens Square is a 0.93-acre open space located at the intersection of 30th Street and 30th Avenue. The publicly-accessible open space features active and passive recreational amenities and includes a basketball court, playground, seating areas, and vegetation (refer to **Figure E-3**).

Figure E-1

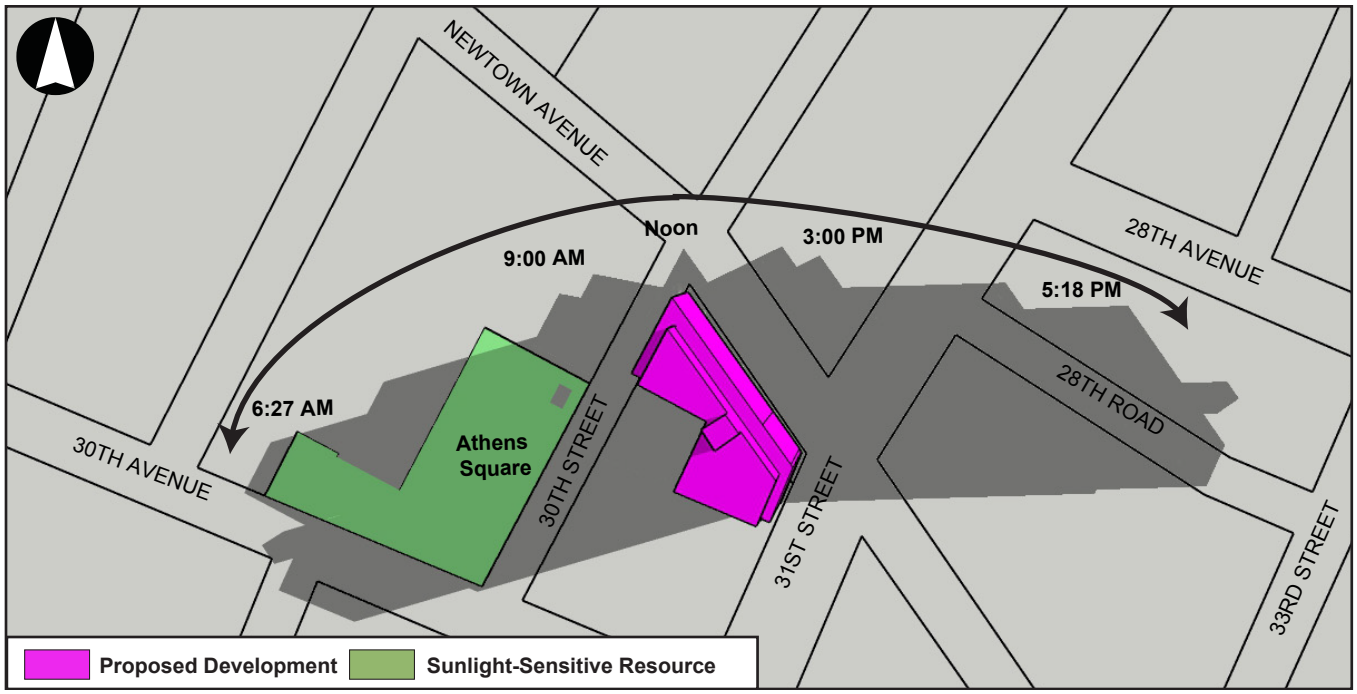
Shadows Tier I and Tier II Assessment



Analysis Day: March 21 / September 21

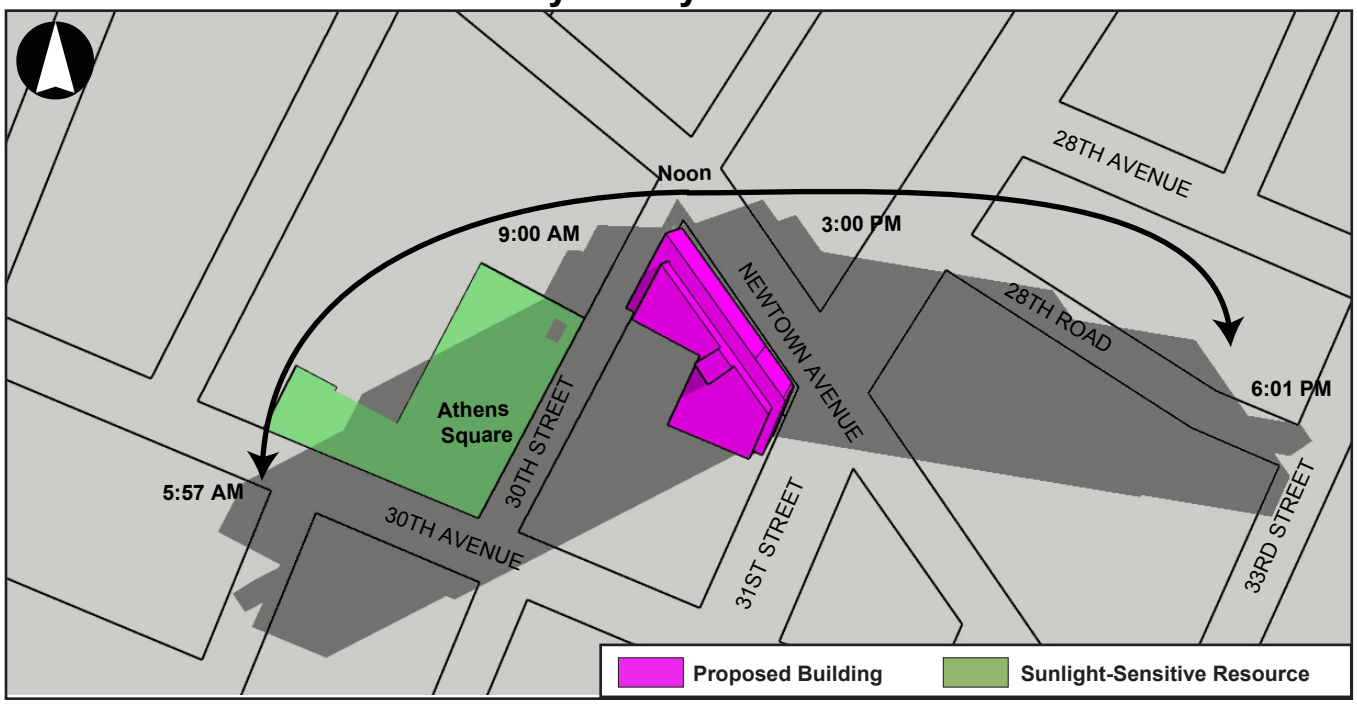


Analysis Day: May 6 / August 6



Shadows Assessment: Tier 3

Analysis Day: June 21



Analysis Day: December 21

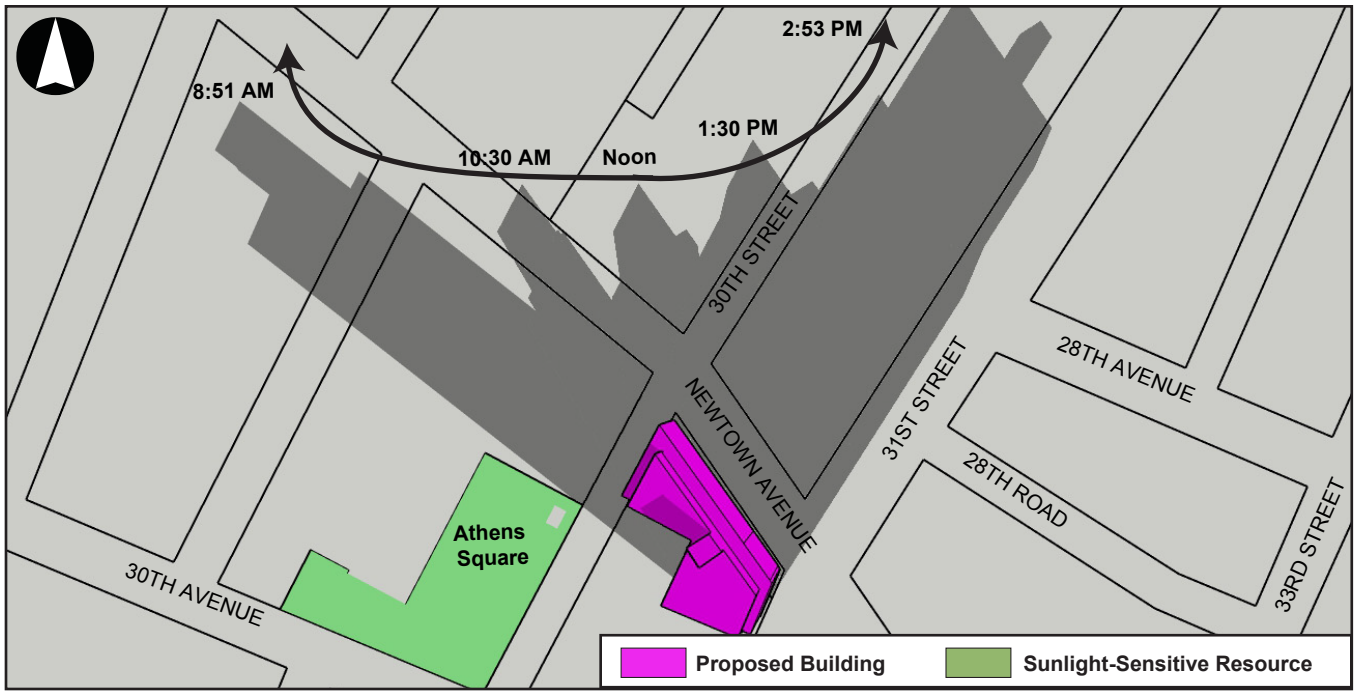


Figure E-3
Athens Square Aerial

Legend

Athens Square

Shadows Analysis

Per CEQR guidance, shadows analyses were performed for the one sunlight-sensitive resource identified above, Athens Square, on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of potential shadows over the course of the year. CEQR guidance define the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. Table E-1 below summarizes the entry and exit times and total duration of project-generated incremental shadows on Athens Square Park.

Table E-1: Duration of Incremental Shadows on Sunlight Sensitive Resources

	Analysis Day	**March 21/Sept. 21**	**May 6/August 6**	**June 21**	**December 21**
		7:36 AM – 4:29 PM	**6:27 AM – 5:18 PM**	**5:57 AM – 6:01 PM**	**8:51 AM – 2:53 PM**
Athens Square	Shadow Enter-Exit Time	7:36 AM – 9:58 AM	6:27 AM – 9:04 AM	5:57 AM – 9:07 AM	-
	Incremental Shadow Duration	*2 hours and 22 minutes*	*2 hours and 37 minutes*	*3 hours and 10 minutes*	-

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *2014 CEQR Technical Manual* guidance. Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

As shown in Table E-1, the RWCDS would cast incremental shadows on Athens Square on the March 21/September 21, May 6/August 6, and June 21 analysis days. It should be noted that, per the *2014 CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this attachment for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Savings Time.

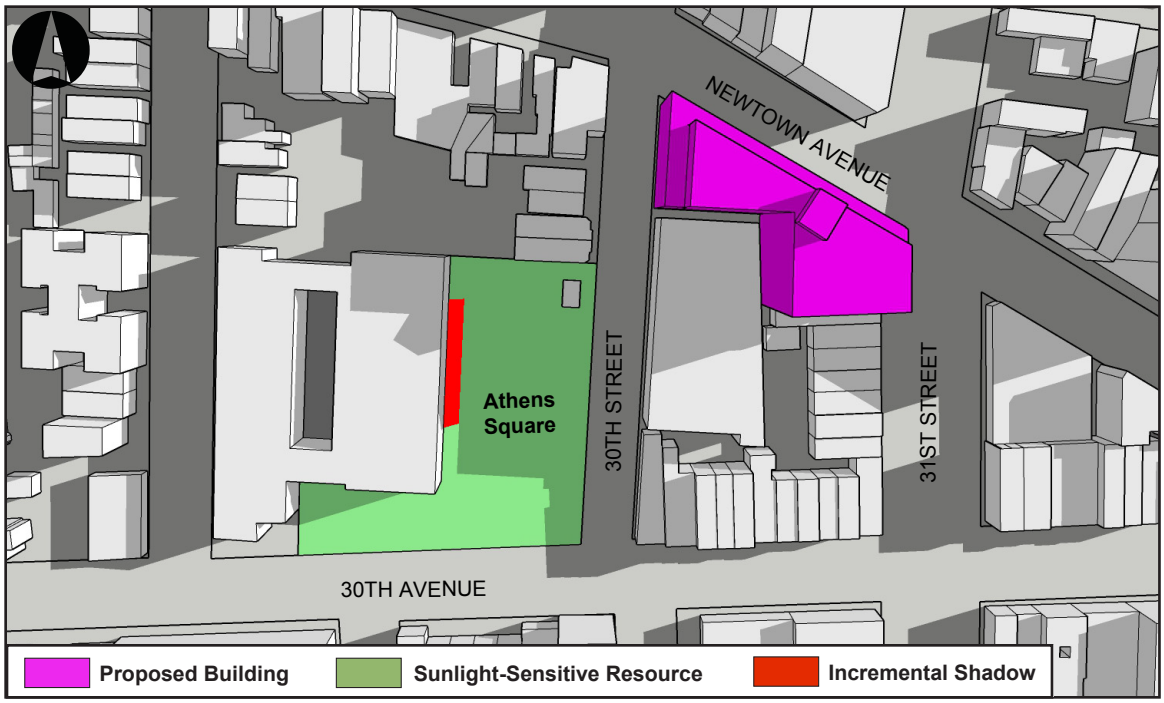
Figures E-4 through **E-6** show the extent of project-generated incremental shadows on Athens Square. As shadows are in constant motion, these figures illustrate the extent of incremental shadows at particular moments in time, highlighted in red.

March 21/September 21

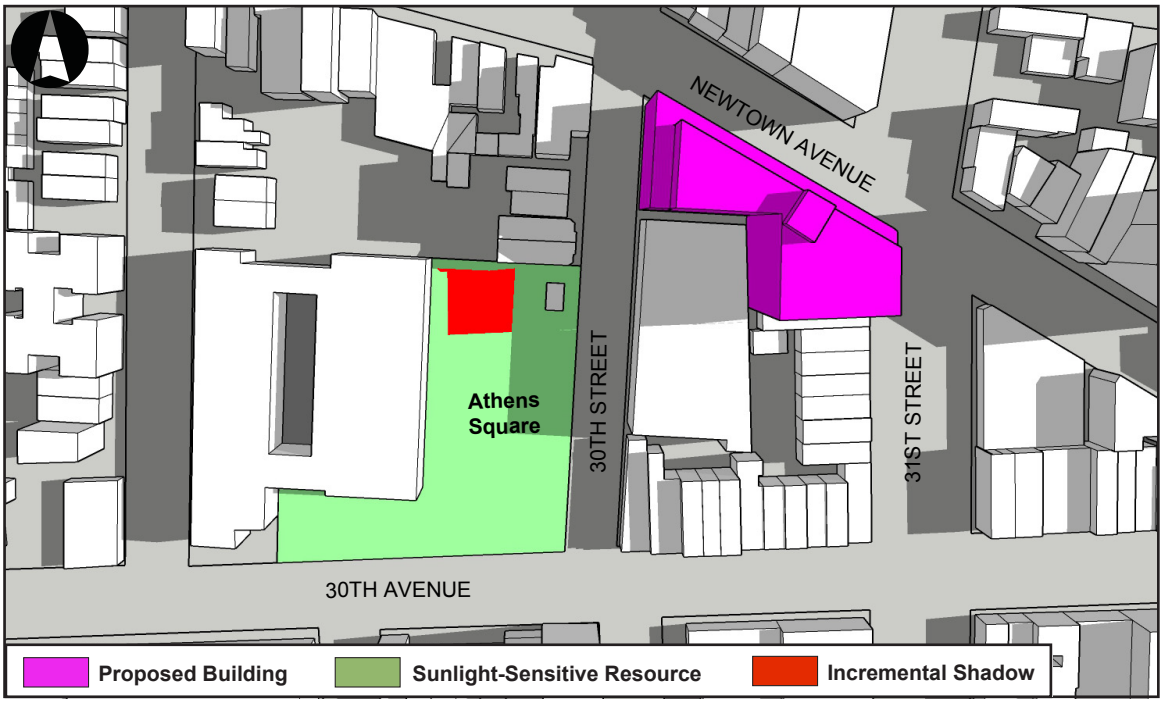
On March 21/September 21 the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City, and September 21, which has the same shadow patterns as March 21, is also within the growing season. On the March 21/September 21 analysis day, incremental shadows from the RWCDS would enter Athens Square at 7:36 AM and remain on the open space until 9:58 AM, for approximately 2 hours and 22 minutes (refer to Table E-1). As shown in Figures **E-4a** and **E-4b**, incremental shadows would be limited to the northeastern corner of the open space. These incremental shadows would be at their largest during the early morning hours and would gradually lessen in size over the course of the morning. As shown in **Figure E-4b**, by 9:45 AM, incremental shadows would be limited to a small portion of the northeastern corner of Athens Square. The portion of the park to be covered by incremental shadows on the March 21/September 21 analysis day includes trees, a seating area, and a portion of a basketball court. No single feature of the open space would be cast in incremental shadows for an extended period of time due to the speed, duration, and movement of theses shadows across the open space.

Incremental Shadows on March 21/September 21

7:45 AM



8:45 AM



Incremental Shadows on March 21/September 21

9:45 AM

May 6/August 6

On May 6/August 6, the midpoint between the equinoxes and the solstices, the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. May 6 and August 6 are both within the growing season in New York City. On the midpoint between the equinoxes and the solstices, the RWCDS would cast incremental shadows over the eastern portion of Athens Square Park on the May 6/August 6 analysis day. Incremental shadows from the RWCDS would remain over Athens Square between 6:27 AM and 9:04 AM (2 hours and 37 minutes). Incremental shadows on the May 6/August 6 analysis day would be cast over trees, a seating area, and a portion of a basketball court. As shown in **Figures E-5a** and **E-5b** these incremental shadows will move across the study area and not affect any one single portion of the park for an extended period of time. The incremental shadows cast by the RWCDS would be largest in size in the early morning hours and would gradually in size as the morning progresses. By 8:45 AM, incremental shadows created by the RWCDS would be limited to a small portion of the northeastern corner of the open space near the comfort station (refer to **Figures E-5a** and **E-5b**).

June 21

On June 21 the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On the summer solstice, which is the day of the year with the longest period of daylight, the sun is most directly overhead and generally shadows are shortest and move across the widest angular range from west to east. June 21 is within the growing season in New York City. On the June 21 analysis day, the RWCDS would cast incremental shadows on Athens Square from 5:57 AM to 9:07 AM, for a duration of 3 hours and 10 minutes. As shown in **Figure E-6a**, by 6:30 AM, incremental shadows would cover a large part of the western portion of Athens Square. By 7:30 AM these incremental shadows would be reduced significantly in size and be limited to the northeastern corner of Athens Square. At 7:30 AM, incremental shadows would be cast on the basketball court, playground, and seating areas. By 8:30 AM, incremental shadows would be located on the northeast tip of Athens Square. Incremental shadows would then exit the open space by 9:07 AM.

December 21

On the winter solstice, December 21, the day of the year with the shortest period of daylight, the sun is low in the sky and shadows are at their longest but move rapidly. December 21 is not within the growing season in New York City. As shown in the Tier III Analysis, project generated shadows would reach Athens Square on December 21. However, on this analysis day, no incremental shadows from the RWCDS would reach Athens Square.

Assessment

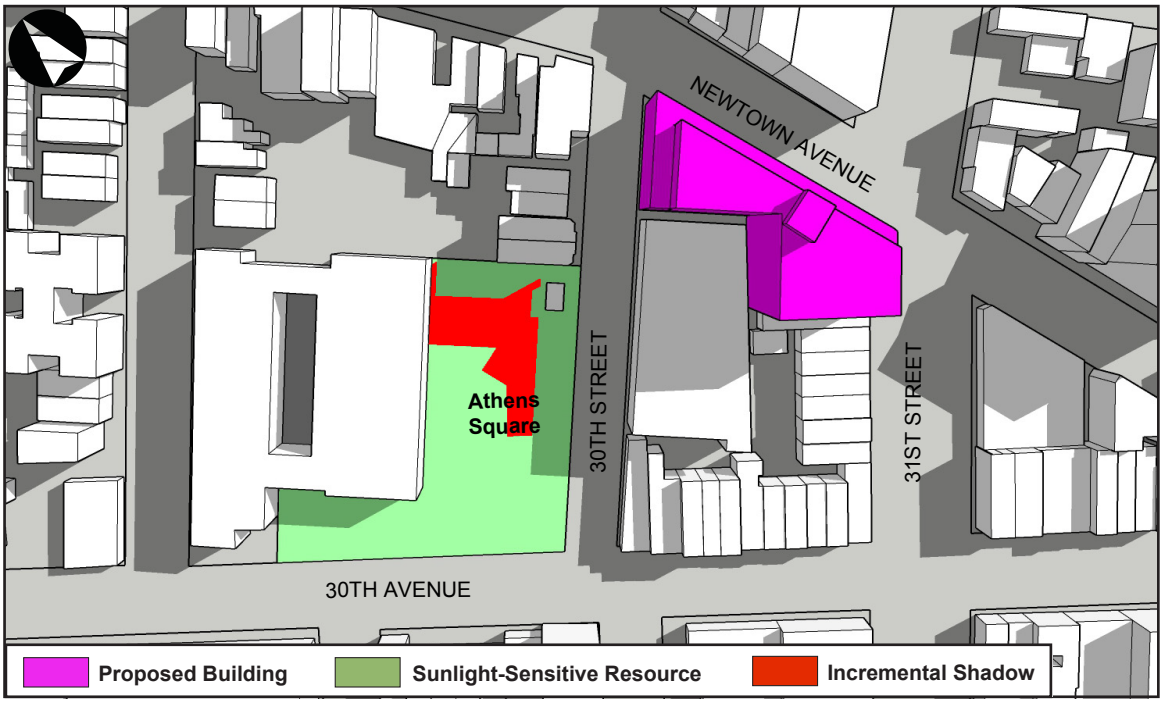
A shadows impact occurs when incremental shadows from a proposed building fall on a sunlight sensitive resource or feature and reduces direct sunlight exposure. Determining whether or not this impact is significant depends on the extent and duration of the incremental shadows and the specific context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

For open spaces, the uses and features of the space indicate its sensitivity to shadows. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. Therefore, this sensitivity is assessed for both (1) warm-weather-dependent features or vegetation that could be affected by a loss of sunlight during the growing season; and (2) features, such as benches, that could be affected by a loss of winter

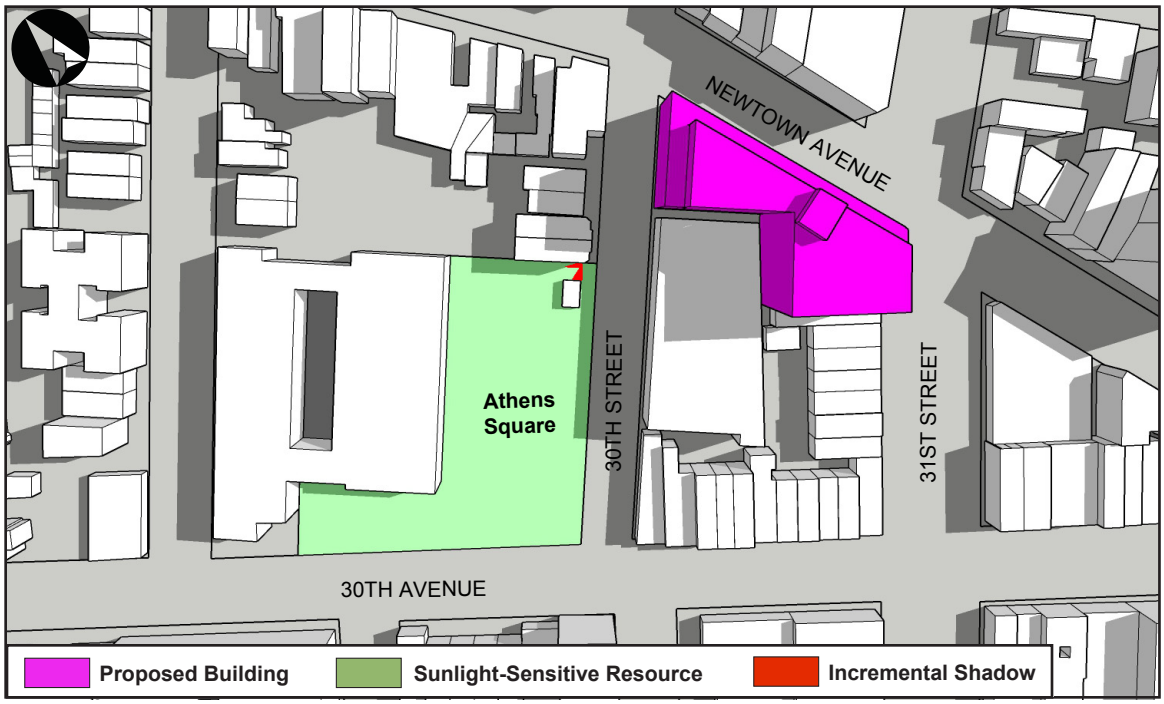
6:45 AM


NEWTOWN AVENUE
Athens Square
30TH STREET
31ST STREET
30TH AVENUE
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

7:45 AM

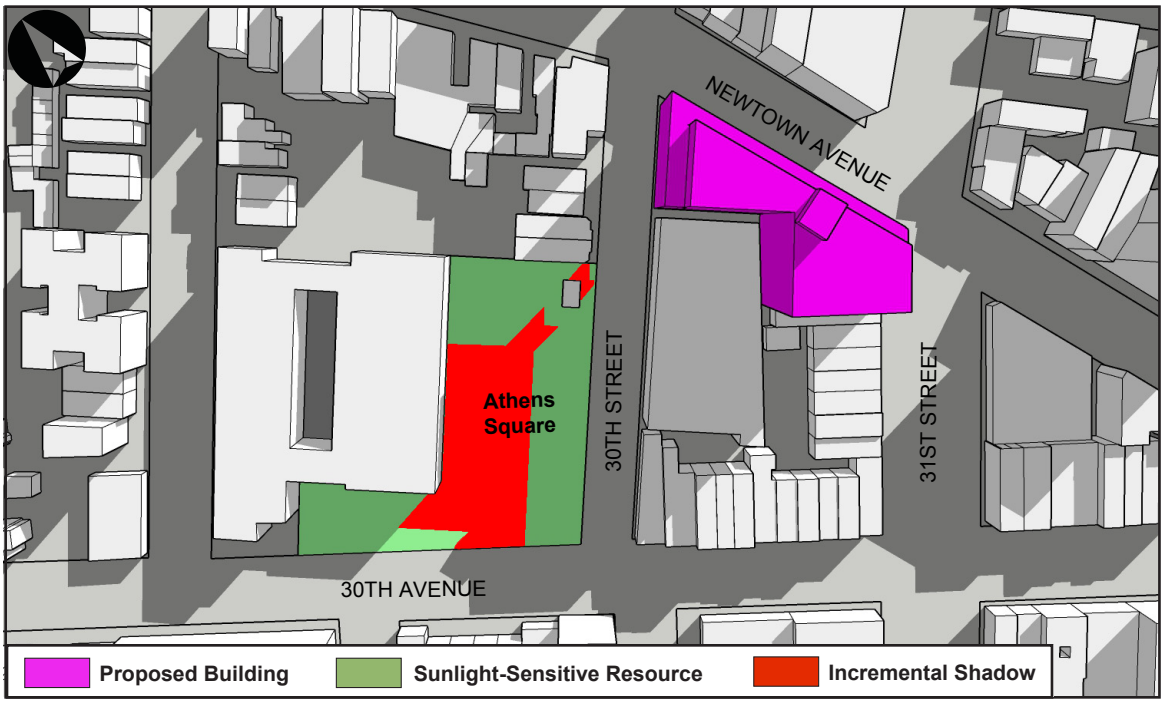

NEWTOWN AVENUE
Athens Square
30TH STREET
31ST STREET
30TH AVENUE
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

8:45 AM

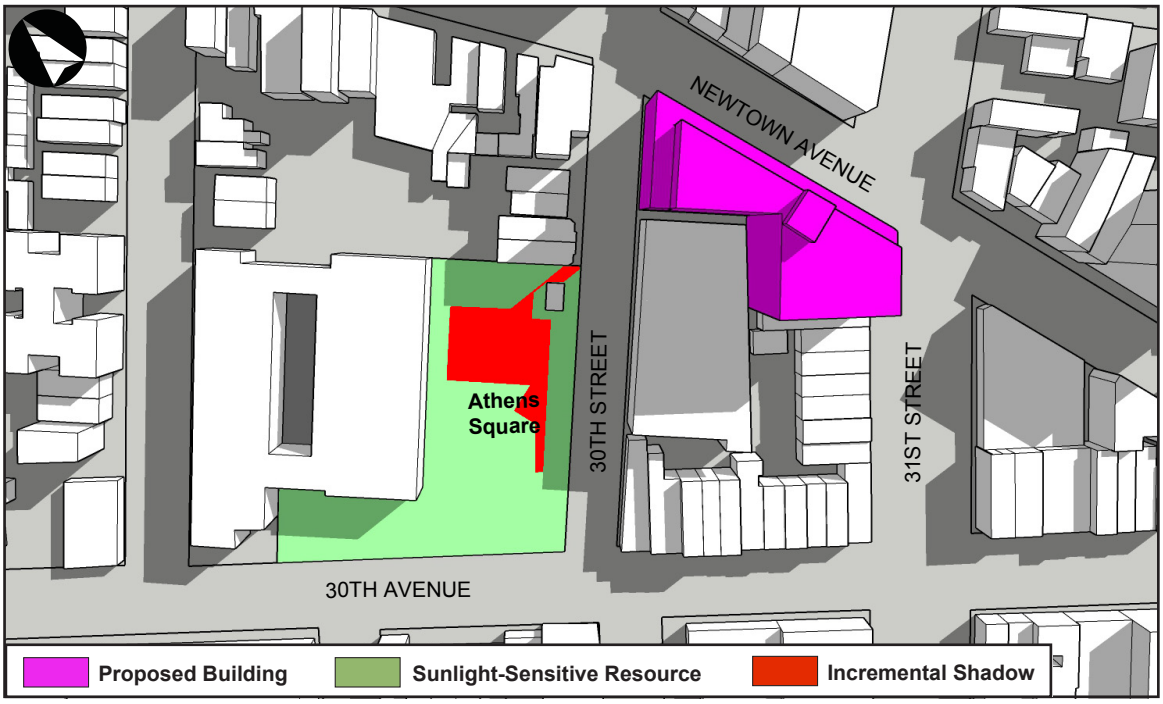

NEWTOWN AVENUE
Athens Square
30TH STREET
31ST STREET
30TH AVENUE
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

Incremental Shadows on June 21

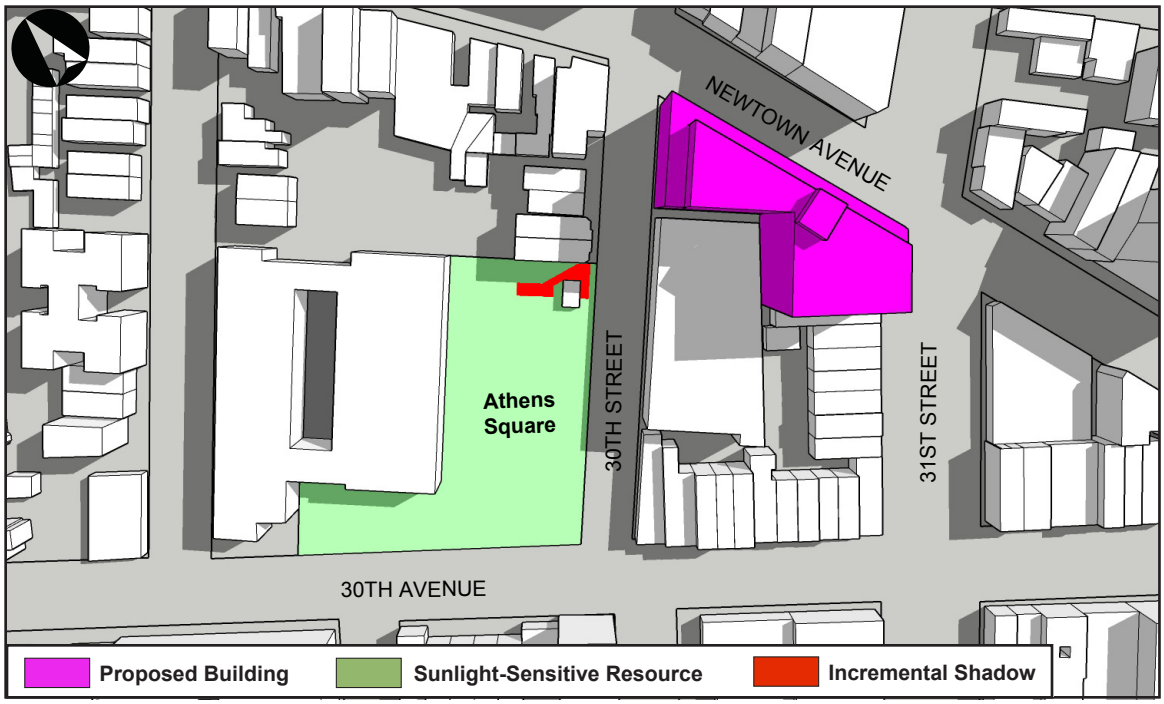
6:30 AM



7:30 AM



8:30 AM


NEWTOWN AVENUE
Athens Square
30TH STREET
31ST STREET
30TH AVENUE
Proposed Building
Sunlight-Sensitive Resource
Incremental Shadow

sunlight. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Consequently, the assessment of an open space's sensitivity to increased shadow focuses on identifying the existing conditions of its facilities, plantings, and uses, and the sunlight requirements for each.

Athens Square

The shadows analysis determined that the duration and coverage of incremental shadows on Athens Square would not be significant or adverse. As shown in **Figures E-4** through **E-6**, the incremental shadows would be limited in extent and duration, and move northward and eastward through Athens Square Park. Project-generated incremental shadows would occur during the early morning hours and would last for approximately two hours and 22 minutes on March 21/ September 21, two hours and 37 minutes on May 6/August 6, and 3 hours and 10 minutes on June 21. On each of the three affected analysis days, new incremental shadows would be limited to the eastern portion of the park which includes trees, open seating areas, and a basketball court. As shown in **Figures E-4** through **E-6**, incremental shadows would move through the open space over the course of the morning and would not affect any particular area of the park or vegetation for an extended period of time. Athens Square would not receive project-generated incremental shadows after 9:58 AM on any analysis day. Additionally, the park would continue to receive adequate sunlight during the morning, afternoon, and evening hours, and as such, the RWCDS building would not have significant adverse effects on any vegetation or affect the usability of Athens Square. Therefore, incremental shadows that would result from the RWCDS building are not anticipated to adversely affect the utilization or enjoyment of Athens Square or result in any significant adverse impact.

Attachment F

Urban Design & Visual Resources

I. INTRODUCTION

This attachment considers the potential effects of the proposed actions and subsequent development on urban design and visual resources. According to the 2014 *CEQR Technical Manual*, urban design is defined as the totality of components that may affect a pedestrian's experience of public space. These components include streets, buildings, visual resources, open spaces, natural resources, and wind. An urban design assessment considers whether and how a project may change the experience of a pedestrian in a given area. *CEQR Technical Manual* guidance recommends the preparation of a preliminary assessment of urban design and visual resources, followed by a detailed analysis, as warranted, based on the conclusions of the preliminary assessment. The Proposed Actions would facilitate the development of a new mixed-use residential, commercial and community facility building along Newtown Avenue between 30th and 31st Street in the Astoria neighborhood of Queens Community District 1.

In accordance with *CEQR Technical Manual* guidance, the analysis provided below addresses urban design characteristics and visual resources for existing conditions, the future without the proposed actions (the No-Action condition), and the future with the proposed actions (the With-Action condition). As described in Attachment A, "Project Description," the proposed actions, as a reasonable worst-case development scenario (RWCDS), would facilitate the construction of a 14-story mixed-use building at a single development site (Block 595, Lots 19, 26, and 27) that would accommodate up to approximately 102 residential dwelling units (DUs), approximately 8,400 gsf of local retail space on the ground floor, and a 99-seat black box theater for the Astoria Performing Arts Center on portions of the ground and cellar levels, as well as 30 below-grade accessory parking spaces. The development is expected to be completed in 2024. In absence of the proposed actions, it is anticipated that the development site would continue to be occupied by the existing 27,206 sf tire wholesale establishment and commercial offices. The effect of the proposed actions represents the incremental effect on conditions resulting from the net change in development at the development site between No-Action and With-Action Conditions.

II. PRINCIPAL CONCLUSIONS

As described below, the proposed actions would not result in significant adverse impacts to urban design or visual resources within the Proposed Rezoning Area, or in the 400-foot study area. The proposed actions would facilitate new development at the applicant-owned projected development site, including residential, commercial, and community facility uses adjacent to existing residential development and along major shopping thoroughfares in Astoria, Queens. The RWCDS would replace a two-story commercial building with a new 14-story mixed-use building with local retail and community facility uses occupying portions of the ground floor and cellar levels that is expected to bring a 24-hour presence to the development site. Consistent with the proposed C4-4D contextual zoning district, the With-Action development would be constructed at the street line along all three of the site's street frontages creating a strong streetwall consistent with surrounding development. The proposed local retail and community facility uses would have entrances along 31st Street and on the corner of 30th Street and Newtown Avenue respectively, and would further activate the streetscapes by increasing pedestrian traffic.

Development to be facilitated by approval of the proposed actions would be constructed within existing blocks, and would not entail any changes to topography, street patterns, street hierarchy, block shapes, or

natural features. The RWCDS would be built in accordance with bulk requirements allowed by the proposed C4-4D zoning district. Though the With-Action building would be taller than any immediately surrounding development, the With-Action building would be consistent with surrounding neighborhood context in terms of use and lot placement, forming consistent streetwalls with buildings lining Newtown Avenue, 31st and 30th Streets. Additionally, the RWCDS is expected complement the context of existing buildings in the surrounding area, which includes a variety of building typologies.

Development resulting from the proposed actions would not negatively alter views in the study area from adjacent publicly-accessible locations and would not obstruct any view corridors of significant visual resources. As such, the proposed actions would not result in significant adverse impacts to urban design and visual resources and further analysis is not warranted.

III. METHODOLOGY

Pursuant to the *CEQR Technical Manual*, an assessment of urban design is appropriate when a proposed action(s) may have effects on one or more of the elements that contribute to the pedestrian experience of public space. The assessment focuses on the components of a proposed action(s) that may have the potential to alter the arrangement, appearance, and functionality of the built environment.

As described in the *CEQR Technical Manual*, a preliminary urban design analysis is appropriate when there is potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning. A preliminary analysis provides a "snapshot" of the project, comparing existing and future conditions with and without the Proposed Actions. The following analysis examines each of the elements that play an important role in the pedestrian experience, including street hierarchy and streetscape (including the arrangement and orientation of streets); building scale, form and arrangement; and natural features, open space, and topography.

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

Per criteria of Section 230 of the *CEQR Technical Manual*, a wind condition analysis is not warranted for the proposed actions. The proposed rezoning area and development site are not located in a high wind location (such as along west and northwest-facing waterfronts), and the RWCDS would not result in the construction of multiple tall buildings that would have the potential to alter wind conditions.

Study Area

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

Consistent with the analysis of land use, zoning, and public policy, the study area for urban design analysis has been identified as the area within a 400-foot radius of the Proposed Rezoning Area. As shown in **Figure F-**1, the study area boundary encompasses and extends as far north as the midblock of 29th and 30th Streets between Newtown Avenue and Astoria Boulevard, as far east as the midblock between 31st and 33rd Streets,

Figure F-1
Urban Design Study Area

Legend

Projected Development Site

Proposed Rezoning Area

400-foot Radius (Secondary Study Area)

as far south as the area approximately 100 feet south of 30th Avenue, and the area as far west as 28th Street.

As stated in the *CEQR Technical Manual*, for visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. While the land use study area may serve as the initial basis for analysis, in many cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of the area, as is often the case with waterfront sites or sites within or near historic districts. The primary view sheds of these visual resources that would be affected by construction of the Projected Development Site were the focus of the visual resources analysis.

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

IV. PRELIMINARY ASSESSMENT

Existing Conditions

Urban Design

Proposed Rezoning Area

The applicant' development site, the Projected Development Site (Block 595; Lots 19, 26, and 27) comprises one through lot and two corner lots with frontage on three streets. The Projected Development Site has approximately 92' of frontage on 30th Street, 219' of frontage on Newtown Avenue, and 61' of frontage on 31st Street. The Projected Development Site has an area of approximately 15,556 sf and a total built floor area of 23,657 zsf (1.52 FAR) which is considered underbuilt relative to the sites existing C4-4A zoning, which permits a maximum FAR for residential, commercial, and community facility uses of 4.0. The site is occupied by three two-story commercial/automotive buildings that are built to the street line along all three street frontages. The site is currently occupied by Max Finkelstein Inc., an automotive repair shop and tire wholesale shop (refers to **Figure F-2** and **F-3**).

As described in **Attachment A, "Project Description,"** a small portion of Lot 10, comprising approximately 269 sf, is also within the Proposed Rezoning Area, but is not under the control of the applicant. Lot 10 is currently occupied by a three-story, 55,836 gsf (2.54 FAR), 60-foot tall building utilized by Verizon as a telephone exchange building.

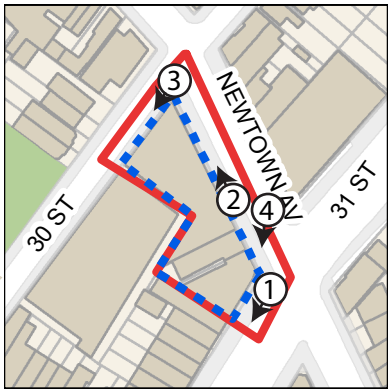
Street Pattern and Streetscape

As described above, the Proposed Rezoning Area has frontage along 30th Street, Newtown Avenue, and 31st Street. 30th Street is a 50-foot narrow, one-way street that carries local southbound traffic through the area west of the Proposed Rezoning Area. The street includes sidewalks and parallel parking lanes on both sides of the street. To the north of the Proposed Rezoning Area, Newtown Avenue is a 70-foot narrow, two-way street[1] that carries traffic east and westbound through the area. The street includes on travel lane in the east and westbound direction and sidewalks and parking on both sides of the street. As shown in **Figure F-2**, parking on Newtown Avenue towards 31st Street is not permitted due to the curb cuts leading

[1] East of 31st Street Newtown Avenue is a westbound one-way street.

1) Looking southeast towards 31st Street from Newtown Avenue.

2) Looking west from the intersection of Newtown Avenue and 31st Street.

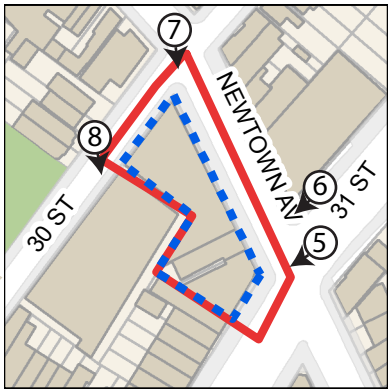


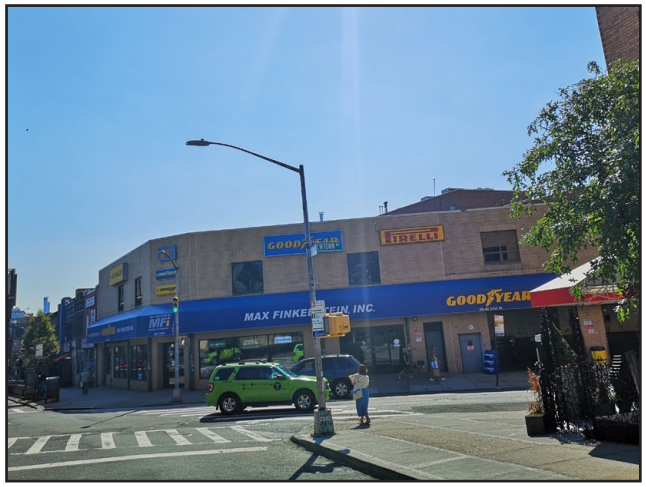
3) Looking south from the intersection of Newtown Avenue and 30th Street.

4) Looking south from the intersection of Newtown Avenue and 31st Street.

*Photos taken 06/28/2019

5) Looking southwest towards the Proposed Rezoning Area from the intersection of Newtown Avenue and 31st Street.





6) Looking south from the intersection of Newtown Avenue and 31st Street.

7) Looking southeast from the intersection of Newtown Avenue and 30th Street.

8) Looking southeast from 30th Street towards Lot 10.

*Photos taken 06/28/2019 & 7/15/2019

into the existing automotive repair service on-site. To the east of the Proposed Rezoning Area is 31st Street, a 100-foot wide, two-way street that carries north and southbound traffic. The street includes a travel lane in each direction and parallel parking lanes on both sides of the street. As shown in **Figure F-2**, above 31st Street is the elevated BMT Astoria Line which carries the N and W trains.

As shown in **Figure F-2**, sidewalks adjacent to the Proposed Rezoning Area vary in width. The sidewalks along 31st Street and Newtown Avenue measure approximately 16 feet while the sidewalk on 30th Street is approximately 12.5 feet. Along 30th Street, streetscape elements are limited to standard street signs and utility poles. The streetscape on Newtown Avenue is similar in that streetscape elements are limited to standard street signs, utility poles, and street lamps.

The frontage along Newtown Avenue features a large curb cut leading into smaller automotive repair bays and a loading bay. Finally, the streetscape on 31st Street is more active relative to the two previously discussed streets. The streetscape includes street trees, mailboxes, and standard street lamps etc.

Buildings

As shown in **Figure F-3**, the Projected Development Site is occupied by three low-rise, high lot coverage, commercial buildings. The buildings are built to the lot line and are two-stories tall, reaching its maximum height of between 26 and 32 feet without any setback from the street. Combined, these three buildings measure 27,206 gsf and feature a brick façade along with awnings and small signage depicting the names of the available tire brands at the on-site automotive repair facility. Along Newtown Avenue the buildings frontages feature garage doors into and out of the repair bays with small windows on the second floor. On 30th Street the building also includes a garage door and curb cut to the street with small windows on the second floor. The frontage of 31st Street includes windows into the lobby/office area for the existing building. The public entrance to the existing buildings on the Projected Development Site is located at the corner of 31st Street and Newtown Avenue.

On the portion of Lot 10 within the Proposed Rezoning Area the existing building is a three-story brick building with windows on the first and second floors. The building is built to the lot line and reaches its maximum height of 59-feet without any setback from the streetwall.

Natural Features and Open Space

There are no notable natural features within the Proposed Rezoning Area and the topography of the area is generally flat measuring between approximately 47’ and 50’ (NAVD88). There are no publicly accessible open space resources within the Proposed Rezoning Area. The existing buildings in the Proposed Rezoning Area cover the entire Proposed Rezoning Area.

Study Area

Street Pattern and Streetscape

The street plan in the study area is characterized by an interrupted grid pattern. As shown in **Figure F-1**, the orientation of Newtown Avenue, along with location of 28th Avenue and 28th Road in the northeastern portion of the study area, creates irregularly sized blocks throughout the urban design study area. The study area includes five thoroughfares that were not previously discussed above.

29th Street is the street furthest west in the study area and is a 60-foot narrow, one-way street that carries local northbound traffic. The street includes parallel parking lanes on both sides of the street. 30th Avenue is the southernmost thoroughfare in the study area and is an 80-foot wide, two-way street that carries traffic east-west through the area. 30th Avenue is a commercial corridor which includes parallel parking lanes on both sides of the street. As shown in **Figure F-1**, a small portion of 32nd Street is within the study area and connects Newtown Avenue to 30th Avenue. Within the study area, 32nd Street is a one-way northbound street with parallel parking lanes on both sides of the street. 28th Road is a 50-foot narrow, eastbound one-way street that connects 31st Street and 33rd Street and includes parallel parking lanes on both sides of the street. Finally, 28th Avenue is located in the northeast corner of the study area. 28th Avenue is an 80-foot wide, two-way street carrying traffic east and westbound through the area. The avenue includes parallel parking lane on either side.

As shown in **Figure F-4**, streetscape elements in the study area include street trees along residential side streets, utility poles, mail boxes, street lights, etc. Curb cuts in the study area are generally limited to small residential side streets and residential buildings along 28th Avenue.

Buildings

As shown in **Figure F-5**, the study area includes a variety of buildings types and is densely developed with few vacant properties. The most densely built building with the study area has an FAR of 6.19 FAR at 29-47 Newtown Avenue (refer to **Figure F-6**). As discussed in **Attachment C, "Land Use, Zoning, & Public Policy,"** land uses in the study area are primarily residential, which constitute nearly 40% of all built floor area in the study area. Residential uses are typically found on smaller side streets and in the area north of Newtown Avenue. Residential buildings in the area vary between small apartment buildings and attached and semi-detached residences. These buildings are typically set back from the property line to include either small areas for parking or a front lawn. Along Newtown Avenue, 31st Street, 30th Avenue are largely commercial uses and mixed-use residential and commercial buildings. These buildings are typically built to the property line along these corridors. As shown in **Figure F-7**, the tallest buildings in the area are generally clustered around these commercial corridors. The tallest building in the study area is located at 31-02 Newtown Avenue and is 10 stories tall.

Natural Features and Open Space

There are no notable natural features within the study area. The topography of the study area is generally flat. The elevation of the study area ranges between 45 and 53 feet (NAVD88) and decreases moving west. The study area includes one publically open space. Just southwest of the Proposed Rezoning Area is Athens Square, a 0.93-acre park, which has frontage along 30th Street and includes a basketball court, playground, and seating area is visible from the western edge of the Proposed Rezoning Area.

Visual Resources

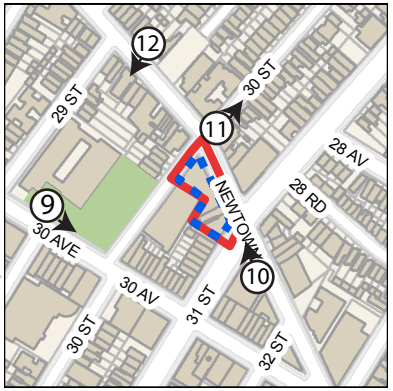
Rezoning Area

No visual resources or historic resources that are located within the Proposed Rezoning Area.

Study Area

There are no visual resources or historic resources located within the study area.

9) Looking east on 30th Avenue towards 30th Street.



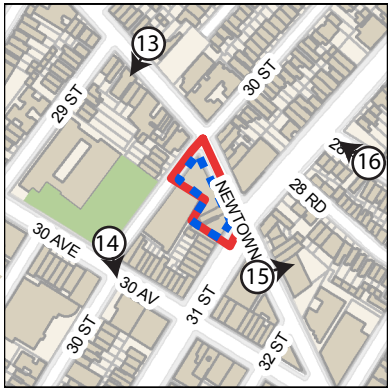
10) Looking west on Newtown Avenue towards 31st Street.

11) Looking north on 30th Street from Newtown Avenue.

12) Looking south on Newtown Avenue east of 29th Street.

*Photos taken 06/28/2019

13) Looking south from Newtown Avenue west of 29th Street.



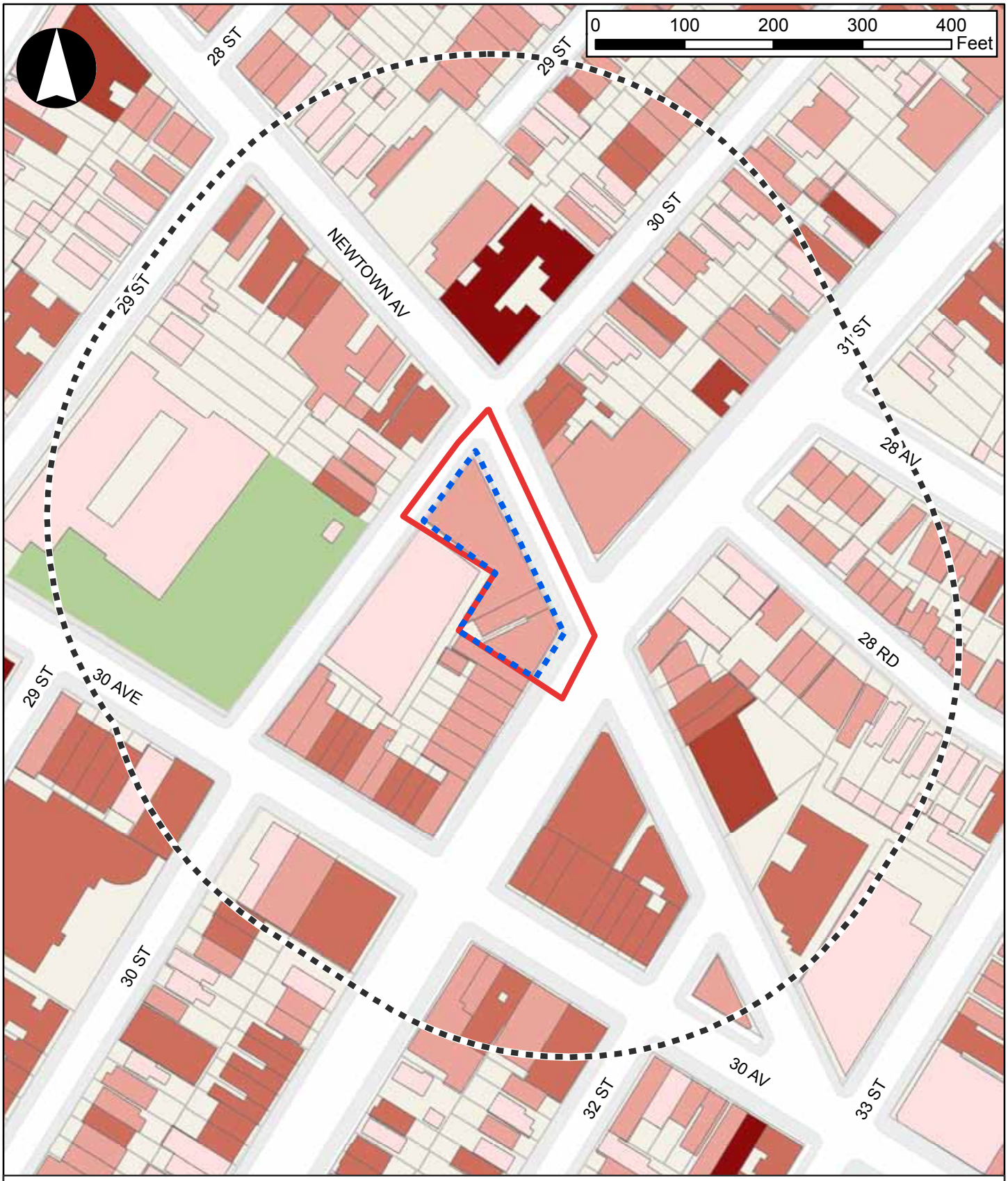
14) Looking from the intersection of 30th Street and 30th Avenue.

15) Looking north from Newtown Avenue towards 31-02 Newtown Avenue.

16) Looking west from 28th Avenue towards 31st Street.

*Photos taken 06/28/2019

Figure F-6
Built FAR



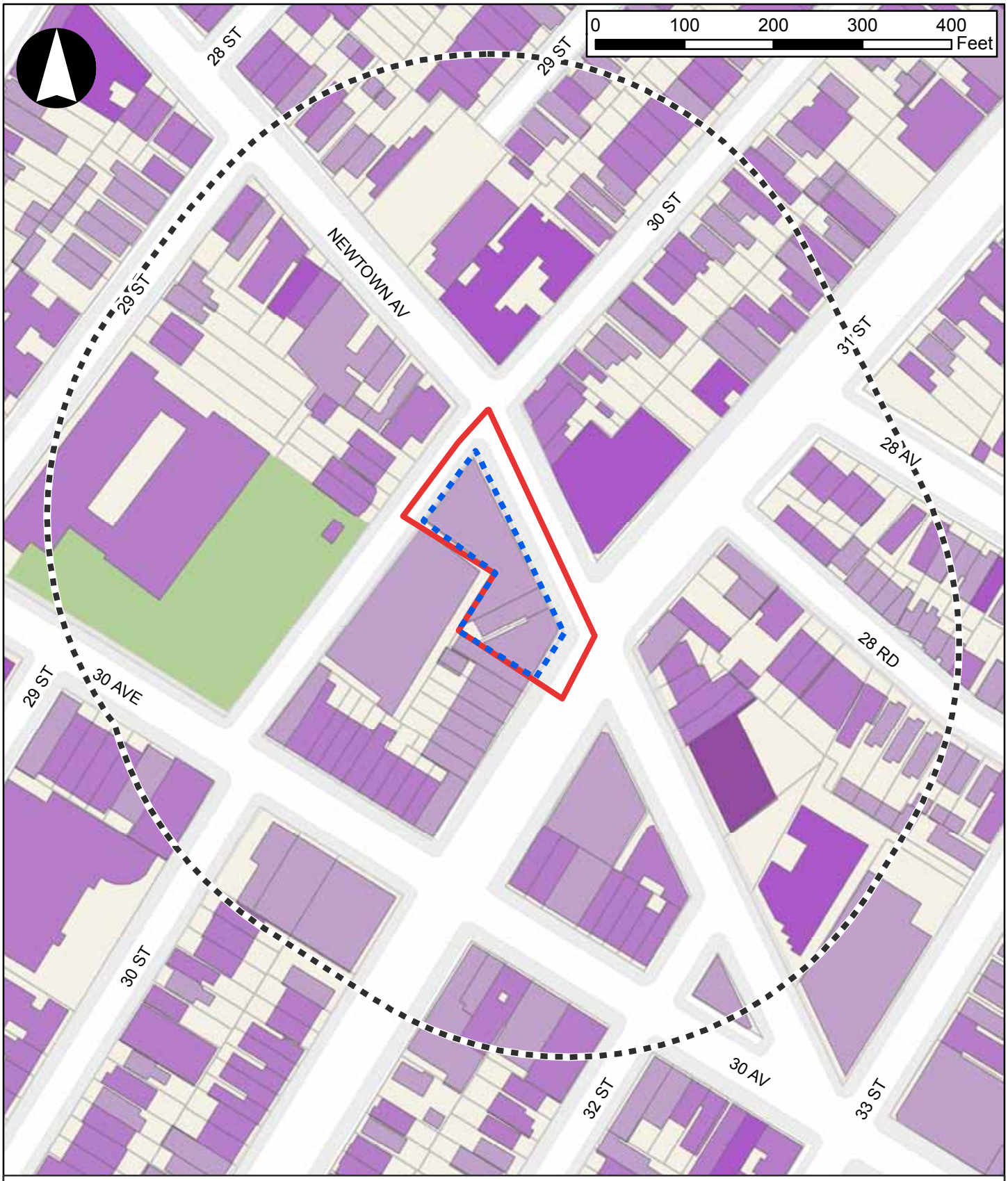
Legend

- Projected Development Site
- Proposed Rezoning Area
- 400-foot Radius (Secondary Study Area)

Built FAR

- 0.0 - 1.0 FAR
- 1.01 - 2.0 FAR
- 2.01 - 4.0 FAR
- 4.01 - 6.0 FAR
- Greater than 6.0 FAR

Figure F-7
Building Height



Future Without the Proposed Actions (No-Action)

Urban Design

Rezoning Area

It is anticipated that in the future without the proposed actions, there would be no changes to the Proposed Rezoning Area and all existing buildings would remain. The projected development site would remain underutilized. Therefore, in the future without the proposed actions, the existing buildings' footprints, heights, and total floor areas within the Proposed Rezoning Area would remain unchanged, compared to existing conditions.

Study Area

Street Pattern and Streetscape

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

Buildings

As discussed in **Attachment C, "Land Use, Zoning, and Public Policy,"** there are three No-Action developments within the study area that are expected to be completed by 2024. These three developments would add approximately 82 new DUs to the study area by the 2024 build year. At 31-25 Newtown Avenue, a seven-story mixed-use residential and commercial building would add approximately 1,000 gsf of commercial area and 20 DUs. At 31-10 28th Road, a new six-story residential building is expected to add 18 DUs. Finally, at 29-19 Newtown Avenue, an eight-story residential building is expected to add 44 DUs.

Natural Features and Open Space

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

Visual Resources

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

Future With the Proposed Actions (With-Action)

This section describes the effects of the proposed actions and resultant RWCDS on the urban design and visual resource conditions in the proposed rezoning area and study area by 2024 and evaluates the potential for the proposed actions to result in significant adverse impacts.

In the future with the proposed actions, the proposed zoning map and zoning text amendments would be implemented in the proposed rezoning area. As such, the proposed rezoning area would be mapped with C4-4D zoning district. The proposed C4-4D zoning district would be designated as an MIH Area. Under

With-Action conditions, the maximum allowable residential FAR in the proposed rezoning area would increase from 4.0 to 7.2 with MIH and the community facility use FAR would increase from 4.0 to 6.5. The maximum commercial FAR would decrease from 4.0 to 3.4.

Urban Design

Proposed Rezoning Area

The proposed actions would change the development potential of sites within the Proposed Rezoning Area, and the proposed rezoning of the existing C4-4A district to C4-4D would allow for residential and community facility uses to be developed at a greater density and bulk than what be allowed under existing zoning. The rezoning to C4-4D would result in a decrease in the maximum allowable commercial FAR on site (from 4.0 to 3.4). The Proposed Rezoning Area is located along one wide street (31st Street) and is near the elevated subway line along 31st Street in a transit accessible area.

Street Pattern and Streetscape

Sidewalk conditions within the Proposed Rezoning Area are expected to improve as a result of development facilitated by the proposed actions. The RWCDS would introduce new street trees along Newtown Avenue and 30th Street. The RWCDS would eliminate the existing curb cuts on Newtown Avenue in front of the Projected Development Site. The construction of the RWCDS would create additional on-street parking in front of the Projected Development Site on Newtown Avenue through the elimination of existing curb cuts on Newtown Avenue. The RWCDS would create a new curb cut on 30th Street to access the below-grade garage.

Buildings

Approval of the proposed actions would result in the development of a 14-story mixed-use residential, commercial, and community facility building. The existing buildings on Lots 19, 26, and 27 would be demolished to construct the 14-story mixed-use building. The maximum With-Action development would rise 105 feet, the maximum base height permitted in the proposed C4-4D district, without any setback from the streetwall. After setting back 15 feet from 30th Street and Newtown Avenue and 10 feet from 31st Street, the RWCDS would rise to its maximum height of 145 feet (14-stories) (refer to **Figures F**-8 and **F-9**).

Natural Resources and Open Space

No notable changes to the natural features or topography of the Proposed Rezoning Area would occur in the future with the proposed actions. As described above, there are no natural resources or open space in the Proposed Rezoning Area.

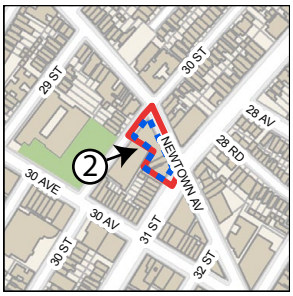
Study Area

As the proposed actions are site-specific, they would not result in any changes in the urban design in the study area. New development facilitated by the proposed actions would be limited to the applicant-owned development site.

Figure F-8

View facing north from Athens Square on 30th Street

No-Action

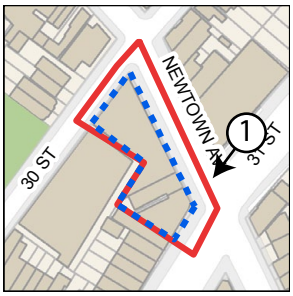


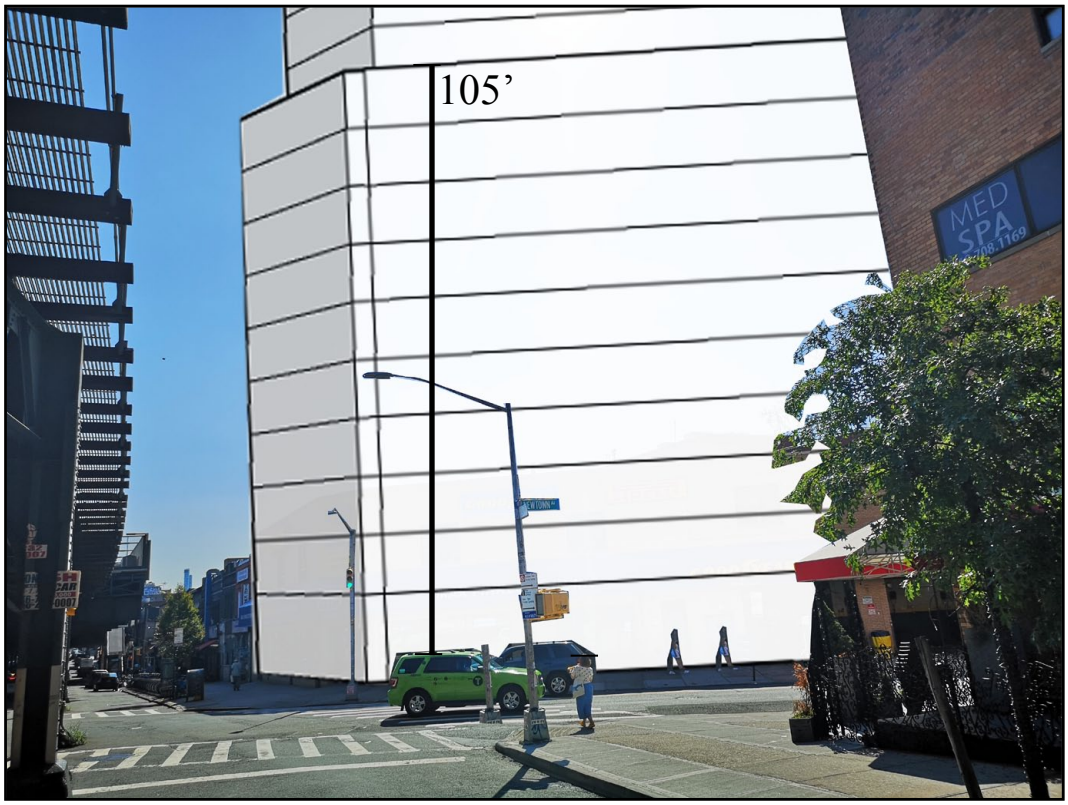
With-Action

FOR ILLUSTRATIVE PURPOSES ONLY

View facing south 31st Street and Newtown Avenue

No-Action





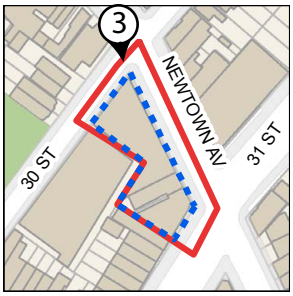
With-Action

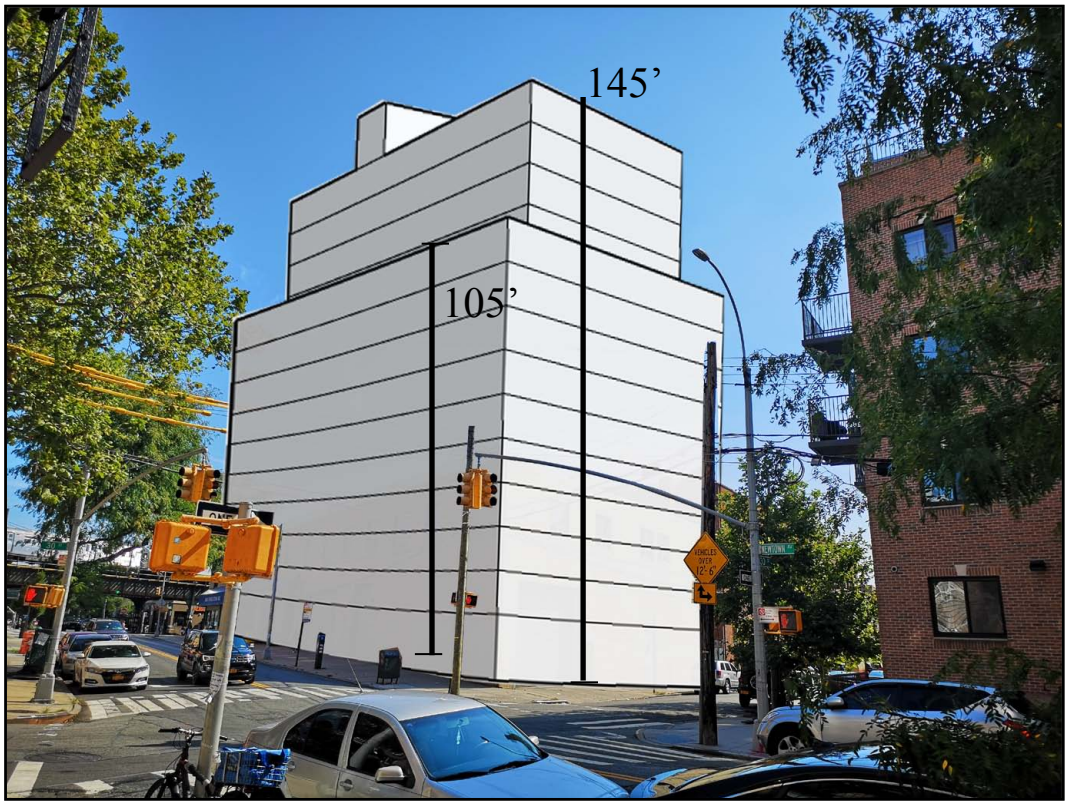
FOR ILLUSTRATIVE PURPOSES ONLY

Figure F-10

View east from 30th Street and Newtown Avenue

No-Action





With-Action

FOR ILLUSTRATIVE PURPOSES ONLY

Street Pattern and Streetscape

The proposed actions would not result in changes to street patterns in the study area. New development constructed as a result of the proposed actions would be constructed on an existing block. The existing interrupted grid pattern and street directions would remain the same. The proposed streetscape improvements on sidewalks and streets immediately adjacent to the Proposed Rezoning Area would be consistent with the streetscapes throughout the study area.

Buildings

The proposed C4-4D zoning district is a contextual district governed by Quality Housing bulk regulations, which encourages high lot coverage buildings set at or near the street line with building height limits. The ground-floor level of the RWCDS would be built at the street line on all frontages, thereby maintaining a consistent streetwall from the perspective of a pedestrian, which would be compatible with other buildings along Newtown Avenue and 31st Street. The proposed rezoning and subsequent increase in allowable FAR would be appropriate for a transit accessible area with frontage along a wide street. The RWCDS would be consistent with study area building's land use, including active ground floor uses, building placement and orientation along the property line.

Natural Features and Open Space

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

Visual Resources

As described above, there are no visual resources within, or visible from, the Proposed Rezoning Area or within the study area. The upper floors of the RWCDS would likely be visible from portions of Athens Square. As such, the proposed actions would not result in significant adverse impacts on visual resources.

Assessment

Proposed Rezoning Area

The proposed actions would facilitate the development of new residential, commercial space, and community facility space, adding to the existing corridor of commercial uses and new residential development in the study area. As described above, the proposed local retail and community facility space is expected a portion of the ground floor and cellar level which would increase foot traffic and pedestrian activity near the Proposed Rezoning Area relative to the Proposed Rezoning Area's No-Action auto-related uses. The -RWCDS would be built to the lot line of 30th Street, Newtown Avenue, and 31st Street. The RWCDS would reach a maximum base height of 105 feet before setting back 10 feet from the streetwall on 31st Street, and 15 feet on Newtown Avenue and 30th Street. After the setback, the RWCDS would rise to a maximum height of 145 feet.

Overall, the proposed actions would not result in any negative effects on the urban design characteristics of the rezoning area and therefore would result in no significant adverse urban design and visual resources impacts within the Proposed Rezoning Area.

Study Area

Overall, the proposed actions would facilitate the redevelopment of the Projected Development Site with new, more active land uses that would be consistent with uses in the surrounding area. The surrounding area supports a variety of building types, scales, and heights. The RWCDS is expected to complement the existing range of building heights and would be consistent with the other tall buildings clustered along commercial corridors and the elevated subway line running along 31st Street. In addition, the Proposed Development would not block any significant visual resources from pedestrian vantage points, though upper floors of the RWCDS would be visible from portions of Athens Square. As such, these changes are not anticipated to be significantly adverse as no view of important visual resources would be obstructed. Therefore, the proposed actions would not have any significant adverse impacts on visual resources.

Attachment G

Transportation

I. INTRODUCTION

This attachment presents the findings from the analysis of traffic, transit, and pedestrian conditions for the proposed actions and resultant reasonable worst case development scenario (RWCDS). As a RWCDS, the proposed actions would facilitate the construction of an approximately 138,470-gross square foot (gsf) mixed-use residential, commercial, and community facility building at 30-02 Newtown Avenue (Block 595; Lots 19, 26, and 27; "Projected Development Site") in the Astoria neighborhood of Queens. The RWCDS would include approximately 102 DUs (31 of which would be affordable under the MIH program), 8,400 gsf of ground floor retail space, and 5,696 gsf of community facility space in the ground floor and cellar levels to be occupied by the Astoria Performing Arts Center (APAC). The RWCDS would include 30 accessory off-street parking spaces in the cellar level accessed by a ramp along 30th Street.

The RWCDS is expected to be completed and occupied by 2024. Absent the proposed actions (the "No-Action condition"), it is anticipated that the Projected Development Site (Block 595; Lots 19, 26, and 27) would remain in its existing form as three two-story commercial/automotive buildings. These buildings include an automotive repair and tire wholesale shop. The incremental development on the Projected Development Site forms the basis of the transportation impact analysis.

II. PRINCIPAL CONCLUSIONS

The proposed actions and associated RWCDS would generate additional pedestrian trips in the surrounding area. As incremental project-generated vehicle, pedestrian, and transit trips would not exceed *City Environmental Quality Review* (CEQR) *Technical Manual* analysis thresholds, a detailed analysis of traffic, pedestrian, and transit conditions is not provided in this EAS.

III. PRELIMINARY ANALYSIS METHODOLOGY

The *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if a more detailed analysis of transportation conditions is warranted. The preliminary analysis first analyzes trip generations (Level 1) to estimate the number of person and vehicle trips attributable to the proposed actions and RWCDS. According to the *CEQR Technical Manual*, if the proposed actions and RWCDS are expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further analysis is not warranted. If the proposed actions and RWCDS exceed these trip thresholds, detailed trip assignments (Level 2) are performed to estimate the incremental trips that may occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments show that the proposed actions and RWCDS would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area, or crosswalk, then further analysis may be warranted, depending on which threshold is tripped, to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and vehicular and pedestrian safety.

IV. LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the number of peak hour person and vehicle trips by mode expected to be generated by the RWCDS. The peak hour person and vehicle trip estimates were then compared to the *CEQR Technical Manual* analysis thresholds to determine if a Level 2 screening is warranted. The travel demand assumptions used for the Level 1 assessment, including a detailed travel demand forecast, are discussed below.

Transportation Planning Factors

The transportation planning factors used to forecast travel demand for the RWCDS's land uses are summarized in Table G-1 and discussed below. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factors for each land use were primarily based on the 2014 *CEQR Technical Manual*, census data, and studies that have been used in previous environmental review documents for projects with similar uses. Factors are shown for the weekday AM, midday, and PM and Saturday midday peak periods.

Existing Auto Shop

The factors used (trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies, and truck trip generation rates) to forecast the travel demand for the existing auto shop were based on data from the 2019 *47-15 34th Avenue Rezoning Revised EAS*. As shown in Table G-1, the travel demand forecast used a trip generation rate of 19.4 trips per 1,000 sf for both the weekday and Saturday. Temporal distributions of 13.2 percent, 11.0 percent, 14.2 percent, and 10.7 percent were used for the weekday AM, midday, and PM and Saturday midday peak hours, respectively. The modal split assumptions used were 85.0 percent by auto, 5.0 percent by taxi, 1.0 percent by subway, 1.0 percent by bus, and 8.0 percent by walk only.

Residential

The residential travel demand forecast used a weekday trip generation rate of 8.075 person trips per DU, a Saturday trip generation rate of 9.6 person trips per DU, and temporal distributions of 10.0 percent, 5.0 percent, 11.0 percent, and 8.0 percent for the weekday AM, midday, and PM, and Saturday midday peak hours, respectively, as per the 2014 *City Environmental Quality Review (CEQR) Technical Manual*. The residential modal split estimated 11.8 percent, 0.2 percent, 76.6 percent, 3.1 percent, and 8.3 percent for private auto, taxi, subway, bus, and walk-only modes, respectively, as per the 2013-2017 Five-Year American Community Survey (ACS) Means of Transportation to Work Table for Queens Census Tracts 63, 65.01, 69, 71, and 73. The private auto occupancy rate of 1.25 persons per auto was also based on the 2013-2017 Five-Year ACS data. Directional splits and the taxi occupancy rate of 1.18 persons per taxi were based on the 2019 *47-15 34th Avenue Rezoning Revised EAS*. Truck trip generation rates were based on the 2014 *CEQR Technical Manual*.

Local Retail

The trip generation rates and temporal distributions for local retail uses were based on the 2014 *CEQR Technical Manual*. Based on this data, the local retail used a weekday trip generation rate of 205 person trips per 1,000 gsf, a Saturday trip generation rate of 240 person trips per 1,000 gsf, and temporal distributions of 3.0 percent, 19.0 percent, 10.0 percent, and 10.0 percent for the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. The directional in/out splits, modal splits, and vehicle occupancies were based on the 2014 *Astoria Cove Development FEIS*. The modal split estimated 11.0 percent, 0.0 percent, 4.0 percent, 3.0 percent, and 82.0 percent for private auto, taxi, subway, bus, and walk-

only modes, respectively on the weekday AM/MD/PM peak hours. During the weekend MD peak hour, the modal split estimated 8.0 percent, 0.0 percent, 7.0 percent, 4.0 percent, and 81.0 percent for private auto, taxi, subway, bus, and walk-only modes, respectively. A vehicle occupancy rate of 2.0 persons per vehicle were used for both private auto and taxi.

Theatre Performing Arts Center

The theatre performing arts center travel demand forecasts were based on the 2018 *Spofford Campus FEIS*, using a weekday trip generation rate of 27.0 person trips per 1,000 gsf, a Saturday trip generation rate of 2.7 person trips per seat, and temporal distributions of 1.0 percent, 16.0 percent, 13.0 percent, and 10.0 percent for the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. The nonprofit theater modal splits were also based on the 2018 *Spofford Campus FEIS*, with an increased subway modal split to reflect the Proposed Development Site's proximity to the 30th Avenue subway station. As such, the travel demand forecast used 19.5 percent trips by auto, 10.0 percent trips by taxi, 20.0 percent trips by subway, 20.0 percent trips by bus, and 30.5 percent trips by walk/bike/other modes. The auto occupancy rate used was 1.60 persons per auto and 2.90 persons per auto on the weekday and Saturday, respectively; and the taxi occupancy rate used was 1.20 persons per taxi and 2.30 persons per taxi on the weekday and Saturday, respectively.

Table G-1: Transportation Planning Assumptions

Land Use:	**Existing Auto Shop**		**Residential**		**Local Retail**		**Theater Performing Arts Center**	
Size/Units:	-27,206 gsf		102 DU		8,400 gsf		5,696 gsf 99 seats	
Trip Generation:	(2)		(1)		(1)		(5)	
Weekday	19.4		8.075		205		27.0 per 1,000 sf	
Saturday	19.4		9.6		240		2.70 per seat	
	per 1,000 sf		per DU		per 1,000 gsf			
Temporal Distribution:	(2)		(1)		(1)		(5)	
AM (8 - 9)	13.2%		10.0%		3.0%		1.0%	
MD (12 - 1)	11.0%		5.0%		19.0%		16.0%	
PM (5 - 6)	14.2%		11.0%		10.0%		13.0%	
SatMD (1 - 2)	10.7%		8.0%		10.0%		10.0%	
	(2)		(3)		(6)		(5)	
Modal Splits:	All Periods		All Periods		AM/MD/PM	SAT MD	All Periods	
Auto	85.0%		11.8%		11.0%	8.0%	19.5%	
Taxi	5.0%		0.2%		0.0%	0.0%	10.0%	
Subway	1.0%		76.6%		4.0%	7.0%	20.0%	
Bus	1.0%		3.1%		3.0%	4.0%	20.0%	
Walk/Bike/Other	8.0%		8.3%		82.0%	81.0%	30.5%	
	100.0%		100.0%		100.0%	100.0%	100.0%	
	(2)		(2)		(4)		(5)	
In/Out Splits:	In	Out	In	Out	In	Out	In	Out
AM	65.0%	35.0%	16.0%	84.0%	50%	50%	61%	39%
MD	50.0%	50.0%	50.0%	50.0%	50%	50%	55%	45%
PM	50.0%	50.0%	67.0%	33.0%	50%	50%	29%	71%
SatMD	50.0%	50.0%	53.0%	47.0%	50%	50%	0%	100%
Vehicle Occupancy:	(2)		(3)(2)		(4)		(5)	
	All Periods		All Periods		All Periods		Weekday	Saturday
Auto	1.30		1.25		2.00		1.60	2.90
Taxi	1.30		1.18		2.00		1.20	2.30
Truck Trip Generation:	(2)		(1)		(1)		(5)	
Weekday	0.89		0.06		0.35		0.14	
Saturday	0.89		0.02		0.04		0.04	
	per 1,000 sf		per DU		per 1,000 sf		per 1,000 sf	
	(2)		(1)		(1)		(5)	
AM	14.0%		12.0%		8.0%		1.0%	
MD	9.0%		9.0%		11.0%		11.0%	
PM	1.0%		2.0%		2.0%		2.0%	
SatMD	0.0%		9.0%		11.0%		11.0%	
	In	Out	In	Out	In	Out	In	Out
AM/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

(1) 2014 *City Environmental Quality Review (CEQR) Technical Manual.*

(2) *47-15 34th Avenue Rezoning Revised EAS* , 2019.

(3) 2013-2017 American Community Survey (ACS) Mean of Transportation to Work for Queens Census Tracts 63, 65.01, 69, 71, and 73.

(4) *Astoria Cove Development FEIS* , 2014.

(5) *Spofford Campus FEIS* , 2018.

(6) Provided by NYCDOT.

Travel Demand Forecast

Table G-2 provides an overall travel demand forecast for the RWCDS for the weekday AM, midday, and PM, and Saturday midday peak hours. As shown in Table G-2, under the RWCDS, the proposed actions would generate a net increase of approximately 56 person trips (in and out combined) in the weekday AM peak hour, 254 person trips in the weekday midday peak hour, 166 person trips in the weekday PM peak hour, and 202 person trips in the Saturday midday peak hour. The proposed actions would generate an incremental decrease of 46, 25, 34, and 26 (in and out combined) vehicle trips (including auto, taxi, and truck trips) in the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. Peak hour subway trips would increase by a net total of 66, 47, 80, and 77 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Peak hour bus trips would increase by a net total of 4, 15, 11, and 14 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Total pedestrian trips (including walk-only and trips to/from public transit) would increase by a net total of 105, 271, 205, and 226 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if a proposed action would result in 50 or more vehicular trip ends in a peak hour at one or more intersections. As shown in Table G-2, under the With-Action condition, the proposed actions would generate an incremental decrease of 46, 25, 34, and 26 vehicle trips in the weekday AM, midday, and PM, and Saturday midday periods. Therefore, as the uses proposed under the With-Action condition are forecasted to generate fewer vehicle trips than the existing uses on the Projected Development Site (an automotive repair shop and tire wholesale shop), the incremental 50-vehicle trip threshold would not be met in any peak period. As such, a Level 2 screening analysis is not needed, and further traffic analysis is not warranted.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus route (in one direction), or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in Table G-2, under the With-Action condition, the proposed actions would generate approximately 66, 47, 80, and 77 (in and out combined) incremental subway trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. Net incremental transit bus trips would total approximately 4, 15, 11, and 14 (in and out combined) during these same periods, respectively. As

these numbers would not exceed 200 subway trips/hour or 50 bus trips/hour, a detailed Level 2 screening analysis is not warranted for any peak hour.

Table G-2: Travel Demand Forecast – Person Trips

		No-Action		*With-Action*						*Net Increment*	
Land Use:		**Existing Auto Shop**		**Residential**		**Local Retail**		**Theater Performing Arts Center**		**Total**	
Size/Units:		-27,206	gsf	102	DU	8,400	gsf	5,696 99	gsf seats		
Peak Hour Person Trips:						(1)					
	AM	-70		84		40		2		56	
	MD	-60		42		246		26		254	
	PM	-76		92		130		20		166	
	Sat MD	-58		80		152		28		202	
Person Trips:											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto**	-39	-22	2	9	2	2	0	0	-35	-11
(8-9)	**Taxi**	-2	-1	0	0	0	0	0	0	-2	-1
	Subway	0	0	10	54	1	1	0	0	11	55
	Bus	0	0	0	2	1	1	0	0	1	3
	Walk/Bike/Other	-4	-2	1	6	16	16	1	1	14	21
	Total	-45	-25	13	71	20	20	1	1	-11	67
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto**	-26	-26	2	2	14	14	3	2	-7	-8
(12-1)	**Taxi**	-2	-2	0	0	0	0	1	1	-1	-1
	Subway	0	0	16	16	5	5	3	2	24	23
	Bus	0	0	1	1	4	4	3	2	8	7
	Walk/Bike/Other	-2	-2	2	2	100	100	5	4	105	104
	Total	-30	-30	21	21	123	123	15	11	129	125
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto**	-33	-33	7	4	7	7	1	3	-18	-19
(5-6)	**Taxi**	-2	-2	0	0	0	0	1	1	-1	-1
	Subway	0	0	47	23	3	3	1	3	51	29
	Bus	0	0	2	1	2	2	1	3	5	6
	Walk/Bike/Other	-3	-3	5	3	53	53	2	4	57	57
	Total	-38	-38	61	31	65	65	6	14	94	72
		In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	**Auto**	-26	-26	5	5	6	6	0	5	-15	-10
(1-2)	**Taxi**	-1	-1	0	0	0	0	0	3	-1	2
	Subway	0	0	32	29	5	5	0	6	37	40
	Bus	0	0	1	1	3	3	0	6	4	10
	Walk/Bike/Other	-2	-2	4	3	62	62	0	8	64	71
	Total	-29	-29	42	38	76	76	0	28	89	113

Table G-2: Travel Demand Forecast (cont.) – Vehicle Trips

		No-Action		*With-Action*						*Total*	
Land Use:		**Existing Auto Shop**		**Residential**		**Local Retail**		**Theater Performing Arts Center**		**Total**	
Vehicle Trips :											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto (Total)**	-30	-17	2	7	1	1	0	0	-27	-9
	Taxi	-2	-1	0	0	0	0	0	0	-2	-1
	Taxi Balanced	-3	-3	0	0	0	0	0	0	-3	-3
	Truck	-2	-2	0	0	0	0	0	0	-2	-2
	Total	-35	-22	2	7	1	1	0	0	-32	-14
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto (Total)**	-20	-20	2	2	7	7	2	1	-9	-10
	Taxi	-2	-2	0	0	0	0	1	1	-1	-1
	Taxi Balanced	-4	-4	0	0	0	0	2	2	-2	-2
	Truck	-1	-1	0	0	0	0	0	0	-1	-1
	Total	-25	-25	2	2	7	7	4	3	-12	-13
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto (Total)**	-25	-25	6	3	4	4	1	2	-14	-16
	Taxi	-2	-2	0	0	0	0	1	1	-1	-1
	Taxi Balanced	-4	-4	0	0	0	0	2	2	-2	-2
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-29	-29	6	3	4	4	3	4	-16	-18
		In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	**Auto (Total)**	-20	-20	4	4	3	3	0	2	-13	-11
	Taxi	-1	-1	0	0	0	0	0	1	-1	0
	Taxi Balanced	-2	-2	0	0	0	0	1	1	-1	-1
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-22	-22	4	4	3	3	1	3	-14	-12

	Incremental Vehicle Trips			**Incremental Ped Trips (Walk + Transit)**		
	In	Out	Total	In	Out	Total
AM	-32	-14	-46	26	79	105
MD	-12	-13	-25	137	134	271
PM	-16	-18	-34	113	92	205
Sat MD	-14	-12	-26	105	121	226

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in Table G-2, the proposed actions' With-Action condition would generate an incremental demand of approximately 105 total pedestrian trips in the weekday AM peak hour, 271 total pedestrian trips in the weekday midday peak hour, 205 total pedestrian trips in the weekday PM peak hour, and 226 total pedestrian trips in the Saturday midday peak hour. These totals include walk-only trips and pedestrians en route to and from nearby subway stations and bus stops. As the numbers of trips in the weekday midday, PM, and Saturday midday peak hours would exceed the 200-trip threshold, a Level 2 screening analysis is warranted to determine which, if any, pedestrian elements would require quantified analysis for these periods.

V. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment of project-generated trips to the study area's transportation networks and the identification of specific locations where the incremental increase in demand may potentially exceed *CEQR Technical Manual* analysis thresholds and, therefore, require a quantitative analysis.

Pedestrians

As shown in Table G-2, the proposed actions would generate approximately 271, 205, and 226 pedestrian trips (including walk-only, subway, and bus trips; in and out combined) in the weekday midday, weekday PM, and Saturday midday peak hours, respectively. The analysis of pedestrian conditions focuses on representative pedestrian elements where new trips generated by the RWCDS are expected to be most concentrated. These elements – sidewalks, corner areas, and crosswalks – are located in the vicinity of the With Action Development and corridors connecting the Projected Development Site to area subway stations and bus routes. Subway trips were assigned to the 30th Avenue station at 30th Avenue and 31st Street served by the N Broadway Express and the W Broadway Local lines. Bus trips were assigned to the Q18 (local line running between Maspeth and Astoria) and the Q102 (local line running between Roosevelt Island, Manhattan and Astoria, Queens) stops along 30th Avenue. Walk-only trips were assigned evenly through the local street network, with residential, retail, and community facility "walk-only" trips originating/ending at their respective entrance/exit locations based on the proposed site plan (refer to **Figure G-1**).

Preliminary assignments of weekday midday, weekday PM, and Saturday midday pedestrian trips are shown in **Figures G-2** through **4**, respectively. As shown in **Figures G-2** through **4,** no pedestrian element located in the vicinity of the Projected Development Site would exceed the 200-trip analysis threshold during the weekday MD, PM, and Saturday midday periods, respectively. As such, a detailed pedestrian analysis is not warranted and no further analysis is necessary.

VI. PARKING

As the Proposed Development is predominately residential, it is anticipated that parking demand would peak in the overnight periods. For the proposed 102 residential units, 2013-2017 ACS Vehicles Available data for renter-occupied households in Queens Census Tracts 63, 65.01, 69, 71, and 73 were utilized, which indicated an auto ownership rate of 0.320 autos per household. Therefore, the proposed actions would generate an overnight demand of approximately 33 vehicles, while the Proposed Development would provide 30 accessory parking spaces below-grade. As project-generated parking demand is expected to exceed the proposed on-site accessory parking supply, an off-site parking analysis would be required within ¼-mile of the Project Area during the overnight period.

Table G-3: Overnight On-Street Parking Inventory

Quarter-Mile Total	Total No. of Parking Spaces	No. Parking Spaces Utilized	No. Spaces Available	Utilization
	2,071	1,946	125	93.9%

Source: Based on PHA field surveys, November 2019

As shown in Table G-1, available on-street parking within a ¼-mile radius of the Proposed Rezoning Area would be able to accommodate the 3 vehicles that cannot be accommodated at the applicant-owned development site. Therefore, no further analysis is necessary.

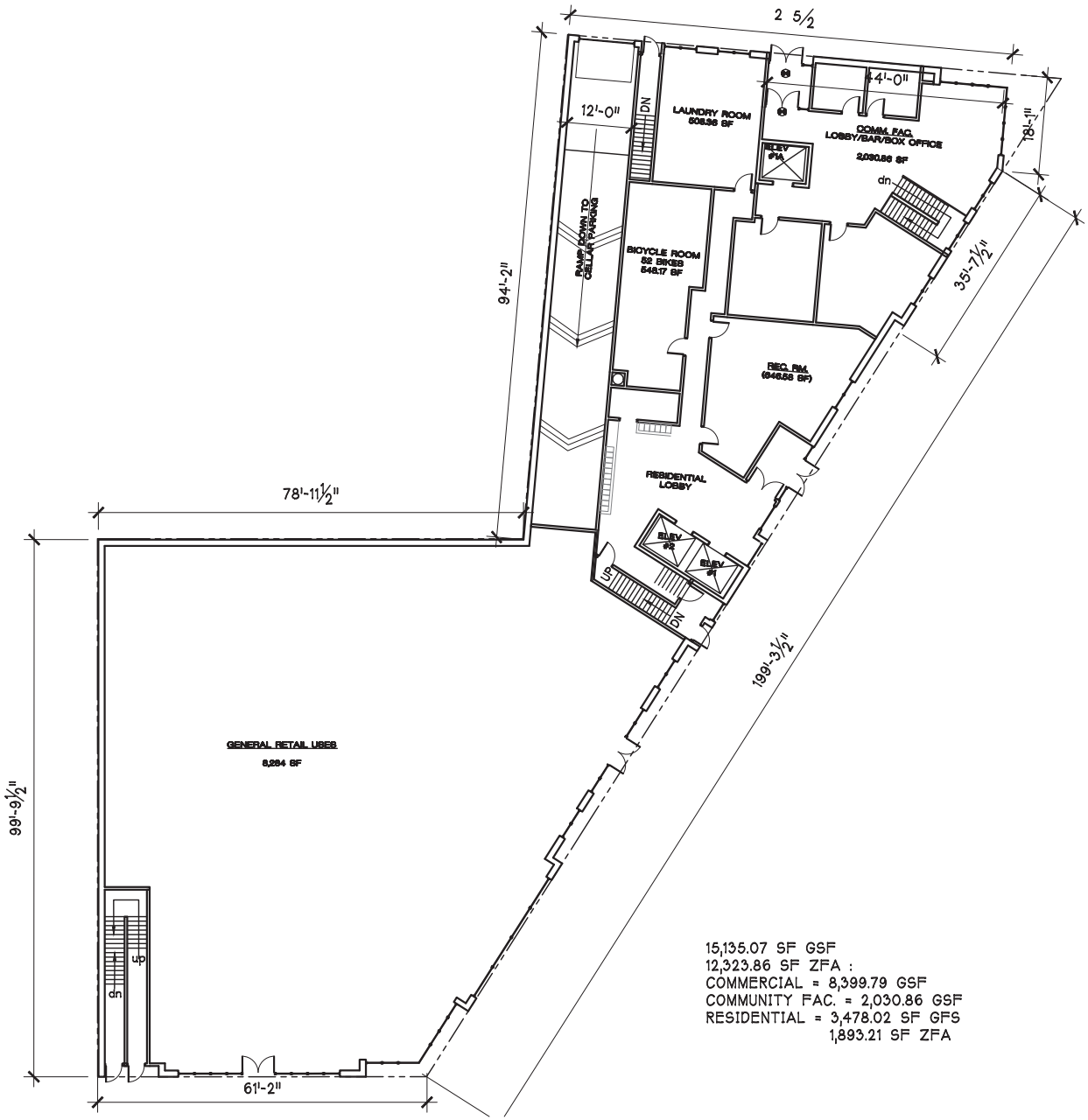
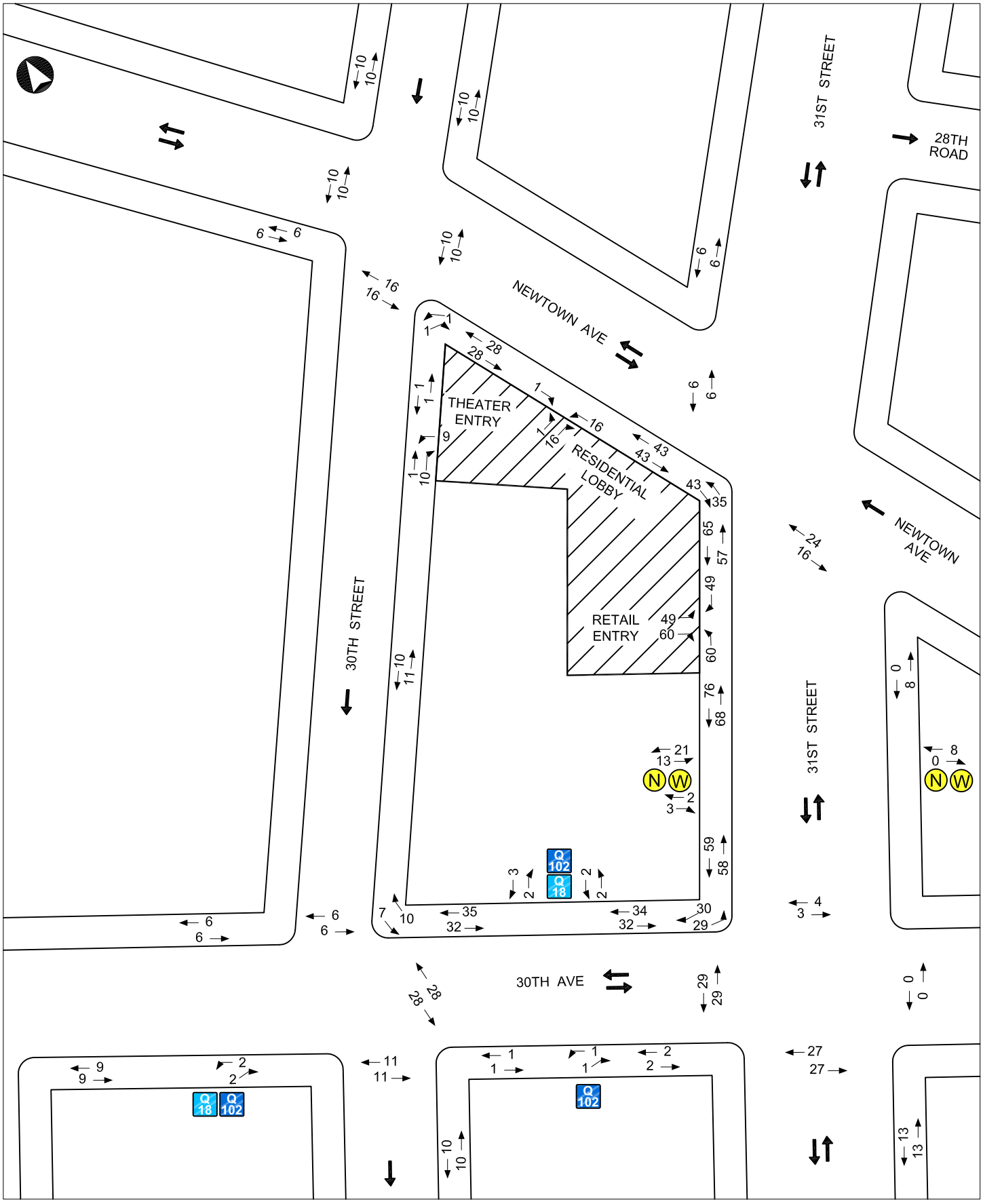

2 5/2
44'-0"
12'-0"
DN
LAUNDRY ROOM
508.36 SF
COMM. FAC.
LOBBY/BAR/BOX OFFICE
2,030.86 SF
ELEV #1A
dn
78'-1"
94'-2"
RAMP DOWN TO CELLAR PARKING
BICYCLE ROOM
52 BIKES
548.17 SF
REC. RM.
(946.58 SF)
35'-7 1/2"
RESIDENTIAL LOBBY
78'-11 1/2"
ELEV #2
ELEV #1
UP
DN
199'-3 1/2"
GENERAL RETAIL USES
8,284 SF
99'-9 1/2"
up
up
61'-2"
15,135.07 SF GSF
12,323.86 SF ZFA :
COMMERCIAL = 8,399.79 GSF
COMMUNITY FAC. = 2,030.86 GSF
RESIDENTIAL = 3,478.02 SF GFS
1,893.21 SF ZFA

Figure G-2
Incremental Midday Pedestrian Volumes

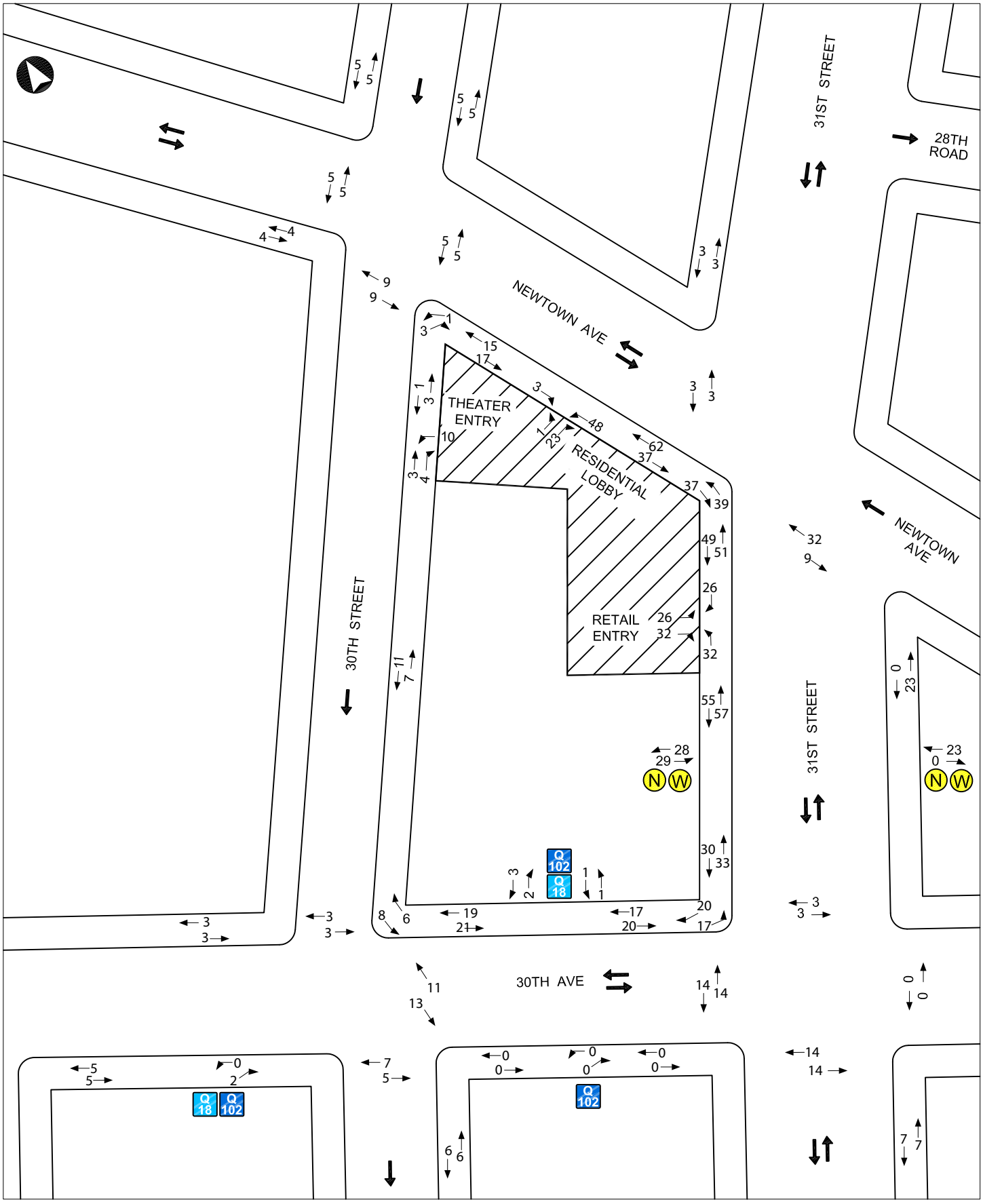
Development Site



98 - Weekday Midday Peak Hour Pedestrian Volumes

Figure G-3
Incremental PM Pedestrian Volumes

Development Site

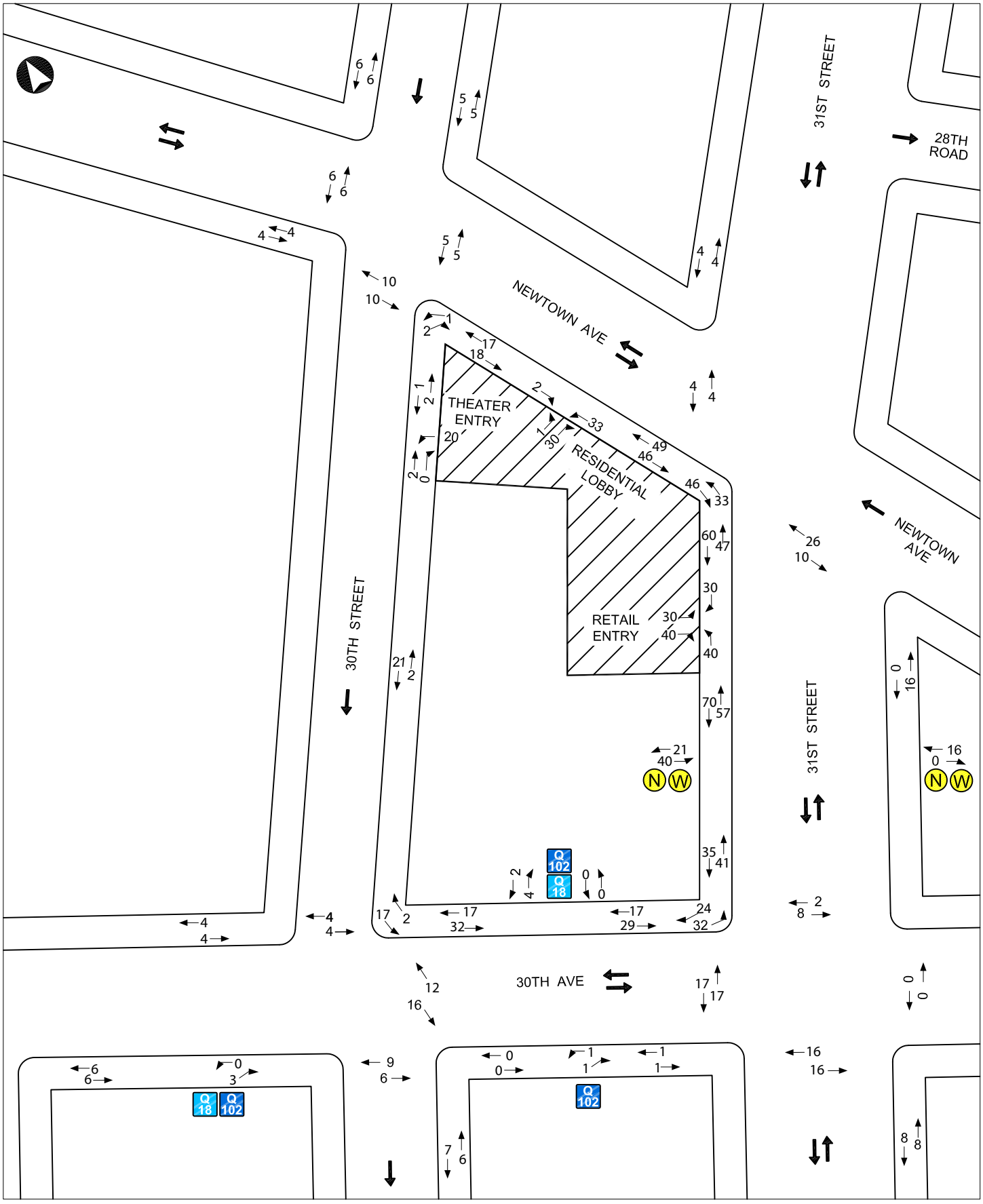


← 98 - Weekday PM Peak Hour Pedestrian Volumes

Figure G-4

Incremental SAT Pedestrian Volumes

Development Site



← 98 - Saturday MD Peak Hour Pedestrian Volumes

Attachment H

Noise

I. INTRODUCTION

This attachment assesses the potential for the proposed actions to result in significant adverse noise impacts. The Applicant is seeking approval of a zoning text and zoning map amendments from the City Planning Commission (CPC) to rezone an existing C4-4A district into a C4-4D district and to designate the C4-4D district as a Mandatory Inclusionary Housing (MIH) Area. As a reasonable worst case development scenario (RWCDS), approval of the proposed actions would facilitate the development of a new 14-story, mixed-use residential, commercial, and community facility building in the Astoria neighborhood of Queens. This new development would include 102 DUs, 8,400 gsf of ground floor retail space, and 5,696 gsf of community facility space in the ground floor and cellar levels to be occupied by the Astoria Performing Arts Center (APAC). The cellar would also include 30 off-street accessory parking spaces.

As discussed in **Attachment B, "Supplemental Screening,"** the proposed actions would introduce new sensitive uses on the Projected Development Site. As the proposed actions introduce new noise-sensitive uses within the Proposed Rezoning Area, an analysis was conducted in order to determine the level of building attenuation required to ensure that future interior noise levels would satisfy applicable noise criteria. Based on a field survey of land uses in the area, it was determined that no stationary noise sources contribute significantly to noise levels in the area, and a stationary source noise analysis was not warranted.

II. PRINCIPAL CONCLUSIONS

Noise from increased traffic generated by the With-Action condition would not cause noise level impacts at sensitive receptors along the adjacent roadways as the relative increases in noise levels would fall well below the impact criterion of 3.0 dBA between No-Action and With-Action conditions.

Based on the noise analysis presented herein, the maximum predicted L_{10} noise level adjacent to the Proposed Rezoning Area is expected to be 84.0 dBA along the site's 31st Street frontage, 74.2 dBA along the site's Newtown Avenue frontage, and 70.6 dBA on the site's 30th Street frontage in the future with the proposed actions. Based on these maximum predicted With-Action noise levels, attenuation of 40.0 dBA on the site's 31st Street frontage and for facades facing Newtown Avenue within 50 feet of 31st Street and the facades facing 30th Avenue within 100 feet of 31st Street, 31.0 dBA of attenuation on any façade facing Newtown Avenue beyond 50 feet of Newtown Avenue, and 28.0 dBA of attenuation on facades facing 30th Street and the facades facing 30th Avenue beyond 100 feet of 31st Street is needed to maintain interior noise levels of 45 dBA or lower for the proposed development's residential and community facility uses. To ensure acceptable noise levels for the proposed development, noise attenuation specifications would be mandated through the assignment of an (E) designation (E-593) assigned to the Projected Development Site that is expected to be developed as a result of the proposed actions. The requirements of the (E) designation resulting from the noise analysis, outlined in Section VIII of this attachment, state that the buildings facades of future residential/community facility uses must provide varying attenuation along the site's frontages. With implementation of the attenuation levels required pursuant to the (E) designation, the proposed development would provide sufficient attenuation to achieve the 2014 *CEQR Technical Manual* interior noise level guidance of 45 dBA or lower for residential or community facility uses. Therefore, the proposed

actions would not result in any significant adverse noise impacts related to building attenuation requirements.

III. NOISE FUNDAMENTALS

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

"A"-Weighted Sound Level (dBA)

Noise is typically measured in units called decibels (dB), which are ten times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared. Because loudness is important in the assessment of the effects of noise on people, the dependence of loudness on frequency must be taken into account in the noise scale used in environmental assessments. Frequency is the rate at which sound pressures fluctuate in a cycle over a given quantity of time, and is measured in Hertz (Hz), where 1 Hz equals 1 cycle per second. Frequency defines sound in terms of pitch components. In the measurement system, one of the simplified scales that accounts for the dependence of perceived loudness on frequency is the use of a weighting network - known as A-weighting - that simulates the response of the human ear. For most noise assessments, the A-weighted sound pressure level in units of dBA is used due to its widespread recognition and its close correlation to perception. In this analysis, all measured noise levels are reported in dBA or A-weighted decibels. Common noise levels in dBA are shown in Table H-1.

Table H-1, Common Noise Levels

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

Source: *2014 CEQR Technical Manual* / Cowan, James P. Handbook of Environmental Acoustics. Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

Note: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.

Community Response to Changes in Noise Levels

Table H-2 shows the average ability of an individual to perceive changes in noise. Generally, changes in noise levels less than 3 dBA are barely perceptible to most listeners. However, as illustrated in Table H-2, 5 dBA changes are readily noticeable. 10 dBA changes are normally perceived as doublings (or halvings) of noise levels. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

Table H-2, Average Ability to Perceive Changes in Noise Levels

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

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

Noise Descriptors Used in Impact Assessment

Because the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level", L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound-energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

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

Applicable Noise Codes and Impact Criteria

New York City Noise Code

The New York City Noise Control Code, amended in December 2005, contains prohibitions regarding unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties. The New York City Department of Environmental Protection (DEP) has set external noise exposure standards. These standards are shown on the following page in Table H-3.

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

Table H-3, Noise Exposure Guidance for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	---------- Ldn ≤ 60 dBA ----------		---------- 60 < Ldn ≤ 65 dBA ----------		(1) 65 < Ldn ≤ 70 dBA, (II) 70 ≤ Ldn		---------- Ldn ≤ 75 dBA ----------
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 65$ dBA		65 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		65 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

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

Notes: (i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;

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

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

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

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

Table H-4:
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise level with proposed development	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Attenuation	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)^B$ dB(A)

Note: [A] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.
[B] Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.
Source: New York City Department of Environmental Protection / 2014 *CEQR Technical Manual*

IV. NOISE PREDICTION METHODOLOGY

Proportional Modeling

Proportional modeling was used to determine No-Action and With-Action noise levels at the receptor locations adjacent to the Proposed Rezoning Area, as discussed in more detail below. Proportional modeling is one of the techniques recommended in the *CEQR Technical Manual* for mobile source analysis.

Using this technique, the prediction of future noise levels (where traffic is the dominant noise source) is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes (counted during the noise recording), are converted into PCE values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of thirteen cars, one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of eighteen cars. Future noise levels are calculated using the following equation:

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

where:

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

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

To calculate the No-Action noise levels, an annual background growth rate of 0.25 percent for the 2024 Build year was applied to the PCE noise values based on counted vehicles.[1] In order to obtain the necessary With-Action PCE values to calculate the With-Action noise levels, a trip generation was prepared based on the projected amount of incremental floor area generated by the 2024 With-Action development, utilizing existing modal split data for the census tract within which the Proposed Development Site is located.[2] As shown in Attachment G, "Transportation," the number of vehicles generated by the Proposed Actions would be a negative increment. Therefore, for conservative analysis purposes, the decrease in vehicles generated by the Proposed Actiosn were not added to each noise monitoring location.

V. EXISTING CONDITIONS

As shown in **Figure H-1**, the Projected Development Site has three frontages. As shown in **Figure H-1**, the Projected Development Site, and coterminous Proposed Rezoning Area, includes 61 feet of frontage on 31st Street. 31st Street is a 100-foot wide, two-way street that carries traffic north and southbound in two travel lanes with two parallel parking lanes on either side of the street. The elevated rail carrying the MTA N and W Broadway trains runs above 31st Street. The Projected Development Site also includes approximately 220 feet of frontage on Newtown Avenue, a 70-foot, two-way narrow street which carries traffic east and west. Finally, the Projected Development Site has 105 feet of frontage on 30th Street, a 60-foot, one-way narrow street that carries cars southbound in one travel lane. As discussed in **Attachment A, "Project Description,"** the Projected Development Site is currently occupied by an automotive repair facility that specializes in tire replacement and tire wholesales.

Selection of Noise Receptor Locations

As discussed above, local traffic and train traffic along the elevated subway line extending along 31st Street are the dominant sources of noise in the vicinity of the Proposed Rezoning Area. The noise receptor locations were selected to be along each frontage of the Proposed Rezoning Area for a total of three receptor locations (1 to 3). The assumption was made that all windows on all frontages of the buildings would be operable. The selected receptor locations in the Proposed Rezoning Area are presented in **Figure H-1**.

Noise Monitoring

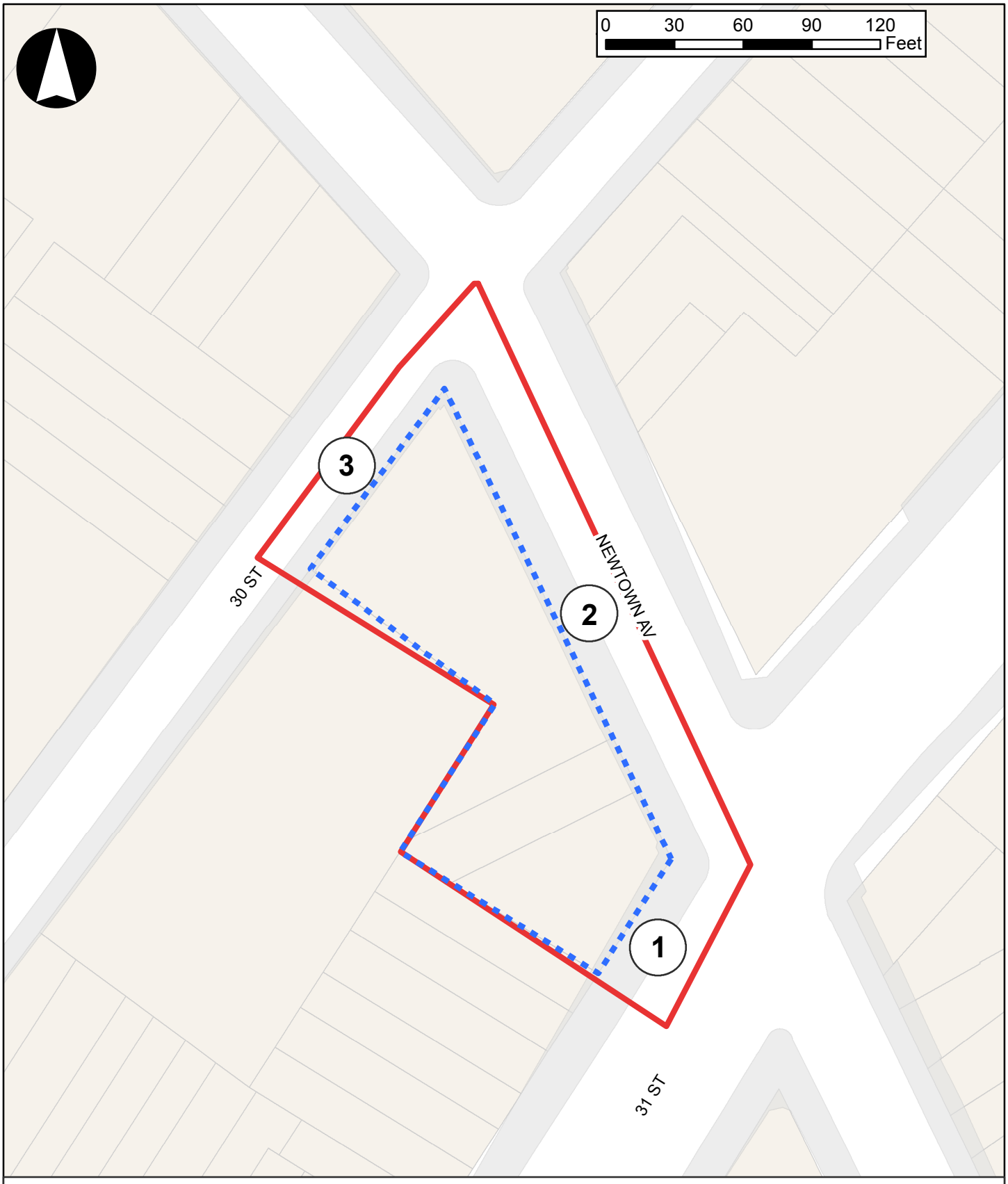
At receptor location 1, 1-hour spot measurements of existing noise levels were conducted for each of the three noise analysis time periods - weekday AM peak hour (8:00AM to 9:00AM), weekday midday (MD) peak hour (12:00PM to 1:00PM), and weekday PM peak hour (5:00PM to 6:00PM). At receptor location 2 and 3, 20-minutes spot measurements were conducted during each of the above mentioned noise analysis time periods. Noise monitoring was performed on Tuesday, September 10th, 2019 and Thursday, September 12th, 2019. On September 10th, the weather was partly cloudy with a high temperature of 76 ºF. On September 12th, the weather was partly cloudy with a high temperature of 81 ºF.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 5 feet above the ground surface on a tripod

[1] The background growth rate is based on information provided in Table 16-4 of the 2014 *CEQR Technical Manual.*
[2] Based on American Community Survey (ACS) Means of Transportation 5-Year data for Queens county census tracts 63, 65.01, 69, 71, and 73.

Figure H-1
Noise Monitoring Receptor Locations



and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound level that is being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at the receptor locations were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Only traffic-related noise was measured; noise from other sources (e.g., emergency sirens, irregular aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at the Noise Receptor Locations

Measured Noise Levels

The noise monitoring results are shown in Table H-6. Area traffic and noise from the elevated rail were the dominant sources of noise at the receptor locations. The existing noise levels reflect the minimal level of vehicular activity on the roadways and train activity on the elevated rail adjacent to the Proposed Rezoning Area, with the highest existing noise levels observed at receptor location 1 during the AM monitoring period.

As shown in Table H-6, the highest L_{10} value was recorded in the AM peak hour (84.0 dBA), placing this receptor location in the "Clearly Unacceptable" CEQR Noise Exposure category pursuant to the guidance of the *CEQR Technical Manual*. At receptor location 2, the highest L_{10} value was recorded in the AM peak hour (74.1 dBA), placing this receptor location in the "Marginally Unacceptable (II)" CEQR Noise Exposure category. At receptor location 3, the highest L_{10} value was recorded in the MD peak hour (70.6 dBA), also placing this receptor location in the "Marginally Unacceptable (I)" CEQR Noise Exposure category.

Table H-6, Existing Noise Levels (in dBA) at the Monitoring Locations

Receptor Location	Time	L_{eq}	L_{max}	L_{min}	L_1	L_{10}[2]	L_{50}	L_{90}	CEQR Noise Exposure Category
1	AM	81.1	99.4	57.2	94.2	**84.0**	68.4	63.0	Clearly Unacceptable
	MD	81.6	99.8	56.5	94.7	82.8	67.4	62.3	
	PM	81.0	98.3	57.9	94.5	82.5	66.3	62.0	
2	AM	70.0	90.0	54.8	79.6	**74.1**	63.3	58.7	Marginally Unacceptable (II)
	MD	71.9	91.2	58.1	84.5	71.3	63.0	60.6	
	PM	71.7	94.7	54.6	83.7	73.3	61.9	58.4	
3	AM	66.1	90.3	55.1	75.5	67.9	62.6	60.0	Marginally Unacceptable (I)
	MD	69.8	91.4	54.0	82.8	**70.6**	62.6	58.2	
	PM	66.7	91.4	54.1	76.4	66.7	61.9	58.6	

Notes: Field measurements were performed by Philip Habib & Associates on September 10th and 12th, 2019.
[1] Refer to **Figure H-1** for noise monitoring receptor locations.
[2] The highest L_{10} noise levels at each monitoring location are shown in **bold**.

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

Using the methodology described in Section IV, "Noise Prediction Methodology," future noise levels in the No-Action condition were calculated for the three analysis periods for the 2024 Build year. Table H-7

shows the measured existing noise levels, as well as the projected No-Action PCE values and the No-Action noise levels at the receptor locations.

Table H-7, Future No-Action Noise Levels and Total PCE Values at Receptor Locations (in dBA)

Noise Receptor Location	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change[1]	No-Action L_{10}[2]	CEQR Noise Exposure Category
1	AM	888	899	81.1	81.2	0.05	**84.0**	Clearly Unacceptable
	MD	836	847	81.6	81.6	0.05	82.8	
	PM	691	700	81.0	81.1	0.05	82.6	
2	AM	585	592	70.0	70.0	0.05	**74.2**	Marginally Unacceptable (II)
	MD	204	207	71.9	72.0	0.05	71.3	
	PM	522	529	71.7	71.7	0.05	73.3	
3	AM	459	465	66.1	66.2	0.05	67.9	Marginally Unacceptable (I)
	MD	243	246	69.8	69.8	0.05	**70.6**	
	PM	348	352	66.7	66.8	0.05	66.7	

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

Comparing future No-Action noise levels with existing noise levels, the increases in L_{eq} noise level would equal approximately 0.05 dBA during each analysis period. Increases of this magnitude would be barely perceptible, and based upon the *CEQR Technical Manual* impact criteria, would not be significant. The projected No-Action L_{10} noise levels would remain in the same respective CEQR Noise Exposure categories as under existing conditions.

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

Using the methodology described in Section IV, "Noise Prediction Methodology future noise levels in the With-Action condition were calculated for the three analysis periods at each of the receptor locations for the 2024 Build year.

As shown in Table H-8, the maximum projected L_{10} noise level in the With-Action condition would be 84.0 dBA during the AM peak hour at receptor location 1, 74.2 dBA during the AM peak hour at receptor location 2, and 70.6 dBA during the MDpeak hour at receptor location 3. Therefore, each receptor location would remain in the same CEQR Noise Exposure category as the No-Action condition.

As the noise levels at the receptor locations would not experience increases of more than 3.0 dBA in any analyzed peak hour, the overall changes to noise levels as a result of the proposed actions would not result in any significant adverse impacts.

Table H-8, Future With Action Noise Levels and Total PCE Values at Receptor Locations (in dBA)

Receptor Location	Time	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change[1]	With-Action L_{10}[2]	CEQR Noise Exposure Category
1	AM	899	81.17	81.2	0.00	**84.0**	Clearly Unacceptable
	MD	847	81.62	81.6	0.00	82.8	
	PM	700	81.06	81.1	0.00	82.6	
2	AM	592	70.02	70.0	0.00	**74.2**	Marginally Unacceptable (II)
	MD	207	71.97	72.0	0.00	71,3	
	PM	529	71.74	71.7	0.00	73.3	
3	AM	465	66.2	66.2	0.00	67.9	Marginally Unacceptable (I)
	MD	246	69.8	69.8	0.00	**70.6**	
	PM	352	66.8	66.8	0.00	66.7	

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

[1] With-Action Leq – No-Action Leq

[2] The highest L_{10} noise levels at each monitoring location are shown in bold.

VIII. ATTENUATION REQUIREMENTS

As shown above in Table H-4, the *CEQR Technical Manual* has set noise attenuation requirements for buildings based on exterior noise levels. Recommended noise attenuation values for buildings are designed to maintain a maximum interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial uses, and are determined based on exterior L_{10} noise levels. As noted in Table H-4, additional attenuation measures would be required at the site wherever exterior noise levels exceed 70 dBA. As the maximum exterior L_{10} noise level in the With-Action condition at each receptor location would exceed 70 dBA, attenuation would be required at the Projected Development Site for sensitive uses in the future with the proposed actions.

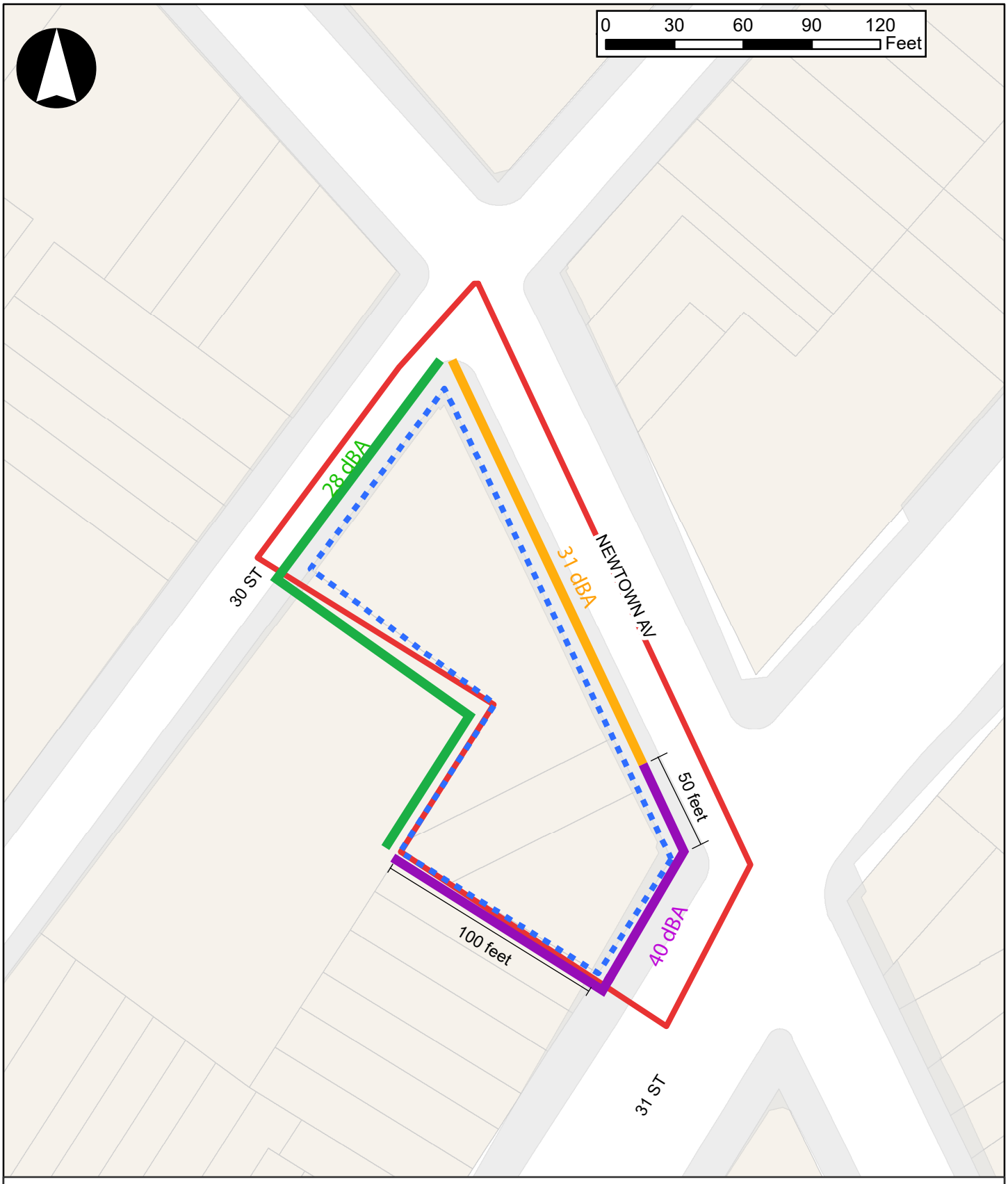
(E) Designation

A (E) designation for noise provides a notice of the presence of an environmental requirement pertaining to high ambient noise levels on a particular tax lot. If an area is proposed to be rezoned, and the accompanying environmental analysis indicates that development on a property may be adversely affected by noise, then an (E) designation for window/wall attenuation and alternate means of ventilation may be placed on the property by the lead agency in order to address such issues in conjunction with any new development or new use of the property. For new developments, enlargements of existing buildings, or changes in use, the NYC Department of Buildings will not issue a building permit until the environmental requirements of the (E) designation are satisfied. The Office of Environmental Remediation (OER) administers the (E) Designation Environmental Review Program

To avoid any potential impacts associated with noise on the Projected Development Site (Block 595, Lots 19, 26, and 27), as part of the proposed actions, an (E) designation for noise would be recorded against the property. The text for the (E) designation E-593 will be as follows:

> **Block: 595; Lots: 19, 26, and 27**
>
> **To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed window condition with a minimum of 40 dBA window/wall attenuation on the facades facing 31st Street and the facades facing 30th Avenue within 100 feet of 31st Street and the facades facing Newtown Avenue within 50 feet of 31st Street and 31 dBA of attenuation on the facades facing Newtown**

Figure H-2
Required Attenuation



*For illustrative purposes only

Avenue beyond 50 feet of 31st Street and 28 dBA of attenuation on the facades facing 30th Street and the facades facing 30th Avenue beyond 100 feet of 31st Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses as illustrated in the EAS. To maintain a closed window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Per the (E) designation requirements, in order to receive a Certificate of Occupancy from the NYC Department of Buildings (DOB) the proposed actions must comply with these required composite window/wall attenuation values in order to maintain proper interior noise levels. With this institutional control in place, the proposed actions and associated development would not result in any significant adverse noise impacts related to building attenuation and no further analysis is necessary.

IX. OTHER NOISE CONCERNS

Mechanical Equipment

No detailed designs of the building's mechanical systems (i.e., heating, ventilation, and air conditioning systems) are available at this time. However, those systems will be designed to meet all applicable noise regulations and requirements and would be designed to produce noise levels that would not result in any significant increase in ambient noise levels. In addition, the building mechanical systems would be designed with enclosures where necessary to meet all applicable noise regulations (i.e., Subchapter 5 §24-227 of the New York City Noise Control Code and the NYC DOB Building Code) and to avoid producing levels that would result in any significant increase in ambient noise levels.

Aircraft Noise

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

Appendix I

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: DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
Project: NEWTOWN AVENUE
Date Received: 7/19/2019

Properties with no Architectural or Archaeological significance:

1) 28-27 30 STREET, BBL: 4005950010
2) 30-02 NEWTOWN AVENUE, BBL: 4005950019
3) 30-20 NEWTOWN AVENUE, BBL: 4005950026
4) 30-22 NEWTOWN AVENUE, BBL: 4005950027

Gina Santucci 7/19/2019

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34328_FSO_GS_07192019.docx

Appendix II

Phase I Executive Summary

ALC Environmental
Assess | Design | Solve

June 18, 2019

Mr. Jacob Entel
800 6th Avenue #21 G
New York, NY 10001

Re: Phase I Environmental Site Assessment for
30-02, 30-20 & 30-22 Newtown Avenue
Queens, NY 11102
Block 595; Lots 19, 26 & 27

Dear Mr. Entel:

In accordance with your authorization, ALC Environmental has completed a Phase I Environmental Site Assessment (ESA) of the properties located at 30-02, 30-20 & 30-22 Newtown Avenue, Queens, NY 11102. The objective of this assessment was to evaluate the past and current environmental conditions at the site and to identify any potential areas of environmental concern or recognized environmental conditions that could affect the property's environmental integrity. This Phase I ESA was performed in general conformance with the scope and limitations of the American International (ASTM) Practice E1527-13.

The Phase I ESA uncovered areas of significant environmental concern or recognized environmental conditions that might require mitigation prior to acquisition or transfer of the subject property. In addition, *de minimis* conditions were identified. Details are provided in the report. Please call (212-675-5544) or e-mail (tania.castro@alcenvironmental.com) if you have any questions regarding this report. We appreciate the opportunity to be of service.

Respectfully submitted,

Tania Castro
Real Estate Due Diligence, Division Manager
ALC Environmental

Identify

Evaluate

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

30-02, 30-20 & 30-22 Newtown Avenue
Queens, NY 11102
Block 595; Lots 19, 26 & 27

Prepared by

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

Prepared for

Jacob Entel
800 6th Avenue #21G
New York, NY 10001

June 18, 2019

Solve

Execute

www.ALCenvironmental.com

1.0 EXECUTIVE SUMMARY

ALC Environmental (ALC) was contracted by Jacob Entel, the Client, to conduct a Phase I Environmental Site Assessment (ESA) of the properties located at 30-02, 30-20 and 30-22 Newtown Avenue (collectively referred to as the "Subject Property"). The Subject Property consists of three interconnected 2-story commercial buildings occupied by Max Finkelstein, Inc., comprised of a warehouse, tire repair shop, and retail/wholesale distributor of tires. The Subject Property lots are identified by the New York City (NYC) Department of Finance as: Block 595, Lots 19, 26 and 27. Below is a description of the subject lots:

Address	Block	Lot	Area
30-02 Newtown Avenue	595	19	0.201-acres
30-20 Newtown Avenue	595	26	0.054-acres
30-22 Newtown Avenue	595	27	0.084-acres

The Subject Property is located on southwestern side of Newton Avenue, and spans between 31st Street to the east, and 30th Street to the west.

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

On May 30, 2019, ALC's Project Manager Sanchita Basu Mallick conducted a site reconnaissance at the Subject Property. The information included in this report was gathered from state and municipal offices and officials, the environmental database search, and from the site inspection.

The Subject Property is located in the Astoria section of the NYC Borough of Queens. The general vicinity of the property consists of mixed-use commercial and residential buildings, commercial and residential buildings, and a telecommunications building owned by Verizon NY Inc. The current adjoining property uses do not appear to pose an environmental risk to the Subject Property. Below is a summary of the Phase I ESA findings:

	Acceptable	Corrective Action	Further Investigation	Reference Section
USER PROVIDED INFORMATION				
Environmental Cleanup Liens	✓			**4.2**
Activity & Land Use Limitations (AULs)	✓			**4.3**
Relationship of Purchase Price to Fair Market Value	✓			**4.5**
Commonly Known or Reasonable Ascertainable Information	✓			**4.4**

	Acceptable	Corrective Action	Further Investigation	Reference Section
USER PROVIDED INFORMATION				
Degree of Obviousness	✓			4.8
RECORDS REVIEW				
Standard Environmental Record	✓			5.0
Physical Setting Records	✓			6.2
HISTORICAL USE INFORMATION				
Subject Property			✓	5.4
Adjoining Properties			✓	5.4
Surrounding Areas	✓			5.4
GENERAL SITE SETTING				
Current Use(s) of the Subject Property			✓	3.4
Current Use(s) of Adjoining Properties	✓			3.6
Current or Past Use of the Surrounding Area	✓			5.3
Surficial & Subsurface Physical Conditions	✓			6.0
INTERIOR & EXTERIOR OBSERVATIONS				
Lead-Based Paint	✓			6.3.1
Asbestos Containing Materials	✓			6.3.2
Hazardous Substance & Petroleum Products	✓			6.3.3
Storage Tanks			✓	6.3.4
Solid Waste	✓			6.3.5
Odors	✓			6.3.6
Hazardous Waste	✓			6.3.6
Vapor Encroachment			✓	6.3.7
Polychlorinated Biphenyls (PCBs)			✓	6.3.8
Wastewater	✓			6.3.9
Wetlands	✓			6.3.10

	Acceptable	Corrective Action	Further Investigation	Reference Section
INTERIOR & EXTERIOR OBSERVATIONS				
Radon	✓			**6.3.11**
Air Emissions	✓			**6.3.12**
Stressed Vegetation	✓			**6.3.13**
Heating/Cooling	✓			**6.314**
Stains or Corrosion	✓			**6.3.15**
Drains & Sumps	✓			**6.3.16**
Mold		✓		**6.3.17**

SUMMARY OF CURRENT RECOGNIZED ENVIRONMENTAL CONDITIONS

The following recognized environmental conditions (RECs) associated with the Subject Property were identified during the course of this site assessment:

- The Subject Property (Lots 19, 26, and 27) was listed on the NY E-Designation database. The E-Designation database indicates that on May 25, 2010 the Subject Property was assigned the following E-Designation (E-245): 'Hazardous Materials* Phase I and Phase II Testing Protocol'. The referenced E-Designation point to potential subsurface contamination at the assigned sites and requires a subsurface investigation prior to redevelopment. If contamination is confirmed, a remedial action plan must be approved by NYC Office of Environmental Remediation (OER) before development can proceed and the plan must be implemented to the satisfaction of NYC OER before occupancy is allowed. The Subject Property is not listed in any of the regulatory databases reviewed, associated with known releases and/or known site contamination. However, the historical review identified two (2) former gasoline underground storage tanks (USTs) in Lot 19, depicted in the 1936 Fire Insurance (Sanborn) map (prior to construction of the existing warehouse circa 1945), and two (2) former gasoline USTs at the existing warehouse building (Lot 19), depicted in the 1948 and 1950 Sanborn maps. In addition, the Property Owner identified the former presence of one (1) gasoline UST. No records of petroleum tanks, tank closures, or tank removals were identified during a search of the New York State Department of Environmental Conservation (NYSDEC) online Bulk Storage Database. ALC has submitted a Freedom of Information Law (FOIL) request to the NYSDEC for information associated with the Subject Property. A response to the request submitted was not received in time for inclusion in this report. Based on this information, the lack of tank regulations prior to the 1970s, length of operation, and the nature of the E-designation, this listing constitutes a REC.

- The existing warehouse building, located in Lot 19 and constructed in 1945, previously contained a tank room with two gasoline tanks, as depicted in the 1948-1950 Sanborn maps. The referenced tank room was located on the southeastern-most section of the building. By 1967, the tank room and gasoline tanks were no longer depicted. No records of the tank closures or removals were identified during a search of the NYSDEC online Bulk Storage

Database. ALC has submitted a Freedom of Information Law (FOIL) request to the NYSDEC and the FDNY for information associated with the Subject Property. A response to the request was not received in time for inclusion in this report. Based on this information, the former presence of the gasoline tanks constitutes a REC.

- An elevator was depicted at the Subject Property (Lot 19) on the 1967 Sanborn map. Based on the map year, the elevator equipment likely utilized PCB-containing hydraulic fluid. No information was provided to ALC regarding the decommissioning of the elevator. Based on the identified map year and lack of information, the former presence of the elevator constitutes a REC.

- The Subject Property Owner reported a total of three former tanks, two (2) oil aboveground storage tanks (ASTs) and one gasoline UST, at the Subject Property. Review of NYC Department of Buildings records identified a permit approved in March 1995 for the removal of an 'oil-fired boiler and tanks'; no such permits were identified for the gasoline UST. No records of the tanks, closures, or removals were identified during a search of the NYSDEC online Bulk Storage Database. ALC has submitted a Freedom of Information Law (FOIL) request to the NYSDEC and the FDNY for information associated with the Subject Property. A response to the request was not received in time for inclusion in this report. The lack of information regarding the referenced gasoline UST constitutes a REC.

- According to the historical Sanborn maps and city directories reviewed, the adjacent property to the northeast across Newtown Avenue and known as 30-07 – 30-19 Newtown Avenue/28-14 – 28-18 31st Street, was previously improved with one commercial garage containing two gasoline tanks fronting 31st Street, as identified in the 1936 Sanborn map. Automotive battery facilities were identified at this site between 1934 and 1939. A machine shop was added to the garage in 1948. By 1967, the gasoline tanks and machine shop were no longer depicted at the garage. Historical city directories also identified the presence of garages/automobile servicing at the property, dating from 1934 to 1991. Certificates of Occupancy obtained from the NYC Department of Buildings indicated a change in the permitted use of the building from a "garage, auto showroom, store" in 1930 to a restaurant, retail stores, and offices in 2003. Review of the regulatory databases indicates that the property is not listed on any database which reports known releases and/or known site contamination. However, the site is listed on the Historical Auto Stations database in regards to "Friendly Garage Inc." (listed between 1969 and 1980) and "PGL Service Station" (listed between 1983 and 1992). ALC has submitted a Freedom of Information Law (FOIL) request to the NYSDEC and FDNY for information associated with the Subject Property. A response to the request was not received in time for inclusion in this report. Based on the historical uses of this property as a commercial garage with gasoline tanks and as service station, as well as the lack of tank regulations prior to the 1970s, and the up-gradient location of this property, the former uses of this northeast adjacent property constitutes a REC to the Subject Property.

- According to the historical Sanborn maps and city directories reviewed, the adjacent property to the southeast, across 31st Avenue and known as 31-02 Newtown Avenue/28-39 31ts Street, was previously improved with a garage built in 1927 containing two gasoline tanks, as identified on the 1936 Sanborn map. The garage was renamed "Auto Sales & Service" by 1967 and the gasoline tank fronting Newtown Avenue was no longer depicted within the building.

The gasoline tank fronting 31st Street was still depicted as of the latest Sanborn map dated 2006. Historical city directories also identified the presence of garages/automobile servicing at the property, dating from 1939 to 1967, as well as a printer from 1970 to 2000. Review of the regulatory databases indicates that the property is not listed on any database which reports the presence of tanks, known releases, or known site contamination. However, the site is listed on the E-Designation database as E-Designation E-245: 'Hazardous Materials Phase I and Phase II Testing Protocol' which points to potential subsurface impacts at the assigned sites. Based on the former use of this property as a commercial garage, length of time the gasoline tanks were present at the site, and lack of tank regulations prior to the 1970s, impacts associated with soil vapor intrusion from this site cannot be ruled out and therefore, the historical uses of this property constitutes a REC to the Subject Property.

- Based on historical uses of the Subject Property, the possibility of a VEC from the presence of two onsite gasoline tanks from at least 1948-1950, one onsite elevator circa 1967, and three former tanks (two oil ASTs and one gasoline UST) until 1995 cannot be dismissed, and itself represents a REC to the Subject Property. In addition, based on the historical uses of the adjacent properties to the northeast (30-07 – 30-19 Newtown Avenue/28-14 – 28-18 31st Street) and southeast (31-02 Newtown Avenue/28-39 31ts Street) as garages with gasoline tanks, the possibility of a VEC cannot be dismissed, and itself represents a REC to the Subject Property

Appendix III

Transportation Planning Factors (TPF) Memorandum

Philip Habib & Associates
Engineers and Planners • 102 Madison Avenue • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

TECHNICAL MEMORANDUM

TO: **New York City Department of City Planning**

FROM: **Philip Habib & Associates**

DATE: **July 30, 2019**
Rev. October 24, 2019

PROJECT: **30-02 Newtown Avenue Rezoning (PHA No. 1933)**

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

This memorandum summarizes the transportation planning factors to be used for the analyses of traffic, parking, transit, and pedestrian conditions for the *30-02 Newtown Avenue Rezoning Environmental Assessment Statement* (EAS). The Proposed Rezoning Area includes approximately 15,825 square feet (sf) in the Astoria neighborhood of Queens Community District (CD) 1 and comprises the northern portion of Queens Block 595 with frontage along 30th Street, Newtown Avenue, and 31st Street. The Proposed Rezoning Area is comprised of the Applicant-owned Projected Development Site (Lots 19, 26, and 27) and a portion of the non-Applicant-owned Lot 10 (see **Figure 1**). Estimates of the peak travel demand for the proposed actions' reasonable worst-case development scenario (RWCDS) are provided, along with a discussion of trip assignment methodologies and study area definitions.

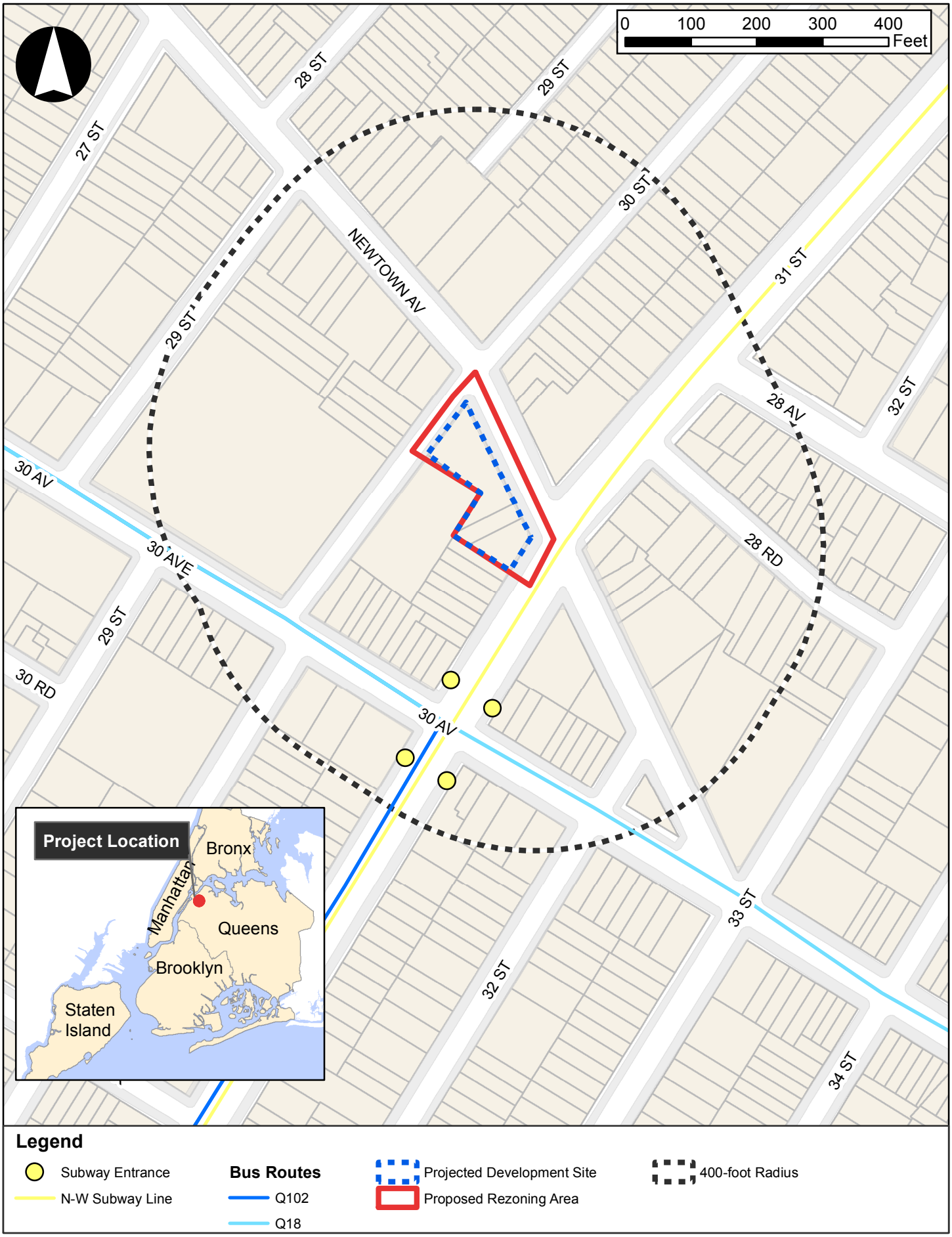
THE PROPOSED ACTIONS

Lynest Associates LLC (the "Applicant") is seeking the approval of two discretionary actions to facilitate the development of an 11-story, 138,470 gross square foot (gsf) mixed-use residential, commercial, community facility building at 30-02 Newtown Avenue (the "Proposed Development"). To facilitate this development, the Applicant is requesting a zoning map amendment to rezone a portion of Block 595, comprising Lots 19, 26, and 27, and part of Lot 10, from C4-4A to C4-4D, and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to designate the Proposed Rezoning Area as a Mandatory Inclusionary Housing (MIH) area.

REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDS)

In order to assess the potential effects of the proposed actions, a reasonable worst-case development scenario (RWCDS) for both the future without the proposed actions (the "No-Action" condition) and the future with the proposed actions (the "With-Action" condition) will be forecasted for an analysis year, or Build year, of 2024. The effects of the proposed actions, therefore, represents the incremental effects on conditions that would result from the net change in development between the No-Action and With-Action

Figure 1
Project Location



conditions (i.e., the "project increment"). **Table 1** below shows a summary of the No-Action conditions, With-Action conditions, and the project increment for the Proposed Rezoning Area in 2024 under the RWCDS.

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

In the future without the proposed actions, the existing zoning would remain and the Applicant would not proceed with the Proposed Development. All buildings within the Proposed Rezoning Area would remain in their existing form. As such, the Applicant-owned Projected Development Site (Lots 19, 26, and 27) would remain occupied by three two-story automotive repair and tire wholesale buildings comprising of approximately 27,206 gsf. The non-Applicant-owned Lot 10 would remain occupied by a three-story, 55,836 gsf, 60-foot tall building utilized by Verizon as a telephone exchange building.

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

In the 2024 future with the proposed actions, an approximately 138,470 gsf mixed-use residential, commercial, and community facility building would be constructed on the applicant-owned Projected Development Site. The building would include 102 DUs (up to 31 of which would be permanently affordable through the MIH program), 8,400 gsf of ground floor retail space, and 5,696 gsf of space for the Astoria Performing Arts Center, which would accommodate a 99-seat black box theater. The Proposed Development would also include 30 accessory parking spaces in an attended below-grade garage that would be accessible via a new curb cut and ramp on 30th Street. Although the applicant intends to build an 11-story building, the proposed C4-4D zoning would allow a maximum of 14 stories. Therefore, the EAS will conservatively assume a maximum height of 14-stories (145-feet) with a maximum base height of 105 feet for the purposes of conservative analysis.

Table 1: Project Increment Summary

Use	**No-Action Scenario**	**With-Action Scenario**	**Increment – Scenario**
Residential	0 units (0 gsf)	102 units (101,302 gsf)	**102 units (+101,302 gsf)**
Commercial	27,206 gsf	8,400 gsf	**-18,806 gsf**
Community Facility	0 gsf	5,696 gsf	**+ 5,696 gsf**
Population/Employment[1]	**No-Action Scenario**	**With-Action Scenario**	**Increment – Scenario**
Residents	0 residents	239 residents	**+ 239 residents**
Workers	40 workers	64 workers	**+24 workers**

Notes:

[1] Assumed based on the average household size of Queens Community District 1 of 2.34 (2010 Census), as well as standard employee generation multipliers, including: one worker per 333 sf of retail space, one worker per 250 sf of office space, one worker per 25 DUs, one worker per 1,000 sf of auto service/repair, and 35 workers for the theater space provided by the Astoria Performing Arts Center.

PRELIMINARY TRANSPORTATION PLANNING ASSUMPTIONS

The transportation planning factors used to forecast travel demand for the RWCDS land uses are summarized in **Table 2** and discussed below. **Table 2** provides the daily trip generation rates, temporal and directional distributions, mode choice factors, vehicle occupancies, and truck trip factors for the land uses discussed above. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Existing Auto Shop

The factors used (trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies, and truck trip generation rates) to forecast the travel demand for the existing auto shop were based on data from the 2019 *47-15 34th Avenue Rezoning Revised EAS*. As shown in **Table 2**, the travel demand forecast used a trip generation rate of 19.4 trips per 1,000 sf for both the weekday and Saturday. Temporal distributions of 13.2 percent, 11.0 percent, 14.2 percent, and 10.7 percent were used for the weekday AM, midday, and PM and Saturday midday peak hours, respectively. The modal split assumptions used were 85.0 percent by auto, 5.0 percent by taxi, 1.0 percent by subway, 1.0 percent by bus, and 8.0 percent by walk only.

Residential

The residential travel demand forecast used a weekday trip generation rate of 8.075 person trips per DU, a Saturday trip generation rate of 9.6 person trips per DU, and temporal distributions of 10.0 percent, 5.0 percent, 11.0 percent, and 8.0 percent for the weekday AM, midday, and PM, and Saturday midday peak hours, respectively, as per the 2014 *City Environmental Quality Review (CEQR) Technical Manual*. The residential modal split estimated 11.8 percent, 0.2 percent, 76.6 percent, 3.1 percent, and 8.3 percent for private auto, taxi, subway, bus, and walk-only modes, respectively, as per the 2013-2017 American Community Survey (ACS) Means of Transportation to Work Table for Queens Census Tracts 63, 65.01, 69, 71, and 73. The private auto occupancy rate of 1.25 persons per auto was also based on this source. Directional splits and the taxi occupancy rate of 1.18 persons per taxi were based on the 2019 *47-15 34th Avenue Rezoning Revised EAS*. Truck trip generation rates were based on the 2014 *CEQR Technical Manual*.

Local Retail

The trip generation rates and temporal distributions for local retail uses were based on the 2014 *CEQR Technical Manual*. Based on this data, the local retail used a weekday trip generation rate of 205 person trips per 1,000 gsf, a Saturday trip generation rate of 240 person trips per 1,000 gsf, and temporal distributions of 3.0 percent, 19.0 percent, 10.0 percent, and 10.0 percent for the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. Modal splits were provided by NYCDOT, estimating 11.0 percent, 0.0 percent, 4.0 percent, 3.0 percent, and 82.0 percent for private auto, taxi, subway, bus, and walk-only modes, respectively during the weekday AM, midday, and PM peak periods, and 8.0 percent, 0.0 percent, 7.0 percent, 4.0 percent, and 81.0 percent for private auto, taxi, subway, bus, and walk-only modes, respectively during the Saturday midday peak period. The directional in/out splits and vehicle occupancies were based on the 2014 *Astoria Cove Development FEIS*. A vehicle occupancy rate of 2.0 persons per vehicle were used for both private auto and taxi.

Theater Performing Arts Center

The theater performing arts center travel demand forecasts were based on the 2018 *Spofford Campus FEIS*, using a weekday trip generation rate of 27.0 person trips per 1,000 gsf, a Saturday trip generation rate of 2.7 person trips per seat, and temporal distributions of 1.0 percent, 16.0 percent, 13.0 percent, and 10.0 percent for the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. Modal splits were estimated to be 19.5 percent trips by auto, 10.0 percent by taxi, 20.0 percent by subway, 20.0 percent by bus, and 30.5 percent trips by walk/bike/other modes. The auto occupancy rate used was 1.60 persons per auto and 2.90 persons per auto on the weekday and Saturday, respectively; and the taxi occupancy rate used was 1.20 persons per taxi and 2.30 persons per taxi on the weekday and Saturday, respectively.

Table 2: Transportation Planning Assumptions

Land Use:	**Existing Auto Shop**		**Residential**		**Local Retail**		**Theater Performing Arts Center**	
Size/Units:	-27,206 gsf		102 DU		8,400 gsf		5,696 gsf 99 seats	
Trip Generation:	(2)		(1)		(1)		(5)	
Weekday	19.4		8.075		205		27.0 per 1,000 sf	
Saturday	19.4		9.6		240		2.70 per seat	
	per 1,000 sf		per DU		per 1,000 gsf			
Temporal Distribution:	(2)		(1)		(1)		(5)	
AM (8 - 9)	13.2%		10.0%		3.0%		1.0%	
MD (12 - 1)	11.0%		5.0%		19.0%		16.0%	
PM (5 - 6)	14.2%		11.0%		10.0%		13.0%	
SatMD (1 - 2)	10.7%		8.0%		10.0%		10.0%	
	(2)		(3)		(6)		(5)	
Modal Splits:	All Periods		All Periods		AM/MD/PM	SAT MD	All Periods	
Auto	85.0%		11.8%		11.0%	8.0%	19.5%	
Taxi	5.0%		0.2%		0.0%	0.0%	10.0%	
Subway	1.0%		76.6%		4.0%	7.0%	20.0%	
Bus	1.0%		3.1%		3.0%	4.0%	20.0%	
Walk/Bike/Other	8.0%		8.3%		82.0%	81.0%	30.5%	
	100.0%		100.0%		100.0%	100.0%	100.0%	
	(2)		(2)		(4)		(5)	
In/Out Splits:	In	Out	In	Out	In	Out	In	Out
AM	65.0%	35.0%	16.0%	84.0%	50%	50%	61%	39%
MD	50.0%	50.0%	50.0%	50.0%	50%	50%	55%	45%
PM	50.0%	50.0%	67.0%	33.0%	50%	50%	29%	71%
SatMD	50.0%	50.0%	53.0%	47.0%	50%	50%	0%	100%
Vehicle Occupancy:	(2)		(3)(2)		(4)		(5)	
	All Periods		All Periods		All Periods		Weekday	Saturday
Auto	1.30		1.25		2.00		1.60	2.90
Taxi	1.30		1.18		2.00		1.20	2.30
Truck Trip Generation:	(2)		(1)		(1)		(5)	
Weekday	0.89		0.06		0.35		0.14	
Saturday	0.89		0.02		0.04		0.04	
	per 1,000 sf		per DU		per 1,000 sf		per 1,000 sf	
	(2)		(1)		(1)		(5)	
AM	14.0%		12.0%		8.0%		1.0%	
MD	9.0%		9.0%		11.0%		11.0%	
PM	1.0%		2.0%		2.0%		2.0%	
SatMD	0.0%		9.0%		11.0%		11.0%	
	In	Out	In	Out	In	Out	In	Out
AM/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

(1) 2014 *City Environmental Quality Review (CEQR) Technical Manual.*

(2) *47-15 34th Avenue Rezoning Revised EAS* , 2019.

(3) 2013-2017 American Community Survey (ACS) Mean of Transportation to Work for Queens Census Tracts 63, 65.01, 69, 71, and 73.

(4) *Astoria Cove Development FEIS* , 2014.

(5) *Spofford Campus FEIS* , 2018.

(6) Provided by NYCDOT.

TRIP GENERATION

Table 3 provides an overall travel demand forecast for the Projected Development Site for the weekday AM, midday, and PM, and Saturday midday peak hours. As shown in **Table 3**, under the RWCDS, the proposed actions would generate a net increase of approximately 56 person trips (in and out combined) in the weekday AM peak hour, 254 person trips in the weekday midday peak hour, 166 person trips in the weekday PM peak hour, and 202 person trips in the Saturday midday peak hour. The proposed actions would generate an incremental decrease of 46, 25, 34, and 26 (in and out combined) vehicle trips (including auto, taxi, and truck trips) in the weekday AM, midday, and PM, and Saturday midday peak hours, respectively. Peak hour subway trips would increase by a net total of 66, 47, 80, and 77 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Peak hour bus trips would increase by a net total of 4, 15, 11, and 14 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Total pedestrian trips (including walk-only and trips to/from public transit) would increase by a net total of 105, 271, 205, and 226 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively.

LEVEL 1 SCREENING ASSESSMENT

The *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the number of person and vehicle trips attributable to the proposed action. According to the *CEQR Technical Manual*, if a proposed action 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 (a Level 2 assessment) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments show that the proposed action would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians and parking.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if a proposed action would result in 50 or more vehicular trip ends in a peak hour at one or more intersections. As shown in **Table 3**, under the RWCDS, the proposed actions would generate an incremental decrease of 46, 25, 34, and 26 vehicle trips in the weekday AM, midday, and PM, and Saturday midday periods. Therefore, as the uses proposed under the With-Action condition are forecasted to generate fewer vehicle trips than the existing uses on the Projected Development Site (an automotive repair shop and tire wholesale shop), the incremental 50-vehicle trip threshold would not be met in any peak period. As such, a Level 2 screening analysis is not needed and further traffic analysis is not warranted.

Table 3: Travel Demand Forecast – Person Trips

		No-Action		*With-Action*						*Net Increment*	
Land Use:		**Existing Auto Shop**		**Residential**		**Local Retail**		**Theater Performing Arts Center**		**Total**	
Size/Units:		-27,206	gsf	102	DU	8,400	gsf	5,696 99	gsf seats		
Peak Hour Person Trips:						(1)					
	AM	-70		84		40		2		56	
	MD	-60		42		246		26		254	
	PM	-76		92		130		20		166	
	Sat MD	-58		80		152		28		202	
Person Trips:											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto**	-39	-22	2	9	2	2	0	0	-35	-11
(8-9)	**Taxi**	-2	-1	0	0	0	0	0	0	-2	-1
	Subway	0	0	10	54	1	1	0	0	11	55
	Bus	0	0	0	2	1	1	0	0	1	3
	Walk/Bike/Other	-4	-2	1	6	16	16	1	1	14	21
	Total	-45	-25	13	71	20	20	1	1	-11	67
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto**	-26	-26	2	2	14	14	3	2	-7	-8
(12-1)	**Taxi**	-2	-2	0	0	0	0	1	1	-1	-1
	Subway	0	0	16	16	5	5	3	2	24	23
	Bus	0	0	1	1	4	4	3	2	8	7
	Walk/Bike/Other	-2	-2	2	2	100	100	5	4	105	104
	Total	-30	-30	21	21	123	123	15	11	129	125
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto**	-33	-33	7	4	7	7	1	3	-18	-19
(5-6)	**Taxi**	-2	-2	0	0	0	0	1	1	-1	-1
	Subway	0	0	47	23	3	3	1	3	51	29
	Bus	0	0	2	1	2	2	1	3	5	6
	Walk/Bike/Other	-3	-3	5	3	53	53	2	4	57	57
	Total	-38	-38	61	31	65	65	6	14	94	72
		In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	**Auto**	-26	-26	5	5	6	6	0	5	-15	-10
(1-2)	**Taxi**	-1	-1	0	0	0	0	0	3	-1	2
	Subway	0	0	32	29	5	5	0	6	37	40
	Bus	0	0	1	1	3	3	0	6	4	10
	Walk/Bike/Other	-2	-2	4	3	62	62	0	8	64	71
	Total	-29	-29	42	38	76	76	0	28	89	113

(1) 25% link-trip credit applied to Local Retail use.

Table 3: Travel Demand Forecast (cont.) – Vehicle Trips

		No-Action		*With-Action*						*Total*	
Land Use:		**Existing Auto Shop**		**Residential**		**Local Retail**		**Theater Performing Arts Center**		**Total**	
Vehicle Trips :											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto (Total)**	-30	-17	2	7	1	1	0	0	-27	-9
	Taxi	-2	-1	0	0	0	0	0	0	-2	-1
	Taxi Balanced	-3	-3	0	0	0	0	0	0	-3	-3
	Truck	-2	-2	0	0	0	0	0	0	-2	-2
	Total	-35	-22	2	7	1	1	0	0	-32	-14
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto (Total)**	-20	-20	2	2	7	7	2	1	-9	-10
	Taxi	-2	-2	0	0	0	0	1	1	-1	-1
	Taxi Balanced	-4	-4	0	0	0	0	2	2	-2	-2
	Truck	-1	-1	0	0	0	0	0	0	-1	-1
	Total	-25	-25	2	2	7	7	4	3	-12	-13
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto (Total)**	-25	-25	6	3	4	4	1	2	-14	-16
	Taxi	-2	-2	0	0	0	0	1	1	-1	-1
	Taxi Balanced	-4	-4	0	0	0	0	2	2	-2	-2
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-29	-29	6	3	4	4	3	4	-16	-18
		In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	**Auto (Total)**	-20	-20	4	4	3	3	0	2	-13	-11
	Taxi	-1	-1	0	0	0	0	0	1	-1	0
	Taxi Balanced	-2	-2	0	0	0	0	1	1	-1	-1
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-22	-22	4	4	3	3	1	3	-14	-12

	Incremental Vehicle Trips			**Incremental Ped Trips (Walk + Transit)**		
	In	Out	Total	In	Out	Total
AM	-32	-14	-46	26	79	105
MD	-12	-13	-25	137	134	271
PM	-16	-18	-34	113	92	205
Sat MD	-14	-12	-26	105	121	226

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus route (in one direction), or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Table 3**, under the RWCDS, the proposed actions would generate approximately 68, 47, 80, and 77 (in and out combined) incremental subway trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. Net incremental transit bus trips would total approximately 4, 15, 11, and 14 (in and out combined) during these same periods, respectively. As these numbers would not exceed 200 subway trips/hour or 50 bus trips/hour, a detailed Level 2 screening analysis is not warranted for any peak hour.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table 3**, the proposed actions' RWCDS would generate an incremental demand of approximately 105 total pedestrian trips in the weekday AM peak hour, 271 total pedestrian trips in the weekday midday peak hour, 205 total pedestrian trips in the weekday PM peak hour, and 226 total pedestrian trips in the Saturday midday peak hour. These totals include walk-only trips and pedestrians en route to and from nearby subway stations and bus stops. As the numbers of trips in the weekday midday, PM, and Saturday midday peak hours would exceed the 200-trip threshold, a Level 2 screening analysis is warranted to determine which, if any, pedestrian elements would require quantified analysis for these periods.

LEVEL 2 SCREENING ASSESSMENT

Pedestrians

As shown in **Table 3**, the proposed actions would generate approximately 271, 205, and 226 pedestrian trips (including walk-only, subway, and bus trips; in and out combined) in the weekday midday, weekday PM, and Saturday midday peak hours, respectively. The analysis of pedestrian conditions focuses on representative pedestrian elements where new trips generated by the Proposed Development are expected to be most concentrated. These elements – sidewalks, corner areas, and crosswalks – are located in the vicinity of the Proposed Development and corridors connecting the Projected Development Site to area subway stations and bus routes. Subway trips were assigned to the 30th Avenue station at 30th Avenue and 31st Street served by the N Broadway Express and the W Broadway Local lines. Bus trips were assigned to the Q18 (local line running between Maspeth and Astoria) and the Q102 (local line running between Roosevelt Island, Manhattan and Astoria, Queens) stops along 30th Avenue. Walk-only trips were assigned evenly through the

local street network, with residential, retail, and community facility "walk-only" trips originating/ending at their respective entrance/exit locations based on the proposed site plan (refer to **Figure 2**).

Preliminary assignments of weekday midday, weekday PM, and Saturday midday pedestrian trips are shown in **Figures 3** through **5**, respectively. As shown in **Figures 3** through **5**, no pedestrian elements located in the vicinity of the Development Site would exceed the 200-trip analysis threshold during the weekday midday, weekday PM, or Saturday midday periods, respectively. As such, a detailed pedestrian analysis is not warranted for the EAS.

Vehicular and Pedestrian Safety

Under *CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the traffic and pedestrian study areas that have been identified as high crash locations. These are defined as locations with 48 or more total reportable and non-reportable crashes or where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent three-year period for which data are available. For these locations, crash trends will be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips.

Parking

As the Proposed Development is predominately residential, it is anticipated that parking demand would peak in the overnight periods. For the proposed 102 residential units, 2013-2017 ACS Vehicles Available data for renter-occupied households in Queens Census Tracts 63, 65.01, 69, 71, and 73 were utilized, which indicated an auto ownership rate of 0.320 autos per household. Therefore, the proposed actions would generate an overnight demand of approximately 33 vehicles, while the Proposed Development would provide 30 accessory parking spaces below-grade. As project-generated parking demand is expected to exceed the proposed on-site accessory parking supply, an off-site parking analysis would be required within ¼-mile of the Project Area during the overnight period.

CONCLUSIONS

A transportation forecast and assignment has been prepared for the proposed actions, including the development of a 138,470 gsf mixed-use residential, commercial, and community facility building at 32-02 Newtown Avenue. According to the 2014 *CEQR Technical Manual* guidelines, if a proposed development is expected to result in fewer than 200 peak hour pedestrian, subway, and bus trips, and fewer than 50 peak hour vehicle trips, further quantified analyses are not warranted.

As shown in **Table 3**, the proposed project would generate an incremental decrease of 46, 25, 34, and 26 vehicle trips and an increase of 105, 271, 205, and 226 incremental pedestrian trips (in and out combined) during the weekday AM, midday, and PM, and Saturday midday peak hour periods, respectively. The proposed actions would also generate 66, 47, 80, and 77 incremental subway (in and out combined) trips and 6, 27, 17, and 20 incremental bus trips during the weekday AM, midday, and PM and Saturday peak hours (refer to **Table 3**). As the proposed project would generate less than 200 subway trips and bus trips and less than 50 incremental vehicle trips during all peak hours, and less than 200 pedestrian trips during the weekday AM peak period, further traffic, subway, bus, and pedestrian analyses are not warranted during these periods.

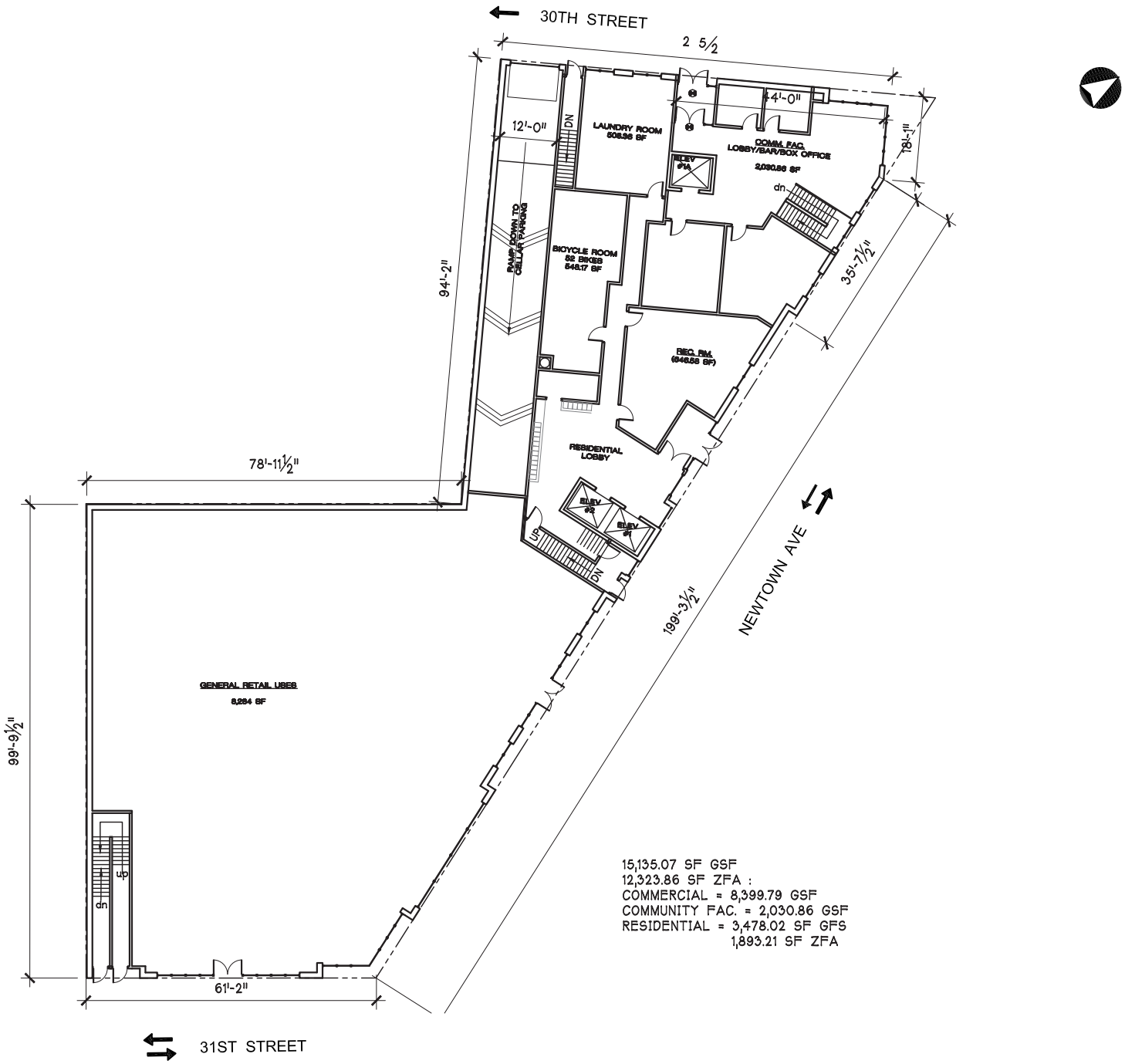
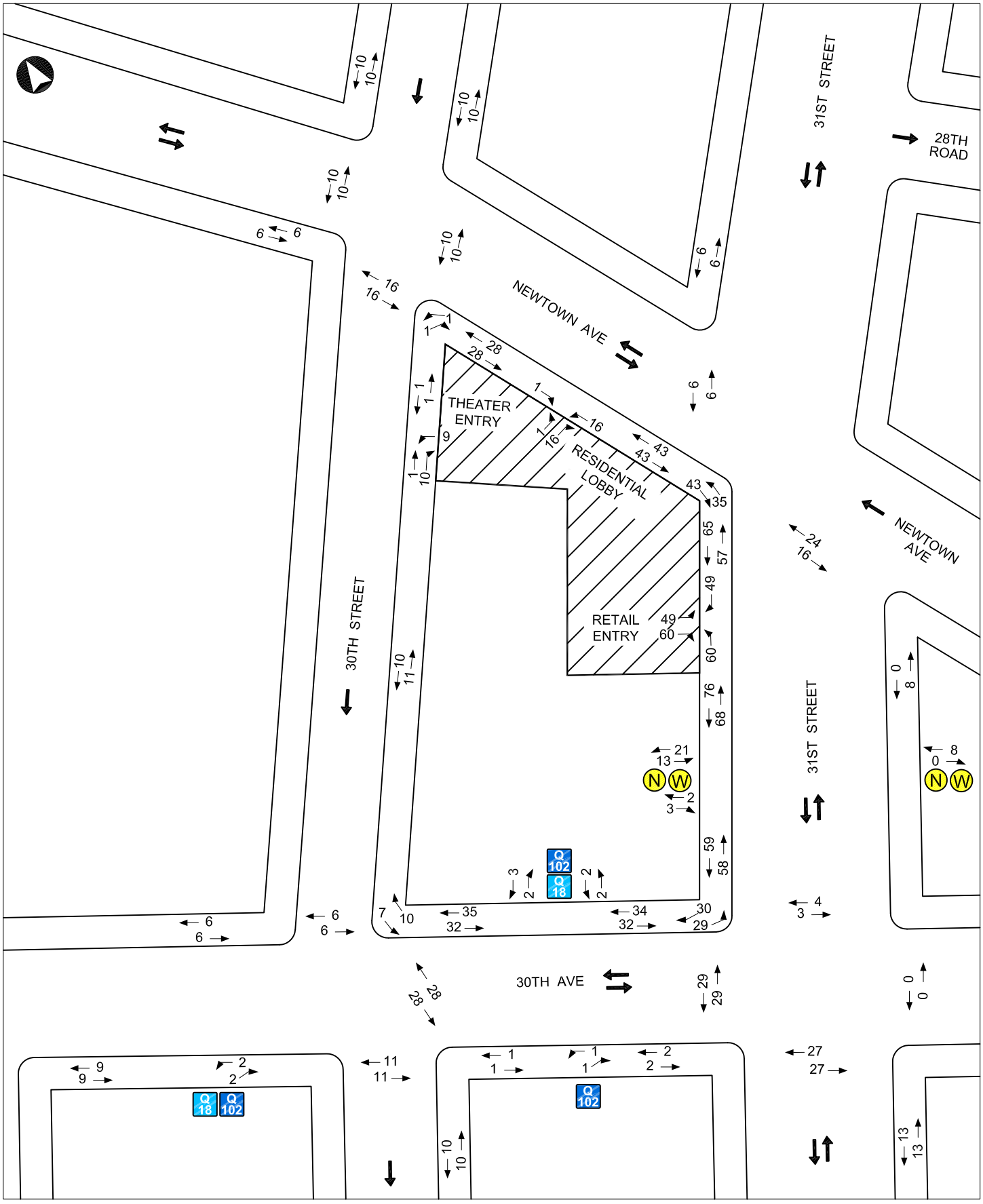

30TH STREET
2 5½
44'-0"
78'-1"
12'-0"
DN
LAUNDRY ROOM
508.36 SF
COMM. FAC.
LOBBY/BAR/BOX OFFICE
2,030.86 SF
ELEV #1A
dn
RAMP DOWN TO CELLAR PARKING
BICYCLE ROOM
52 BIKES
548.17 SF
94'-2"
35'-7½"
REC. RM.
(946.58 SF)
RESIDENTIAL
LOBBY
78'-11½"
ELEV #2
ELEV #1
UP
DN
199'-3½"
NEWTOWN AVE
GENERAL RETAIL USES
8,284 SF
99'-9½"
up
dn
61'-2"
15,135.07 SF GSF
12,323.86 SF ZFA :
COMMERCIAL = 8,399.79 GSF
COMMUNITY FAC. = 2,030.86 GSF
RESIDENTIAL = 3,478.02 SF GFS
1,893.21 SF ZFA
31ST STREET

Figure 3
Incremental Midday Pedestrian Volumes

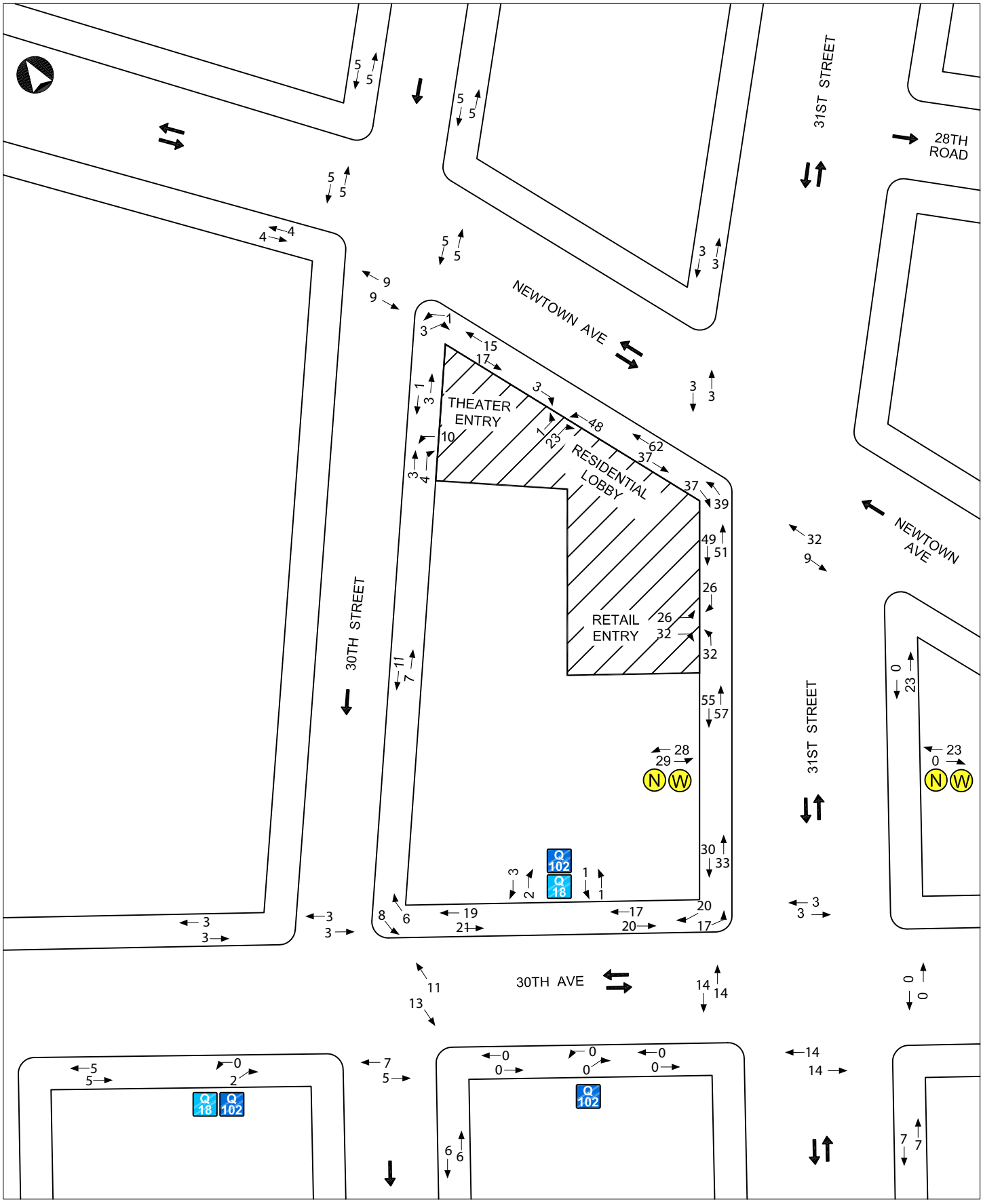
Development Site



98 - Weekday Midday Peak Hour Pedestrian Volumes

Figure 4
Incremental PM Pedestrian Volumes

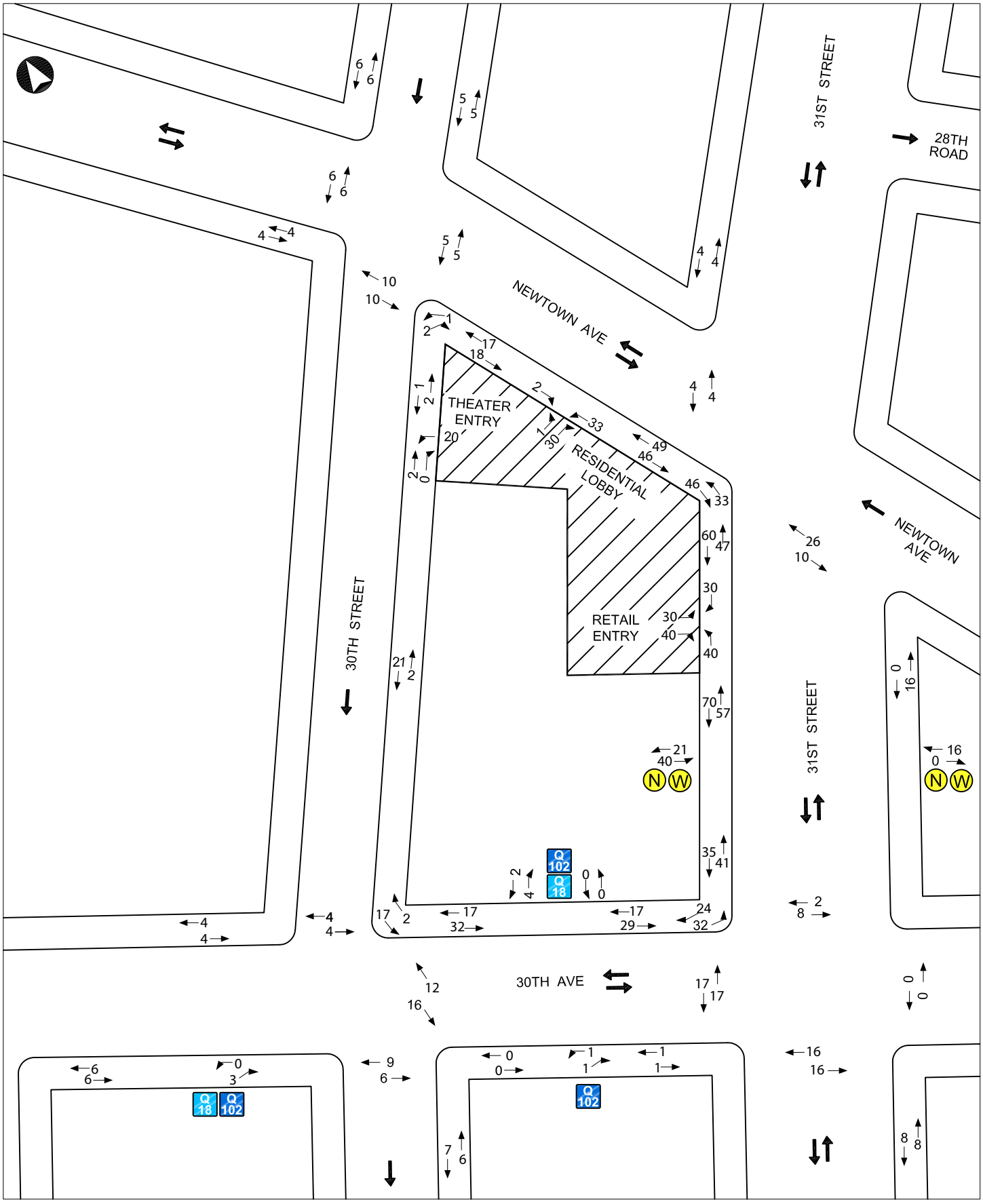
Development Site



98 - Weekday PM Peak Hour Pedestrian Volumes

Figure 5
Incremental SAT Pedestrian Volumes

Development Site



← 98 - Saturday MD Peak Hour Pedestrian Volumes

However, as the number of action-generated pedestrian trips exceeds the CEQR threshold of 200 peak hour trips during the weekday midday, weekday PM, and Saturday midday peak periods, a preliminary pedestrian assignment was prepared and is shown in **Figures 3** through **5**. Based on the preliminary pedestrian assignment, it was determined that no pedestrian elements would have an increase of 200 or more pedestrians during the weekday midday, weekday PM, or Saturday midday peak periods. As such, a detailed pedestrian analysis is not warranted in the EAS.

However, as project-generated parking demand is expected to exceed the proposed on-site accessory parking supply during the over-night period, an off-site parking analysis will be conducted for the EAS.